



November 16, 2020

Mr. David Olson
U.S. Army Corps of Engineers
Attn: CECW-CO-R, 441 G Street NW
Washington, DC 20314-1000

RE: Docket Number: COE-2020-0002

By email (nationwidepermits2020@usace.army.mil) and submission through www.regulations.gov

Dear Mr. Olson:

The following comments are submitted on behalf of the Natural Resources Defense Council. As described in detail below, our organizations are troubled by the Army Corps of Engineers' (Corps') proposal to re-issue and expand several nationwide permits (NWP), and to promulgate new NWP. 85 Fed. Reg. 57,368 (Sept. 15, 2020). In large part, these permits are unlawful and unwise, and must be either substantially modified or not re-issued. In brief summary, the following comments demonstrate that the proposed NWP are flawed in multiple ways.

First, they do not give sufficient consideration to the vitally important functions wetlands and streams serve, and the increasingly important role they will serve as fewer and fewer of these aquatic resources remain. More and more land is developed, which is generating more pollution and destroying the hydrology of the Nation's water resources. Among other concerns, this makes flooding and other extreme events more possible – a real concern, particularly as global warming worsens.

Second, the Corps' proposal routinely flouts its obligation to limit general permits to activities that will not cause more than minimal adverse impact individually and cumulatively. In several instances, the Corps allows unlimited or barely limited use of dozens of permits in a way that will affect or destroy stream and wetland resources.

Third, in a theme that is recounted throughout these comments, we are extremely concerned that the Corps has provided little, if any, scientific data or analysis to support its claims that these NWP have no more than a minimal adverse effect, individually or cumulatively, on the environment. The decision documents that accompany the proposed NWP proposal are replete with repeated and rote statements that are not supported by any studies, reports, or data – and that often fly in the face of facts about the adverse environmental consequences of the NWP program that the Corps has been aware of for years.

NATURAL RESOURCES DEFENSE COUNCIL

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Fourth, NWP's may not be used to cover activities that are not similar in nature, but several proposed permits fail to meet this criterion.

Fifth, although applicable requirements demand that impacts to waters of the United States be avoided and minimized before being allowed, the NWP's do not preserve this sequencing requirement.

Sixth, the proposed NWP's violate the Endangered Species Act and the National Environmental Policy Act.

Finally, a number of proposed permits contain arbitrary and capricious provisions that must be corrected.

The Corps must fix this mistaken approach to permitting activities that may affect waters of the United States. The Corps has ample time to do so, because the existing NWP's do not expire until March of 2022.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Devine', with a stylized flourish extending to the right.

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DETAILED COMMENTS

I. Overarching Legal Issues

A. Summary of Section 404(e) Requirements

In this section, we describe the basic legal framework that the Clean Water Act establishes for the issuance of general dredge and fill permits. From the plain language of the Act and its implementing regulations, several principles emerge.

1. “[T]he Secretary *may* . . . issue general permits”

The Corps’ authority is not mandatory, and its existence does not mean that the Corps must permit everything that it thinks might qualify. To the contrary, because the Corps has the authority to refuse to issue general permits at all, it has ample authority to condition them consistent with the overall purposes of the CWA. *See generally Nat’l Assn. of Home Builders v. U.S. Army Corps of Eng’rs*, 453 F.Supp. 2d 116, 129 n.10 (D.D.C. 2006) (rejecting claim that Corps must “create a ‘streamlined’ system of general permits,” and stating that “efficiency does not drive the creation of the NWP – protecting the environment does”).

2. “[T]he activities in such category are similar in nature”

Under applicable regulations, complying with the statutory command to permit only activities that are “similar in nature” means that the activities “are similar in nature and similar in their impact upon water quality and the aquatic environment.” 40 C.F.R. § 230.7(a)(1); *see also Wyo. Outdoor Council v. U.S. Army Corps of Eng’rs*, 351 F.Supp. 2d 1232, 1257 (D. Wyo. 2005) (noting dual requirements of regulations). With regard to the “similar in nature” prong of the analysis, the Corps has indicated that its view is that the purpose of the activity is critical to identifying similar activities. *Id.* at 1257-58.

To meet this criterion, the agency must “include a *precise* description of the activities to be permitted under the General permit, explaining why they are sufficiently similar in nature and in environmental impact to warrant regulation under a single General permit,” with consideration given to the possible effect the activities might have on: the physical, chemical, and biological properties of the aquatic system; identified aquatic sites considered to be “special,” including wetlands; and human uses. 40 C.F.R. § 230.7(b)(2) (emphasis added).

3. “[W]ill cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect”

The plain language of the Clean Water Act does not allow activities to be permitted if they cause more than negligible harm. Congress’s use of the term “minimal” in the statute reveals that the law requires that permitted activities have a truly insignificant impact in order to qualify for general permitting. *See* Merriam-Webster Dictionary, www.merriam-webster.com/minimal (defining “minimal” as “relating to or being a minimum”); *id.*,

www.merriam-webster.com/minimum (defining “minimum” as “the least quantity assignable, admissible, or possible”).

4. “[O]n the environment”

Congress chose to focus on the entire environment when authorizing the Corps to issue general permits. It did not focus only on water resources. Although the general permitting regulations presently focus on the “aquatic environment,” *see, e.g.*, 40 C.F.R. §§ 230.7(a)(1) & (3), regulations cannot supersede the protections guaranteed by the statute, and the CWA is clear that general permits may only issue if the permitted activities have minimal impacts on the environment as a whole. *Cf. Wyo. Outdoor Council*, 351 F.Supp. 2d at 1254 n. 11 (noting differences between statutory and regulatory provisions).

Indeed, Congress knows how to refer to the “aquatic” environment when it wishes to do so and did so in the very same section of the law. In § 404(f)(1)(E) of the Act, enacted in the same 1977 Clean Water Act Amendments that also codified § 404(e), Congress provided an exemption for certain roads where, among other things, “any adverse effect on the *aquatic* environment will be otherwise minimized.” 33 U.S.C. § 1344(f)(1)(E) (emphasis added). Because “Congress generally acts intentionally when it uses particular language in one section of a statute but omits it in another,” *Dept. of Homeland Sec. v. MacLean*, 574 U.S. 383, 392 (2015), the Corps lacks authority to import the word “aquatic” into § 404(e)(1), when Congress omitted it.

5. “[B]e based on the guidelines described in subsection (b)(1) of this section”

The section 404 guidelines that EPA has promulgated for the protection of water resources from dredge and fill activities contain several provisions that are applicable to the present permits.

First, under the guidelines, “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, so long as the alternative does not have other significant adverse environmental consequences.” 40 C.F.R. § 230.10(a).¹ For an activity affecting a “special aquatic site,” including a wetland, if it “does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose (*i.e.*, is not ‘water dependent’), practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise.” *Id.* § 230.10(a)(3).

¹ While we acknowledge that the regulations say that the requirements of 40 C.F.R. § 230.10(a) are “not directly applicable to General permits,” 40 C.F.R. § 230.7(b)(1), those requirements still apply, just differently. Specifically, the alternatives analysis is not “directly” applicable to general permits like the NWP because there are obvious difficulties with doing an alternatives analysis for projects/locations that have not yet been identified but would be covered by the permit. But this provision still has importance for general permits; the NWPs must have provisions to ensure that they are used only after the prospective permittee demonstrates avoidance and minimization, and to implement the other requirements in 40 C.F.R. § 230.10(a), such as protecting “special aquatic sites.”

Second, the guidelines prohibit any discharge which, among other things, “[c]auses or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard. . . .” *Id.* § 230.10(b)(1).

Third, the guidelines likewise specify that discharges shall not “cause or contribute to significant degradation of the waters of the United States,” which could include “[s]ignificantly adverse effects” on: “human health or welfare”; “life stages of aquatic life and other wildlife dependent on aquatic ecosystems”; “aquatic ecosystem diversity, productivity, and stability”; or “recreational, aesthetic, and economic values.” *Id.* §§ 230.10(c)(1)-(4).

On a related point, the Corps’ regulations also prohibit the issuance of a § 404 permit that would not be in the public interest, as defined by the Corps’ regulations.² Under this public interest review, the Corps must evaluate the “probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest.”³ Specifically, “[t]he benefits that reasonably may be expected to accrue from the project must be weighed against its reasonably foreseeable detriments” – including adverse impacts to wetlands.⁴ The Corps’ regulations state that “the unnecessary alteration or destruction” of wetlands “should be discouraged as contrary to the public interest.”⁵

B. The Corps’ Proposed NWP’s Systematically Violate the Requirements of Section 404(e) and the Implementing Regulations.

As discussed in detail below, many of the Corps’ proposed permits do not comply with the legal requirements applicable to general permits. Contrary to § 404(e), the Corps did not limit itself to permitting activities which are similar in nature, have minimal impacts, and comply with the section 404 guidelines.

1. Numerous NWP’s authorize activities which have dissimilar purposes and/or effects on the environment.

The Corps’ proposal is rife with examples, identified in detail below, of NWP’s that permit activities that are not similar in nature.

First, NWP 46 authorizes activities of all sorts in ditches, with the only arguable similarity between the activities being that they affect those kinds of waters. That approach violates section 404(e), however, because the structures and other discharges contemplated under these permits could be of any nature, for any purpose, and with any kind of environmental impact.

Second, NWP’s 18 and 19 are so undefined that virtually any kind of activity could be allowed under the permits. NWP 18 authorizes “minor discharges,” and NWP 19 authorizes “minor dredging,” but these categories cannot reasonably be said to encompass only “similar”

² 33 C.F.R. §§ 320.4, 323.6.

³ 33 C.F.R. § 320.4(a).

⁴ *Id.*

⁵ 33 C.F.R. § 320.4(b).

activities. Certainly it cannot be contended that activities are "similar" within the meaning of § 404(e)(1) merely because they involve "discharges" or "dredging." These are overarching terms inherent to § 404 permitting. 33 U.S.C. § 1344 (e)(1) (general permits address activities "involving *discharges of dredged or fill material*" (emphasis added)). The Corps' duty under § 404(e)(1), as a prerequisite to issuing any general permit, is to define *which* discharges and *which* dredging are "similar in nature." Establishing NWP categories that broadly encompass "discharges" and "dredging" renders the similar-in-nature requirement meaningless.

Nor can similarity be established by the requirement that the discharges or dredging addressed by NWPs 18 and 19 be "minor." Once again, the requirement that permitted activities be minor is a pervasive one applicable to *all* nationwide permits by virtue of the § 404(e)(1) mandate that such permits cause no more than "minimal" adverse environmental effects. It is thus not a basis for concluding that activities are "similar in nature." Indeed, if compliance with the "minimal" effects requirement were in itself sufficient to comply with the "similar in nature" requirement, the latter would be rendered superfluous. *Circuit City Stores v. Adams*, 532 U.S. 105, 113 (2001) (rejecting interpretation that would render a statutory provision superfluous, and saying, "[o]ur cases express a deep reluctance to interpret a statutory provision so as to render superfluous other provisions in the same enactment" (internal citation and quotation omitted)); *Holland v. Williams Mtn. Coal Co.*, 256 F.3d 819, 822 (D.C. Cir. 2001) (rejecting reading of a statutory provision under which another provision "would, for the most part, be surplusage").

Third, NWP 23 would authorize entirely dissimilar activities. To take but a few examples, the list of currently approved categorical exclusions includes: permits from the Bureau of Reclamation for the "removal of gravel or sand by an established process from existing quarries"; "[i]mprovements to existing rest areas and truck weigh stations" by the Federal Highway Administration; and Coast Guard "[d]emolition or disposal actions that involve buildings or structures when conducted in accordance with regulations applying to removal of asbestos, PCB's, and other hazardous materials, or disposal actions mandated by Congress." See U.S. Army Corps of Eng'rs, Regulatory Guidance Letter, Approved NEPA Categorical Exclusions for Nationwide Permit 23 (Dec. 8, 2005), available at <https://www.nap.usace.army.mil/Portals/39/docs/regulatory/rpls/rgl05-07.pdf>. These activities – and the many more that NWP 23 would lump together – are so plainly different in purpose and effect that any attempt to try to describe them as similar would be unreasonably circular, and indeed the Corps' effort fails:

The activities authorized by this NWP are sufficiently similar in nature and environmental impact to warrant authorization by a general permit. The terms of the NWP authorize a specific category of activity (i.e., discharges of dredged or fill material for activities qualifying for approved categorical exclusions) in a specific category of waters (i.e., waters of the United States). The restrictions imposed by the terms and conditions of this NWP will result in the authorization of activities that have similar impacts on the aquatic environment, namely the replacement or modification of aquatic habitats, with activities eligible for approved categorical exclusions under an agency's National Environmental Policy Act implementing regulations.

U.S. Army Corps of Eng'rs, Draft Decision Document: Nationwide Permit 23, at 59. Contrary to the Corps' claims, neither "activities qualifying for approved categorical exclusions" nor discharging into waters of the U.S. is "specific," as the former is open to any number of different kinds of activities,⁶ and the latter describes the entire set of waters to which section 404 applies.

If the Corps' explanation were sufficient – which it is not – the Corps could substitute any arbitrary category of activities for "approved categorical exclusions," and issue an NWP. The following absurd example – created merely by substituting a similarly disparate set of activities for categorically excluded ones – demonstrates that the Corps has authorized something completely at odds with the statute:

The activities authorized by this NWP are sufficiently similar in nature and environmental impact to warrant authorization by a general permit. The terms of the NWP authorize a specific category of activity (i.e., discharges of dredged or fill material for activities conducted on Tuesdays) in a specific category of waters (i.e., waters of the United States). The restrictions imposed by the terms and conditions of this NWP will result in the authorization of activities that have similar impacts on the aquatic environment, namely the replacement or modification of aquatic habitats, with activities conducted on Tuesdays.

Plainly, something so close to this intentionally unreasonable example cannot possibly represent a reasonable interpretation of the statute. *See Aremu v. Dep't of Homeland Security*, 450 F.3d 578, 583 (4th Cir. 2006) ("a court must, if possible, interpret statutes to avoid absurd results").

Fourth, another example of dissimilar activity can be found in NWPs 29 and 39, which would authorize a host of unrelated activity under the rubric of residential and commercial and institutional development, respectively. NWPs 29 and 39 allow building foundations and pads for a wide variety of developments and authorize "attendant features" as well, thereby lumping highly dissimilar activities together. NWP 29 would allow such construction for the smallest single-family home or the biggest multi-unit development. NWP 39 would permit fills associated with small places of worship as well as those associated with mega-malls and enormous industrial complexes. Even worse, both would authorize activities that would destroy waters of the U.S. for a *non-exclusive* list of a wide variety of "attendant features," ranging from playing fields to parking lots (and, in the case of NWP 29, golf courses that are "integral" to the residential development). 85 Fed. Reg. at 57,375 & 57,378; *cf. Sierra Club v. U.S. Army Corps of Eng'rs*, 464 F.Supp.2d 1171, 1191-92 (M.D. Fla. 2006) (holding that list of activities for "the construction of residential, commercial, recreational and institutional projects" could be considered "similar in nature," but only by virtue of special conditions imposed on the use of the permit; stating that the listed activities by themselves "could not possibly be deemed to be similar in nature, especially when the list flatly states that it contains only *examples* of the activities to be permitted, implying that other activities not even mentioned could be authorized by the permit as well").

⁶ Note also that, like the categories of "minor discharges" and "minor dredging," even if one assumes that the impacts from categorically excluded activities are small, that does not make them similar, because minimal impacts is a separate legal requirement from "similar in nature."

These several NWP (and others discussed below) therefore violate one of the basic tenets of section 404(e), can hardly be said to describe the similarity of the covered projects in “precise” terms, *see* 40 C.F.R. § 230.7(b)(2), and are arbitrary and capricious to boot. They must be substantially limited to activities that are, in fact, similar in nature, purpose, and impact – or not be re-issued.

2. The Corps unlawfully ignores impacts beyond the aquatic environment or outside its ordinary regulatory purview.

The Corps acknowledges that several NWPs will have environmental effects beyond the aquatic environment but does not appear to consider such impacts in determining whether the activities are eligible for general permitting. In the same vein, the Corps will commonly note harms that could result from permitted activities on the aquatic ecosystem but ignore those things that the Corps itself does not directly regulate in the usual course of business. Both of these self-imposed limitations are unlawful.

The Corps’ draft decision documents specifically admit that several NWP-authorized activities will impact more than just aquatic resources. *See, e.g.*, U.S. Army Corps of Eng’rs, Draft Decision Document: Nationwide Permit 12, at 49 (“Activities authorized by this NWP will affect general environmental concerns, such as water, air, noise, and land pollution. The authorized activities will also affect the physical, chemical, and biological characteristics of the environment.”); U.S. Army Corps of Eng’rs, Draft Decision Document: Nationwide Permit 14, at 47 (same); U.S. Army Corps of Eng’rs, Draft Decision Document: Nationwide Permit 23, at 47 (same); U.S. Army Corps of Eng’rs, Draft Decision Document: Nationwide Permit 42, at 46 (“Activities authorized by this NWP are likely to have minor adverse effects on general environmental concerns, such as water, air, noise, and land pollution. The authorized activities may also affect the physical, chemical, and biological characteristics of the environment.”).

Notwithstanding the admitted impacts permitted activities will have beyond the aquatic environment, the draft decision documents for these NWPs commonly limit their analysis of whether the activity warrants a general permit to impacts on aquatic resources. In particular, the Corps’ assessment of cumulative impacts typically focuses on the acreage of water resources expected to be impacted by the authorized activities and finds those impacts to be minimal after considering estimates of compensatory mitigation that will occur. For example, the draft decision document for NWP 12 states: “The 404(b)(1) Guidelines at 40 CFR 230.11(a) define cumulative effects as ‘...the changes in an *aquatic ecosystem* that are attributable to the collective effect of a number of individual discharges of dredged or fill material.’” U.S. Army Corps of Eng’rs, Draft Decision Document: Nationwide Permit 12, at 65 (emphasis added). Section 7.2.2 of other NWPs’ draft decision documents repeat this language verbatim.

In addition to erroneously limiting its impact analysis to the aquatic environment, the Corps also limits its review by excluding consideration of environmental impacts that the Corps does not ordinarily regulate directly. For instance, the draft decision document for NWP 12 states:

For oil or natural gas pipelines, general environmental concerns may include the burning of the fossil fuels that occurs after the oil or natural gas reaches its destination, which produce carbon dioxide that contribute to greenhouse gas emissions. The Corps does not have the authority to control the burning of fossil fuels or the adverse environmental effects that are caused by burning those fossil fuels to produce energy.

U.S. Army Corps of Eng'rs, Draft Decision Document: Nationwide Permit 12, at 50; *see also id.* at 49-51 (disclaiming Corps' authority to regulate various adverse impacts associated with pipelines).

Ignoring impacts that extend beyond the aquatic environment or that are typically within another agency's regulatory purview violates the plain terms of the Clean Water Act. As noted above, the law expressly uses the broad term "environment" to describe the Corps' obligation in evaluating whether activities can be authorized by a general permit, as distinguished from the "aquatic environment," a term the statute uses elsewhere. And, it is of no moment that the Corps does not ordinarily directly regulate various activities or their impacts; section 404(e) directs the Corps to evaluate the entire suite of impacts in determining whether or not an activity can be authorized by a general permit.

3. Permitted activities will have more than minimal impacts on the environment.

Throughout the proposal, the Corps suggests that the NWP's will have minimal impacts, no matter how extensive or destructive the activities, thanks to the district engineers' ability to require compensatory mitigation and take other precautions against permitted activities becoming too harmful, and because division engineers can impose regional conditions. Numerous NWP's rely on the district engineer taking steps to minimize the impacts of individual projects when made aware of them by prospective permittees' preconstruction notifications (PCNs). *See* U.S. Army Corps of Eng'rs, Buffalo, Huntington, Louisville & Pittsburgh Districts, Public Notice, Nationwide Permit Reissuance Request for Comments (Sept. 30, 2020), available at https://www.lrb.usace.army.mil/Portals/45/docs/regulatory/publicnotices/2020-10/LRH_PublicNoticeRegionalConditions.pdf (identifying 37 NWP's for which PCN is required for all or some covered activities); 85 Fed. Reg. at 57,300 ("PCNs give the Corps the opportunity to evaluate certain proposed NWP activities on a case-by-case basis to ensure that they will cause no more than minimal adverse environmental effects, individually and cumulatively."). *See also, e.g., id.* at 57,344 ("In response to a PCN, the district engineer may impose activity-specific conditions on an NWP verification to ensure that the adverse environmental effects of the authorized activity are no more than minimal..."). Although PCNs are not themselves objectionable – indeed, they may provide information vital to monitoring the ongoing use of particular permits – there are multiple flaws with the idea of relying on them to make the minimal impacts finding.

a. Pre-construction notification does not guarantee that district engineers will review projects and ensure activities have minimal impacts.

In numerous cases, district engineers do not even have the opportunity to review projects before construction occurs (and no notice of them after the fact), so there is not a meaningful

opportunity to intervene if the activities do in fact cause more than minimal harm. This same problem arises for activities that fall below the PCN thresholds in those permits for which a PCN is required. For example, because NWP 14 permits a linear transportation project to go forward without a PCN if it will not affect more than 1/10 of an acre of waters or will involve a discharge to a special aquatic site, the district engineer will not need to be notified of any such project, no matter how many occur in his/her jurisdiction. Accordingly, there is no way that they will be able to be sure that activities in the covered category are cumulatively minimal.

Even for those permits that do require a PCN, there is no guarantee that activities that are more than minimally harmful will be addressed by the district engineer, as many of the proposed permits contain a significant loophole that allow PCN-triggering activities to go forward if the district engineer has not taken action to limit the impact of the proposed activity, or simply has not had the opportunity yet to examine the proposed activity. *See* 85 Fed. Reg. 57,390 (General Condition 32(a)(2) indicates that the prospective permittee may go forward if “45 days have passed from the district engineer’s receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer”). So, for instance, a coal company eager to take advantage of NWP 50 for underground coal mining discharges could submit a notice of its intent to destroy ½ an acre of streams with mining waste (which could be more than half a mile of a first order stream), and even if there are less destructive alternatives or there are mitigation measures that could be performed, the district engineer’s failure to act within 45 days would allow the project to go ahead unchecked.⁷

In addition, the Corps has utterly failed to demonstrate that the ability of district engineers to demand mitigation actually results in minimally harmful impacts in the aggregate. The agency’s draft decision documents commonly identify the expected usage of the permit and declare that the impacts will be minimal, in light of that predicted usage and the Corps’ ability to curb adverse impacts on a project-by-project basis, without any meaningful showing why that conclusion is supported by facts in the record. For example, the Corps admits that NWP 12 will be used to authorize an estimated 47,750 activities during its five-year life. U.S. Army Corps of Eng’rs, Draft Decision Document: Nationwide Permit 12, at 66. Although those activities will impact an estimated 3,160 acres of waters and the Corps expects only 225 acres of compensatory mitigation will be imposed, the Corps completely fails to explain why the 2,935 acres of unmitigated impacts are minimal.

b. Post-permit mitigation cannot be used to make the minimal effects finding, both because it is legally impermissible and because the Corps lacks sufficient evidence to conclude that mitigation will render activities’ impacts minimal.

As a threshold legal matter, the Corps may not rely on mitigation measures to reach the conclusion that the activities permitted will not cause more than minimal impacts. If specific projects in a category of activities must later be reviewed by the Corps to determine whether their effects are minimal, then that category of activities is not now eligible for authorization

⁷ Perhaps recognizing the harms that could occur due to the Corps’ inaction, the Corps does not allow activity to proceed in certain circumstances even after 45 days have elapsed, unless the prospective permittee gets authorization to proceed. *See, e.g.*, 85 Fed. Reg. at 57,390 (General Condition 32 requires Corps’ notification of certain findings prior to beginning activity).

with a general permit. However, by relying on future review and possible corrective action by the Corps, the proposed NWP's would authorize just such ineligible categories of activities.

First, the authority to modify or revoke a general permit after issuance is inherent in § 404(e), which provides that such a permit “may be revoked or modified by the Secretary if, after opportunity for public hearing, the Secretary determines that the activities authorized by such general permit have an adverse impact on the environment or such activities are more appropriately authorized by individual permits.” § 404(e)(2). If the mere existence of such authority were deemed sufficient to satisfy the minimal effects requirement of § 404(e)(1), that requirement would be met *per se* in every case and would thus be drained of meaning.

