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To: U.S. Environmental Protection Agency
From: Ecological Restoration Business Association
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Re: Revised Definition of “Waters of the United States”

The Ecological Restoration Business Association (ERBA) is pleased to provide comments to the U.S. Environmental Protection Agency (USEPA), docket EPA-HQ-OW-2018-0149 regarding the USEPA and U.S. Army Corps of Engineers (USACE) (collectively, the “Agencies”) proposed rule on the revised definition of “Waters of the United States” (the “Rule”).

ERBA members appreciate the Agencies’ goal to provide greater clarity and certainty to permittees and subsequently reduce regulatory burdens and delays in permitting timelines. As providers of mitigation, we are subject to our own regulatory process and thus empathize with the challenges of regulated entities. However, we see opportunities within the Rule for clarifications and improved certainty for permittees, which we more specifically outline below and in the attached Appendix. As proposed, the Rule may lead to unintended consequences for permittees, especially those developing large scale linear projects, including a challenging patchwork of federal agency and state interpretations. Large policy changes typically result in uneven field interpretations across the 38 USACE Districts and 10 USEPA Regions, which in turn has long term adverse implications for investment in infrastructure projects. With acknowledgment of the challenge presented by U.S. Supreme Court interpretations and federal constitutional limits, ERBA urges the Agencies to consider revisions to the Rule for a more durable (i.e. legally defensible) WOTUS policy. Our comments seek to achieve this balance.

I. Background on ERBA and Relevance to WOTUS Step Two.

First established in 1998 as the National Mitigation Banking Association, ERBA promotes federal legislation and regulatory policies that encourage private investment in advance

compensatory mitigation and other ecological restoration projects that offset unavoidable adverse impacts of development, as required under the Clean Water Act (CWA). Our member companies have projects that support infrastructure across the country and work with developers daily to provide private sector compensatory mitigation solutions. The broader ecological restoration sector creates 225,000 jobs (and growing) and has a total economic impact of \$24.5 billion.¹

ERBA members enable infrastructure to move forward in an innovative and responsible manner that recognizes the balance between economic growth and maintaining resilient natural systems. In supporting clients' development projects, members are motivated to provide clients with time saving solutions and the most cost-effective methods of compensatory mitigation. Because our members are experts in the process of ecological restoration and generate mitigation services in advance of impacts, they expedite the permitting process for developers while taking on the mitigation-based liabilities of development projects. Notably, developers' use of compensatory mitigation credits generated by our member companies has cut permit timelines in half.²

Just as with the rest of our development industry, our efficient delivery is hindered by regulatory inconsistency and uncertainty. We applaud that additional clarity and regulatory certainty are goals of the Agencies in the WOTUS rule-making process, but we are concerned that some of the proposed Rule language may actually have the opposite affect and result in a national checkerboard of varying jurisdictional determinations – not just by States, but by USACE Districts and USEPA Regions as well. Additionally, while we hear the concerns that the Agencies have with the scope of the 2015 Clean Water Rule, we are concerned that too large a swing away from pre-2015 WOTUS policy will perpetuate frustrating uncertainties for development, add to permitting timelines, and slow mitigation providers' investment in readily available offset solutions for permittees. We request the Agencies adopt a more durable

¹ BenDor, T et al. 2015. *Estimating the size and impact of the ecological restoration economy*. <https://doi.org/10.1371/journal.pone.0128339>.

² U.S. Army Corps of Engineers. 2015. *The Mitigation Rule Retrospective: A Review of the 2008 Regulations Governing Compensatory Mitigation for Losses of Aquatic Resources*. www.iwr.usace.army.mil/Portals/70/docs/iwrreports/2015-R-03.pdf.

approach that offers greater clarity and policy longevity and appropriately considers practitioner implications.

