

Appendix A

Case Study: Clean Water Act Section 404 General Permits

Introduction

In order to obtain a thoughtful and thorough examination of our analysis of permit programs, we conducted an in-depth study of a single permitting program that spans the range from general to specific permits.¹ Our case study was the permitting program implementing Section 404 of the Clean Water Act, which regulates the discharge of dredge and fill materials into the waters of the United States.² This permitting program is administered by the Army Corps of Engineers, pursuant to regulations issued by both the Army Corps and the Environmental Protection Agency (EPA) with oversight from the EPA.³

We selected the Section 404 program for our in-depth case study for several reasons. First, the Corps of Engineers' Section 404 permitting program has been in operation since the early 1970s and has made use of permitting configurations that run the entire spectrum we identify, from very general to very specific and intermediates between. The program covers tens of thousands of activities each year. Those activities extend across a diverse range, from residential and commercial development to the installation of navigation buoys, from restoration of wetlands to offshore oil and gas development, from cranberry farms to the construction of water crossings for major highways. There is a robust policy and litigation history to the program and extensive scholarly commentary, allowing us to illustrate in deeper detail how our framework differentiates between permit configurations and how our design criteria could assist in the selection of those configurations for applied contexts.

Nationally, the Corps' Section 404 program has fifty general permit categories; we conducted in-depth investigations of six of those. These six examples were selected to span the range from permitting systems that were very skeletal (highly general) to more intense in terms of the information and review they required (more specific).⁴

¹ Special thanks to Taylor Reeves and Mae Manupipatpong for research assistance.

² The permitting program also regulates discharges under Section 10 of the Rivers and Harbors Act of 1899.

³ The Corps' regulations are at 33 C.F.R. §§ 320-332. The EPA's regulations are at 40 C.F.R. § 230. The EPA regulations provide guidelines for the issuance of permits pursuant to Section 404(b)(1) of the Clean Water Act. The EPA guidelines do not apply to NWP 1 because it only regulates structures and work under the Rivers and Harbors Act of 1899.

⁴ Corps district offices also have the authority to issue general permits on a regional basis, and there are a large number of these regional general permits. Because of space and time limitations, we only look at national permits. Readers interested in the regional general permit program and the important ways in which Corps district staff affect the implementation of the Section 404 permitting program should read Dave Owen, *Regional Federal Administration*,

We begin with a brief overview of how the Section 404 permitting program operates. We then describe the six general permits that we closely examined. The bulk of this report summarizes our analysis based on those general permits. Our analysis compares the implementation of the Corps' general permit program with the various factors we identify in our article as to the desirability of specific versus general permits. We use our comparison to develop critical insights as to both our factors and the Corps' general permits. We conclude with a summary of the lessons we learned about the utility of general permits from our case study.

Overview of the Section 404 permitting program

The Clean Water Act prohibits the “discharge of any pollutant by any person”⁵ into the “waters of the United States.”⁶ Pollutant is broadly defined to include anything from incinerator refuse to sand and certainly includes the kinds of materials historically used to fill in wetlands to make them developable.⁷ However, discharge is legal if authorized pursuant to one of a number of sections of the Act, including Section 404, which allows the Secretary of the Army to issue permits for activities that result in the “discharge of dredged or fill material into the navigable waters at specified disposal sites.”⁸ The delegated officer within the Department of the Army for issuance of the permits is the Chief of the Corps of Engineers.⁹

In issuing permits, the Corps must conduct a public interest review (evaluating 21 criteria)¹⁰ and comply with environmental and other guidelines established by the EPA.¹¹ EPA

UCLA L. REV. (forthcoming). These permits may replace or amend the terms of the national permits. For instance, some regions have increased the acreage limits for some of the general permits. In some locations (e.g., New England), Corps district offices have replaced the entire national general permit structure with a single regional general permit that has subcategories for each of the national general permits.

⁵ 33 U.S.C. § 1311(a).

⁶ The Act defines “discharge of any pollutant” as “any addition of any pollutant to navigable waters from a point source.” 33 U.S.C. § 1362(12). In turn, it defines “navigable waters” as “the waters of the United States,” 33 U.S.C. § 1362(7).

⁷ 33 U.S.C. § 1362(6) (“The term ‘pollutant’ means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.”).

⁸ 33 U.S.C. § 1344(a).

⁹ 33 U.S.C. § 1344(d). That authority has been further delegated, to a large degree, to division and district engineers. In addition to allowing the district and division engineers to issue individual permits, that delegation allows the development of regional general permits and district or division review of the issuance of national general permits, as discussed below.

¹⁰ See 33 C.F.R. § 320.4(a)(1). The Corps' public interest review applies to all of the Corps' permitting authorities: Sections 9 and 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972. The EPA guidelines only apply to permits issued under Section 404 of the Clean Water Act.

¹¹ 33 U.S.C. § 1344(b).

may also veto the Corps' issuance of permits under Section 404.¹² Section 404 does exempt a number of activities from the permitting requirement, including “normal farming,” dam repairs, and construction of farm stock ponds.¹³

In designing the permit system, Section 404 gives some guidance to the Corps. The default is that the Corps can issue permits pursuant to the standard model of the Act – individually tailored permits are issued to specific entities implementing particular actions, with public notice and comment, consideration of the relevant public interest factors under the Corps' regulations, and compliance with National Environmental Policy Act (NEPA) and Endangered Species Act (ESA) environmental review requirements.¹⁴

However, under Section 404, the Corps may issue a general permit “for any category of activities involving discharges of dredged or fill material if the Secretary determines that the activities in such category are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will only have minimal cumulative adverse effects on the environment.”¹⁵ The Corps issues general permits at a number of scales – nationwide, regional, and state.¹⁶ In this case study, we focus on the nationwide permits, although where relevant we note the role that regional permits play in its program.