Second, when an agency takes final action, *that action* must meet requirements of applicable law. If it does not, the agency's intention to revisit it later cannot save it. *See, e.g., Chlorine Chemistry Council v. EPA*, 206 F.3d 1286, 1291 (D.C. Cir. 2000) (agency cannot avoid applicable statutory requirements “by dubbing its action ‘interim’”). Indeed, the applicable regulations reflect this requirement, as they provide that a general permit may only be issued if “the permitting authority . . . set[s] forth in writing an evaluation of the potential individual and cumulative impacts of the category of activities to be regulated under the General permit,” and that “the evaluation *must be completed before any General permit is issued*, and the results must be published with the final permit.” 40 C.F.R. § 230.7(b) (emphasis added). Here the Corps has not -- and based on the administrative record could not -- find that the NWP's proposed in the September 15 notice will have no more than minimal effects.

Third, the post-issuance corrective actions on which the Corps relies are not only in the future, but also are as yet unidentified. The Corps has not specified when activities authorized by the NWP's with PCN's will be conditioned after issuance and in what way, or which activities will be removed from the scope of which NWP's after issuance and assigned to the individual permit process. Because the nature and environmental impact of these post-issuance corrective measures are not specified in the record of this proceeding, and indeed are unknown, the Corps cannot meet basic requirements of reasoned agency decision-making. Specifically, the Corps cannot point to substantial evidence documenting that these unknown measures will ensure minimal adverse environmental effects, or to any explanation of why that is so. Nor does it appear that such evidence would be possible to develop, since the Corps does not explain how the *district* engineers can conceivably know whether the *nationwide* use of any one of these permits will have, or is having, more than minimal cumulative effects.

Fourth, these post-issuance corrective actions will come into existence only after the comment period on the NWP's has concluded. This unlawfully deprives the public of its statutory right to comment on those actions and their relationship to the statutory minimal effects standard. *See CWA* § 404(e)(1) (the Corps must allow for “notice and opportunity for public hearing” prior to issuance of NWP's). Indeed, this problem demonstrates why those actions that cannot categorically be said to have minimal impacts should utilize the individual permit process; one of the key purposes of requiring a § 404 individual permit is to force the Corps, and the applicant, to develop specific conditions to mitigate the adverse effects of the specific projects, *see* 33 C.F.R. § 325.4(a), and to permit the public to comment on the specific projects and the proposed mitigation. Thus, in individual permitting, the Corps must consider conditions “for mitigation of

significant losses which are specifically identifiable, reasonably likely to occur, and of importance to the human or aquatic environment.” 33 C.F.R. § 325.4(a)(3). If mitigation is used to justify general permits, the whole purpose of this specific case-by-case analysis, and the right of the public to be heard, would be destroyed.⁸

Even if undefined future mitigation may theoretically be taken into account under § 404(e) (which it cannot), that would not sustain the proposed NWP. It is well established that even where mitigation is taken into account, the mitigation measures must be concrete, predictable, enforceable, and based on supporting analytic data and scientific evidence demonstrating that the mitigation will provide a functional and successful replacement for the lost water resources. *Wyo. Outdoor Council*, 351 F. Supp. 2d at 1250-52 (examining mitigation for NEPA purposes). However, it is clear that the Corps lacks the substantial evidence it needs to rely on mitigation to the extent the NWP. The Corps has previously conceded that it “has done a poor job of tracking past impacts on both wetlands and other waters primarily due to a lack of notification for numerous activities and ‘generic’ permits that do not distinguish the type of project.” *Id.* at 1252 (internal quotation omitted). In the absence of a credible tracking mechanism, it is impossible for the Corps to reasonably conclude that these activities are having a minimal impact, especially on a cumulative basis. Indeed, the Corps does not claim that it has evidence that mitigation imposed upon review of planned projects has in fact limited the adverse impacts of NWP-authorized projects to minimal levels.

Moreover, the Corps does not have substantial evidence to conclude that individual projects will have less-than-minimal impacts when mitigation is used to minimize the permitted activities’ effects. In 2005, the Government Accountability Office issued a report that highlighted numerous failures in the Corps’ use of compensatory mitigation. GAO’s summary bears quoting at length:

⁸ We are aware that the Fourth Circuit has held that “section 404(e) does not unambiguously forbid the Corps from making the minimal-environmental-impact determinations by relying in part on the availability of post-issuance procedures, and such reliance is a reasonable way for the Corps to ensure that the projects it authorizes under general permits will have only minimal impacts.” *Ohio Valley Env’tl. Coalition v. Bulen*, 429 F.3d 493, 502 (4th Cir. 2005). However, that decision does not justify the Corps’ proposal. First, the language of section 404(e) is clear, and we respectfully disagree with any suggestion that pointing to undefined post-permit procedures can substitute for the required pre-permit analysis – based on substantial evidence – that the activities will in fact have minimal impacts. *See Ohio Valley Env’tl. Coalition v. Bulen*, 437 F.3d 421, 423 (4th Cir. 2006) (denial of rehearing *en banc*) (King, J., dissenting) (“The Corps’ ability to make such *post-issuance* evaluations, however, does not relieve it of the responsibility of making the *pre-issuance* determination mandated by section 404(e).”). Second, the Fourth Circuit did not rule that the Corps’ reliance on post-permit mitigation was lawful; to the contrary, the court left that issue open on remand. *OVEC*, 429 F.3d at 502 n. 6; *see also Sierra Club v. U.S. Army Corps of Eng’rs*, 464 F.Supp.2d 1171, 1204 (M.D. Fla. 2006) (discussing *OVEC*, and noting that “the Fourth Circuit did not address the issue of whether the Corps’ reliance on any *particular* post-permit consideration, including mitigation, was arbitrary and capricious.”). Third, the Fourth Circuit itself stated, “[w]e would have substantial doubts about the Corps’ ability to issue a nationwide permit that relied solely on post-issuance, case-by-case determinations of minimal impact, with no general pre-issuance determinations. In such a case, the Corps’ ‘determinations’ would consist of little more than its own promise to obey the law.” *OVEC*, 429 F.3d at 502. We submit that this is effectively what the Corps has done with its heavy reliance on district engineer review of PCNs in many of these proposed permits.

The Corps has developed guidance that establishes two primary oversight activities for compensatory mitigation: requiring the parties performing mitigation to periodically submit monitoring reports to the Corps and conducting compliance inspections of the mitigation. However, parts of the guidance are vague or internally inconsistent. For example, the guidance suggests that the Corps place a high priority on requiring and reviewing monitoring reports when “substantial mitigation” is required, but it does not define substantial mitigation. Furthermore, one section of the guidance directs district officials to conduct compliance inspections of a relatively high percentage of compensatory mitigation sites, while another section designates these inspections as a low priority, leading to confusion by Corps officials.

Overall, the seven Corps districts GAO visited performed limited oversight to determine the status of compensatory mitigation. The Corps required monitoring reports for 89 of the 152 permit files reviewed where the permittee was required to perform compensatory mitigation. However, only 21 of these files contained evidence that the Corps received these reports. Moreover, only 15 percent of the 152 permit files contained evidence that the Corps had conducted a compliance inspection. The Corps districts provided somewhat more oversight for mitigation performed by the 85 mitigation banks and 12 in-lieu-fee arrangements that GAO reviewed. For the 60 mitigation banks that were required to submit monitoring reports, 70 percent of the files contained evidence that the Corps had received at least one monitoring report. However, only 36 percent of the mitigation bank files that GAO reviewed contained evidence that the Corps conducted an inspection. For the 6 in-lieu-fee arrangements that were required to submit monitoring reports to the Corps, 5 had submitted at least one report. In addition, the Corps had conducted inspections of 5 of the 12 arrangements.

The Corps can take a variety of enforcement actions if required compensatory mitigation is not performed. These actions include issuing compliance orders, assessing administrative penalties of up to \$27,500, requiring the permittee to forfeit a bond, suspending or revoking a permit, implementing the enforcement provisions of agreements with third parties, and recommending legal actions. District officials rarely use these actions and rely primarily on negotiation to resolve any violations. In some cases, GAO found district officials may not be able to use enforcement actions after detecting instances of noncompliance because they have limited their enforcement capabilities. For example, because they did not always specify the requirements of compensatory mitigation in the permits, they had no legal recourse for noncompliance.

U.S. General Accounting Office, Pub. No. GAO-05-898, *Wetlands Protection: Corps of Engineers Does Not Have an Effective Oversight Approach to Ensure That Compensatory Mitigation is Occurring* (Sept. 2005). Similarly, others who have analyzed the real-world implementation of compensatory mitigation have concluded that it is rife with failures. *See, e.g.,* R. E. Turner, et al., *Count it by Acre or Function – Mitigation Adds Up to Net Loss of Wetlands*, 23(6) Nat'l Wetlands Newsletter 5 (2001); Comments of National Wildlife Fed. et al., on the Proposed Rule on “Compensatory Mitigation for Losses of Aquatic Resources,” Docket Number EPA-HQ-OW-2006-0020 (2006). Although the Corps’ mitigation regulations have changed since these prior analyses, *see* 73 Fed. Reg. 19,594 (Apr. 10, 2008), the record does not reflect

that these regulations have improved the success of mitigation, much less improved it so dramatically that it can be relied on to assume that any adverse impacts from NWP-authorized activities will be minimal.

c. The NWPs fail to adequately guard against adverse impacts to streams.

Of the proposed nationwide permits, many allow unlimited or barely limited impacts to streams, while others give the Corps discretion to waive stream impact limits.

- Numerous section 404 NWPs allow unlimited impacts to streams, including NWPs 3, 4, 7, 15, 16, 17, 20, 22, 23, 25, 27, 30, 31, 33, 37, 38, 41, 45, 48, and 49.
- One NWP gives the district engineer virtually unfettered discretion to waive linear foot stream impact limitations; NWP 13 specifies that the 500 linear foot limitation on bank stabilization can be waived by the district engineer.
- At least two NWPs allow unlimited impacts to streams in particular instances: NWP 5 (imposes a 25 cubic yard limit on only some activities); NWP 6 (imposes a 1/10 acre limit on only some activities).
- At least two NWPs give the district engineer virtually unfettered discretion to waive areal impact limitations: NWP 36 (both the 50 cubic yard limit, and 20 foot wide boat ramp limit, can be waived by the district engineer); NWP 54 (allowing waiver of linear foot extension of fill into water bodies and 500 foot limit of along-bank activity).
- Several other NWPs have limits on the amount of impact that can occur at particular locations but authorize impacts at an unlimited number of locations, effectively allowing unlimited impacts: NWPs 12, 14, C, and D authorize up to ½ acre of impacts for each activity associated with various linear projects that cross “a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations.”⁹ *See, e.g.*, 85 Fed. Reg. at 57, 371 (Note 2 to NWP 12).
- In a new development for this proposal, the Corps proposes to rescind linear foot limitations for numerous NWPs. Specifically, the proposal would remove 300-foot limits in NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52. The Corps argues that these linear foot limits are unneeded in view of the ½ acre areal limits in those permits, but acknowledges that a typical first-order stream is only about 6.2 feet wide and a second-order stream is about 8.5 feet wide, such that these NWPs would now be able to authorize the destruction of more than 3,500 feet of a first-order stream or more than 2,500 feet of a second-order stream.

Consequently, each of these NWPs allow for unlimited, or barely limited, impacts to rivers and streams, both individually and cumulatively. Each permit should have strict area, and for streams both area and linear, impact limitations that cannot be waived. A single measure is not sufficient

⁹ The Corps unhelpfully fails to define what makes two locations “separate and distant.”

for streams because their functions are a consequence of channel width, floodplain, and riparian ecosystem in addition to length. Stream impacts also should be limited by the order and type of the stream being impacted.

d. The draft decision documents are fatally flawed, and do not demonstrate that the NWP's will have only minimal impacts to streams.

The draft decision documents for the NWP's fail to provide information that would support a finding that each of the NWP's would result in only minimal impacts, individually and cumulatively, considering the unique functions of streams and the importance of headwater and other small streams. Thus, the Corps' determinations that each of the NWP's will produce no more than minimal impacts to waters of the United States, individually or cumulatively, are fundamentally and fatally flawed.

First, the decision documents do not evaluate the impacts to specific types of waters (*i.e.*, headwater streams, riffle and pool complexes, wetlands, vernal pools, vegetated shallows). Instead, the impacts analyses lump all waters together, providing nothing more than an unsupported approximation of impacts to "acres of waters of the United States, including jurisdictional wetlands." *E.g.*, Draft Decision Document for NWP 12 at 65-66; Draft Decision Document for NWP 14 at 60-61; Draft Decision Document for NWP 39 at 60; Draft Decision Document for NWP 40 at 59.

Without an assessment of the types of waters impacted, it is not possible to properly assess whether the individual or cumulative impacts are in fact significant. For example, the loss of 10 acres of vernal pools will certainly be significant, while the loss of 10 acres of ponds or other open waters *might* not be significant. In addition to acreage impacts, a full assessment of stream impacts would also require an assessment of linear feet impacted and stream order impacted (see discussion below).

Second, the draft decision documents fail to take into account the losses of streams, and losses of particular orders of streams, to date. Small streams have proven to be very vulnerable to development, urbanization, logging, mining, and other activities and these losses must be taken into account when determining both the individual and cumulative impacts of stream-impacting activities permitted through the NWP's.

Third, with respect to streams, the draft decision documents ignore reality, and basic and well-established stream science. The draft decision documents ignore the fact that activities carried out in a portion of a single stream could well have more than minimal adverse impacts, and that destruction of numerous small streams has in fact caused significant cumulative adverse effects in numerous watersheds across the country.

The draft decision documents also ignore the fact that streams – even the smallest intermittent and ephemeral streams – play critical ecological and hydrological roles that must be considered in assessing impacts from stream losses.¹⁰ The riparian zone (the transition zone

¹⁰ We are of course aware that the Corps and EPA have finalized a regulation that excludes ephemeral streams (and many other waters) from the safeguards of the Clean Water Act. 85 Fed. Reg. 22,250 (Apr. 21, 2020). However,

along edges of stream channels) is also ecologically and hydrology important. The draft decision documents completely fail to account for (or even recognize) these vital roles.

The draft decision documents also fail to recognize and account for the importance of an impacted stream's position in the landscape and in the stream network. Indeed, the draft decision documents do not even acknowledge the existence of different stream types and stream orders, or the critical roles of headwater and other small streams. Instead, the draft decision documents assume that activities affecting streams will have the same degree of adverse impact regardless of the size of the stream, or the stream's location in the landscape. The draft decision documents also appear to assume that when a "small" portion of a stream is affected by an activity, the impacts will always be minimal. These assumptions are patently incorrect.

The scientific literature is replete with studies that demonstrate both the significance of position in the stream network for determining ecosystem structure and function, and the roles that different order streams play in the functioning of entire river networks. Most prominently, the Corps is well aware of this record because the Corps based its 2015 Clean Water Rule on a state-of-the-science review of the role of various water bodies in the ecosystem. That review found, among other things: "The scientific literature unequivocally demonstrates that streams, individually or cumulatively, exert a strong influence on the integrity of downstream waters. All tributary streams, including perennial, intermittent, and ephemeral streams, are physically, chemically, and biologically connected to downstream rivers via channels and associated alluvial deposits where water and other materials are concentrated, mixed, transformed, and transported." U.S. EPA, Office of Research & Development, *Connectivity of Streams & Wetlands to Downstream Waters: A Review & Synthesis of the Scientific Evidence*, EPA/600/R-14/475F, at ES-2 (Jan. 2015) (hereinafter "Connectivity Report").

These basic premises of stream ecology can also be found in standard textbooks on the topic. *E.g.*, Vannote, R.L. et al. (1980) *The river continuum concept*. Canadian Journal of Fisheries and Aquatic Sciences 37: 130-137; Minshall, G.W. et al. (1985) *Developments in stream ecosystem theory*. Canadian Journal of Fisheries and Aquatic Sciences 42: 1045-1055; Minshall, G.W. et al. (1983) *Interbiome comparisons of stream ecosystem dynamics*. Ecological Monographs 53: 1-25; Naiman, R.J. et al. (1987) *Longitudinal patterns of ecosystem processes and community structure in a subarctic river continuum*. Ecology 68: 1139-1156; Allan, J.D. (1995) Stream Ecology: Structure and Function of Running Waters. Chapman & Hall. London.

For example, headwater streams have a unique role in a riverine ecosystem, and destruction of portions of such streams can have very significant impacts. Meyer, J.L. and J.B. Wallace. (2001) *Lost linkages and lotic ecology: rediscovering small streams*. pp. 295-371 in M.C. Press, N. Huntly and S. Levin (eds.) Ecology: Achievement and Challenge. Blackwell Science; Lowe, W. H. and G.E. Likens. (2005) *Moving headwater streams to the head of the class*. BioScience 55: 196-197.

even if we were to accept the propriety of that rule – which we do not – the Corps' issuance of these NHPs must still examine the impacts of permitted activities on the environment as a whole, which obviously includes features like ephemeral streams.

The destruction or alteration of small stream channels, which make up a huge portion of most watersheds,¹¹ can produce a cascade of negative effects throughout the watershed. The upper reaches of stream networks are important for storing water, recharging groundwater, reducing the intensity and frequency of floods, retaining sediments, and protecting and improving water quality by storing and modifying potential pollutants ranging from chemical fertilizers to rotting carcasses. They also provide vital ecological functions. J.L. Meyer, A.L. Kaplan, et al, *Where Rivers are Born: The Scientific Imperative for Defending Small Streams and Wetlands*, at 13-14 (2003) (*Where Rivers Are Born*, attached). Altering small streams and wetlands disrupts these processes with very real consequences downstream. *Id.* at 11.

For example:

- *Small Streams Provide Vital Ecological Functions:* Even very small, intermittent streams can host robust aquatic communities and play a role in the life cycles of migratory organisms. For example, in one California watershed the most important spawning tributary for rainbow trout was found to be an intermittent stream. D.C. Erman and V.M. Hawthorne, *The quantitative importance of an intermittent stream in the spawning of rainbow trout*, Transactions of the American Fisheries Society 105(6): 675-681 (1976). Even the smallest streams can host populations of aquatic insects that play an important role in the food chain. J.L. Meyer and J.B. Wallace, *Lost linkages and lotic ecology: rediscovering small streams*, in Ecology: Achievement and Challenge, M.C. Press, N.J. Huntly, and S. Levin, eds. (2001) at 310. Small headwater streams, especially if they are forested, also play a critical role in introducing nutrients to the watershed and beginning the process of cycling those nutrients through the food chain. *Id.* at pp. 296, 308. Indeed, in freshwater ecosystems, much of the recycling nutrients into the food chain happens in small streams and wetlands, where microorganisms transform everything from leaf litter and downed logs to dead salamanders into food for other organisms in the aquatic food web, including mayflies, frogs and salmon. *Where Rivers are Born* at 14.
- *Small Streams Provide Critical Water Quality Protections:* “Headwater streams and associated wetlands both retain and transform excess nutrients, thereby preventing them from traveling downstream. Physical, chemical and biological processes in headwater streams interact to provide this ecosystem service. Compared with larger streams and rivers, small streams, especially shallow ones, have more water in physical contact with a stream channel. Therefore, the average distance traveled by a particle before it is removed from the water column is shorter in headwater streams than in larger ones. A study of headwater streams in the southern Appalachian Mountains found that both phosphorus and the nitrogen-containing compound ammonium traveled less than 65 feet downstream before being removed from the water.” *Id.* at 13 (emphasis added).

“In headwater streams and wetlands, more water is in direct contact with the streambed, where most processing takes place. Bacteria, fungi and other microorganisms living on

¹¹ According to one source, first- and second-order streams make up approximately 95 percent of all stream channels and 73 percent of all stream channel length in the United States. J.L. Meyer and J.B. Wallace, *Lost linkages and lotic ecology: rediscovering small streams*, in Ecology: Achievement and Challenge, M.C. Press, N.J. Huntly, and S. Levin, eds. (2001).

the bottom of a stream consume inorganic nitrogen and phosphorus and convert them into less harmful, more biologically beneficial compounds. *A mathematical model based on research in 14 headwater streams throughout the U.S. shows that 64 percent of inorganic nitrogen entering a small stream is retained or transformed within 1,000 yards.*” *Id.* at 14 (emphasis added).

- *Small Streams Provide Natural Flood Protection:* First-order streams are the primary collectors of rain in most watersheds, and the way they transport water affects the entire watershed, particularly the way in which larger streams in the watershed will behave during floods. D.F. Ritter, R.C. Kochehl, and J.R. Miller, Process Geomorphology, pp. 151, 180 (1995). Loss of small channels and low-order streams in a watershed increases the “flashiness” of a watershed and the frequency of flood events. *Id.* The modifications to those streams typical of development and urbanization, such as channelization and bank armoring, also increase flood flows, a phenomenon exacerbated by the increase in impervious surfaces associated with development. This increase in the frequency and force of flood flows results in a host of negative effects, including habitat destruction, erosion, instability, and sedimentation. *Id.*; Stream Corridor Restoration, Federal Interagency Stream Restoration Working Group, Chapter 3 (1998).
- *Small Streams Retain Sediments:* Headwater systems retain sediments, keeping excess sediment out of downstream rivers and lakes where it can become a significant problem for plants, fish, wildlife, and people. *Where Rivers are Born* at 12. In general, sediment yield from streams increases as the stream order decreases. D.F. Ritter, R.C. Kochehl, and J.R. Miller, Process Geomorphology, pp. 151, 180 (1995). Excess sedimentation can create significant damage to aquatic ecosystems. For example, suspended sediments make water murkier preventing underwater plants from receiving enough light to grow, reducing spawning cues for some fish, and smothering fish eggs and small organisms that form the base of many food webs. Excess sediments can also produce significant economic costs. For example, excess sediment can increase dredging costs to maintain navigation channels and harbors, and can increase water filtration costs for municipalities and industries. *Where Rivers are Born* at 12.

The Corps must conduct a legally sufficient environmental review of the potential impacts of each of the proposed NWP that includes a full consideration of the issues discussed above.

e. The Corps lacks a permit mechanism to conclude that cumulative impacts will not be more than minimal.

One of the obvious failures throughout the NWPs is that the Corps’ proposal does not contain any provision that ensures that the adverse effects of the permit will be minimal when used by multiple permittees, especially within discrete areas. For instance, there is no limit on the number of times that permits may be used in a given watershed or waterbody, no cap on the amount of total acres or linear feet of particular resources that can be damaged or destroyed (within a watershed, a region, or nationwide), no restriction on the ability to use an NWP within a certain radius of another NWP permittee, or any similar protection against a permit’s overuse.

Even more importantly, the Corps does not condition the use of these permits in any way that ensures that the lost functions associated with impacted water resources will be assessed, much less addressed, on a cumulative basis.

f. The Corps' own record indicates that cumulative impacts will be more than minimal.

Numerous draft decision documents indicate that a significant amount of aquatic resources will be impacted – and not addressed with compensatory mitigation¹² – over the five-year life of these NWP. Specifically, the Corps predicts that dozens of NWPs would result in unmitigated acres of impacts to water bodies without explaining how those impacts should be considered minimal. Indeed, 10 NWPs (3, 4, 12, 13,14, 31, 37, 48, C, and D) would authorize activities adversely impacting more than 1,000 unmitigated acres of waters. *See* Appendix A (table summarizing impacts assessments from draft decision documents).

4. The proposed NWPs do not comply with the section 404(b) guidelines.

The rule, embodied in the guidelines, is that impacts to water resources are first to be avoided, then to be minimized, and only then to be mitigated. *See* 40 C.F.R. § 230.10(a) (prohibiting discharges of dredged or fill material where there is a less damaging, practicable alternative without “significant adverse environmental consequences”). In the case of a “special aquatic site,” including any wetlands, unless the activity in question is ‘water dependent,’ practicable alternatives are assumed to be available, except where “clearly demonstrated otherwise.” *Id.* § 230.10(a)(3). As noted above, although the regulations state that “consideration of alternatives in § 230.10(a) are not *directly* applicable to General permits,” *id.* § 230.7(b)(1) (emphasis added), because an alternatives analysis of specific sites and projects cannot be performed before a general permit is issued, the alternatives analysis requirement of the guidelines must still be satisfied.¹³

Despite the guidelines’ requirements, there is no clear directive in the NWPs that prohibits their use unless the avoidance and minimization requirements are met and practicable alternatives are unavailable. The closest that the Corps gets is GC 23, which says:

The district engineer will *consider* the following factors *when determining appropriate and practical mitigation* necessary to ensure that the individual and cumulative *adverse*

¹² This observation is not a reflection of agreement that mitigation can be used to render NWPs’ impacts to be minimal. Our comments in this section specifically reject that argument. But even if mitigation could be taken into account, many NWPs have remaining unmitigated impacts and the Corps fails to explain how those impacts are minimal.