II. Pragmatic Concerns for Mitigation Providers and Permittees.

In our experience, permittees are responsible entities pursuing development in a sustainable manner that is conscious of natural design and community impacts. Rather than elimination of environmental obligations grounded in stewardship and public health, these entities are seeking reasonable, consistent WOTUS regulations and a sensible path to determining and resolving WOTUS liabilities. The compensatory mitigation industry developed over the past two decades is an entrepreneurial solution to permittees' challenges under Section 404 and is a prime example of private ingenuity working with the federal agencies to streamline development, while achieving the purpose of the CWA. For years, industry providers, agency partners, and permittees have worked together under the pre-2015 Clean Water Rule regulations and procedural framework to deliver both efficient results for permittees and ecological benefits for the public. A setback from the understanding of pre-2015 Clean Water Rule jurisdiction would result in greater uncertainty for permittees and providers, chill investment in readily available offset options for permittees, and lead to unintended consequences of higher costs and timeline delays.

Checkerboard of Regulation. Both mitigation providers and permittees benefit from a certain level of regulatory consistency across the nation. The Agencies have made significant progress parsing the nuances of the applicable U.S. Supreme Court decisions to develop the proposed legal framework for WOTUS, but some of the Rule language falls short of the Agencies' stated goal of "establishing a clear, predictable regulatory framework that can be efficiently implemented in the field." Our desire is to see the legal framework applied in ways that are as consistent as possible with pre-2015 standard operating practice because we recognize the challenge the Agencies will have providing consistent application in the field. As we have learned from our experience with the 2008 Compensatory Mitigation Rule, implementation of change in the field is slow. Large changes from current practice (pre-2015 WOTUS) will have the unintended consequence of creating greater uncertainty. The balance

we seek is between creating a durable rule that is consistent with U.S. Supreme Court decisions on proper federal constitutional authority and maintaining efficiency in implementation.

Rule Lacks Clarity on Important Terms. In several categories the proposed Rule falls short of offering bright-line boundaries that Agency personnel and applicants could rely on to make a quick visual determination that an aquatic feature qualifies as WOTUS. Part of the challenge stems from the conflict between the Rule's premise as a solely legal definition and the reality of the Rule's reliance on scientific and physical characteristics of water bodies to articulate the "legal" limits of jurisdiction. We recognize the Agencies' emphasis that WOTUS is inherently a legal term and only informed by science. However, we are concerned that emphasis has restrained the Agencies from providing additional reference to scientific terms that are necessary for a clear understanding on the scope of WOTUS. In the attached Appendix we outline a few areas of concern that warrant greater specificity from the Agencies. Generally, we recommend the Agencies give a fresh look to EPA's 2015 final report on "Connectivity of Streams and Wetlands to Downstream Waters: a Review and Synthesis of the Scientific Evidence" for guidance on definition considerations, especially the use of field indicators.

Private Investment Depends on Stable Regulations. A continual swing in policy undermines and dis-incentivizes investment in private sector and innovative compensatory mitigation market solutions. If investment pulls away from these solutions due to the lack of regulatory certainty, there may be fewer options and service providers available to assist developers moving forward with projects that impact aquatic resources. The lack of diverse mitigation options would be troublesome for permittees later seeking offsets to comply with state or federal regulations, if the proposed Rule results in protracted litigation or spurs another rule-making to resolve ambiguities or issues related to field implementation. Many mitigation projects require years of investment and planning, which will only exacerbate the effect on permittees should industry investment in diverse mitigation options stall.

For example, one ERBA member, who's capital providers are hoping to invest more than \$100 million into the mitigation banking industry in the next 3 - 5 years, has slowed its investment decisions because of the anticipated rollback of the jurisdictional scope of the law and the corresponding reduction in demand for wetland and stream credits. As a result, fewer

jobs are now being created in the rural communities where it has been looking to invest, and fewer mitigation options are being developed to answer permittee's needs.

A Forward-Looking WOTUS. Regardless of the final Rule on WOTUS, ERBA urges the Agencies to provide direction that the effect of the new Rule will be forward-looking. ERBA recommends that the Agencies issue public guidance detailing that existing and in-process Mitigation Banking Instruments and related agreements between providers, resource agencies, and permittees will be honored and grandfathered in under the new Rule's jurisdiction. Since mitigation providers usually plan their projects at least a year in advance, ERBA recommends such guidance apply at least twelve months from the publication of the final Rule in the federal register. Guidance on this grandfathering is important to ensure that the rule-making process and final Rule do not undermine prior or existing investments in mitigation solutions and permittees' reliance on those solutions.