In issuing a nationwide permit, the Corps proceeds through public notice and comment, including environmental review and determination of compliance with the EPA Section 404 guidelines.¹⁷ Its analysis looks at the full range of activities that might be covered within the scope of the general permit. Thus, instead of analyzing the particular impacts of a specific project at a particular location, and taking public comment on permitting that specific project, the Corps analyzes the impacts of a category of activities, and takes public comment on permitting that category of activities.¹⁸

The scope of activities covered by the Section 404 permitting program is quite large in terms of numbers. Approximately 74,000 discrete activities per year are covered by the general

¹² 33 U.S.C. § 1344(c).

¹³ 33 U.S.C. § 1344(f).

¹⁴ For an overview of the individual permits program, see Stephen M. Johnson, *Individual Permits*, in WETLANDS LAW AND POLICY: UNDERSTANDING SECTION 404, at 191 (Kim Diana Conolly et al. eds., 2005).

¹⁵ 33 U.S.C. § 1344(e)(1)-(2).

¹⁶ See William E. Taylor and Kate L. Geoffroy, *General and Nationwide Permits*, in WETLANDS LAW AND POLICY: UNDERSTANDING SECTION 404, at 151, 153 (Kim Diana Conolly et al. eds., 2005).

¹⁷ See 33 C.F.R. § 330.1-.6 (overview of general permitting process).

¹⁸ See, e.g., 77 Fed. Reg. 10,184 (Feb. 21, 2012) (most recent publication of nationwide permits).

permit program under Section 404, with thousands more covered by specific permits.¹⁹ General permits cover a wide range of categories, including aids to navigation, fish and wildlife harvesting devices, oil and gas structures on the outer continental shelf, mooring buoys, utility lines, “linear transportation projects” (i.e., roads and railroads), hydropower projects, surface coal mining activities, residential developments, cranberry production, boat ramps, and water-based renewable energy generation pilot projects, among others.

In setting up its general permit program, the Corps has developed three important overarching structures that affect the program’s implementation. First, for many activities covered by general permits, the Corps requires what it calls “pre-construction notice” (PCN) before the activity can proceed under the general permit.²⁰ Usually, the applicant can proceed a specified time after providing the Corps with the PCN (unless the Corps requests more information or requires an individual permit). However, for some general permits the applicant cannot proceed after providing the PCN until the Corps provides “verification” to the applicant that the proposed activity falls within the scope of the general permit. The Corps might impose additional conditions on the applicant pursuant to the PCN process. The level of information that is required in a PCN may vary from general permit to general permit.

Second, the Corps has created a long list of general conditions that apply to some or all of the general permits. These conditions generally restrict the applicability of general permits. For instance, if the proposed activity might affect endangered species, General Condition 18 requires compliance with the ESA, including consultation with fish and wildlife agencies and prohibition of federal actions that would violate the ESA. Another General Condition (23) requires compensatory mitigation for all wetland losses over 1/10 an acre.

Third, the Corps allows regional Corps offices to tailor the applicability of nationwide permits within their regions. This includes narrowing the scope of nationwide permits, or revoking one or more nationwide permits and issuing their own regional permits to be used instead of those nationwide permits.

Finally, consistent with the Clean Water Act, all general permits must be renewed every five years. The most recent renewal for Section 404 nationwide general permits was 2012.

¹⁹ Claudia Copeland, Cong. Research Serv., RL 97223, *The Army Corps of Engineers’ Nationwide Permits Program: Issues and Regulatory Developments 2* (2012).

²⁰ *See* 33 C.F.R. § 330.6.

General permits covered in our case study

We looked at six general permits in our case study. We chose permits that allowed us to analyze a diverse range of activities covered by the general permit program. In particular, we sought to compare general permits that covered a large number of relatively small activities with general permits that covered a smaller number of relatively large activities. We also sought to compare permits that would cover activities that are generally noncontroversial in terms of regulation (e.g., regulation of navigational aids) and those that have been highly controversial (e.g., regulation of surface coal mining activities). Finally, we also sought to include permits that provided a diversity of approaches in terms of Corps regulatory structures – specifically, whether the permits required prior notice to the Corps before the activity could proceed, and the kinds of limits that the Corps imposes on the use of the general permits.

Nationwide Permit 1: Aids to Navigation: This permit regulates the placement of aids to navigation and regulatory markers. Electrical service cables attached to navigational aids are not included in this nationwide permit and require a separate permit.²¹ The permit does not require PCN.²²

We selected this permit because it provided an example of an activity that is widespread,²³ that is relatively small in its individual impacts,²⁴ and that is relatively noncontroversial.²⁵

Nationwide Permit 4: Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities: Permit 4 authorizes fish and wildlife harvesting activities. These may include but are not limited to: pound nets, crab traps, crab dredging eel pots, lobster traps, duck blinds, clam and oyster digging, fish aggregating devices, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). NWP 4 does not authorize artificial reefs or impoundments or semi-impoundments of waters of the United States for the culture or holding of motile species such

²¹ 33 C.F.R. § 322.5(e).

²² See p. 11, NWP 1 Decision Document.

²³ According to the National Marine Fisheries Service, which conducted an Endangered Species Act analysis of the Section 404 general permit program, there were 251 authorizations under this NWP between 2010 and 2012. (p. 287, 2014 NMFS Biological Opinion). The NMFS identified NWP 1 as increasing in annual authorizations, with the number of authorizations in 2012 more than doubling those in 2010 and 2011. (p. 289, 2014 NMFS Biological Opinion).

²⁴ The NMFS also reported that between 2010 and 2012, the average impact size per permit for NWP 1 was 14.8 linear feet (98% permanent impacts) and 0.006 acres (26% permanent impacts). (p. 292, 2014 NMFS Biological Opinion).

²⁵ Indeed, there were no public comments submitted for this NWP. 77 Fed. Reg. 10184, 10191 (Feb. 21, 2012).

as lobster. Nor does it authorize the use of covered oyster trays or clam racks. NWP 4 does not require pre-construction notification (PCN).²⁶

We selected this permit because it provided an example of an activity that is widespread,²⁷ that is relatively small in its individual impacts,²⁸ and that is relatively noncontroversial (though more controversial than Nationwide Permit 1).²⁹

Nationwide Permit 21: Surface Coal Mining Activities: NWP 21 authorizes discharges related to surface coal mining and reclamation operations. To qualify for the permit, the operations must be authorized under the Surface Mining Control and Reclamation Act (SMCRA) (either by an approved state program or by the federal program). The operations must generate a maximum loss of ½ acre of non-tidal wetlands/waters, and no more than 300 linear feet of stream bed. The 300 linear feet restriction can be waived for intermittent and ephemeral stream beds with a written finding of minimal individual and cumulative adverse effects by the district engineer. There is no authorization for discharge into tidal waters. The permit does not authorize valley fills (a fill structure that is typically constructed within valleys associated with steep, mountainous terrain).

