



November 14, 2014

U.S. Environmental Protection Agency
Office of Environmental Information Docket
1200 Pennsylvania Avenue NW.
Washington, DC 20460

RE: Comments in Response to the Environmental Protection Agency's and U.S. Army Corps of Engineers' Proposed Rule to Define "Waters of the United States" Under the Clean Water Act EPA-HQ-OW-2011-0880

Dear Sir or Madam:

The National Corn Growers Association (NCGA) offers these comments on the Environmental Protection Agency and the U.S. Army Corps of Engineers ("Agencies") proposed rule to define "waters of the United States" (WOTUS) under the Clean Water Act (CWA). NCGA has been a consistent advocate for a rulemaking that is grounded in the 1972 CWA's foundational concept that WOTUS are part of US "commerce" and that navigability is their defining feature leading to commerce. Other waters may be WOTUS under the law, but they must have direct and significant enough hydrological contact with navigable waters to be considered unequivocally part of a system of waters defined by the property of navigability that leads to commerce. We have also advocated for a rulemaking to clearly establish how the Agencies will determine when these other, non-navigable waters have enough connections and sufficient water moving through them to be considered part of a system of navigable waters and therefore jurisdictional. Such a rule is needed to give farmers greater clarity and certainty about their responsibilities under the CWA. While we have very serious concerns with the proposed rule in its present form, we appreciate this proposal and the opportunity it creates to craft a rule that is firmly grounded in navigability and clear and sensible in its application and implementation.

Corn growers wholeheartedly embrace the CWA's goal to protect and restore the chemical, physical, and biological integrity of the waters of the US. We have and will continue to work with the Agencies, their state counterparts, and others that care about water quality to reach these goals. Most of corn farmers' contributions in support of these goals take place in areas where the waters or drainage features are themselves not jurisdictional because they are too

remote or have too little flow in them to be considered part of this system defined by the property of navigability. Corn growers' commitment to protecting and restoring water quality does not apply just to the waters of the US further down in the watersheds. Farmers have and will continue to work in their communities to restore or protect the health and vitality of the local waterways that the community values by minimizing sediment and nutrient losses from their farms, even though such local waters are not themselves jurisdictional.

We are deeply concerned by the implications of many aspects of the proposed rule that is working contrary to this view. The Agencies state that they intend to create more certainty and less confusion with this proposal. We respectfully submit that in the case of agriculture, the exact opposite has been the result. The new, never before articulated definition for tributaries, which works in tandem with a definition of adjacent waters that is also changed, the status of farmers' operations and their liabilities under the CWA are now in question. The proposal would or could make jurisdictional more than five million miles of remote waters and drainage features, innumerable wet areas in farm country associated with those drainage features, and at last count approximately 25 million acres of remote, isolated wetlands in crop, pasture and range land.

These proposals are not consistent with the two most recent Supreme Court decisions and the related opinions that make it clear that the court found the Agencies' interpretation of the scope of federal jurisdiction to be far too broad. Furthermore, these proposals and the uncertainty and confusion they create will work directly against farmers' efforts to prevent nutrients and sediments from reaching the system of navigable waters while they also work to produce abundant, affordable high quality food, feed, fuel and other products.

Our comments below detail many of the practical, adverse consequences of the proposed, first-ever definition of tributary and the revised and expanded definition of adjacent waters. We comment on the arbitrary nature Agencies' definition of significant nexus and suggest changes to address that problem and to help ensure that jurisdictional waters will more likely be part of a system of navigable waters. We offer a suggested comment on the definition of "upland" not only to ensure that the upland ditch exclusion will work, but also to provide a foundation for determining which drainage features should not be treated as categorically WOTUS. Similarly, we offer a suggested change to the definition of floodplain so as to ensure that the "adjacent" waters that are categorically WOTUS in fact have a substantial and non-speculative hydrological nexus with traditionally navigable waters.

NCGA represents over 42,000 dues-paying corn farmers and the interests of more than 300,000 farmers who contribute through corn check-off programs in their states. Our producer members will be directly and substantially affected by this rulemaking. If features on their farms are made jurisdictional or could be considered possibly jurisdictional farmers could be subject to new and unprecedented regulatory requirements or obligations under the CWA's

Section 404 (the dredge and fill permitting program) and Section 402 (the National Pollution Discharge Elimination System permitting program), spurious legal actions by citizen activists involving both these programs, and a host of uncertainties and liabilities that come with such consequences. All of these will have direct financial and practical consequences for farmers which are unacceptable. For these reasons and the reasons detailed below we offer these comments on the proposal and ask that they be given careful, serious, and complete consideration.

I. Corn Growers' Conservation Accomplishments

Corn growers are proud of their soil, water and nutrient conservation efforts and the substantial benefits of that work. Between 1980 and 2011, soil erosion was reduced by 67 percent per bushel of corn produced and by 43 percent per acre of corn planted.¹ Excess sediment lost to waterways from farmland is one of the nation's top water quality concerns, and corn producers have reduced these losses by 147 tons per year in 2011 relative to 1980. Phosphorous loss from farm land often is directly related to sediment losses, and corn growers' erosion reduction accomplishments translate directly into less phosphorus in runoff reaching surface waters.

Corn yields per acre over this period have gone up by more than 60 percent, about 60 bushels of corn per acre increase. Yet at the same time, the rates at which the primary corn nutrients (nitrogen, phosphorous, and potassium) have been applied per acre have declined. We produced 6.64 billion bushels of corn in 1980 and used 3.2 pounds of primary nutrients per bushel. By 2010 we produced 12.45 billion bushels of corn, but used only 1.6 pounds of nutrients per bushel. This equates to an 87 percent increase in nutrient use efficiency and translates directly into far greater quantity of nutrients being removed from the land in the form of corn grain than was the case in 1980. The net effect of this is fewer nutrients in the soil profile that might move into surface water.² These data clearly show the practical, extensive benefits of corn growers' commitment to practicing sound soil, water and nutrient conservation on their farms, and in the process protecting water quality locally and in the downstream navigable waters.

¹ Field to Market (2012 V2). Environmental and Socioeconomic Indicators for Measuring Outcomes of On-Farm Agricultural Production in the United States: Second Report, (Version 2), December 2012. Available at: www.fieldtomarket.org. See pages 41-50 for the results for corn.

² See The Fertilizer Institute, U.S. Fertilizer Consumption Table and U.S. Consumption of Primary Plant Nutrients. Derived from USDA NASS data (2011). Available at: <http://www.tfi.org/statistics/fertilizer-use>.

