



To: Department of the Army, U.S. Corps of Engineers
From: The Earth Partners, LP
Date: November 16, 2020
Re: Docket No. COE-2020-0002, Proposal to Reissue and Modify Nationwide Permits

The Earth Partners, LP (TEP) develops new markets and builds large-scale ecological restoration projects to improve water quality, sequester carbon, and build resiliency to the impacts of climate change. TEP is pleased to provide comments to the U.S. Army Corps of Engineers (the USACE) regarding the Proposal to Reissue and Modify Nationwide Permits (the Proposal) published in the Federal Register on September 15, 2020 (Docket Number COE-2020-0002).

According to Section 404(e) of the Clean Water Act, Nationwide Permits (NWP) can only authorize activities that result in no more than minimal individual and cumulative adverse environmental effects. The Proposal, most notably modifying the limit on losses of stream bed and removing the pre-construction notification (PCN) requirement for mechanized land clearing under NWP 12, lacks proper justification for these changes and will likely result in several NWPs authorizing activities that have significantly more than minimal adverse environment effects. As a result, multiple NWPs will likely be subject to litigation, as recently occurred with NWP 12, creating uncertainty and delays for the many industries that rely on the NWP program.

***Comment 1:** Due to project developers' incentives, the vast majority of stream impacts are to headwater streams, which are fundamentally linear features. Therefore, the linear foot is a more appropriate metric than the acre for measuring most stream impacts in the context of the Clean Water Act Section 404 Regulatory Program.*

The majority of stream impacts occur to headwater streams.¹ A review of ORM2 data from all USACE districts during FY2019 shows that 69.4% (2,802,965 linear feet) of authorized impacts were to headwater streams, whereas 30.6% (1,237,053 linear feet)² of impacts were to larger streams.³ More specifically, in Texas, where TEP has its primary operations, ORM2 data shows that from 2015 to 2019 in the Galveston and Fort Worth Districts, impacts to headwater streams associated with nationwide permits comprised 83% (834,855 linear feet) of total stream impacts during that period.⁴ The above

¹ "Headwater streams" are defined here as either first- through third-order streams, in the context of stream order using the Strahler classification system, and as ephemeral, intermittent (all types), and upper perennial (all types), in the context of the Cowardin classification system. Note that the Delaware Rapid Assessment Procedure defines "upper perennial" as "typically first and second order streams that serve as headwaters to the watershed", found here:

http://www.dnrec.delaware.gov/Admin/DelawareWetlands/Documents/DERAP_Field_Protocol_v6%200_Aug2010.pdf

² Analysis of ORM2 data acquired via Freedom of Information Act request from the USACE.

³ "Larger streams" are defined here as fourth-order streams and above, in the context of stream order, and as lower perennial (all types), in the context of Cowardin classes.

⁴ BenDor, T. and Ungaro, M. (2020). *Technical Memorandum re: Potential Effects of Navigable Waters Protection Rule and Proposed Nationwide Permit Changes in Fort Worth and Galveston Districts.*

findings are consistent with the fact that headwater streams “typically represent from 60 to 80% of the stream length within a catchment.”⁵ Even more dramatically, there were 53,457 stream credit withdrawals in the Fort Worth District from 2015 – 2019, which has a stream assessment methodology and crediting system that separates perennial, intermittent, and ephemeral credits and requires in-kind purchases to offset impacts. During that time period, only 52 perennial stream credit withdrawals were made by permittees, meaning that 99.9% of credit withdrawals were for intermittent and ephemeral credits, i.e. headwater streams.⁶

The skew of impacts toward headwater streams is the result of the incentives created by 1) the regulatory structure set up by the Clean Water Act, and 2) engineering limitations and flood management considerations associated with impacting larger streams:

- 1) Section 230.10(a) of the Clean Water Act Section 404(b)(1) Guidelines⁷ states that “no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem.” As a result, permittees proposing to permanently impact larger streams are oftentimes met with opposition from regulatory agencies as not conforming with the Section 404(b)(1) Guidelines. This is because there are oftentimes “practicable alternatives” to causing permanent impacts to larger streams. The threshold of “practicable alternative,” as defined by 40 CFR 230.3(q), is an alternative that is “available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.” This threshold is easier to meet when a permittee is proposing a permanent impact to a larger stream, as diverting a larger stream into a culvert, for example, can have significant watershed implications, impacting hydraulics around the culvert, channel and basin integrity, fish and benthos habitat and passage, flood concerns above the culvert, and water quality. Lack of knowledge of streams leads engineers and developers to design and install “perched” culverts that completely disconnect ecosystems, which devastate fish and benthos species populations. Whereas bridging over or boring under a larger stream is more likely to meet the threshold of being a “practicable alternative.” Conversely, when a project developer proposes to cross or divert a headwater stream, it is oftentimes not viewed by regulatory agencies as being practicable to require the permittee to bridge over or completely avoid impacts to these smaller watercourses. Opposition from regulatory agencies causes permitting delays and drives up project costs, and the effect is for permittees to avoid impacts to larger streams. Proposed impacts to headwater streams are more permissible by regulatory agencies and lead to fewer permitting delays, thus increasing impacts to headwater streams.
- 2) Permanently impacting a larger stream oftentimes results in the project developer having to make significant conveyance improvements in order to address the resulting narrowing of the floodplain. Construction work done directly in a larger stream can produce significant sediment, which can trigger additional environmental permits. Addressing flood management challenges becomes more complicated and more expensive when impacting larger streams. Such impacts oftentimes require the need to design and construct detention ponds, artificial floodplains,

⁵ MacDonald, L. and Coe, D. (2007). *Influence of Headwater Streams on Downstream Reaches in Forested Areas*. Society of American Foresters.

⁶ BenDor, T. and Ungaro, M. (2020). *Technical Memorandum re: Potential Effects of Navigable Waters Protection Rule and Proposed Nationwide Permit Changes in Fort Worth and Galveston Districts*.

⁷ CWA Section 404(b)(1) Guidelines (40 CFR 230), found here: https://www.epa.gov/sites/production/files/2015-03/documents/cwa_section404b1_guidelines_40cfr230_july2010.pdf

bankfull benches, and other flood mitigation techniques. This requires more land set aside for such purposes, which can significantly drive up project costs. As a result, bridging over or boring under larger streams, which regularly results in only temporary impacts, is oftentimes preferred from an engineering perspective. Conversely, permanently impacting a headwater stream does not create the same engineering challenges and oftentimes is not accompanied by the significantly higher costs associated with impacts to larger streams, and thus is more likely to occur.⁸

Due to the incentive structures described above, larger streams are already better “protected” from impacts than headwater streams. As a result, the USACE should think of the Section 404 Regulatory Program, in the context of streams, as primarily regulating impacts to headwater streams and design the program accordingly. Removing the linear foot metric and moving to only an area-based metric in the NWP program does not accomplish this.

If the Section 404 Regulatory Program primarily regulated impacts to larger streams, an area-based metric may be more defensible, as such streams are more likely to have well-established floodplains, sloughs, backwater lakes, etc. However, headwater streams are fundamentally linear features in their hydrogeomorphic characteristics. They do not typically have well-established or wide floodplains and their features fundamentally change as one moves through a headwater stream’s cross-section, from ordinary high water mark (OHWM) to OHWM.⁹ As stream restoration science and implementation have evolved over the past few decades, the linear foot has become the most established metric for measuring and capturing the linear nature of ecological functions and services provided by headwater streams. The USACE recognized this as few as three years ago, when in the preamble to the 2017 reissuance of the NWPs, it said in the context of NWP 21, “we believe that both the 1/2-acre and 300 linear foot limits are necessary to ensure that the activities authorized by this NWP cause no more than minimal individual and cumulative adverse environmental effects.”¹⁰