The permit, pursuant to General Condition 31, requires pre-construction notification (PCN) and written authorization from Corps. Unlike most NWPs, even if Corps does not reply to PCN within 45 days, the activity still can't proceed until the Corps responds.³⁰ For proposals that will affect more than 300 linear feet of stream bed, the Corps must circulate the PCN to other federal agencies, which have 10 days to indicate they will provide comments, then another 15 days for the

²⁶ See p. 1, NWP 4 Decision Document.

²⁷ Based on 343 authorized activities between 2010 and 2012 under NWP 4 and a variation rate of 49%, the NMFS estimated that the Corps authorizes between 51 and 177 activities under NWP 4 each year (with a five-year projection of between 255 and 885 authorized activities). (p. 288, 2014 NMFS Biological Opinion). The number of authorizations under this NWP is quickly growing, with 2012 authorizations more than doubling those in 2010 and 2011. (p. 288, 2014 NMFS Biological Opinion).

²⁸ The average impact size for this permit, according to the NMFS, is 9,086 linear feet, and 0.057 acres. (p. 290, 2014 NMFS Biological Opinion). Cumulatively, however, this general permit, combined with eight others, causes about 90% of the linear feet impacts from Section 404 general permits on tidal wetlands. (p. 292, 2014 NMFS Biological Opinion). The greater impact from the activities allowed by this permit might be the risk of entanglement and incidental capture on endangered species. (p. 306, 2014 NMFS Biological Opinion). Also, the fishing equipment covered by NWP 4 in many cases is also subject to separate regulation under state and federal fisheries laws.

²⁹ There were a few public comments submitted for this NWP, though we are not aware of any litigation associated with it. See p. 3, NWP 4 Decision Document.

³⁰ The PCN, consistent with General Condition 31, must contain name and contact information, the location of the project, a description of the project (including purpose, impacts of the project including loss of wetlands, and any other permits being relied upon), a delineation of affected wetlands (this need not be a jurisdictional delineation), a mitigation plan (or explanation of why adverse effects are minimal), and identification of Endangered Species Act and historic structures that might be affected by the project.

agencies to provide comments that indicate why they believe that adverse effects would be more than minimal.

This NWP was revised in 2012 to set the acreage, linear fit, and valley fill limitations. The revised NWP does grandfather operations that were authorized under the 2007 version of NWP 21. These operations are exempt from the acreage and linear feet limitations and the valley fill prohibitions. These grandfather operations must be authorized under SMCRA (either by approved state program or by federal program). The operator must request re-verification of permit authorization from the district engineer. The district engineer must confirm that continued operations would not produce an increase in loss of waters of the US from prior authorization, and must make a finding of minimal individual and cumulative adverse effects. In making the finding, the district engineer shall take into account regional conditions, and any activity-specific conditions added to the permit requirements.³¹

We selected this permit because it covers an activity that is limited in how frequently it occurs,³² but potentially substantial in its impacts,³³ and because it has been highly controversial in its implementation.³⁴

Nationwide Permit 27: Aquatic Habitat Restoration, Establishment, and Enhancement Activities: NWP 27 covers aquatic habitat restoration, establishment, and enhancement activities. The permit authorizes a wide range of activities including, among others, “modifications of the streambed and/or banks,” “installation of structures or fills necessary to establish or re-establish wetland or stream hydrology,” and “construction of oyster habitat.”³⁵ It does not authorize “the conversion of a stream or natural wetlands to another aquatic habitat type.”³⁶ There is also no authorization of “stream channelization” or “relocation of tidal waters or the conversion of tidal

³¹ As with all nationwide permits, district engineers can impose additional conditions on NWP 21, either for all permittees within the region, or for particular permittee operations.

³² The Corps estimated the permit would be used 61 times a year on national basis. See p. 51, NWP 21 Decision Document.

³³ One use of this NWP is for “mountain-top removal” coal mining techniques in Appalachia, which involve removing large amounts of rock from mountains to extract coal. It is also used for other types of surface coal mining in other areas of the country.

³⁴ This NWP has been the subject of multiple lawsuits. See *Black Warrior Riverkeeper, Inc. v. Cherokee Mining, LLC*, 548 F.3d 986 (11th Cir. 2008); *Kentucky Riverkeeper v. Rowlette*, 714 F.3d 402 (6th Cir. 2013); *Ohio Valley Environmental Coalition v. Hurst*, 604 F.Supp.2d 860 (S.D.W.Va. 2009). There were also substantial public comments on this NWP. See, e.g., 77 Fed. Reg. 10184, 10186, 10206, 10203-04, 10208 (Feb. 21, 2012).

³⁵ See p. 1, NWP 27 Decision Document.