II. Summary of the Proposed Rulemaking and its Practical Implications for Farmers

Key elements of the EPA definition for WOTUS are largely unchanged from previous rulemakings and are part of the settled law on this subject; traditionally navigable waters (TNW), interstate waters, and territorial seas are all clearly WOTUS under the law and as addressed in the proposed rule.

Most of the other major features identified in the proposed rule as WOTUS reflect the application of a relatively new concept in CWA jurisdiction, “significant nexus.” Under the proposed rule, all “tributaries,” all “impoundments” of all tributaries, and all wetlands and wet areas “adjacent” to these tributaries are categorically defined as WOTUS. They are treated as categorically WOTUS because of the hypothesized existence of a “significant nexus” that in the abstract implies that each and every one of these features, without consideration of each feature’s own unique, site-specific characteristics and circumstances, has a significant connection to the downstream waters considered categorically WOTUS in the proposal.

Ditches, with two exceptions, are considered tributaries under the proposed rule and are therefore WOTUS. Excluded are those ditches excavated wholly in uplands, drain only uplands and that have flowing water in them less than permanently. The term “uplands” is not defined. Also excluded are ditches that do not contribute flow, either directly to indirectly, to a downstream WOTUS. A ditch that meets either of these conditions is excluded; the two conditions need not be met simultaneously.

Beyond these “categorical” WOTUS, the proposed rule provides for finding “other,” more remote waters or wetlands to be WOTUS on a case-by-case basis. To be WOTUS, such remote waters must be found to have a significant nexus to tributaries or other waters. These other waters can be considered individually or in aggregate with other similarly situated waters in assessing their nexus and its significance with downstream waters.

The proposed rule’s treatment of tributaries (including ditches), waters or wetlands defined as adjacent to these tributaries, and the “other” isolated waters or wetlands are discussed in more detail below. Also discussed are the practical implications of their being made WOTUS.

A. Significant Nexus

The proposed rule states that “significant nexus means that a water, including wetlands, either alone or in combination with other similarly situated waters in the region (i.e., the watershed that drains to the nearest water identified in paragraphs (1)(i) through (iii) of this definition), significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (1)(i) through (iii) of this definition. For an effect to be significant, it must be more than speculative or insubstantial. Other waters, including wetlands, are similarly situated when

they perform similar functions and are located sufficiently close together or sufficiently close to a “water of the United States” so that they can be evaluated as a single landscape unit with regard to their effect on the chemical, physical, or biological integrity of a water identified in paragraphs (1)(i) through (iii) of this definition.” (See 79 FR 22263, April 21, 2014).

The Agencies’ science report on the degree of connections between TNW and upstream waters and wetlands, the *Connectivity Report*, does not distinguish in any scientific or quantifiable manner the relative strengths of the degree of connections that exist, nor their degree of effects. As a result, the proposed rule’s finding that certain classes of features are categorically WOTUS is based on a highly subjective and arbitrary standard with not practical meaning. This means that entire major classes of geographical and hydrological features are essentially being determined to all be the same; significant enough in their effects on TNW to themselves be lumped together, categorically, as WOTUS. All tributaries, whether they flow a few days a year after rainfall events, or flow a few weeks of the year during a particular season, or flow several weeks over multiple seasons, or flow permanently, are all of the same significance to the TNW and are all therefore WOTUS. All waters or wetlands that are contiguous with, next to or in the neighborhood of this seriously diverse set of features are also categorically WOTUS as adjacent features.

This same subjective standard, without any meaningful threshold of effects considered as “significant,” is also to be used to define case-by-case whether “other” isolated or remote wetlands and waters are WOTUS. In the case of these “other” waters, the Agencies explicitly decided not to develop objective measures to determine significance in the case of these “other” waters, saying that to do so would restrict the necessary flexibility needed to make site specific decisions case by case.³

B. Tributaries and Ditches

The proposed rule defines for the first time how the Agencies understand the term “tributaries.” The proposal defines tributaries as waters physically characterized by the presence of a bed and banks and ordinary high water mark which contributes flow to a TNW and other waters. Any feature with those characteristics will be a tributary no matter the quantity or duration of the flow; whether the water flows perennially (year round), intermittently (only in a season or part of certain seasons), or ephemerally (when rain falls and

³ “The agencies do not propose absolute standards such as flow rates, surface acres, or a minimum number of functions for “other waters” to establish a significant nexus. A determination of the relationship of “other waters” to traditional navigable waters, interstate waters, and the territorial seas, and consequently the significance to these waters, requires sufficient flexibility to account for the variability of conditions across the country and the varied functions that different waters provide.” (See 79 FR 22198, April 21, 2014.)

there is surface runoff), it is a tributary and therefore WOTUS. Former ephemeral streams that have been improved (e.g. straightening, channeling, widening) to serve some other purpose (e.g. drainage or water transport) are still a tributary and therefore WOTUS. The proposal states that a water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more man-made breaks so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. In the Agencies' view, tributaries in a watershed are similarly situated and have a significant nexus alone or in combination with other tributaries because they significantly affect the chemical, physical, or biological integrity of TNW and other jurisdictional waters.

Farm Drainage Features as WOTUS Tributaries--NCGA believes that it is not lawful for intermittent or ephemeral tributaries to be made categorically WOTUS. The reasoning for this is given in Section XX below. Aside from the issue of their lawfulness, the potential scope and reach of making all ephemeral and intermittent tributaries jurisdictional is simply breathtaking. Drainage features in every part of essentially every farming region of the country commonly exhibit bed, bank and ordinary high water mark characteristics that would make them tributaries. Many of these, as evidenced in the aerial imagery to follow, were likely to have been natural features (streams) that have been adapted in the agricultural landscape to serve a drainage function. As the proposed rule makes clear, former tributaries improved for purposes such as drainage are still tributaries and remain WOTUS.

Table A-1 in Appendix One presents the calculated number of miles for many, but far from all, perennial, intermittent, and ephemeral streams in 20 states, as captured in the USGS National Hydrography Database (NHD). Using the 1:100,000 medium resolution dataset, which roughly approximates the perennial and intermittent streams, we estimate there are approximately 1.6 million miles of such streams in these 20 states alone. Using the 1:24,000 NHD dataset, which roughly approximates the perennial and intermittent streams plus about 35 percent of the ephemeral streams on average, we calculate that in these 20 states the number of stream miles jumps to approximately 3.5 million. That 1.9 million mile increase in streams between the medium resolution and high resolution estimates is due to a large extent to the addition of the 35 percent of the ephemeral streams to the calculation. The increase in stream miles would certainly be significantly higher if 100 percent of the ephemeral streams were included in the calculation.