¹³ The Corps’ decision documents try to wish the guidelines’ alternatives analysis obligation away by stating that “the consideration of off-site alternatives under the 404(b)(1) Guidelines does not apply to specific projects authorized by general permits,” and instead it is sufficient to ask whether proceeding by individual permitting instead of an NWP is a satisfactory alternative. *See, e.g.*, Draft Decision Document for NWP 12 at 6. This approach contravenes the plain language of the Act, which demands that all general permits be “based on the guidelines,” 33 U.S.C. § 1344(e)(1), and is absurd to boot – the alternatives analysis requires an inquiry about the discharge, not the method of permitting. 40 C.F.R. § 230.10(a) (requiring analysis of whether “there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem,” not whether the Corps would prefer to use a particular type of permit).

*environmental effects are minimal: **** (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (*i.e.*, on site).

85 Fed. Reg. at 57,388 (emphasis added). The italicized portions of GC 23 suggest that avoidance and minimization are only things for the district engineer to consider, and only then in order to determine what mitigation is needed to reduce the impacts to a “minimal” level. This could be read to suggest that a prospective permittee may not need to avoid and minimize the initial impacts of the activity before being eligible for NWP authorization. To ensure that the guidelines are in fact met, the language must be clarified to direct all NWP prospective permittees to avoid and minimize impacts initially, and it should be changed to require prospective permittees to document (and include such documentation in a PCN) the steps they take to satisfy the condition.

The NWPs also do not limit discharges into “special aquatic sites” to situations where the activity is ‘water dependent’ or where the prospective permittee clearly demonstrates that there are not practicable alternatives available. To the contrary, the NWPs typically fail to address this requirement of the guidelines, either by being silent on the question and implicitly letting prohibited activities take place or by relying on the PCN process but not directing the district engineer to look at the relevant regulatory requirements. *See, e.g.*, 85 Fed. Reg. at 57,335 (“Despite the status of submerged aquatic vegetation in the 404(b)(1) Guidelines as a special aquatic site (*i.e.*, vegetated shallows under 40 CFR 230.43), the Guidelines do not prohibit discharges of dredged or fill material into special aquatic sites as long as a section 404 permit is issued by the Corps of Engineers or other permitting authority (*e.g.*, a state or tribe that has [been] approved by EPA to implement the section 404 permit program under section 404(g) of the Act). For activities authorized by the NWPs, the individual and cumulative adverse environmental effects caused by permitted impacts to submerged aquatic vegetation must be no more than minimal.”); *see also id.* at 57,354 (discussing GC 32 and stating: “For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing, including those single and complete crossings authorized by NWP but do not require PCNs.”).

As discussed above, the NWPs may not authorize activities that cause or contribute to a violation of state water quality standards. 40 C.F.R. § 230.10(b). However, the NWPs do not comply with this requirement. The Corps appears to be relying on the state certification process pursuant to section 401 of the Act, *see generally* GC 25, but that does not fulfill the Corps’ affirmative obligation to guard against water quality standards violations. The primary reason for that failure is that states may waive – or be deemed to have waived – review under section 401 even without any determination about compliance with state water quality standards. Indeed, even if the Corps receives a certification from the state that the issuance of these NWPs will not violate state water quality standards, that does not suffice. Although the Corps maintains that “[c]ertification of compliance with applicable effluent limitations and water quality standards required under provisions of section 401 of the Clean Water Act will be considered conclusive with respect to water quality considerations unless the Regional Administrator, Environmental Protection Agency (EPA), advises of other water quality aspects to be taken into consideration,”

33 C.F.R. § 320.4(d), if the Corps finalizes NWP that are inconsistent with state standards, it will both violate the 404(b) guidelines and constitute arbitrary and capricious agency action, because the Corps has an independent duty to ensure compliance.

Additionally, some permits on their face authorize discharges in violation of state standards. For instance NWP 21 would authorize the use of waters of the United States as mining waste dumps, notwithstanding the general prohibition on state water quality standards authorizing such activities. *See* 40 C.F.R. § 131.10(a) (“In no case shall a State adopt waste transport or waste assimilation as a designated use for any waters of the United States.”); *see also, e.g.*, W.Va. Code of State Rules § 47-2-6.1.a (“Waste assimilation and transport are not recognized as designated uses.”); *id.* § 47-2-3.2.b. (prohibiting waste materials that cause or contribute materially to “[d]eposits or sludge banks on the bottom”; *id.* § 47-2-3.2.e. (prohibiting waste “[m]aterials in concentrations which are harmful, hazardous or toxic to man, animal or aquatic life”).

Another way in which these NWPs fail to comply with the guidelines is that they do not guarantee that the permitted activities will not cause or contribute to “[s]ignificantly adverse effects” on a number of values protected by the guidelines, including: “human health or welfare, including but not limited to, effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites;” “life stages of aquatic life and other wildlife dependent on aquatic ecosystems;” “aquatic ecosystem diversity, productivity, and stability;” and “recreational, aesthetic, and economic values.” 40 C.F.R. §§ 230.10(c)(1)-(4).

First, the Corps takes too narrow a view of its obligations to protect fish and wildlife. To take an example, the Corps says the following about the impact of NWP 23:

General condition 2 will reduce the adverse effects to fish and other aquatic species by prohibiting activities that substantially disrupt the movement of indigenous aquatic species. Compliance with general conditions 3 and 5 will ensure that the authorized work has minimal adverse effects on spawning areas and shellfish beds, respectively. The authorized work cannot have more than minimal adverse effects on breeding areas for migratory birds, due to the requirements of general condition 4.

U.S. Army Corps of Eng’rs, Draft Decision Document: Nationwide Permit 23, at 49. This rationale is repeated in numerous, if not every one, of the draft decision documents for the different NWPs. However, it fails entirely to meet the requirements of the guidelines; it is limited to indigenous species, not other species that depend upon the waterbody, for example.

Second, although the Corps draft decision documents routinely recognize the adverse effects on recreational and aesthetic values that the permitted activities could have, the NWPs do not address these impacts in any meaningful way. For instance, the Corps acknowledges in the draft decision document for NWP 23 that “[a]ctivities authorized by this NWP may change the recreational uses of the area,” but claims that such “changes will be minor.” *Id.* at 50. In particular, the Corps says, “[c]ertain recreational activities, such as bird watching, hunting, and

fishing may no longer be available in the area.” *Id.* Yet the Corps’ proposal contains no restriction on using the NWP’s in a way that degrades recreational values.¹⁴

C. The Proposed NWP’s Frequently Use Hortatory Language When They Must Be Mandatory.

Throughout the proposal, the Corps uses language that would give the district engineer or the prospective permittee so much discretion that the agency cannot conclude that these activities will not cause more than minimal harm. Some examples include:

- NWP’s 6, 12, C, D: “In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench.” 85 Fed. Reg. at 57,369, 57,370, 57,383, 57,384.
- NWP 27: “Only native plant species should be planted at the site.” *Id.* at 57,374.
- NWP 37: “In general, the permittee should wait until the district engineer issues an NWP verification or 45 calendar days have passed before proceeding with the watershed protection and rehabilitation activity. However, in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur, the emergency watershed protection and rehabilitation activity may proceed immediately....” *Id.* at 57,377.
- NWP 45: “Minor dredging is limited to the amount necessary to restore the damaged upland area and should not significantly alter the pre-existing bottom contours of the waterbody.” *Id.* at 57,379.
- NWP 48, A, B: “The permittee should notify the applicable U.S. Coast Guard office regarding the project.” *Id.* at 57,379, 57,382.
- NWP 54: “Living shorelines should maintain the natural continuity of the land-water interface, and retain or enhance shoreline ecological processes.”
- NWP A, B: “The pre-construction notification should describe all species and culture activities the operator expects to undertake during the effective period of this NWP.” *Id.* at 57,382.
- General Conditions Note: “Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP.” *Id.* at 57,385.
- GC 2: “If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.” *Id.*
- GC 23: “Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).” *Id.* at 57,388. “If restoring riparian areas involves planting vegetation, only native species should be planted.” *Id.* “Since the likelihood of success is greater and the impacts to potentially valuable uplands

¹⁴ Similarly, although the draft decision documents typically acknowledge that there may be aesthetic harms arising from the conduct of permitted activities, the NWP’s do not require the permittees to limit such harms or even to take steps to mitigate them when they do occur. *See, e.g.,* U.S. Army Corps of Eng’rs, Draft Decision Document: Nationwide Permit 23, at 47.

are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.” *Id.* at 57,389.

- GC 32: “The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.” *Id.* at 57,391. “Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans). . . .” *Id.*
- District Engineer’s Decision: “If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or streams, the prospective permittee should submit a mitigation proposal with the PCN.” *Id.* at 57,392.

This discretion is problematic because it will create varying standards across the country. The Corps has 38 domestic districts, each headed by its own district engineer. This discretion could also create vast differences within each district as the district engineers typically rotate out of the Corps after a short period of time (often as short as two years). Of course, one can expect that prospective permittees will also implement the discretion they are given in dramatically different ways.

D. The Corps’ Proposal Violates the Endangered Species Act.

On two prior occasions, federal courts have held that the Corps’ refusal to conduct Endangered Species Act §7(a)(2) consultation for the issuance of NWPs violated the Act. *Northern Plains Resource Council v. U.S. Army Corps of Eng’rs*, CV-19-44-GF-BMM (D. Mont., Apr. 15, 2020); *National Wildlife Federation v. Brownlee*, 402 F. Supp.2d 1 (D.D.C. 2005). Despite these holdings, the Corps again proposes in this action not to consult on the issuance of these NWPs and to rely on district engineers reviewing project-specific PCNs and taking action to prevent any effect on endangered or threatened species or to consult with the Fish and Wildlife Service (FWS) or National Marine Fisheries Service (NMFS) on those projects. If the Corps carries through with this proposal without consultation, it will violate the ESA.

1. Section 7 of the ESA requires federal agencies to ensure that their actions are not likely to jeopardize ESA-listed species or adversely modify critical habitat

The ESA’s fundamental purpose is to conserve imperiled species and the ecosystems on which they depend. 16 U.S.C. § 1531(b). To that end, the ESA establishes a comprehensive program to ensure the survival and recovery of threatened and endangered species. The “heart” of this comprehensive program is section 7 of the Act. *Cal. ex rel. Lockyer v. U.S. Dep’t of Agric.*, 575 F.3d 999, 1018 (9th Cir. 2009). Pursuant to section 7, each federal agency “shall” consult with the Fish & Wildlife Service (for terrestrial species) and the National Marine Fisheries Service (for marine species) to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered

species or threatened species or result in the destruction or adverse modification of [critical] habitat of such species.” 16 U.S.C. § 1536(a)(2). Federal agencies also must “use the best scientific and commercial data available” in assessing the potential impacts on listed species and critical habitat. *Id.*

In the formal consultation process, FWS and/or NMFS must evaluate the effects of the proposed agency action on listed species and their habitat and determine whether the action may proceed under the ESA. 50 C.F.R. § 402.14. The consultation process is the ESA’s single most important tool for protecting vulnerable species, and it often results in modification of proposed agency actions to lessen the action’s impact on endangered or threatened species. The formal consultation process under § 7 results in a biological opinion, which provides decision-makers and the public with comprehensive information about the effects of the proposed action on threatened and endangered species and their habitat and serves as the vehicle for delivering FWS’ and/or NMFS’ judgment about whether the proposed action complies with the substantive requirements of § 7(a)(2) and thus may proceed. *Id.*

The threshold for triggering section 7’s consultation requirement is low. A federal agency must determine “at the earliest possible time” whether a proposed action “may affect” an ESA-listed species or its critical habitat. 50 C.F.R. § 402.14(a). If the agency determines that the proposed action “may affect” listed species or critical habitat, the agency must initiate formal consultation with the relevant Service, unless the agency and Service agree in writing that the proposed action is “not likely to adversely affect” listed species or critical habitat. *Id.* § 402.14(a), (b). “Any possible effect, whether beneficial, benign, adverse or of an undetermined character, triggers the formal consultation requirement.” Interagency Cooperation – Endangered Species Act of 1973, as Amended; Final Rule, 51 Fed. Reg. 19,926, 19,949 (June 3, 1986). For broad federal programs, action agencies and the Services must engage in “programmatic consultation” to consider the cumulative impacts of the program and to guide implementation by establishing criteria to avoid, minimize, or offset adverse effects on listed species and critical habitat. *See* 50 C.F.R. §§ 402.02, 402.14(i)(6); *see also* 80 Fed. Reg. 26,832, 26,832, 26,837 (May 11, 2015).

An agency must complete the section 7 consultation process “*before* engaging in a discretionary action” that “may affect listed species.” *Turtle Island Restoration Network v. NMFS*, 340 F.3d 969, 974 (9th Cir. 2003) (emphasis added). At the end of the formal consultation process, the relevant Service issues a “biological opinion” on whether the proposed action is likely to jeopardize any ESA-listed species or result in the adverse modification of critical habitat. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g)(4), (h). If the Service concludes that a proposed agency action is likely to jeopardize a listed species or adversely modify its critical habitat, the Service must propose measures that would avoid jeopardy or adverse habitat modification. *See* 16 U.S.C. § 1536(b)(3)(A).

2. The NWP’s would authorize dumping dredged or fill material into waters upon which endangered and threatened species rely.

Effective consultation on the Corps’ sweeping use of NWP’s to authorize dredge and fill activities in wetlands and other waters of the U.S. is essential to conserving threatened and

endangered species nationwide. Wetlands provide crucial habitat for many species protected by the Endangered Species Act. According to the National Academy of Sciences, “[l]arge numbers of wetland species have received special attention because their populations have dwindled to levels that mark them as endangered.” National Research Council, Restoration of Aquatic Ecosystems 304 (1992).

In addition, “more than one-third of the United States’ threatened and endangered species live only in wetlands, and nearly half use wetlands at some point in their lifecycle.”¹⁵ Wetlands that the NHPs would allow to be filled support a diverse range of animals by, for example, acting as integral components of food webs, and providing breeding sites for birds, nursery habitat for amphibians, colonization opportunities for invertebrates, and maturation habitat for insects.¹⁶ Endangered and threatened species that inhabit wetlands include birds like the Audubon’s crested caracara, wood stork, Everglade snail kite, Cape Sable seaside sparrow, piping plover, yellow-billed cuckoo, Mississippi sandhill crane, least Bell’s vireo, whooping crane, and roseate tern. Wetlands also provide important habitat for endangered and threatened invertebrates like the Hine’s emerald dragonfly, Poweshiek skipperling, Mitchell’s satyr butterfly, and vernal pool fairy shrimp; amphibians like the California tiger salamander and Oregon spotted frog; reptiles like the eastern massasauga rattlesnake and bog turtle; mammals like the New Mexico meadow jumping mouse; and plants like the green pitcher plant, mountain sweet pitcher plant, northeastern bulrush, Cooley’s meadowrue, pondberry, bunched arrowhead, and eastern prairie fringed orchid. Many other ESA-listed species live in wetlands or rely on them for food.

In a 1997 study, two FWS biologists concluded that 46% of the species in the United States that were listed as threatened or endangered are associated with wetlands. Karen Day Doylan & Donald R. MacLean, Linking Species Loss with Wetlands Loss, National Wetlands Newsletter, November-December 1997, at 13, 14. In some states, the FWS biologists continued, the proportion of listed species that are wetlands-associated was even larger. For example, 71 percent of Florida’s listed animals and 20 percent of its listed plants were associated with wetlands. In California, 63 percent of listed animal species and 29 percent of listed plants were wetland-associated. All of Georgia’s listed animals, and 59 percent of its listed plants, were wetland-associated. *Id.* at 13. The FWS biologists concluded that there is a “crucial” relationship between wetland losses and species endangerment. *Id.* at 17.

Similarly, endangered and threatened species inhabit streams that could be affected by activities authorized by these NHPs. *See, e.g.*, 51 Fed. Reg. 16,042 (Apr. 30, 1986) (listing Sonora chub as threatened, and identifying habitat as including an intermittent stream); *TVA v. Hill*, 437 U.S. 153 (1978) (concerning project on Little Tennessee River that could affect snail darter). A 2003 report noted that “[m]any headwater species, including fish, snails, crayfish, insects and salamanders, are now in danger of extinction as a result of human actions. A few dozen headwater species are already listed under the U.S. Endangered Species Act; hundreds of others are rare enough to be considered for listing.” *Where Rivers are Born*, at 18.

¹⁵ EPA and U.S. Army Corps of Engineers, Economic Analysis for the Proposed Revised Definition of “Waters of the United States,” at 49 (Dec. 2018).

¹⁶ Connectivity Report, ES-3, 4-32 to 4-35.

Finally, these NWP’s “may affect” the survival and critical habitat of countless other endangered and threatened species that live in or depend on downstream waters like rivers and lakes, such as the West Indian manatee, Atlantic salmon, pallid sturgeon, shortnose sturgeon, Atlantic sturgeon, Gila chub, Rio Grande silvery minnow, Colorado pikeminnow, bull trout, rabbitsfoot mussel, sheepsnose mussel, dwarf wedgemussel, higin’s eye pearlymussel, snuffbox mussel, spectaclecase mussel, least tern, and Yuma clapper rail. The NWP’s will degrade the quality of those downstream waters—and harm the species that depend on them—because, as the Corps is well aware, the wetlands and streams significantly impact those waters.¹⁷

3. The Corps must engage in § 7 consultation prior to reissuing its NWP’s.

Issuing NWP’s is a discretionary federal action that is subject to the ESA. The Clean Water Act, as noted above, says that the Corps “may ... issue general permits,” which clearly evinces Congressional intent not to require the issuance of any such permit.

Furthermore, federal agency authorizations of actions by private parties must comply fully with § 7. 16 U.S.C. § 1536 (a)(2) (§ 7 reaches “any action authorized...by” a federal agency); 50 C.F.R. § 402.02 (defining agency action broadly for purposes of § 7). The law is equally clear that agency actions that are programmatic in nature must comply fully with the § 7 consultation process if the “may affect” test is satisfied. *See, e.g., Pacific Rivers Council v. Thomas*, 30 F.3d 1050, 1053-54 (9th Cir. 1994) (holding forest plans to constitute agency action subject to the consultation requirements of §7).

In light of the importance of wetlands and streams to threatened and endangered species and their habitat, and in light of the extensive loss of water resources caused by the NWP program, it is plain that the Corps’ proposal to reissue and modify NWP’s “may affect” listed species and their habitat, and hence that consultation with FWS and NMFS is required under the ESA. The Corps’ draft decision documents are rife with admissions that authorized activities could impact waters on which endangered species depend. *See, e.g., U.S. Army Corps of Eng’rs, Draft Decision Document: Nationwide Permit 12* at 18-19 (“Habitat alterations as a cause or source of impairment may be the result of activities regulated under section 404 and section 10 because they involve discharges of dredged or fill material into jurisdictional waters or structures or work in navigable waters....”); *see also id.* at 28 (“Two common causes of impairment for rivers and streams, habitat alterations and flow alterations, may be due in part to activities regulated by the Corps under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899.”). Additionally, as noted above, numerous draft decision documents indicate that a significant amount of aquatic resources will be impacted over the five-year life of these NWP’s.

Based on this information, the Corps must consult for all of the specific NWP’s involving activities that may affect endangered or threatened species and for the NWP program as a whole. In fact, when the Services issued regulations in 2015 defining framework programmatic

¹⁷ *See* Connectivity Report at ES-5 (finding that discharging pollutants into streams and wetlands can degrade the integrity of downstream waters); *id.* at 2-46 to 2-47 (finding that loss of wetlands increases pollutants in downstream waters).

consultations, they specifically used the Corps' NWP program as an example of a federal program requiring programmatic consultation. 80 Fed. Reg. at 26,835 (“Examples of Federal programs that provide such a framework include . . . the U.S. Army Corps of Engineers’ Nationwide Permit Program.”). *See also, e.g., Northern Plains Resource Council*, CV-19-44-GF-BMM, slip op. at 10 (citing 80 Fed. Reg. at 26835 and stating, “[t]he Services specifically have listed the Corps’ nationwide permit program as an example of the type of federal program that provides a national-scale framework and that would be subject to programmatic consultation.”). The Services have therefore already explicitly directed the Corps to complete programmatic consultation for the NWP program, yet the Corps intends to ignore that directive.

The reason for the programmatic consultation requirement is clear: it is the only way to ensure that the piecemeal destruction of habitat from the thousands of construction activities authorized by specific NWPs and by all of the NWPs each year will not cumulatively jeopardize listed species. *See Wild Fish Conservancy v. Salazar*, 628 F.3d 513, 522 (9th Cir. 2010) (noting the obligation “to analyze the effect of the *entire* agency action”); *Am. Rivers v. U.S. Army Corps of Eng’rs*, 271 F. Supp. 2d 230, 255 (D.D.C. 2003) (requiring a comprehensive assessment of the overall impacts of agency activities on protected species). Programmatic consultation is also necessary to allow the Services to establish broad conservation measures to prevent jeopardy to species, such as ongoing monitoring to ensure that incidental take does not occur at unsustainable levels and restrictions to limit impacts at the programmatic level. *See* 80 Fed. Reg. at 26,833 (describing the purpose of programmatic consultation). The Corps is well aware that its reauthorization of the NWPs required programmatic consultation. The Corps initiated formal programmatic consultation on the 2012 reissuance of the NWPs with NMFS, and on February 15, 2012, NMFS released a Biological Opinion concluding that the Corps’ implementation of the NWP program was jeopardizing the continued existence of listed species under NMFS’s jurisdiction. Nat’l Marine Fisheries Serv., Endangered Species Consultation: Biological Opinion on U.S. Army Corps of Engineers’ Nationwide Permit Program (Feb. 2012) (hereinafter “NMFS 2012 BiOp”) (attached). The Corps reinitiated consultation to address NMFS’s concerns, and NMFS issued a new Biological Opinion in 2014.¹⁸

Despite this prior action and the clear import of the ESA, the Corps failed to consult over the 2017 NWPs, just as it proposes to do now. But that decision was not based on any change in the law or how it applies to the NWP program; indeed, David Olson, the Corps’ Regulatory Program Manager, stated in an email that “for the 2017 NWPs, we would have to do a new consultation. . . .” Email from David Olson, U.S. Army Corps of Engineers, to Margaret Gaffney-Smith, U.S. Army Corps of Engineers (Jan. 17, 2014) (attached). However, Mr. Olson went on to recommend that rather than engage in such consultation, the Corps should simply make a “no effect” determination—regardless of the Corps’ prior consultation with NMFS, which identified many adverse impacts to listed species from NWP-authorized activities—and rely on Corps districts to implement regional conditions, which “might make a national ‘no effect’ determination more legally defensible.” *Id.* He noted further:

¹⁸ Although that Biological Opinion did not make a jeopardy determination, it reiterated many of the agency’s concerns about the NWP program and required modifications to the NWPs, including data collection, monitoring, and corrective action, with semi-annual reporting requirements. It was only on the basis of these measures that NMFS was able to conclude that the 2012 issuance of the NWPs would not jeopardize listed species within its jurisdiction. However, it is not clear that the Corps complied with these measures.

We could continue to make the national “no effect” determination for each NWP reissuance until it is challenged in federal court and a judge rules against the Corps. If we lose in federal court, then we would start doing the national programmatic consultations again.

Id. The Corps has apparently embraced Mr. Olson’s scheme to avoid programmatic consultation. It failed to undertake a new programmatic consultation on the 2017 version of the NWP with NMFS and has *never* completed any programmatic consultation with FWS. It proposes to take the same approach today.

The ESA plainly requires that federal agencies *complete* the § 7 consultation process *prior* to implementing the action being consulted on. For example, the Ninth Circuit has held squarely that, “section 7(a)(2) of the ESA imposes a procedural duty on federal agencies to consult with the [FWS] *before* engaging in a discretionary action which may affect a protected species.” *Sierra Club v. Babbitt*, 65 F.3d 1502, 1504-05 (9th Cir. 1995) (emphasis added, footnote omitted). The ESA’s implementing regulations are equally clear, directing that “[f]ollowing the issuance of a biological opinion, the Federal agency shall determine *whether and in what manner to proceed with the action* in light of its section 7 obligations and the Service’s biological opinion.” 50 C.F.R. § 402.15(a) (emphasis added).