³⁶ See p. 31, 2014 NMFS Biological Opinion.

waters . . . to other aquatic uses.”³⁷ NWP 27 does not require compensatory mitigation because all authorized activities “must result in net increases in aquatic resource functions and services.”³⁸

With the exception of three categories of activities, the permit requires PCN. The permit grants an exemption to this requirement to: 1) “activities conducted on non-Federal public lands and private lands, in accordance with the terms and conditions of a binding stream restoration or enhancement agreement or wetland enhancement, restoration, or establishment agreement between the landowner and [a government or state agency],” 2) NRCS/USDA “voluntary stream or wetland restoration or enhancement action, or wetland establishment action,” and 3) “reclamation of surface coal mine lands, in accordance with an SMCRA permit.”³⁹ Although permittees engaging in such activities do not have to provide a PCN, they are still required to submit documentation of relevant agreements, descriptions, or permits. They must also provide the “baseline ecological conditions at the project site.”⁴⁰

We selected this permit because it covers a relatively common activity⁴¹ that would generally have beneficial environmental impacts, but that might inspire some controversy because of the difficulty of defining what constitutes “restoration, establishment, and enhancement” habitat activities.⁴² In particular, there may be controversy over whether restoration activities covered by this permit might in fact cause negative environmental impacts either because they are ineffective or because the restoration activities might be a cover for development projects.⁴³

Nationwide Permit 29: Residential Developments: Permit 29 authorizes the construction of building foundation and building pads and other attendant features necessary for use of residence or residential development. Attendant features may include but are not limited to roads, parking lots, garages, yards, utility lines, storm water management facilities, septic fields, and recreation facilities such as playgrounds, playing fields and golf courses that are integral parts of the residential development. Activities authorized by this NWP must result in a loss of no more

³⁷ See p. 31-32, 2014 NMFS Biological Opinion.

³⁸ See p. 32, 2014 NMFS Biological Opinion.

³⁹ See p. 3, NWP 27 Decision Document.

⁴⁰ See 77 Fed. Reg. 10184, 10216 (Feb. 21, 2012).

⁴¹ The Corps estimated that the permit would be used “approximately 1,650 times per year on a national basis” and impact “approximately 880 acres of waters of the United States, including jurisdictional wetlands.” (p. 37, NWP 27 Decision Document).

⁴² There has been at least one lawsuit over the application of NWP 27. See *S.C. Coastal Conservation League v. United States Army Corps of Eng'rs*, 2013 U.S. Dist. LEXIS 189492, *7 (D.S.C. Nov. 7, 2013).

⁴³ A number of public commenters expressed these concerns. See 77 Fed. Reg. 10184, 10215-16 (Feb. 21, 2012). Reciprocally, a number of other public commenters sought to expand the scope of the permit to include more activities. See 77 Fed. Reg. 10184, 10214-15 (Feb. 21, 2012).

than ½ acre of non-tidal wetlands/waters, and no more than 300 linear feet of stream bed.⁴⁴ The 300 linear feet restriction can be waived for intermittent and ephemeral stream beds with a written finding of minimal individual and cumulative adverse effects by the district engineer. For residential subdivisions, the aggregate total loss of waters of the United States authorized by this NWP, including loss of waters associated with the development of individual subdivision lots, cannot exceed ½ acre.⁴⁵

NWP 29 was first issued in 1995 with a ½ acre limit. In response to a lawsuit, the Corps lowered the acreage limit of this NWP to 1/4 acres from ½ acres in 1999.⁴⁶

Initially, this permit was limited to use for single-family homes and personal residences, and it could be used only once per parcel. However, in 2007, the Corps modified NWP 29 by incorporating a separate nationwide permit (NWP 39) for multiple-unit residential developments into NWP 29. Before 2007, “single family residential projects could choose between NWPs 29 and 39. NWP 39 had a higher acreage limit [½ acre], but NWP 29 allowed activities in wetlands adjacent to tidal waters.”⁴⁷ After the change was implemented, NWP 29 authorized both single and multiple unit residential housing, including residential subdivisions, and a ½ acreage limit was universally applied to all projects authorized under NWP 29.⁴⁸

This permit requires pre-construction notification (PCN) and written authorization from Corps. If an applicant’s proposal will affect more than 300 linear feet of stream bed, the Corps must circulate the PCN to other federal agencies; they have 10 days to indicate they will provide comments, then another 15 days for the agencies to provide comments that indicate why they believe that adverse effects would be more than minimal.⁴⁹ If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects.⁵⁰

⁴⁴ According to Corps staff, the vast majority of users of NWP 29 avoid and minimize their impacts to get below the 1/10 acre threshold for requiring compensatory mitigation.

⁴⁵ See p. 1, NWP 29 Decision Document.

⁴⁶ *Final Notice of Modification of Nationwide Permit 29 for Single Family Housing*, 64 F.R. 47175 (August 30, 1999).

⁴⁷ 2007 Nationwide Permits Federal Register Notice, p. 1122-24, (March 12, 2007), http://www.usace.army.mil/Portals/2/docs/civilworks/nwp/nwp_2007_final.pdf.

⁴⁸ *Id.*

⁴⁹ p. 39, 2012 Nationwide Permits, Conditions, District Engineer’s Decision, Further Information, and Definitions (with corrections).

⁵⁰ p. 29, 2012 Nationwide Permits, Conditions, District Engineer’s Decision, Further Information, and Definitions (with corrections).

We selected this permit because it covers activity that is both widespread⁵¹ and may cause significant environmental impacts from individual projects. It has also been somewhat controversial for this reason, with litigation on the subject.⁵²

Nationwide Permit 52: Water-Based Renewable Energy Generation Pilot Programs: NWP 52 authorizes “structures or work in navigable waters of the U.S. and discharges of dredged or fill material into waters of the U.S. for the construction, expansion, or modification of water-based wind or hydrokinetic renewable energy generation pilot projects and their attendant features.”⁵³ These activities cannot produce a loss of “greater than ½ –acre of waters of the U.S” or result in a loss exceeding “300 linear feet of stream bed,” except in the case of “intermittent and ephemeral stream beds” for which the district engineer can waive the 300 linear foot threshold.⁵⁴ There can only be a maximum of 10 generation units per “single and complete project.”⁵⁵ NWP 52 does not provide authorization for “activities in coral reefs,” and may not authorize placement of structures “in established danger zones or restricted areas . . . Federal navigation channels, shipping safety fairways or traffic separation schemes . . . or EPA or Corps designated open water dredged material disposal areas.”⁵⁶

The permit requires PCN. For NWP activities that will result in a loss of more than 300 linear feet of stream bed, the district engineer must circulate the PCN to relevant federal agencies.⁵⁷ The agencies have 10 calendar days to notify the district engineer that they plan to give comment, and another 15 days to submit an explanation of “why . . . the adverse effects will be more than minimal.”⁵⁸

When pilot projects are complete, permittees are required to remove all “generation units, transmission lines, and other structures or fills associated with the pilot project . . . to the maximum extent practicable unless they are authorized by a separate Department of the Army authorization.”⁵⁹ A project’s completion is determined by the “date of expiration of the Federal

⁵¹ The Corps estimates that this NWP will be used approximately 700 times per year resulting in impacts to approximately 105 acres of waters of the United States, including jurisdictional wetlands. See p. 33, NWP 29 Decision Document.