III. Support for a Robust Benefit-Cost Analysis.

ERBA supports the Agencies following a robust rule-making process, including honoring all applicable guidance from the Office of Management and Budget (OMB) regarding regulatory analysis for significant regulatory actions. The Agencies' record of adherence to such guidance will place the Rule in a more defensible, credible position and consequently lower the risk of time-consuming and project-delaying litigation challenges. In particular, ERBA urges the Agencies to document the Rule's development in accordance with "Circular A-4," which details OMB's guidance on Benefit-Cost Analysis.³ Circular A-4 requires analysis of the important benefits surrounding regulatory alternatives to inform the Agencies and the public of the alternative with the largest net benefit to society and the benefits at stake, regardless of whether economic efficiency is the overriding public policy objective. The guidance directs that benefit analyses should be based on the best reasonably obtainable peer-reviewed scientific, technical, and economic information available.

³ U.S. Office of Management and Budget. September 17, 2003. *Circular A-4: Regulatory Analysis*. <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/circulars/A4/a-4.pdf>.

Considering this guidance, ERBA recommends the Agencies detail their Benefit-Cost Analysis of science and economic-based data on the environmental, resilience, and other disaster mitigation benefits provided by our nation's aquatic resources and systems. From an environmental standpoint, data should be considered on the water quality benefits of protecting natural ecosystems, streams, and wetlands and the costs for states and municipalities to compensate for the loss of these water quality benefits in the absence of stronger WOTUS protections. Relatedly, the Agencies should also evaluate the Rule's potential economic impacts to the outdoor recreation and sportsmen industries that are dependent on healthy aquatic environments. Critically, especially in light of the numerous recent catastrophic flooding events, the Agencies must weigh the natural disaster and flood mitigation services provided by healthy watersheds and the great economic benefits and savings our natural infrastructure provides as preventative disaster mitigation. Lastly, we also encourage the Agencies to consider the Rule's economic impact on the restoration industry, assessed as producing \$9.47 billion in direct annual economic output and directly employing 126,000 workers in rewarding jobs in rural regions,⁴ and the subsequent economic impact on permittees who would suffer from an investment stall in the restoration industry.

IV. Brief Note on the Scientific and Legal Debate behind WOTUS.

In multiple instances, the notice states that the line between federal jurisdictional and non-jurisdictional waters is a legal distinction rather than a scientific one. As a policy and advocacy focused organization, ERBA acknowledges that other organizations are in a more authoritative position to provide specific counsel on the scientific and legal aspects of the Rule. Those debates are secondary to ERBA's primary concern over durability and the impact of uncertainty in federal water policy. Ultimately, regardless of where the line is drawn on federal jurisdiction, ERBA member companies will continue to pursue efficient and timely offset solutions with high environmental standards.

However, ERBA member companies are also ecologists by trade and take pride in delivering environmental solutions that help permittees meet their CWA liabilities, act as

⁴ BenDor, T et al.

responsible community partners, and fulfill the objective of the CWA “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

While not perfect and currently often protracted in application, the consideration of a wetland’s “nexus” to the health and sustainability of traditionally navigable waters is an important and reasonable consideration for the Rule in light of the CWA’s objective. ERBA believes a balance can be struck between the goal of regulatory certainty and incorporation of additional criteria indicative of a nexus that would qualify a wetland as jurisdictional. As the Agencies evaluate potential revisions to the Rule, ERBA recommends that the Agencies give worthy consideration to comments by the Society of Wetland Scientists, an internationally respected organization of wetland experts, on the appropriate extent of jurisdiction to protect the “chemical, physical, and biological” aspects of our aquatic resources.

