



DEPARTMENT OF THE ARMY  
OFFICE OF THE ASSISTANT SECRETARY  
CIVIL WORKS  
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WASHINGTON DC 20310-0108

JUL 17 2015

The Honorable James M. Inhofe  
Chairman  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510-6175

Dear Chairman Inhofe,

Thank you for your letter dated July 16, 2015 requesting a copy of the April 27, 2015 memorandum signed by Major General (MG) John Peabody, Deputy Commanding General for Civil and Emergency Operations, U.S. Army Corps of Engineers (Corps), along with its tabbed enclosures (collectively referred to *Peabody I*). Further, you asked for a copy of the May 15, 2015 memorandum from MG Peabody (referred to as *Peabody II*) which forwards a memorandum from the Corps' Regulatory Program Chief, Ms. Jennifer Moyer (*Moyer* memorandum), as well as a copy of the analysis prepared by Paul Scodari (*Scodari* document), an economist on staff at the Corps' Institute for Water Resources. The *Moyer* memorandum and the *Scodari* document offer comments on the Economic Analysis prepared in support of the final Clean Water Rule that was published in the Federal Register on June 29, 2015.

In order to address your request for expedited handling of these documents, earlier today the Deputy General Counsel of the Army (Installations, Environment and Civil Works) delivered an electronic copy of the requested documents to the Committee's Chief Counsel. We shall now turn our attention to the other documents you requested in your letter.

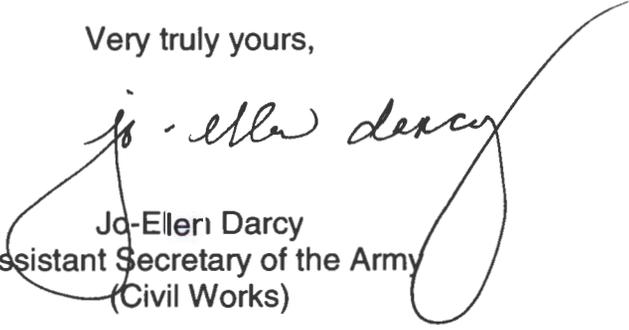
I wish to emphasize several key points related to these documents. First, although *Peabody I* was produced more than three weeks after the Clean Water Act rule was provided to the Office of Management and Budget to initiate the interagency review process, the concerns raised in the memorandum, and its associated enclosures, were thoroughly considered prior to issuance of the draft final rule. Because these materials were considered internal deliberative documents, they were not released outside the Army. However, the issues raised therein were considered in detail and discussed with the Environmental Protection Agency (EPA), our partner in developing the rule, as well as with the larger Federal family during the interagency review process. After analyzing and discussing the issues raised by the Corps, the Army and EPA agreed to make three important changes to the rule, in addition to many other technical edits, for which the Corps was advocating, for example, inclusion of the 100-year flood plain in section (a)(8), modification to the ditch exclusion in section (b)(3)(ii), and inclusion of a flexible grandfathering provision in the preamble. Thus, the Army considered all the input received from the Corps throughout the drafting, vetting, and interagency review

processes. Secondly, I want to make it very clear to the Committee that the *Scodari* document was never provided to me until Tuesday, June 30, 2015, when I asked for a copy. In fact, my staff and I were completely unaware of the existence of this document until it was brought to our attention by Chairman Gibbs, House Committee on Transportation and Infrastructure - Subcommittee on Water Resources and Environment. Presumably, the comments offered by Mr. Scodari were incorporated into the *Moyer* memorandum. I wish to also remind the Committee that *Peabody II* was prepared six weeks after the Clean Water Act rule was provided to the Office of Management and Budget to undertake interagency review. Although received very late in the process, the concerns raised in the *Moyer* memorandum were in fact considered prior to issuance of the draft final rule. Like *Peabody I*, *Peabody II* and the *Moyer* memorandum were considered to be internal and deliberative Army documents. As such, these documents were not released outside the Army. However, I assure you the issues in *Peabody II* and the *Moyer* memorandum were likewise discussed in detail with the EPA. I emphasize that the Army considered all the input received from the Corps throughout the drafting, vetting, and interagency review processes.

Please note that the documents transmitted today to the Committee's Chief Counsel contain sensitive information exempt from the disclosure provisions of the Freedom of Information Act (5 U.S.C. § 552). The Army provides these documents with a full reservation of rights and with the understanding and intent that providing them shall not be deemed a waiver of any applicable privilege. The Army respectfully requests that these documents be shared only within your Committee and then only with those who have an official need for the information; that the documents not be disclosed outside the Committee or to the public; that appropriate steps be taken to safeguard the documents; and that the documents be destroyed after use. Safeguarding these documents is particularly important now that the Army and the EPA are actively involved in litigation associated with publication of the final rule.

Thank you for your continued interest in the Army Civil Works program.

Very truly yours,



Jo-Ellen Darcy  
Assistant Secretary of the Army  
(Civil Works)



DEPARTMENT OF THE ARMY  
 U.S. ARMY CORPS OF ENGINEERS  
 441 G STREET, NW  
 WASHINGTON, D.C. 20314-1000

REPLY TO  
 ATTENTION OF

CECW-CEO

27 April, 2015

MEMORANDUM FOR Assistant Secretary of the Army for Civil Works

SUBJECT: Draft Final Rule on Definition of "Waters of the United States"

1. As we have discussed throughout the rule-making process for "Waters of the United States" over the last several months, the Corps of Engineers has serious concerns about certain aspects of the draft final rule. On 3 April 2015, the Environmental Protection Agency delivered the draft final rule to the Office of Management and Budget to initiate the inter-agency review process by our federal partners. Once we obtained a copy of the draft final rule, I asked USACE legal and regulatory staff to review it to ascertain the extent to which Corps' concerns had been incorporated, and to conduct an analysis of the legal and technical impacts of its language. That just-completed review reveals that the draft final rule continues to depart significantly from the version provided for public comment, and that the Corps' recommendations related to our most serious concerns have gone unaddressed. Specifically, the current draft final rule contradicts long-standing and well-established legal principles underlying Clean Water Act (CWA) Section 404 regulations and regulatory practices, especially the *Reagan* Supreme Court decision. The rule's contradictions with legal principles generate multiple legal and technical consequences that, in the view of the Corps, would be fatal to the rule in its current form.

2. The preamble to the proposed rule and the draft preamble to the draft final rule state that the rulemaking has been a joint endeavor of the EPA and the Corps, and that both agencies have jointly made significant findings, reached important conclusions, and stand behind the final rule. Those statements are not accurate with respect to the draft final rule, as the process followed to develop it greatly limited Corps input -- a practice that has continued thus far in the inter-agency review process. Within these circumstances however, I believe that the Corps has done all that it could do to assist and support the rulemaking. The critical fact remains that the most important concerns regarding the defensibility and implementability of the draft final rule remain unaddressed, although we continue to believe, as we have previously explained, that a relatively few simple "fixes" that the Corps has offered would resolve the problems with the draft final rule.

3. The analysis of and concerns with the draft final rule developed by the Corps professional staff are respectfully forwarded for your consideration. I have reviewed all of the attached documents and have concluded that unless the draft final rule is changed to adopt the Corps' proposed "fixes," or some reasonably close variant of them, then under the National Environmental Policy Act, the Corps would need to prepare an Environmental Impact Statement (EIS) to address the significant adverse effects on the human environment that would result from the adoption of the rule in its current form. Thank you for your consideration of the Corps' serious concerns and recommendations on this issue.

Building Strong!

*John W. Peabody*  
 JOHN W. PEABODY  
 Major General, U.S. Army  
 Deputy Commanding General

for Civil and Emergency Operations

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**Senate EPW  
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Litigation Sensitive**



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS  
441 G STREET, NW  
WASHINGTON, DC 20314-1000

REPLY TO  
ATTENTION OF

APR 24 2015

CECC-E

MEMORANDUM FOR Deputy Commanding General for Civil and Emergency Operations,  
U.S. Army Corps of Engineers (ATTN: MG John W. Peabody)

THROUGH the Chief Counsel, U.S. Army Corps of Engineers (ATTN: David R. Cooper)

SUBJECT: Legal Analysis of Draft Final Rule on Definition of "Waters of the United States"

This memorandum responds to your request for a legal analysis of the draft final rule regarding the definition of the "waters of the United States" (WOUS) subject to Clean Water Act (CWA) jurisdiction, which the Environmental Protection Agency (EPA) submitted to the Office of Management and Budget (OMB) for inter-agency clearance on April 7, 2015.

### Summary

The draft final rule regarding the definition of WOUS contains several serious flaws. If the rule is promulgated as final without correcting those flaws it will be legally vulnerable, difficult to defend in court, difficult for the Corps to explain or justify, and challenging for the Corps to implement. The Corps has identified every serious area of concern in the draft final rule to both the Department of the Army (DA) and the EPA, and Corps legal and regulatory staff has provided numerous edits or "fixes" to rule language to correct those errors. However, to date, the fixes have not been adopted, so the flaws remain.

The fundamental problem reflected in every one of the flaws described below is that the proposed rule that was published on April 21, 2014, is based on sound principles of science and law, but many provisions of the draft final rule have abandoned those principles and introduced indefensible provisions into the rule. The following is a summary of the most serious flaws in the draft final rule; the proposed fixes are shown in track changes in the attached "Revised Draft Final Rule," which was provided most recently to DA and EPA on April 16, 2015.

### Legal Standard

EPA and Corps staff agree with our colleagues at the U.S. Department of Justice that the final rule will survive the expected legal challenges that it will face in the federal courts only if the courts conclude that the rule complies with the test for CWA jurisdiction provided by Justice Kennedy in the *Rapanos* decision. The following is the essence of Justice Kennedy's test: a water body (such as a wetland) is subject to CWA jurisdiction if it has a significant nexus with navigable waters. The term "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 the downstream navigable waters. For an effect to be significant, it must be more than speculative or insubstantial.

### Loss of CWA Jurisdiction

The draft final rule excludes from jurisdiction of the CWA large areas of lakes, ponds, and similar water bodies that are important components of the tributary system of the navigable waters and that the Federal government has been regulating as jurisdictional from 1975 to the present moment. Those water bodies are important to the physical, chemical, and biological integrity of the entire tributary system of the navigable waters and to the navigable waters themselves. However, those lakes, ponds, and wetlands would lose all federal CWA protection under the draft final rule merely because they happen to lay outside and beyond a distance of 4000 feet from a stream's ordinary high water mark (OHWM) or high tide line (HTL). The 4000-foot cut-off line (or "bright-line rule") for jurisdiction has no basis in science or law, and thus is "arbitrary." The Corps believes that the 4000-foot limit on jurisdiction would cause significant adverse environmental effects as a result of the loss of jurisdiction over a substantial amount of jurisdictional "waters," based on the Corps' experience in implementing the CWA Section 404 program and performing the majority of jurisdictional determinations under the CWA.

The arbitrary nature of the 4000-foot cutoff of jurisdiction is demonstrated by the fact that EPA staff engaged in drafting the rule told Corps staff during a conference call in March 2015 that EPA was going to cut off CWA jurisdiction at a distance of 5000 feet from the OHWM/HTL of traditional navigable waters, interstate waters, territorial seas, and ponds and tributaries. Then, three days later, EPA staff changed its position and decided to cut off CWA jurisdiction at the narrower 4000-foot limit from an OHWM/HTL. EPA staff has never provided any scientific support or justification for either a 5000-foot or 4000-foot cut-off. Both distances are arbitrary and either limitation would be very difficult to defend in the federal courts when the final rule is challenged because neither limitation on CWA jurisdiction is supported by science or field-based evidence. It is significant that EPA's Science Advisory Board recommended against using any set distance to establish or limit CWA jurisdiction.

To abandon existing Federal CWA jurisdiction over ecologically important water bodies that significantly affect the biological, physical, and chemical integrity of the downstream waters would lead to significant adverse effects on the environment, because, shorn of CWA protection, those lakes, ponds, and wetlands can be polluted, filled, drained, and degraded at will, with no Federal regulation to prevent, regulate, or mitigate for those destructive activities. Pollutants dumped into no-longer-jurisdictional water bodies would flow downstream to the navigable waters, polluting drinking water supplies and killing or harming fish, shellfish, and wildlife, and harming human populations. Consequently, the abandonment of CWA jurisdiction over important parts of the tributary system of the navigable waters cannot be done without first preparing an environmental impact statement (EIS) to identify precisely what water bodies would lose CWA protection under the final rule and what significant adverse environmental effects would result from that loss of jurisdiction.

In a limited time frame during the development of the draft final rule (roughly the last two months), the Corps' professional staff has documented representative examples of the many lakes, ponds, and wetlands that are part of the tributary system of the navigable waters and that would lose CWA jurisdiction and protection under the draft final rule. This documentation has

been presented to both the Assistant Secretary of the Army (Civil Works) (ASA(CW)), and to EPA decision-makers and technical staff. Thus far, no one has refuted or denied the professional, technical, and well-documented examples of lost jurisdiction under the draft final rule. No one has presented any basis to refute or challenge the Corps' determination that the draft final rule would cause significant adverse effects on the human environment and thus would require an EIS before the final rule could be promulgated in its current form.

During discussions with EPA staff on April 9, 2015, EPA representatives suggested that, although the proposed abandonment of substantial parts of the CWA's long-standing jurisdiction would cause significant adverse effects on the human environment, those adverse effects might be offset by the hope that the final rule will lead to the assertion of CWA jurisdiction over five categories of "isolated" waters under section (a)(7) of the draft final rule. That argument is unpersuasive for at least two reasons:

First, a well-established principle of NEPA law states that a proposed Federal action that would cause significant adverse effects on any part or aspect of the human environment requires an EIS to address those significant adverse effects, even if the Federal agency believes that other aspects of its proposed action would have environmental benefits. For example, the Council on Environmental Quality's (CEQ's) legally binding NEPA regulations state the rule of law regarding how a Federal agency must determine whether its proposed action could cause significant adverse environmental effects as follows:

"Significantly" as used in NEPA required considerations of: (a) Intensity: (b) Intensity. This refers to the severity of the impact. . . . (c) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the impact will be beneficial." (40 CFR 1508.27)

Secondly, in section (a)(7) of the draft final rule, EPA has determined that every hydrologically/geographically isolated water in each of the five defined subcategories of isolated waters is "similarly situated" with all other isolated waters in those subcategories in the watershed that drains to the nearest traditional navigable water, interstate water, or territorial sea. Leaving aside the legal, scientific, and technical problems presented by section (a)(7), which are discussed below, section (a)(7) does not assert CWA jurisdiction over any of the isolated water bodies identified in that provision. CWA jurisdiction could be asserted over those isolated water bodies identified in section (a)(7) only if and when the Corps (or possibly EPA as a "special case") was to determine on a case-specific basis that those isolated water bodies have a significant nexus with navigable or interstate waters. Given the fact that, by definition, the vast majority of those isolated water bodies have no hydrologic connection with navigable or interstate waters, it is uncertain whether many, if any, of those isolated waters will pass the "significant nexus" test and be found to be subject to CWA jurisdiction. Even if the Corps or the EPA were to assert that those isolated waters are jurisdictional under the significant nexus test, it is doubtful that the federal courts would uphold such assertions of CWA jurisdiction.

The Corps has questioned what legal authority exists that would enable DA and EPA to abandon CWA jurisdiction over large areas of lakes, ponds, and wetlands that are important parts of the tributary system of the navigable waters, and over which the Corps and EPA have asserted CWA

jurisdiction since 1975. But even if such legal authority exists, at present there is no legally adequate administrative record to support such a move. The proposed rule did not propose any limitation for CWA jurisdiction comparable to the 4000 feet cut-off, which was presented for the first time in the draft final rule. Consequently, the public did not have the opportunity to evaluate that idea or to comment on it during the public comment period and thus the addition of this limitation likely violates the Administrative Procedures Act (APA).

In some ways the proposed abandonment of CWA jurisdiction over many lakes, ponds, and wetlands that are important parts of the tributary system of the navigable waters also has the effect of calling attention to legal and scientific questions regarding other parts of the final rule. For example, the draft final rule asserts CWA jurisdiction *by rule* over every "stream" in the United States, so long as that stream has an identifiable bed, bank, and OHWM. That assertion of jurisdiction over every stream bed has the effect of asserting CWA jurisdiction over many thousands of miles of dry washes and arroyos in the desert Southwest, even though those ephemeral dry washes, arroyos, etc. carry water infrequently and sometimes in small quantities if those features meet the definition of a tributary. The draft final rule's assertion that the dry washes all have a "significant nexus" with navigable waters contrasts sharply with the contradictory position in the rule that large areas of lakes, ponds, and wetlands in the well-watered parts of the USA, which water bodies actually send large amounts of water, sediments, nutrients, and (potentially) pollutants to the navigable waters, would lose CWA jurisdiction under the 4000-foot cutoff.

When these flaws were described to EPA staff during the April 9, 2015 meeting, the response was that the agencies have legal authority to place any limitation that they choose on the extent of CWA jurisdiction, even if that would have the effect of excluding from CWA jurisdiction lakes, ponds, and wetlands that have already been determined by the Corps to have a significant nexus with navigable waters or that would satisfy that jurisdictional test in any future site-specific jurisdictional determination. Even if that assertion is valid, that sort of abandonment of CWA jurisdiction cannot take place without having first prepared an EIS to analyze and seek public comment on the potentially significant adverse effects on the natural and human environment that would result.

It is easy to fix the draft final rule to avoid the legal necessity of preparing an EIS. The Corps has suggested the necessary fix many times during the last several months. To date, consensus has not been reached to resolve the Corps' continuing concerns. The reason that EPA has given for not adopting the Corps' fixes is that EPA apparently believes that the 4000-foot cut-off of CWA jurisdiction would provide greater clarity (i.e., a "bright line") to the regulated public by limiting the Corps' ability to perform site-specific jurisdictional determinations. The Corps has explained why the EPA's 4000-foot limit would be more difficult to understand, identify, implement, or defend in the federal courts than the Corps' suggested approach, as explained in the technical memorandum accompanying this memorandum.

The Corps' fix is shown in the attached revised draft final rule. If this problem is not fixed, then the Corps must prepare an EIS before the final rule can be promulgated and leaves the rule vulnerable to an APA challenge.

**Definition of "Adjacent"**

On the day that the draft final rule was sent to OMB to begin the inter-agency review process, EPA introduced into the rule's definition of "adjacent" a new sentence that would exclude from the final rule's definition of "adjacent waters" large areas wetlands that are used, or have been used, for farming, forestry, or ranching activities. That sentence reads as follows: "Waters subject to established, normal farming, silviculture, and ranching activities (33 U.S.C. Section 1344(f)(1)) are not adjacent." On its face, the sentence is indefensible: it is a textbook example of rulemaking that cannot withstand judicial review. This is true because a wetland is, by definition, "adjacent" to a tributary stream if, as a matter of geographical fact, that wetland is "bordering, contiguous, or neighboring" to the stream, regardless of whether farming, forestry, or ranching activities are taking place on that wetland. That sentence must be removed or modified to retain credibility and legal defensibility for the final rule's definition of "adjacent."

According to the draft preamble to the draft final rule, the intended effect of the new sentence is to require a site-specific "significant nexus" determination before the particular adjacent waters could be determined to be subject to CWA jurisdiction, rather than to declare the waters jurisdictional by rule, as is the case with all other "adjacent" wetlands and other adjacent waters. For many years wetland areas adjacent to rivers and streams have been used for cutting hay or other farming, ranching, or silviculture purposes. All normal farming, ranching, and silviculture activities have been exempted by statute from CWA Section 404 permitting requirements since 1977. The proposed rule that was published in the Federal Register did not propose to exclude from the definition of "adjacent" any categories of adjacent waters based on the activities that occur in those waters, so the public did not have an opportunity to comment on the new definition, again leaving the rule vulnerable to an EPA challenge. The last-minute decision to distinguish adjacent farmed waters from other adjacent wetlands is highly problematic, both as a matter of science and for purposes of implementing the final rule.

Nevertheless, if EPA and DA decide that the final rule should implement the idea underlying the sentence quoted above, then at the least the sentence should be revised as follows: "Waters subject to established, normal farming, silviculture, or ranching activities (33 U.S.C. Subsection 1344(f)(1)) are not jurisdictional by rule under sub-section (a)(6) of this paragraph as "adjacent waters," but may be determined to be jurisdictional on a case-by-case basis under subsection (a)(8)."

**Definition of "Neighboring"**

The draft final rule would provide a new definition of the term "neighboring," which would declare "jurisdictional by rule" all water bodies within 1500 feet of an OHWM or HTL, so long as the water body is located within a 100-year flood plain. The 1500-foot limitation is not supported by science or law and thus is legally vulnerable. The Corps has advocated the more scientifically and legally defensible distance of 300 feet for declaring by rule that all neighboring water bodies are jurisdictional, based on the Corps' experience in implementing the CWA Section 404 program and performing the majority of jurisdictional determinations under the CWA. Site-specific significant nexus determinations of jurisdiction are necessary to justify the assertion of CWA jurisdiction over water bodies that lie more than 300 feet from an OHWM or

HTL. The definition of "neighboring" also contains other fixable flaws. The edits are shown and explained in the attached revised draft final rule.

### Categories of Isolated Waters

The draft final rule's treatment of five categories of "isolated" waters (i.e., prairie potholes... western vernal pools, Carolina bays and Delmarva bays, Texas coastal prairie wetlands, and pocosins) is problematic. Such isolated waters undoubtedly are ecologically valuable and important, so the policy goal of providing CWA protection for such waters is understandable. However, to be subject to CWA jurisdiction, those isolated water bodies must be demonstrated to have a significant nexus with navigable or interstate waters, which nexus will be difficult to show for isolated waters that are not hydrologically connected to the tributary system of either navigable or interstate waters.

The draft final rule would declare that all isolated waters in each of those five listed categories of isolated waters are "similarly situated," but the Corps has never seen any data or analysis to explain, support, or justify this determination. In essence, section (a)(7) in the draft final rule provides a definition of each of five categories of isolated waters and then asserts that every water that fits into each definition is similar to all other waters that fit into that same definition within any single point of entry watershed. This approach is circular reasoning, making use of a tautology, so that the determinations of "similarly situated" do not have much substance.

Moreover, the determination that all isolated waters in each of the listed five categories of isolated waters are "similarly situated" is in conflict with the draft final rule's definition of "similarly situated," which is embedded in the definition of "significant nexus." The current draft final rule defines the concept of "similarly situated" as follows: "Waters are similarly situated when they function alike and are sufficiently close to function together in affecting downstream waters." This definition requires findings on two matters: the functions of the waters and how close to each other those similar waters are located. However, the current definition for each category of isolated waters in section (a)(7) of the draft final rule is based entirely on the functions of those waters, leaving out the required findings regarding proximity. In other words, the definitions in section (a)(7) for the five categories of isolated waters are not based on any findings that those isolated waters "are sufficiently close together to function together in affecting downstream waters," as required by the definition of "similarly situated." Significantly, EPA's technical staff has demonstrated that in some areas prairie potholes (for example) are located close together and, in other areas, they are spaced far apart. Yet, the assertion that all prairie potholes are "similarly situated" does not account for that discrepancy, which renders section (a)(7) legally vulnerable.

It is also worth noting that section (a)(7) asserts that every example of the five categories of isolated waters identified in that section have essentially the same functions regarding navigable and interstate waters, and the territorial seas, as every other isolated water in that category. But how can that be true, when some of those isolated waters have been hydrologically connected to the tributary system of the navigable waters by drainage ditches, while other isolated waters in that same category have not been so connected, and are truly "isolated?" Their functions would

not necessarily be the same and even if they share some of the same functions, the effects of the functions would be varied such that they would not be functioning "alike."

### Functions of Wetlands/Water Bodies Indicating Significant Nexus

The draft final rule presents a limited and exclusive list of nine (9) functions that wetlands and other water bodies perform, which can be evaluated and documented to establish a significant nexus between that wetland or other water body and downstream navigable or interstate waters to establish CWA jurisdiction over that water body. The Corps on numerous occasions has advised EPA that the list of functions is incomplete, based on the Corps' experience and expertise in performing significant nexus evaluations in the nearly eight years since the release of the *Rapanos* guidance. During that period the Corps has made more than 51,800 significant nexus determinations by analyzing the biological, physical, and chemical functions provided by such water bodies. Nevertheless, thus far EPA has not expanded the list or revised the provision to designate EPA's list of functions as representative and non-exclusive. The proposed fix for this problem is presented in the attached revised draft final rule.

### Transition to New Rule

The draft final rule does not include an adequate provision for "grandfathering" that is, for transitioning from the existing rule to the new rule. The transition could be difficult and fraught with problems, all of which require careful treatment in a well-conceived provision that has not yet been drafted. The needed provision should consider the various types of authorizations provided under the CWA, the different types of jurisdictional determinations provided to landowners, and various other types of actions related to jurisdictional determinations. Without a well-considered transition provision, implementation of the rule will generate significant legal problems.

### Essential Principles in the Proposed Rule

To understand the fundamental legal problems with the draft final rule, all that one needs to do is read the language of the proposed rule and compare it to the very different language of the draft final rule. The comparison reveals that many essential principles that made the proposed rule legally defensible have been abandoned or obscured in the draft final rule. Given the fact that the proposed rule was carefully developed by the EPA and the Corps, and then reviewed and cleared by the EPA, the Corps, DOJ, the Department of Justice, OMB, and other Federal agencies, the draft final rule's deviation from fundamental legal and scientific principles that were essential components of the proposed rule reveals the basic problems of the draft final rule.