The US EPA has conducted a similar mapping analysis of stream miles, and the results of that effort are posted on the US House of Representatives Science Committee's website. The national analysis presented there indicates that there are 7,339,124 miles of linear streams in the U.S. (including Puerto Rico). Of these, 77 percent or 5,661,337 miles are intermittent or ephemeral streams.⁴

⁴ See <http://science.edgeboss.net/sst2014/documents/epa/national2013.pdf>.

What does this look like in practice? Figure 1 below is an image from the mapping analysis for an area in south of Mt. Vernon, Indiana that is about 10 square miles in size. The red lines are the stream features in the high resolution dataset. The white area around them are the 35 foot buffers that were applied to these streams to simulate adjacent areas. What is evident from this image is that in this part of Indiana there is hardly a farm field in view that is not crossed by or intersect with one of these mapped streams. It is likely that the vast majority of the features depicted here have water in them only ephemerally, only after a rainfall.

It is also critical to realize is that for those streams that are tributaries under the rule, including those that have drainage water in them only after a rainfall, that any field-side or roadside drainage ditch they flow to will also be WOTUS (under the proposed rule any ditch draining a WOTUS is also a WOTUS). If all of these mapped streams are WOTUS, then it is highly likely that each and every drainage ditch in this 10 square mile area is there is a WOTUS even if they have water in them less than permanently.

Figure 1 – Mapped NHD streams and estimated buffers in southeastern Indiana



Will all of these mapped features, including the numerous ones that are ephemeral, be found to be a tributary as defined in the proposed rule through a formal determination? Every farm depicted here will share this concern as the fact of the matter is that, using USGS NHD data, EPA’s own “My Waters Mapper” labels features such as these streams or ditches. It is impossible to say for sure from these aerial images if a channel with a bed, bank and ordinary high water mark will be visible when standing on the ground next to these features in every instance. But in many instances it is clear from a review of aerial imagery in farm country with

the mapped stream and floodplain layers turned on and off that many of the mapped features very well will be WOTUS under the proposed rule.

For example, the images in Figure 2 below are from the “thumb” area of Michigan, east of Saginaw. The upper image has the mapped stream features at the 1:24,000 scale turned on and depicted in red, as well as the FEMA floodplains and stream buffers in light blue and white. The lower image is the aerial view for the same area but with the mapping features turned off. Clearly visible in the lower image are the actual physical channels and the characteristic stream-like morphology for the drainage area that lie under the mapped flowlines, floodplains and buffers in the upper image. Also, it is clear that these physical, tributary-like channels have in many places been straightened to facilitate drainage; such features are WOTUS under the proposed rule as noted above. Lastly, while it is hard to see in these images, it is very likely that all of the other roadside and field-side drainage ditches in this area are connected to the surface drainage system characterized by these tributaries or tributary-like system and are also themselves WOTUS as a result. Many of these drainage features will only have drainage water in them after a rainfall.

Figure 2 – Mapping analysis of area east of Saginaw, Michigan, with streams, FEMA floodplain and buffer layers depicted in 2 and not depicted in 3.



Figure 3 below contains photographs of farm fields at the ground level. The farm drainage features have a distinct channel that almost certainly would be found to have tributary characteristics as defined in the proposed rule.



As noted above, such drainage features are found in farm fields across the US. NCGA encourages the Agencies, before finalizing this rulemaking, to conduct a thorough and accurate field review of this class of features across the country and to provide NCGA and the larger agriculture community with its own assessment of the likely jurisdictional consequences for

these features. Lacking such an assessment we are convinced that the Agencies will be doing this rulemaking in the absence of critical and important information to help them and the public assess the practical effects of the policies being advanced in the rule.

One of the Agencies' expressly stated goals for the proposed rule is to create certainty for the regulated community. In fact and practice, in the case of farmers the exact opposite will occur. The farm drainage features depicted here, many with visible channels even at this elevation, and visible in farm fields in nearly every farming region in the country, appear to be WOTUS. They may or may not be WOTUS, depending on the outcome of a formal determination, which will be a source of uncertainty for farmers. Not only is there uncertainty created by the definition of tributary as it might be interpreted in the field, every farmer knows that that field judgments will have their own uncertain outcome, depending on the subjective and personal judgment calls made by different agency personnel.

There also is the uncertainty and liability from the likelihood that farmers will face citizen suits alleging on the basis of these apparent facts that these are in fact tributaries. Those suits will be able to claim, following the logic of the proposed rule, that these features have a "significant nexus" to TNW and are therefore critical to the "chemical, physical and biological integrity" of the nation's jurisdictional waters. Further following the logic of the proposed rule and the structure of the CWA, these suits will also claim that such drainage features require their own CWA "water quality standards," that they must be "assessed" as to whether they are "attaining" their "designated use" and if "impaired" must have a "TMDL" applied to them.

Beyond these concerns, and even more fundamentally important, are the concerns for what will happen as a result of agency action or activist litigation if these farm drainage features are made WOTUS. These concerns have to do with the permitting programs under Section 404 and Section 402 of the CWA.

The Agencies rightly point out that this rulemaking has not changed the application of the Section 404 exemptions for "normal farming activities" or the application of the "agricultural stormwater exemption" from Section 402 permitting. We agree. But there are far more troubling consequences of making these drainage features WOTUS.

In making these farm drainage features WOTUS the rulemaking would invite activist lawsuits challenging the application of fertilizers or pesticides onto, over, into or near to these drainage features as being an illegal point source discharge needing a Section 402 National Pollution Discharge Elimination System (NPDES) permit. That was the logic adopted by a federal court in the *Cotton Council* decision that ruled that aquatic pesticides applied from a nozzle onto, over, into or near WOTUS require a CWA NPDES permit. The court reached this conclusion even though the pesticides are only allowed to be used under separate, longstanding federal pesticide law following a mandated rigorous and expensive scientific study, review and labeling

process. The lawsuits challenging farmers' use of terrestrial pesticides under the agricultural stormwater exemption, even though used under a label and requirements created in the federal process, would effectively result in the federal NPDES permitting of the use of pesticides in the entire farm field, or the establishment of mandatory, large buffers around these features in which agricultural production would not occur. The same is true for the use of fertilizers near or in these drainage features. This is despite the fact that it is universally recognized as appropriate and needed, including under federal conservation practice standards, to fertilize the grass stands in and immediately adjacent to these drainage features to ensure a healthy, erosion controlling and soil stabilizing stand. Such activist lawsuits and the resulting federal law would effectively end the agricultural stormwater exemption's meaningful application in farm fields where these WOTUS drainage features are located.