V. Thank You for Your Thoughtful Consideration.

ERBA respectfully urges the Agencies to reconsider certain language of the proposed Rule and uncertainty implications for mitigation providers and permittees. In particular, we ask the Agencies to give serious consideration to the multiple practical policy concerns flagged within our comments, and Rule revisions to better achieve the Agencies’ objective of additional and efficient clarity for permittees. We welcome the opportunity to further discuss and offer information on the identified issues in our comments. ERBA looks forward to serving as an industry resource and working with the Agencies through this rule-making process.

ERBA WOTUS Comment Appendix: Specific Examples of Needed Clarifications

1) Adjacent Wetlands and Ditches

1.1 What Clarification is Needed?

Clarification is needed about how the definition of ditches and adjacent wetlands interplay when otherwise isolated wetlands have been historically connected by ditches through uplands to waters of the United States.

1.2 Background

Historically, vast areas have been drained by the construction of ditches to convey water off the land toward downstream waters of the United States. A widespread pre-CWA drainage practice was to construct ditches from wetland depressional areas to natural drainages downstream, often connecting many otherwise isolated wetland depressional areas in series, i.e., from one to another until reaching a natural drainage. In part these ditches would often be constructed across uplands to connect isolated wetlands. Currently, when there is a perennial or intermittent hydrologic connection, even through a ditch constructed in uplands, both the ditch and the wetlands connected thereby are jurisdictional under CWA, regardless of those features' distance from traditional navigable waters or upland location.

1.3 Definition of Adjacent Wetlands and Exclusion of Upland Ditches

The proposed definition of *adjacent wetlands* includes non-abutting wetlands that have a direct hydrologic surface connection to other jurisdictional waterbodies. The definition of *adjacent wetlands* would seem to include any wetland not lacking a direct hydrologic surface connection to jurisdictional waterbodies, even when separated by uplands, dikes, barriers, or similar structures. Thus, otherwise isolated wetlands would now be defined as *adjacent wetlands*, and hence be jurisdictional, even through the existence of drainage ditches connecting these wetlands to jurisdictional waterbodies.

However, the proposed definition of jurisdictional *ditches* excludes by omission ditches that were constructed through uplands, even when these ditches have perennial or intermittent flow. The definition of jurisdictional ditches includes "ditches constructed in an adjacent wetland as long as those ditches also satisfy the conditions of the tributary definition." The definition of tributary is limited to mean "a river, stream, or similar naturally occurring surface channel," which would exclude ditches that are defined as artificial channels. The reference to "conditions of the tributary definition" may be to the requirement for perennial or intermittent flow in the tributary definition. This is unclear since the tributary definition does not enumerate or otherwise specify "conditions."

1.4 Circularity in Definitions

The definitions of *adjacent wetlands* (§328.3(a)(6)) and jurisdictional *ditches* (§328.3(a)(3)) can seem somewhat circular if an adjacent wetland is dependent on a ditch to provide the direct hydrologic surface connection needed in the definition of adjacent wetlands and the ditch is only jurisdictional if it is constructed in an adjacent wetland. This seeming circularity will likely cause confusion and should be clarified.

1.5 Importance of the Question

Aside from the need for clarity, the essential policy question is:

When a ditch through uplands is providing the direct hydrologic surface connection needed to classify a wetland as an *adjacent wetland*, can the portion of that ditch constructed in uplands be filled without a permit to sever the direct hydrologic surface connection?

If the answer is yes, the effect of this proposed rule would be the eventual severance of vast acreages of wetlands in many parts of the country where ditching across uplands was historically a common practice to drain previously isolated wetlands.

If the intent of this rule is not to allow the severance of adjacent wetlands by the filling of upland ditches without permit authorization, then clarification is needed that ditches through uplands connecting adjacent wetlands to otherwise jurisdictional waterbodies are also jurisdictional. We recommend the below change to provide this clarification.

1.6 Recommended Changes

Modify §328.3(a)(3) to read:

Ditches that satisfy any of the conditions identified in paragraph (a(1)) of this section, ditches constructed in a tributary or that relocate or alter a tributary as long as those ditches also satisfy the conditions of the tributary definition, ditches with perennial or intermittent flow providing a connection between an adjacent wetland and waters identified in paragraphs (a)(1) – (6) of this section, and ditches constructed in an adjacent wetland as long as those ditches also satisfy the conditions of the tributary definition.