The Corps is thus in violation of §7 for failing to complete the mandatory formal consultation process with FWS and NMFS *prior* to reissuing and implementing its nationwide permits for wetland- and stream-altering activities under § 404 of the Clean Water Act. As a result, the Corps has violated its duty under ESA §7(a)(2) to ensure that its actions will not jeopardize listed species or adversely modify critical habitat, 16 U.S.C. §1536(a)(2), and the prohibition under §7(d) of “any irreversible or irretrievable commitment of resources with respect to [an] agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent” alternatives necessary to avoid jeopardy to listed species or adverse modification of critical habitat. *Id.* § 1536(d).

4. The Corps’ plan for district-level action does not comply with the ESA or CWA §404(e).

Rather than consult with the Services concerning the issuance of these NWPs, the Corps floats an alternative approach:

the Corps continues to believe that the issuance or reissuance of the NWPs has ‘no effect’ on listed species or designated critical habitat, and that the ESA section 7 compliance is most effectively achieved by applying the requirements of general condition 18 and 33 CFR 330.4(f) to specific proposed NWP activities that identified after the NWPs are issued and go into effect. Compliance with the requirements of ESA section 7 can also be achieved by applying appropriate formal or informal regional programmatic ESA section 7 consultations that have been developed by Corps districts with regional offices of the FWS and NMFS.

85 Fed. Reg. at 57,359.

The provisions that the Corps relies on to address endangered species would convert the consultation requirements of section 7 into a project-level process that relies heavily on the actions of regulated parties. The regulatory section the Corps cites, 33 C.F.R. § 330.4(f), provides:

Endangered species. No activity is authorized by any NWP if that activity is likely to jeopardize the continued existence of a threatened or endangered species as listed or proposed for listing under the Federal Endangered Species Act (ESA), or to destroy or adversely modify the critical habitat of such species.

(1) Federal agencies should follow their own procedures for complying with the requirements of the ESA.

(2) Non-federal permittees shall notify the DE if any Federally listed (or proposed for listing) endangered or threatened species or critical habitat might be affected or is in the vicinity of the project. In such cases, the prospective permittee will not begin work under authority of the NWP until notified by the district engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized. If the DE determines that the activity may affect any Federally listed species or critical habitat, the DE must initiate section 7 consultation in accordance with the ESA. In such cases, the DE may:

(i) Initiate section 7 consultation and then, upon completion, authorize the activity under the NWP by adding, if appropriate, activity-specific conditions; or

(ii) Prior to or concurrent with section 7 consultation, assert discretionary authority (see 33 CFR 330.4(e)) and require an individual permit (see 33 CFR 330.5(d)).

(3) Prospective permittees are encouraged to obtain information on the location of threatened or endangered species and their critical habitats from the U.S. Fish and Wildlife Service, Endangered Species Office, and the National Marine Fisheries Service.

General Condition 18 contains essentially identical requirements. 85 Fed. Reg. at 57,386-87. These provisions both rely on prospective permittees to assess if species might be affected and notify the Corps if so, and the Corps would then need to determine if the activity “may affect” species and consult with the Services as necessary.

The Corps’ proposal to institute consultation at the district level *after* issuance of the NWPs fails to comply with the agency’s ESA §7 consultation duties. Even if such post-issuance district level consultation was legal in its timing, it does not meet the requirements of the law in practice because it does not ensure that all NWP authorizations that may affect protected species will be identified and subjected to FWS/NMFS consultation. The Corps’ reliance on post-issuance procedures lead to a system by which a permittee may proceed with construction for a given activity under a NWP when: 1) they receive notice from the Corps that their activities will have “no effect” on listed species or critical habitat; or 2) §7 consultation has been completed. These procedures fail to ensure, however, that either the “may affect/no effect” determination or the consultation will be carried out by the Corps in a manner that will satisfy the ESA.

First, the procedure does not ensure that the Corps will have available, or will employ, the best available science to determine whether the activities in question “may affect” or “may adversely affect” threatened or endangered species. This is because the threshold responsibility for determining whether the proposed activity may affect a threatened or endangered species in the hands of the permittee – generally a private citizen pursuing a NWP authorization – and this approach does not adequately guard against the failure of those prospective permittees to identify possible species impacts. 85 Fed. Reg. at 57,386 (“Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat...”). However, prospective permittees have neither the experience nor the duty under the ESA to make this determination. While the Corps ostensibly accepts responsibility for the “may affect” determination, 85 Fed. Reg. at 57,386-87, the NWP proposal fails to direct the Corps to conduct any independent investigation or verification to support its “effect” determination. In fact, the ESA requirements on which the Corps relies create a potential loophole by requiring a PCN that includes threatened and endangered species information (presumably to assist the Corps in making a “may affect” determination) only in those cases where the prospective permittee concludes an activity “might affect” protected species or critical habitat. *Id.* at 57,386. That is, the Corps will only even know about those projects that the self-interested prospective permittee concludes “might affect” listed species, thus seriously limiting the agency’s ability to adequately identify all of the activities that truly “may affect” such species.

Second, NMFS previously unequivocally objected to the Corps’ reliance on project-level review to make a “no effect” determination, stating that it “cannot support [the determination’s] inclusion in the preamble of this rule,” and that “such a conclusion is not supportable under the ESA.” National Marine Fisheries Service’s Comments to U.S. Army Corps of Engineers’ Proposal to Reissue and Modify Nationwide Permits, at 18 (Apr. 4, 2016) (attached). NMFS further stated that it is “concerned that the [Corps’] failure to consult on the effects of this rule pursuant to Section 7(a)(2) of the ESA is not consistent with the [Corps’] legal obligations.” *Id.* In particular, in its 2012 biological opinion, NMFS identified multiple problems with the reliance on PCNs to ensure protection of species consistent with the Act; it noted that “the USACE does not review significant percentages of PCNs to insure they are complete and the information is correct,” NMFS 2012 BiOp at 197, that “the USACE does not appear to routinely conduct field inspections of PCNs to verify that the information contained in those notifications captures the activity and impacts that actually occurred,” *id.* at 198, and that, “assuming that USACE’s project managers critically review PCNs for specific activities, those reviews appear to overlook the cumulative impacts of multiple activities on aquatic ecosystems.” *Id.*

Third, the Corps’ reliance on project-specific consultation to avoid programmatic review has been squarely rejected by the courts. For instance, in *Brownlee*, the Corps refused to consult with FWS on four NWPs on the basis that project-specific analyses would avoid any harm to species. 402 F. Supp. 2d at 10. The court disagreed, reasoning that the ESA regulations are clear that “[a]ny request for formal consultation may encompass . . . a number of similar individual actions within a given geographical area or a segment of a comprehensive plan. This does not relieve the Federal agency of the requirements for considering the effects of the action as a whole.” *Id.* (quoting 50 C.F.R. § 402.14(c)). The court concluded that “overall consultation for

the NWP is necessary to avoid piece-meal destruction of . . . habitat through failure to make a cumulative analysis of the program as a whole.” *Id.* Likewise, in *Northern Plains Resource Council*, the court held that “[t]he Corps cannot circumvent ESA Section 7(a)(2) consultation requirements by relying on project-level review or General Condition 18. Project-level review does not relieve the Corps of its duty to consult on the issuance of nationwide permits at the programmatic level. The Corps must consider the effect of the entire agency action.” CV-19-44-GF-BMM, slip op. at 16 (citations omitted). Other courts have come to similar conclusions.¹⁹ Project-specific consultation therefore cannot relieve the Corps of its duty to consult on the issuance of the NWP at the programmatic level and cannot justify a “no effect” determination for specific NWPs.

5. Action Needed

- The Corps must initiate a nationwide programmatic consultation based on a detailed compilation of data on the use of NWPs in threatened and endangered species habitat supplemented with mandatory district-by-district formal consultations outlined below.
- The Corps require that each district formally consult with the expert agency (i.e., FWS or NMFS) on the impacts of all NWPs with their corresponding regional conditions on each threatened or endangered species that may be found in the district prior to authorizing any activity under an NWP that may affect a listed species or critical habitat. This formal consultation -- combined with nationwide programmatic consultation -- will ensure that the direct, indirect, and cumulative impacts of the NWP program are adequately assessed.
- The Corps must revise GC 18 to provide additional guidance to Corps districts that their consultations, additional regional conditions, and subsequent NWP authorizations must be clearly based on the best available science and must not individually or cumulatively jeopardize the continued existence of any threatened or endangered species. If, for example, formal consultation indicates that habitat degradation is a significant threat to a protected species, the use of NWPs that degrade or destroy protected species’ habitat should not be permissible in such habitat.

E. The Corps Has Failed to Complete an Environmental Impact Statement for NWPs as Required Under NEPA.

Once again, as in previous years, the Corps is ignoring its clear obligations under the National Environmental Policy Act (NEPA) to fully assess and evaluate the effects of the NWPs on the environment.

¹⁹ See, e.g., *Lane Cty. Audubon Soc’y v. Jamison*, 958 F.2d 290, 294 (9th Cir. 1992) (a broad “strategy” for actions that may affect listed species must undergo Section 7 consultation, even if individual actions will be subject to project-specific consultation); *Conner v. Burford*, 848 F.2d 1441, 1453-58 (9th Cir. 1988) (rejecting the Services’ deferral of impacts analysis to a second, project-specific stage); *Pac. Coast Fed’n of Fishermen’s Ass’ns v. Nat’l Marine Fisheries Serv.*, 482 F. Supp. 2d 1248, 1266-67 (W.D. Wash. 2007) (holding that deferral of analysis to the project level “improperly curtails the discussion of cumulative effects”).

NEPA requires that an environmental impact statement (EIS) be prepared in connection with any proposal for “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). In particular, NEPA § 102(2)(E) requires agencies to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” *Id.* § 4332(2)(E).

Rather than conducting an EIS for any of the NWP's individually or for the package of nationwides, which we believe is required, the Corps instead prepared “preliminary decision documents” for each proposed NWP, including an environmental assessment (EA) which anticipates the Corps making a Finding of No Significant Impact (FONSI). These draft decision documents consist mostly of rote boilerplate with little actual analysis and no real evaluation of alternatives. The EAs make conclusory statements that the NWP's have “no more than minimal adverse effects,” yet the Corps willfully ignores existing data showing that many of the permits do, indeed, have substantial adverse effects on the environment, especially when considering all past, present, and reasonably foreseeable future harm to aquatic resources covered by the NWP program, which the Corps must take into account when making this evaluation.

1. The Corps is required to prepare an EIS for the nationwide permits.

As stated above, NEPA requires that an environmental impact statement (EIS) be prepared in connection with any proposal for “major Federal actions significantly affecting the quality of the human environment.” § 102(2)(C), 42 U.S.C. § 4332(2)(C). Pursuant to the recently-adopted NEPA regulations issued by the Council on Environmental Quality (CEQ), “affecting,” for the purposes of this requirement, “means will *or may* have an effect on.” 40 C.F.R. § 1508.1(b) (emphasis added).²⁰

Based on available information about the environmental effects of the NWP's – discussed throughout these comments – it is not reasonable to argue that the NWP program has not had, or will not continue to have, significant environmental impacts; it is completely beyond reason to claim that the issuance of the proposed NWP's *may not* have significant environmental impacts. Destroying small streams and wetlands, even individually, can have significant impacts on the environment. Many particular NWP's would authorize an unlimited number of activities that will affect a great deal of aquatic resources. And, beyond that, the package of NWP's as a whole would affect a wide range of water bodies in a variety of different ways. Thus, the inescapable conclusion is that to satisfy NEPA, the Corps must prepare an EIS, because if the Corps actually considered cumulative impacts as it is required to do, it would conclude that the NWP's would significantly affect the quality of the environment.

NEPA compliance is not “a triviality,” but a vital tool to ensure that agency decisions have adequately considered environmental impacts. *Florida Wildlife Federation v. U.S Army*

²⁰ Although the Corps has its own NEPA implementation procedures for the Regulatory Program, 33 C.F.R. pt. 325, App. B, and regulations governing implementation of NEPA for the Civil Works Program, 33 C.F.R. pt. 230, these comments focus on CEQ's regulations. The Corps' existing NEPA procedures primarily focus on NEPA compliance at the individual permit level and for the Corps' own civil works projects; they do not meaningfully discuss how NEPA should be implemented for Corps' regulations and general permits.

Corps of Eng'rs, 404 F.Supp.2d 1352, 1362 (S.D. Fla. 2005). Yet, the proposed NWP package proposed by the Corps treats NEPA as a triviality, or mere formality, because the NWPs clearly are a major federal action, yet the Corps does not adequately consider the effects of the proposal on the environment.

As in the past, the Corps continues to act as though the NWP program has “no significant impact” and thus the Corps is not required to complete an EIS. Indeed, each of the draft decision documents contains a placeholder for a future FONSI.

2. The Environmental Assessments that the Corps has prepared to make its finding of “No Significant Impact” are woefully inadequate.

The Corps’ EAs do not even approach the thorough, reasoned, data-supported analysis required by NEPA. For many of the same reasons that the Corps’ § 404(e) impacts analysis is deficient (see above), the EAs also fail to satisfy the requirements of NEPA. There are gaping holes in the Corps’ impact analysis, the conclusions lack a substantial factual basis, and the Corps fail to consider relevant factors and to provide reasoned analysis, causing the EAs to fall far short of the minimal standards of such assessments.

For example, based on our analysis of the EAs and draft decision documents for several of the NWPs enormous sections of the discussion in these documents is boilerplate – *it is exactly the same* in each “analysis” of the different NWPs, despite the fact that each of these NWPs authorizes very different activities effecting very different types of streams, rivers and wetlands and in very different amounts. Specifically, roughly 40 pages of each of the draft section 404 decision documents (the sections discussing the affected environment and environmental consequences) are essentially verbatim from document to document. This approach can hardly be considered a reasoned, informed analysis. Rather, it shows the arbitrary nature of the Corps’ finding that the NWPs – either each permit alone or collectively – have no more than a minimum environmental effect, either individually or cumulatively.

Further, the EAs fail to adequately consider alternatives to the proposed NWPs. The Corps repeats throughout the EAs the rote assertion that the no-action alternative (*i.e.*, requiring standard individual permits for a category of activities) would fail to further the regulatory streamlining goal of the NWP program, and would eliminate the incentive for permittees to design their projects to reduce impacts and thereby fit within the bounds of the NWPs, and so the no-action alternative must therefore be rejected. Likewise, the EAs’ purported consideration of other alternatives is just as empty an exercise. The EAs fail to consider in any detail, on a permit-by-permit basis, more narrowly-drawn NWPs. Rather, as with the no-action alternative, the EAs simply repeat assertions that environmentally-protective restrictions of the NWPs are unwarranted. Absent any reasoned discussion based upon documented information, these mere conclusory assertions cannot constitute consideration of alternatives. The approach taken to this NWPs “analysis” stands in sharp contrast to an environmental impact analysis that actually examines environmental impacts.

Finally, and very significantly, the draft decision documents do not contain any discussion or analysis of the environmental effect the NWPs will have on particular kinds of

water resources, including wetlands and streams. Merely providing an acreage estimate for the use of a given NWP, along with boilerplate language about what consequences could occur if the authorized activities took place in certain waters, fails completely to evaluate how the environment will likely be actually affected by the implementation of each NWP.

Thus, on several grounds, the provisional EAs fail to satisfy NEPA's minimal standards for an adequate EA. Because the Corps has failed to perform even the relatively cursory assessment required of an adequate EA, to issue the proposed NWPs would violate NEPA.

3. Bare assertions that mitigation can offset significant impacts to the environment are inadequate under NEPA.

CEQ's recent changes to the NEPA regulations, as unlawful as they are,²¹ do not permit the Corps to rely on district engineers taking measures to require mitigation actions in order to make a FONSI for the issuance of these NWPs. Those regulations specify:

The finding of no significant impact shall state the authority for any mitigation that the agency has adopted and any applicable monitoring or enforcement provisions. If the agency finds no significant impacts based on mitigation, the mitigated finding of no significant impact shall state any enforceable mitigation requirements or commitments that will be undertaken to avoid significant impacts.

40 C.F.R. § 1501.6(c). The Corps falls far short of meeting this burden with respect to the NWPs as it presents no evidence whatsoever showing that the mitigation it suggests may be imposed as "compensatory" for the destruction of streams and wetlands under the authority of NWPs will actually ensure that significant impacts are avoided. *Cf. Cabinet Mountains Wilderness v. Peterson*, 685 F.2d 678, 682 (D.C. Cir. 1982) (agency must "convincingly establish[]" that the mitigation *has* sufficiently reduced impacts).

Moreover, it is clearly insufficient for the Corps to merely conclude that the possibility of future mitigation can successfully compensate for the filling or other alteration or destruction of streams, wetlands, rivers and other waters. The Corps must look at the actual track record of success or failure of past mitigation that has affected the resources at issue and take this information into account when assessing the potential impacts of future mitigation. As discussed at elsewhere in these comments, the track record for mitigation clearly shows that mitigation often fails.

Finally, even if one were to assume that all of the mitigation the Corps anticipates is fully implemented and enforced and effectively offsets the harm to the acres of waters for which it is supposed to compensate, the Corps still admits that there will be significant amounts of aquatic resources that are impacted without being mitigated. As noted above and illustrated in Appendix A, the Corps estimates that many of the NWPs will authorize impacts to waters that exceed the amount of compensatory mitigation the Corps expects district engineers to demand. The Corps utterly fails to explain how these unmitigated impacts are not "significant" for NEPA purposes.

²¹ See Complaint, *Environmental Justice Health Alliance v. Council on Env'tl. Qual.*, No. 20-cv-6143 (S.D.N.Y., Aug. 6, 2020).

4. The EIS for the NWP's must account for all past, present, and reasonably foreseeable harm resulting from the issuance of these permits.

The Corps takes the position is that no EIS is required at all for any NWP individually or for the entire package of NWP's it proposes to issue. The Corps is wrong on both counts. An EIS is required, and that EIS must consider not merely the impacts of NWP's individually, but also the cumulative impact of such permits.

NEPA undeniably requires an analysis of the cumulative impacts of a project. *See Sierra Club v. Penfold*, 857 F.2d 1307, 1320-21 (9th Cir. 1988) (citing *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976)) (“NEPA requires that where several actions have ... cumulative or synergistic effects, this consequence must be considered in an EIS.”). Any reasonable cumulative impact assessment will consider past, present, and future actions; indeed, until recently, CEQ’s regulations explained:

Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. § 1508.7 (2016); *Neighbors of Cuddy Mountain v. U. S. Forest Service*, 137 F.3d 1372, 1379 (9th Cir. 1998). The Corps’ own Clean Water Act regulations also recognize the importance of a cumulative impacts assessment because “numerous piecemeal changes can result in a major impairment of wetland resources.” 33 C.F.R. § 320.4(b)(3).

Thus, the Corps must look at the environmental effects of past NWP's as well as other past, present, and reasonably foreseeable future activities affecting wetlands, streams, and other waters when evaluating whether the proposed federal action – the re-issuance and modification of the NWP's – will have a significant impact on those resources. In analyzing cumulative impacts “quantified or detailed information is required” so that the courts and the public can be assured that the Corps has taken the mandated hard look at the environmental consequences of the project. *Neighbors of Cuddy Mountain*, 137 F.3d at 1379. The U.S. Court of Appeals for the Fifth Circuit has ruled that a meaningful analysis of cumulative impacts must identify:

(1) the area in which effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions – past, proposed, and reasonably foreseeable – that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate.

Fritiofson v. Alexander, 772 F.2d 1225, 1245 (5th Cir. 1985).

The current proposal does not include any such information about or analysis of past NWP's, individually or collectively, or of other development or industrial activities that have or

reasonable could be expected to have an impact on the protected resources. A cumulative impacts analysis that contains only “very broad and general statements devoid of specific, reasoned conclusions” does not satisfy NEPA. *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 811 (9th Cir. 1999); *see also Neighbors of Cuddy Mountain*, 137 F.3d at 1379. Even under a deferential standard of review, a “no look” at the cumulative impacts cannot qualify as the “hard look” required by law.

Nor is the Corps’ noncompliance with these requirements excused by the recent changes to the CEQ regulations under NEPA. Those revised rules seek to limit the scope of the impact analysis only to “reasonably foreseeable” effects, apparently to the exclusion of past impacts. 40 C.F.R. §1508.1(g) (“Effects or impacts means changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives.”). This unduly limits the proper scope of the Corps’ NEPA obligations by ignoring NWP-authorized activities’ impacts over the last 43 years. *See, e.g.*, U.S. Army Corps of Eng’rs, Draft Decision Document: Nationwide Permit 12 at 38 (citing new CEQ regulations and stating, “[t]herefore, the impact analysis in this environmental assessment focuses on the impacts or effects that are likely to be caused by the activities authorized by this NWP under the Corps’ permitting authorities”). But even if this limitation were consistent with NEPA – which it is not – the Corps’ own admissions in the draft decision documents about the expected impacts of many particular NWPs and the NWP package as a whole reveal that the effects in just the five-year duration of these permits will be more than significant. An EIS is therefore required.

5. The Corps should reevaluate, based on public comment, then complete, a programmatic EIS for the NWPs.

To carry out its NEPA responsibilities, the Corps should evaluate the entirety of the NWP program comprehensively via a programmatic EIS (“PEIS”). In a notice published on July 1, 1998, as part of its then-proposal to modify and reissue nationwide permits, the Corps announced its intention to prepare a PEIS “for the entire NWP program.” The Corps stated:

the PEIS will provide the Corps with a comprehensive mechanism to review the effects of the NWP program on the environment, with full participation of other Federal agencies, States, Tribes, and the public. The Corps will initiate the PEIS by mid-1999 and complete it by December 2000. The Corps plans to complete the PEIS prior to the next scheduled re-issuance of the NWPs in December 2001.

63 Fed. Reg. 36,040, 36,043 (July 1, 1998). On March 22, 1999, the Corps published a Notice of Intent and request for comments regarding the proposed scope for the NWP PEIS. In this notice, the Corps stated:

The overall purpose of the PEIS is to review and *evaluate the NWP program as a whole*, to ensure that the NWP program authorizes only those activities with minimal individual and cumulative adverse effects on the aquatic environment. The PEIS will provide a

programmatic comprehensive and structured review of the effects of the NWP program on the environment.

64 Fed. Reg. 13,782 (Mar. 22, 1999) (emphasis added). However, the Corps restricted the scope of the proposed EIS from that outlined in the July 1998 proposal; the March 1999 notice went on to state: “The intent of the PEIS is to evaluate the *procedures and process* associated with the NWP program and *not to examine impacts associated* with individual NWP authorizations.” *Id.* (emphasis added). In July of 2001, the Corps issued a notice of availability of the draft NWP PEIS, reflecting this narrower scope. 66 Fed. Reg. 39,499 (July 31, 2001). As of this writing, even this limited PEIS has not been finalized and the Corps has stated that it “is not a legally required EIS,” 67 Fed. Reg. 2020, 2026 (Jan. 15, 2002), suggesting that the Corps may not ever intend to take a comprehensive look at the actual environmental effects of this sweeping program.

In fact, a programmatic EIS for the NWP program should be employed to examine the totality of the real-world impacts of the program. The Corps’ development, assessment, and issuance of nationwide permits would greatly benefit from a programmatic perspective. The NWP program has been in place since 1977, has authorized likely more than a million activities impacting the nation’s waters, and the Corps has maintained for more than 40 years that the net effect of these authorizations is minimal without actually analyzing that question. The agency’s assessment of that critical matter would be extremely helpful to determining whether the NWPs comply with the Clean Water Act, thus making it a program suitable to programmatic NEPA review now, while the agency is considering reissuing the permits. *See* 40 C.F.R. § 1502.4(b) (“Environmental impact statements may be prepared for programmatic Federal actions, such as the adoption of new agency programs. When agencies prepare such statements, *they should be relevant to the program decision and timed to coincide with meaningful points in agency planning and decision making.*” (emphasis added)).

II. The Corps Must Not Remove the 300 Linear Foot Limit in Several NWPs.

The Corps proposes to lift currently-applicable restrictions on the use of NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52, which prohibit the use of those NWPs if the planned activity would impact more than 300 feet of stream bed. The Corps may not do so on the record it has made available.