In the case of the Section 404 dredge and fill permitting program, it is NCGA's understanding that if the drainage features like those depicted in Figures 1 and 2 are made WOTUS, or could be possibly WOTUS, that farmers in many parts of the country will invariably face stepped up Section 404 obligations, costs and liabilities. This will be despite the "normal farming exemption" in Section 404(f)(1). At a basic level this will be for the simple reason that there will be an exponential increase in the number of instances whereby farmers will have to approach the Corps and seek the normal farming exemption. Time and cost will be involved in those requests in nearly every instance. Furthermore, the Corps in many of its districts have a long history of being very reluctant to grant the normal farming exemption (claiming a recapture of the activities under Section 404(f)(2)), or of being able to impose certain constraints on activities in granting the normal farming exemption.

The issues under Section 404 do not stop there. The Section 404(f)(1) normal farming exemption does not include many activities like land shaping that may occur in these drainage systems to facilitate the creation or management of more effective farm drainageways. Making these ephemeral and intermittent drainage features WOTUS will invariably result in more Section 404 permitting in farm country. All of these Section 404 concerns could result from either the Corps' own implementation of their program in light of the rulemaking, or as a result of activists lawsuits under the CWA forcing them, or farmers, to do so.

This rulemaking cannot and must not be conducted without taking into full account the long history of the CWA, with several recent examples during the past six years, where activist groups have pursued legal challenges to the agencies' policies and the private sectors' actions. These suits were made possible by the "creative" or "imaginative" interpretations of the agency's authority under the CWA. The suits themselves take that logic further and expand the authorities beyond even those in the red letter versions of rules and guidance. No one should be naïve enough to think that such litigation will not follow this rulemaking if finalized in its proposed form or without significant revision. The fact that in the recent past it is evident that the agencies' themselves deliberately formulated policy in rulemaking, guidance, or out-of-

court settlements to facilitate such follow-on activist litigation makes NCGA very cautious about this proposed rule and its implications.

The bottom line is that USEPA's own mapping analysis discussed above estimated that nationwide there are more than five million miles of ephemeral and intermittent streams. All of these certainly do not lie in farm country. But it is reasonable to assume that since farming and ranching is the most common land use in states that most of these more than five million miles of streams are in farm and ranching country. Each of those likely millions of stream miles would become overnight, with the simple stroke of a pen, a potential and very serious regulatory or legal liability farmers that did not exist before this rulemaking if it is finalized in its proposed form.

Portions of Ditches with Wetland Characteristics—The proposed rule excludes from jurisdiction ditches excavated wholly in uplands, draining only uplands and flowing less than permanently. While upland is not defined in the rule, assuming that at a minimum it means areas that are not wetland, what are the jurisdictional implications if a portion of an upland ditch develops wetland characteristics? Does that mean the ditch is draining a non-upland area and is therefore WOTUS along its entire length? Also, does that mean that any subsequent ditch downgradient from this initial ditch is also categorically WOTUS as they are part of a system of ditches draining WOTUS?

NCGA is very concerned about this instance; where an ephemeral or intermittently flowing ditch excavated in upland farming areas may develop wetland like characteristics in some portion of the ditch. In many parts of the country, over a relatively short period of time sediments can collect in an excavated ditch, and over the course of a growing season or two wetland or wetland-facultative plants can become established. Corn growers have experience with the Corps finding these areas in ditches to be wetlands.

Figure 4 below depicts such a possible circumstance. This feature from a farm in the Mid-Atlantic region is either an excavated ditch or an improved ephemeral stream (it is not clear how to interpret this under the proposed rule without more detailed, in-field examination). Clearly visible here is a section of the drainage feature in which wetland or wetland-facultative plant species have grown up. Assuming this is an excavated upland ditch and that there will be sufficient moisture in it for the soils in its channel to be hydric, will the presence of some of these wetland features that can develop over time mean that this ditch is not solely draining an upland? If so, then this ditch would be a WOTUS under the proposed rule. We offer suggestions in the sections that follow to address this concern.

Figure 4 – possible excavated ditch in upland area. Does the presence of portions of the ditch with wetland features mean that the ditch is not draining uplands, and is therefore WOTUS?



C. Wetlands or Waters Defined as Adjacent to these Tributaries

The proposed rule makes categorically WOTUS all wetlands and waters that are adjacent to TNW, tributaries, waters used in commerce, territorial seas, and impoundments. New to this definition is the addition of the term “waters” (as in “wetlands **and waters**”) to features that can be considered adjacent and therefore WOTUS. This is a significant expansion of the scope of the rule, as discussed below.

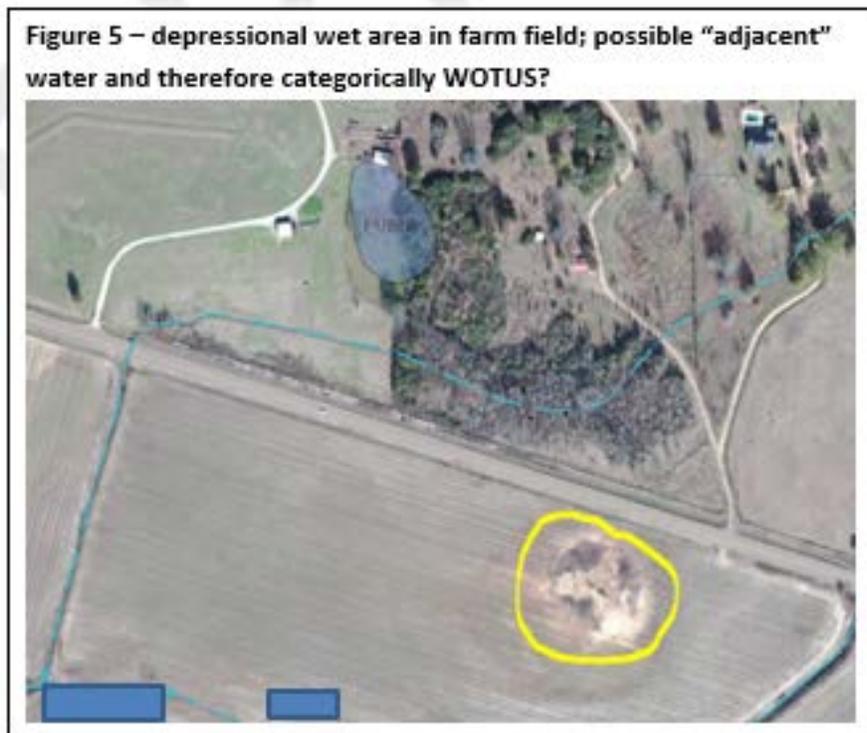
The term adjacent means bordering, contiguous or neighboring. Waters, including wetlands separated from other WOTUS by man-made dikes or barriers, natural river berms, beach dunes and the like are adjacent waters. The term neighboring includes waters located within a river’s or a tributary’s biologically active riparian area or in its floodplain are WOTUS. Wetlands or with a shallow subsurface hydrologic connection or confined surface hydrologic connection to rivers or their tributaries also are WOTUS.