⁵² See *Alaska Center for the Environment v. West*, 31 F. Supp. 2d 714, 721 (D. Alaska 1998).

⁵³ See p. 46, 2014 NMFS Biological Opinion.

⁵⁴ See p. 47, 2014 NMFS Biological Opinion.

⁵⁵ See *id.*

⁵⁶ See *id.*

⁵⁷ See p. 61, 2014 NMFS Biological Opinion.

⁵⁸ See p. 62, 2014 NMFS Biological Opinion.

⁵⁹ See p. 47, 2014 NMFS Biological Opinion.

Energy Regulatory Commission (FERC) license, or the expiration date of the NWP authorization if no FERC license is issued.”⁶⁰

We selected this permit because it involves substantial projects with potentially significant impacts⁶¹ that nonetheless might be seen as having important environmental benefits.

Analysis

We begin by analyzing the Corps’ general permit programs based on the seven factors we identified in our original article (Barriers to Entry, Information, Tailoring, Politics, Enforcement, Constraining Discretion, and Lower Administrative Burdens). We then develop overall lessons from our analysis for permit programs in general. We also use the case study to identify ways in which we might amend the factors in our original article.

Barriers to Entry: Permitting programs by definition impose barriers to entry into regulated activities. While there may be good reasons for those barriers to entry (e.g., they restrict activities that impose substantial social costs), those barriers do have costs. In particular, those barriers might weigh particularly heavily on small entities (especially individuals). General permits might be particularly useful in reducing the regulatory burden on small entities while still maintaining some level of protection against the harm from the regulated activity.

Some of the nationwide permits appear to be well-designed to reduce barriers to entry for small entities. For instance, the installation of navigation aids is an activity that would be pursued by a wide range of large and small entities, such as major ports but also small marinas. Thus, NWP 1 appears to be a thoughtful use of a general permit for reducing barriers to entry. Likewise, fishing equipment might be deployed by not just large corporations, but also by small entities such as owner-operated commercial and recreational fishing vessels. These small entities can take advantage of NWP 4. It is perhaps no accident that both of these permits, which might cover large numbers of small entities, also have the lowest transaction costs – with no PCN requirement.

On the other hand, other nationwide permits do not seem to be easily justified on the basis that they reduce barriers to entry to small entities. Surface coal mining activities are capital-intensive and thus are generally pursued by relatively large entities – the requirements of a Section 404 individual permit are likely only a small cost relative to the overall expenses of initiating and

⁶⁰ *See id.*

⁶¹ The Corps estimated that the permit would be used approximately 50 times per year and impact approximately 20 acres every year, with 25 acres of compensatory mitigation. *See* p. 37, NWP 52 Decision Document. Commenters on the creation of NWP 52 noted the potential for significant environmental impacts from renewable energy projects, such as the impacts of wind turbines on birds. 77 Fed. Reg. 10183, 10239 (Feb. 21, 2012).

operating a surface coal mine.⁶² Likewise, NWP 52 applies to pilot projects for water-based renewable energy – again, these will in general be relatively large, capital-intensive projects pursued by relatively large entities. Lowering the barriers to entry for these projects might make sense because we want to encourage renewable energy, but not because it is primarily small entities pursuing these projects.

NWP 27 and 29 are intermediate on this measurement. With respect to NWP 27, a wide range of entities might pursue restoration projects, from developers undertaking mitigation for other regulated activities, to environmental NGOs seeking to restore habitat they have acquired.⁶³ Some of these restoration projects might be undertaken by relatively small actors, and given the benefits they might provide, we may want to encourage these projects.

NWP 29 covers two very different categories of actors: individual landowners and residential developers. The former might be the classic example of small entities who would be hit hard by the high costs of the individual permitting process, making it difficult for someone to build a home on a property he or she has bought. The latter, however, would generally include substantially larger entities with greater resources who we might expect could generally cover the costs of individual permitting (particularly if those costs can be passed through to the purchasers of lots in the development).

Information: General permits may provide less information to the regulatory agency than specific permits. At the extreme end, general permits that require no notice to the regulatory agency provide no information to the agency about the regulated activities. This limits the ability of the agency to use the permitting program to determine the impacts from regulated activities and compliance by regulated parties.

NWP 1 and 4 do not require PCN to the Corps for regulated activities, and so without voluntary submission of a PCN or the requirement of a PCN under a separate provision of its

⁶² Of course, if the permit is denied, or onerous conditions are imposed as part of the permit, this may stop the mine's operations completely. But the time and costs of applying for and processing an individual permit, assuming that it is granted with minimal conditions, would not be a major component of the overall cost of a surface coal mine project, even with expenses estimated to be around a quarter of a million dollars and about two years of permitting time for an individual permit. See *Rapanos v. U.S.*, 547 U.S. 715, 721 (2006) (citing Sunding & Zilberman, *The Economics of Environmental Regulation by Licensing: An Assessment of Recent Changes to the Wetlands Permitting Process*, 42 NATURAL RESOURCES J. 59, 74-76 (2002)). Nonetheless, even for NWP 21 some commentators expressed concerns about the burdens that the general permit process would impose on surface coal mining. 77 Fed. Reg. 10184, 10209 (Feb. 21, 2012).