The fundamental legal and scientific principles of the proposed rule are fairly straightforward, elegantly simple, easily understood, based on sound scientific and legal principles, and thus very legally defensible. Those principles included the following:

The proposed rule would assert CWA jurisdiction by rule over all of the natural water bodies that constitute the tributary system of the navigable and interstate waters, subject to a limited number of specified exclusions from CWA jurisdiction. The proposed rule would do that by asserting

CWA jurisdiction by rule over all tributaries of the navigable and interstate waters. Those tributaries are defined in the proposed rule as all water bodies (i.e., rivers, streams, lakes, ponds, wetlands, etc.) that contribute a flow of water (directly or through another water body) to the navigable or interstate waters, plus all other waters that are adjacent to those tributary water bodies. In accordance with the Supreme Court's legally binding, precedential decisions, the proposed rule and its administrative record would establish the reasonable proposition that the natural water bodies that constitute the tributary system of the navigable and interstate waters have a significant nexus with those downstream waters because they provide the water to those downstream navigable and interstate waters, and because pollutants, sediments, etc., flow from the upper parts of the tributary system down to the navigable and interstate waters.

Under the proposed rule, for truly isolated water bodies that have no shallow subsurface or confined surface connection to the tributary system of the navigable or interstate waters, those isolated water bodies could be evaluated on a case-by-case basis in site-specific jurisdictional determinations made by the Corps or EPA to determine whether various "aggregations" of those isolated water bodies might be "similarly situated" and might have a "significant nexus" with navigable or interstate waters, or the territorial seas, and thus might be subject to CWA jurisdiction despite the fact that they have no shallow subsurface or confined surface hydrologic connection to the navigable or interstate waters. Whatever result those specific significant nexus analyses might yield for various aggregations of truly isolated water bodies, at least the legal challenges to those jurisdictional determinations would be independent of, and would not undermine the legal defensibility of, the final rule as a whole.

The basic principles of the proposed rule described above reflect the controlling Federal law and undeniable scientific facts about pollution control and hydrology, and thus are legally sound and defensible. Unfortunately, the draft final rule has departed markedly from the sound legal and scientific principles of the proposed rule, in several important ways, and those basic changes make the draft final rule legally vulnerable.

#### Change in Definition of "Tributary"

The draft final rule would change the definition of "tributary" to exclude from that important definition all lakes, ponds, and wetlands that are part of the tributary system of the navigable or interstate waters and that send a flow of water into those waters. This change would have the effect of excluding from CWA jurisdiction potentially vast areas of lakes, ponds, and wetlands that are integral parts of the tributary system of the navigable and interstate waters. Those excluded wetlands, lakes, and ponds have been subject to CWA jurisdiction since at least 1975 and are subject to CWA jurisdiction now. Excluding those lakes, ponds, and wetlands from CWA jurisdiction under the draft final rule is not supported by an administrative record or EIS to provide the NEPA compliance for the significant adverse environmental effects that would result from such an action. Also, no notice of such a change was provided in the proposed rule to allow for public comment leaving the rule vulnerable to an APA challenge.

Attempts to remedy the problems that the new definition of tributary causes has led to the addition of several new provisions in the draft final rule, which were not in the proposed rule, and which try to patch the final rule to recapture CWA jurisdiction over some of the lakes,

ponds, and wetlands that the new definition of tributary would abandon. These patches are difficult to understand, explain, implement, or defend in court.

For example, the draft final rule adds new provisions to allow the agencies to assert CWA jurisdiction on a case-by-case basis over lakes, ponds, or wetlands that contribute flow to navigable or interstate waters and that are located no more than 4000 feet from a stream's OHWM/HTL. The same provision excludes from CWA jurisdiction altogether any lake, pond, or wetland that contributes a flow of water to navigable or interstate waters, but that lies more than 4000 feet from that same OHWM/HTL. This 4000-foot bright line rule is not based on any principle of science, hydrology or law, and thus is legally vulnerable. The fundamental fact that the tributary lakes, ponds, or wetlands inside or outside the 4000-foot boundary all contribute the same flow of water, pollutants, sediments, etc., to the navigable or interstate waters is ignored in the draft final rule. This rule is not likely to survive judicial review in the federal courts.

Other examples of problematic patches in the draft final rule that are intended to correct problems created by the new definition of tributary can be found in the revised definition of "neighboring," which asserts that water bodies that lie within 1500 feet of a stream's OHWM or HTL are neighboring to that stream. Once again, the 1500-foot figure is not based on any principle of science or law, and thus is legally vulnerable. Additionally, the federal courts may find that common sense dictates that a water body located 1500 feet from a stream is too far away from that stream to be defined as neighboring and thus adjacent to that stream. The fact that the draft final rule abandons the fundamental legal and scientific principle of the proposed rule that asserted CWA jurisdiction by rule over water bodies that are part of the tributary system of navigable or interstate waters, and substitutes for that principle non-science-based tests based on distances from OHWMs/HTLs makes the draft final rule legally vulnerable.

#### Site-Specific JDs for Water Bodies Draining into Jurisdictional Waters

A related example of a serious legal flaw in the draft final rule is the fact that it imposes novel limitations on the ability of the Corps and EPA to make jurisdictional determinations based on case-specific "significant nexus" determinations for any lake, pond, or wetland that contributes a flow of water to navigable or interstate waters or to the territorial seas. The Corps and EPA can make such case-specific significant nexus determinations now, but not under the draft final rule. No final rule should be promulgated unless this flaw is fixed. The Corps' proposed edit is set forth in the attached revised draft final rule.

#### Isolated Waters Characterized as "Similarly Situated"

Another example of a provision of the draft final rule that makes the entire rule legally vulnerable is the provision that characterizes literally millions of acres of truly "isolated" waters (i.e., wetlands that have no shallow subsurface or confined surface connection with the tributary systems of the navigable waters or interstate waters) as "similarly situated." In at least three places in the preamble, it is stated that such a determination of "similarly situated" in a final rule would be tantamount to an inevitable future determination that all of those identified aggregations of similarly situated isolated waters do have a significant nexus with navigable or interstate waters, and thus will later be determined to be subject to CWA jurisdiction in future

jurisdictional determinations. That part of the draft final rule creates legal vulnerabilities for the entire rule.

It will be difficult, if not impossible, to persuade the federal courts that the implicit, effective determination that millions of acres of truly isolated waters (which have no shallow subsurface or confined surface connection to the tributary system of the navigable or interstate waters) do in fact have a "significant nexus" with navigable or interstate waters. Consequently, the draft final rule will appear to be inconsistent with the Supreme Court's decisions in *Rapanos* and *SWANCC*. As a result, this assertion of CWA jurisdiction over millions of acres of isolated waters may well be seen by the federal courts as "regulatory over-reach," which undermines the legal and scientific credibility of the rule.

The final rule should address isolated water bodies just as the proposed rule did --by leaving to future case-by-case determinations all findings regarding what isolated waters are primarily situated, which waters should be aggregated in what watershed, and whether these case-specific aggregations of isolated waters actually have a significant nexus with navigable or interstate waters.

*James Wood*  
LANCER WOOD  
Assistant Chief Counsel  
Environmental Law and Regulatory Programs

cc: Revised Draft Final Rule

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**PART 328 – DEFINITION OF WATERS OF THE UNITED STATES**

1. The authority citation for part 328 continues to read as follows:

**AUTHORITY:** The Clean Water Act, 33 U.S.C. 1251 *et seq.*

2. Section 328.3 is amended by removing the introductory text and revising subsections

(a), (b) and (c) to read as follows:

**328.3 Definitions**

(a) For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term “waters of the United States” means:

(1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which that are subject to the ebb and flow of the tide;

(2) All interstate waters, including interstate wetlands;

(3) The territorial seas;

(4) All impoundments of waters otherwise identified as waters of the United States under this section;

(5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (5) of this section;

(6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;

(7) All waters in paragraphs (A) through (E) of this paragraph where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section. The waters identified in each paragraph (A) through (E)

of this paragraph are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (a)(1) through (3) of this section. ~~Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis.~~ Waters identified in this paragraph shall be combined only with waters that serve similar functions when performing a significant nexus analysis. Some waters identified in this paragraph are also adjacent (and thus jurisdictional) under paragraph (a)(6). Non-adjacent waters shall not be determined to have a "significant nexus" with navigable or interstate waters merely because they are aggregated with adjacent waters having similar functions. Nevertheless, if all waters with similar functions (both adjacent and non-adjacent) within the same point of entry watershed in the aggregate would have a significant nexus with navigable or interstate waters, then all of those waters with similar functions would be jurisdictional.

If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.

(A) Prairie potholes. Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets located in the upper Mid-west.

(B) Carolina bays and Delmarva bays. Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain.

(C) Pocosins. Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain.

**Comment [DRC1]:** The Corps agrees with EPA that a water under section (a)(7) or (a)(8) cannot be found to be jurisdictional merely by aggregating that waterbody with adjacent waters and asserting that the adjacent waters somehow confer or transmit CWA jurisdiction to or over the isolated waters; that would be an inappropriate form of "bootstrapping" jurisdiction. The proposed insert would forbid that bootstrapping, but would still allow all waterbodies with similar functions within an SPOE watershed to be aggregated and evaluated together during a significant nexus determination. This fix is necessary to avoid the effect of the current language, which would forbid the aggregation of waterbodies that have similar functions and exist side by side in a SPOE watershed, merely because similar waterbodies happen to lie on one side or the other of a line that demarcates adjacency.

(D) Western vernal pools. Western vernal pools are seasonal wetlands located in parts of California and associated with topographic depression, soils with poor drainage, mild, wet winters and hot, dry summers.

(E) Texas coastal prairie wetlands. Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.

Comment [DRC2]: Previous language, "found in southeastern Oregon to northern Baja California," has been replaced with "in parts of California." Why are vernal pools in southeastern Oregon being omitted?

(8) All of the following waters, if they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section: (1) All waters located within 4000 feet of the high tide line or ordinary high water mark, or within the 100-year floodplain, whichever is greater, of a water identified in paragraphs (a)(1) through (5) of this section; and (2) waters that contribute a flow of water (either directly or through another water body) to a water identified in paragraphs (a)(1) through (5) of this section, where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1) through (5) of this section. The entire water is a water of the United States if a portion is located within 4000 feet of the high tide line or ordinary high water mark, or is within the 100-year floodplain, or if that water contributes a flow of water to a water identified in paragraphs (a)(1) through (5) of this section. Waters identified in this paragraph shall be combined only with waters that serve similar functions when performing a significant nexus analysis. Some waters identified in this paragraph are also adjacent (and thus jurisdictional) under paragraph (a)(6). Non-adjacent waters shall not be determined to have a "significant nexus" with navigable or interstate waters merely because they are aggregated with adjacent waters having similar functions. Nevertheless, if all waters with similar functions (both adjacent

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and non-adjacent) within the same point of entry watershed in the aggregate would have a significant nexus with navigable or interstate waters, then all of those waters with similar functions would be jurisdictional.

Comment [DRC3]: Same comment as above on no "bootstrapping" under section (a)(7).

~~Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.~~

(b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(1) through (8) of this section:

(1) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(2) Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purpose of the Clean Water Act the final authority regarding Clean Water Act jurisdiction remains with EPA.

(3) The following ditches:

(A) Ephemeral ditches that are not a relocated tributary or excavated in a tributary or other jurisdictional waterbody, and that would not have the effect of draining a jurisdictional waterbody.

(B) Ephemeral and intermittent roadside ditches that drain a Federal, state, tribal, county, or municipal road, and that are not a relocated tributary or excavated in a tributary.

Comment [IAM4]: This language ensures that ditches that are constructed within or to drain jurisdictional waters of the U.S. That would have the effect of making the waterbody being drained a jurisdictional "adjacent" water, thereby providing some degree of CWA control over drainage of wetlands.

(C) Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1) through (3) of this section.

(4) The following features:

(A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;

(B) Artificial lakes and ponds created in dry land and used primarily for uses such as stock watering, irrigation, settling basins, rice growing, or cooling ponds;

(C) Artificial reflecting pools or swimming pools created in dry land;

(D) Small ornamental waters created in dry land;

(E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;

(F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways; and

(G) Puddles.

(5) Groundwater, including groundwater drained through subsurface drainage systems.

(6) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(7) Wastewater recycling structures created in dry land: detention and retention basins built for wastewater recycling, groundwater recharge basins, and percolation ponds built for wastewater recycling, and water distributary structures built for wastewater recycling.

(c) Definitions—In this section, the following definitions apply:

(1) *Adjacent*. The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (a)(1) through (5) of this section, including waters separated by constructed dikes or barriers, natural river berms, beach dunes and the like. For purposes of determining adjacency, a ~~waterbody that includes~~ includes, and is considered a single waterbody with, all wetlands within or that are bordering, contiguous to, or abutting that waterbody. ~~its ordinary high water mark is considered a single water.~~ Adjacency is not limited to waters located laterally to a water identified in paragraphs (a)(1) through (5) of this section. All waters that connect segments of a water identified in paragraphs (a)(1) through (5) or are located at the head of a water identified in paragraphs (a)(1) through (5) of this section and are bordering, contiguous, or neighboring such water, are adjacent. ~~Waters subject to established, normal farming, silviculture, and ranching activities, as USC § 1344(D)(1) are not adjacent.~~

(2) *Neighboring*. The term *neighboring* means

(A) all waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (a)(1) through (a)(5) of this section. The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark;

(B) all waters located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (5) of this section and not more than ~~1500~~ 300 feet of the ordinary high water mark of such water. The entire water is neighboring if a portion is located within ~~1500~~ 300 feet of the ordinary high water mark and within the 100 year floodplain;

**Comment [DRC5]:** This language would correct a problem presented by the comparable sentence found in the draft final rule submitted to OMB. The problem is that often it is impossible to identify an OHWM for a river, stream, lake, pond, or similar waterbody that has adjacent wetlands, any OHWM observed by the wetlands. The current wording would require the Corps or EPA to identify an OHWM where none can be found because of the adjacent wetland.

**Comment [JAM6]:** Including this language conflates geographic jurisdiction with activity-based exemptions. There is no scientific basis to support the notion that waters subject to specific activities are any more or less "adjacent" than other adjacent waters.

**Comment [DRC7]:** Per the Corps' prior comments, this language would capture all waterbodies that are separated vertically, which is inappropriate (e.g., wetlands and open waters on bluffs).

(C) all waters located within ~~1500~~300 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of this section, and all waters within ~~1500~~300 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located with 1500 feet of the high tide line.

(3) *Tributary and tributaries.* The terms *tributary* and *tributaries* ~~each~~ mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (a)(4) of this section), to a water identified in paragraphs (a)(1) through (3) of this section, and that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark. These physical indicators demonstrate there is volume, frequency and duration of flow sufficient to create a bed and banks and an ordinary high water mark, and thus to qualify as a tributary. A tributary can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, canals, and ditches not excluded under paragraph (b) of this section. 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 constructed breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if it contributes flow through a water of the United States that does not meet the definition of tributary or through a water excluded under paragraph (b) of this section, directly or through another water, to a water identified in paragraphs (a)(1) through (3) of this section.

(4) *Ditch*. The term *ditch* means a man-made channel whose physical characteristics are often straightened to efficiently convey water from a source to an outlet. Ditches are generally constructed for the purpose of drainage, irrigation, water supply, water management and/or distribution. A ditch may carry flows that are perennial, intermittent, or ephemeral.

Comment [JAM8]: This addition has been discussed previously and language provided previously. Many types of ditches are excluded and certain ditches are referred to in the definition of tributary; however, ditches are not defined. A common understanding is necessary for clarity.

(45) *Wetlands*. The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

(5) *Significant Nexus*. The term *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. The term "in the region" means the watershed that drains to the nearest 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. Waters are similarly situated when they function alike and are sufficiently close to waters performing similar functions to function together in affecting downstream waters. For purposes of determining whether or not a water has a significant nexus, the water's effect on downstream (a)(1) through (3) waters shall be assessed by evaluating the aquatic functions identified in paragraphs (A) through (I) of this paragraph. A water has a significant nexus when any single function or combination of functions performed by the water, alone or together with similarly situated waters in the

Comment [JAM9]: This sentence, in particular, and in combination with the definition overall, does not work effectively for both paragraphs (a)(7) and (a)(8). Additionally, the sentence contains a partially incomplete thought. Waters are similarly situated when they function alike and are sufficiently close to each other? Downstream waters? Each other so it can be ascertained they are functioning as a single landscape unit? The bracketed language is offered to complete the thought.

This must be clarified and it may suggest clarification is necessary in (a)(7) to make it clear in what sense those waters are "similarly situated" - close to each other? Functioning as a landscape unit?

region, contributes significantly to the chemical, physical, or biological integrity of the nearest water identified in paragraphs (a)(1) through (3) of this section. Functions relevant to the significant nexus evaluation ~~are include, but are not limited to, the~~ following:

- (A) sediment and pollutant trapping, transformation, filtering, and transport;
- (B) nutrient recycling, trapping, transformation, filtering, and transport;
- (C) pollutant trapping, transformation, filtering, and transport;
- (~~D~~) retention and/or attenuation of flood waters;
- (~~E~~) runoff storage;
- (~~F~~) contribution of flow;
- (~~G~~) export, trapping, and transformation of organic matter, including food resources;
- (H) export of food resources;
- (~~I~~) provision of life cycle dependent aquatic habitat (such as foraging, feeding, nesting, breeding, spawning, or use as a nursery area) for species located in, or dependent on, a water identified in paragraphs (a)(1) through (3) of this section;
- (I) habitat support for aquatic and wetland plant communities;
- (J) groundwater discharge and recharge;
- (J) carbon sequestration.

**Comment (JAM10):** These changes were discussed and provided previously. Edits capture functions provided by Corps districts that are currently being used to demonstrate significant nexus support of affirmative jurisdictional determinations.

(67) *Ordinary High Water Mark.* The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of

soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(78) *High Tide Line.* The term *high tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gauges, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

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DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS  
441 G STREET, NW  
WASHINGTON, DC 20314-1000

REPLY TO  
ATTENTION OF

CECW-CO-R

24 April 2015

MEMORANDUM FOR Deputy Commanding General for Civil and Emergency Operations,  
U.S. Army Corps of Engineers (ATTN: MG John W. Peabody)

THROUGH the Chief of Operations and Regulatory, U.S. Army Corps of Engineers (ATTN:  
Edward E. Belk)

SUBJECT: Technical Analysis of Draft Final Rule on Definition of "Waters of the United  
States"

1. References

- a. Title 33 of the Code of Federal Regulations, Part 328, Definition of Waters of the United States (1986 Regulations).
- b. 2003 Post-SWANCC Guidance (FR Vol. 68, No. 79, p. 1995) (SWANCC Guidance).
- c. 2008 Joint Agency Guidance on Clean Water Act Jurisdiction Following the U.S. Supreme Court Decisions in *Rapanos vs. U.S. & Carroll vs. U.S.* (Rapanos Guidance).
- d. Draft Final Clean Water Rule: Definition of "Waters of the United States," submitted to the Office of Management and Budget for Interagency Review on 3 April 2015 (draft final rule)

2. This memorandum and its attachments provide a technical analysis of reference d. This technical analysis includes documentation of representative examples of aquatic resources over which the Corps has asserted Clean Water Act (CWA) jurisdiction in accordance with existing regulations and current guidance, but which would no longer be subject to CWA jurisdiction if the current draft of the final rule takes effect. CWA jurisdiction was appropriately asserted by the Corps over every aquatic resource described in these representative examples.

3. The examples included in Appendix A do not represent the only currently jurisdictional aquatic resources in the Nation over which CWA jurisdiction would be lost by adoption of the draft final rule in its present form; what is provided here is only a representative sample based on Approved Jurisdictional Determinations (AJDs) completed by Corps Districts and completed permit actions based on Preliminary Jurisdictional Determinations (PJDs), also completed by Corps Districts. It is important to note that the representative examples included in Appendix A as well as additional others used for discussion purposes were developed in a limited amount of time to facilitate discussion with the Environmental Protection Agency (EPA). It was unknown to the Corps until early February that Army and EPA were contemplating a "bright-line" cut off of CWA jurisdiction either 5,000 or 4,000 linear feet from the Ordinary High Water Mark (OHWM)/High Tide Line (HTL) and a robust interagency discussion of the potential effects of

MEMORANDUM FOR DCG-CEO

SUBJECT: Technical Analysis of Draft Final Rule on Definition of WOUS

the "bright-line" on currently jurisdictional water bodies has continued since that time. Throughout those discussions, the Corps has provided representative examples, including those in Appendix A, to factually illustrate its concern. To provide every example, both AJDs and issued permits with no JD or based on a PJD, where jurisdiction currently exists but would be extinguished if the draft final rule is adopted in its final form would take several months of multiple staff members working full time.

4. The examples were extracted from the Corps' existing database, ORM2, which is based entirely on what landowners request from the Corps. We have not undertaken any specific technical analysis of what aquatic resources may or may not be subject to CWA jurisdiction independent of requests for a jurisdictional determination or a permit decision. Therefore, the data discussed and conclusions reached in this memorandum are based on facts; that is, on actual AJDs and permit decisions, and not on assumptions about watershed areas that could contain jurisdictional waters.

5. Based solely on the data entered into ORM2 associated with AJDs, approximately 6.7% of all waters of the U.S. are wetlands that are adjacent to, but not directly abutting, relatively permanent waters/non-relatively permanent waters, and ~3.4% of all waters of the U.S. are wetlands adjacent to traditionally navigable waters, both directly abutting and non-abutting. The Corps' data demonstrate that 98% of the adjacent wetlands that require a significant nexus evaluation are jurisdictional waters under the CWA, following the 2008 *Rapanos* Guidance. Thus, approximately 10% of all waters over which the Corps has asserted CWA jurisdiction under its 1986 regulations and current guidance are non-abutting, adjacent wetlands. Under those 1986 regulations and current guidance, only wetlands can be determined to be jurisdictional because they are adjacent waters. Under the draft final rule, any type of aquatic resource (e.g., lake, pond, stream, wetland) can be determined to be jurisdictional because the aquatic resource is adjacent to jurisdictional tributary.

6. Neither the *Rapanos* Guidance nor the form used to implement that guidance (which is used by the Corps to document AJDs) requires the Corps to indicate the distance that an adjacent wetland is located from the nearest jurisdictional tributary's OHWM or HTL when evaluating whether a significant nexus exists, and in making a jurisdictional determination concerning such waters. Rather, the Guidebook that accompanies the *Rapanos* Guidance indicates that consideration will be given to the distance between a tributary and traditionally navigable water (TNW) such that the effect of the tributary on the TNW is not speculative or insubstantial. The Guidebook further states that, "it is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW).

7. Thus, from the information collected and tracked within the USACE Regulatory Program database, it is not possible to estimate the specific percentage of the approximately 10% of adjacent water bodies that could be lost to CWA jurisdiction as a result of application of the 4,000 linear foot limitation if the draft final rule is finalized. A portion of the approximately 10% of all water bodies that are currently jurisdictional as adjacent, non-abutting wetlands fall outside of 4,000 linear feet of the OHWM/HTL. To verify the exact portion of the 10% of currently jurisdictional waters that would be lost to Federal jurisdiction as a result of adoption of

the draft final rule in its current form, the Corps would need to complete a robust analysis of its data that would yield statistically significant and reliable results. This is precisely the type of research and analysis that would be undertaken in completing an Environmental Impact Statement (EIS).

8. To remove from CWA jurisdiction what is potentially as much as 10% of the currently jurisdictional aquatic resources without the benefit of a detailed analysis, such as one that would be performed as part of an EIS, would present the potential for significant adverse effects on the natural and human environment. In its permit evaluations, the Corps is charged with keeping in perspective the functions and values of any given aquatic resource, recognizing that the functions and values of those resources rely heavily on their geographic location in relation to (as well as their hydrologic connection to) other waters, and to balance the need for the proposed use with the need for conservation of the resource. Nowhere in this process is it considered that important aquatic resources that are traditionally and legitimately part of the tributary system to navigable waters, contributing water to traditionally navigable waters of the U.S., are not within the jurisdiction of the CWA.

9. Additionally, by excluding as much as 10% of currently jurisdictional waters from CWA jurisdiction, the draft final rule is crafted in a manner that will be challenging for the regulated public to understand and for the Corps to implement. Those implementation challenges are outlined in Appendix B to this memorandum.

10. I have read the legal analysis of the draft final rule prepared by the Office of the Chief Counsel and I agree with the conclusions of that document. Based on the evidence of the loss of CWA jurisdiction over currently jurisdictional aquatic resources as illustrated by the representative examples provided in Appendix A, and significant implementation concerns summarized in Appendix B, I recommend the following essential revisions to the draft final rule:

a. Allow case-specific significant nexus determinations for hydrologically isolated water bodies such as prairie potholes, vernal pools, Carolina and Delmarva bays, Texas coastal prairie wetlands, and pocosins, including determinations of whether such water bodies are "similarly situated". In other words, eliminate section (a)(7) and include those water body categories within section (a)(8).

b. Include within section (a)(8) (as waters regarding which a case-specific significant nexus evaluation can be completed to determine CWA jurisdiction) two additional criteria: i.e., waters located within the 100-year floodplain (regardless of distance) and those water bodies that contribute a flow of water to an (a)(1)-(a)(5) water.

c. Reduce the linear foot distance in the definition of neighboring under parts (B) and (C) from 1,500 feet to 300 feet.