Where a particular water body is outside of the floodplain and riparian area of a tributary, but is connected by a shallow subsurface hydrologic connection with such tributary, the agencies will assess the distance between the water body and tributary in determining whether or not the water body is adjacent. The size of a floodplain will also vary and require the professional

judgment of the agencies to determine which flood interval to use to determine whether a water is in the floodplain and therefore adjacent to a jurisdictional water and a WOTUS for the purpose of this rule.

The number of acres of land within which wetlands or waters could be found to be adjacent to a WOTUS and therefore themselves categorically WOTUS is exceedingly large. The analysis that NCGA and several other agricultural groups conducted this summer, as discussed earlier and in Appendix One, used conservative assumptions about the possible size of the floodplains in 20 states and found that they encompassed 114 million acres of land. We used the Federal Emergency Management Agency's (FEMA) 100-year floodplains in these 20 states, plus the land in 70 foot wide buffers around the smaller tributaries for which a FEMA floodplain is not available. As in the case for the estimates of the number of ephemeral stream miles from the USGS National Hydrography Database (NHD), this 114 million acre, 20-state figure is likely a significant underestimate as the NHD reflects on average approximately only 35 percent of the ephemeral streams in these states. The acres in floodplains around 100% of these streams would certainly be significantly higher than 114 million acres.

Floodplain areas of this size would certainly encompass large quantities of agricultural acres, and could lead to a significant number of wet areas or farmed wetlands to be found to be adjacent to a tributary and therefore WOTUS. Figure 5 below is an aerial image of an example of this from a farm in the southern US. This farm field has a small depressional area (see circled area) in a corner of a field on three sides of which is a small tributary mapped in the NHD dataset.



A small depression in a farm field can have standing water in it for a few days. They commonly do not have water in them for a long enough period of time, or the type of vegetation, to constitute making the feature a wetland, but that occurs as well. Yet if the drainage feature to which this water feature is adjacent is a WOTUS (as a former ephemeral stream, for example, improved for drainage purposes), then this water feature could easily be considered a “water” under the proposed definition of adjacency and therefore categorically WOTUS. As such, when this area is cropped in dry years, it would be subject to the same Section 402 liabilities discussed above in the case of tributaries in farm fields. As an adjacent water and therefore a WOTUS, this depressional area would also be subject to Section 404 dredge and fill permitting requirements and liabilities as well.

NCGA does not have estimates of the number of such small, occasionally flooded low spots there are in farm fields across the country. But it is fair to expect that any farm field of any size in a farming area with a modestly rolling topography to have at least one of these, meaning the number of these small depressional wet areas runs well into the millions. These occasionally wet or ponded areas in farm fields should not be categorically WOTUS as an “adjacent” water.

D. Other Isolated Wetlands or Waters

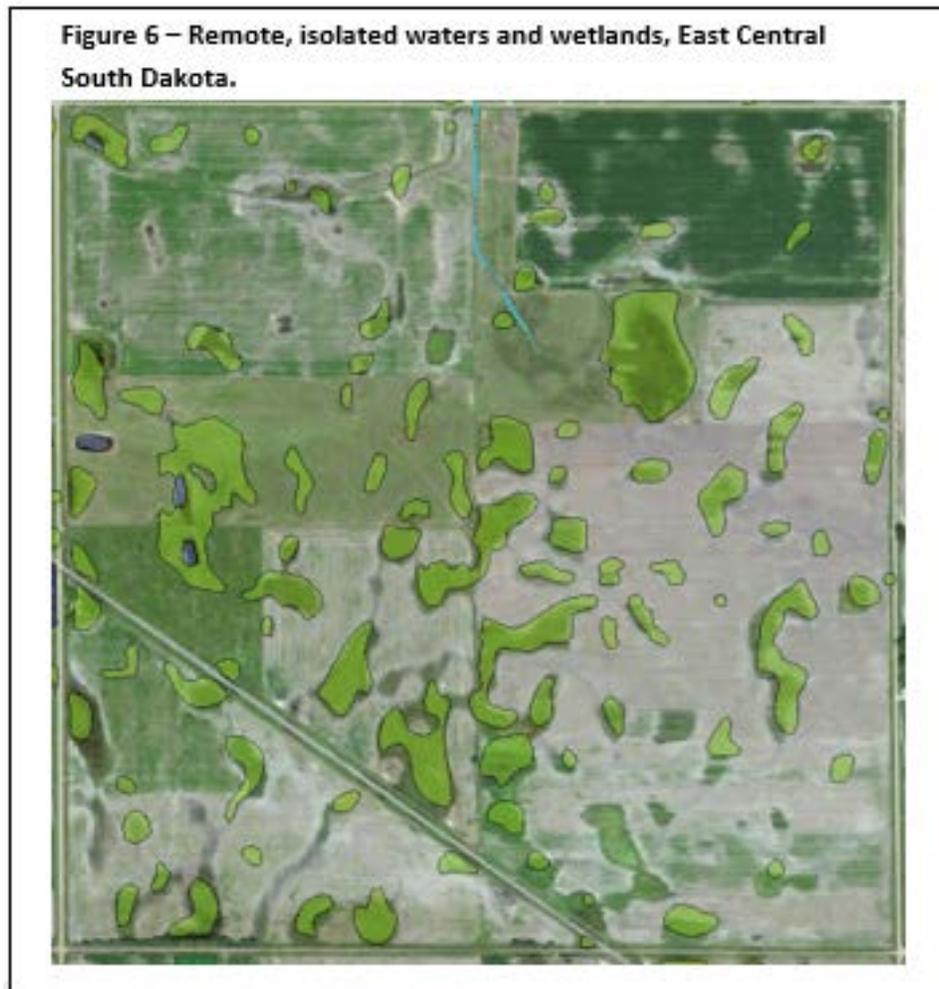
The proposed rule adopts a case-by-case approach to determine whether “other” waters are WOTUS. In short, the “other” waters covered by this part of the proposed rule are simply all the waters that have not already been defined to be categorically jurisdictional or which are not otherwise exempted. “Other” waters will be evaluated either individually, or as a group of waters where they are determined to be similarly situated in the region. Waters are similarly situated where they perform similar functions and are located sufficiently close together or when they are sufficiently close to a jurisdictional water. For other waters that perform similar functions, their landscape position within the watershed relative to each other or to a jurisdictional water is generally what determines how they are aggregated in a significant waters analysis.

