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Water Docket

Environmental Protection Agency
Mail Code 4101T
1200 Pennsylvania Ave., NW
Washington, DC 20460

April 16, 2003

RE: Docket Identification Number (OW-200200050) Advanced Notice of Proposed Rulemaking Relating to the Definition of "Waters of the United States."

Dear U.S. Environmental Protection Agency and U.S. Army Corps of Engineers,

The U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (COE) issued a January 10, 2003, Advanced Notice of Proposed Rulemaking (ANPRM) on Clean Water Act Regulatory Definition of "waters of the United States." The agencies state that the ANPRM is in response to the January 9, 2001, U.S. Supreme Court ruling in Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC).

The State of Montana contains hundreds of thousands of acres of water resources including streams, rivers, lakes and wetlands. Water is one of Montana's greatest resources. Therefore, we are very concerned about any possible loss of Clean Water Act jurisdiction over these waters since they provide drinking water, revenue, wildlife habitat and aesthetic beauty for the enjoyment of everyone living in or visiting the "Last Best Place."

Montana Department of Environmental Quality (DEQ) thanks the agencies for an opportunity to comment on the ANPRM and urges you to give full consideration to our attached comments and concerns which include the following considerations:

- 1) Justification for proposed rule making,
- 2) Potentially affected Montana waters, and
- 3) Potential impacts to Montana DEQ Clean Water Act programs.

In sum, Montana DEQ does not support the proposed rulemaking and recommends that the agencies abandon the ANPRM.

If you have any questions, please contact Lynda Saul of this Department at (406) 444-6652.

Sincerely,

/s/

Jan P. Sensibaugh
Director

Comments submitted by the Montana Department of Environmental Quality.

1) Justification for proposed rule making.

We recognize the confusion caused by the SWANCC decision. As the ANPRM states, “SWANCC also calls into question whether CWA jurisdiction over isolated, intrastate, non-navigable waters could now be predicated on the other factors listed in the “Migratory Bird Rule” or the other rationales of 33 CFR 328.3(a)(3)(i)-(iii).” However, the proposed rule making is not required by SWANCC. SWANCC only addressed manmade sand and gravel mining pits constructed in uplands that happened to fill with water and attract migratory birds. There was no surface inlet or outlet, no pipes and no ditches draining or contributing water to the pits. The scope of the 5-4 SWANCC Supreme Court ruling pertaining to regulatory jurisdiction under the Clean Water Act (CWA) was narrowly limited to CWA regulation of “non-navigable, isolated, intrastate” waters based solely on the use of such waters by migratory birds. The intent of the SWANCC ruling was not to reduce or limit federal jurisdiction and there is no basis for this attempt to limit the scope of the CWA or its regulations. We respectfully request that EPA and COE abandon this proposed rule making process.

2) Potentially affected Montana waters.

The ANPRM states, “One of the purposes of the ANPRM is to solicit additional information, data, or studies addressing the extent of resource impacts to isolated, intrastate, non-navigable waters.”

The term ‘isolated’ is a relative term. There is no single, ecologically or scientifically accepted definition of an ‘isolated’ wetland or water. Isolated is more a matter of perspective than scientific fact. Physically and scientifically, certain types of waters cannot be considered ‘isolated’ from the hydrologic systems of navigable waters. All ephemeral, intermittent and perennial streams within Montana are tributaries (or tributaries to tributaries) to three federally navigable waterways in Montana – the Missouri, Yellowstone and Kootenai or are tributaries to interstate federally navigable waters such as the Clark Fork. All upstream tributaries to these waters and wetlands are an integral part of our nation’s watersheds and thus affect the health of all waters of the United States. Because all waters within a watershed drain into larger waterbodies and or groundwater sources, their degradation can negatively affect interstate and navigable waters. We believe that all these waters should be considered jurisdictional waters for CWA purposes, as all are critical to the CWA mission to “restore and maintain the chemical, physical and biological integrity of the nation’s waters.”

Montana is a semi-arid state with a low density of wetlands. The total wetland area of Montana has not yet been systematically inventoried. However, based on unpublished data (Dahl 1990), Montana contains approximately 840,300 acres of wetlands, roughly 0.9 percent of the State. While wetlands cover only a small part of Montana, the ecologic and economic importance of wetlands far outweighs their relative size.

The distribution of different wetland types correlates with the three major physiographic divisions: the Great Plains and the Northern and Middle Rocky Mountains. In the glaciated regions of the Great Plains, wetlands are mainly in topographic depressions referred to as prairie potholes. In unglaciated areas of the Great Plains, wetlands occur in floodplains of streams in the Yellowstone and Missouri River basins and are also commonly associated with constructed livestock ponds. In the Northern and Middle Rocky Mountains, most wetlands are in potholes of

glaciated intermontane basins, in floodplains of unglaciated intermontane basins and in high mountain valleys. (USGS 1996).