2) Intermittent Flow and Ephemeral Flow to Traditional Navigable Waters

2.1 What Clarification is Needed?

The discussion section of the Rule contains a helpful synopsis of the “connectivity gradient” between perennial, intermittent, and ephemeral streams and references EPA’s 2015 Connectivity Report that grades features upon their probability to impact downstream waters. We recognize the Agencies’ struggle to draw the line along this gradient to provide clear, predictable boundaries around WOTUS for permittees. In the context of streams, the Rule proposes to draw the line of jurisdiction between ephemeral and intermittent flow. The challenge with this approach is that the concept of flow underlying intermittent and ephemeral conditions is amorphous – one blends into another. This creates inherent problems of clarity. Rather than base jurisdiction on water flow, a fluctuating feature that requires expensive technical monitoring and data, we recommend the Agencies consider using an ordinary high water mark and related physical features as the benchmark for a jurisdictional vs. non-jurisdictional tributary.

2.2 Background

Some regions of the U.S. have much greater seasonal variability of flow than others. Streams in the West, for example, are typified by episodic events, often driven by precipitation. Even groundwater may exhibit significant temporal variability in its expression at or near the surface.

This is why the USACE has developed regional supplements to the wetland delineation manual for the Arid West and the Western Mountains, Valleys, and Coast. In some years, intermittent drainage features may be driven by groundwater and only supplemented by rainfall. In other years, they may be largely driven by rainfall events. But, what is consistent are the indicators of natural process that speak to the very concern expressed in the discussion of the Rule – the impact on downstream waters. The indicators described in the USACE’s western region supplements, particularly those describing the ordinary high water mark, bed and bank features, are better suited to address the key question of jurisdiction than reliance on the amount, source, timing, and duration of flow.

For purposes of clarity, the superiority of physical geographical features over flow monitoring data is illustrated when considering how to determine continuous flow. The Rule’s proposes use of a rolling 30-year average, but many stream impacts occur well upstream from gauge locations. Additionally, collecting gauge data is an arduous task that we understand the U.S. Geological Survey is pulling back from due to funding constraints. If accurate flow data is not publicly available, the burden of modeling flow levels might inevitably be pushed to permittees and cause expensive delays. Considering these factors, we have serious concerns about the feasibility of efficient implementation of the Rule’s reliance on flow levels to define jurisdiction and we encourage the Agencies to instead rely on a readily apparent geographical feature.

2.3 Ephemeral Features Exclusion

The Rule would exclude as non-jurisdictional those ephemeral features that result from surface water flowing or pooling only in direct response to precipitation. As highlighted above, flow should be evaluated in the context of a gradient and there is not always a bright line distinction between intermittent and ephemeral features. In some years, the proposed exclusion definition may exclude certain intermittent features. To avoid this result, the Agencies should consider redefining the exclusion to exclude features that lack the characteristics of an ordinary high water mark.

2.4 Importance of the Issue

The importance of the question is in the stability of drainages and impacts to downstream waters. Establishing a definition that targets watershed stability and function, rather than flow amounts or duration, will serve the public better by buffering infrastructure and communities from devastating floods and by protecting the quality of receiving waters and downstream users. Clarity in the regulation by tying the jurisdictional definition to a readily apparent visual indicator like the ordinary high water mark will also help the regulated public, and the mitigation providers that serve them, by outlining clearer expectations.

2.5 Recommended Changes

Modify §328.3(c)(11) to remove reference to flow durations and instead add in reference to ordinary high water mark, stream bank and bed as physical features that define a jurisdictional “tributary.” Additionally, modify §328.3(b)(3) to exclude as non-jurisdictional those features that lack an ordinary high water mark and related physical attributes.