We have significant concerns about the lawfulness of designating remote, isolated “other” waters as WOTUS (see the discussion in Section III below). But should the agency move forward with this proposed approach to such isolated waters, we cannot stress enough how critical it is that the Agencies come up with more objective standards for determining the significant nexus between an isolated water or wetland and a downstream TNW.

Figure 6 below is an aerial image from a farming area in east central South Dakota. It is drawn from the mapping exercise described in Appendix One, which utilizes the NHD data plus the Department of the Interior Fish and Wildlife Service’s National Wetlands Inventory (NWI). The center of the section of farmland depicted here, which contains more than 50 spots within the fields that are wet enough to be classified in the NWI, is a quarter of a mile from the start of an ephemeral drainage feature which proceeds north and then generally westwards for

approximately 9 miles, eventually becoming an intermittent drainage feature or stream, and then connecting to a named perennial stream that proceeds southward for another 14 miles, approximately, before it reaches a river. The total distance via the water drainage system is approximately 25 miles.

Under the proposed rule, the challenge facing the farmer or farmers that own and manage these fields is that they have no objective way of determining for themselves the likelihood of any of these wet areas in their fields being found jurisdictional under the case-by-case analysis contemplated in the rule. Nor would these farmers have any assurances that the field person making such a determination could do so in anything but a highly subjective manner. The proposed rule, by not defining what “significant” actually means, leaves the producer with no way of judging if the determinations of the field staff actually make sense. The decisions will be necessarily somewhat arbitrary, or at least certainly idiosyncratic according to the particular thinking and approach taken by the staff person making the determination.



We note that if any of these features are in fact wetlands, they are currently protected from drainage under the “Swampbuster” provisions of the 1985 Food Security Act, as amended by every farm bill since. Those Swampbuster provisions today deny producers access to federal crop insurance premium subsidies should they drain wetlands. Such premium subsidies are essential to making the insurance premiums affordable; the practical consequence is that farmers would not have crop insurance available to them should any wetlands present here be drained, which is a strong disincentive to any farmer considering draining a wetland. These strong protections for the wetlands that may be present here and anywhere else in farm country are in place today and do not depend in any way on whether these are deemed WOTUS under the CWA.

But were these features to be determined WOTUS, the implications for the operation of these fields is enormous. It is evident that many of these wet areas are actively cropped. This is not unusual as farmed wetlands are often in production in those years that are dry enough. If found to be WOTUS, the same class of issues identified above for tributaries and adjacent waters in farm fields would be present. Namely, fertilizer and pesticide products applied through a nozzle would be found to be a point source discharge subject to CWA Section 402 permitting. This is simply unacceptable.

III. Major legal and policy comments on the rule

Support for WAC’s Legal Comments—NCGA is a member of the Waters Advocacy Coalition (WAC) and NCGA endorses the views expressed in the comments submitted collectively by WAC members on the lawfulness of several of the measures of the proposed rule, and we wish to associate ourselves with those comments for the purpose of this notice and comment process. We provide a summary of our views on the matter of the proposed rule’s lawfulness here without attempting a full, legal explication of their content. We direct you to the WAC comments for a more complete discussion.

Jurisdictional Determinations Must Be Grounded Meaningfully in Navigability--Our views of the law go back to the foundational CWA premise, that jurisdictional waters be tied in a clear, direct, substantive and non-speculative fashion to navigation and navigability. Other non-navigable waters are of course jurisdictional under the CWA, but it is through their close, direct and substantial hydrological contribution to these navigable waters that they can be considered as part of a navigable system and therefore WOTUS. While the chemical, physical and biological effects of these other, non-navigable waters on downstream waters can and should be taken into account, the courts have made it clear that the term “navigable” in these jurisdictional determinations must be given real meaning. It is our view, in light of the three applicable Supreme Court decisions on this subject, that this proposed rule claims or could be claiming jurisdiction over features and waters that are so remote, and with such limited flowing water in them that they cannot in any way be considered as making a significant contribution to

the navigability of the TNW. The Agencies' definition and use of significant nexus fails entirely to incorporate or reflect the need to give meaning to the term navigable when defining the relationship between the other, non-navigable waters and the downstream TNW.

Proposed Definition of Significant Nexus is Arbitrary in its Nature and Applicability--

Furthermore, even in the proposed rule's incorrect conceptualization of significant nexus in terms of chemical, physical or biological effects, the Agencies' did not draw upon science, scientific inquiry, or some other reasonably objective process to establish some meaningful standards by which "significance" or "substantial" can be judged. As a result, the proposed significant nexus standard is highly arbitrary. The proposed rule states that **significant** nexus means that "a water, including wetlands, either alone or in combination with other similarly situated waters in the region...**significantly** affects the chemical, physical, or biological integrity of a water identified in paragraphs (a)(1) through (3) of this section. For an effect to be significant, it must be more than speculative or insubstantial." (See 79 FR 22263, April 21, 2014). In effect, this definition says the nexus is significant if it is significant and substantial.

This is basically meaningless and in effect it is a simple binary standard; if there is a connection, it is significant, and if no connection it is not. The rule defines significance tautologically. As such this standard does not merit the traditional deference the courts give to the Agencies on matters of the reasonable application of science.

In Most Instances, Case-by-Case Determinations Are Needed--To establish jurisdiction, Justice Kennedy calls for a determinations that the nexus is more than speculative and not insubstantial. We think it physically impossible for such a non-speculative determination to be made categorically for every single one of the millions of miles of streams and drainage features, most of which have water in them at best a few days or weeks a year, and for all wetlands and waters that might be contained in some yet-to-be specified floodplain or riparian zone encompassing hundreds of millions of acres. Categorical findings covering such an enormous breadth of features found in innumerable and highly unique climactic, hydrologic, and physical conditions is, by definition, a highly speculative enterprise. For not only are the Agencies not attempting to specify the possible size of the error terms or uncertainty intervals around their estimates, they fail to make rough estimates of the actual effects in any instance beyond the simple binary finding discussed above.