In the Proposal, the USACE justifies this change from a linear-based to an area-based metric by citing studies from Doyle¹¹ and Lave.¹² Since publication of the Proposal, the authors of these papers have said that the USACE’s interpretation of their research is incorrect and does not reflect the broader scientific literature on this topic. Specifically, the authors said that their research “does not support the use of stream bed area as being a superior or preferred metric for compensatory stream mitigation, nor does it offer a scientific rationale for replacing 300 LF with a 0.5-acre limit for stream impacts.” The authors state that the Proposal is “not based on an accurate interpretation of our science, which the USACE purports is a basis for their proposing the change” and they recommend maintaining the 300 linear foot threshold as the proposed area-based threshold will “likely result in a significantly greater number of unmitigated losses to the nation’s stream ecosystems.”¹³

⁸ Interviews with two hydrologic & hydraulic engineers and with an environmental consultant who has project-managed more than one-hundred Dept. of the Army 404 permits for clients.

⁹ U.S. Environmental Protection Agency. (2015). *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence*. EPA/600/R-14/475F.

¹⁰ U.S. Army Corps of Engineers. (Jan. 6, 2017). *Issuance and Reissuance of Nationwide Permits*. 82 FR 1860.

¹¹ Doyle, M.W., et al. (2015). *The morphology of streams restored for market and nonmarket purposes: Insights from a mixed natural-social science approach*. *Water Resources Research*, 51:5603-5622.

¹² Lave, R. (2014). *Neoliberal Confluences: The Turbulent Evolution of Stream Mitigation Banking in the U.S.* *Political Power and Social Theory*, vol. 27, p. 59-88.

¹³ Doyle, M.W. and Lave, R. (Oct. 2020). *Comment letter to the USACE on the Proposal to Reissue and Modify Nationwide Permits*.

Comment 2: A change in the metric used for determining stream function debits and credits will increase uncertainty and reduce investment in stream restoration projects, reducing stream credit inventory and resulting in out-of-kind compensatory mitigation being used to offset stream impacts.

The fundamental metric that underpins all USACE District-level stream assessment methodologies is the linear foot. The linear foot has been included in multiple decades' reissuances of the NWP; subsequently, stream restoration professionals' project designs over this long timeframe have also been underpinned by the linear foot. Stream restoration professionals design projects and the USACE credits projects based on the linear foot. USACE assessment methodologies are developed through a robust process focused on local aquatic resource conditions and stakeholder input. Developing new methodologies based on a fundamentally different metric, followed then by stream restoration professionals transitioning existing projects to that new metric, will likely take years. During this time, permittees are left without in-kind stream credits available, stream restoration professionals are left with stranded credit inventory, and capital providers are left with too much uncertainty to want to invest in stream restoration projects. This will result in fewer stream restoration projects, fewer in-kind offsets for permittees, fewer jobs in the ecological restoration sector, and a reduced likelihood that the nation is able to achieve its goal of no-net-loss of aquatic resources.

While uncertainty grows in the stream restoration sector as a result of the Proposal and fewer stream credits are brought onto the market, this will likely result in District Engineers' approving out-of-kind wetland credits to offset impacts to headwater streams, as was done in Districts before they created their own stream assessment methodologies and as is still done in the Districts that do not have their own stream assessment methodologies.

Comment 3: Changing from a linear-based to an area-based metric will not, in fact, result in more investment in larger stream restoration projects.

A justification used for dropping the linear foot as a metric is to increase investment in projects that restore larger streams. This is a good intention, as there are countless larger streams across the U.S. in desperate need of restoration. Unfortunately, changing the metric in the NWP will not serve this purpose. The restoration of larger streams is complex and is dependent upon many variables including funding availability, site selection, engineering and design considerations, mitigation requirements associated with the project, and market incentives. Moreover, the restoration of larger streams generally does not allow the restoration project proponent to control future impacts in the headwaters, which in turn jeopardizes the success of that larger stream restoration project.