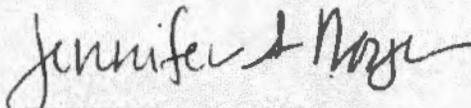
d. Make additional edits to the draft final rule to enhance clarity and simplicity as indicated in the attached revised draft final rule previously submitted to EPA staff for their consideration.

MEMORANDUM FOR DCG-CEO

SUBJECT: Technical Analysis of Draft Final Rule on Definition of WOUS

11. If the changes recommended above are not adopted, then the draft final rule cannot be promulgated as a final rule without an EIS to evaluate the potential significant adverse effects on the natural and human environment that the final rule as currently written may cause.

12. The point of contact for this memorandum is Ms. Jennifer Moyer at 202-761-4598.



JENNIFER A. MOYER  
Chief, Regulatory Program

cc: Revised Draft Final Rule

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**PART 328 – DEFINITION OF WATERS OF THE UNITED STATES**

1. The authority citation for part 328 continues to read as follows:

**AUTHORITY:** The Clean Water Act, 33 U.S.C. 1251 *et seq.*

2. Section 328.3 is amended by removing the introductory text and revising subsections

(a), (b) and (c) to read as follows:

**328.3 Definitions**

- (a) For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term “waters of the United States” means:
- (1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which ~~that are~~ subject to the ebb and flow of the tide;
  - (2) All interstate waters, including interstate wetlands;
  - (3) The territorial seas;
  - (4) All impoundments or waters otherwise identified as waters of the United States under this section;
  - (5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (3) of this section;
  - (6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;
  - (7) All waters in paragraphs (A) through (E) of this paragraph where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section. The waters identified in each paragraph (A) through (E)

of this paragraph are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (a)(1) through (3) of this section. ~~Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis.~~ Waters identified in this paragraph shall be combined only with waters that serve similar functions when performing a significant nexus analysis. Some waters identified in this paragraph are also adjacent (and thus jurisdictional) under paragraph (a)(6). Non-adjacent waters shall not be determined to have a "significant nexus" with navigable or interstate waters merely because they are aggregated with adjacent waters having similar functions. Nevertheless, if all waters with similar functions (both adjacent and non-adjacent) within the same point of entry watershed in the aggregate would have a significant nexus with navigable or interstate waters, then all of those waters with similar functions would be jurisdictional.

If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.

(A) Prairie potholes. Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets located in the upper Mid-west.

(B) Carolina bays and Delmarva bays. Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain.

(C) Pocosins. Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain.

**Comment [DRCA]:** The Corps agrees with EPA that a water under section (a)(7) or (a)(8) cannot be found to be jurisdictional merely by aggregating that waterbody with adjacent waters and asserting that the adjacent waters somehow confer or transmit CWA jurisdiction to or over the isolated waters; that would be an inappropriate form of "bootstrapping" jurisdiction. The proposed insert would forbid that bootstrapping, but would still allow all waterbodies with similar functions within an SPOE watershed to be aggregated and evaluated together during a significant nexus determination. This fix is necessary to avoid the effect of the current language, which would forbid the aggregation of waterbodies that have similar functions and exist side by side in a SPOE watershed, merely because similar waterbodies happen to lie on one side or the other of a line that demarcates adjacency.

(D) Western vernal pools. Western vernal pools are seasonal wetlands located in parts of California and associated with topographic depression, soils with poor drainage, mild, wet winters and hot, dry summers.

(E) Texas coastal prairie wetlands. Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.

Comment [DR CZ]: Previous language, "found in southeastern Oregon to northern Baja California," has been replaced with "in parts of California." Why are vernal pools in southeastern Oregon being omitted?

(8) All of the following waters, if they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section: (1) All waters located within 4000 feet of the high tide line or ordinary high water mark, or within the 100-year floodplain, whichever is greater, of a water identified in paragraphs (a)(1) through (5) of this section; and (2) waters that contribute a flow of water (either directly or through another water body) to a water identified in paragraphs (a)(1) through (5) of this section, where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1) through (5) of this section. The entire water is a water of the United States if a portion is located within 4000 feet of the high tide line or ordinary high water mark, or is within the 100-year floodplain, or if that water contributes a flow of water to a water identified in paragraphs (a)(1) through (5) of this section. Waters identified in this paragraph shall be combined only with waters that serve similar functions when performing a significant nexus analysis. Some waters identified in this paragraph are also adjacent (and thus jurisdictional) under paragraph (a)(6). Non-adjacent waters shall not be determined to have a "significant nexus" with navigable or interstate waters merely because they are aggregated with adjacent waters having similar functions. Nevertheless, if all waters with similar functions (both adjacent

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and non-adjacent) within the same point of entry watershed in the aggregate would have a significant nexus with navigable or interstate waters, then all of those waters with similar functions would be jurisdictional.

Comment [DRC3]: Same comment as above on no "bootstrapping" under section (a)(7).

~~Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.~~

(b) The following are not "waters of the United States" even when they otherwise meet the terms of paragraphs (a)(1) through (8) of this section:

(1) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(2) Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purpose of the Clean Water Act the final authority regarding Clean Water Act jurisdiction remains with EPA.

(3) The following ditches:

(A) Ephemeral ditches that are not a relocated tributary or excavated in a tributary or other jurisdictional waterbody, and that would not have the effect of draining a jurisdictional waterbody.

(B) Ephemeral and intermittent roadside ditches that drain a Federal, state, tribal, county, or municipal road, and that are not a relocated tributary or excavated in a tributary.

Comment [JAM4]: This language ensures that ditches that are constructed within or to drain jurisdictional waters, once constructed, are themselves waters of the U.S. That would have the effect of making the waterbody being drained a jurisdictional "adjacent" water, thereby providing some degree of CWA control over drainage of wetlands.

(C) Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1) through (3) of this section.

(4) The following features:

(A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;

(B) Artificial lakes and ponds created in dry land and used primarily for uses such as stock watering, irrigation, settling basins, rice growing, or cooling ponds;

(C) Artificial reflecting pools or swimming pools created in dry land;

(D) Small ornamental waters created in dry land;

(E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;

(F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, nonswale swales, and lawfully constructed grassed waterways; and

(G) Puddles.

(5) Groundwater, including groundwater drained through subsurface drainage systems.

(6) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(7) Wastewater recycling structures created in dry land: detention and retention basins built for wastewater recycling, groundwater recharge basins, and percolation ponds built for wastewater recycling, and water distributary structures built for wastewater recycling.

(c) Definitions—In this section, the following definitions apply:

(1) *Adjacent*. The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (a)(1) through (5) of this section, including waters separated by constructed dikes or barriers, natural river berms, beach dunes and the like. For purposes of determining adjacency, a waterbody that includes includes, and is considered a single waterbody with all wetlands within or that are bordering, contiguous to, or abutting that waterbody, its ordinary high water mark is considered a single water. Adjacency is not limited to waters located laterally to a water identified in paragraphs (a)(1) through (5) of this section. All waters that connect segments of a water identified in paragraphs (a)(1) through (5) or are located at the head of a water identified in paragraphs (a)(2) through (5) of this section and are bordering, contiguous, or neighboring such water, are adjacent. Waters subject to established, normal farming, silviculture, or ranching activities (22 USC § 1344(f)(1)) are not adjacent.

(2) *Neighboring*. The term *neighboring* means:

(A) all waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (a)(1) through (a)(5) of this section. The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark;

(B) all waters located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (5) of this section and not more than ~~1500~~300 feet of the ordinary high water mark of such water. The entire water is neighboring if a portion is located within ~~1500~~300 feet of the ordinary high water mark and within the 100-year floodplain;

Comment [DRCS]: This language would correct a problem presented by the comparable sentence found in the draft final rule submitted to OMB. The problem is that often it is impossible to identify an OHWM for a river, stream, lake, pond, or similar waterbody that has adjacent wetlands; any OHWM is obscured by the wetlands. The current wording would require the Corps or EPA to identify an OHWM where none can be found because of the adjacent wetland.

Comment [IAM6]: Including this language conflates geographic jurisdiction with activity-based exemptions. There is no scientific basis to support the notion that waters subject to specific activities are any more or less "adjacent" than other adjacent waters.

Comment [DRC7]: Per the Corps' prior comments, this language would capture all waterbodies that are separated vertically, which is inappropriate (e.g., wetlands and open waters on bluffs).

(C) all waters located within ~~4500~~300 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of this section, and all waters within ~~1500~~300 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located with 1500 feet of the high tide line.

(3) *Tributary and tributaries.* The terms *tributary* and *tributaries* ~~each~~ mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (a)(4) of this section), to a water identified in paragraphs (a)(1) through (3) of this section, and that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark. These physical indicators demonstrate there is volume, frequency and duration of flow sufficient to create a bed and banks and an ordinary high water mark, and thus to qualify as a tributary. A tributary can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, canals, and ditches not excluded under paragraph (b) of this section. 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 constructed breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands along the run of a stream, debris piles, border fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if it contributes flow through a water of the United States that does not meet the definition of tributary or through a water excluded under paragraph (b) of this section, directly or through another water, to a water identified in paragraphs (a)(1) through (3) of this section.

(4) Ditch: The term *ditch* means a man-made channel whose physical characteristics are often straightened to efficiently convey water from a source to an outlet. Ditches are generally constructed for the purpose of drainage, irrigation, water supply, water management and/or distribution. A ditch may carry flows that are perennial, intermittent, or ephemeral.

Comment [JAM9]: This addition has been discussed previously and language provided previously. Many types of ditches are excluded and certain ditches are referred to in the definition of tributary; however, ditches are not defined. A common understanding is necessary for clarity.

(45) Wetlands. The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

(5b) Significant Nexus. The term *significant nexus* means that a water, including wetlands, either alone or in combination with other similarly situated waters in a region, significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (a)(1) through (3) of this section. The term "in the region" means the watershed that drains to the nearest 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. Waters are similarly situated when they function alike and are sufficiently close to waters performing similar functions to function together in affecting downstream waters. For purposes of determining whether or not a water has a significant nexus, the water's effect on downstream (a)(1) through (3) waters shall be assessed by evaluating the aquatic functions identified in paragraphs (A) through (I) of this paragraph. A water has a significant nexus when any single function or combination of functions performed by the water, alone or together with similarly situated waters in the

Comment [JAM9]: This sentence, in particular, and in combination with the definition overall, does not work effectively for both paragraphs (a)(7) and (a)(8). Additionally, the sentence contains a partially incomplete thought. Waters are similarly situated when they function alike and are sufficiently close to each other? Downstream waters? Each other so it can be ascertained they are functioning as a single landscape unit? The bracketed language is offered to complete the thought.

This must be clarified and it may suggest clarification is necessary in (a)(7) to make it clear in what sense those waters are "similarly situated" - close to each other? Functioning as a landscape unit?

region, contributes significantly to the chemical, physical, or biological integrity of the nearest water identified in paragraphs (a)(1) through (3) of this section. Functions relevant to the significant nexus evaluation ~~are include, but are not limited to, the~~ following:

- (A) sediment and pollutant trapping, transformation, filtering, and transport;
- (B) nutrient recycling, trapping, transformation, filtering, and transport;
- (C) pollutant trapping, transformation, filtering, and transport;
- (D) retention and/or attenuation of flood waters;
- (E) runoff storage;
- (F) contribution of flow;
- (G) export, trapping, and transformation of organic matter, including food resources;
- (H) export of food resources;
- (I) provision of life cycle dependent aquatic habitat (such as foraging, feeding, nesting, breeding, spawning, or use as a nursery area) for species located in, or dependent on, a water identified in paragraphs (a)(1) through (3) of this section;
- (J) habitat support for aquatic and wetland plant communities;
- (K) groundwater discharge and recharge;
- (L) carbon sequestration.

(67) *Ordinary High Water Mark.* The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of

**Comment [JAM10]:** These changes were discussed and provided previously. Edits capture functions provided by Corps districts that are currently being used to demonstrate significant support of affirmative jurisdictional determinations.

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soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(78) *High Tide Line*. The term *high tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gauges, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

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APPENDIX A

Representative Examples

EXAMPLE #1



100 years floodplain example

Adjacent Wetlands to Ohio River, Indiana

37.868332°N, -87.633698°W

See map entitled, "Adjacent Wetlands to Ohio River, Indiana."

Wetlands currently **jurisdictional as adjacent** to the Ohio River, a TNW.

Subject wetland is approximately **3 acres** in size.

Note that there are other wetlands present beyond the subject wetland. In addition there are other wetlands present that do not appear on the NWI map layer; this often occurs with Cypress swamps such as the subject wetlands.

Multiple GP authorizations were provided for these activities in these wetlands (LPL-2011-696).

**These wetlands are currently 10,000' from the Ohio River OHWM.** They drain to the Ohio River as can be seen in the aerial map; they do not drain to the ditch observed in the northern portion of the map. They are also beyond 4,000' from the ditch.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of the Ohio River.

- ? Under the draft final rule, these wetlands would not be considered adjacent for a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of the Ohio River.

Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

This scenario often occurs in the floodplains of major river systems, such as the Ohio River, Mississippi River, Missouri River, etc. Such large river systems have very wide floodplains, and the adjacent wetlands are often located behind natural levees that form in the floodplain which can be far beyond 4,000' from the OHWM of the major river to which the wetlands are adjacent.

Overall, **~3.4% of water are wetlands adjacent to TNWs (based on ORM data), both abutting and non-abutting.** Such adjacent wetlands currently jurisdictional are at risk of being non-jurisdictional under the draft final rule.

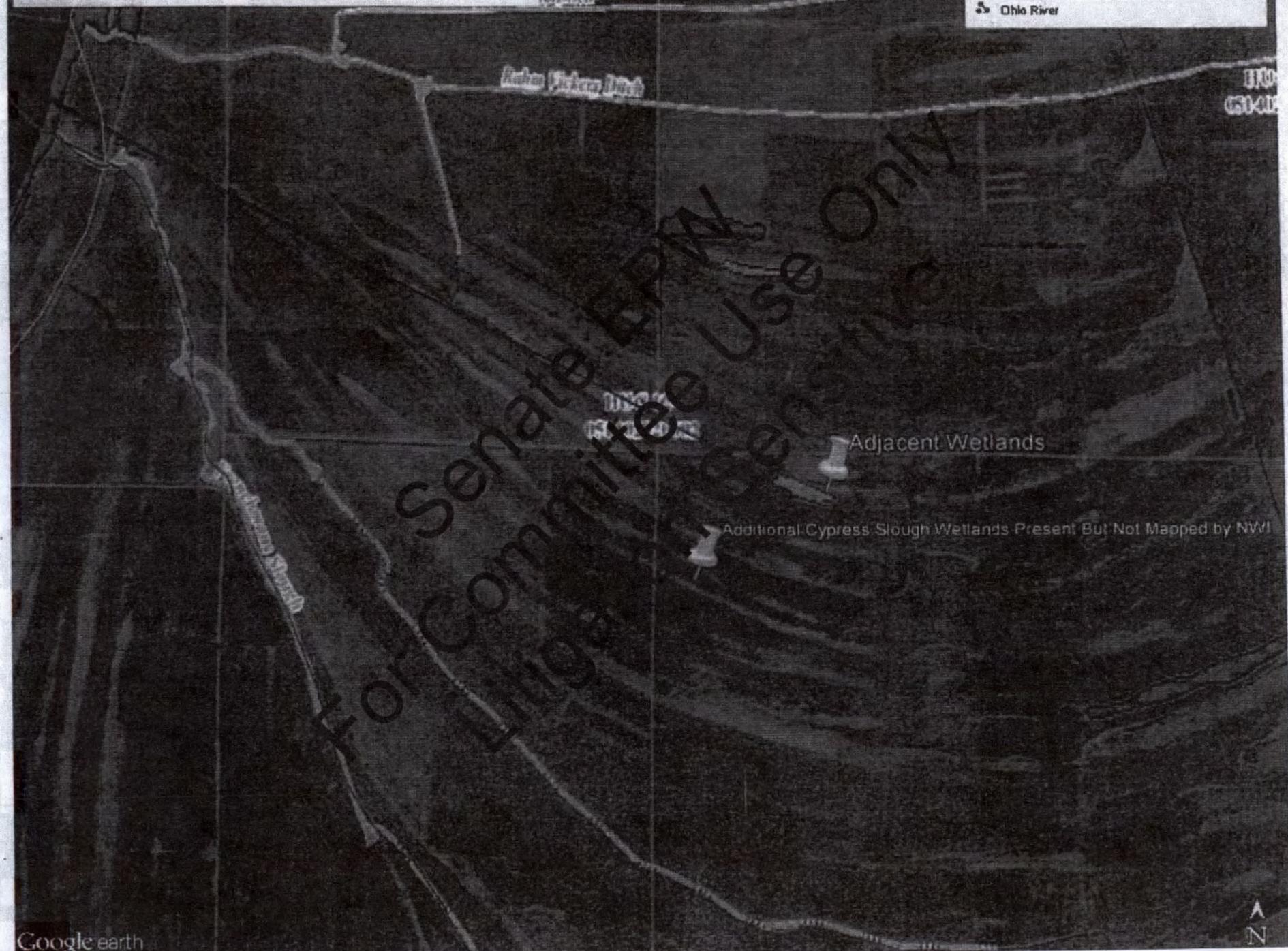
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# Adjacent Wetlands to Ohio River, Indiana

Currently Jurisdictional Adjacent Wetlands to Ohio River; 10,000' from the OHWM Wetlands drain to the Ohio River and not to the ditches to the north or tributaries to the south.

## Legend

- 10,000' from wetland to OHWM of Ohio River
- Currently jurisdictional adjacent wetland
- Ohio River



EXAMPLE #2

*Floodplain  
Example*

Adjacent Wetlands to Similk Bay, WA

48.417797°N, -122.530224°W

See map entitled, "Adjacent Wetlands to Similk Bay, WA."

Wetlands currently jurisdictional as adjacent to the Similk Bay, a TNW.

Subject wetlands are approximately 4 acres in size.

GP authorization was provided for activities in these wetlands (NWS-2007-116).

These wetlands are approximately 5,000' from the HTL of Similk Bay.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the HTL of the Similk Bay.

Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 4,000' from the HTL of the Similk Bay.

Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

This scenario often occurs in the coastal floodplains. The coastal waters have very wide floodplains, and the adjacent wetlands are often located in the floodplain far beyond 4,000' from the HTL of the coastal waters to which the wetlands are adjacent.

Overall, ~3.4% of waters are wetlands adjacent to TNWs (based on ORM data), both abutting and non-abutting. Such adjacent wetlands currently jurisdictional are at risk of being non-jurisdictional under the draft final rule.

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# Adjacent Wetlands to Similk Bay, WA

Currently Jurisdictional / Adjacent Wetlands to Similk Bay 5,000' from the HTL

## Legend

- 5,000' from wetland to HTL of Similk Bay
- Currently Jurisdictional / Adjacent wetland
- Similk Bay

Adjacent Wetlands



Mill Ln

Indian Rd

Ooshi Rd

an St

18191

Google earth

EXAMPLE #3

Adjacent Wetlands to Hickory Creek, TN

*Strongly  
adjacent  
case  
- no drain*

35.549058°N, -85.875673°W

See map entitled, "Adjacent Wetlands to Hickory Creek, TN."

Wetlands currently jurisdictional as adjacent to Hickory Creek, a perennial relatively permanent water, with the characteristics to meet the definition of tributary under the draft final rule; it is a TNW downstream.

Subject wetland is approximately 34 acres in size.

JD action only; currently in pre-application stage (LRN-2013-504).

These wetlands are approximately 5,700' from the OHWM of Hickory Creek.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of Hickory Creek.

Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of Hickory Creek.

Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

These adjacent wetlands are common throughout TN. Note there are several other wetlands beyond 4,000' depicted on the map near the wetland for which the JD action was completed.

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### Adjacent Wetlands to Hickory Creek, TN

Adjacent Wetlands to Hickory Creek 6,700' from the OHWM

Adjacent Wetland

Additional wetlands beyond 4,000'

### Legend

- 6,700' from wetland to OHWM
- Currently jurisdictional adjacent wetland
- Hickory Creek

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Additional wetlands beyond 4,000'

Bouldin Rd

Bonner St  
Mill St  
Lynn St

Viola



Map data © OpenStreetMap contributors, Imagery © Mapbox

EXAMPLE #4

Wetlands Associated with Sinkholes in Clarksville, TN

36.574052°N, -87.246477°W

See map entitled, "Clarksville, TN."

Wetlands currently jurisdictional as adjacent to the Red River, a TNW. In addition, the open water pond is a tributary to the Red River.

Subject wetlands are approximately 300 acres in size. Open water pond is approximately 100 acres in size.

\* Wetlands and open water ponds drain into sinkholes which carry the flow of water underground directly to the Red River; flow is documented.

SP authorization was provided for activities in these wetlands (LRN-2013-1047).

These wetlands are approximately 10,000-15,000' from the OHWM of the Red River.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of the Red River.

Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of the Red River.

Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

Currently the open water pond is considered a tributary to the Red River; the open water pond would not be considered a tributary under the draft final rule as ponds cannot be tributaries since it wouldn't have both bed/bank and OHWM. The open water pond would also not be considered adjacent due to the distance limitations discussed above. Therefore, the open water pond would be non-jurisdictional under the draft final rule.

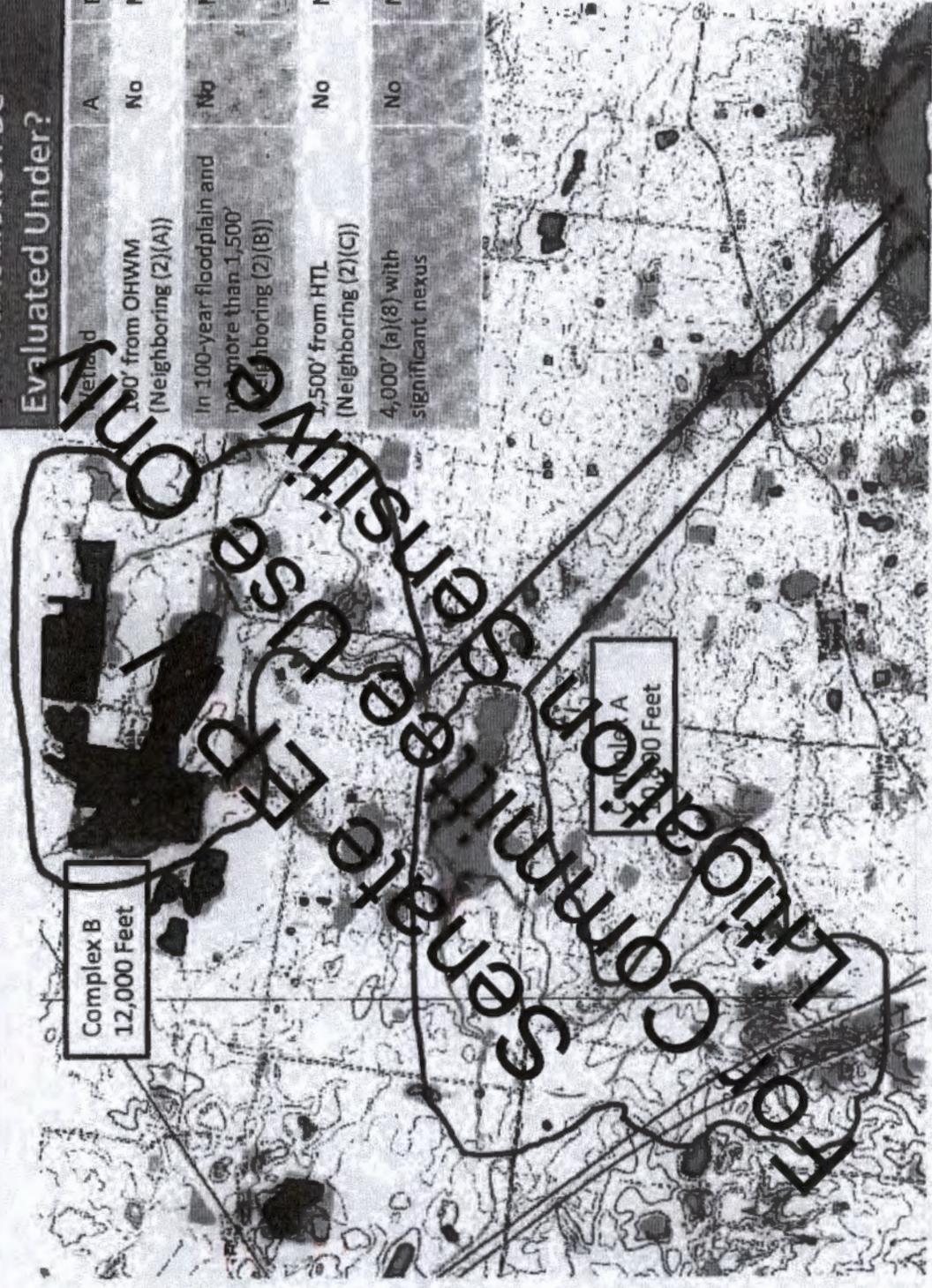
These sinkhole systems are present throughout TN and generally have associated wetlands and ponds that are currently jurisdictional and have been found to have a significant nexus but would be non-jurisdictional under the draft final rule due to distance limitations and lack of the option to use shallow subsurface flow connections for case-specific significant nexus determinations.