We recommend these changes to shift the rule’s focus to the ecological significance of hydrological flows, indicated by physical attributes, rather than on the regularity, consistent quantity, or source of flows. A readily adaptable tool and guidance are available in USACE manuals and Regulatory Guidance Letter 05-05 on ordinary high water indicators. Ordinary high water marks speak to the force of flows in the aquatic system and thus to the natural processes at play in any given location across the country. The erosional force that creates bed and bank elements evidences the potential for that aquatic feature to mobilize biological and mineral material and to impact downstream waters. Similarly, streams in which large woody debris are moved have the potential to broadly affect ecological function in lower parts of the watershed.

The discussion section of the Rule contains the idea that federal jurisdictional areas must be “geographical features.” This is consistent with the idea that ordinary high water indicators – which outline geographical features - could serve as a more clear and effective measure to identify jurisdictional limits along the “connectivity gradient” of potential impacts on downstream waters, and thus on the functional dimension of WOTUS and purpose of the CWA.

3) Typical Year Considerations

3.1 What Clarification is Needed?

The agencies have solicited “comment on whether it is necessary to define ‘typical year’ given the agencies’ understanding that it is a commonly understood term in field application.” We respectfully disagree with the “commonly understood” premise and have found that statistical measures of recurring frequency are often misunderstood.

3.2 Background

The agencies seek an easily accessible “bright line” metric to evaluate the frequency of flow relative to rainfall to determine whether an observed flow is the result of a precipitation event or not. The need for a long-term of record is recognized in the requirement for a “rolling thirty-year period.” Presumably, that means a recent thirty-year period with the nearest year being the first in which records are readily accessible, e.g. 1989 – 2018 for records available in 2019. The definition of a “typical year” includes the term “normal range of precipitation,” which would seem to exclude some years within the recent thirty-year record that are considered abnormal. In the preamble, there is a discussion that indicates the Agencies consider a year “typical” when the observed rainfall falls within the 30th and 70th percentiles established by a 30-year rainfall average generated at NOAA weather stations. Thus, it appears that only 40% of observed annual rainfalls would be considered typical. This seems more restrictive than the nearby statement: “A typical year would generally not include times of drought or extreme floods.”

3.3 Source of Uncertainty

It will be difficult in the extreme to create regulatory certainty and fair notice and predictable notice of the limits of federal jurisdiction, when most of the years of observed rainfall are considered atypical. For example, many NOAA weather stations are not proximate enough to provide watershed scale determinations, especially in the West. The preamble doesn’t limit the

data to NOAA sources and suggests other tools may be available to make “typical year” determinations, yet little guidance is given on how the various tools should work together to guide the determination.

3.4 Importance of the Question

The “typical year” determination is key to the central purpose of the Rule – establishing the boundary limits of federal jurisdiction. The jurisdiction limits of tributaries, ditches, lakes, ponds, and adjacent wetlands all rest to some degree on the “typical year” determination, where we find the guidance in the rule insufficient.

3.5 Recommended Change

Detailed regional methodologies should be developed based on a valid statistical framework that can be reduced to simple tools to be applied by landowners, regulators, and consultants without their resort to analysis of raw precipitation records. These tools will account for regional differences in the distribution of rainfall and should be guided by consideration of the downstream effects of flow on §328.3(a)(1) – (6) waterbodies. The tools should be updated and promulgated annually.

In addition, a default tool should be adopted in the rule for use by the Agencies until superseded by such regional tools. This tool should be simple and easy to apply, even if it relies on raw precipitation records. An example of such default methods might be truncating the data sets by removal of the two highest and lowest rainfall years in the thirty-year period, or excluding the values exceeding one or two standard deviations of the mean of the thirty-year record. The exact nature and application of the default tool should be developed by Agency statisticians and be guided by consideration of the downstream effects of flow on §328.3(a)(1) – (6) waterbodies.

Additionally, our consideration laid out here underscores the complexity of basing jurisdiction on flow level determinations and offers further support for our recommendation above to move away from reliance on flow and instead look to readily visible physical features, like the ordinary high water mark.