Stronger promotion by USACE of *Regulatory Guidance Letter 18-01: Determination of Compensatory Mitigation Credits for the Removal of Obsolete Dams and Other Structures from Rivers and Streams* – through trainings, workshops, and the drafting of District-level SOPs – would be a much more effective and efficient way to incentivize investment in the restoration of larger streams. Dropping the linear foot metric from the NWP program will not accomplish this while being at the significant detriment to headwater streams across the country. Moreover, as described above, the Section 404 Regulatory Program, in the context of streams, should focus on regulating headwater streams as these are the most impacted by development due to regulatory- and engineering-based incentive structures. A shift from linear feet to acres will only deter investment in headwater stream restoration while not increasing investment in larger stream restoration.

Recommendation: Do not remove the linear foot as a metric in the NWP program as a linear-based metric is better than an area-based metric for measuring both impacts and uplift to headwater streams, the primary stream type impacted by development projects.

Comment 4: A half-acre impact to a headwater stream bed is far too large for a NWP to authorize as it is significantly more than a minimal adverse environmental effect.

As the data above demonstrates, the majority of authorized impacts in the Section 404 Regulatory Program are to headwater streams. Downing et al. (2012)¹⁴ describes an international mean width of 6.3 feet for first-order streams, which is cited in the Proposal. However, the supplemental to that study shows that the mean width for first-order streams in the U.S. is only 2.6 feet.¹⁵ Given that most first-order streams do not have well-developed floodplains and adjacent wetlands,¹⁶ there will regularly not be any non-tidal wetlands to consider. Therefore, under the Proposal, a permittee could file a NWP for a project that impacts 8,377 feet, or over 1.5 miles, of an average-sized domestic first-order stream bed without triggering the scrutiny of the public or any resource agencies. A linear project recently permitted under a NWP near Houston, TX caused permanent impacts to four separate headwater streams in four distinct hydrological features. Under the Proposal, this project could permanently impact 33,000 feet (6.3 miles) of stream bed and remain under the threshold of a NWP, implying that the project has no more than minimal adverse environmental effects. Furthermore, the Downing et al. (2012) Supplemental states that the mean width of third-order streams in the U.S. is 12.1 feet, meaning the half-acre equivalent is 1,800 feet of stream bed. Many third-order streams are perennial and are large enough that local residents can name them. Any reasonable person would assert that six football field lengths of permanent impacts to a named stream constitute significantly more than a minimal adverse environmental effect.

To pass along an anecdote, in a conversation about the Proposal with a senior environmental consultant who has assisted hundreds of clients over his career acquire Department of the Army 404 permits, he was considering the practical impacts of this proposed change. He described the streams that some of his clients commonly propose to impact as “small rivers” with mean widths of 40 feet that flow into Lewisville Lake, a drinking water source for Dallas, TX. When he did the calculation to discover that his clients would be able to permanently impact over 500 feet of these 40-foot wide small rivers and potentially not require an individual permit, his response was: “This is insane. It’s absolutely insane that the Corps would even consider something like that.”¹⁷

Given the perpetual permit processing backlog, due in part to a flatlined USACE budget, these kinds of projects proposed under a NWP could reach their maximum 45-day limit after receipt of a complete PCN and the activity would be automatically authorized by the NWP with very little scrutiny from any regulatory agencies.

Projects with such significant impacts as those described above deserve the scrutiny of an individual permit. Over one-third of the total U.S. population, roughly 117 million people, get their drinking water from systems that rely on “intermittent, ephemeral, or headwater streams.”¹⁸ In Pennsylvania, for

¹⁴ Downing, J.A. (2012). *Global abundance and size distribution of streams and rivers*. *Inland Waters*: 2:4, p. 229-236, DOI: 10.5268/IW-2.4.502. International Society of Limnology.