Although the Corps admits that the genesis of this idea is a report the Corps issued in response to an executive order directing agencies to lift regulatory “burdens” on energy production, 85 Fed. Reg. at 57,301-02 (citing Executive Order 13,783), it claims that it has four reasons for its action.²² The Corps summarizes its rationale for this decision as follows:

Our rationale comprises six categories of considerations: (1) The Corps employs a number of tools in the NWP Program to ensure that NWP activities result only in no more than minimal individual and cumulative adverse environmental effects; (2) using acres or square feet instead of linear feet is a more accurate approach to quantifying losses of stream bed and also serves as a better surrogate for losses of stream functions

²² As indicated above, the Corps’ notice says that it has “six” bases for its decision but only lists four; we presume this was an error.

when a functional assessment method is not available or practical to use; (3) removing the 300 linear foot limit would provide consistency across the numeric limits used by the NWP Program for all categories of non-tidal waters of the United States (*i.e.*, wetlands, streams, ponds, and other non-tidal waters), and (4) it would further the objective of the NWP Program stated in 33 CFR 330.1(b) (*i.e.*, to authorize with little, if any, delay or paperwork certain activities having minimal impacts), by providing equivalent quantitative limits for wetlands, streams, and other types of non-tidal waters, and NWP authorization for losses of stream bed that have no more than minimal individual and cumulative adverse environmental effects.

85 Fed. Reg. at 57,313. These explanations utterly fail to provide a legally-sufficient rationale for the removal of the 300-foot limit. We address below only the first two of these reasons, as the consistency-across-NWPs and streamlining rationales are makeweight arguments that have no bearing on the central question for the Corps: whether the permits, as amended, are lawful using the criteria in section 404(e).

First, the Corps suggests that it can simply drop the 300-foot limit because there are other provisions in the NWPs that might help reduce the impacts of authorized activities to a minimal level. Specifically, the Corps points to the PCN process, regional conditioning by division engineers, and the proposed addition of a waivable requirement for compensatory mitigation when activities impact more than 1/10 of an acre. These aspects of the NWPs do not ensure that lifting the 300-foot limit will not lead to more than minimal adverse impacts on waters. As discussed above, reliance on post-issuance actions by district engineers does not ensure that the permits – as issued – are limited to minimally-impactful activities. Also as noted above, the evidence shows that the record of district engineers imposing mitigation does not show success in minimizing impacts. Moreover, relying on having a lower acreage trigger at which compensatory mitigation will typically be required is inadequate because it can be waived by the district engineer and because, as the Corps itself acknowledges, streams are hard to replace resources. *See, e.g.*, U.S. Army Corps of Eng’rs, Draft Decision Document: Nationwide Permit 12, at 68. Critically, the Corps offers no evidence to support the implication that these other provisions constitute sufficient reason to conclude that authorized activities under these NWPs will have minimal impacts; the Corps discusses no data or analysis of prior uses of these NWPs to predict how the removal of this safeguard will affect the environmental impact of activities authorized under the revised permits.

The second claim that the Corps makes is that using acreage instead of a linear foot limit is a “more accurate” proxy for the aquatic resource function that would be affected by authorized activities. The Corps states:

When only a portion of the stream bed is filled or excavated, the portion of the stream bed that is not filled or excavated can continue performing its physical, chemical, and biological processes. In situations where only a portion of the stream bed is filled, there will likely be only a partial loss of stream functions because the areas of stream bed near the authorized activity that have not been filled will continue to provide some degree of stream functions. For example, a bank stabilization activity along a river bank will fill only a portion of the stream bed up to the ordinary high water mark and the river will continue to flow past the

stabilized bank, whereas filling the entire stream bed often results in a complete loss of stream functions. Using linear feet to quantify the impacts of these two different types of impacts does not distinguish between the substantially different effects on stream functions in the two different scenarios, whether those effects are no more than minimal and thus qualify for NWP authorization, or if the effects are more than minimal and require individual permits.

This is wholly insufficient under the Clean Water Act. At most, the Corps' discussion reveals that, for certain kinds of streams, a 300-foot limit alone might not adequately guard against more-than-minimal adverse impacts (e.g., because completely filling the stream bed of 300 feet of various streams could eliminate their function). What this argument does not in any way show, however, is that relying solely on an acreage limit prevents more-than-minimal impacts. Based on the Corps' estimates, a first-order stream typically is about 6.5 feet wide; completely filling or excavating a half-acre of such a stream's bed would mean impacting about 3,350 feet of the stream's length, or nearly two-thirds of a mile, and if an activity were to impact less than the full width of a stream, the half-acre limit could easily mean authorizing miles of harms to such small streams. The Corps offers no evidence to support a conclusion that impacts on that order, especially when considered cumulatively, would be minimal. Accordingly, these proposed changes cannot be squared with the requirements of section 404(e).

III. Several Specific NWPs Are Seriously Flawed.

The preceding sections identify fatal legal problems that cut across numerous NWPs. Below, we discuss problems arising with particular NWPs, but do not repeat the generally applicable ones here.

A. NWP 3 – Maintenance

This NWP is replete with vague language that undermines its stringency and enforceability and, therefore, the Corps' ability to reasonably conclude that the use of this permit will not result in more than minimal impacts. For instance, the permit would largely leave it to the prospective permittee to determine whether riprap placement, stream channel modification, or sediment removal is "the minimum necessary" to achieve certain objectives. 85 Fed. Reg. at 57,369. Permittees also are responsible for identifying "[a]ppropriate measures ... to maintain normal downstream flows and minimize flooding to the maximum extent practicable," and for revegetating areas affected by temporary fills "as appropriate." *Id.*

B. NWP 6 – Survey Activities

NWP 6 authorizes survey activities, including seismic exploratory operations, plugging of seismic shot holes and other exploratory-type bore holes. It also authorizes the construction of temporary pads, provided the discharge does not exceed 1/10-acre in waters of the U.S.²³ Drilling and the discharge of excavated material from test wells for oil and gas exploration is not authorized by this NWP, but the plugging of such wells is authorized.²⁴ While there are no

²³ 85 Fed. Reg. at 57,369.

²⁴ *Id.*

modifications proposed for NWP 6 at this time, the Corps' issuance of NWP 6, as currently written, could authorize activities that cause more than minimal adverse environmental effects, either individually or cumulatively. Therefore, the Corps should take this opportunity to clarify the nature and extent of seismic exploratory operations that qualify for NWP 6 and modify NWP 6 to require pre-construction notification (PCN) in all cases.

We urge the Corps to remove uncertainty about the seismic exploratory operations that qualify for verification under NWP 6 as follows: (1) allow NWP 6 to expire without reissuance and require individual §404 permits for seismic exploratory operations; (2) alternatively, modify the existing language in NWP 6 to clarify the types of seismic exploratory activities that would qualify for NWP 6; and (3) require pre-construction notification for all seismic exploratory operations to enable district engineers to review the nature and extent of the proposed seismic exploratory operations and require district engineers to impose conditions that curb the environmental impacts of such projects or require individual permits.

1. NWP 6 Should Expire Without Reissuance Because Seismic Exploratory Operations Cause Adverse Effects to Waters of the U.S., including Wetlands, and Endangered Species, Requiring Authorization Under Individual Section 404 Permits

Seismic exploratory operations, which can be authorized under NWP 6 in some cases, can cause adverse individual and cumulative environmental effects, including to wetlands and wildlife habitats. Soil Hydrologic Groups typically found in lowland areas (wetlands and floodplains) are very susceptible to adverse impacts from seismic exploratory operations. In general, these soils have high clay contents, low permeability, are moderately to highly compactable, and have low infiltration rates and recharge potentials.²⁵ Wet or saturated soils are the most sensitive to disturbance from vehicle use. Compaction reduces the soil's water-holding and infiltration capacities which could increase runoff of surface waters and accelerate soil erosion, and ultimately degrade existing soil and wetland communities.²⁶ Disturbance of existing unpaved surfaces and resultant road runoff or the crossing of small areas of wetlands along tributary streams may also affect surface water and wetland resources. Where soils are compacted or rutted, surface hydrology could be altered.²⁷

Wetland soils are adversely impacted due to rutting and compaction when "vibroseis"²⁸ and other off-road vehicles used in seismic exploratory operations drive over them to explore for

²⁵ See U.S. Department of Agriculture, Natural Resources Conservation Service, Part 630 Hydrology National Engineering Handbook, Chapter 7 Hydrologic Soil Groups, 2007, *available at*: <https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba>.

²⁶ Sjoerd Duiker, Avoiding and Mitigating Soil Compaction Associated with Natural Gas Development (2004), http://extension.psu.edu/natural-resources/natural-gas/issues/environmental/avoiding-and-mitigating-soil-compaction-associated-with-natural-gas-development/extension_publication_file; Pennsylvania State University, Effects of Soils Compaction (2009), http://extension.psu.edu/plants/crops/soil-management/soil-compaction/effects-of-soil-compaction/extension_publication_file.

²⁷ D.J. Archibald, et al., Forest management guidelines for the protection of the physical environment (1997), <http://www.ontario.ca/document/forest-management-guidelines-protection-physical-environment>.

²⁸ Generally, an onshore 3-D seismic survey using vibroseis technology is designed to evaluate the subsurface geologic structure and geophysical conditions pertaining to accumulations of commercial quantities of crude oil and gas beneath the survey area. It will do this by using small, portable seismic receivers (geophones) and recording

oil and gas resources, which are then re-disturbed by subsequent reclamation attempts. Vibroseis vehicles that can weigh as much as 33 tons²⁹ compact and rut wetland soils as they drive over them due to their sheer weight.³⁰ These seismic exploratory operations can create de facto roads if the compacted soils remain.³¹ Thus, seismic exploratory operations using vibroseis vehicles can equate to mechanized land clearing, ditching, or channelization resulting in redeposit of fill greater than incidental fallback, resulting in individual and cumulative adverse effect on aquatic function and changes to the bottom elevations of wetlands that degrade waters of the U.S.³²

Seismic survey lines that cut through wetland ecosystems can result in a decrease in the quantity and quality of wildlife habitats, including for endangered species.³³ The habitats that remain in impacted areas are often heavily fragmented, which has an extensive adverse impact

devices, which measure and record subtle vibrations in the ground. Each receiver point will consist of three geophones, a recording box and battery. Vibrations are created using mobile plates attached to special off-road vehicles (ORVs) that can weigh as much as 33 tons known as vibroseis vehicles or buggies. These plates are placed against the ground, vibrated, and then moved on to the next location. These vibration devices, and the geophones which receive the return seismic signals from the subsurface geology are oriented in “source” and “receiver” line grids that will allow mapping of the subsurface geology. See, e.g., Burnett Oil Co., Inc., et al., *Nobles Grade 3-D Seismic Survey, Big Cypress National Preserve and Big Cypress National Preserve Addition Plan of Operations 4* (2014) [hereinafter, *Big Cypress Plan of Operations*], available at: <https://parkplanning.nps.gov/document.cfm?parkID=352&projectID=53498&documentID=66527>.

²⁹ See, e.g., *Big Cypress Plan of Operations*, Exhibit 8 (Field Testing of Vibroseis Buggy), Exhibit B (Vibroseis Buggy Specifications) at page 5 (specification sheet with heading “AHV4-PLS 362 Vibrator Buggy W/Frame Rollover Protection).

³⁰ See Quest Ecology, *Summary of March 6, 2020 Site Assessment within Burnett Oil Company’s Nobles Grade 3-D Seismic Oil and Gas Exploration area, Big Cypress National Preserve, Collier County, Florida* (March 15, 2020), available at: <https://www.nrdc.org/sites/default/files/final-quest-ecology-memorandum-20200306.pdf>; Quest Ecology, *Comments on Turrell, Hall & Associates, Inc.’s 2019 Reclamation Monitoring Report – August 30th, 2019 Burnett Oil Company’s Nobles Grade 3-D Seismic Oil and Gas Exploration in the Big Cypress National Preserve* (January 3, 2020), available at: <https://www.nrdc.org/sites/default/files/quest-ecology-memorandum-2019-reclamation-monitoring-report-01032020.pdf>; Quest Ecology, *Seismic Survey Inspection Report, Big Cypress National Preserve* (June 2019), available at: <https://www.nrdc.org/sites/default/files/seismic-survey-inspection-report-20190615.pdf>; Quest Ecology, *Phase I Seismic Survey Inspection Report, Big Cypress National Preserve* (May 2018), available at: https://assets.nrdc.org/sites/default/files/seismic-survey-inspection-big-cypress-20180531.pdf?_ga=2.61695279.2044034844.1586532000-1336211018.1533580820.

³¹ See Quest Ecology, *Phase I Seismic Survey Inspection Report, Big Cypress National Preserve* (May 2018) at Appendices A and B, available at: https://assets.nrdc.org/sites/default/files/seismic-survey-inspection-big-cypress-20180531.pdf?_ga=2.61695279.2044034844.1586532000-1336211018.1533580820.

³² *Id.*; see also U.S. Army Corps of Engineers, Jacksonville District, Enforcement Section, Memorandum for Record CESAJ-RD-PE (1200A) (February 7, 2020) (hereinafter, “February Memorandum”) at 1, available at: https://www.biologicaldiversity.org/programs/public_land/pdfs/SAJ-2016-1849-Burnett-Oil-Company-in-Big-Cypress-MFR-002.pdf; U.S. Army Corps of Engineers, Jacksonville District, Regulatory Division, Notice to Burnett Oil Company (March 6, 2020) (hereinafter, “Notice”) at 2, available at: https://www.biologicaldiversity.org/programs/public_land/pdfs/SAJ-2016-1849-Burnett-Oil-Company-in-Big-Cypress-3-6-20-Letter-from-Corps.pdf.

³³ Abib, T. H., Chasmer, L., Hopkinson, C., Mahoney, C. and Rodriguez, L. C. E. (2018), Seismic line impacts on proximal boreal forest and wetland environments in Alberta. *Science of the Total Environment*, 658: 1601-1613. <https://doi.org/10.1016/j.scitotenv.2018.12.244>; see also Quest Ecology, *Preliminary Evaluation of Potential Effects of Seismic Surveying for Oil and Gas on the Endangered Florida Panther* (2018). <https://www.nrdc.org/sites/default/files/preliminary-evaluation-of-potential-effects-of-seismic-surveying-for-oil-and-gas-on-the-endangered-florida-panther-2018-10-16.pdf>.

on wildlife behaviors, including those of endangered species, and biodiversity.³⁴ The Corps also acknowledges that seismic exploratory operations in the vicinity of streams will likely increase surface flow velocities—increasing erosion, reducing aquatic organism habitat, and destroying fish spawning areas.³⁵

Seismic exploratory operations using the shot-hole method³⁶ can also cause adverse individual and cumulative environmental effects—for example, improperly plugged shot holes can cause a decline in ground-water quality.³⁷ The shot holes may breach confining strata and impact perched water-tables supporting surrounding wetland habitats.³⁸ Additionally, improperly placed charges to create the shot holes could result in cross-contamination between aquifers.³⁹ In addition to the shot holes themselves, oil companies may need to drive heavy vehicles used for drilling and watering through large swaths of wetlands to access shot hole locations.⁴⁰

In proposing the reissuance of NWP 6, the Corps' determination that this NWP's activities will have will have “no more than minimal individual and cumulative adverse environmental effects”⁴¹ relies heavily on the fact that this NWP typically only authorizes activities that are “temporary.”⁴² However, seismic lines can leave an extensive footprint that makes regeneration difficult—one study found that some wetlands fail to recover even fifty years after a seismic disturbance.⁴³ This footprint is a result of altering the natural conditions of the ecosystem—including changes to soil temperature; changes to light and wind intensity; ground

³⁴ Van Rensen, C. K., Nielsen, S. E., White, B., Vinge, T. and Lieffers, V. J., (2015), Natural regeneration of forest vegetation on legacy seismic lines in boreal habitats in Alberta's oil sands region. *Biological Conservation* 184: 127-135. doi: <http://dx.doi.org/10.1016/j.biocon.2015.01.020>; *see also Quest Ecology, Preliminary Evaluation of Potential Effects of Seismic Surveying for Oil and Gas on the Endangered Florida Panther* (2018), available at: https://www.nrdc.org/sites/default/files/preliminary-evaluation-of-potential-effects-of-seismic-surveying-for-oil-and-gas-on-the-endangered-florida-panther_2018-10-16.pdf.

³⁵ Draft NWP 6 Decision Document (2020) at 63, available at: <https://beta.regulations.gov/document/COE-2020-0002-0008> [hereinafter, Draft NWP 6 Decision Document].

³⁶ Shot hole seismic exploration can be performed by installing a grid of shot holes and geophones along transect lines with the use of drill and water vehicles at a defined spacing. An explosive charge is then placed in each shot hole, which is used to create a shock or “seismic” waves within an underground line. The seismic waves travel into the earth, are reflected by subsurface formations of oil and gas, and return to the soil surface where they are recorded by receivers called geophones. By analyzing the time it takes for the seismic waves to reflect off the subsurface formations and return to the surface, a geophysicist can map subsurface formations and predict where oil and natural gas may be trapped in sufficient quantities for exploration. *See, e.g.*, Army Corps of Engineers, Jacksonville District Regulatory Division, Verification letter to Tocala, LLC, June 2, 2017, attached hereto.

³⁷ Chaffee, P. (1988), Effects of Water-well Construction on Temporal Variability of Ground-water Quality in Lincolville, Marion County, Kansas. http://www.kgs.ku.edu/Hydro/Publications/1988/OFR88_26/index.html.

³⁸ Noah Kugler, P.G., H2O GeoSolutions LLC, Opinion and Recommendation (2014), attached hereto.

³⁹ Florida Department of Environmental Protection. September 20, 2013. Geophysical permit application G166-13 Request for additional information, attached hereto.

⁴⁰ *See, e.g.*, Army Corps of Engineers, Jacksonville District Regulatory Division, Verification letter to Tocala, LLC, June 2, 2017, attached hereto.

⁴¹ 85 Fed. Reg. at 57298.

⁴² Draft NWP 6 Decision Document at 49.

⁴³ Van Rensen, C. K., Nielsen, S. E., White, B., Vinge, T. and Lieffers, V. J., (2015), Natural regeneration of forest vegetation on legacy seismic lines in boreal habitats in Alberta's oil sands region. *Biological Conservation* 184: 127-135. doi: <http://dx.doi.org/10.1016/j.biocon.2015.01.020>.

compaction due to mechanical damage; and altered hydrology.⁴⁴ Sensitive areas like Designated Critical Resource Waters (DCRWs)⁴⁵ are even more susceptible to the long-term damage these activities leave behind. For example, following seismic exploratory operations in the Florida Everglades' Big Cypress National Preserve in 2017 and 2018, profound dissimilarities between seismic lines created and adjacent undisturbed communities remain in terms of ground elevations; dwarf pond cypress cover and density; groundcover abundance, composition, species richness; periphyton cover; and physical soil properties. Recovery of these features does not appear imminent and may not be possible.⁴⁶ The Corps itself acknowledges that “[i]t is difficult to restore or establish natural wetland hydrology, and water quality functions are likely to be different than the functions provided at wetland impact sites (NRC 2001).”⁴⁷

2. At a Minimum, the Corps Should Revise Nationwide Permit (NWP) 6 to Clarify the Nature and Extent of the Seismic Exploratory Operations it Covers

If the Corps does not allow NWP 6 for seismic exploratory activities to expire without reissuance, at a minimum, the Corps should revise NWP 6 to provide clarifying text with additional detail regarding the nature and extent of the seismic exploratory operations that could be authorized through NWP 6, as opposed to an individual Section 404 permit. Without such clarity, large-scale seismic exploratory operations could rely on NWP 6 to authorize activities that cause more than minimal adverse environmental effects, either individually or cumulatively. And in some cases, seismic exploratory activities could fall between the permitting cracks altogether, as has already occurred in the Jacksonville District, as described below.

Additional clarification would also remove any regulatory uncertainty for project proponents. For example, it is unclear whether 3-D seismic exploratory operations using vibroseis technology, without shot-holes or the construction of temporary pads, qualify for authorization under NWP 6, or require authorization by an individual §404 permit. It is also unclear whether the de facto creation of roads through the operation of vibroseis and other heavy vehicles used in seismic exploratory operations in wetlands would qualify for NWP 6.⁴⁸ Requiring an individual permit for all seismic exploratory operations is the only way to properly and consistently evaluate the nature and extent of a proposed project's impacts and ensure that wetland impacts are avoided or minimized.

⁴⁴ Abib, T. H., Chasmer, L., Hopkinson, C., Mahoney, C. and Rodriguez, L. C. E. (2018), Seismic line impacts on proximal boreal forest and wetland environments in Alberta. *Science of the Total Environment*, 658: 1601-1613. <https://doi.org/10.1016/j.scitotenv.2018.12.244>.

⁴⁵ General Condition 22 states that critical resource waters include NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

⁴⁶ Quest Ecology, *Seismic Survey Inspection Report, Big Cypress National Preserve* 10 (June 2019), available at: <https://www.nrdc.org/sites/default/files/seismic-survey-inspection-report-20190615.pdf>.

⁴⁷ Draft NWP 6 Decision Document at 60.

⁴⁸ See, e.g., Quest Ecology, *Phase I Seismic Survey Inspection Report, Big Cypress National Preserve* (May 2018) at Appendices A and B, available at: https://assets.nrdc.org/sites/default/files/seismic-survey-inspection-big-cypress-20180531.pdf?_ga=2.61695279.2044034844.1586532000-1336211018.1533580820.

a. The Nature and Extent of Seismic Exploratory Operations that Qualify for NWP 6 is Unclear Resulting in Uncertainty as to Which Activities Would Qualify, Even When They Occur Within the Same District

It is currently unclear which types of seismic exploratory operations qualify for NWP 6, leading to inconsistent permitting decisions, including within the same District. For example, it is unclear whether seismic exploratory operations that do not use the shot-hole method, and instead operate vibroseis and other off-road vehicles in wetlands to obtain seismic data without the construction of temporary mats, qualify for verification under NWP 6, or require authorization through an individual permit.

To highlight the regulatory uncertainty with the NWP 6 qualification criteria as currently written, we offer a recent example of seismic exploratory operations using 3-D vibroseis technology in the Florida Everglades' Big Cypress National Preserve (hereinafter, Preserve). The Preserve was established by Congress “[i]n order to assure the preservation, conservation, and protection of the natural, scenic, hydrologic, floral and faunal, and recreational values of the Big Cypress Watershed.” 16 U.S.C. § 698f(a) (2015). The National Park Service “envisions the preserve as a nationally significant ecological resource” and “a primitive area where ecological processes are restored and maintained and where cultural sites are protected from unlawful disturbance.”⁴⁹ Big Cypress was the first national preserve incorporated into the National Park Service. 16 U.S.C. § 689(f), *et seq.* The Preserve covers 720,567 acres of a water-dependent ecosystem in southwestern Florida, and it includes much of the western Everglades.⁵⁰ The Big Cypress Swamp is a western extension of the Everglades hydrologic system. The Big Cypress basin provides approximately 42% of the water flowing into Everglades National Park and is a vast hydrologic network—among the least altered remaining in South Florida.⁵¹

The Preserve is also home to a wide array of important species, including the Florida panther—one of the most endangered mammals in the country—as well as the Florida black bear, Florida bonneted bat, Eastern indigo snake, wood stork, red-cockaded woodpecker, many species of wading birds, and rare plants like the ghost orchid. Former Florida governor Jeb Bush referred to the Preserve as the most “environmentally-sensitive” area in the state.⁵² Seismic exploratory operations can adversely impact wildlife and their habitats, including endangered species like the Florida panther.⁵³

⁴⁹ U.S. Department of Interior, National Park Service, *Big Cypress National Preserve, General Management Plan and Final Environmental Impact Statement*, Volume I, at iii (January 27, 1992) (hereinafter, “GMP/EIS”).

² National Park Service, *Big Cypress National Preserve Geologic Resource Evaluation Report*, Natural Resource Report NPS/NRPC/GRD/NRR—2008/021 (February 2008) at 2, *available at*: https://www.nature.nps.gov/geology/inventory/publications/reports/bicy_gr_e_rpt_view.pdf.

⁵⁰ *Id.*

⁵¹ *Id.* at 1.

⁵² Frank Ackerman, Ph.D., Synapse Energy Economics, *Why Drill for Oil in Florida? Tiny industry, huge risks* (November 2018) at 7, *available at*: https://www.nrdc.org/sites/default/files/why-drill-for-oil-in-florida-tiny-industry-huge-risks_2018-10-22.pdf.

⁵³ *Quest Ecology, Preliminary Evaluation of Potential Effects of Seismic Surveying for Oil and Gas on the Endangered Florida Panther* (October 2018), *available at*: <https://www.nrdc.org/resources/preliminary-evaluation-potential-effects-seismic-surveying-oil-and-gas-endangered-florida>.