Underground  
connections to  
TNW  
- shallow  
subsurface  
connections

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# Clarksville, TN

2 wetland and stream complexes which drain into sinkholes which are more than 4,000 feet away from the OWHM of an (a)(1)-(a)(5) water



## Can Jurisdiction Be Evaluated Under?

Wetland	A	B
100' from OWHM (Neighboring (2)(A))	No	No
In 100-year floodplain and no more than 1,500' neighboring (2)(B)	No	No
1,500' from HTL (Neighboring (2)(C))	No	No
4,000' (a)(8) with significant nexus	No	No

EXAMPLE #5

Adjacent Wetlands in Grassy Cove, TN

*Sink hole  
Subsurface  
Connections*

35.831103°N, -84.916600°W

See map entitled, "Grassy Cove, TN."

All wetlands in the watershed are currently jurisdictional as adjacent to the Sequatchie River, a perennial relatively permanent water which meets the characteristics of a tributary under the draft final rule; it is a TNW downstream.

Subject wetlands are approximately 45 acres in size.

Wetlands, an open water pond, and a creek (Grassy Cove Creek) within Grassy Cove watershed drain into a sinkhole (Mill Cave) which carries the flow of water underground directly to the Sequatchie River; flow is documented.

JD action only; currently in pre-application stage for restoration activities under LRN-2017-49.

These wetlands are approximately 36,000' from the OHWM of the Sequatchie River.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of the Sequatchie River.

Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of the Sequatchie River.

Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

Currently the open water pond is considered a tributary to the Sequatchie River; the open water pond would not be considered a tributary under the draft final rule, as ponds cannot be tributaries since it wouldn't have both bed/bank and OHWM. The open water pond would also not be considered adjacent due to the distance limitations discussed above. Therefore, the open water pond would be non-jurisdictional under the draft final rule.

Currently the Grassy Cove Creek is considered a tributary to the Sequatchie River; however, the creek would not be considered a tributary under the draft final rule because it does not contribute flow directly or indirectly to the downstream tributary system. The Grassy Cove Creek flows north and does not have a "break" in the stream but rather ends at Mill Cave which transports the water via subsurface flow to south to the Sequatchie River. Therefore, the Creek would not be considered a tributary under the draft final rule and would be non-jurisdictional.

These sinkhole systems are present throughout TN and generally have associated wetlands and ponds that are currently jurisdictional and have been found to have a significant nexus but would be non-jurisdictional under the draft final rule due to distance limitations and lack of the option to use shallow subsurface flow connections for case-specific significant nexus determinations.

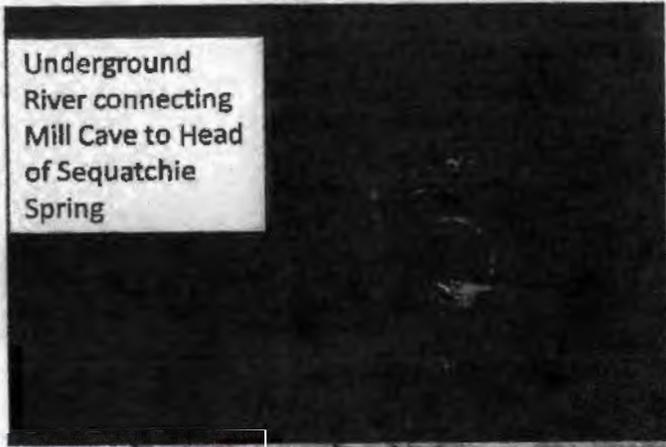
This JD example was not coordinated with EPA.

# Grassy Cove, TN

Isolated basin which drains into Mill cave, the cave flows to Head of Sequatchie Spring, which is the headwaters of the Sequatchie River – connection is well known/documented.

Grassy Cove Karst Area is a National Natural Landmark as designated by the National Park Service.

Underground River connecting Mill Cave to Head of Sequatchie Spring



36,310 Feet

Mill Cave

Grassy Cove Watershed



Head of Sequatchie Spring

## Can Jurisdiction Be Evaluated Under?

Waters Name	Grassy Cove – All waters and wetlands
100' from OHWM (Neighboring (2)(A))	No
In 100-year floodplain and not more than 1,500' (Neighboring (2)(B))	No
1,500' from HTL (Neighboring (2)(C))	No
4,000' (a)(8) with significant nexus	No determination

EXAMPLE #6

POA JD Appeals

*Shallow  
subsurface  
connections  
in Alaska*

64.767167°N, -147.362109°W

See map entitled, "Recent JD Appeals Vicinity Map."

Wetlands currently jurisdictional as adjacent to Channels B (Tin Cup and Gower) and C (HC Contractors and Universal Welding); perennial relatively permanent waters (ditches that are considered a tributary under current guidance and would also not be excluded under the draft final rule), with the characteristics to meet the definition of tributary under the draft final rule.

Subject wetlands total over 500 acres in size.

Associated with SP actions for the projects (e.g., POA-2010-190); multiple JD appeal actions.

These wetlands are approximately 7,000'-12,000' from the OHWM of Channels B and C.

Under the draft final rule, these wetlands would not be considered tributary as they are beyond 1,500' from the OHWM of Channels B and C.

Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 1,000' from the OHWM of Channels B and C.

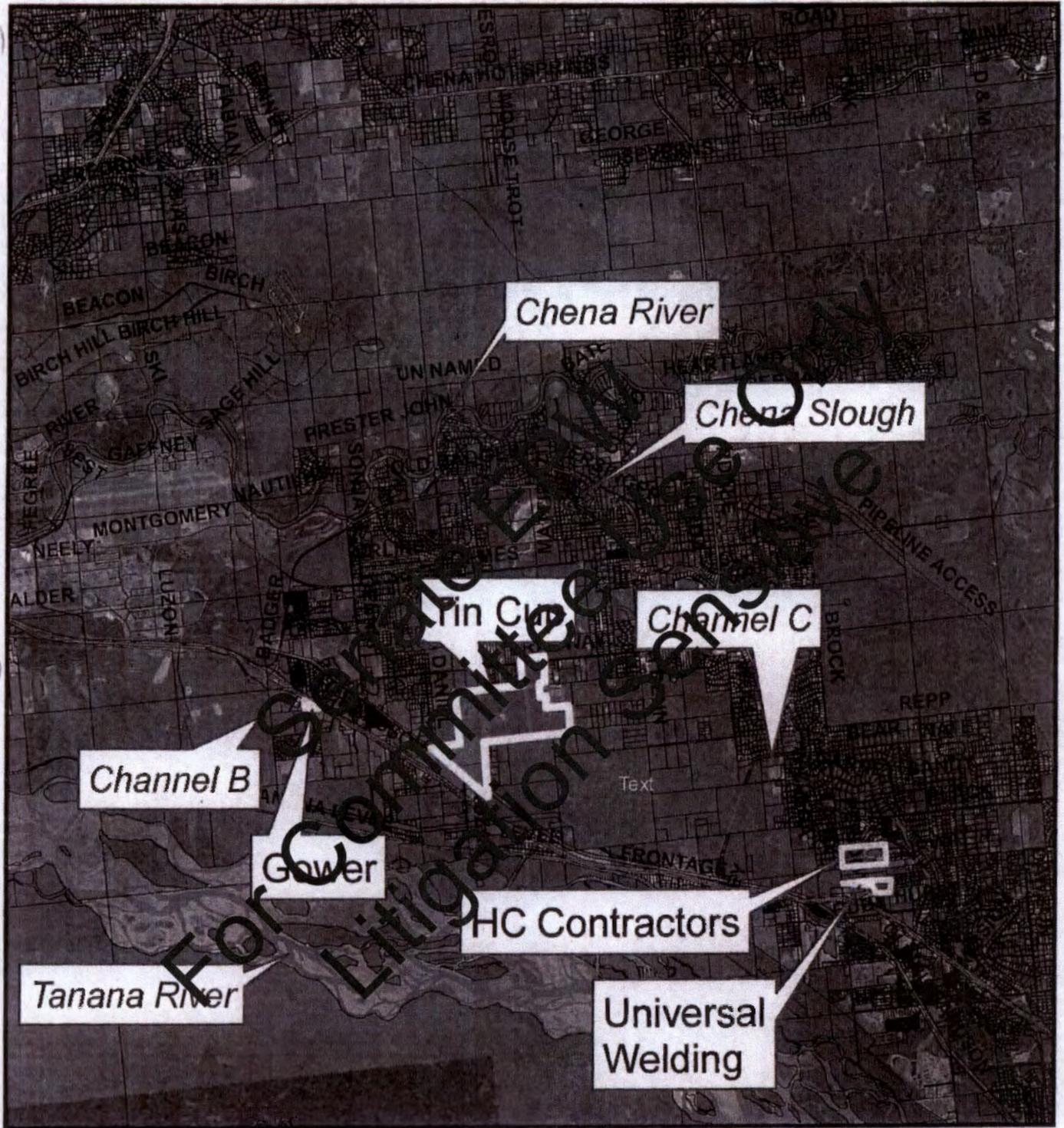
Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

These wetlands were part of three separate SP requests and associated permit actions; all three JDs were appealed and related to a lawsuit (Great Northwest). According to the court decision the Corps was not successful in demonstrating that the wetlands were part of the same wetland complex and adjacent to a tributary; we instead had to demonstrate that the wetlands were jurisdictional via shallow subsurface flow connections to Channels B and C and were independently adjacent to the Channels despite wetlands and roads being present between the subject wetlands and the Channels.

If the draft final rule provided for the use of shallow subsurface flow connections to be used in a case-specific significant nexus determination, these wetlands would be found jurisdictional as they have been determined to have a significant nexus under current guidance.

We have many other examples to provide in Alaska demonstrating that the 4,000' distance would result in the loss of currently jurisdictional wetlands connected via shallow subsurface flow, as well as wetlands connected via confined surface flow. With Alaska alone having more wetlands than the entire contiguous lower 48 states, this could result in a significant loss of jurisdictional wetlands.

# Recent JD Appeals Vicinity Map



Fairbanks Field Office  
Compiled By: GJM  
Date: 1-31-13



Scale: 1 inch = 4,000 feet  
contours tied to NAVD88 datum

Fairbanks North Star Borough



EXAMPLE #7

Adjacent Wetlands Compensatory Mitigation Bank Near Klondike Cemetery, Strathcona, MN

48.588557°N, -96.068048°W

See maps entitled, "Klondike Cemetery, MN HUC 12 v1," "Klondike Cemetery, MN HUC 12 v2," and related maps entitled, "MN Adjacent Wetlands" and "Adjacent Wetlands to South Branch of Two Rivers."

Wetlands currently jurisdictional as adjacent to intermittent relatively permanent roadside ditches which contribute flow to the South Branch of Two Rivers, a perennial relatively permanent water, with the characteristics to meet the definition of tributary under the draft final rule.

Subject wetlands are approximately 500 acres in size.

These adjacent wetlands are part of an approved wetland compensatory mitigation bank (MVP-2008-1048).

These wetlands are directly abutting intermittent roadside ditches and are approximately 5,700' from the OHWM of the South Branch of Two Rivers.

Under the draft final rule, the intermittent roadside ditches would be excluded under (b)(3)(B) as they drain a municipal road and they are not delineated tributaries or excavated in a tributary.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of the South Branch of Two Rivers.

Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of the South Branch of Two Rivers.

Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

If the draft final rule provided for the use of confined surface flow connections then a case-specific significant nexus determination could be applied to determine jurisdiction.

This may have serious implications for the efficacy and validity of the existing compensatory mitigation bank. It is unclear what the loss of jurisdiction over these compensatory mitigation bank wetlands means for existing authorized credits used to offset permanent impact losses to wetlands for authorized projects. It is also unclear what the loss of jurisdiction over these compensatory mitigation bank wetlands means for future credit sales at the bank. This would require a reconsideration and potential modification of the compensatory mitigation banking instrument.

In reviewing the initial map provided by EPA it was clear that they had not removed the 4,000' buffer around the excluded ditches under the draft final rule. Once that was communicated to EPA they corrected the map, which shows that the entire HUC 12 does not include any jurisdictional waters or 4,000' buffers. Another issue that was pointed out to EPA, but which was not addressed, was that the

*Roadside  
ditches  
- confined  
surface  
connections*

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Litigation Sensitive

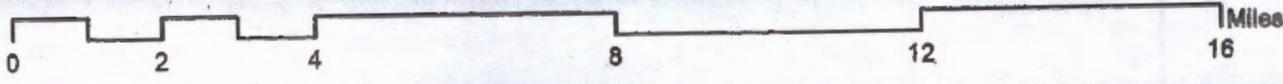


For Senate EPW Litigation Use Only

**Legend**

- KlondikeCemeteryHUC12
- Tributaries/Diches
- 100 Foot Buffer from OHWM
- 4000 Foot Buffer from OHWM

**Note: No FEMA Floodplain Map Availalble**



**From:** Jensen, Stacey M HQ02  
**To:** "Stokely, Peter"; Kaiser, Russell  
**Cc:** Moyer, Jennifer A HQ02  
**Subject:** RE: Klondike Cemetery HUC 12 (UNCLASSIFIED)  
**Date:** Wednesday, April 15, 2015 2:16:00 PM  
**Attachments:** [Klondike Cemetery, MN HUC 12.jpg](#)  
[MN: 48.5888557, -96.068048 HUC 8.jpg](#)  
[MN: 48.5888557, -96.068048 HUC 12.jpg](#)

---

Classification: UNCLASSIFIED  
Caveats: NONE

Pete,

The ditches are intermittent roadside ditches maintained by the municipalities, and as such they should not be included in the mapping of the 4,000' buffer for (a)(8) waters since they would be excluded under the draft final rule language as they would not be considered tributaries. The nearest tributary to which this wetland drains is the South Branch of Two Rivers, which is approximately 4 miles away from the wetland via intermittent roadside ditches. I also want to note that this scenario is common throughout MN where there are many roadside ditch networks.

Another question I had about this one, and all of your other maps, is about the HUC boundary. I am assuming by drawing that boundary you are equating the HUC-12 to the SPOE boundary? This MN example in particular illustrates why that is not always possible, especially in the flat topography areas, like MN, and in the Arid West. To where is the HUC-12 draining? The SPOE must drain to the nearest (a)(1)-(a)(3) water, which is not present in the map. In fact, the nearest (a)(1)-(a)(3) water to which the wetlands on the map drain appears to be Lake Bronson according to the NHD flow lines, which is 25 miles to the west from the site, making the SPOE much larger than what was included in the HUC-12. I've attached some maps depicting the HUCs and the flow path to the (a)(3) water. Let me know if you want to discuss. Thank you!

Best wishes,  
Stacey

HQUSACE Regulatory Program Manager  
441 G Street NW  
Washington, DC 20314-1000  
Phone (202) 761-5856

-----Original Message-----

**From:** Stokely, Peter [mailto:Stokely.Peter@epa.gov]  
**Sent:** Wednesday, April 15, 2015 12:17 PM  
**To:** Kaiser, Russell  
**Cc:** Jensen, Stacey M HQ02  
**Subject:** [EXTERNAL] Klondike Cemetery HUC 12

Attached is another map, this one is a ditched area in MN with relatively sparse NHD mapped drainage, most of the mapped drainage appear to be roadside ditches (did not try to figure out their flow or whether they may have bee tribs), also there may be additional unmapped ditches near the site.

Peter Stokely

EPA Office of Civil Enforcement

1200 Pennsylvania Ave, NW

### Adjacent Wetlands

Wetlands adjacent to intermittent roadside ditches which carry flow to the South Branch of Two Rivers. Such intermittent roadside ditches would be excluded under the draft final rule. The wetland is well beyond the 4,000' distance from the OHWM of the South Branch of Two Rivers. The nearest (a)(1) water to draw the SPOE is ~25 miles away to the west and is only in the same HUC-8 as the wetlands. Even so, the HUC-8 does not match the SPOE boundary. This SPOE must be hand-drawn as there is no readily available tool for an efficient demarcation of the boundary.

Layer:

48.5888057, -08.089048  
Path to (a)(1) Water



### Adjacent Wetlands

Wetlands adjacent to intermittent roadside ditches which carry flow to the South Branch of Two Rivers. Such intermittent roadside ditches would be excluded under the draft final rule. The wetland is well beyond the 4,000' distance from the OHWM of the South Branch of Two Rivers. The nearest (a)(1) water to draw the SPOE is ~25 miles away to the west and is only in the same HUC-8 as the wetlands. Even so, the HUC-8 does not match the SPOE boundary. This SPOE must be hand-drawn as there is no readily available tool for an efficient demarcation of the boundary.

Legend  
48.5888557, -96.069048  
Path to (a)(1) Water



**From:** Stokely, Peter  
**To:** Jensen, Stacey M.HQ02  
**Cc:** Kaiser, Russell  
**Subject:** [EXTERNAL] RE: Last One (UNCLASSIFIED)  
**Date:** Thursday, April 16, 2015 9:55:55 AM

---

Stacey, for the purposes of this exercise I selected HUC 12's because they are manageable data sets and illustrate the concepts of adjacency that would apply to the site whether I used HUC 12 or SPOE's. I did not look for SPOE's to TNW (I wouldn't know what is the TNW is many cases anyway) because that concept is for a SN analysis and the data sets would have been too big and there would have been too much editing to do. And as I said the smaller HUC 12 illustrate the adjacency concepts.

I noticed that the HUC 12 for the MN site (Klondike Cemetery) was odd, in some cases the ditch and the HUC boundary paralleled, so I agree in some areas of the country the SPOE will be difficult to delineate accurately. As for the roadside ditches at Klondike Cemetery, I labeled them, so EPA and Corps staff can tell folks that the buffer doesn't apply, I guess I didn't know which way the point was on that one anyway, but I will resend with the buffers removed.

Give the time constraints, I had to turn these around very quickly and given that and the data limitations we have discussed, the maps should be presented with caveats.

Peter Stokely  
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Washington, DC 20460  
Room 4110  
William Jefferson Clinton Federal Building South (WJC South)  
Mail Code 2243A  
202-564-1841

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-----Original Message-----

From: Jensen, Stacey M HQ02 [mailto:Stacey.M.Jensen@usace.army.mil]  
Sent: Thursday, April 16, 2015 7:39 AM  
To: Stokely, Peter; Kaiser, Russell  
Subject: RE: Last One (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Pete,

Did you get my reply email yesterday regarding the MN Klondike site? I got a bounce back email so I'm checking to make sure. It is attached here again via PDF. Thanks!

Best wishes,  
Stacey

HQUSACE Regulatory Program Manager  
441 G Street NW  
Washington, DC 20314-1000  
Phone (202) 761-5856

# County Ditch No.3-Leaf River, MN HUC 12

This is misnamed. This is Klondike Cemetery, MN HUC 12 v2. Revised to reflect lack of 4,000' buffers.

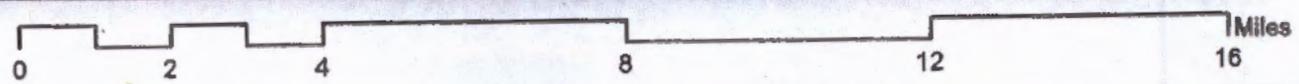


JD Site

**Note: No FEMA Floodplain Map Available**

**Legend**

-  Klondike Cemetery HUC 12
-  Roadside Ditches



## Adjacent Wetlands to South Branch of Two Rivers

Currently Jurisdictional Adjacent Wetlands to South Branch of Two Rivers 5,700' from the OHWM. Wetlands are part of a compensatory mitigation bank. Currently connected via ditch network. Ditches would be excluded under draft final rule as intermittent roadside ditches.

## Legend

▶ 'Adjacent Wetlands' currently jurisdictional adjacent wetlands to South Branch of Two Rivers

▶ Additional Wetlands Beyond 5,700'

▶ Intermittent roadside ditches excluded under draft final rule

HUC  
The  
SOUTH BRANCH

▶ Adjacent wetlands to South Branch of Two Rivers

EXAMPLE #8

Adjacent Wetlands Compensatory Mitigation Bank in Lower Tarmac, MN

48.243669°N, -94.52144°W

See map entitled, "Lower Tarmac, MN HUC 12" and "Lower Tarmac, MN HUC 12 NWI Map."

Wetlands currently jurisdictional as adjacent to ephemeral non-relatively permanent roadside ditches which contribute flow to the Upper Red Lake, a TNW.

Subject wetlands are approximately 150 acres in size.

These adjacent wetlands are part of an approved wetland compensatory mitigation bank.

These wetlands are directly abutting ephemeral roadside ditches and are approximately 15,000' from the OHWM of the Upper Red Lake.

Under the draft final rule, the ephemeral roadside ditches would be excluded under (b)(3)(B) as they drain a municipal road and they are not relocated, tributaries or excavated in a tributary.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of the Upper Red Lake. In addition, these wetlands are located in agricultural field which would preclude them from being considered adjacent when 404(f)(1)(A) activities occur in them.

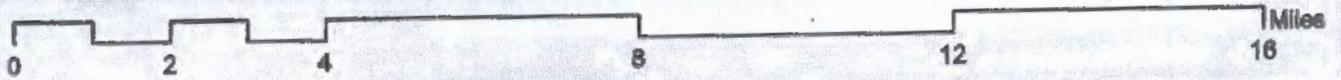
Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of the Upper Red Lake.

If the draft final rule provided for the use of confined surface flow connections to be used in a case-specific significant nexus determination, these wetlands may be found to be jurisdictional.

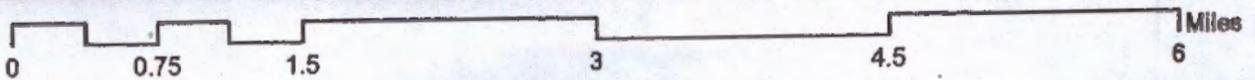
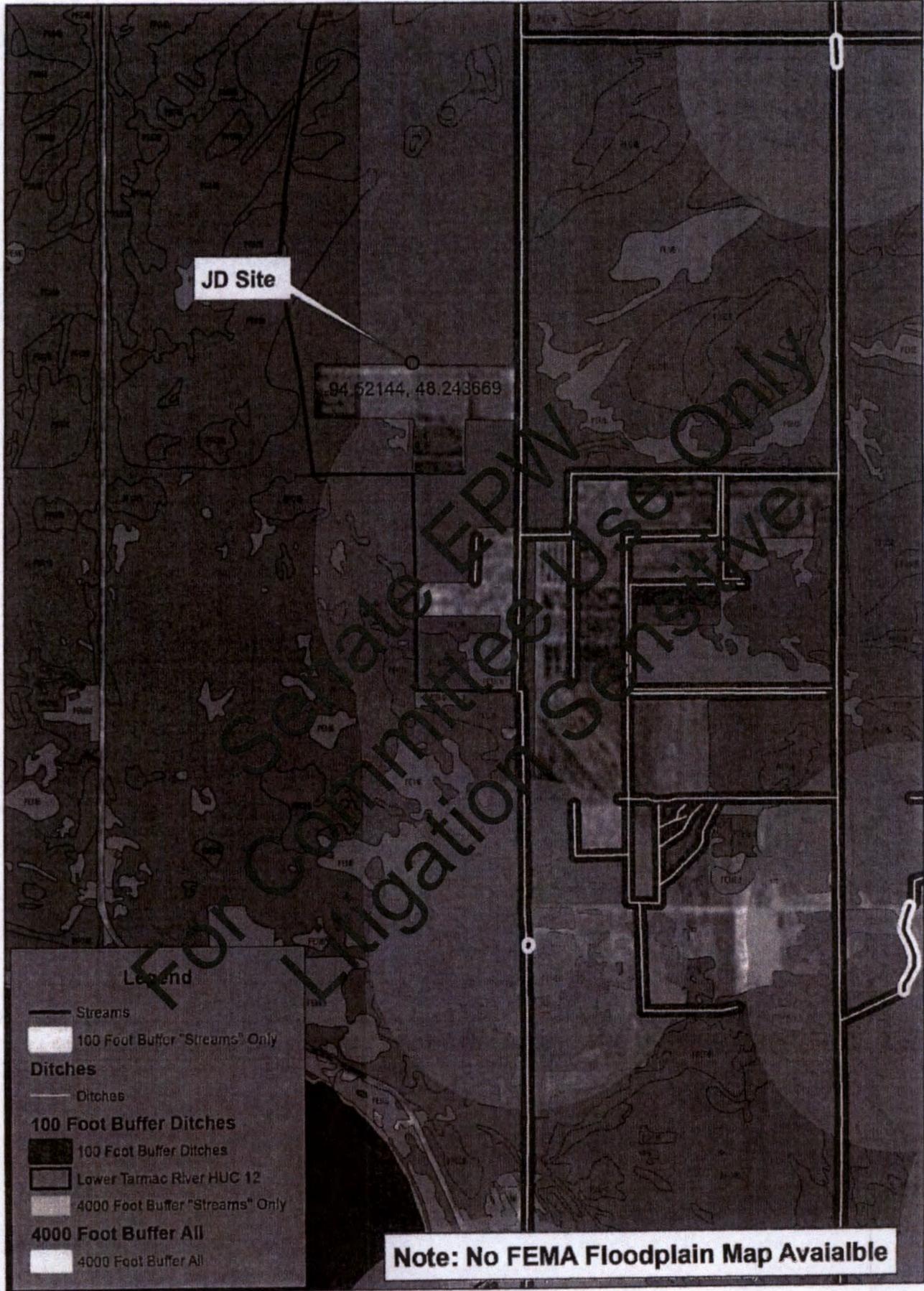
Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional. This may have serious implications for the efficacy and validity of the existing compensatory mitigation bank.