¹⁵ Supplementary electronic material to: Downing, J.A. et al. (2012). *Global abundance and size distribution of streams and rivers*. *Inland Waters*: p. 229-236, DOI: 10.5268/IW-2.4.502. International Society of Limnology.

¹⁶ U.S. Environmental Protection Agency. *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence*. (2015). EPA/600/R-14/475F.

¹⁷ Personal communication on October 19, 2020 with an engineer from Halff Associates.

¹⁸ U.S. Environmental Protection Agency. *Geographic Information Systems Analysis of the Surface Drinking Water Provided by Intermittent, Ephemeral, and Headwater Streams in the U.S.* found here: <https://www.epa.gov/cwa-404/geographic-information-systems-analysis-surface-drinking-water-provided-intermittent>

example, 317 drinking water intakes are in headwater streams, serving over 1.5 million people.¹⁹ The public should be given the opportunity to provide comments and feedback on projects that may impact thousands of linear feet of headwater streams in their watershed – projects with the ability to impair local conditions for water quality, flood management, and the general aesthetics of an entire region.

Additionally, the USACE should be required to coordinate on such large projects with relevant state and federal resource agencies. This coordination should occur in part because these agencies bring valuable expertise that the USACE does not necessarily have over issues like water quality impacts, flood management, and wildlife habitat. Agency coordination should also occur because these agencies have statutory and regulatory authorities over these natural resources. If the USACE were to assert sole authority over such resources, this may be a violation of the National Environmental Policy Act and could lead to litigation.

If the U.S. needs to invest \$110 billion per year in water infrastructure over the next 20 years in order to close the ‘infrastructure gap,’²⁰ why would the USACE ever want to increase the incentive to impact headwater streams, which are absolutely critical to protecting the nation’s drinking water supply?

Recommendation: The 300 linear foot limit should be kept as the threshold in the applicable NWP for differentiating between the need for a NWP and an individual permit.

Comment 5: One-tenth of an acre of impact to a headwater stream bed is far too large of an impact to trigger the need for compensatory mitigation.

Taking the same mean domestic stream widths from the Downing et al. (2012) Supplemental means that the USACE is effectively articulating a threshold of 1,675 feet for projects that will permanently impact an average-sized domestic first-order stream and also require compensatory mitigation. For the specific linear project mentioned above with four separate stream crossings, a permittee could permanently impact more than 6,500 feet and not trigger the need for any mitigation. Permanently destroying a mile of stream with no corresponding compensatory mitigation is more than a minimal individual environmental effect. Allowing this to be done tens of times annually within a single river basin and hundreds of times annually across the nation is more than a minimal cumulative environmental effect. Since 1989, the U.S. has articulated a goal of no-net-loss of aquatic resources. A regulatory program that requires no compensatory mitigation for a project that permanently impacts more than a mile of headwater streams does not meet this goal.

While General Condition 23 requires the District Engineer to ensure that compensatory mitigation is done for projects that will create more than a minimal adverse environmental effect, this statement is vague enough that putting thresholds in writing sends a signal to both permittees and District Engineers that this minimum threshold for compensatory mitigation is something to be considered, wherever that threshold stands. As the Proposal states, “numeric limits provide predictability and transparency to the regulated public through clear limits for NWP activities.” It is critical that these limits reflect what is considered to be a minimal adverse environmental effect.

The USACE asks in the Proposal why headwater streams should be regulated differently from nontidal wetlands and the answer is simple: Headwater streams are fundamentally different features on our

¹⁹ Nadeau, T. & Rains, M. (2007). *Hydrological Connectivity Between Headwater Streams and Downstream Waters: How Science Can Inform Policy*. Journal of the American Water Resources Association. 43: p. 118-133.