Montana contains the largest percent of private lands of all Rocky Mountain States and all but one west coast state. Seventy two percent of Montana is privately owned. Since wetlands are approximately equally distributed on public and private lands, roughly $\frac{3}{4}$ of the State's wetlands, including isolated wetlands, exist on private lands. These wetlands will be highly vulnerable to filling and draining in the absence of protection under Section 404 of the CWA. Approximately 27% (306,700 acres) of Montana's original wetlands have already been destroyed (Dahl 1990).

Montana's wetlands and other waters could be greatly affected by the proposed redefinition of jurisdictional waters. Montana waters that seem to have the most risk of removal from CWA jurisdiction by the proposed rulemaking include:

1. Depressional wetlands, including prairie potholes of northeastern Montana formed by continental ice sheets and potholes of the Northern and Middle Rocky Mountain intermontane glaciated valleys formed by alpine glaciation.
2. Other types of 'isolated' wetlands and waters such as fens, wet meadows, seeps, slope wetlands, ponds and lakes.
3. If Montana state laws were changed to reflect the ANPRM, then headwater streams and riparian systems including intermittent and ephemeral drainages that may have surface hydrologic connectivity to jurisdictional water only seasonally or in response to heavy storm events or snowmelt could be greatly affected by the ANPRM.

Importance of Wetlands and Riparian Areas

In a 2002 survey of Montana residents, 84% and 83% of respondents agreed or strongly agreed with the statements "Wetlands and riparian areas are important resources in Montana" and "It's important to me that wetland and riparian areas in Montana are conserved and protected" (Lewis et al. 2003). A recent national survey revealed very similar results across various demographic groups (Lake et al. 1998). Wetlands are considered important because of the contributions to society they provide:

- Wetlands contribute to better water quality by physically, chemically and biologically cleansing water of pollutants and debris.
- Wetlands contribute to flood attenuation by retarding the flow of fast-moving water that can be erosive and destructive and by reducing sedimentation that contributes to the pollution of water bodies.
- Wetlands can store large volumes of water during spring runoff and during storms and release it slowly back into the ground or the water channel.
- Wetlands often contribute to ground water recharge by allowing it to infiltrate into deeper ground layers.
- Wetlands can provide water and forage for livestock. Wet meadows can produce excellent hay crops.
- Wetlands are wildlife habitat for wetland-dependent species that include imperiled, threatened, endangered, increasing and stable species. Fish, amphibians, mammals and birds may use wetlands during part or all of their life cycles.
- Wetlands sustain biological diversity of plant and animal species and plant and animal communities wherever they are located in the landscape.
- Wetlands provide recreational opportunities including photography, wildlife watching, hunting, fishing and nature walks.
- Wetlands provide open space; therefore, protection of wetlands simultaneously protects open space and provides all the benefits derived from open space.

- Wetlands lend themselves to be studied and observed at many levels and provide tremendous informal educational opportunities and formal educational opportunities in the fields of biology, botany, zoology, ecology and chemistry.
- Wetlands provide economic value by providing all of the above and providing food, fish, and medicines. Some of the functions wetlands perform, such as water purification and flood storage, would otherwise cost society.

Depressional Wetlands - Blackfoot Watershed

Research investigating the intermontane pothole region of western Montana demonstrated that temporary surface-water and soil-water connections among intermontane depressional wetlands are common and that they have significant effects on depressional wetland ecosystem structure and function. In fact, hydrologically 'isolated' wetlands and those having a temporary (<2 weeks) soil-water connection to an adjacent wetland were found in equal proportions on the landscape. Moreover, connected wetlands stored more water, stored water longer, and had higher specific conductance and net primary productivity than isolated wetlands. Wetland plant composition of connected wetlands also differed from that of isolated wetlands. These results contrast with the many studies that have characterized all depressional wetlands as being "closed basins." (Winter and Woo 1990, Brinson 1993, Mitsch and Gosselink 1993, Bedford 1996, Hayashi et al. 1998). Cook concluded that "Clearly...it can no longer be an accepted view that depressional wetlands are isolated ecosystems on the landscape." (Cook 2001. p.70). These subtle, and usually ignored, temporary surface water and soil-water connections among depressional wetlands have important ecological and practical implications for understanding the landscape distribution of dissolved solutes (pollution), sediments and the diversity, distribution, abundance, and productivity of wetland plants in depressional wetlands and wetland landscapes. Any wetlands located within close proximity to a surface water connection through topography, natural channel, swale, soil-water connection, drainage ditch or groundwater must be considered jurisdictional because of the subsurface connection as a part of the larger watershed system.