Scientists and statisticians tell us that all estimates never yield a precise, actual value or condition that they are attempting to represent. But we generally don't consider using estimates of values or conditions to be speculation if we have a good understanding of how far off from the actual value our estimates might be. Doing so means we have applied reason to help us understand the degree of error that can be present in estimates, and therefore allow one to do more complete policy analysis of likely or potential benefits and costs. Risk management, for example, means understanding the degree of risk and uncertainty present,

quantifying it to the extent possible or at least qualitatively, and making prudent decisions and taking appropriate measures to account for the risk and uncertainty present. But the proposed rule's significant nexus test fails in this regard. The test not only doesn't involve any estimate of the strength of an actual nexus for a particular feature or water, it cannot tell us how far from the actual nexus the test's estimate may in fact be, on average. In its breadth and lack of specification, these so-called determinations are more reasonably termed speculations.

Aggregation of Features in Making a Significant Nexus Determination--We reject as unlawful the supposition in the proposed rule that in all instances an individual, non-navigable water or feature can be lumped together with other non-navigable waters in the area when making a significant nexus determination. Some aggregation in some instances is clearly allowed under Justice Kennedy's opinion. But allowing for that to be done in every instance, and without any guidance in the rule as to how that can be meaningfully done while giving the term navigable its due, seems more a way to simplify and lighten the work the Agencies must do rather than a way to make an accurate jurisdictional determination that has profound implications for the regulated community.

Remote, Isolated "Other" Waters Do Not Meet the SWANCC Test—The Supreme Court in its 2001 *Solid Waste Agency of Northern Cook County (SWANCC)* decision rejected the Agencies' attempts to assert jurisdiction over an abandoned sand and gravel pit based on the Agencies' theory that the isolated pond was used by migratory birds. The Court said that for it to rule for the government it would have to find that jurisdiction extends to ponds that are not adjacent to open water. The Court concluded that the text of the statute did not allow this, as this would mean that the term "navigable" in the CWA did not have any independent significance. The Court said that the term navigable shows what Congress had in mind when enacting the CWA: jurisdiction was over waters that were or had been navigable-in-fact or which could be made navigable with reasonable efforts.

In light of the above discussion, we think it is unlawful for any of the following to be deemed WOTUS categorically:

1. **Ephemeral of Intermittent or Tributaries.** Ephemeral and intermittent tributaries should not be categorically WOTUS. It is possible that, on a case-by-case basis, some of them could be found to have a significant (properly defined and specified) nexus to the TNWs. But it is not appropriate or lawful, under Justice Kennedy's test, to treat them all as categorically WOTUS. Such tributaries, including ephemeral and intermittent ditches, could well have insufficient volumes of water moving through them to support the finding that they have a significant nexus with traditionally navigable waters downstream. Such a significant nexus finding cannot be made categorically, for all such tributaries, as that could easily ignore the facts in a particular tributary's situation that would reject a significant nexus finding. Making a categorical finding of a significant nexus for tributaries with minor flow volumes

amounts to little more than speculation as to the connection's substantive effects in specific instances.

2. **Impoundments of Ephemeral or Intermittent Tributaries.** Only impoundments of WOTUS should be found to themselves be categorically WOTUS. Such impoundments could be found to be WOTUS on a case-by-case basis. But as in the case for ephemeral or intermittent or tributaries, to do so categorically without accounting for the specific facts involving the affected flows is not lawful as it would amount to speculation.
3. **Wetlands or Waters that are Adjacent to Ephemeral Intermittent Tributaries or their Impoundments.** Only waters that are adjacent to WOTUS could be found to be WOTUS, and since ephemeral and intermittent tributaries and their impoundments should not be found WOTUS categorically, neither should wetlands nor waters adjacent to them be so categorically found.
4. **"Other" Waters.** Lastly, in light of SWANCC and its rejection of the premise that isolated ponds could be WOTUS, we question the lawfulness of the proposed rule's treatment of the more remote and isolated "other" waters as possibly being WOTUS, case-by-case. Perhaps there are instances where their remoteness and isolation are not so great as to make it impossible for them to have a nexus integral or significant to the navigability characteristic of the TNWs. Almost by definition, though, these other waters fall into a class of features comparable to the feature in dispute in *SWANCC*. As such, we expect it would be highly unusual for one of these other waters to meet a significant nexus test, appropriately defined.

IV. Specific comments and recommendations for change

Navigability and the Definition of Significant Nexus—We strongly encourage the Agencies to work with the scientific community to investigate the degree of effects of individual non-navigable water on the navigability characteristics of the TNWs. With that information in hand, the Agencies could develop a reasonable, well-informed and more objective definition of significant nexus that does not define itself in a circular fashion.

Chemical, Physical and Biological Effects and the Definition of Significant Nexus—Should the Agencies not agree on this question of navigability, we still strongly encourage them to work with the scientific community to help the Agencies specify in meaningful terms what are significant or substantial chemical, physical, or biological effects. A meaning that leads to a simple binary decision fails this test. We encourage the agencies to examine the available scientific record and develop from it concrete, quantitative measures of the degree of effects of a tributary on a traditionally navigable water. With that information, the agencies could propose a concrete threshold below which effects are not significant. This would help give a better grounding to whatever policy findings the Agencies make as to what is categorically WOTUS, and also in the case-by-case determinations for the non-categorical waters.

Definition of Upland—We strongly recommend that upland be defined as the parts of the landscape whose surface drainage system flows predominately in the event of wet weather. Such a system could have sheet flow over the landscape, or in features conveying concentrated flow of water. Such concentrated conveyances could have water in them ephemerally or intermittently, or with volumes of water that don't constitute a significant nexus, as discussed above. We strongly recommend that any drainage feature in an upland area not be found categorically to be a jurisdictional tributary. Such a feature could be found to be WOTUS, case-by-case, using a scientifically grounded, concrete and quantitative threshold for the degree of effects necessary to become “significant.”

Adjacent Wetlands—Wetlands and “waters” are categorically WOTUS in the proposed rule if they are “adjacent” to a tributary. Adjacency is defined as bordering, contiguous or neighboring. We strongly suggest that any condition of adjacency apply only in the case of wetlands, and that the more nebulous “waters” not be included. There are innumerable instances in farm fields of small depressions that could have ponded water in them after an average rainfall for brief periods of time, or even for part of a season yet not meet wetland criteria. Such features could easily be interpreted to be “waters” as considered in this adjacency definition, and such features could be found to be WOTUS if they are near a drainage feature that is also found to be a WOTUS under the proposed rule. We strongly recommend that only wetlands be considered possibly adjacent WOTUS in this instance.