⁶³ Many non-profit organizations have restoration programs, and citizens have themselves engaged in NWP 27-type activities (with guidance from experts). See National Oceanic and Atmospheric Administration, *An Introduction and User's Guide to Wetland Restoration, Creation, and Enhancement*, 15, http://www.habitat.noaa.gov/pdf/pub_wetlands_restore_guide.pdf (last visited June 10, 2015).

regulations, the Corps would have little or no information about the regulated activities.⁶⁴ To the extent that these activities seem unlikely to cause significant environmental impacts individually or cumulatively, now or in the future, this lack of information is not a serious concern.⁶⁵

On the other hand, three of the other nationwide permits we reviewed all require at least basic information in the PCN process. NWP 21, NWP 29, and NWP 52 all required PCN for all activities covered by the general permits, and each require significant amounts of information for the PCNs that are submitted pursuant to the permits. Even the basic requirements for a PCN under General Condition 31 require substantial information about the applicant, the location of the proposed project, and the purpose and possible impacts of the proposed project.⁶⁶ Given the relatively large nature of the potential impacts covered by the projects authorized under each of the three permits, it makes sense to impose these informational requirements in order to allow the agency to monitor the individual and cumulative impacts of permitted activities and facilitate enforcement.⁶⁷

⁶⁴ Even for these NWPs there may be substantial information that may be collected. Many users of NWPs that do not require PCNs may still submit a PCN (a voluntary PCN), because the applicant wants written confirmation from the Corps that the activity is in fact authorized by that NWP. The Corps tracks those voluntary PCNs, sends verification letters to the applicant, and includes those voluntary PCNs in its analysis of the usage of NWPs. In addition, a number of general conditions require PCN requirements even for NWPs that do not otherwise require PCNs. In particular, General Conditions 18 (for endangered species) and 20 (for historic preservation) can trigger PCN requirements, and do so in a significant number of cases.

Of course, the Corps might also obtain information about the regulated activity from other sources, such as observations by enforcement staff in the field. Note that for navigational aids, private aids to navigation must be approved by the appropriate Corps district engineer. 33 C.F.R. § 66.01-30(a)-(b), 66.01-40(a)-(b). Thus, the Corps has access to this information from a separate regulatory program. Also, some regional offices impose stricter PCN requirements for these permits. For example, the Norfolk District in Virginia requires PCN for NWP 1 if work will occur in areas that contain submerged aquatic vegetation and also requires pre-construction review of whether the area in question contains anadromous fish. *Nationwide Permit 1: Aids to Navigation*, Norfolk Regional USACE, http://www.nao.usace.army.mil/Portals/31/docs/regulatory/nationwidepermits/Nationwide_Permit_01.pdf. (last visited June 20, 2015).

⁶⁵ We consider this issue in our discussion of tailoring, below.

⁶⁶ The PCN must contain a “description of the proposed project; the project’s purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity.” 2012 Nationwide Permits Overview Document at p. 38. It also must include information about whether endangered species or historic structures might be impacted by the proposed project, delineation of wetlands or other special aquatic sites located on the project site, and, if more than 1/10 of an acre of wetlands will be affected by the project, a mitigation proposal must be submitted.

⁶⁷ Projects undertaken by individual property owners under NWP 29 likely do impose relatively smaller impacts than projects undertaken by developers. Thus, the informational burden probably is more justified for developers than individual property owners.

NWP 27 is intermediate. It requires PCN for all restoration projects except for three categories, all of which involve projects that have already been reviewed and approved by a governmental agency.⁶⁸ This exemption makes sense given that information about these projects is already compiled by a governmental agency, albeit not the Corps;⁶⁹ approval also increases the likelihood that the restoration project is, in fact, beneficial and will be effective.⁷⁰

Overall then, the information structures of these three general permits appear to track when and how information would be more useful for a regulatory agency. Nonetheless, we also note two important limitations to the utility of the information the Corps has about its Section 404 general permit program.

First, simply because the Corps requires PCN before regulated parties take advantage of a general permit does not mean that, in fact, many regulated parties actually provide the required PCN. In fact, for some kinds of activities, it is plausible that many regulated parties are not submitting the required PCN. For instance, construction of homes on small areas of wetlands by individual property owners may often occur without a PCN, and it would be difficult for Corps enforcement staff to be aware that it had occurred without a PCN because of the relatively small scale of the activity.⁷¹ On the other hand, the large scale of surface coal mining activities or renewable energy projects makes it less likely that these could occur without providing the appropriate PCN. The existence of substantial additional local, state, and federal permitting requirements for these projects also makes failure to comply with the PCN requirement less likely, for instance because the additional permitting agencies might require evidence of Section 404 compliance for their own processes. Thus, this risk seems highest for individual property owners using NWP 29.⁷²

Second, even with the information the Corps has through the PCN process, it still has relatively limited information about the individual and cumulative impacts caused by the activities covered by its general permits. For instance, in its 2012 cumulative environmental impacts analysis for the renewal of NWP 21, the agency stated that it could not conduct a cumulative

⁶⁸ See p. 32, 2014 NMFS Biological Opinion.

⁶⁹ The further requirement that the documentation of approval be submitted to the Corps ensures that this information is available to it.

⁷⁰ Approval is not a guarantee that these projects will in fact be beneficial and effective. Our only claim is that they are more likely to be beneficial and effective than non-approved projects.

⁷¹ Failure to comply with the PCN requirement for individual property owners might well be a result of a lack of information about the permit requirement, rather than deliberate noncompliance with the law.

⁷² We think similar concerns would apply if NWP 1 and NWP 4 in fact required PCN.

analysis at a national scale because of a lack of data.⁷³ In *Ohio Valley Environmental Coalition v. Hurst*, 604 F.Supp.2d 860 (S.D.W.Va. 2009), plaintiffs challenged the 2007 renewal of NWP 21 on the grounds that the agency’s cumulative environmental impacts analysis was inadequate, and the court agreed that the analysis was inadequate. *Id.* at 883-86. Similar conclusions were reached by the court in *Kentucky Riverkeeper v. Rowlette*, 714 F.3d 402 (6th Cir. 2013). Accordingly, commenters on NWP 27 called for greater documentation and monitoring requirements to ensure that restoration projects are implemented effectively.⁷⁴

Tailoring: General permits are most useful when permit terms or conditions do not need to be tailored to the specific characteristics of individual projects within the permit category. This might be true either where the harms of projects in a category are consistently minimal, or where the harms of projects in a category are relatively uniform (even if not minimal). The Clean Water Act limits the use of general permits for Section 404 to situations where the Corps “determines that the activities in [a general permit] category are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effects on the environment.”⁷⁵

NWP 1 and NWP 4 appear to be classic examples of regulated actions with minimal impacts. Both aids to navigation and fishing devices generally will have only trivial (and often temporary) impacts on waters of the United States.