In 2016, the National Park Service authorized the first of four phases of Burnett Oil Company's seismic survey, which encompasses more than 110 square miles (70,454 acres) in an area of the Preserve consisting of over 80 percent wetlands.⁵⁴ Burnett Oil's seismic survey operations included the driving of 33-ton "vibroseis"⁵⁵ vehicles and other off-road vehicles through wetlands. Burnett Oil did not obtain verification to use NWP 6 or apply for an individual Section 404 permit prior to commencing these seismic activities in the Preserve.

Burnett Oil initially proposed the construction of staging areas with composite interlocking mats for vehicles and equipment in wetlands in the Preserve. Yet in its plan of operations submitted to the National Park Service, Burnett Oil included an e-mail from the Corps indicating that its seismic activities did not require a Section 404 permit because "they would not result in fill or mechanical clearing in waters of the United States."⁵⁶ The email did not include the Corps' underlying reasoning for this determination; nor did it mention the potential use of a composite interlocking mat system in wetlands. However, the seismic exploratory operations, including the driving of heavy vibroseis and other vehicles off-road in wetlands and the placement of a composite interlocking mat system in wetlands, requires Section 404 permit authorization due to the resulting changes to the bottom elevations of wetlands. Therefore, in 2015, prior to commencement of seismic activities, NRDC wrote to the Corps asserting that a Section 404 permit was in fact required for Burnett Oil Company's seismic activities in Big Cypress National Preserve, including authorization of the use of temporary mats.⁵⁷

Rather than applying for and obtaining a Section 404 permit for its activities, Burnett Oil subsequently removed the use of mats from its proposal, stating that it would stage them outside of the Preserve to avoid the need to apply for a permit.⁵⁸ However, it went ahead and staged vehicles and other equipment in the Preserve on roof tarps during seismic exploratory

⁵⁴ See *Big Cypress Plan of Operations* at 1. Note this plan of operations has changed, including, but not limited to, the removal of the use of composite interlocking mats to protect wetland soils and vegetation, the type of vehicles utilized in the seismic testing, and the use of smooth balloon tires on vibroseis vehicles to minimize damage to wetland soils. The National Park Service conditioned its approval of the first phase of the seismic testing on the Burnett Oil Company's compliance with 47 mitigation and minimization measures, which include reclamation, mitigation, and maintenance and monitoring criteria. See U.S. Dep't of the Interior, National Park Service, *Finding of No Significant Impact, Nobles Grade 3-D Seismic Survey Big Cypress National Preserve* (2016) (hereinafter, FONSI), <https://parkplanning.nps.gov/document.cfm?parkID=352&projectID=53498&documentID=72619>; U.S. Dep't of the Interior, National Park Service, *Conditional Approval of Burnett Oil Company, Inc. Nobles Grade 3-D Seismic Survey Plan of Operations, Big Cypress National Preserve, Florida*, (2016) (hereinafter, Conditional Approval), <https://parkplanning.nps.gov/document.cfm?parkID=352&projectID=53498&documentID=72745>.

⁵⁵ For vibroseis vehicle specifications, see *Big Cypress Plan of Operations*, Exhibit 8 (Field Testing of Vibroseis Buggy), Exhibit B (Vibroseis Buggy Specifications) at page 5 (specification sheet with heading "AHV4-PLS 362 Vibrator Buggy W/Frame Rollover Protection).

⁵⁶ *Big Cypress Plan of Operations* at Exhibit 15.

⁵⁷ See Letter from NRDC, et al. to Tunis McElwain, Chief, Fort Myers Section, Jacksonville District Corps of Engineers re: Nobles Grade 3-D Seismic Survey/Plan of Operations in Big Cypress National Preserve (October 14, 2015), attached hereto.

⁵⁸ Letter from Passarella & Associates to Acting Section Chief, Fort Myers Section, Jacksonville District Corps of Engineers re: Nobles Grade 3-D Seismic Survey (June 3, 2016), attached hereto; National Park Service, *Revised Environmental Assessment, Burnett Oil Company Nobles Grade 3-D Seismic Survey* (March 2016) at Appendix D, comment 12(b), available at: <https://parkplanning.nps.gov/document.cfm?parkID=352&projectID=53498&documentID=71803>.

operations.⁵⁹ And it failed to apply for and obtain a Section 404 permit for the seismic exploratory operations themselves, including the driving of 33-ton vibroseis vehicles and other vehicles off-road through saturated wetland soils.

In 2016, NRDC's environmental consultants with Quest Ecology prepared a technical report, which explained why the seismic exploratory operations themselves should be regulated under the Clean Water Act.⁶⁰ They explained that the driving of heavy 33-ton "vibroseis" and other off-road vehicles through wetlands constituted mechanized land clearing, which displaced and compacted soils and changed the bottom elevation of the wetlands.⁶¹ However, Burnett Oil failed to obtain authorization for its seismic activities and did not receive verification of its use of NWP 6 or an individual 404 permit, which led to confusion and uncertainty among Corps permitting and enforcement staff about whether these were regulated activities.

Burnett Oil subsequently conducted seismic exploratory operations in the Preserve in 2017 and 2018 without a Section 404 permit. Since then, Quest Ecology has documented the wetland damage caused by the seismic testing and NRDC has shared this scientific information with state and federal agencies, including the Corps' Jacksonville District.⁶² This led the Corps' Jacksonville District enforcement section to conduct a site visit in February 2020 to view the damage in the Preserve caused by Burnett Oil's seismic exploratory operations. Following this site visit, the enforcement section agreed that the Burnett Oil Company's seismic exploratory operations were regulated activities pursuant to the Clean Water Act. Based on scientific evidence included in its Memorandum for Record, the Corps determined:

that the activity described in this memo is regulated under the Clean Water Act because the activity equates to mechanized land clearing, ditching or channelization resulting in redeposit of fill greater than incidental fallback. The activity causes an identifiable individual and cumulative adverse effect on an aquatic function and change (s) to the bottom elevation of ... a water of the United States...⁶³

⁵⁹ Quest Ecology, *Phase I Seismic Survey Inspection Report, Big Cypress National Preserve* (May 2018) at Appendices A and B, available at: https://assets.nrdc.org/sites/default/files/seismic-survey-inspection-big-cypress-20180531.pdf?_ga=2.61695279.2044034844.1586532000-1336211018.1533580820.

⁶⁰ Quest Ecology, *Technical Review of Wetlands, Wildlife, Vegetation, and Habitat Aspects of the Proposed Burnett Oil Company Nobles Grade 3-D Seismic Survey, Big Cypress National Preserve*, 20-26 (April 2016), attached hereto.

⁶¹ *Id.* at 20.

⁶² See, e.g., Quest Ecology, *Summary of March 6, 2020 Site Assessment within Burnett Oil Company's Nobles Grade 3-D Seismic Oil and Gas Exploration area, Big Cypress National Preserve, Collier County, Florida* (March 15, 2020), <https://www.nrdc.org/sites/default/files/final-quest-ecology-memorandum-20200306.pdf>; Quest Ecology, *Comments on Turrell, Hall & Associates, Inc's 2019 Reclamation Monitoring Report – August 30, 2019, Burnett Oil Company's Nobles Grade 3-D Seismic Oil and Gas Exploration in the Big Cypress National Preserve* (January 3, 2020), <https://www.nrdc.org/sites/default/files/quest-ecology-memorandum-2019-reclamation-monitoring-report-01032020.pdf>; Quest Ecology, *Seismic Survey Inspection Report, Big Cypress National Preserve* (June 2019), <https://www.nrdc.org/sites/default/files/seismic-survey-inspection-report-20190615.pdf>; Quest Ecology, *Phase I Seismic Survey Inspection Report, Big Cypress National Preserve* (May 2018), https://assets.nrdc.org/sites/default/files/seismic-survey-inspection-big-cypress-20180531.pdf?_ga=2.61695279.2044034844.1586532000-1336211018.1533580820.

⁶³ U.S. Army Corps of Engineers, Jacksonville District, Enforcement Section, Memorandum for Record CESAJ-RD-PE (1200A) (February 7, 2020) (hereinafter, February Memorandum) at 1, available at: https://www.biologicaldiversity.org/programs/public_lands/pdfs/SAJ-2016-1849-Burnett-Oil-Company-in-Big-

Based on the scientific findings made in the February Memorandum, the Corps correctly issued a notice to the Burnett Oil Company on March 6, 2020, stating:

The Corps concludes that the survey activity caused an impact that resulted in a change in the bottom elevation of the wetland, that the activity caused an identifiable individual and cumulative adverse effect on aquatic function, and that the survey had the adverse effect of degrading a water of the U.S. Finally, the Corps concludes that the completed survey activities represent a cumulative adverse impact thereby causing a situation that is not de minimis.⁶⁴

The Corps further advised Burnett Oil Company that:

any future oil and gas survey activity by Burnett Oil Company in Big Cypress National Preserve should continue to be coordinated with the Corps in accordance with the Clean Water Act. A permit will be required of you unless and until you can demonstrate to the satisfaction of the Corps or Environmental Protection Agency, prior to commencing the activity involving the discharge, that the activity would not have the effect of destroying or degrading any area of waters of the United States.⁶⁵

One month later, after receiving a written complaint from Burnett Oil Company,⁶⁶ the Corps rescinded this notice following communications with the Burnett Oil Company and the National Park Service, without explanation or supporting scientific information, stating it had “re-evaluated all of the current and available information relating to Burnett’s prior activities” and “rescinds the conclusions specified in the previous letter and asserts no further action is being taken by Jacksonville District or required of Burnett for its completed seismic survey.”⁶⁷

Despite the extensive wetland damage caused by Burnett Oil Company’s seismic exploratory operations documented in Big Cypress National Preserve, there is no compensatory mitigation plan to compensate for the loss of wetland functions because there was no NWP 6 verification letter or individual permit requiring such mitigation. There are also significant issues with the reclamation and maintenance and monitoring of the wetland damage caused by the seismic exploratory operations.⁶⁸

[Cypress-MFR-002.pdf](#).

⁶⁴ U.S. Army Corps of Engineers, Jacksonville District, Regulatory Division, Notice to Burnett Oil Company (March 6, 2020) (hereinafter, Notice) at 2, *available at*:

https://www.biologicaldiversity.org/programs/public_lands/pdfs/SAJ-2016-1849-Burnett-Oil-Company-in-Big-Cypress-3-6-20-Letter-from-Corps.pdf.

⁶⁵ *Id.*

⁶⁶ Letter from Charles Nagel, Burnett Oil Company to Robert Halbert, U.S. Army Corps of Engineers re: Seismic Survey in Big Cypress National Preserve, SAJ-2016-1849 (RJK) dated March 12, 2020, attached hereto.

⁶⁷ Colonel Andrew D. Kelly, Commander, Jacksonville District, U.S. Army Corps of Engineers, Letter to Burnett Oil Company (April 7, 2020) (hereinafter, rescission letter); *available at*:

https://www.biologicaldiversity.org/programs/public_lands/pdfs/2020041-Draft-Letter-to-BurnettL_20200402-002.pdf.

⁶⁸ See Quest Ecology, *Summary of March 6, 2020 Site Assessment within Burnett Oil Company’s Nobles Grade 3-D Seismic Oil and Gas Exploration area, Big Cypress National Preserve, Collier County, Florida* (March 15, 2020), <https://www.nrdc.org/sites/default/files/final-quest-ecology-memorandum-20200306.pdf>; Quest Ecology, *Comments*

While it was apparently unclear to Corps staff whether a Section 404 permit was required for seismic exploratory operations in the Preserve, the Corps authorized another seismic exploratory operation in the same District through a NWP 6 verification letter, proposed by Tocala, LLC.⁶⁹ This applicant proposed plugging of seismic shot holes over a 161-square mile area, including in wetlands.⁷⁰ This NWP verification contains special conditions requiring as-built drawings, specific work methodology and locations, restoration, and protection measures and inspections related to endangered species, cultural resources, and historic properties.⁷¹ These protections could have been extended to the seismic exploratory operations in the Preserve had a permit been required. But instead, the oil company used the fact that it was not using shot holes or constructing temporary mats, as described in NWP 6, to evade Section 404 permitting requirements altogether.

Additionally, while NWP 6 purportedly does not authorize fills for roads,⁷² it is unclear whether the de facto creation of roads by driving vibroseis and other off-road vehicles used for seismic exploratory operations, through wetlands, is prohibited. The sheer weight of vibroseis vehicles used for seismic exploratory operations can create de facto roads by compacting and displacing soils,⁷³ which change the bottom elevation of wetlands, as acknowledged by the Corps' enforcement section after viewing the damage caused by Burnett Oil's seismic exploratory operations in the Big Cypress National Preserve.⁷⁴

on Turrell, Hall & Associates, Inc's 2019 Reclamation Monitoring Report – August 30, 2019, Burnett Oil Company's Nobles Grade 3-D Seismic Oil and Gas Exploration in the Big Cypress National Preserve (January 3, 2020), <https://www.nrdc.org/sites/default/files/quest-ecology-memorandum-2019-reclamation-monitoring-report-01032020.pdf>; Quest Ecology, *Seismic Survey Inspection Report, Big Cypress National Preserve* (June 2019), <https://www.nrdc.org/sites/default/files/seismic-survey-inspection-report-20190615.pdf>; Quest Ecology, *Phase I Seismic Survey Inspection Report, Big Cypress National Preserve* (May 2018), https://assets.nrdc.org/sites/default/files/seismic-survey-inspection-big-cypress-20180531.pdf?_ga=2.61695279.2044034844.1586532000-1336211018.1533580820.

⁶⁹ See Verification Letter to Tocala, LLC from Fort Myers Permits Section, Jacksonville District (June 2017), attached hereto.

⁷⁰ *Id.*

⁷¹ *Id.* at 2-6.

⁷² Summary of the Proposed 2020 Nationwide Permits,

<https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll7/id/15396>.

⁷³ See Quest Ecology, *Summary of March 6, 2020 Site Assessment within Burnett Oil Company's Nobles Grade 3-D Seismic Oil and Gas Exploration area, Big Cypress National Preserve, Collier County, Florida* (March 15, 2020), <https://www.nrdc.org/sites/default/files/final-quest-ecology-memorandum-20200306.pdf>; Quest Ecology, *Comments on Turrell, Hall & Associates, Inc's 2019 Reclamation Monitoring Report – August 30, 2019, Burnett Oil Company's Nobles Grade 3-D Seismic Oil and Gas Exploration in the Big Cypress National Preserve* (January 3, 2020), <https://www.nrdc.org/sites/default/files/quest-ecology-memorandum-2019-reclamation-monitoring-report-01032020.pdf>; Quest Ecology, *Seismic Survey Inspection Report, Big Cypress National Preserve* (June 2019), <https://www.nrdc.org/sites/default/files/seismic-survey-inspection-report-20190615.pdf>; Quest Ecology, *Phase I Seismic Survey Inspection Report, Big Cypress National Preserve* (May 2018), https://assets.nrdc.org/sites/default/files/seismic-survey-inspection-big-cypress-20180531.pdf?_ga=2.61695279.2044034844.1586532000-1336211018.1533580820.

⁷⁴ U.S. Army Corps of Engineers, Jacksonville District, Enforcement Section, Memorandum for Record CESAJ-RD-PE (1200A) (February 7, 2020) (hereinafter, February Memorandum) at 1, available at: https://www.biologicaldiversity.org/programs/public_land/pdfs/SAJ-2016-1849-Burnett-Oil-Company-in-Big-Cypress-MFR-002.pdf.

Therefore, the Corps should include clarifying language in NWP 6 that prohibits its use for seismic exploratory operations that would create de facto roads. In the event the Corps continues to allow use of NWP 6, at a minimum, it should require the use of temporary mats to protect wetlands and limit all seismic exploratory operations to the dry season while accounting for seasonal needs of wildlife and bird species, such as breeding, nesting, and denning timeframes. Any NWP 6 verification should also contain special conditions requiring as-built drawings, specific work methodology and locations, restoration, and protection measures and inspections related to endangered species, cultural resources, and historic properties.⁷⁵ The inability of a project proponent to meet these requirements would clearly signal the need to apply for an individual Section 404 permit.

3. The Corps Should Require Pre-Construction Notification for all Seismic Exploratory Operations Under NWP 6

At a minimum, the Corps should require mandatory pre-construction notification for all NWP 6 seismic exploratory operations to provide the Corps the opportunity to assess whether an individual Section 404 permit is required or to impose conditions to curb the adverse effects of the activity.⁷⁶ Seismic exploratory operations should also require PCN because any compensatory mitigation required for NWP activities must comply with the Corps' compensatory mitigation regulations at 33 C.F.R. part 332,⁷⁷ and during their reviews of PCNs, district engineers can assess needed mitigation at an appropriate regional scale.

PCN requirements are critical because the nature and extent of the proposed activity can be made clear by a project proponent and the Corps can request additional information about the activity in advance. Even more critical, Corps staff can identify important safeguards to protect water resources, such as special conditions requiring as-built drawings, specific work methodology and locations, best management practices, restoration and compensatory mitigation requirements, and protection measures and inspections related to endangered species, cultural resources, and historic properties, prior to commencement of seismic exploratory operations:

The case-by-case review of PCNs often results in district engineers adding activity-specific conditions to NWP authorizations to ensure that the adverse environmental effects are no more than minimal. These can include permit conditions – such as time-of-year restrictions and use of best management practices or compensatory mitigation requirements to offset authorized losses of jurisdictional waters and wetlands so that the net adverse environmental effects are no more than minimal. *** Review of a PCN may also result in the district engineer asserting discretionary authority to require an individual permit from the Corps for the proposed activity, if he or she determines, based on the information provided in the PCN and other available information, that adverse environmental effects will be more than minimal, or otherwise determines that “sufficient concerns for the environment or any other factor of the public interest so requires” consistent with 33 CFR 330.4(e)(2)).

⁷⁵ See, e.g., *Tocala, LLC, Verification Letter* at 2-6, attached hereto.

⁷⁶ 85 Fed. Reg. at 57300.

⁷⁷ 85 Fed. Reg. at 57300; Regulatory impact analysis at 6: <https://beta.regulations.gov/document/COE-2020-0002-0061>.

During their reviews of PCNs, district engineers assess cumulative adverse environmental effects at an appropriate regional scale. The district engineer uses his or her discretion to determine the appropriate regional scale for evaluating cumulative effects. The appropriate regional scale for evaluating cumulative effects may be a waterbody, watershed, county, state, or a Corps district. The appropriate regional scale is dependent, in part, on where the NWP activities are occurring. *** For NWPs that authorize discharges of dredged or fill material into non-tidal wetlands and streams, the appropriate geographic region for assessing cumulative effects may be a watershed, county, state, or Corps district.⁷⁸

The Corps describes how a district engineer should respond if they determine that the adverse environmental effects of the proposed NWP activity are more than minimal:

then the district engineer will notify the applicant either:

- That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit;
- That the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or
- That the project is authorized under the NWP with specific modifications or conditions.⁷⁹

Based on the foregoing, the PCN requirement could help to avoid or minimize significant wetland damage and address uncertainty about the nature and extent of the proposed seismic exploratory operations authorized by the NWP.

The Federal Register Notice for the reissuance of NWPs stated that “[i]nterested parties may also suggest suspension or revocation of NWPs in certain geographic areas, such as specific watersheds or waterbodies. Such comments should include data to support the need for the suggested modifications, suspensions, or revocations of NWPs.”⁸⁰ Based on the foregoing, including documentation of extensive damage to wetlands in Big Cypress National Preserve resulting from Burnett Oil Company’s seismic exploratory operations and the permitting inconsistencies between Burnett Oil’s and Tocala, LLC’s seismic exploratory operations in the same Region and watershed, NWP 6 should, at a minimum, be suspended or revoked in the Jacksonville District, at least until these inconsistencies can be clarified and resolved. This is the only way to avoid or minimize individual and cumulative environmental effects in region, including net loss of wetlands.

⁷⁸ 85 Fed. Reg. at 57,300-01. As discussed elsewhere in these comments, we do not concede – indeed, we strongly object to the argument – that the possibility of district engineer action in response to a PCN enables the Corps to make a minimal effects finding for any NWP or for the NWP package as a whole. However, if the Corps moves forward despite these objections, it should at least build in a strict mandatory district engineer review process triggered by a PCN.

⁷⁹ Regulatory impact analysis at 16: <https://beta.regulations.gov/document/COE-2020-0002-0061>.

⁸⁰ 85 Fed. Reg. at 57307.

Based on the foregoing, we urge the Corps to remove uncertainty about the seismic exploratory operations that qualify for verification under NWP 6 as follows: (1) allow NWP 6 to expire without reissuance and require individual §404 permits for seismic exploratory operations; (2) alternatively, modify the existing language in NWP 6 to clarify the types of seismic exploratory operations that would qualify for NWP 6 verification; and (3) require pre-construction notification (PCN) for all seismic exploratory operations to remove any uncertainties about the nature and extent of the proposed seismic exploratory operations and to ensure they would have only minimal environmental impacts.

B. NWP 12 – Oil or Natural Gas Pipeline Activities

There are multiple flaws in this permit, discussed below. Before addressing them, we note that the Corps' proposal to divide the activities authorized by the previous version of NWP 12 into three separate permits because oil and gas pipelines pose distinct threats illustrates that the activities covered by that prior permit were not similar in nature, as the Clean Water Act requires. Unfortunately, the Corps' proper decision to look at these activities separately is where its compliance with the law ends, as the Corps has utterly failed to analyze many threats associated with pipelines and incorrectly concludes that the impacts that it does analyze are minimal.

First, the Corps fails to analyze, under either the Clean Water Act or NEPA, the harms associated with oil spills, with drilling "frac-outs," or with climate change, the risk of which will be exacerbated by the issuance of this NWP. Although the Corps admits these are foreseeable consequences of activities authorized by the permit, U.S. Army Corps of Eng'rs, Draft Decision Document: Nationwide Permit 12, at 50-51, the draft decision documents do not reflect that the Corps has considered these consequences in evaluating whether or not oil and gas pipelines can appropriately be permitted under section 404(e) or whether or not to prepare an EIS; instead, the Corps deflects responsibility by disclaiming authority to regulate such impacts or by saying other entities regulate them. In the same vein, the Corps acknowledges terrestrial environmental harms associated with clearing land for pipeline construction but does not appear to attempt to include those harms in its analysis. Both the Clean Water Act and NEPA, however, require the Corps to develop a record that includes all of these impacts and to analyze such impacts in making final decisions.

Second, even looking exclusively at the impacts to water bodies, the Corps lacks any reasonable basis for concluding that the activities authorized by NWP 12 will be minimally harmful. The draft decision document indicates that the permit will be used nearly 48,000 times in its five-year life, that those activities will impact 3,160 acres of waters, and that the Corps will only require 225 acres of compensatory mitigation. *See* Appendix A. The Corps offers no explanation, much less any analysis, to support its conclusion that these impacts will be minimal.

Third, this permit gives the permittee discretion to determine whether or not to perform corrective measures when conducting activities in wetlands. Specifically, it says that "the top 6 to 12 inches of the trench *should normally* be backfilled with topsoil from the trench." 85 Fed. Reg. at 57,369. Without a standard by which to judge when this must be done, this element of the

permit is, at best, difficult to enforce and thus cannot provide a basis on which to conclude that activities conducted in accordance with the permit are minimally impactful.

Fourth, there are numerous elements of the permit that give the permittee discretion to determine how stringently various provisions will be followed, thus preventing the Corps from relying on those permit terms to conclude that minimal effects will ensue from authorized activities. For instance, the permit can be used for foundations for pipelines or for access roads, “provided the foundations are the minimum size necessary,” and the “[a]ccess roads must be the minimum width necessary” and “as near as possible to pre-construction contours and elevations.” *Id.* at 57,370. Likewise, “work necessary for the remediation of inadvertent returns of drilling fluids to waters of the United States” is to be done “as soon as practicable.” *Id.* “Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable....” *Id.* And, “areas affected by temporary fills must be revegetated, as appropriate.” *Id.* at 57,371.

Fifth, the permit authorizes an unlimited number of activities impacting water bodies in connection with a single pipeline project. It accomplishes this outcome by arbitrarily and capriciously treating each individual crossing of a water body, for “activities crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distinct locations” as “a single and complete project.” *Id.* at 57,371. Because of this loophole, oil and gas pipelines could harm innumerable water bodies, covering hundreds of miles, leaving the Corps completely unable to reasonably conclude that the impacts from authorized activities will be minimal.