²⁰ American Society of Civil Engineers and the Value of Water Campaign. (2020). *The Economic Benefits of Investing in Water Infrastructure*.

landscape, playing fundamentally different ecological roles and offering different ecosystem services at different orders of magnitude than nontidal wetlands.²¹ A “minimum adverse environmental effect” is different for distinctive aquatic resources and their unique functions. The USACE asking such a question would be as if the EPA were to ask the public in a proposed rulemaking why it should distinctly regulate two different chemicals with different impacts on human health based on different exposure rates. The answer is patently obvious: headwater streams and nontidal wetlands are fundamentally different natural resources that provide different ecosystem services and their corresponding regulatory regimes should reflect this.

If the USACE continues to pursue an area-based metric as a minimum mitigation requirement threshold for headwater streams, we recommend that the 300 linear foot-equivalent be used, based on the domestic mean stream widths in the Downing et al. (2012) Supplemental. This would equate to the following:

Stream Order Impacted	Mean Width, feet (Downing et al. 2012)	Recommended Minimum Threshold for Compensatory Mitigation, acres
1	2.6	0.02
2	5.9	0.04
3	12.1	0.08

Note that an area-based metric may be more justifiable for larger streams as they have wider riparian corridors and more developed floodplains. However, using the NWP reissuance process to address this challenge is not the appropriate regulatory method for this kind of complex and region-specific regulatory change. Such a change should be done at the USACE District level through Standard Operating Procedures and district-level guidance documents. For example, stream order would be an inferior metric compared to catchment area in many areas of the country for differentiating what is a headwater stream (that is a fundamentally linear feature) versus a large stream (where an area-based metric may be more appropriate).

Recommendation: Revise paragraph (d) of General Condition 23 “Mitigation” to state that “Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 300 linear feet and require pre-construction notification...” “For losses of stream bed of 300 linear feet or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects...”

Comment 6: Removing the pre-construction notification requirement in NWP 12 (pipeline construction) for mechanized land clearing of forested wetlands will authorize activities through the NWP program that will have significantly more than minimal adverse environmental effects and will make NWP 12 vulnerable to litigation.

The Proposal states that mechanized land clearing “usually” results in only temporary impacts, implying that such activities do not reach a level that amounts to more than minimal adverse environmental effects, but the USACE does not cite any studies or data to support this assertion and its claim is simply incorrect. The hydrogeomorphic functional assessment model (HGM) used in several USACE districts requires permittees to determine wetland conditions both before and after project impacts using separate physical, biological, and chemical metrics. A review of HGM data for pipeline construction projects impacting palustrine forested (PFO) wetlands shows that mechanized land clearing results in significant permanent

²¹ U.S. Environmental Protection Agency. *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence*. (2015). EPA/600/R-14/475F.

impacts to these PFO wetlands. In the Galveston District, for example, the impacts to PFO wetlands permanently reduces the wetlands' biological function by 40% and the chemical and physical functions each by 15%.²²

The conversion of PFO wetlands to non-forested wetlands is more than a minimal adverse environmental effect, as PFO wetlands provide critical ecosystem services: PFO wetlands mitigate flooding by serving as temporary reservoirs during flood events and are more effective at reducing surface water flow velocity and erosion than non-forested wetlands.²³ PFO wetlands improve water quality, particularly by absorbing and transforming excess nitrogen and phosphorus from nearby agricultural sources.²⁴ In addition, PFO wetlands along the Gulf Coast provide vital stopover areas for birds migrating across the Gulf of Mexico.²⁵ This is especially critical as the proposed changes to NWP 12 would be most profound on the Gulf Coast where pipelines are regularly constructed through PFO wetlands.²⁶

Requiring a PCN for the conversion of PFO wetlands to non-forested wetlands allows the USACE to review proposed impacts, confirm that avoidance and minimization are being conducted to the maximum extent practicable, and ensure that compensatory mitigation is being used to offset unavoidable impacts. The Proposal describes the PCN process as a "critical tool" that facilitates the District Engineer's analysis of a permittee's specific impacts. Removing the need for a PCN for mechanized land clearing in PFO wetlands under NWP 12 removes the District Engineer's ability to ensure that the permit application is in compliance with the CWA Sec. 404(b)(1) Guidelines.