In reviewing the maps provided by EPA, they provided a version of the map with two different buffers; one buffer around only the mapped streams and one buffer around both the streams and ditches. It can be seen that if the ditches are excluded, which they would be under the draft final rule, then the subject wetlands lie outside the 4,000' distance, as does much of the HUC 12. The extensive area of wetlands in the area can be seen in the NWI map layer, of which many of them would be beyond 4,000'. There are also errors in the EPA map with small relict segments of what the NHD layer had determined to be streams but are now part of the ditch network. The 4,000' buffer around those small sections should be removed.

# Lower Tarmac, MN HUC 12



# Lower Tarmac, MN HUC 12 NWI Map



EXAMPLE #9

Adjacent Wetlands, Wing River, MN

46.4231821°N, -95.065699°W

See map entitled, "County Ditch No. 3-Leaf River, MN HUC 12."

Wetlands currently jurisdictional as adjacent to Wing River; perennial relatively permanent waters, with the characteristics to meet the definition of tributary under the draft final rule. Tributary to Leaf River.

Subject wetlands are approximately 16 acres in size. Note that there are several other wetlands of equal or greater size beyond the subject wetlands in the area.

Associated with RGP action (MVP-2013-1426 and MVP-2013-997).

These wetlands are approximately 5,000' from the OHWM of Wing River.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of Wing River.

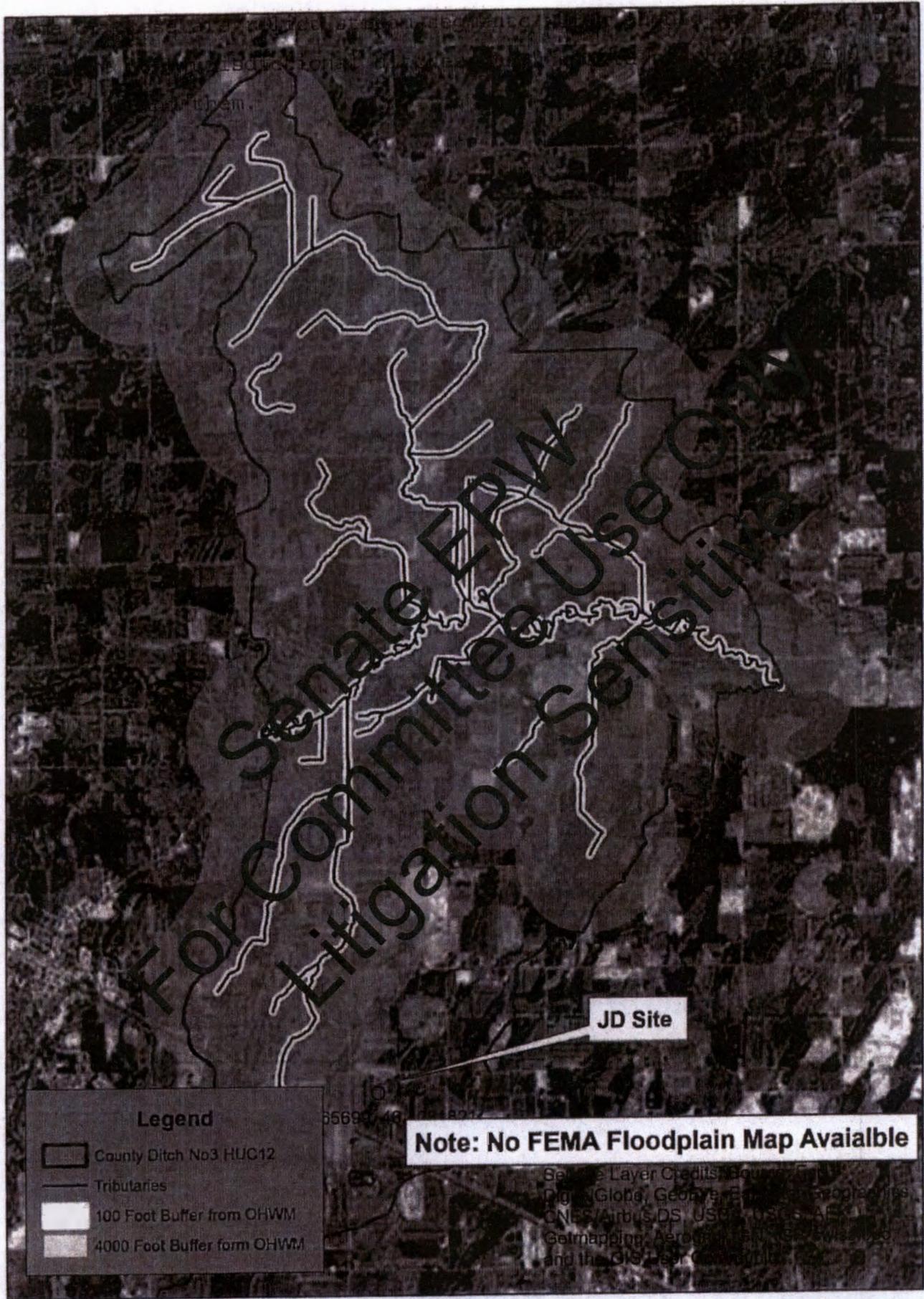
Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of Wing River.

Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

Note that the wetlands present that are beyond the subject wetlands would also be non-jurisdictional. The acreage totals approximately 75 acres.

In reviewing the maps provided by EPA, it is evident that changes need to occur in order to make the map an accurate depiction of potential jurisdiction under the draft final rule. EPA has not drawn the single point of entry watershed boundary but has chosen to simplify the data by only depicting the HUC 12. The map NHD layer also includes relict segments of streams which should be removed with no 4,000' buffer around them. In addition, EPA stated that they only "cleaned" or edited the NHD layer data around the JD example site location as opposed to throughout the HUC 12, which gives a false sense of impression that almost the entire HUC 12 would be included within the 4,000' buffer. However, much of the buffers in the unedited portion of the HUC 12 are surrounding non-jurisdictional ditch features under the draft final rule. Therefore, a much larger portion of the HUC 12 would not be included in the 4,000' buffer if correctly and accurately drawn.

# County Ditch No.3-Leaf River, MN HUC 12

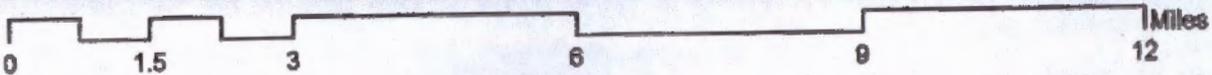


**Legend**

- County Ditch No3 HUC12
- Tributaries
- 100 Foot Buffer from OHWM
- 4000 Foot Buffer form OHWM

**Note: No FEMA Floodplain Map Available**

Source Layer Credits:  
DigitalGlobe, GeoEye, Earthstar, GeoEye, IGN, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, Getmapping, Aeroterm, IGN, Swire, 23° and the GIS User Community



EXAMPLE #10

Headwater Adjacent Wetlands, English Creek, FL

28.018817°N, -82.053704°W

See map entitled, "English Creek, FL HUC 12."

Headwater wetlands currently jurisdictional as adjacent to English Creek; perennial relatively permanent water, with the characteristics to meet the definition of tributary under the draft final rule.

Subject wetlands total approximately 50 acres in size.

Associated with an NWP action (SAJ-2011-621).

These wetlands range from approximately 4,500'-10,000' from the OHWM of English Creek.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of English Creek.

✓ Under the draft final rule, these wetlands would not be considered adjacent under a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of English Creek.

Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

Note that the wetlands present that are beyond the subject wetlands would also be non-jurisdictional. The additional acreage totals over 25 acres.

In reviewing the maps provided by EPA, it is evident that several changes need to occur in order to accurately depict the jurisdictional status of the wetlands. EPA concludes that the location of the ID site is the "only part of the watershed where there is gap in the 4,000 foot buffer." However, EPA then admits that they did not "clean up" or edit the NHD data layer anywhere else in the HUC 12. Much of the area where the 4,000' buffer are drawn on the map surround roadside ditches which would be excluded under the draft final rule. Most of the eastern portion of the HUC 12 should not have the buffer shading. In addition, EPA again depicts the HUC 12 for simplification purposes as the "watershed" as opposed to the single point of entry watershed that is used in the draft final rule.

# English Creek, FL HUC 12



Note: No Floodplain Map East of this Point

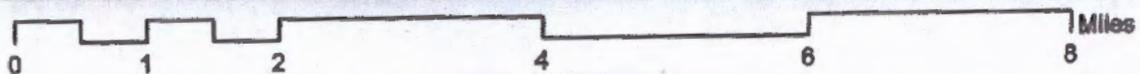
JD Site

82.0537, 28.018817

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For Committee Use Only  
Litigation Sensitive

## Legend

- English Creek HUC 12
- NHD Tributaries
- 100 Foot Buffer from OHWM
- 1500 Foot Buffer from OHWM
- 100 Year Flood Plain
- 4000 Foot Buffer from OHWM



**From:** Stokely, Peter  
**To:** Kaiser, Russell  
**Cc:** Jensen, Stacey M.H002  
**Subject:** [EXTERNAL] English Creek FL  
**Date:** Monday, April 13, 2015 4:53:43 PM

---

Attached is a WOUS analysis of English Creek HUC 12 in FL. A couple of things to note, first there was only partial GIS floodplain mapping available from FEMA. Secondly, as with most of these analysis, the NHD data needs to be examined closely and cleaned up so that only jurisdictional tributaries and ditches remain (a laborious and imprecise process). I did some cleaning of the NHD data near the JD site, but nowhere else. I deleted unconnected drainages and small ditches near the site to be conservative. Interestingly, the resulting map matches what was reported by the Corps in that the JD site is further than 4000 feet from an OHWM. It is also interesting to note the JD site is the only part of the watershed where there is a gap in the 4000 foot buffer (but I didn't clean up the NHD data anywhere else).

I should be able to complete a couple more tomorrow (this one took me about two hours once I received the coordinates)

Peter Stokely

EPA Office of Civil Enforcement

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Room 4110

William Jefferson Clinton Federal Building South (WJC South)

Mail Code 2243A

202-564-1841

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EXAMPLE #11

Adjacent Wetlands, Rowell Creek, FL

30.26194°N, -81.87274°W

See map entitled, "Yellow Creek, FL HUC 12."

Wetlands currently jurisdictional as adjacent to Rowell Creek; perennial relatively permanent water, with the characteristics to meet the definition of tributary under the draft final rule. Rowell Creek is a tributary to Yellow Creek.

Subject wetlands are approximately 150 acres in size. Note that there are several other wetlands of equal or greater size beyond the subject wetlands in the area.

Associated with an NWP action (SAJ-2014-2054).

These wetlands are approximately 5,000' from the OHWM of Rowell Creek.

These wetlands currently have a confined surface connection to Rowell Creek via an ephemeral non-relatively permanent water non-jurisdictional ditch.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of Rowell Creek.

Under the draft final rule, these wetlands would not be considered in a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of Rowell Creek.

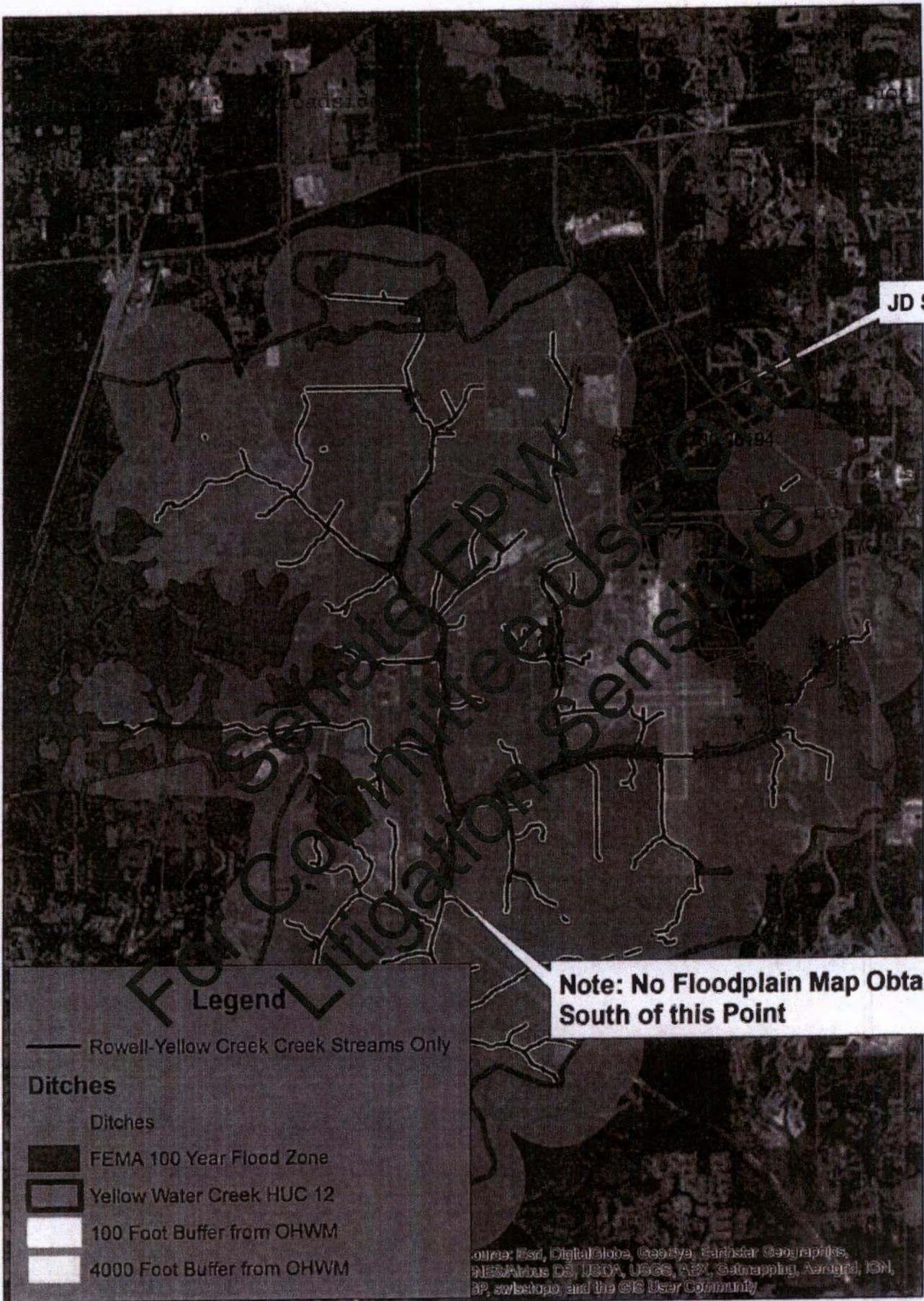
Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

Note that the wetlands present that are beyond the subject wetlands would also be non-jurisdictional. The additional acreage totals over 200 acres.

If the draft final rule provided for the use of confined surface flow connections to be used in a case-specific significant nexus determination, these wetlands may be found to be jurisdictional.

In reviewing the map provided by EPA, it is evident that changes need to occur in order to make the map an accurate depiction of potential jurisdiction under the draft final rule. EPA has not drawn the single point of entry watershed boundary but has chosen to simplify the data by only depicting the HUC 12. The map NHD layer also includes relict segments of streams which should be removed with no 4,000' buffer around them. In addition, EPA only "cleaned" or edited the NHD layer data around the JD example site location as opposed to throughout the HUC 12, which gives a false sense of impression that almost the entire HUC 12 would be included within the 4,000' buffer. However, there are buffers in the unedited portion of the HUC 12 that are surrounding non-jurisdictional ditch features under the draft final rule. Therefore, a larger portion of the HUC 12 would not be included in the 4,000' buffer if correctly and accurately drawn.

# Yellow Creek, FL HUC 12



JD Site

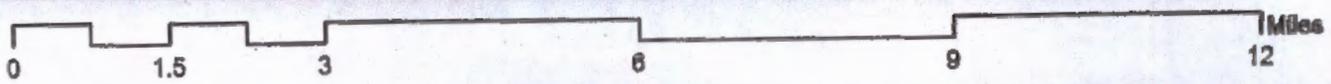
should be removed.

Note: No Floodplain Map Obtained South of this Point

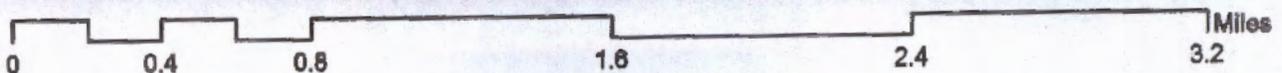
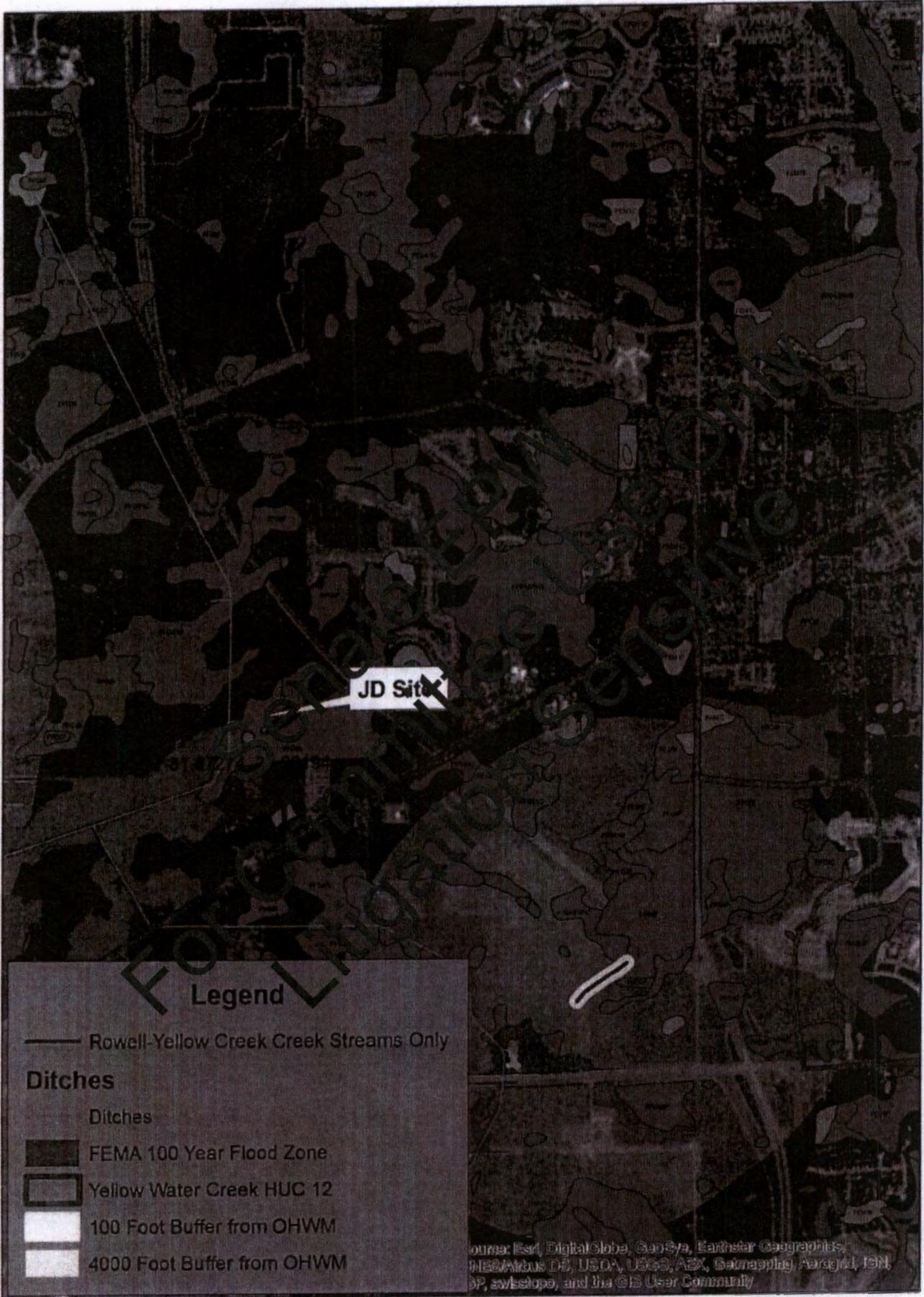
**Legend**

- Rowell-Yellow Creek Creek Streams Only
- Ditches**
- Ditches
- FEMA 100 Year Flood Zone
- Yellow Water Creek HUC 12
- 100 Foot Buffer from OHWM
- 4000 Foot Buffer from OHWM

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, NLS/Airbus DS, USDA, USGS, AeroGRID, IGN, SPT, swisstopo, and the GIS User Community



# Yellow Creek, FL HUC 12 NWI Map



**From:** [Stokely, Peter](#)  
**To:** [Kaiser, Russell](#)  
**Cc:** [Jensen, Stacey M H002](#)  
**Subject:** [EXTERNAL] Rowell-Yellow Creek  
**Date:** Tuesday, April 14, 2015 11:06:04 AM

---

Here is another one, (Russ let me know if you need any more of these). Based on the description regarding Non-RPW ditches I only buffered NHD "streams" for this one, but included the ditches on the map so you can see them. I didn't bother with the 1500 limit from the OHWM in the floodplain because it didn't seem relevant to adjacency in this case. I have also included a close up of the site with NWI wetlands to give a sense how the ditches, the wetlands and the JD site connect

Peter Stokely

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202-564-1841

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EXAMPLE #12

Adjacent Wetlands, Big Creek, OH

41.271053°N, -83.949624°W

See map entitled, "Big Creek, OH HUC 12." Also, see historic maps of the area depicting the existing ditch network dating back to 1909.

Wetlands currently jurisdictional as adjacent to Big Creek; perennial relatively permanent water, with the characteristics to meet the definition of tributary under the draft final rule.

Subject wetlands are approximately 2.5 acres in size.

Associated with an NWP action (LRB-2007-658).

These wetlands are approximately 30,000' from the OHWM of Big Creek.

These wetlands currently have a confined surface connection to Big Creek via an ephemeral non-relatively permanent water non-jurisdictional road side ditch.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of Big Creek.

Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of Big Creek.

Therefore, under the draft final rule, these currently jurisdictional wetlands would be non-jurisdictional.

If the draft final rule provided for the use of confined surface flow connections to be used in a case-specific significant nexus determination, these wetlands may be found to be jurisdictional.

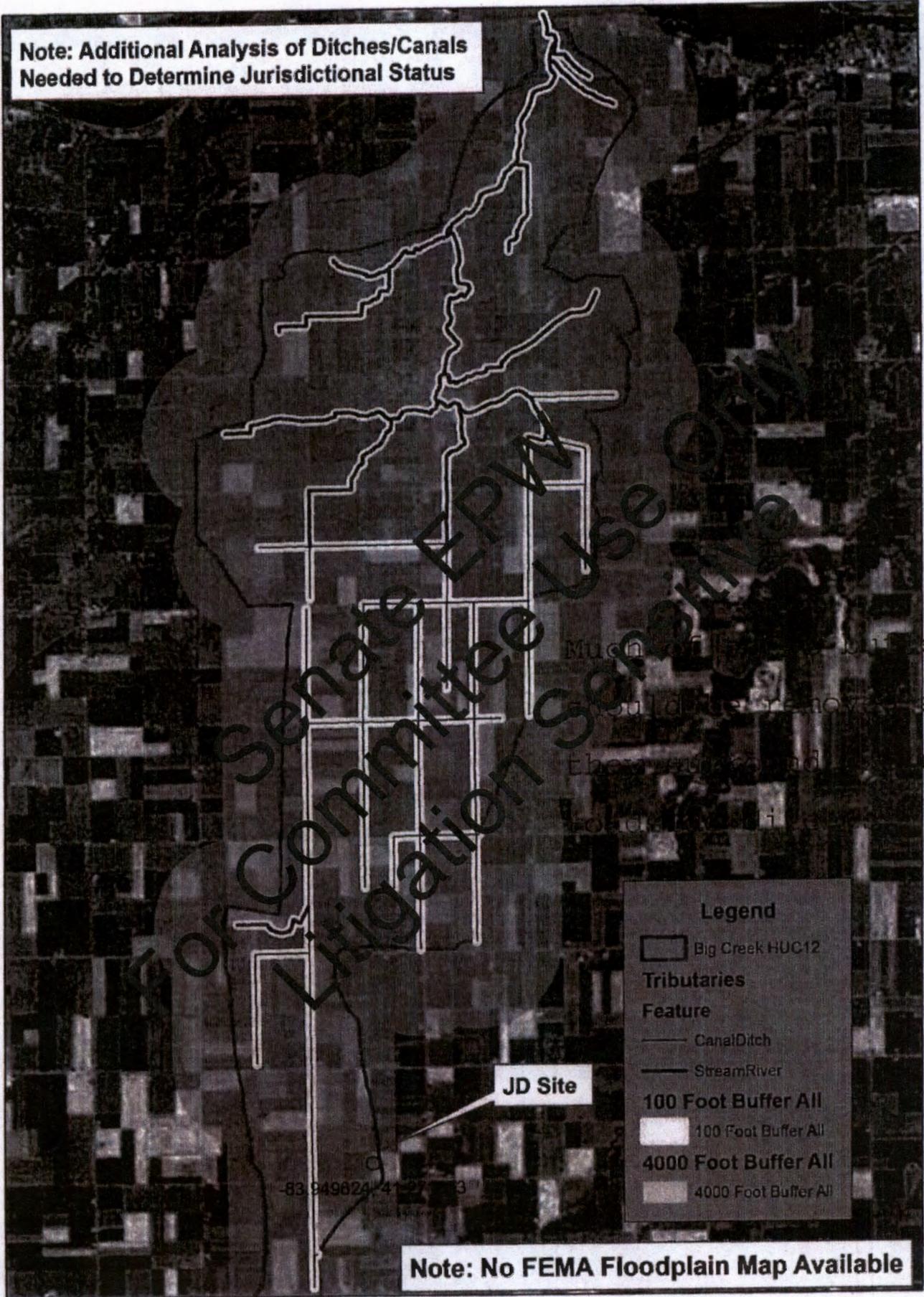
Note that these pockets of wetlands adjacent to ditches are common throughout Ohio, and in particular in the agricultural areas. Without the use of the confined surface flow connections in a significant nexus determination, many of these wetlands would not be jurisdictional under the draft final rule.