C. NWP 13 – Bank Stabilization

The bank stabilization NWP has few mandatory limits on the permit’s use. In particular, the NWP allows the district engineer to waive several otherwise applicable requirements, including the prohibition on discharges into special aquatic sites, the prohibition on bank stabilization activities longer than 500 linear feet, and the prohibition on the discharge of more than one cubic yard of material per linear foot of bank. This virtually unfettered discretion to authorize activities that exceed these restrictions means that the Corps cannot reasonably conclude that the NWP will not result in more than minimal adverse impacts.

For instance, the draft decision document contains no assessment or evidence concerning the provision that enables the district engineer to authorize discharges into special aquatic sites. Instead, the Corps merely cites the district engineer’s authority to limit such impacts if they so choose. The draft decision document also does not differentiate among the types and orders of streams that will be, or have been, impacted. As discussed elsewhere in these comments, this is an essential component of a meaningful stream impacts assessment. Instead, the impacts analysis lumps all waters together, providing only an unsupported approximation of cumulative impacts to “acres of waters of the United States, including jurisdictional wetlands.”

In addition, the draft decision document fails utterly to assess cumulative impacts. The draft decision document is completely devoid of any information concerning the extent of bank stabilization activities permitted under other NWPs, individual permits, and state permits. It is

also completely devoid of any discussion of impacts to natural stream channels from other sources, like the construction of locks and dams. A valid cumulative impacts assessment must assess the past, present, and reasonably foreseeable future impacts to waters covered by this NWP. The draft decision document also fails to assess the implications of the permits' failure to include any limitation on the number of times the bank stabilization NWP can be used on a particular stream or watershed. Without such a limitation, the cumulative impacts can be very grave indeed, as quite literally an entire stream could be rip-rapped 500 feet (or more) at a time. Without an analysis of this information, the Corps cannot make even a remotely reliable assessment of the cumulative impacts of proposed NWP 13.

Bank stabilization projects have a long history, and cumulatively have caused far reaching impacts for healthy rivers and communities. For example, as the Federal Emergency Management Agency has observed:

When positioned along a section of riverbank, for example, riprap has a number of negative impacts on the surrounding environment. Riprap tends to increase the speed of water flow along an armored reach, as the water has no points of friction to come up against and nothing to slow it down. This additional strength of flow presents issues further downstream from a riprap protected bank, as water is deflected off the riprap and directed at other points of riverbank. The increased strength and speed of the water only increases erosion suffered at these new locations, the typical result of which is the necessity of installing additional armoring, which merely moves the problem further down the stream.

Riprap impedes the natural functions of a riverbank or shoreline, as it interrupts the establishment of the riparian zone, or the point of interface between land and flowing water. A properly functioning riparian zone is important for a number of reasons; it can reduce stream energy and minimize erosion; filter pollutants from surface runoff via biofiltration; trap and hold sediments and woody debris, which assists in replenishing soils and actually rebuilding banks and shorelines; and it provides habitat diversity and an important source of aquatic nutrients. Not to mention, a naturally functioning riparian zone simply looks better.

Another aspect of riprap is its considerable effect on wildlife, specifically fish that live in and utilize streams and rivers where eroding banks have undergone armoring. While erosion can cause potential problems for fish, especially in high-silt locations, the installation of riprap leads to other, more significant, issues. When riprap is the primary or only form of riverbank stabilization measure, the end result is typically a uniform, smooth channel, with no complexity. This means that there are no areas of vegetation either in or overhanging the water, leaving fish at risk from predation. In addition, a lack of riverbank diversity denies fish a place to seek refuge during periods of high-water, which often results in their being washed out of a fast moving system during flooding.

Federal Emergency Mgmt. Agency, *Engineering With Nature: Alternative Techniques to Riprap Bank Stabilization*, at 8, https://www.fema.gov/pdf/about/regions/regionx/Engineering_With_Nature_Web.pdf; see also

Schmetterling, David; C. Clancy, and T. Brandt. 2001. *Effects of riprap bank reinforcement on stream salmonids in the western United States*. Fisheries. 26(7): 6–13 (hereinafter, Schmetterling 2001), https://www.researchgate.net/publication/250017404_Effects_of_Riprap_Bank_Reinforcement_on_Stream_Salmonids_in_the_Western_United_States.

In light of the clear evidence of damage from bank stabilization activities, the Corps should not adopt proposed NWP 13 but should instead tighten the environmental protections applicable to the permit to reduce future impacts.

While bank stabilization projects may appear to be an easy solution to erosion at the local level, they in fact cause significant problems downstream and throughout the watershed. Impacts from bank stabilization structures include the loss of shallow-water habitat because of changes in water depth, velocity, temperature, and sediment load; isolation of rivers from their floodplains; disturbance to sediment and debris input; and adverse affects to nutrient cycling. As hard substrates replace vegetated buffers, the water body's ability to filter pollutants, nutrients, and sediment is also impaired, affecting the health of human and animal communities.

Bank stabilization activities constrict what would be meandering rivers into a single channel, degrade river beds, and alter the formation and replenishment of sandbars and backwater areas. Armored stream banks destroy, impair the normal growth of, and prevent the regeneration of riparian vegetation. Schmetterling 2001; Peters, R.J. et al, 1998. *Seasonal Fish Densities Near River Banks Stabilized with Various Stabilization Methods*. Riparian vegetation helps slow and store floodwaters during high water events, is an important source of energy and nutrients to aquatic organisms, and provides critical habitat, including for federally listed threatened and endangered species. Trees also help maintain a water temperature hospitable to aquatic life.

Importantly, the use of structural or “hard” streambank stabilization methods such as riprap and concrete has been shown to exacerbate accelerated erosion downstream. Suddhuth, E. B. and J. L. Meyer. 2006. *Effects of Bioengineered Streambank Stabilization on Bank Habitat and Macroinvertebrates in Urban Streams*. *Environmental Management* Vol. 38, No. 2, pp. 218–226, at 218 (citing Li, M.-H., and K. E. Eddleman. 2002. *Biotechnical engineering as an alternative to traditional engineering methods: A biotechnical streambank stabilization design approach*. *Landscape and Urban Planning* 60:225–242; Henderson, J. E. 1986. *Environmental designs for streambank protection projects*. *Water Resources Bulletin* 22:549–558). This creates an ever-increasing need for future bank stabilization projects.

In view of these significant adverse effects from hardened streambanks, the Corps should either withdraw this NWP or make substantial modifications to it. At a minimum, those changes would include imposing a much shorter (and non-waivable) linear foot limit on the permit's use, requiring PCNs for all uses of the permit, and requiring a demonstration that natural streambank approaches are infeasible and that the structural approach is the least environmentally damaging alternative.

D. NWP 17 – Hydropower Projects

The Corps proposes to “modify this NWP to authorize discharges of dredged or fill material into waters of the United States associated with hydropower projects with a generating capacity of less than 10,000 kilowatts (kW),” instead of 5,000 kW. 85 Fed. Reg. at 57,328. The Corps’ rationale for expanding this permit to authorize facilities with double the capacity of those authorized under the prior NWP has nothing to do with the environmental impact of the activities permitted. Rather, the change is intended to make the NWP “consistent with the current threshold for which the Federal Energy Regulatory Commission can issue a license or exemption for small hydroelectric power projects....” *Id.*

This proposal is wholly inconsistent with the Corps’ statutory responsibilities. Neither the preamble to the proposal nor the draft decision document for NWP 17 discusses how the change would affect the environment and why any such change should be considered minimal, when considered with the other past, present, and future impacts of this permit. Consequently, the Corps lacks any basis for concluding that this change is permissible under the Clean Water Act or NEPA. The only argument the draft decision document presents as to why the impacts from the expanded permit will be minimal is the ability of district engineers to impose mitigation for particular projects or division engineers to place regional conditions on the permit’s use. As discussed elsewhere in these comments, however, those authorities are legally and practically inadequate to fulfill the Corps’ statutory duties.

E. NWP 23 – Approved Categorical Exclusions

This permit unlawfully authorizes activities that are not similar in nature. As discussed above, it presently applies to a wide variety of activities conducted for numerous purposes, and the permit is not limited to those presently-included activities. There appears to be no limiting principle on the nature of the activities that could be permitted.

NWP 23 also fails to comply with the statutory requirement that the activities have minimal impacts. For instance, the permit appears to permit activities not even yet identified, making the minimal impacts finding impossible now. The permit applies to any activity that some other agency decides is exempt from NEPA review, if the Office of the Chief of Engineers also approves of the inclusion in NWP 23, and this list can be expanded over the life of the permit.

This permit also violates the public participation requirements of section 404(e). The statute specifies that the Corps may issue general permits, but only “after notice and opportunity for public hearing. . . .” 33 U.S.C. § 1344(e)(1). If new categorically excluded activities are authorized by the permit after the promulgation of the permit, however, the NWP provides only that “the Office of the Chief of Engineers will solicit public comment.” 85 Fed. Reg. at 57,373. It is unclear what form this solicitation will take (*i.e.*, will the Corps actually provide public notice and a comment opportunity?), and it does not appear to include an opportunity for a public hearing, as the statute requires.

F. NWP 25 – Structural Discharges

This NWP lacks any kind of constraint to ensure that it does not have more-than-minimal impacts. There is no size limitation to the discharges it authorizes, nor is there any limitation on the number of times it may be used in a given water body.

G. NWP 30 – Moist Soil Management for Wildlife

This NWP cedes permitting authority entirely to the prospective permittee. It does not include a PCN requirement so that the Corps can track its usage to assess the real-world impacts of the permit and modify it as necessary or take other actions. And this permit involves activities that it is unwise to leave to self-policing permittees; for instance, it states that any authorized activity “must not result in a net loss of aquatic resource functions and services,” but provides no direction on how a permittee is to make this assessment. 85 Fed. Reg. at 57,375.

H. NWP 33 – Temporary Construction, Access, and Dewatering

Indefinite language in the permit gives the permittee discretion to determine how stringently various provisions will be followed, thus preventing the Corps from relying on those permit terms to conclude that minimal effects will ensue from authorized activities. For instance, it says, “[a]ppropriate measures must be taken to maintain near normal downstream flows and to minimize flooding,” and it says that “affected areas must also be revegetated, as appropriate.” 85 Fed. Reg. at 57,377.

I. NWP 34 – Cranberry Production Activities

This NWP authorizes activities that the Corps cannot reasonably say will not have a more-than-minimal impact on the environment. It authorizes cranberry production operations to impact up to 10 acres of waters, per operation, and does not limit the number of such facilities that may be authorized in a given watershed. In addition, although the permit specifies that the authorized “activity must not result in a net loss of wetland acreage,” 85 Fed Reg. at 57,377, it does not require that wetland functions be maintained. Consequently, the permit would appear to authorize activities that, especially when considered cumulatively, could seriously degrade a watershed.

J. NWP 48 – Commercial Shellfish Mariculture Activities

This permit violates NEPA, the Clean Water Act, and the ESA.

First, the NEPA analysis for NWP 48 is deficient. NEPA requires agencies to prepare an environmental impact statement for “major federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(C). Where an action is unlikely to have significant effects or where the significant effects are unknown, an agency shall prepare an environmental assessment. 40 C.F.R. § 1501.5(a). An agency may prepare a finding of no significant impact if, based on the environmental assessment, a proposed action will not have significant effects. 40 C.F.R. § 1501.6(a).

The Corps cannot rely on “a deferred determination” by a district or division engineer that a project will have no significant impacts for the purposes of NEPA, and it must evaluate the impacts of a nationwide permit. *Ohio Valley Environmental Coalition v. Hurst*, 604 F. Supp. 2d 860, 895 (S.D.W. Va. 2009); *see also*, *Wyoming Outdoor Council v. U.S. Army Corps of Engineers*, 351 F. Supp. 2d 1232, 1243 (D. Wyo. 2005)(finding Corps cannot defer cumulative impacts analysis to later grant of individual permit); *Puget Sound Habitat v. U.S. Army Corps of Engineers*, 417 F. Supp. 3d 1354, 1367 (W.D. Wash. 2019)(finding the Corps must evaluate the impacts of the nationwide permit, rather than relying on district engineer analyses of individual projects).

The Corps errs here in a similar way, deferring much of its responsibility for evaluating impacts to division and district engineers.⁸¹ Even if this was proper – which it is not –the Corps handicaps the ability of division and district engineers to conduct adequate analyses by proposing to remove the preconstruction notification requirements for newly cultivated species and cultivation in areas that have not been used for commercial shellfish mariculture for the past 100 years.⁸²

Further, the Corps cannot rely on conclusory assertions that project-specific mitigation measures will ensure minimal adverse impacts to the aquatic environment. *Ohio Valley Environmental Coalition*, 604 F. Supp. 2d at 889; *see also* *Wyoming Outdoor Council*, 351 F. Supp. 2d at 1252 (holding that Corps cannot rely on speculative mitigation measures to conclude that project would have no significant impact on wetlands), *Puget Sound Habitat*, 417 F. Supp. 3d at 1375 (finding that Corps erred by relying on general conditions to conclude there would be minimal environmental impacts). Yet here, the Corps relies on general conditions and conditions that may be imposed by district engineers to conclude that there will be no individual or cumulative adverse environmental effects.⁸³ This is improper.

The Corps cannot make a finding of no significant impact in this instance and must prepare a full EIS evaluating the impacts of NWP 48.

Second, this NWP violates the Clean Water Act. The Corps may only issue nationwide permits for activities that “are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effect on the environment.” 33 U.S.C. § 1344(e)(1). NWP 48 fails to meet these criteria.

The Corps fails to support its conclusion that NWP 48 will have only minimal adverse environmental effects. *See Coalition to Protect Puget Sound*, 417 F. Supp. 3d at 1363. The Corps estimates that the NWP will be used approximately 336 times per year, impacting approximately 13,360 acres nationwide.⁸⁴ The Corps estimates that 1680 activities could be authorized over 5 years, affecting 40,080 acres of wetlands.⁸⁵ It also proposes to remove the half

⁸¹ 85 Fed. Reg. at 57,340; Decision Document for NWP 48 at 45-46.

⁸² 85 Fed. Reg. at 57,335.

⁸³ 85 Fed. Reg. at 57,340; Decision Document for NWP at 53-54.

⁸⁴ Decision Document for NWP 48 at 81.

⁸⁵ Decision Document for NWP 48 at 81.

acre limit for projects that would impact submerged aquatic vegetation.⁸⁶ This activity will have more than minimal adverse effects in myriad ways.

For example, the Corps acknowledges that shellfish mariculture threatens the health of seagrass beds.⁸⁷ It also acknowledges that seagrass beds around the world have declined by nearly 30 percent since the 19th century⁸⁸, and that the restoration of seagrass beds has lower rates of ecological success than the restoration of other wetland types.⁸⁹ Streamlining the permitting process for new shellfish mariculture projects will likely result in additional projects being placed in or near seagrass beds, which are important habitats for fish and other marine life, and help maintain a healthy coastal ecosystem.⁹⁰ New projects will impact these critical areas, and as the Corps itself has noted, it is difficult to restore seagrass beds. Yet the Corps concludes that the individual adverse effects of NWP 48 will be no more than minimal.⁹¹ The Corps cannot solely rely on mitigation measures that may be imposed by division or district engineers to conclude that effects will be no more than minimal. *See Ohio Valley Environmental Coalition*, 604 F. Supp. 2d at 889, 901; *Coalition to Protect Puget Sound*, 417 F. Supp. 3d at 1367. Yet that is precisely what the Corps does here, noting that adverse effects on the environment will be no more than minimal due to compliance with general conditions and “regional conditions imposed by division engineers and activity-specific conditions imposed by district engineers.”⁹² This is not enough to satisfy the requirements of the Clean Water Act.

The Corps also fails to support its position that NWP will have minimal cumulative environmental effects. The Corps relies on division and district engineers to impose compensatory mitigation measures or to revoke project authorization to ensure that there will be no more than minimal cumulative adverse environmental effects.⁹³ But the Corps’ assessment of cumulative effects for the purposes of the CWA cannot rely on the supposition that division or district engineers will require mitigation for individual projects. *Ohio Valley Environmental Coalition*, 604 F. Supp. 2d at 901; *see also, Wyoming Outdoor Council*, 351 F. Supp. 2d at 1256 (finding that Corps cannot rely on unsupported mitigation measures to conclude there will be no cumulative effects); *Puget Sound Habitat*, 417 F. Supp. 3d at 1367 (finding the Corps must evaluate the impacts of the nationwide permit, rather than relying on district engineer analyses of individual projects). This is not enough to meet the requirements of the Clean Water Act.

Third, the NWP does not comply with the ESA. The Corps must ensure that its actions do not jeopardize listed species or adversely affect critical habitat. 16 U.S.C. § 1536(a)(2). It must assess its actions “at the earliest possible time,” and if they may affect listed species or critical habitat, consult with the Fish and Wildlife Service or NMFS. 16 U.S.C. § 1536(a)(2); 50 C.F.R.

⁸⁶ 85 Fed. Reg. at 57,331.

⁸⁷ Decision Document for NWP 48 at 29, 52.

⁸⁸ Decision Document for NWP 48 at 29.

⁸⁹ Decision Document for NWP 48 at 86.

⁹⁰ *See* Smithsonian, *Seagrass and Seagrass Beds*, <https://ocean.si.edu/ocean-life/plants-algae/seagrass-and-seagrass-beds>; United Nations Environment Program, *Out of the Blue: The Value of Seagrasses to the Environment and to People* (2020), https://www.seagrasswatch.org/wp-content/uploads/Resources/Publications/2020/PDF/UNEP_2020-Out-of-the-blue.pdf

⁹¹ Decision Document for NWP 48 at 88.

⁹² Decision Document for NWP 48 at 53, 79, 88.

⁹³ Decision Document for NWP 48 at 45-46.

§ 402.14(a); *Northern Plains Resource Council v. U.S. Army Corps of Engineers*, 454 F. Supp. 3d 985, 989 (D. Mont. 2020). When promulgating a framework for future actions, the Corps must conduct a programmatic consultation with FWS or NMFS, to assess the effect of proposed activity as a whole. 50 C.F.R. § 402.2; *Northern Plains Resource Council*, 454 F. Supp. 3d at 990. And the Corps cannot circumvent ESA consultation requirements by “relying on project-level review or General Condition 18.” *Northern Plains Resource Council*, 454 F. Supp. 3d at 992.

But that is precisely what the Corps does here. It states that NWP 48 complies with Section 7 of the Endangered Species Act given consultations that will be conducted by Corps districts and because of the prohibitions of general condition 18.⁹⁴ Deferring consultation ignores the threat increased shellfish mariculture creates for ESA-listed species – for example, listed species such as green sea turtles and manatees depend on healthy seagrass beds for survival,⁹⁵ and development of new shellfish mariculture facilities will affect their habitat. The Corps fails to comply with the requirements of the ESA and must complete a Section 7 consultation with FWS and NMFS prior to issuing the permit.

K. NWP A – Seaweed Mariculture Activities

This NWP violates NEPA. As with NWP 48, the Corps counts on district engineers to review proposed projects on a case-by-case basis to ensure that individual and cumulative adverse effects are no more than minimal.⁹⁶ The Corps cannot defer its responsibility to conduct a NEPA analysis. *Ohio Valley Environmental Coalition*, 604 F. Supp. 2d at 895; *see also*, *Wyoming Outdoor Council*, 351 F. Supp. 2d at 1243; *Puget Sound Habitat*, 417 F. Supp. 3d at 1367.

The Corps also assumes that division and district engineers will impose conditions to ensure that individual or cumulative adverse effects will be no more than minimal.⁹⁷ The Corps cannot rely on the potential for such conditions to be imposed in concluding there is no significant environmental impact from the NWP. *Ohio Valley Environmental Coalition*, 604 F. Supp. 2d at 889; *see also*, *Wyoming Outdoor Council*, 351 F. Supp. 2d at 1252; *Puget Sound Habitat*, 417 F. Supp. 3d at 1375. The Corps must complete an EIS fully evaluating the impacts of NWP A.

This NWP also violates the Clean Water Act – because the proposed activity involves discharge of dredge and fill material into the waters of the United States, the Corps must satisfy the criteria of Section 404 of the CWA, and it cannot do so. The proposed NWP would allow multi-trophic mariculture, allowing shellfish or other species to be cultivated along with seaweed.⁹⁸ The Corps acknowledges that some shellfish mariculture operations involve discharges of dredge and fill material in U.S. waters; therefore, in order to issue this multi-use

⁹⁴ Decision Document for NWP 48 at 73.

⁹⁵ *See* Smithsonian, *Seagrass and Seagrass Beds*, <https://ocean.si.edu/ocean-life/plants-algae/seagrass-and-seagrass-beds>

⁹⁶ Decision Document for NWP A at 38, 42.

⁹⁷ Decision Document for NWP A at 36.

⁹⁸ 85 Fed. Reg. at 57,343.

permit, the Corps must comply with Section 404.⁹⁹ The CWA allows the issuance of nationwide permits for activities that are “similar in nature.” 33 U.S.C. § 1344(e). This would allow the development of greatly dissimilar industrial facilities under the nationwide permit – for example, a facility farming only seaweed would be allowed under the same nationwide permit as a facility farming seaweed and shellfish. This is not the purpose for which nationwide permits were intended.

The Corps concludes that the NWP will have no more than minimal individual and cumulative adverse effects, due to NWP general conditions and the assumption that division and district engineers will impose additional conditions where necessary.¹⁰⁰ It also assumes that mitigation requirements imposed by district engineers will ensure that there will be no more than minimal cumulative adverse effects.¹⁰¹ The Corps cannot rely on the potential for such conditions or mitigation requirements, and has not supported its finding that there will be only minimal individual or cumulative adverse effects. *See Ohio Valley Environmental Coalition*, 604 F. Supp. 2d at 889, 901; *Coalition to Protect Puget Sound*, 417 F. Supp. 3d at 1367.

Finally, this NWP also violates the ESA. The Corps notes that the district engineer will review pre-construction notifications and will conduct Section 7 consultation if proposed projects will affect listed species or critical habitat.¹⁰² The Corps also notes that general condition 18 will ensure that project activity will not jeopardize listed species or adversely affect critical habitat.¹⁰³ But the structures used to support seaweed aquaculture risk entangling marine mammals, and may pose other threats to ESA-listed marine life.¹⁰⁴ The Corps must complete a Section 7 consultation before issuing this NWP in order to meet the requirements of the ESA. *See Northern Plains Resource Council*, 454 F. Supp. 3d at 992.

L. NWP B – Finfish Aquaculture

This NWP violates NEPA. The Corps notes that there will likely be adverse effects on the environment due to the NWP.¹⁰⁵ But as with the other mariculture nationwide permits, the Corps defers to division and district engineers to conduct more detailed assessments of adverse environmental effects.¹⁰⁶ The Corps also relies on the power of division and district engineers to impose mitigation measures and revoke individual permits to ensure that adverse effects are no more than minimal.¹⁰⁷ This is not sufficient to meet the requirements of NEPA. *Ohio Valley Environmental Coalition*, 604 F. Supp. 2d at 889; *see also, Wyoming Outdoor Council*, 351 F. Supp. 2d at 1252; *Puget Sound Habitat*, 417 F. Supp. 3d at 1375.

⁹⁹ 85 Fed. Reg. at 57,334.

¹⁰⁰ Decision Document for NWP A at 38, 43.

¹⁰¹ Decision Document for NWP A at 44.

¹⁰² Decision Document for NWP A at 42.

¹⁰³ Decision Document for NWP A at 59, 61.

¹⁰⁴ High Level Panel for A Sustainable Ocean Economy, *The Future of Food From the Sea* (Nov. 2019) at 16; https://oceanpanel.org/sites/default/files/2019-11/19_HLP_BP1%20Paper.pdf

¹⁰⁵ Decision Document for NWP B at 49.

¹⁰⁶ Decision Document for NWP B at 35.

¹⁰⁷ Decision Document for NWP B at 35-36.

Full consideration of the cumulative effects of this permit is crucial, given facilities under development like the proposed Pacific Ocean AquaFarms finfish facility off the coast of Southern California,¹⁰⁸ NMFS' proposal to develop Aquaculture Opportunity Areas,¹⁰⁹ and existing mariculture facilities.¹¹⁰ The Corps must complete an EIS assessing the effects of this permit.