Permittees are incentivized to limit the likelihood of delay during the District Engineer's review of a NWP application. The PCN process creates this incentive by establishing the only touchpoint for the District Engineer to review a permittee's proposal in detail. Without the PCN process, a permittee has little incentive to consider avoidance, minimization, and compensation for its permanent impacts to aquatic resources and it will simply design projects based on whatever lowest-cost option will allow it to get under the NWP numeric limit. If that numeric limit rises, permittees' impacts will correspondingly rise.

Without the PCN requirement for mechanized land clearing in PFO wetlands, a pipeline developer would have virtually no oversight from the USACE or any other resource agency for wetland impacts if they design their project to avoid 1) the permanent "loss" of waters of the U.S. over one-tenth of an acre, 2) the crossing of any Section 10 navigable waters, 3) impacts to any threatened and endangered species, and 4) impacts to sites listed on the National Register for Historic Places. As currently written, the "Notification" paragraph of NWP 12 states that "the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if... the discharge will result in the loss of greater than 1/10-acre of waters of the United States..." The NWPs define "loss" as "Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity..." and that "Permanent adverse effects include permanent discharges of dredged or fill material

²² A review of physical, biological, and chemical functional capacity units required to offset permanent impacts to PFO wetlands from four pipeline projects in the USACE-Galveston District using the Hydrogeomorphic Approach for Assessing Wetland Functions.

²³ Coastal Ecology Inst. (2020). *Ecological Processes and Cumulative Impacts Illustrated by Bottomland Hardwood Wetland Ecosystems*. Lewis Publishers, Inc.

²⁴ Collins, M.E. and R.J. Kuehl. (2001). *Organic matter accumulation and organic soils*. in J.L. Richardson and M.J. Vepraskas (eds.) *Wetland Soils: Genesis, Hydrology, Landscapes and Classification*. Lewis Publishers.

²⁵ Partners in Flight. (2008). *Landbird Conservation Plan BCR: Gulf Coastal Prairie*, Version 1.3.

²⁶ A review of credit transactions on the Regulatory In Lieu Fee and Bank Information Tracking System from 2015 - 2019 for the New Orleans and Galveston Districts:

<https://ribits.ops.usace.army.mil/ords/f?p=107:158:12073532747745::NO>

that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody.” Under this definition, even very large pipeline projects can be constructed without causing a permanent “loss” to waters of the U.S.

For example, a permittee could construct a 200-mile pipeline that will cross 25 miles of jurisdictional PFO wetlands – a hypothetical that is quite reasonable near the Gulf Coast. With a right-of-way of 75 feet, this pipeline could create a 40% loss of biological function and a 15% loss of both physical and chemical function across 200 acres of PFO wetlands, all without requiring so much as a notification to the USACE or the public. It does not need to be said that this is more than a minimal adverse environmental effect; and yet, under the Proposal this activity would be allowed. If NWP 12 is finalized as currently drafted in the Proposal, it will very likely be subject to litigation.

Recommendation: Retain the PCN requirement in NWP 12 (pipeline construction) for mechanized land clearing of forested wetlands.

Comment 7: Many federal agencies and state departments of transportation (DOTs) do not have the in-house staff with the requisite expertise and independence to self-administer the Section 404 Regulatory Program, and the USACE’s delegation of this authority is unlikely to be legally permissible.