In reviewing the maps provided by EPA, it is evident that changes need to occur in order to make the map an accurate depiction of potential jurisdiction under the draft final rule. EPA has not drawn the single point of entry watershed boundary but has chosen to simplify the data by only depicting the HUC 12. In addition, EPA did not "clean" or edit the NHD layer data throughout the HUC 12, which gives a false sense of impression that the entire HUC 12 would be included within the 4,000' buffer. However, much of the buffers in the unedited portion of the HUC 12 are surrounding non-jurisdictional ditch features under the draft final rule. Therefore, the bottom 2/3 of the HUC 12 would not be included in the 4,000' buffer if correctly and accurately drawn. EPA points out that they believe some of the ditches may be relocated tributaries and so would remain jurisdictional. However, in searching through aerial maps and USGS topo maps dating back to 1909 the area is depicted as currently exists, with a vast ditch network. It is clear at some point the tributary to the north, Big Creek, was likely ditched into

# Big Creek, OH HUC 12



**Note: Additional Analysis of Ditches/Canals Needed to Determine Jurisdictional Status**



### Legend

Big Creek HUC12

### Tributaries

### Feature

Canal/Ditch

Stream/River

100 Foot Buffer All

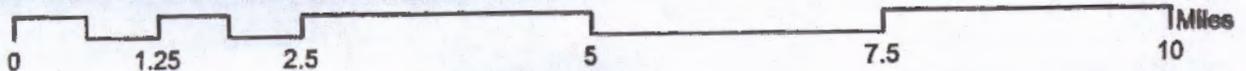
4000 Foot Buffer All

4000 Foot Buffer All

JD Site

83 949624 41 27 3

**Note: No FEMA Floodplain Map Available**



**From:** [Stokely, Peter](#)  
**To:** [Kaiser, Russel](#)  
**Cc:** [Jensen, Stacey M HQ02](#)  
**Subject:** [EXTERNAL] Big Creek, OH HUC 12  
**Date:** Thursday, April 16, 2015 11:44:33 AM

---

In this case the HUC 12 may be the SPOE (in most other maps, the HUC 12 was not the SPOE and was used only to represent adjacency measures).

Also on this one, it appears to me that some of the ditches/canals could be relocated tributaries and would remain jurisdiction, additional analysis is required. And again, additional surface water connections are likely present.

Peter Stokely

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Mail Code 2243A

202-564-1841

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**Jensen, Stacey M HQ02**

---

**From:** Jensen, Stacey M HQ02  
**Sent:** Thursday, April 16, 2015 1:58 PM  
**To:** 'Stokely, Peter'; Kaiser, Russell  
**Subject:** RE: Big Creek, OH HUC 12 (UNCLASSIFIED)  
**Attachments:** OH\_Mc Clure\_227790\_1909\_62500.jpg

Classification: UNCLASSIFIED  
Caveats: NONE

Thank you, Pete. I think this one illustrates another good point. In searching through the records, the oldest imagery I have found of the area is an old USGS topo map dating to 1909 which depicts the area as it exists today with the ditch network (see attached; area around McClure for the tributaries that branch to become the network of ditches). It is clear that at some point the tributaries to the north, Big Creek and its tributary, were most likely ditched into roadside ditches. But which of those many ditches is to be considered the "excavated" or "constructed in" tributary? There are many more ditches than one or two tributaries. If the record does not exist dating back to the point of when these ditches were constructed, to whom does the burden fall? The landowner or the Corps/EPA? It is also interesting to note that the direction of flow changes within the ditches even within a short distance as they are greatly manipulated. So what would the cause be? This is a common occurrence and challenge that our districts and regions will face with the roadside ditches. Thank you!

Best wishes,  
Stacey

USACE Regulatory Program Manager  
1 G Street NW  
Washington, DC 20314-1000  
Phone (202) 761-5856

-----Original Message-----

From: Stokely, Peter [mailto:Stokely.Peter@epa.gov]  
Sent: Thursday, April 16, 2015 1:43 AM  
To: Kaiser, Russell  
Cc: Jensen, Stacey M HQ02  
Subject: [EXTERNAL] Big Creek, OH HUC 12

In this case the HUC 12 may be the SPOE (in most other maps, the HUC 12 was not the SPOE and was used only to represent adjacency measures).

Also on this one, it appears to me that some of the ditches/canals could be relocated . tributaries and would remain jurisdiction, additional analysis is required. And again, additional surface water connections are likely present.

Peter Stokely

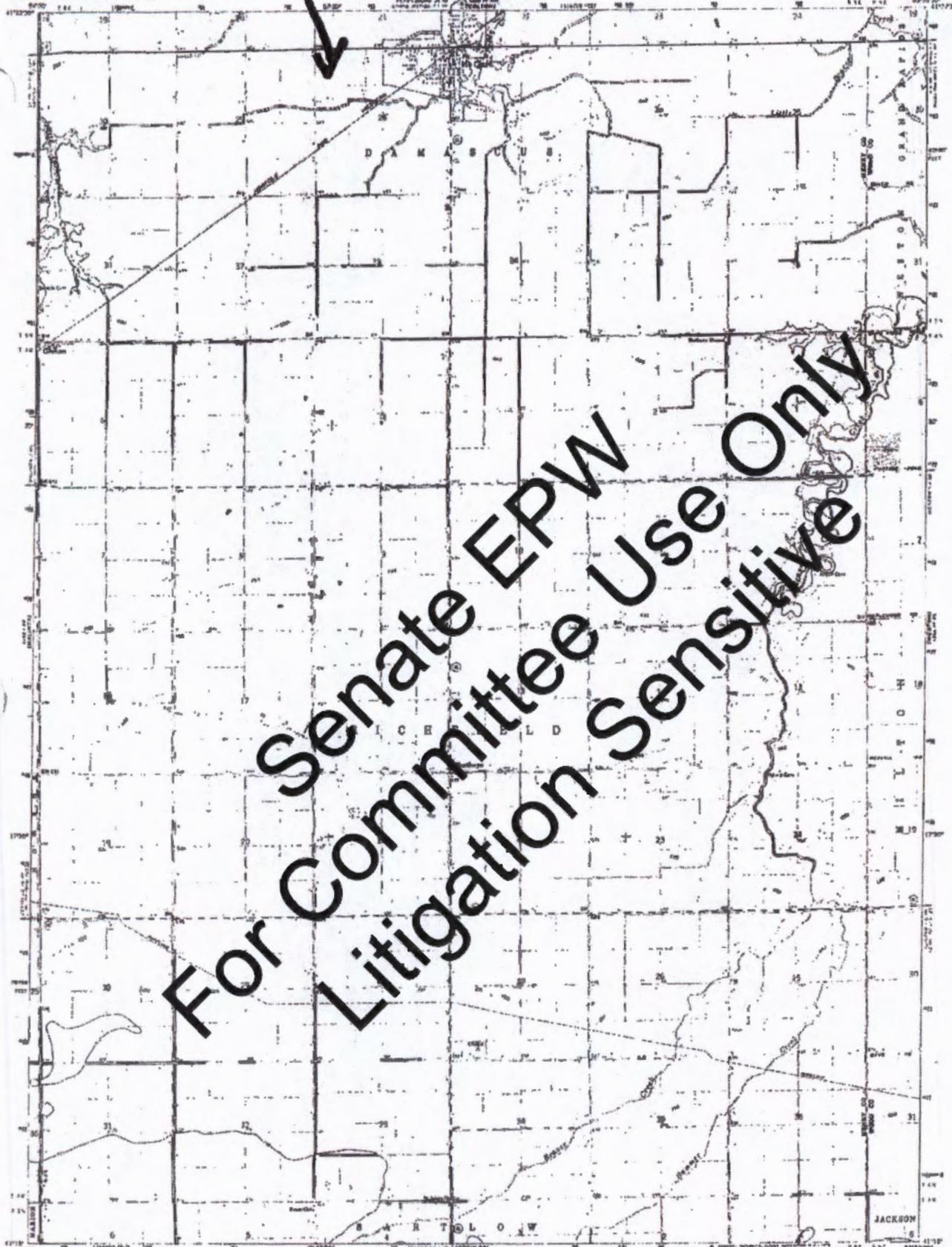
Office of Civil Enforcement

# HISTORIC DITCH NETWORK

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF GEOLOGICAL SURVEY

MC CLURE QUADRANGLE  
OHIO  
7.5 WHITE SERIES (TOPOGRAPHIC)



For Senate EPW  
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Mapped, edited, and published by the Geological Survey

under USGS and USGCS

Contours and buildings in part compiled from aerial photographs taken 1959. Topography by stereoscopic maps 1952.

Political boundaries, 1977 North American datum 10,000-foot grid based on Ohio coordinate system, with zero 1000-meter (United States) National grid zone, zone 17, shown in blue.

Color area has white contour lines.

Line and shaded areas include railroad lines and field lines unless specifically noted on aerial photographs. The remainder is unshaded.

THIS MAP AND ANY INFORMATION CONTAINED THEREON ARE UNCLASSIFIED DATE 05/11/00 BY 60322 UC/STP



VERTICAL DATUM: MEAN SEA LEVEL (1929) DATUM OF 1929

UNITED STATES GEOLOGICAL SURVEY

WASHINGTON, D. C. 20508

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS FOR SALE BY U.S. GOVERNMENT PRINTING OFFICE, GPO: 2000 A PUBLICATION OF THE NATIONAL MAP AND DIGITAL DATA CENTER

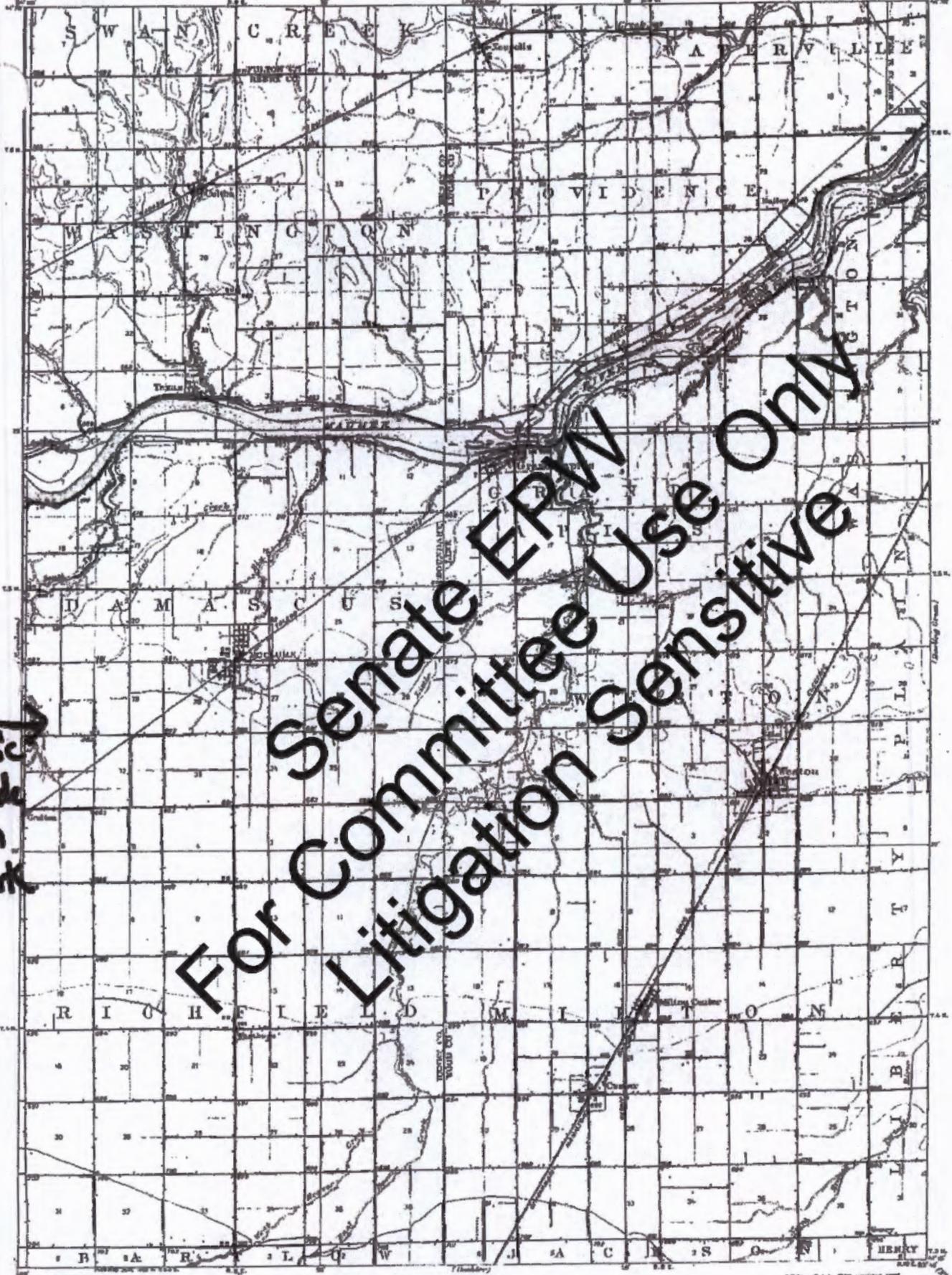


7.5 WHITE SERIES (TOPOGRAPHIC)

MC CLURE, OHIO  
7.5 WHITE SERIES (TOPOGRAPHIC)

1960  
PRODUCTION NO. 1375  
AND MAP OF THE QUADRANGLE

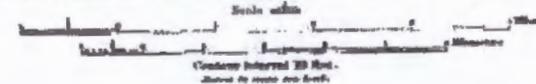
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275



brick  
side  
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mark

For Senate EPW  
Litigation Use Only

Frank Saxon, Geographer in charge.  
Compiled by R.D. Zeman and R.D. McClure.  
Copyright by U.S.G.S.  
Revised in 1908-1909.



Edition of July 1908, revised 1908  
Polyconic projection.

EXAMPLE #13

Adjacent Wetlands, Chickasawhatchee Creek, GA

31.345246°N, -84.446706°W

See map entitled, "Wolf Pond-Chickasawhatchee Creek, GA HUC 12."

Wetlands currently jurisdictional as adjacent to unnamed tributaries to Chickasawhatchee Creek; perennial relatively permanent water, with the characteristics to meet the definition of tributary under the draft final rule.

Subject wetlands are approximately 40 acres in size. Note that there are several other wetlands of equal or greater size beyond the subject wetlands in the area.

Associated with an unauthorized activity and an NWP action (SAS-2012-512)

These wetlands are approximately 10,000' from the OHWM of Chickasawhatchee Creek.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of Chickasawhatchee Creek.

Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of Chickasawhatchee Creek.

Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

Note that the wetlands present that are beyond the subject wetlands would also be non-jurisdictional. The additional acreage totals over 300 acres.

In reviewing the maps provided by EPA it is clear that the majority of the HUC 12 lies beyond the 4,000' distance.

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# Adjacent Wetlands to Chickasawhatchee Creek, GA

Currently Jurisdictional/Adjacent Wetlands to Chickasawhatchee Creek, GA 10,000' from the DWM/M

## Legend

Adjacent Wetlands - currently jurisdictional/adjacent wetlands to Chickasawhatchee Creek, GA

Note how many additional wetlands lie beyond 4,000'

Adjacent Wetlands

Elmrode

1000  
2000  
3000  
4000

1000  
2000  
3000  
4000

**From:** [Stokely, Peter](#)  
**To:** [Kaiser, Russell](#)  
**Cc:** [Jensen, Stacey M HQ02](#)  
**Subject:** [EXTERNAL] Chickasawhatchee Creek, GA  
**Date:** Tuesday, April 14, 2015 4:10:30 PM

---

This area in GA has very little NHD mapped drainage, hence the site is outside all the adjacency measures based on NHD. I don't know however if there are unmapped ditches and small tributaries that may link the site to Chickasawhatchee Creek.

There are two more sites, I should be able to get to those tomorrow.

Pete

Peter Stokely

EPA Office of Civil Enforcement

1200 Pennsylvania Ave, NW

Washington, DC 20460

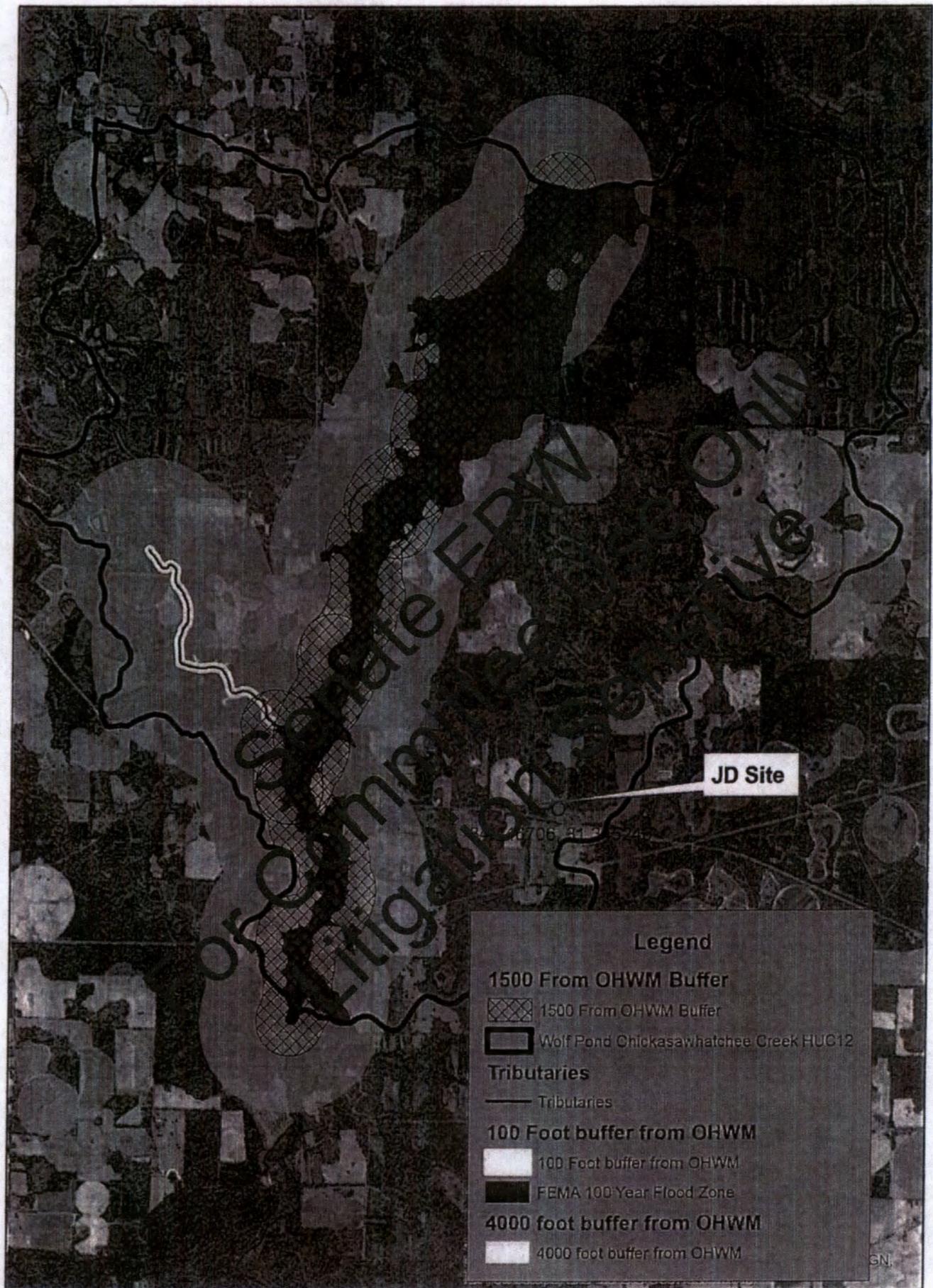
Room 4110

William Jefferson Clinton Federal Building South (WJC South)

Mail Code 2243A

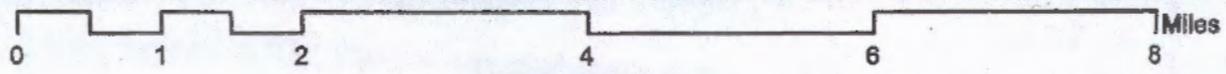
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**Legend**

- 1500 From OHWM Buffer**  
 1500 From OHWM Buffer
-  Wolf Pond Chickasawhatchee Creek HUC12
- Tributaries**  
 Tributaries
- 100 Foot buffer from OHWM**  
 100 Foot buffer from OHWM
-  FEMA 100-Year Flood Zone
- 4000 foot buffer from OHWM**  
 4000 foot buffer from OHWM



EXAMPLE #14

Adjacent Wetlands, California Creek, WA

48.929721°N, -122.635156°W

See map entitled, "Dakota Creek HUC 12."

Wetlands currently jurisdictional as adjacent to California Creek; perennial relatively permanent water, with the characteristics to meet the definition of tributary under the draft final rule.

Subject wetlands are approximately 18 acres in size. Note that there are several other wetlands of equal or greater size beyond the subject wetlands in the area.

Associated with an NWP action (NWS-2007-344).

These wetlands are approximately 6,000' from the OHWM of California Creek.

These wetlands currently have a confined surface connection to California Creek via an ephemeral non-relatively permanent water non-jurisdictional ditch.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of California Creek.

Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of California Creek.

Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

✓ If the draft final rule provided for the use of confined surface flow connections to be used in a case-specific significant nexus determination, these wetlands may be found to be jurisdictional.

Note that the wetlands present that are beyond the subject wetlands would also be non-jurisdictional. The additional acreage totals over 100 acres.

In reviewing the maps provided by EPA, it is clear that v2 is the more accurate map regarding jurisdictional status under the draft final rule. The map v1 assumes the ditches are jurisdictional, but the JD completed by the district stated that the ditches connected to the subject wetlands were non-jurisdictional ephemeral (non-relatively permanent) ditches. In addition, most of the ditches surrounding the JD site are intermittent roadside ditches which would also be excluded. Therefore, v1 should be disregarded and v2 should be viewed as the more accurate portrayal. However, there are still issues which must be amended in a new version to accurately depict the status of jurisdiction. The map NHD layer also includes relict segments of streams which should be removed with no 4,000' buffer around them. In addition, EPA only "cleaned" or edited the NHD layer data around the JD example site location as opposed to throughout the HUC 12, which gives a false sense of impression that almost the entire HUC 12 would be included within the 4,000' buffer. However, there are buffers in the unedited portion of the HUC 12 that are surrounding non-jurisdictional ditch features under the draft final rule.

**From:** [Stokely, Peter](#)  
**To:** [Kaiser, Russell](#)  
**Cc:** [Jensen, Stacey M HO02](#)  
**Subject:** [EXTERNAL] Dakota Creek WA HUC 12  
**Date:** Thursday, April 16, 2015 2:07:49 PM

---

For this one I have included two versions, v1 assumes all HND features are jurisdictional and v2 excludes ditches/canals from the analysis. It can be seen there is a small decrease in coverage with the ditches excluded, but the JD site is covered by both analysis.