The research wetlands are located within a half mile of the Blackfoot River, a class B-1 water, blue ribbon trout stream, drinking water source, tourist magnet and national treasure made famous by the movie "A River Runs Through It." The wetlands are part of the landscape that Meriwether Lewis described as the "prairie of the knobs" when he and his party entered the vicinity on July 6th, 1806. The Blackfoot River is considered a "water of the United States" and tributary to a federally navigable water.

Regarding ANPRM requests for the extent of resource impacts, imagine a 50-gallon drum of PCB's or other highly mobile bioaccumulating pollutant, such as mercury, leaking into one of these depressional wetlands. Based on field research, there is an equal probability that a surface-water or soil-water connection exists to transport contaminate from the depressional wetland into the Blackfoot River. This shows a hydrologic connection between 'isolated' waters and "waters of the United States." We believe that it is critical to retain CWA jurisdiction to regulate deposition or fill, discharge of pollutants and other deleterious activities within 'isolated' waters.

Depressional Wetlands - Big Muddy Watershed

The Big Muddy watershed is located in the extreme northeastern corner of Montana and is a glacial prairie pothole dominated landscape. Its 1.6 million acres includes 43,563 acres of wetlands (NWI 1993). These include 8595 individual wetlands distributed as follows:

- Lacustrine wetlands had 59 occurrences with a 231.56 acre mean size.
- Riverine wetlands had 42 occurrences with a 16.82 acre mean size.
- Palustrine wetlands had 8352 occurrences with a 3.5 acre mean size.

Of these palustrine wetlands (prairie potholes) the size distribution favors smaller wetlands, 67 percent are less than one acre:

5589 are less than 1 acre. Mean size is 0.40 acres.
2382 are between 1 and 10 acres. Mean size is 3 acres.
347 are between 10 and 100 acres. Mean size is 26.4 acres.
32 are between 100 and 1000 acres. Mean size is 202.6 acres.
2 are 1054 acres (partially drained or ditched) and 3126 acres.

The storage capacity of wetlands range from 1 to 5 acre-feet of water per acre of wetland. (Kelmelis 1994). On average, 1 acre of wetland represents 1 million gallons of floodwater storage. For every acre of wetlands destroyed, an average of 1 million gallons of water runs off quickly downstream instead of being stored and slowly released as river level drops. Restoring wetlands can reduce 100-year floods by 10%. An Illinois study reported that flood flows increased 7% for every 1% wetland destroyed.

The 1993 flood in the Upper Missouri River Basin is a good case study of the value of wetlands in absorbing and moderating flood flows. Pre-settlement wetlands in the basin have been estimated at 58 million acres (Dahl 1990). In 1993, approximately 23 million acres of wetlands remained. The loss of 35 million acres has mostly been a result of agricultural drainage of prairie potholes, channel modification and flood control. This wetland destruction represents the loss of up to 90 million acre-feet of potential flood storage, which is more than twice the volume of the 1993 Mississippi River flood at St. Louis. In the Upper Mississippi River Basin, the states of Iowa, Missouri and Illinois have destroyed the most wetlands, 87% on average. It is not surprising then, that these states accounted for \$11.8 of the total \$15.7 billion of the cost for the 1993 flood damages.

Montana is a headwater state and has a significant number of prairie potholes along its northern border. These wetlands provide a valuable service in absorbing runoff and moderating flood flows for downstream states. These wetlands cannot be considered 'isolated'.

Other Types of Potentially 'Isolated' Waters

Other types of non-adjacent wetlands and waters in Montana that could be potentially affected by the proposed redefinition of jurisdictional waters include fens, wet meadows, seeps, slope wetlands, ponds and lakes. These unique ecosystems provide water to an otherwise arid and often harsh landscape. Wetland areas such as fens, wet meadows and ponds are critical to maintaining healthy species diversity and keeping species off the Federal threatened and endangered species list. Montana hosts a total of about 3,000 different plant species. Although wetland and riparian areas occupy less than 3% of the total landmass, 50% of the diversity of plants can be found in these areas. Montana plants include over 1,500 wetland species on the U.S. Fish and Wildlife Service (USFWS) wetland indicator list; at least 170 are Montana species of special concern. Wetland plant species represent over half of the total number of species of special concern in Montana. Further, the only two plants listed as federally threatened in Montana are wetland dependent. Western Montana ponds in 2 counties provide the only habitat in Montana for water howellia, an aquatic annual and federally threatened species. The Montana population of water howellia is only one of two population centers in the world. In sum, habitat destruction resulting from the ANPRM could cause more species of fish, wildlife and plants to be federally listed, severely restricting land use and limiting management options as state and federal governments then work to de-list these species.