There of course may be exceptions to this general rule for these categories, and the Corps attempts to cover these exceptions through its general conditions. These conditions restrict the use of general permits in ways that might produce substantial environmental impacts, such as damage to special aquatic sites, endangered species, impacts to water flows or flood plains, or breeding habitat for fish and wildlife. They are thus efforts by the Corps to ensure that general permits really are limited to activities that cause minimal impacts.

NWP 21, 29, and 52 authorize much larger projects than NWP 1 and 4, and projects that seem much more likely to cause substantial environmental impacts: surface coal mining;⁷⁶

⁷³ See p. 41 NWP 21 decision document; see also NWP 27 decision document (Corps stating that its analysis of cumulative impacts would be conducted in a “speculative or predictive” manner).

⁷⁴ 77 Fed. Reg. 10,184, 10,216 (Feb. 21, 2012).

⁷⁵ 33 U.S.C. § 1344(e)(1).

⁷⁶ For public comments on the potential impacts of surface coal mining, see 77 Fed. Reg. 10,184, 10,186 (Feb. 21, 2012). The Corps suspended the prior version of NWP 21 based on concerns about the impacts it was causing.

residential development;⁷⁷ and renewable energy projects.⁷⁸ For each of these three permits, the Corps has sought to minimize the potential environmental impacts by establishing maximum areas that can be impacted by authorized projects under the general permit: ½ acre of waters of the United States or 300 linear feet of stream beds.⁷⁹ NWP 52 is further limited by restricting it to a maximum of 10 generation units and to temporary pilot projects;⁸⁰ NWP 21 by prohibiting valley fills.⁸¹ These limits apply in addition to the general conditions.⁸²

An additional way in which the Corps argues that it ensures that general permits have minimal impacts is by authorizing regional Corps offices to impose stricter requirements on permitted activities, either on a case-by-case basis or by amending nationwide permits on a regional basis.⁸³ The Corps argues that the PCN process allows regional staff to identify proposed projects that may cause more than minimal impacts and either impose conditions to avoid those risks, or require the applicant to apply for an individual permit.⁸⁴

Finally, the Corps also heavily relies upon mitigation requirements for all three permits when they cause impacts on more than 1/10 an acre of waters of the United States. The Corps concludes that given these mitigation requirements, any adverse impacts from permitted activities that are more than minimal are offset.⁸⁵

However, there are concerns about the approaches that the Corps has taken to try to ensure that general permits such as NWP 21, 29, and 52 only cause minimal impacts, despite the

⁷⁷ NMFS concluded that NWP 29 results in the increase of impervious surfaces on former wetlands areas of between 42.7 to 112 acres per year. See p. 271 2014 NMFS Biological Opinion.

⁷⁸ See 77 Fed. Reg. 10,184, 10,239 (Feb. 21, 2012) (describing that “numerous commenters objected to the issuance of . . . NWP [52]” because it would “result in more than minimal individual and cumulative adverse effects”)

⁷⁹ See, e.g., 77 Fed. Reg. 10,184, 10,204-05, 10,210-11 (Feb. 21, 2012) (NWP 21).

⁸⁰ In response to comments asking for these limits to be lifted, the Corps emphasized the importance of these limits in ensuring minimal impacts. See 77 Fed. Reg. 10,184, 10,238-29 (Feb. 21, 2012).

⁸¹ See 77 Fed. Reg. 10,184, 10,204-05, 10,210-11 (Feb. 21, 2012). “By prohibiting the use of NWP 21 for discharges associated with valley fills and activities exceeding appropriate thresholds, which are consistent with the thresholds used for many other NWPs, we can ensure that activities that may result in more than minimal individual and cumulative adverse effects obtain individual permits.” (77 Fed. Reg. 10,184, 10,205 (Feb. 21, 2012).

⁸² Some commenters called for additional limits to be imposed on NWP 29 as well, by limiting the features that could be constructed in addition to the residences. The Corps’ response was that any such limits were best imposed by regional offices.

⁸³ In addition, Corps regions may identify critical resource waters that would be excluded from general permits under general condition 22. The Corps emphasized this possibility in explaining why NWP 52 would not necessarily result in impacts on sensitive aquatic habitats. 77 Fed. Reg. 10,184, 10,240 (Feb. 21, 2012)

⁸⁴ See 77 Fed. Reg. 10,184, 10,185-86 (Feb. 21, 2012) (NWP 21); 77 Fed. Reg. 10,184, 10,216 (Feb. 21, 2012) (NWP 27). Corps staff report that regional offices regularly impose specific conditions on the use of NWP 21 and 29.

⁸⁵ See, e.g., p. 42 NWP 21 decision document; p. 33 NWP 29 decision document (estimating that the 105 acres impacted by the permit each year will be offset by 325 acres of mitigation).

potentially large scale of the projects they authorize. Relatively small activities (like those authorized by NWP 1 and 4) generally cause minimal impacts by the very nature of the activity – the impacts are self-limiting in other words.⁸⁶ However, for large-scale activities like those covered by NWP 21, 29, and 52, the limits on impacts are imposed by the terms of the permit itself, and therefore the success (or failure) of the limitation of those impacts depends in large part on the effectiveness with which the Corps can enforce the terms of the general permits – both against parties that provide the Corps with PCN, and against parties that fail to provide the Corps with PCN.⁸⁷

Given the limited data about the impacts of these general permits, it is difficult to say how effective the Corps has been in limiting the scope of the impacts under permits such as NWP 21, 29, and 52. However, there are indications that raise concerns about the effectiveness of those limits.