The USACE’s proposal to eliminate PCN requirements for federal permittees, including state DOTs with NEPA authority, is not justified. The Proposal would essentially allow the USACE to delegate its statutory responsibility to implement the Clean Water Act Section 404 Regulatory Program. This runs counter to Congress’ explicit authorization of the Secretary of the Army to issue NWPs for activities the Secretary deems will cause only minimal adverse environmental effects. Delegation of this responsibility to another federal agency is not likely to be legally permissible and will make the USACE vulnerable to litigation. Case law suggests the delegation of a federal agency’s statutory authority is not allowed.²⁷

Federal agencies and state DOTs would be expected to self-regulate their NWPs, determining whether their own project designs have avoided and minimized appropriately and whether they are seeking the necessary amount of compensatory mitigation – all without any USACE oversight. This is a clear conflict of interest for federal agencies, as they are incentivized to ensure their projects are permitted with as little cost as possible. The assertion that federal agencies already have in-house expertise to oversee their own impacts to natural resources is not accurate. Many agencies, especially state DOTs that have been included in the definition of “federal agency” in the Proposal, lack the necessary in-house knowledge and capacity. The USACE’s justification for this delegation of responsibility is that “Federal agencies may employ staff who are environmental experts.” This statement is as true as “federal agencies may employ staff who are pharmaceutical experts.” The possibility that a federal agency has an employee who understands the processes and requirements necessary to safely bring a pharmaceutical drug to market does not mean that the FDA would be wise to delegate its responsibilities to all other federal agencies. If all federal agencies and state DOTs had the necessary in-house environmental experts, why do most of them hire environmental consultants to manage their impacts to and permitting of aquatic resources? The USACE’s logic is unsound.

Recommendation: Retain the requirement that Federal Agencies must submit PCNs when seeking NWPs

²⁷ Shah, B. (2017). *Interagency Transfers of Adjudication Authority*, 34 Yale J. on Reg. p.320-322 (2017). Available at: <https://digitalcommons.law.yale.edu/yjreg/vol34/iss1/5>

Comment 8: The regulatory impact analysis (RIA) associated with the Proposal is incomplete and leads to a flawed cost-benefit analysis.

The USACE must use the best reasonably obtainable scientific, technical, and economic information available when promulgating a federal rule and demonstrate that the benefits of the intended regulatory action justify its costs.²⁸ The RIA in the Proposal focuses on cost savings to permittees and to the USACE and estimates annual savings of between \$12.1 and \$27.5 million. Other than a general section on environmental benefits, the USACE fails to quantify the costs to the public from the expected lost ecosystem services that will result from the significant expected reduction in wetland and stream function. Considering that flooding, our costliest natural disaster, is exacerbated by development in streams and wetlands, any reduction in this ecosystem service should be included in an RIA.

The USACE also fails to account for the significant detrimental impacts to the \$25 billion²⁹ ecological restoration industry that will result from the proposed changes to the NWP program. It should be noted that a comparison of economic losses to permittees versus economic losses to the ecological restoration industry does not result in equivalent job losses in these respective groups. Economic losses to permittees that result from a robust Section 404 Regulatory Program result in few job losses because the cost of compensatory mitigation does not impair broader growth or development. Whereas economic losses to the ecological restoration industry due to a rolled-back Section 404 Regulatory Program results in a high number of direct job losses in this industry – as is currently being seen due to the June 2020 rollback of the definition of waters of the U.S. – because it is an attack on the very business model of this sector.

The USACE fails to adhere to Executive Order 12866 and demonstrate that the Proposal will have a net benefit to the public. We suspect that a properly done RIA that considers lost ecosystem services and detrimental economic impacts to the ecological restoration industry will show that the Proposal will have a significant net cost to the public.

Recommendation: The USACE must redo its significantly flawed RIA before finalizing this proposal to more precisely estimate the public cost that will result from the additional loss of stream and wetland functions.

²⁸ Executive Order 12866. *Regulatory Planning and Review*. Sept. 30, 1993. and *Office of Management and Budget Circular A-4 (Regulatory Analysis)*. Sept. 17, 2003.

²⁹ BenDor T, et al. (2015) *Estimating the Size and Impact of the Ecological Restoration Economy*. PLoS ONE 10(6): e0128339. <https://doi.org/10.1371/journal.pone.0128339>