Definition of Floodplain to Establish Adjacency--In the case of the use of a floodplain to determine adjacency, we suggest that for a floodplain wetland to be adjacent and therefore WOTUS there has to be a serious and persistent interaction between it and the tributary. We recommend that a floodplain defined as that portion of the area around a tributary that is covered by water in the event of a 5 year-24 hour rainfall event as traditionally defined by the National Weather Service.

V. Conclusion

We appreciate that an effort is being made to bring greater clarity and certainty to the nation's understanding of what are waters of the US under the CWA. While we have very serious concerns about the proposed rule in its present form, we stand ready to work with the Agencies in such a valuable effort.

We encourage the Agencies to revisit the many issues we and many other organizations and entities like us have identified in the proposal and make several fundamental changes. Significant portions of the non-navigable waters deemed categorically WOTUS in the proposed rule are, in our view, not lawfully WOTUS. Other significant portions of these non-navigable waters are likely WOTUS, but we think it obvious that most of these cannot be found to be so with a categorical determination that is necessarily speculative; case-by-case determinations in

these instances will be necessary. If a more objective, reasoned definition of significant nexus can be developed so as to identify a threshold of effects that the Agencies decide are significant, it is possible that a portion of these non-navigable waters can be found to be WOTUS categorically. Lacking such a revised definition of significant, though, we encourage the Agencies not to make such determinations. To do so will create, as detailed in Section II above, enormous liabilities for corn growers and farmers everywhere.

Lastly, we want to emphasize that there are no additional benefits to water quality under the CWA through the creation of such liabilities for farmers. The fact that in our view many of these non-navigable waters will not be jurisdictional does not in any way lessen our commitment to the goals of the CWA; to protect and restore the chemical, physical and biological integrity of the nation's waters. While that goal does not define, in the absence of navigability, what is jurisdictional, it certainly captures perfectly what corn growers intend to see accomplished in both the non-navigable, non-jurisdictional waters and the downstream jurisdictional waters to which they are connected.

Thank you once again on behalf of the nation's corn growers for this opportunity to provide you with these comments.

Sincerely,

A handwritten signature in cursive script that reads "Chip Bowling".

Chip Bowling,
President

Appendix 1: Results from Agricultures' WOTUS Mapping Initiative (AWMI)

NCGA worked this summer and fall with several agricultural groups to map in 20 states streams and their floodplains to help visualize what the proposed rule means for farmers, and to calculate the affected stream miles and the acreage in floodplains that may be associated with these streams data. This effort was carried out to help visualize proposed jurisdictional tributaries and adjacent areas and to calculate certain statistics about the potential geographic scope or coverage of these proposed jurisdictional features.

The streams data used in the mapping analysis are from the publicly available US Geological Survey's National Hydrography Database (NHD), which is the same data that the US EPA Office of Water uses in its online mapping utility, My Waters Mapper. Two sets of streams data were mapped; the 1:100,000 (medium resolution) dataset which are roughly an approximation of perennial and intermittent streams (and are depicted as blue lines), and the 1:24,000 (high resolution) dataset, which are roughly an approximation of perennial and intermittent streams plus on average about 35 percent of the ephemeral streams (and are depicted as red lines).

Floodplain estimates are from two sources. The Federal Emergency Management Agency (FEMA) has estimated 100-year floodplains for many of the country's major rivers in publicly available datasets and these were used. The many streams for which no FEMA floodplain data are available were overlain with 35 foot buffers on either side to approximate their floodplains or possible areas of adjacency.

Table A-1 below presents by state and in total for the 20 states the calculated number of stream miles for both the medium and high resolution datasets, and the number of acres in the FEMA 100-year floodplains and the 35 foot buffers for the streams for which no FEMA data were available.

The results of the AWMI efforts can be seen on a publicly available website that NCGA and the other agricultural groups have sponsored at www.tinyurl.com/EPAwaters. Note in this website that when you zoom in closer to the surface that the AWMI switches from the NHD streams data discussed above to the USGS NHDPlus dataset, that depicts streams, canals, ditches, related waters and the wetlands identified in the Department of the Interior's National Wetlands Inventory. These NHDPlus data are available for all 50 states, not just the original 19 states mapped in the AWMI. The legend to the left of the screen indicate what the depicted features are.

The mapped features in the AWMI are not formal CWA jurisdictional determinations. But they are river, stream, canal and ditch features as collected by USGS, in cooperation with USEPA and others. The proposed WOTUS rule references agency personnel using such mapping utilities in assisting them in making jurisdictional determinations. While it is not likely that each and every

one of the stream and ditch features depicted in the NHD are jurisdictional waters, there is likely quite a strong correspondence between the depicted stream features and what the proposed rule considers to be tributaries. Certainly, even if some of these features do not prove to have the stream morphology that would make them tributaries as defined in the proposed rule, their inclusion in federal USGS datasets as streams and their depiction as such in mapping utilities like the USEPA MY Waters Mapper certainly leads to the working presumption by Agency personnel and the public that they are WOTUS.

Table A-1

State	Stream Miles, Medium Resolution	Acres in Floodplains and Buffers, Medium Resolution	Stream Miles, High Resolution	Acres in Floodplains and Buffers, High Resolution
Alaska	200,000	3,890,000	792,000	11,340,000
Arkansas	88,300	5,581,000	137,000	5,899,000
Colorado	104,000	5,787,000	277,000	7,090,000
Florida	55,700	12,944,000	99,500	13,139,000
Iowa	71,900	2,799,000	114,000	3,110,000
Louisiana	57,000	6,873,000	109,000	7,189,000
Michigan	57,900	1,477,000	81,000	1,621,000
Minnesota	77,400	1,529,000	105,000	1,759,000
Missouri	104,000	4,652,000	184,000	5,160,000
Montana	180,000	18,600,000	390,000	20,040,000
N. Hampshire	10,700	136,300	18,600	189,500
North Carolina	65,000	5,648,000	130,000	6,128,000
Ohio	58,900	1,995,000	91,200	2,234,000
Pennsylvania	63,900	1,387,000	86,000	1,603,000
South Dakota	101,000	6,430,000	164,000	6,860,000
Virginia	54,600	2,375,000	106,000	2,766,000
Indiana	31,900	1,399,000	131,000	2,178,000
Mississippi	83,200	6,517,000	155,000	6,958,000
Illinois	72,400	3,810,000	120,000	4,160,000
Washington	76,400	3,023,000	236,000	4,310,000
total	1,614,200	96,852,300	3,526,300	113,733,500