This NWP also violates the Clean Water Act. The proposed permit would authorize finfish mariculture and multi-trophic mariculture projects (e.g., a facility cultivating finfish and bivalves).¹¹¹ The Corps itself notes that the impacts of finfish cultivation will depend on how facilities are operated, the species that are produced, stocking density, how fish are being fed, and location.¹¹² The CWA limits the use of nationwide permits for activities that are "similar in nature." 33 U.S.C. § 1344(e). The range of industrial facilities that would be allowed under NWP B violates this core provision of the CWA.

The industrial production of finfish in the ocean has numerous potential adverse effects, including: water pollution from waste runoff;¹¹³ disease spread;¹¹⁴ escaped fish impacts on wild populations;¹¹⁵ interactions with protected species;¹¹⁶ and pressure on wild fish stocks used to feed cultivated fish.¹¹⁷ The Corps counts on district engineers reviewing projects through the preconstruction notification process to ensure that individual and cumulative adverse effects are no more than minimal.¹¹⁸ The Corps also relies on the ability to district engineers to require additional conditions and mitigations to minimize adverse effects.¹¹⁹ But reliance on speculative conditions or mitigation measures is not sufficient to meet the criteria for a NWP under the CWA. See *Ohio Valley Environmental Coalition*, 604 F. Supp. 2d at 889, 901; *Coalition to Protect Puget Sound*, 417 F. Supp. 3d at 1367.

The Corps also notes that while there may be unavoidable environmental risks associated with finfish mariculture, the tradeoffs between those risks and the benefits of food production

¹⁰⁸ 85 Fed. Reg. 55,677 (Sep. 9, 2020).

¹⁰⁹ 85 Fed. Reg. 67, 519 (Oct. 23, 2020).

¹¹⁰ See, e.g., San Diego Bay Aquaculture, <https://sandiegobayaquaculture.com>; Carlsbad Aquafarm, <https://carlsbadaquafarm.com>

¹¹¹ 85 Fed. Reg. at 57,345.

¹¹² 85 Fed. Reg. at 57,345.

¹¹³ Jillian Fry, David Love & Gabriel Innes, *Ecosystem and Public Health Risks From Nearshore and Offshore Finfish Aquaculture*, Johns Hopkins Center for a Livable Future (revised Aug. 2018) at 9-10, <https://clf.jhsph.edu/sites/default/files/2019-09/ecosystem-and-public-health-risks-from-nearshore-and-offshore-finfish-aquaculture.pdf>; Rebecca R. Gentry et al., *Offshore aquaculture: Spatial planning principles for sustainable development*, 7 *Ecology & Evolution* 733, 735-36 (2016); Report of the Marine Aquaculture Task Force, *Sustainable Marine Aquaculture: Fulfilling the Promise: Managing the Risks* (Jan. 2007), ch. 6, https://www.who.edu/cms/files/mcarlowicz/2007/1/Sustainable_Marine_Aquaculture_final_1_02_07_17244.pdf

¹¹⁴ See Fry, Love & Innes at 6-9.

¹¹⁵ Fry, Love & Innes at 5-6.

¹¹⁶ See Katie Rowley, *Bibliography: Aquaculture Interactions with Endangered Species*, NOAA Central Library (May 2020), sec. I, https://repository.library.noaa.gov/view/noaa/24250/noaa_24250_DS1.pdf?

¹¹⁷ See Harold Upton & Eugene Buck, Congressional Research Service, CRS Report RL32694, *Open Ocean Aquaculture* (2010) at 11-12, <http://nationalaglawcenter.org/wp-content/uploads/assets/crs/RL32694.pdf>.

¹¹⁸ Decision Document for NWP B at 37.

¹¹⁹ Decision Document for NWP B at 37, 42, 44.

justify proceeding with the permit.¹²⁰ Such a cost-benefit analysis is not one of the criteria for issuing nationwide permits, and cannot form the basis for issuing the permit here. *See* 33 U.S.C. § 1344(e); 33 C.F.R. § 330.1.

Finally, this NWP also violates the ESA. The Corps notes that the permit may alter estuarine and marine habitats utilized by endangered or threatened species.¹²¹ It also flags the potential for interactions with marine mammals, including the entanglement of marine mammals in mariculture structures.¹²² Yet it defers Section 7 consultation to district engineers.¹²³ This violates the requirements of the ESA. *See Northern Plains Resource Council*, 454 F. Supp. 3d at 992. The Corps must complete a Section 7 consultation prior to issuing this permit.

M. NWPs C and D – Electric Utility Line and Telecommunications Activities and Utility Line Activities for Water and Other Substances

These two NWPs suffer from several of the same faults as NWP 12, discussed above.

First, the Corps acknowledges terrestrial environmental harms associated with clearing land for these utility line construction activities but does not appear to attempt to include those harms in its analysis. Both the Clean Water Act and NEPA, however, require the Corps to develop a record that includes all of these impacts and to analyze such impacts in making final decisions.

Second, even looking exclusively at the impacts to water bodies, the Corps lacks any reasonable basis for concluding that the activities authorized by these NWPs will be minimally harmful. The draft decision document indicates that both permits will each be used 8,650 times in its five-year life, that those activities will impact 3,550 acres of waters, and that the Corps will only require 500 acres of compensatory mitigation. *See Appendix A*. The Corps offers no explanation, much less any analysis, to support its conclusion that these impacts will be minimal. Moreover, the Corps does not explain how these estimates are reasonable; the notion that these two sets of very different activities will result in precisely the same amount of impacts to water bodies is highly questionable and reveals that the Corps has not made any real effort to assess these permits' likely use.

Third, both permits give the permittee discretion to determine whether or not to perform corrective measures when conducting activities in wetlands. Specifically, it says that “the top 6 to 12 inches of the trench *should normally* be backfilled with topsoil from the trench.” 85 Fed. Reg. at 57,383-84. Without a standard by which to judge when this must be done, this element of the permit is, at best, difficult to enforce and thus cannot provide a basis on which to conclude that activities conducted in accordance with the permit are minimally impactful.

Fourth, there are numerous elements of the permit that give the permittee discretion to determine how stringently various provisions will be followed, thus preventing the Corps from

¹²⁰ Decision Document for NWP at 50.

¹²¹ 85 Fed. Reg. at 57,346.

¹²² Decision Document for NWP B at 56.

¹²³ Decision Document for NWP B at 56, 63-64.

relying on those permit terms to conclude that minimal effects will ensue from authorized activities. For instance, the permit can be used for foundations for aboveground utility lines or for access roads, “provided the foundations are the minimum size necessary,” and the “[a]ccess roads must be the minimum width necessary” and “as near as possible to pre-construction contours and elevations.” *Id.* at 57,383-84. “Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable....” *Id.* And, “areas affected by temporary fills must be revegetated, as appropriate.” *Id.*

Fifth, the permit authorizes an unlimited number of activities impacting water bodies in connection with a single utility line project. It accomplishes this outcome by arbitrarily and capriciously treating each individual crossing of a water body, for “activities crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distinct locations” as “a single and complete project.” *Id.* at 57,383 & 57,385. Because of this loophole, utility lines could harm innumerable water bodies, covering hundreds of miles, leaving the Corps completely unable to reasonably conclude that the impacts from authorized activities will be minimal.

IV. The NWP General Conditions Must be Strengthened

A. GC 2 – Aquatic Life Movements

This general condition is too ambiguous to provide meaningful constraints on the actions of permittees that can harm aquatic life. It says that activities may not “*substantially* disrupt the *necessary* life cycle movements of aquatic life indigenous to the waterbody,” 85 Fed. Reg. at 57,385 (emphasis added), without explaining how much of a disruption is substantial and without identifying those life cycle movements that are necessary. Similarly, the condition specifies that water crossings have to be “*suitably* culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.” *Id.* (emphasis added).

B. GC 3 – Spawning Areas

This condition is likewise too ambiguous to ensure minimal harm. It only limits activities during spawning season to “the maximum extent practicable.” *Id.* And it says that activities are not authorized if they destroy “an important spawning area.” *Id.*

C. GC 4 – Migratory Bird Breeding Areas

This condition is likewise too ambiguous to ensure minimal harm. It only limits activities in migratory bird breeding areas to “the maximum extent practicable.” *Id.*

D. GC 7 -- Protection of Drinking Water Intakes

The proposed nationwide permit package fails to guard against harm to drinking water supplies from authorized discharges. In the last decade, Americans have endured a host of

drinking water crises, including the chemical spill in Charleston, WV; the historic drought in California; the massive bloom of toxic algae contaminating Toledo, OH's supply; and the catastrophic lead problems in Flint, MI. Although some of these examples do not have a likely connection to discharges of dredged or fill material, they all illustrate the vulnerability of the nation's drinking water supplies, and the close connection between surface water resources and safe and reliable drinking water supplies. They also underscore the need to closely scrutinize discharges that destroy water bodies, like wetlands, that filter out pollutants from polluted runoff and that help recharge groundwater sources from which drinking water systems draw their supplies.

Pollution authorized by the NWP's can harm drinking water supplies. The section 404(b)(1) guidelines describe some of the adverse impacts that discharges of dredged or fill material can have on drinking water sources. They note:

Discharges can affect the quality of water supplies with respect to color, taste, odor, chemical content and suspended particulate concentration, in such a way as to reduce the fitness of the water for consumption. Water can be rendered unpalatable or unhealthy by the addition of suspended particulates, viruses and pathogenic organisms, and dissolved materials. The expense of removing such substances before the water is delivered for consumption can be high. Discharges may also affect the quantity of water available for municipal and private water supplies. In addition, certain commonly used water treatment chemicals have the potential for combining with some suspended or dissolved substances from dredged or fill material to form other products that can have a toxic effect on consumers.

40 C.F.R. § 230.50(b). In the same vein, the draft decision documents for these NWP's acknowledge the potential harms that discharges authorized by the NWP's may inflict on water bodies, saying, "[a]ctivities authorized by this NWP may adversely affect both surface water and groundwater supplies. Activities authorized by this NWP can also affect the quality of water supplies by adding pollutants to surface waters and groundwater...." Draft Decision Document for NWP 12 at 55.

In light of harms such as these, the permitting rules applicable to Section 404 demand careful Corps' scrutiny for discharges that might impact drinking water sources. First, the Guidelines specify that discharges cannot "cause or contribute to significant degradation of the waters of the United States," including "[s]ignificantly adverse effect" on, among other things, "human health or welfare...." 40 C.F.R. § 230.10(c)(1). Similarly, the Corps' public interest review of planned discharges must consider "water supply and conservation," as well as "in General, the needs and welfare of the people." 33 C.F.R. § 320.4(a)(1). To that end, the Corps' regulations note, as a general policy:

Water is an essential resource, basic to human survival, economic growth, and the natural environment. Water conservation requires the efficient use of water resources in all actions which involve the significant use of water or that significantly affect the availability of water for alternative uses including opportunities to reduce demand and improve efficiency in order to minimize new supply requirements. Actions affecting

water quantities are subject to Congressional policy as stated in section 101(g) of the Clean Water Act which provides that the authority of states to allocate water quantities shall not be superseded, abrogated, or otherwise impaired.

33 C.F.R. § 320.4(m).

Finally, the Guidelines prohibit any discharge which, among other things, “[c]auses or contributes, after consideration of disposal site dilution and dispersion, to violations of any applicable State water quality standard,” 40 C.F.R. §230.10(b)(1), and many states have adopted “drinking water supply” as the designated use for numerous water bodies. The Corps therefore must ensure that these permits do not authorize discharges that threaten water availability or the quality of water used as a drinking water supply.

Unfortunately, as written, the NWP’s fail to adequately guard against harms to drinking water sources. The only specific limitation relevant to drinking water in the permits is General Condition 7, which provides: “No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.”¹²⁴ But this condition is virtually meaningless in practice and we suspect it is rarely, if ever, examined as part of the NWP authorization process.

We question the condition’s effectiveness for three reasons. First, because the Corps failed to define “proximity,” the key term in the condition, neither prospective permittees nor the Army Corps clearly understands how close to a planned discharge a drinking water intake must be for the condition to be relevant. Second, the location of water supply intakes may well be difficult for a prospective permittee to obtain, because the public availability of that information is routinely restricted.¹²⁵ Third, the Army Corps neither requires pre-construction notifications (for those permits that even have such a requirement) to contain information about drinking water intakes in the vicinity,¹²⁶ nor accepts that it must review permittees’ compliance with the condition.¹²⁷

To address these deficiencies and comply with its legal obligations to prevent certain harms to drinking water supplies, the Army Corps must strengthen restrictions on discharges of dredged or fill material that could adversely impact water bodies important for drinking water. Specifically, the Corps should include a general condition that the NWP’s are unavailable to authorize discharges into water bodies located within public water systems’ source water protection areas (as delineated under the Safe Drinking Water Act) or into water bodies designated by states for use as drinking water supplies (pursuant to section 303 of the Clean Water Act). Such a condition would be far clearer, in terms of where it applies, as the location of

¹²⁴ 81 Fed. Reg. 35,186, 35,231 (June 1, 2016).

¹²⁵ See, e.g., U.S. EPA, DWMAPS: Drinking Water Mapping Application to Protect Source Waters, *available at* <https://www.epa.gov/sourcewaterprotection/dwmaps> (“DWMAPS does not display the actual locations of public water system facility intakes but contains a wide variety of data useful to protection of drinking water sources.”).

¹²⁶ See 85 Fed. Reg. at 37,390-91 (describing required contents of PCN).

¹²⁷ See *Mobile Baykeeper, Inc. v. U.S. Army Corps of Engineers*, 2014 WL 5307850, *13 (S.D. Ala. 2014) (“the Corps Defendants’ unequivocal stance is that ‘the Corps is not required to determine that the project will comply with General Condition 7 in verifying that it falls within the scope of NWP 12.’”).

delineated source water protection areas and where certain state designated uses apply are both publicly available, far more so than the location of drinking water intakes.

E. GC 8 – Adverse Effects from Impoundments

This condition is too vague to limit adverse impacts to a minimal level. Specifically, it only directs permittees to limit the adverse effects of water flow changes from impoundments “to the maximum extent practicable.” *Id.* at 57,386.

F. GC 9 – Management of Water Flows

This condition is too vague to limit adverse impacts to a minimal level. Specifically, it only directs permittees to maintain the “pre-construction course, condition, capacity, and location of open waters” due to various activities “to the maximum extent practicable.” *Id.*

G. GC 10 – Fills Within 100-Year Floodplains

This condition is inadequate to limit adverse impacts to a minimal level. All it requires is compliance with other requirements – namely, “applicable FEMA-approved state or local floodplain management requirements.” *Id.* The Corps has recognized the critical functions of floodplain wetlands; the EPA Connectivity Report that provided the scientific basis of the EPA/Corps’ 2015 Clean Water Rule found:

- Riparian areas and floodplains connect upland and aquatic environments through both surface and subsurface hydrologic flowpaths. These areas are therefore uniquely situated in watersheds to receive and process waters that pass over densely vegetated areas and through subsurface zones before the waters reach streams and rivers. When pollutants reach a riparian or floodplain wetland, they can be sequestered in sediments, assimilated into wetland plants and animals, transformed into less harmful or mobile forms or compounds, or lost to the atmosphere. Wetland potential for biogeochemical transformations (e.g., denitrification) that can improve downstream water quality is influenced by local factors, including anoxic conditions and slow organic matter decomposition, shallow water tables, wetland plant communities, permeable soils, and complex topography.
- Riparian/floodplain wetlands can reduce flood peaks by storing and desynchronizing floodwaters. They can also maintain river baseflows by recharging alluvial aquifers. Many studies have documented the ability of riparian/floodplain wetlands to reduce flood pulses by storing excess water from streams and rivers. One review of wetland studies reported that riparian wetlands reduced or delayed floods in 23 of 28 studies. For example, peak discharges between upstream and downstream gaging stations on the Cache River in Arkansas were reduced 10–20% primarily due to floodplain water storage.
- Riparian areas and floodplains store large amounts of sediment and organic matter from upstream and from upland areas. For example, riparian areas have been shown to remove 80–90% of sediments leaving agricultural fields in North Carolina.

- Ecosystem function within a river system is driven in part by biological connectivity that links diverse biological communities with the river system. Movements of organisms that connect aquatic habitats and their populations, even across different watersheds, are important for the survival of individuals, populations, and species, and for the functioning of the river ecosystem. For example, lateral expansion and contraction of the river in its floodplain result in an exchange of matter and organisms, including fish populations that are adapted to use floodplain habitats for feeding and spawning during high water. Wetland and aquatic plants in floodplains can become important seed sources for the river network, especially if catastrophic flooding scours vegetation and seed banks in other parts of the channel. Many invertebrates exploit temporary hydrologic connections between rivers and floodplain wetland habitats, moving into these wetlands to feed, reproduce, or avoid harsh environmental conditions and then returning to the river network. Amphibians and aquatic reptiles commonly use both streams and riparian/floodplain wetlands to hunt, forage, overwinter, rest, or hide from predators. Birds can spatially integrate the watershed landscape through biological connectivity.

Connectivity Report at ES-9 to ES-10. In view of these findings, the Corps should prohibit the use of nationwide permits in floodplains and require projects that harm floodplain waters to obtain individual permits.

H. GC 12 – Soil Erosion and Sediment Controls

This condition is too vague to limit adverse impacts to a minimal level. As with many conditions, the Corps empowers permittees to determine how to apply it by directing them to use “appropriate” controls on sediment and soil erosion and to maintain those controls in “effective operating condition. 85 Fed. Reg. at 57,386.

I. GC 21 – Discovery of Previously Unknown Remains and Artifacts

This condition is too vague to limit adverse impacts to a minimal level. Specifically, it only directs permittees to avoid construction activities that may affect discovered remains and artifacts “to the maximum extent practicable” while consulting with the district engineer. *Id.* at 57,388.

J. GC 23 – Mitigation

The Corps does not appear to believe that this condition will significantly compensate for harms to aquatic resources. Although the condition says that mitigation “will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal,” and will be required “at a minimum one-for-one ratio” for impacts of more than 1/10 acre to wetlands or stream beds, *id.*, the Corps forecasts that many NWP will result in impacts substantially greater than the amount of compensatory mitigation required. *See* Appendix A. Perhaps this prediction is attributable to activities that escape PCN review or fall beneath the 1/10 acre threshold, or perhaps it is due to the ability of district engineers to make certain findings and ignore the default rule. In any event, as discussed above, the Corps may not rely on this condition to conclude that impacts to water resources will be minimal.

K. GC 32 – Pre-Construction Notification

As noted above, this condition contains an enormous loophole that precludes relying on district engineers' responding to PCNs to minimize the impacts of authorized activities to conclude that these NWP's are consistent with the law. Because prospective permittees may move forward with their activities if required PCNs are not acted upon by the district or division engineer within 45 days, 85 Fed. Reg. at 57,390, the Corps may not reach a minimal effects conclusion based on the PCN process being included in numerous NWP's.

V. The NWP Definitions Must be Clarified

Fourteen different NWP's (12, 21, 29, 39, 40, 41, 42, 43, 44, 50, 51, C, D, and E) prohibit discharges using those permits into wetlands adjacent to tidal waters. However, the NWP package does not define "adjacent," which could create an enormous loophole in these NWP's. Earlier this year, the Corps and EPA adopted new regulations – known widely as the Dirty Water Rule -- defining "waters of the United States" for numerous purposes under the Clean Water Act. Those rules contain a severely constrained and unscientific definition of "adjacent wetlands." *See, e.g.*, 33 C.F.R. § 328.3(c)(1). Because of this narrow – and unlawful – definition, wetlands lacking specified surface water connections to other protected waters are treated as non-adjacent. If the Corps were to apply the Dirty Water Rule's definition to these permits, that would grossly weaken them. The Corps does not appear to have considered this possibility in its preamble or in the NWP draft decision documents; without examining which wetlands qualify as "adjacent" for purposes of these NWP's, the Corps cannot reasonably conclude that the impacts of any of them will be minimal.

Another problematic definition is "practicable." As indicated above, several permits and conditions apply to "the maximum extent practicable," but the definition, which is nothing more than an open-ended "consideration" of several factors, is highly subjective.

VI. The Corps Should Not Finalize the Reissuance of NWP's Prior to Concluding Public Comment on Regional Conditions

We note that the deadline for commenting on some regional conditions, such as in the Jacksonville District, ended prior to the November 16, 2020, comment period for reissuance and modification of the NWP's. This approach impairs the public participation requirements of the Clean Water Act and the National Environmental Policy Act. It is nonsensical for the division engineers to seek comment on regional conditions but conclude the public comment period on those conditions prior to the Corps finalizing the NWP's on a nationwide basis. Regional conditions are meant to be developed in conjunction with a regional cumulative effects analysis to inform division engineers' determinations about whether the NWP's combined with regional conditions would result in only minimal impacts to the environment. Division engineers cannot develop those conditions and hold a public comment period before it understands what changes, if any, will be made to the NWP's at the national level, and before it has an opportunity to evaluate the cumulative effects at a regional level.

APPENDIX A: ESTIMATED IMPACTS FROM DRAFT DECISION DOCUMENTS

NWP	Number of estimated uses/yr	Number of estimated acres impacted/yr	Number of estimated uses/yr without PCN	Number of estimated acres impacted/yr without PCN	% of activities expected to require mitigation	Number of estimated acres impacted/yr	Number of estimated activities/5 yrs	Number of estimated acres impacted/5 yrs	Number of estimated acres impacted/5 yrs	Number of estimated acres impacted/5 yrs	Difference between 5 Year impacted acres & mitigated acres	Notes
1												
2												SEC 10 ONLY
3	4360	1800	1000	15	1	45	26800	9075	225	8850		SEC 10 ONLY
4	50	5	20000	200	0	0	100250	1025	0	1025		
5	90	7	100	<1	<1	0	950	35	<1	34		
6	150	23	100	1	0	0	1250	120	0	120		
7	290	22			4	3	1450	110	15	95		
8												0 SEC 10 ONLY
9												0 SEC 10 ONLY
10												0 SEC 10 ONLY
11												0 SEC 10 ONLY
12	8110	615	1450	17	8	415	47750	3160	225	2935		
13	3300	220	500	10	3	10	19000	1150	50	1100		
14	5210	1240	200	10	16	650	27050	6250	3250	3000		
15	20	6	10	0.5	20	10	150	33	50	-17		
16	90	65	50	3	<1	0	700	340	<1	340		
17	7	3			0	0	35	15	0	15		
18	850	130	200	3	9	15	5250	665	90	575		
19	260	5	150	1	<1	0	2050	30	<1	30		
20	5	<0.5	50	5	0	0	125	28	0	28		
21	5	1	25	0	50	1	25	5	5	0		
22	30	5	300	12	30	0	3000	1510	2250	-740		
23	300	290										0 SEC 10 ONLY
24	30	1	30	0.5	0	0	300	8	0	8		
25												0 RESERVED
26												0 RESERVED
27	1350	3500			0	0	6750	17500	0	17500		
28												0 SEC 10 ONLY
29	1320	210	25	155	39	550	6600	1050	2250	-1700		
30	45	210	25	5	0	0	125	775	0	775		
31	50	90	25	5	60	110	450	475	550	-75		
32	360	145	33	7	2	12	2850	760	60	700		
33	40	5				5	200	25	25	0		0 IMPACTS ONLY EXPECTED IF RGP NOT RE-ISSUED
34												0 SEC 10 ONLY
35	235	6	100	1	2	0.2	1675	35	1	34		
36	60	220			0	0	300	1100	0	1100		
37	80	140			8	20	400	700	100	600		
38	1025	205	20	43	15	6	5125	1025	2550	-1525		
39	60	20	50	7	4	2	650	360	10	350		
40	80	40			15	27	1200	200	135	65		
41	210	110	100	5	37	40	100	50	200	-150		
42	20	60			4	2	400	300	10	290		
43	80	15			4	2	275	75	10	65		
44	55				0	0	1680	40080	0	40080		
45	336	13360	50	150	28	11	80	200	55	145		
46	16	40			0	0	20	2.5	2.5	0		
47	0.5	0.5	2	0.1	35	11	165	46	55	-9		
48	30	1.4			0	0	15	7	0	7		
49	3	2			0	0	35	10	0	10		
50	13	0			5	2	225	25	1	24		
51	45	5			5	<1						0 SEC 10 ONLY
52												0 SEC 10 ONLY
53	1400	690	330	20	5	100	8650	3550	500	3050		
54	1400	690	330	20	5	100	8650	3550	500	3050		
55	5	1			2	2	25	5	10	-5		
TOTAL	31719	24287.9	25210	648.1		3139.7	284730	97215.5	13864.5			