Headwater Streams

Of Montana's 192,198 total stream miles, we estimate that 136,002 miles are intermittent headwater streams or 71% percent of all stream miles (NHD 2003). If the definition of "waters of the United States" were reduced to only those streams that have perennial flow or are traditionally navigable, Montana would lose federal CWA support over the majority of stream

miles in the state. Currently, state jurisdiction over these resources would still hold. The Montana DEQ strongly urges you to include all stream channels (with permanent, intermittent and ephemeral flows) in the definition of ‘waters of the United States.’”

Approximately 53% of wetlands have been lost in the coterminous United States since European settlement (Dahl 1990). Hansen et al (1995) reported that the loss of wetlands is responsible, in part, for the change from perennial to intermittent flow in some streams. They explain that many alluvial aquifers in the western United States are maintained by infiltration of upland runoff. Water storage in these aquifers was once partially responsible for maintaining base flow in western rivers, which are now dry beds much of the year. As the wetlands have disappeared, so too have the perennial flow of many of our streams and rivers. For the agencies charged with implementing the CWA to attempt to redefine “waters of the United States” deleting the intermittent or ephemeral nature of stream flow reduces critical protection of our aquatic ecosystems and lowers the baseline of the CWA responsibility to restore and maintain the nation’s waters.

The proposed rulemaking is in effect asking what is the most upstream jurisdiction of the Clean Water Act. As a headwater state, the future quality of Montana’s water has much at stake with this proposed rulemaking. Montana DEQ recommends that the headwater extent of the Clean Water Act be the watershed divide, which would incorporate all ephemeral, intermittent and tributary streams and all wetlands within the watershed. Ephemeral and intermittent waters provide beneficial uses to both residents and visitors to the State and deserve protection under the CWA.

3. Potential Impacts to DEQ Clean Water Act Programs

We believe that the SWANCC decision confines itself to the jurisdictional scope of Section 404 only, and does not apply to the CWA overall. These comments are in response to the ANPRM request for potential implications of the rulemaking on other CWA sections. Programs authorized by Sections 401 and 303 Water Quality Standards require the federal underpinning that presently exists.

CWA Section 401 Water Quality Certification Programs

Montana has no specific state law that will protect isolated wetlands in the absence of Section 404 CWA jurisdiction. Wetlands are not clearly identified as state waters. They are only protected under state law when they have water in them. However by their very nature, wetlands are often dry for part of the year or in drought years. The State relies on CWA section 401 as its primary CWA tool to protect wetlands. Under CWA Section 401, Montana has historically relied on the CWA Section 404 program and has not established independent wetland regulation. A Federal basis of support for implementation of water quality protection efforts in Montana is critical in light of the state’s limited regulatory resources.

If ANPRM results in the COE losing jurisdiction over all waterways except the few major rivers in Montana that are now considered "navigable" by the COE, DEQ would lose the ability to certify the several hundred 404 permits that are currently being issued by the COE every year in Montana. The 401 certification process can apply conditions to 404 permits that help the proposed work in state waters meet water quality standards and provide for no loss of beneficial uses. It can also be an effective tool to modify proposed stream projects to complement the DEQ TMDL program.

CWA Section 303 Water Quality Standards Programs

Should the EPA modify its definition of “waters of the U. S.” to exclude wetlands, lakes or ponds that are not directly connected to a ‘navigable’ water and tributaries that are ephemeral or

intermittent, existing State water quality standards would continue to apply because these waters meet the definition of 'state waters,' except for wetlands with no standing water. Except for a few specific situations (i.e., temporary water quality standards) individual water bodies are not explicitly given standards (numeric or narrative). The geographic classification of Montana's surface waters automatically includes waters that may not be regulated by the federal CWA and all surface waters in Montana are classified.

Other CWA sections, such as Section 402, Montana Pollutant Discharge Elimination System Programs and the TMDL program, rely on state definition. However, these programs are strengthened and supported by their consistency with federal rule. The ANPR would remove this consistency and support, leaving the programs vulnerable to diminishment by local legislative actions.

Remediation Programs

The DEQ Remediation Division requires compliance with the CWA and obtaining permits or compliance with equivalent standards at its cleanup sites. These requirements are spelled out in Applicable or Relevant and Appropriate Requirements (ARARs) under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA, also known as federal superfund) and Environmental Requirements, Criteria, and Limitations (ERCLs) under Montana's Comprehensive Environmental Cleanup and Responsibility Act (CECRA, also known as state superfund). The ANPRM changes may affect EPA and DEQ's ability to require cleanup of contaminated wetlands and ephemeral/intermittent/headwater streams.

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