Peter Stokely

EPA Office of Civil Enforcement

1200 Pennsylvania Ave, NW

Washington, DC 20460

Room 4110

William Jefferson Clinton Federal Building South (WJC South)

Mail Code 2243A

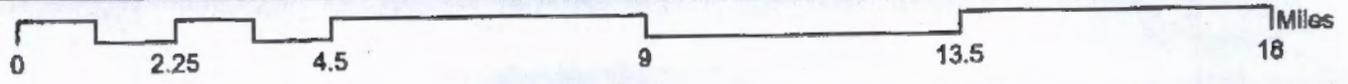
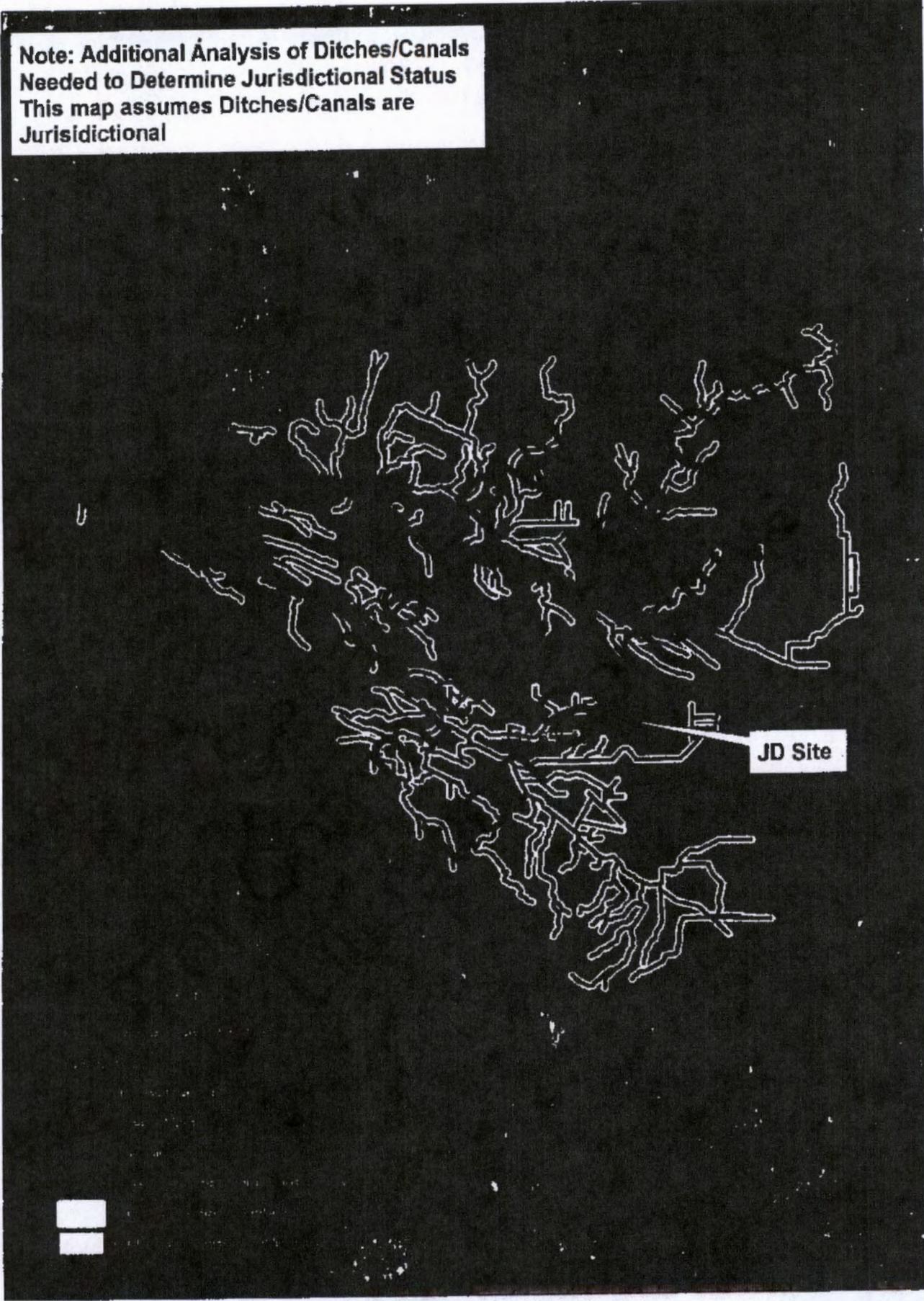
202-564-1841

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**Note: Additional Analysis of Ditches/Canals  
Needed to Determine Jurisdictional Status  
This map assumes Ditches/Canals are  
Jurisdictional**





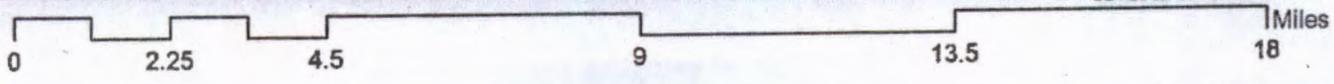
Note: Additional Analysis of Ditches/Canals Needed to Determine Jurisdictional Status  
This map assumes Ditches/Canals are NOT Jurisdictional



**Legend**

- Dakota Creek WA HUC12
- Feature**
- Ditches/Canals
- Stream/River
- Connector
- FEMA 100 Year Floodzone
- 100 Foot Buffer OHWM Stream/River Only
- 4000 Foot Buffer OHWM Stream/River Only

Service Layer Credits: Source: Esri  
DigitalGlobe, GeoEye, Earthstar  
CNES/Airbus DS, USDA, USGS,  
Swire, GEBCO, CNES/Airbus, GeoEye, AeroGRID, IGN, and the GIS User Community



EXAMPLE #15

Adjacent Wetlands, Edmondson Slough, Mississippi River, MS

37.290869°N, -89.482414°W

See map entitled, "Edmondson Slough HUC 12."

Wetlands currently jurisdictional as adjacent to Mississippi River, a TNW.

Subject wetlands are approximately 9 acres in size. Note that there are several other wetlands of equal or greater size beyond the subject wetlands in the area.

Associated with an NWP action (MVS-2008-782).

These wetlands are approximately 8,000' from the OHWM of the Mississippi River.

Under the draft final rule, these wetlands would not be considered adjacent as they are beyond 1,500' from the OHWM of Mississippi River.

Under the draft final rule, these wetlands would not be considered under a case-specific significant nexus determination as they are beyond 4,000' from the OHWM of Mississippi River.

Therefore, under the draft final rule these currently jurisdictional wetlands would be non-jurisdictional.

Note that the wetlands present that are beyond the subject wetlands would also be non-jurisdictional. The additional acreage totals over 80 acres.

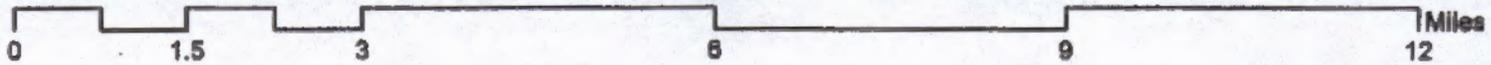
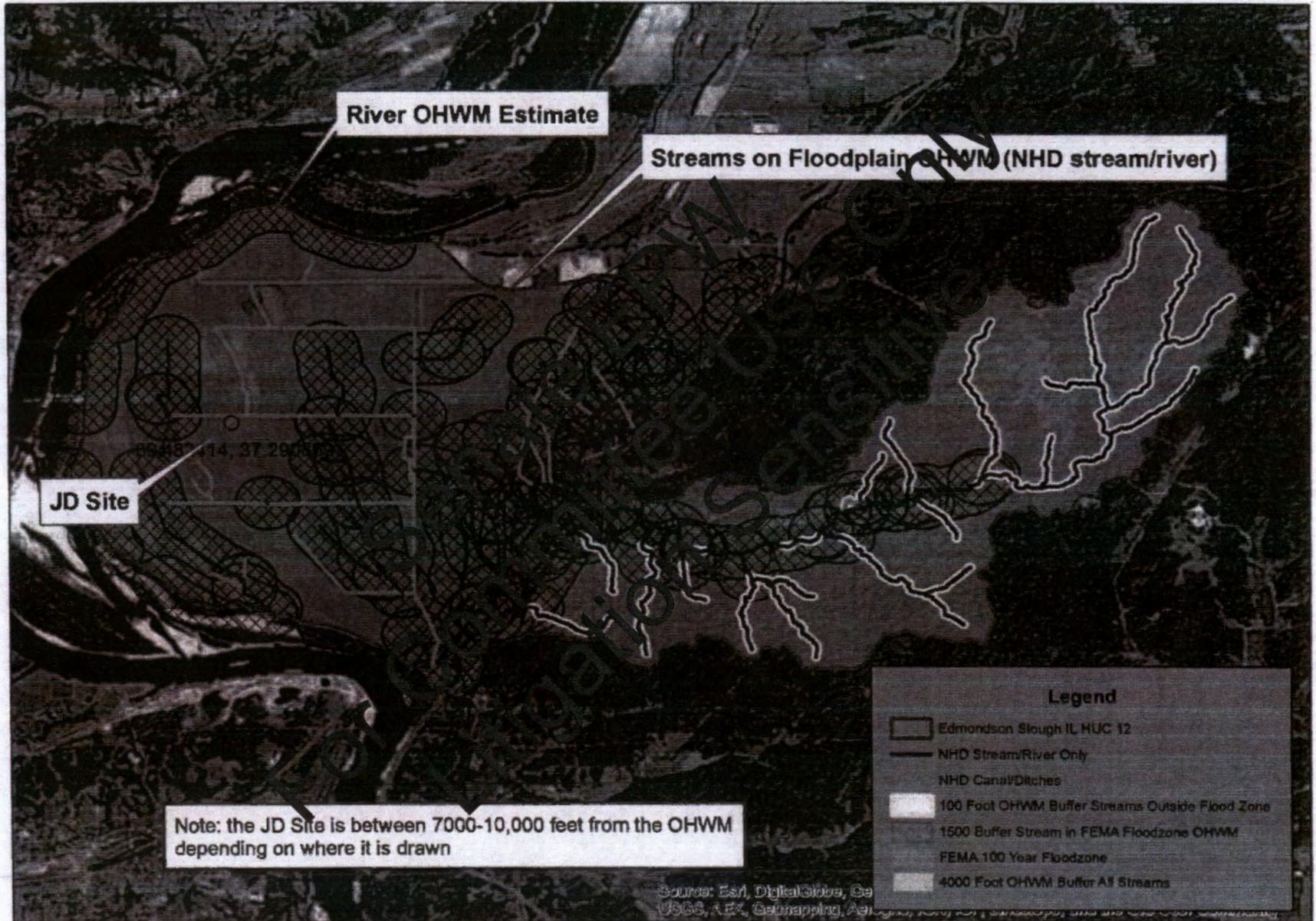
In reviewing the maps provided by EPA it is clear that the JD review site would not be jurisdictional. The wetlands are adjacent to non-jurisdictional ditches which would be excluded under the draft final rule.

The wetlands lie within the 100-year floodplain of the Mississippi River but beyond 4,000' from the OHWM of the River. There are many wetlands in the area and the determination was made on all of them in the area. The NHD map layer includes several flow lines which are not actually tributaries and do not connect to the River. There are many surface features in the area which NHD has a difficult time distinguishing. EPA also indicated the challenges in drawing the map for this location, such as having to estimate an OHWM as the NHD map data drew the OHWM line down the middle of the River. These are typical challenges that our field staff will routinely encounter if they had to implement the draft final rule language.

This scenario often occurs in the floodplains of major river systems, such as the Ohio River, Mississippi River, Missouri River, etc. Such large river systems have very wide floodplains, and the adjacent wetlands are often located behind natural levees that form in the floodplain which can be far beyond 4,000' from the OHWM of the major river to which the wetlands are adjacent.

Overall, ~3.4% of waters are wetlands adjacent to TNWs (based on ORM data), both abutting and non-abutting. Such adjacent wetlands currently jurisdictional are at risk of being non-jurisdictional under the draft final rule.

# Edmondson Slough, IL HUC 12



**Jensen, Stacey M HQ02**

---

From: Jensen, Stacey M HQ02  
Sent: Thursday, April 16, 2015 10:46 AM  
Subject: 'Kaiser, Russell'; Stokely, Peter  
RE: Last One (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Pete,

Here is one of our adjacent wetland determinations in the 100-year floodplain of the Mississippi River but beyond 4,000' from the nearest TNW. The determination was made on all the wetlands located in the surrounding area of the lat/long coordinates. Note that NHD includes several flow lines of "tributaries" in the area that do not connect to the Mississippi but whose indicators disperse prior to the "tributary" reaching the Mississippi. There are many surface features in the area that may demonstrate partial characteristics of a tributary but do not consistently present the indicator and do not directly, or indirectly, contribute flow to the Mississippi but rather turn into sheetflow and/or end in wetlands. These wetlands were determined to be adjacent to the Mississippi River.

Lat/long: 37.290869, -89.482414.

Since these wetlands are also located in an agricultural area, which is very common along these major river systems like the Mississippi River, if these wetlands cannot be considered adjacent to the Mississippi under the draft final rule language regarding the farming activities, would they then be considered under (a)(2)? If so, since these wetlands are beyond 4,000' from the TNW these would no longer be jurisdictional under the draft final rule. Or are wetlands that cannot be considered adjacent under the draft final rule evaluated under significant nexus regardless of distance? That part is unclear in the draft final rule language and this example also illustrates the consequences of that decision. Thank you!

Best wishes,  
Stacey

HQUSACE Regulatory Program Manager  
441 G Street NW  
Washington, DC 20314-1000  
Phone (202) 761-5886

-----Original Message-----

From: Kaiser, Russell [<mailto:Kaiser.Russell@epa.gov>]  
Sent: Thursday, April 16, 2015 8:11 AM  
To: Jensen, Stacey M HQ02; Stokely, Peter  
Subject: [EXTERNAL] RE: Last One (UNCLASSIFIED)

I can't remember but are we doing one to look at broad floodplains such as those along the Missouri River. If not, that might be a good one - thoughts?

Russell L. Kaiser  
Chief, Wetlands & Aquatic Resources Regulatory Branch  
801 Constitution Ave., N.W.  
Room 7217M West Bldg.

From: [Stokely, Peter](#)  
To: [Kaiser, Russell](#)  
Cc: [Jensen, Stacey M H002](#)  
Subject: [EXTERNAL] Edmondson Slough IL HUC 12  
Date: Thursday, April 16, 2015 6:20:33 PM

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This was complicated to make, I digitized the flood zone from viewing a FEMA map (not digital GIS data), I had to create an OHWM along the Mississippi because NHD drew the blue line right down the middle. The OHWM is only a guess on my part. There were many "streams", probably with OHWM's, and ditches in the floodplain/flood zone. I wasn't sure which streams with OHWM's on the floodplain to buffer with the 1500 measure, so I buffered all the NHD "stream/river designations and my own river OHWM estimate. It would take additional effort to map all the "streams" to determine which ones don't connect to the TNW. I didn't buffer the NHD canal/ditches.

Here is the write up from Stacey that describes the in the field complexity of the site, which is born out by the complexity and difficulty of making the map.

Here is one of our adjacent wetland determinations in the 100-year floodplain of the Mississippi River but beyond 4,000' from the nearest TNW. The determination was made on all the wetlands located in the surrounding area of the lat/long coordinates. Note that NHD includes several flow lines of "tributaries" in the area that do not connect to the Mississippi but whose indicators disperse prior to the "tributary" reaching the Mississippi. There are many surface features in the area that may demonstrate partial characteristics of a tributary but do not consistently present the indicators and do not directly, or indirectly, contribute flow to the Mississippi but rather turn into sheet flow and/or end in wetlands. These wetlands were determined to be adjacent to the Mississippi River.

Since these wetlands are also located in an agricultural area, which is very common along these major river systems like the Mississippi River, if these wetlands cannot be considered adjacent to the Mississippi under the draft final rule language regarding the farming activities, would they then be considered under (a)(8)? If so, since these wetlands are beyond 4,000' from the TNW these would no longer be jurisdictional under the draft final rule. Of the wetlands that cannot be considered adjacent under the draft final rule evaluated under significant nexus regardless of distance? That part is unclear in the draft final rule language and this example also illustrates the consequences of that decision.

I will not be able to make any more maps until next week, I have dentist appointment in the AM then I am heading to a college orientation session with my step son in the afternoon.

Peter Stokely

EPA Office of Civil Enforcement

1200 Pennsylvania Ave, NW

Washington, DC 20460

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APPENDIX B

USACE Implementation Challenges

**CWA "Waters of the U.S." Implementation Concerns**  
**HQUSACE**  
24 April

**Overarching Concerns:**

1. Rule text contains non-equivalent requirements for significant nexus determinations
2. Arbitrary limits for case-specific significant nexus determinations not rooted in science
3. Arbitrary limits within definition of "neighboring" not rooted in science and beyond reasonable reach of defining adjacency by rule
4. Lack of definitions for multitude of terms used within rule text (e.g. similarly situated, "a water", prairie pothole, western vernal pool, Delmarva & Carolina Bay, pocosins, Texas coastal prairie wetland, ditch, roadside ditch, etc.)
5. Grandfathering provisions lacking granularity and clarity
6. Preamble does not reflect Corps technical experience and expertise, nor does it accurately reflect the Corps understanding of the substantive public comments

**Specifics:**

- Need implementation clarification on when a waterbody meets more than one category which category to use in the determination. Does one go down the list in order (TNW, then interstate waters, then territorial seas, etc.) until the first category that applies? With exclusions applied first overall.
- (a)(1) – Traditional Navigable Waters (TNW)
  - Districts may be challenged to identify whether there is an "upper limit" to the TNW, and if so, where.
    - These analysis take at least several months, similar to a Section 10 designation
  - Districts currently do not have a list of TNWs, as they do with the Section 10 waters.
    - Drawing single point of entry (SPOE) watersheds to the TNW may be a challenge without such lists and limits identified.
    - Need implementation clarifications on how to identify and make determinations for TNW designation. Rapanos guidance included an Appendix for TNWs.
- (a)(5) – Tributaries
  - Need a definition or further discussion on "bed and banks" to implement in the field and identify a tributary. Some areas, especially in the arid west, may have very wide tributaries with shallow "banks" or very gradually sloped "banks." Do these still constitute "bed and banks" as to the intent in the rule? The preamble only discusses that the slope may vary. Needs further clarification to implement.

- The specific indicators used in the OHWM manual and the term "active channel" need to be related back to the OHWM definition in the rule.
- Need implementation clarification and/or definitions to distinguish between excluded erosional features and ephemeral tributaries.
- What constitutes a "break" in a tributary? Is there need to distinguish a tributary upstream of a break but not downstream of a break? The Corps OHWM manuals state that you need to find the tributary both up and downstream of the break.
- How does a regulator or the public know if the two sections of a tributary are part of the same tributary when there is a break separating sections? How does a regulator or the public know they are connected? How far can a break go; any distance limitation? Ephemeral tributaries out west may hit an alluvial plain and fan out; are these considered "breaks" or do these result in isolation of the streams?
- (a)(6) – All waters, including wetlands, ponds, lakes, oxbows, impoundments, and similar water features, adjacent to a water identified in subparagraphs (a)(1) through (5) of this section.
  - Need a definition of "water." It may be hard to distinguish what constitutes a non-wetland adjacent water without a definition of "water." A low depression on a farm field that ponds water after a rain storm for ten days, would that be considered a non-wetland adjacent water? A pond? Received many comments on this topic. Should there be a requirement for wetland parameters, hydrology, permanence of water, duration? A "delineation manual" for non-wetland waters?
  - New definition of adjacency includes a provision that waters subject to established normal farming, silviculture, and ranching activities are not adjacent.
    - This could result in large workload increases for those districts in agricultural areas as wetlands subject to such activities which are currently adjacent by rule would now require a case-specific significant nexus determination. For example, a wetland abutting a perennial tributary which was subject to farming activities currently would be considered adjacent without additional analysis; however, such wetland under the draft final rule could not be adjacent and instead would require a case-specific significant nexus determination.
    - Specific state example: Minnesota has 10.6 million acres of wetlands; ~50% of Minnesota's 54 million acres are farmland and an additional ~7% are forested wetland of which a large portion is managed in silviculture. The proposed definition may exclude a large amount of those 10.6 million acres of wetlands as adjacent, and would instead require a case-specific significant nexus determination.
  - Neighboring:
    - The indirect reference to the FEMA floodplain can lead to challenges in the field. Is the "list" of floodplains to use in the preamble considered a "hard preference" or a "soft preference" list? In any order? Landowners may want a different version to be used; need implementation clarification on which floodplain and which order to use in adjacency determinations.

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- FEMA redraws their floodplains often; which version do we use? Levee Improvement Districts apply for floodplain modifications frequently; almost monthly in some districts.
- Other options for the 100-year floodplain do not match the FEMA floodplain; they serve different purposes. The NRCS soil maps suggested for use do not match the risk assessment that is used by FEMA. HEC-RAS is based on hydrology not flood risk.
- Can vertical and elevation changes be used in determining distance? Deeply incised tributaries with waters on a bluff: would these be considered adjacent?
- How is the distance measured? Remotely via aerial photography? Can't do the distance measurement in the field as it would take into account the elevation profile. Need implementation tools/resources on how to determine distance.
- (a)(7) and (a)(8) – Case-Specific Significant Nexus Determinations
  - How do we identify a prairie pothole, western vernal pool, Texas coastal prairie wetland, Carolina/Delmarva bays, or peat bogs? Need delineation manuals for these waters or at least a definition of these waters, vegetation characteristics, etc.
  - Single point of entry watershed (SPOE) is a challenge to delineate. There are no readily available maps or tools. The tools used by EPA (NHDPlus) do NOT delineate SPOE. It needs to be drawn manually which can be especially challenging in the arid west with very large SPOEs and in areas of flat topography. Can introduce inconsistency.
  - Need a mapping tool for districts to outline SPOEs and to potentially use in future determinations. However, SPOEs may change over time with development, climate, etc. Would need to be periodically re-evaluated if trying to use the same SPOE as used in a previous JD.
  - Need guidance on how to identify “similarly situated” waters. How close do they need to be to each other. How many and which type of functions do they need to similarly provide?
  - Need guidance on how to identify all of the “similarly situated” waters in a SPOE in order to do a significant nexus determination. This may be challenging to do remotely.
    - Must identify all waters similarly situated in a SPOE using remote tools, aerial photos, NWI maps. This may not be accurate as to the actual waters and of the same type to be used in significant nexus determination. May be a source for legal or appeal challenges.
  - Distance limit used in (a)(8) may modify state assumed waters in Michigan and New Jersey. Applicable Districts will need to work this out with the states.
  - Need guidance on appropriate procedural steps for (a)(7) and (a)(8) waters, as the procedures differ between them.
    - In (a)(7) the “similarly situated” waters are already identified then the SPOE is identified then the significant nexus determination is completed.
    - In (a)(8) the SPOE is drawn first, then “similarly situated” waters are identified and then the significant nexus determination is completed.

- If (a)(6) waters cannot be aggregated with (a)(7) or (a)(8) waters when doing a sig nexus determination, it is logical that first all the (a)(6) waters in the SPOE must be identified in order to “subtract” them out.
  - How can these be identified and upon what technical or scientific basis can these waters be “ignored” when conducting the sig nexus analysis? By what process that is repeatable?
- Significant Nexus –
  - Need specific guidance on significant nexus determination.
  - Must clarify that those functions need to be tied to the (a)(1) through (a)(3) waters.
  - Only one of those functions? Needs to be clear that needs to be more than speculative or unsubstantial.
  - Exclusive list; what if other functions are performed; cannot use in significant nexus determination?
  - Courts have made clear that qualitative evidence supporting a significant nexus determination is all that is required. The legal term of significant nexus is not a scientific one and as such should not be made into a metric.
- Exclusions –
  - Do we need to map the excluded waters/features for a determination? In the determination do we need to “officially” exclude those waters/are they part of the approved JD? We do so with “isolated” determinations currently, but would we need to do so for all of these excluded waters? For example, would we need to include in the determination documentation or map the feature, such as a gully or swale?
  - Only approved JDs can be used to make non-jurisdictional determinations. There may be an increase in approved JD requests if landowners understand that these features are excluded for the first time in rule, especially related to ditches and storm water management features.
  - May be a challenge to distinguish between a ditch and a tributary. Need a definition or clarification on a ditch.
  - What is a roadside ditch? How close to the road does it need to be? Does it need to be parallel to the road?
  - May be a challenge to identify a ditch that is a relocated tributary or excavated in a tributary. How far back in history does a regulator need to go? If it can't be determined definitively, who bears the burden of proof? The landowner or the agency? Need to provide a set of tools/resources that the field can use to make the determination of the history of a ditch.
  - Need to distinguish between perennial, intermittent, and ephemeral flow regimes for ditches.
  - Need guidance on what perennial “flow” is, does it mean water is perennially present or that the water is flowing perennially? What about ditches that temporarily “pond” or “pool”?
  - Does the ditch exclusion extend to the banks of the ditch or does it extend only to the OHWM? What about wetlands that may be adjacent or within the ditch? Are these excluded with the ditches or if they meet the terms of adjacency (to a

tributary for example) could they could be jurisdictional? Need guidance on wetlands within and adjacent to excluded ditches.

- May be challenging to determine whether some depressions were incidental to construction or mining in the past. Without the “abandonment” provision, these are excluded in perpetuity, and it may be a challenge for the PM to determine the historical use or creation.
- What if the depressions develop wetland characteristics or there are fringe wetlands? Are these included in the “water-filled depressions” or are wetlands separate? Could they be considered an adjacent water if they meet the definition or are they excluded along with the open water depression?
- “Lawfully constructed” for grassed waterways may be challenging to implement; does this mean they need a CWA permit or can it be funded by NRCS? Needs clarification.
- If we have a definition of “water” a puddle may not be necessarily in the excluded list. If we do not have a definition of “water” it may be difficult to distinguish a “puddle” from some non-wetland waters. We received many comments on this. Need guidance on how short of a time a water must be held for it to be considered a non-jurisdictional puddle or a depressional feature. No hydric soils? Other characteristics?
- Is tiling included in the “drained through subsurface drainage systems”? Need guidance and clarification on the tiling; what forms of tiling are excluded under this exclusion? Tiling in the bottom of a stream or on the sides of the channel?
- May be challenging in determining whether stormwater control features were constructed in WOLIS in some areas with limited historical data and if not permitted or part of an approved plan.
- Does the exclusion include any stormwater management features or do they need to be part of an approved local/county/state plan? Or simply designed to meet the requirements of the CWA like the waste treatment system exclusion? May be difficult to challenge an applicant’s statement that it is constructed for the purpose of stormwater management. Technically all waters/wetlands may serve that purpose.
- Documentation
  - New JD form
  - No coordination required between agencies.
  - There are many points in the JD process that will require additional documentation and could be sources of appeal and legal challenges -
    - For adjacent waters: identifying for the first time adjacent non-wetland waters, identifying floodplain, identifying distance, etc.
    - For case-specific waters: identifying SPOE, identifying ‘subcategory’ of water, identifying similarly situated waters, identifying significant nexus, etc.
- Grandfathering –
  - How is the field going to transition into the new rule from current practice? Many considerations regarding existing permits, existing JDs, JD requests received during 60-day period between publication and effective date, enforcement actions, modifications to permits, etc.