4) Subsurface Connections Between Ditches and Wetlands

4.1 What clarification is needed

The Agencies have requested comment on if or under what circumstances subsurface connections between wetlands and jurisdictional waters could be used to determine adjacency. We suggest there is a specific case where because of hydrological alteration, subsurface connection should be considered. The specific case is when ditching has drained a potential adjacent wetland and the wetland has been reduced in extent (as indicated by the lack of any one of the required indicators: hydrophytic vegetation, hydrology, or soils) from its historical boundary as indicated by aerial photographs from before the ditches were in place or effective or the presence of relic indicators of the wetland’s original areal extent.

4.2 Background

Historically, ditches have been constructed to reduce high water tables and reclaim wetlands and improve uplands for agricultural and other uses. Even when ditches did not intersect the historical wetland boundary, the purpose and effect of these ditches was to shrink the original size of the wetland. A common practice was “rim ditching,” where a ditch was constructed around the perimeter of the wetland. These were historically common practices and the effect has been to diminish the hydroperiod of the wetland and reduce the areal extent of one or more indicators used to delineate the wetland boundary.

Below ground the effect of a ditch is to bend the surface of the water table downwards to intersect the water surface in the ditch. This alteration deprives hydrophytic vegetation of the saturated soil environment needed to persist, and this effect is most pronounced close to the ditch where the water table surface is most depressed. Without the dominance of hydrophytic vegetation, the wetland boundary may no longer intersect the ditch, making the wetland no longer jurisdictional.

4.3 Source of Uncertainty

During seasonally wet periods of the year, the capacity of the ditch to lower water tables is often overwhelmed, and wetlands and nearby ditches are connected on the surface, contributing flow to waters of the United States on a regular, periodic basis. Because the ditch has caused the demise of hydrophytic vegetation, however, along the top of the ditch bank, the wetland will not meet the definition of “adjacent” or “abutting,” and because the connection is caused by localized flooding, there may be no established channel between the wetland and the ditch. Thus, while the wetland will be contributing to a ditch connected to waters of the United States, without the wetland touching the ditch, due to the diminishment of hydrophytic vegetation caused by the ditch, or having a channel connecting to the ditch, the wetland may not be considered jurisdictional.

4.4 Importance of the Question

Drainage ditching is widespread and has been effective in diminishing the areal extent of wetlands. In many places, however, the effect of the drainage is most pronounced during seasonally dry periods, and the drainage effect may be virtually nonexistent during seasonally wet periods. Because the boundary of the wetland is determined by the required presence of all three indicators (plants, hydrology and soils), the wetland boundary is fragile to the effects of ditching, especially along the top of the ditch bank where the surface of the water table is the most depressed by the ditch. By not considering the subsurface connection between a wetland and an adjacent ditch, wetlands that periodically connect to ditches contributing to waters of the United States will appear not to be jurisdictional. That such a wetland would not be considered adjacent is counterintuitive and will lead to confusion and unpredictable application of the rule.

4.5 Suggested Rule Language Change

In the following rule language change suggestion, additions to the proposed rule language are depicted in red underline.

Modify the last sentence of § 328.3(c)(1) to read:

Wetlands physically separated from a paragraph (a)(1) through (5) water by upland or by dikes, barriers, or similar structures and also lacking a direct hydrologic surface connection to such waters are not adjacent, except when historical aerial photographs or the presence of relic indicators of the original extent of the wetland demonstrate that the historical wetland boundary intersected a ditch that now provides a direct hydrologic surface connection to paragraph (a)(1) through (5) waters.

5) Modeling and Delineation Methods

ERBA supports the Agencies' exploration of the best modeling methods for wetland delineations and an attempt to bring some level of national consistency and standardization to those methods where appropriate. We recommend the Agencies' give strong consideration to any databases, tools, or methods endorsed by professional scientists and trade groups, such as the Society for Wetland Scientists, when developing a potential national wetland inventory or other national delineation system. We also recommend implementing such tools through a consistent national training initiative that involves the regulatory community and wetland professionals. Our practitioner member companies stand ready to serve as a resource to the Agencies, both in Washington and regionally, as they identify the most efficient and accurate methods for implementation of WOTUS.