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS  
441 G STREET, NW  
WASHINGTON, DC 20314-1000

REPLY TO  
ATTENTION OF

CECW-CEO

15 May, 2015

MEMORANDUM FOR Assistant Secretary of the Army for Civil Works

THRU Commanding General and Chief of Engineers, US Army Corps of Engineers

SUBJECT: Economic Analysis and Technical Support Document Concerning the Draft Final Rule on Definition of "Waters of the United States"

1. I am forwarding the attached memorandum summarizing the Corps of Engineers' technical review of the Economic Analysis and Technical Support Document (TSB) produced by the Environmental Protection Agency (EPA), to support the on-going draft final rule on the definition of the "waters of the United States" (WOUS) under the Clean Water Act (CWA). The Corps received these final draft versions for the first time in the last two weeks. These documents were reviewed at my request by some of the Corps' most experienced experts in applying Section 404 of the Clean Water Act, including legal, regulatory, and scientific experts in the Corps Headquarters, Engineer Research and Development Center, and the Institute for Water Resources.

2. The Corps of Engineers' technical review indicates that both documents are flawed in multiple respects. The collective view of the Corps experts is summarized by our Regulatory Chief in the attached memorandum, which highlights the key aspects requiring your awareness, and deserving of your attention. To briefly summarize, our technical review of both documents indicate that the Corps data provided to EPA has been selectively applied out of context, and mixes terminology and disparate data sets. In the Corps' judgment, the documents contain numerous inappropriate assumptions with no connection to the data provided, misapplied data, analytical deficiencies, and logical inconsistencies. As a result, the Corps' review could not find a justifiable basis in the analysis for many of the documents' conclusions. The Corps would be happy to undertake a comprehensive review with the EPA to help improve these supporting documents, which we recognize are critical to the rule-making.

3. With respect to these two documents, the Corps provided the EPA with raw data on the overall numbers of jurisdictional determinations (JDs) made by the Corps for aquatic resources within the span of control of the Corps' regulatory program (i.e., Section 404 of the Clean Water Act), and provided similar raw data for the Technical Support Document. However, the Corps had no role in selecting or analyzing the data that EPA used in drafting either document. As a result, the documents can only be characterized as having been developed by the EPA, and should not identify the Corps as an author, co-author or substantive contributor. To the extent that the term "agencies" includes the Corps of Engineers, any such reference should be removed. Finally, the Corps of Engineers logo should be removed from these two documents. To either

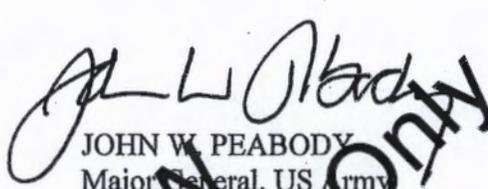
MEMORANDUM FOR ASA(CW)

SUBJECT: Economic Analysis and Technical Support Document Concerning the Draft Final Rule on Definition of "Waters of the United States"

imply or portray USACE as a co-author or contributor to these documents, other than as the provider of raw unanalyzed data, is simply untrue.

4. The Corps of Engineers fully recognizes the importance of this rule-making, and of these documents to underpin the content of the final proposed draft rule. We stand ready to assist the EPA in improving the technical analysis and to develop logically supportable conclusions for these documents, if and when requested.

Building Strong!

  
JOHN W. PEABODY  
Major General, US Army  
Deputy Commanding General  
for Civil and Emergency Operations

Encl.

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REPLY TO  
ATTENTION OF

CECW-CO-R

15 May 15

MEMORANDUM FOR Deputy Commanding General for Civil and Emergency Operations,  
U.S. Army Corps of Engineers (ATTN: MG John W. Peabody)

THROUGH the Chief of Operations and Regulatory, U.S. Army Corps of Engineers (ATTN:  
Edward E. Belk)

SUBJECT: Economic Analysis and Technical Support Document Concerning the Draft Final  
Rule on Definition of "Waters of the United States"

1. References

a. *Draft Final Economic Analysis of the EPA-Army Clean Water Rule*, U.S.  
Environmental Protection Agency & U.S. Army Corps of Engineers, 27 April 2015

b. *Technical Support Document for the Clean Water Rule: Definition of Waters of the  
United States*, U.S. Environmental Protection Agency, June 2015

2. This memorandum responds to your request for a technical analysis of the documents in references a and b. Both documents were prepared by the U.S. Environmental Protection Agency (EPA). With respect to EPA's Economic Analysis, the Corps provided the EPA with raw data on the overall numbers of jurisdictional determinations (JDs) made by the Corps for aquatic resources within the span of control of the Corps' regulatory program, but the Corps had no role in selecting or analyzing the data that EPA elected to use in drafting the attached Economic Analysis document. Similarly with respect to the Technical Support Document (TSD), Corps data was also used by EPA when crafting the TSD, but the Corps also had no role in actually performing the technical analysis or drafting the TSD.

3. The following paragraphs summarize the Corps Regulatory Program concerns and provide as many examples as possible of what are fundamentally flawed products from a technical aspect. In essence, certain sections of both the Economic Analysis document and the TSD are devoid of any information about how the EPA obtained the results it has presented, rendering the methodology and subsequent results in the documents unverifiable by the Corps.

**EPA's Economic Analysis**

4. The document includes the EPA's review of Corps JDs from FY 2013 and FY 2014, which the Corps provided to the EPA for the purpose of identifying estimated changes in jurisdiction that would occur as a result of adoption of the draft final rule. However, the attached document fails to identify the actual draft final rule language that EPA applied in performing its review or the methodology used by EPA in applying such language to the Corps' JDs pertaining to isolated

MEMORANDUM FOR DCG-CEO  
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water bodies from FY 2013 and FY 2014. Without an explanation of the methodology or which language was used in this exercise, the Corps cannot verify or provide cogent comments on the results presented by EPA.

5. The document mixes terminology and disparate datasets. For example, stream mitigation costs provided by the Corps appear to have been extrapolated and applied in States where no in-lieu fee program or mitigation bank data exist; there is no explanation of how such data were used or applied to obtain the results presented. Also, the Section 404 data provided by the Corps has been used out of context as if it were applicable to all Clean Water Act (CWA) programs, despite the fact that this data is only meaningful for a specific authority under the CWA (Section 404) and does not represent data under Sections 303, 401, 402, or other programs implemented by EPA and the States for different purposes under the CWA. Compliance costs under Section 404 are presented as representing seventy percent of the draft final rule's total costs and Section 404 benefits representing eighty-seven percent of the draft final rule's total benefits. When presented in this manner, Section 404 costs and benefits appear to far outweigh all other CWA programs combined, which greatly diminish the magnitude of the other, very important CWA programs. Using Section 404 data in this manner and in the absence of data from other programs cannot yield an accurate estimate of the true costs and benefits of those other CWA programs.

6. The document equates aquatic resources with JDs, which are two entirely different data sets. A single JD can provide the determination of jurisdictional status of multiple aquatic resources on a particular site. The revised analysis estimates an increase in the number of section 404 permits, the average impact acreage and corresponding total impact acreage, and an increase in total permit application costs. However, these changes are driven by using the highest number of individual permits and general permits issued in any one year over the five year period from FY 2009-2014 and average impact acreage for permits issued in FY 2013. It is unclear and not explained in the document why impact data from a single year was used to calculate average impact acreage for permits when a five year period was used to estimate the number of permits.

7. The document also makes certain assumptions that have no analytical basis. For example, to account for aquatic resources that are not captured in the Corps' data (e.g., isolated waters on properties of landowners who do not seek a JD from the Corps), EPA used the data from the Corps and simply doubled the number of isolated waters. Doubling data sets in the absence of analysis or basis for doing so cannot withstand even the most cursory technical review. All assumptions should have a justifiable basis, with reasoned logical analysis to support them.

8. The Economic Analysis grossly overestimates the amount of compensatory mitigation required under section 404 the CWA.

a. EPA assumed that all individual permits (IPs) and half of all general permits (GPs) require compensatory mitigation. The actual values are thirty-one percent and 8 percent, respectively, based on data in the Corps ORM2 database.

b. Mitigation totals used by the EPA represented only permittee-responsible mitigation (i.e. mitigation constructed by the permittee), but the totals are characterized as

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representing all types of compensatory mitigation, including mitigation banks and in-lieu fee programs.

c. Mitigation totals used by the EPA also included a range of ratios from all compensatory mitigation sources (establishment, rehabilitation, enhancement, preservation), but EPA assumed a 2:1 ratio for all compensatory mitigation.

d. The mitigation cost data tables used are out of date. No quality checks from the Corps on the data that EPA used were requested or obtained. EPA appears to have placed its own data into tables originally provided by the Corps. This results in a gross misrepresentation of the Corps' raw data.

9. The EPA's use of compensatory mitigation as a benefit is also problematic. Estimated Section 404 benefits described in the document based on compensatory mitigation required for permitted impacts, while costs are based on compliance with a Section 404 permit. Both are based on the same unit impact acreage. As compensatory mitigation is typically greater than compliance (i.e. acres of required mitigation are greater than acres of authorized impact), the overall ratio of costs to benefits cannot change. Compensatory mitigation is provided to offset acreage and functions of aquatic resources lost through authorized impacts from Corps permitting with a programmatic goal of achieving no net loss; thus, it is unclear how this translates to a "benefit." Both should be costs.

10. The document is misleading in its geographic representation of data. Based on the sample set of JDs used for its analysis, in many instances EPA used one JD per state to draw conclusions regarding regional variations of the impacts of the draft final rule, such as the draft final rule section (a)(7) categories of isolated wetlands (prairie potholes, western vernal pools, Carolina bays and Delmarva bays, Texas coastal prairie wetlands, and pocosins). More specificity is necessary to inform the public on the true expected delta of changes in jurisdiction, either lost or gained, jurisdiction under the draft final rule.

11. Although administrative costs were included in the economic analysis accompany the proposed rule, there was no comparable cost requested or provided in the attached Economic Analysis document to accompany the draft final rule. The document estimates CWA jurisdiction to increase from its estimate of 2.7 percent in the proposed rule to 4.65 percent in this analysis of the draft final rule. Section 404 administrative costs are qualitatively described in this document; however, the cost estimate value is left blank. The Corps was not asked to provide information about the increase in administrative costs that would be expected to result from EPA's calculation of increased jurisdiction. Although the Corps is unable to validate how EPA arrived at its estimate of a 4.65 percent increase in jurisdiction, our preliminary review using EPA's estimate indicates that the Corps' administrative costs may increase by \$4 million.

12. Several important aspects of jurisdiction were not considered as part of the analysis in the document, which contribute to its technical weakness. The analysis focused only on estimated increases in jurisdiction, not on potential decreases, thus it was limited in its scope. Some of

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these aspects were disclosed as assumptions; however, the absence of robust analysis when that analysis is possible is not technically sound.

a. Significant nexus determinations on all types of aquatic resources (e.g. adjacent wetlands) were not reviewed to inform the estimated change in jurisdiction. Only approved jurisdictional determinations on isolated waters were reviewed.

b. A more extensive review of significant nexus determinations would have allowed for an accurate estimation of predicted changes in jurisdiction regarding adjacent waters and tributaries. The assumption was made that all tributaries would be jurisdictional under the final rule; however, some tributaries that are currently jurisdictional might no longer be jurisdictional under the draft final rule.

c. An assumption was made that all adjacent wetlands would be jurisdictional under the final rule; however, some currently jurisdictional adjacent wetlands may not be considered adjacent under the final rule as a result of the "bright-line" distance thresholds and the prohibition on using shallow subsurface and confined surface flow connections to establish adjacency. More analysis is necessary to quantify potential decreases in jurisdiction of these waters, which may offset the potential increase in jurisdiction predicted in the Economic Analysis.

13. Finally, the statement in the Economic Analysis document that "[t]his action does not have tribal implications as specified in E.O. 175" is patently inaccurate. Both the expansion of and loss of current jurisdiction over WOUS may have significant effects on tribes and treaty/trust resources. These effects have not been identified and evaluated, and the tribes concerned apparently were not consulted as part of the Economic Analysis.

14. In sum, as stated above, the Corps cannot be identified as an author, co-author or substantive contributor to the EPA's Economic Analysis of the draft final rule defining WOUS. I request that all references to the Corps be removed from the attached document and reference made to the EPA only as the author of the product in all documents associated with the final rule.

#### EPA's TSD

15. As mentioned above, it appears the EPA used a considerable amount of Corps data in preparing the TSD; no data was requested by or provided to EPA to produce the TSD. The Corps also had no role in performing the analysis or drafting the TSD.

16. In the TSD, the EPA overestimates the number of case-specific significant nexus determinations (SNDs) the agencies have completed since 2008. The TSD states that the agencies have made more than 500,000 JDs since 2008, and of those approximately fifty percent included SNDs. This conflicts with Corps data and estimates and the Corps is unclear how and from what dataset EPA derived the estimate included in the TSD.

a. Corps data show that the Corps completed approximately 424,000 JDs on 710,000 aquatic resources.

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b. The Corps estimates that, at the uppermost limit, it has completed SNDs on approximately seventeen percent of the aquatic resources for which JDs have been completed.

c. The seventeen percent includes both preliminary and approved JDs.

d. An even smaller percentage of the seventeen percent were required to be coordinated with EPA (e.g., non-relatively permanent waters, wetlands adjacent but not abutting those waters, etc.)

17. The TSD states that the SNDs are the "key" to the agencies' interpretation of the CWA. However, a policy decision has been made, which conflicts with the TSD. An SND cannot be performed outside 4,000 feet from the ordinary high water mark (OHWM)/high tide line (HTL) of an (a)(1)-(a)(5) water under the draft final rule, which eliminates use of the "key method" in determining jurisdiction for such waters. The 4,000-foot limit arbitrarily cuts off which waters can be determined "similarly situated" under an SND, as (a)(8) waters cannot be aggregated with other waters beyond 4,000 feet even if they are truly "similarly situated," further limiting the use of the "key" factor under the final rule. The 4,000-foot limitation under (a)(8) conflicts with the TSD regarding the importance of connectivity. The Connectivity Report, produced by EPA to support the proposed rule recommended against using linear distance limitations to establish jurisdictional boundaries.

18. The TSD states that the 4,000-foot distance threshold limit for (a)(8) waters "will protect the types of waters that in practice have been determined to have a significant nexus on a case-specific basis." This statement is unfounded. The isolated JDs reviewed for the Economic Analysis by EPA to estimate the change in jurisdiction were originally considered under the 2003 *SWANCC* guidance; therefore, jurisdiction was determined based on whether there was an interstate/foreign commerce connection; the jurisdiction was not analyzed through a SND. None of the isolated JDs resulted in a positive determination of jurisdiction. The EPA did not review any of the agency-coordinated SND JDs and as such could not have estimated how many of the SNDs would include waters that would be covered under (a)(8) of draft the final rule. Approved JDs are not required to indicate the distance from the aquatic resource to the nearest tributary OHWM. Therefore, the potential impacts to jurisdiction as a result of the (a)(8) distance limit cannot be estimated and the Corps cannot corroborate the numbers or conclusions in the TSD.

19. The TSD describes that wetland functions and wetland proximity to downstream waters determine where wetlands occur along the connectivity gradient. The TSD states that the science demonstrates strong evidence supporting the connectivity of waters in varying degrees in maintaining the structure and function of downstream waters. The appropriate conclusion would be that an SND should be performed for all waters not determined adjacent to determine where they fall along the connectivity gradient and whether that nexus is significant. However, under the draft final rule, if the subject water is greater than 4,000 feet from the OHWM/HTL of an (a)(1)-(a)(5) water, even if they are within an area that lies along the connectivity gradient of the tributary and may be providing important functions to the downstream waters, an SND cannot be performed under the draft final rule and the water would be non-jurisdictional. Thus, the TSD contains conclusions that conflict with the language of the final rule

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20. The TSD describes that wetlands with channelized surface or regular shallow subsurface connections demonstrate connectivity and provide functions that can be generalized and can affect downstream waters. A shallow subsurface or confined surface connection should be a factor in determining jurisdiction based on the discussion in the TSD. However, such factors are not able to be used under the draft final rule as a factor in an (a)(6) adjacency determination and cannot be used in establishing jurisdiction under a SND for waters beyond 4,000 feet from the OHWM/HTL of an (a)(1)-(a)(5) water. The TSD provides evidence of studies that indicate the "substantial" functions provided by non-floodplain wetlands. The draft final rule forecloses on the ability to do a SND on waters beyond 4,000 feet from the OHWM/HTL of an (a)(1)-(a)(5) water despite the potential presence of such "substantial" functions described by the TSD. This conflicting language serves as a basis for technical conflicts during implementation.

21. The TSD emphasizes that evaluations of individual wetlands should be considered in the context of other wetlands within the same watershed and emphasizes the aggregation of waters in the watershed. The TSD also emphasizes that wetlands complexes can be connected to downstream waters even if individual wetlands are isolated. As such, JDs for wetlands should consider the influence and effect in aggregate of other wetlands within the same watershed. However, the draft final rule does not allow for aggregation of (a)(6) waters when doing an SND for (a)(7) or (a)(8) waters, and does not allow for (a)(8) waters to be aggregated with waters beyond 4,000 feet from the OHWM/HTL of an (a)(1)-(a)(5) water. Caveats should be included regarding policy decisions that restrict and limit SNDs to the arbitrary distances and that limit the types of waters that can be aggregated within a watershed to reflect the situations where "in the region" and "similarly situated" are not allowed under the final rule.

22. The TSD emphasizes that the agencies undertake a very thorough analysis of the complex interactions between upstream waters and wetlands and the downstream rivers to reach the significant nexus conclusions underlying the provisions of the draft final rule. This does not comport with or support the policy decisions made to restrict aggregation and SNDs under the distance limits. Furthermore, the Corps was not part of any type of analysis to reach the conclusions described; therefore, it is inaccurate to reflect that "the agencies" did this work or that it is reflective of the Corps experience and expertise.

23. The TSD does not provide support for the determination of how "significance" will be measured in the SND or what is "more than speculative or insubstantial?" How is that quantified beyond the list of factors to be considered in the definition of the final rule? The TSD also does not provide clarity for how "similarly situated" is defined. The TSD contains clearer and consistent language than the language in the preamble regarding hed/banks and OHWM, as well as the discussion on breaks in those indicators not limiting upstream and downstream reaches of the tributary. There is potential for the language in the TSD to conflict with the language in the preamble; such language on these topics needs to be consistent and clear between the TSD and the preamble.

24. The document does not provide necessary support for the draft final rule language and cannot be used by the field in implementing the final rule. The TSD recognizes that floodplains

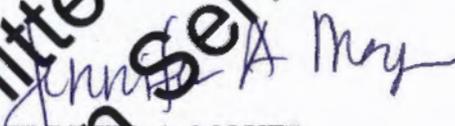
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of large river systems are much greater than 4,000 feet from the OHWM/HTL of the river. Arguably, it is the expansive floodplains of the larger river systems that provide the important exchange between waters within the floodplain and (a)(1)-(a)(5) waters rather than a linear distance.

25. The Corps provided substantial technical comments on the draft EPA Connectivity Report, which are still valid with respect to the technical validity of the concepts presented in the TSD. Thus, with respect to the TSD, as with the Economic Analysis, the Corps cannot be identified as having been involved in performing the technical analysis or preparation the actual document. It is inaccurate to reflect that the Corps experience and expertise is reflected in the conclusions drawn within the document. All references to the "agencies" or to the Corps should be removed from the TSD and the sole author of the TSD is appropriately EPA.

26. In conclusion, it should be made clear by EPA within each document the sections or subject matter areas for which the Corps provided data, but the documents should not be characterized as anything other than analyses performed solely by the EPA. The Corps should not be identified as an author, co-author or substantive contributor to either document. Additionally, all references to the "agencies" in the documents should be removed as well as references to conclusions drawn based on the agencies' "experience and expertise."

27. The point of contact for this memorandum is Ms. Jennifer Moyer at 202-761-4598

  
JENNIFER A. MOYER  
Chief, Regulatory Program

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**Review Comments on Economic Analysis of the EPA-Army Clean Water Rule (April 27, 2015)**

Paul Scodari, CEIWR-GW

May 11, 2015

The comments presented below are limited to the 2015 report estimation of CWA Section 404 permit application costs and compensatory mitigation benefits, and how these calculations changed from the 2014 report that was released for public comment. The comments are organized in two parts that address: 1) major revisions from the 2014 report, and 2) what did not significantly change from the 2014 report.

**Major Revisions from 2014 Report**

1. Revised estimate of increase in jurisdictional determinations.

The 2015 report calculates that the rule will result in a 4.65% overall increase in positive jurisdictional determinations, while the 2014 report calculated the increase as 2.7%. The difference is due to different jurisdictional determination datasets used to produce the estimates—the 2015 report used a dataset corresponding to fiscal years 2013-2014, while the 2014 report used a dataset correspond to fiscal years 2009-2010. Use of 2013-2014 data in the 2015 report purports to respond to public comments expressing concern that the 2009-2010 dataset reflected a period of significant economic distress, and thus a relatively low level of Section 404 permitting.

2. Revised estimates of increase in Section 404 permits, average impact acreage, increase in total impact acreage, and increase in total permit application costs.

These changes are driven by the revised estimate of increased jurisdictional determinations (4.65%) as well as a different permit datasets to which the revised estimate are applied. The 2014 report based this analysis on the total number of (and average impact acreage for) permits issued in FY2010, while the 2015 report relied on permit data from FY2009-2014. Specifically, the 2015 report used the highest number of individual permits and general permits issued in any one year over this five year period, and average impact acreage for permits issued in FY2013 (it is not clear why year 2013 was chosen to calculate average impact acreage for permits).

The result of these revisions was to change the estimates of total additional individual and general permits and total additional impact acreage for those permits. For individual permits, the estimated number of added permits increased from 75 to 217, but the average impact acreage fell from 12.81 to 5.94, resulting in a net increase in added impacts due to the rule from 960 to 1290 acres. For general permits, the estimated number of added permits and average impact acreage both roughly doubled, resulting in an increase in added impacts due to the rule from 372 to 1200 acres.

These revisions, when combined with the unit cost estimates and cost formulas for permit application (which did not change from 2014 report), result in an increase in estimated total annual

permit application costs. From the 2014 report to the 2015 report, the “high” estimate for annual permitting costs increased from \$52.9 million to \$80.3 million.

### 3. Representation of USACE views

For the 2014 report, USACE made a point of telling EPA to delineate which sections of the analysis USACE did and did not contribute to, and to characterize the entire report as an EPA analysis. In the 2015 report, by contrast, EPA seems to go out of its way to link report responsibility to USACE. While it is true that USACE cannot run from this rulemaking or this report, some of things in the report that seem overblown might be addressed at the margin. One example is the strange report title. Other examples involve assertions in the narrative about what the “agencies believe.” For example, the last sentence of the second full paragraph on page 6 state, “For these and similar reasons, the agencies believe that positive jurisdictional determinations under the final rule will be less than assumed for the purpose of this economic analysis.” These statements should be identified, reviewed, and modified as deemed necessary to accurately reflect USACE views.

#### What Did Not Significantly Change from 2014 Report

##### 1. Section 404 dominates estimated rule costs and benefits

In both the 2014 report and the 2015 report, estimated effects for Section 404 drive the estimates of rule costs and benefits. In the 2015 report, the “high” estimate for all Section 404 compliance costs (sum of permit application and mitigation costs) represent 70% of total rule costs, and estimated Section 404 benefits accounts for 87% of total rule benefits. (Note that the 2014 report did not include estimates of increase in USACE costs for administering the Section 404 program; revised estimates apparently were not yet available for inclusion in this draft.)

##### 2. Proportionality of estimated Section 404 benefits to costs

In both the 2014 and 2015 reports, estimated Section 404 benefits, which are based on compensatory mitigation for permitted impacts, outweigh estimated Section 404 compliance costs. This is because unit (mitigation) benefits are greater than unit (compliance) costs for a “typical” Section 404 permit, where both are based on unit impact acreage. So even though the 2015 report significantly increased estimated positive jurisdictional determinations and permitted impacts, this did not (could not) change the overall relationship between estimated benefits and costs for Section 404, and thus for the rule as a whole.

##### 3. Section 404 benefits analysis

USACE has always recognized that the Section 404 benefits analysis is meaningless. However, agencies are required by Administrative policy to develop benefits estimates for rulemakings whenever possible. The OMB representative for this rulemaking encouraged and appears comfortable with the benefits transfer approach applied for Section 404 benefits analysis, and from the beginning EPA was intent on including a benefits analysis that would show that rule benefits outweigh costs (even though the CWA

does not require such a showing). There is nothing more to say or do relating to this benefits analysis, however. USACE is just going to have to live with it and leave responsibility for defending it to EPA and OMB.

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