For instance, there have been significant problems with the Corps' assessment of the impacts of NWP 21, prompting questions about whether the Corps knows enough about the actions occurring under the permit to determine whether permit limits are being followed.⁸⁸ In *Black Warrior Riverkeeper*, plaintiffs challenged the grandfathering provisions of the renewed NWP 21 in the Black Warrior River watershed in Alabama, where 41 projects were recertified under the grandfathering provision of NWP 21 after 2012, allowing the filling of 27 miles of stream. The plaintiffs argued that there was inconsistency between the agency's finding that grandfathered projects would have minimal adverse environmental impacts, and the agency's finding that the acreage and stream limits and valley fill prohibition were necessary to ensure minimal adverse environmental impacts. In the case, the Corps admitted that it had not taken into account the fact that grandfathered activities would impact more than a half-acre of waters of United States, meaning that the impacts from the 2012 renewal of NWP 21 are more than originally assessed in the EA in the 2012 NWP 21 decision document. Accordingly, the appeals court remanded the

⁸⁶ As the Corps noted, there are a “few NWPs [that] have no explicit limits, but this is limited to those that authorize activities that provide benefits to the aquatic environment . . . or those for which the nature of the authorized activity inherently ensures that effects will be minimal.” 77 Fed. Reg. 10,184, 10,186 (Feb. 21, 2012).

⁸⁷ In many cases for these large-scale projects, the Corps only has jurisdiction over a relatively small part of the project, and the environmental impacts of the overall project are mostly in upland areas that are not regulated by the Corps. According to Corps staff, this is especially true for surface coal mining activities, where there are large areas of upland disturbance, but only a small percentage of that land area consists of wetlands and waters authorized to be filled by Corps permits, including nationwide permits.

⁸⁸ The Corps noted the difficulty of assessing the ecological impacts from permitted activities under NWP 21, and reasoned that the strict limits on the use of NWP 21 would help reduce the risk of substantial impacts. 77 Fed. Reg. 10,184, 10,204 (Feb. 21, 2012) (noting “the difficulty of documenting minimal adverse effect determinations for losses of aquatic resource area and functions that exceed those allowed in other NWPs”).

permit to the agency to correct its cumulative impact analyses under NEPA and the 404(b)(1) Guidelines, but allowed permitted activities to continue under the permit.

Indeed, in the context of NWP 21, historically, the Corps has approved the great majority of requests, indicating that site-specific review through regional consideration of PCNs may not be fully ensuring that impacts are minimal.⁸⁹ More generally, heavy reliance on individual review of PCNs to ensure impacts are minimal for any NWP indicates that individualized analysis is important for permitted activities, and raises questions about whether the generalized analysis implicit in a general permit form is appropriate. The challenges of the Corps' heavy reliance on site-specific analysis in this context is made clear by judicial skepticism as to the Corps' review of the impacts of NWP 21.

Similarly, many kinds of mitigation in this context have traditionally required site-specific analysis, and in its environmental review documents, the Corps has deferred any analysis as to mitigation to individual review of PCNs by district engineers.⁹⁰ Such heavy reliance on site-specific analysis also raises questions about the appropriateness of the general permit form.

In addition, there are questions about the level of enforcement by the Corps of mitigation requirements,⁹¹ and about whether mitigation can be effective in this context.⁹² But even more

⁸⁹ Lucy Allen, *Making Molehills Out of Mountaintop Removal: Mitigated "Minimal" Adverse Effects in Nationwide Permits*, 41 *ECOLOGY L.Q.* 181, 191 (2014).

⁹⁰ Some forms of mitigation will require closer review than others. There are three major kinds of mitigation in the Section 404 program: permittee-responsible mitigation; mitigation banks; or in-lieu fees. In permittee-responsible mitigation, the permittee takes full responsibility for implementing mitigation, often through a specially designed mitigation project. In mitigation banking, the permittee pays a third party who has already undertaken approved mitigation at another site (a mitigation bank); the permittee receives mitigation credits that satisfies the permit requirements. In in-lieu fee mitigation, the permittee also pays a third-party to undertake mitigation at another site; however, the mitigation generally has not yet occurred. Because it has been preapproved, mitigation banking may require a less close review on a permit-by-permit basis; the regulator may simply want to make sure that using mitigation credits from a particular bank are appropriate for the resources being replaced in the permitted project. Likewise, in-lieu fees may require less specific analysis because they involve projects undertaken by third parties, often larger projects that provide mitigation for a number of permitted activities. However, because they are individually designed to mitigate harms for a particular project, and also have had a poor history of implementation, permittee-responsible mitigation may require the closest level of site-specific review. General condition 23 requires substantially greater information about permittee-responsible mitigation than for the other forms of mitigation. For details on these three kinds of mitigation, see Royal C. Gardner, *Lawyers, Swamps, and Money: U.S. Wetland Law, Policy, and Politics*, ch. 6-9 (2011).

⁹¹ William A. Sicheri, *Losing Wetlands Under the Nationwide Permit Program*, 8 *ENVTL. L.* 619, 627 (2002) (citing National Research Council, *Compensating for Wetland Losses under the Clean Water Act* 101-117 (2001)); Lucy Allen, *Making Molehills Out of Mountaintop Removal: Mitigated "Minimal" Adverse Effects in Nationwide Permits*, 41 *ECOLOGY L.Q.* 181, 190 (2014).

⁹² See 77 Fed. Reg. 10,184, 10,207 (Feb. 21, 2012); NWP 21 Decision Document pp. 13-14. The Corps stated that its additional restrictions on acreage, impacts on streams, and prohibitions on valley fill were in part the result of concerns about mitigation. It also stated that it would not allow recreation of streams as mitigation, which is the most

importantly for purposes of this report, the significant reliance on site-specific analysis for mitigation, particularly for permittee-responsible mitigation, raises questions about the appropriateness of a general permit in this context.

These concerns about mitigation have been raised by courts considering challenges to NWP 21. In *Ohio Valley Environmental Coalition v. Hurst*, 604 F. Supp. 2d 860 (S.D.W.Va. 2009), the plaintiffs asserted, and the court agreed that in its 2007 renewal of NWP 21 the Corps had failed to do an adequate analysis of the extent of compensatory mitigation, relied too much on district engineering review and approval on a case-by-case basis, and no specific mitigation tools identified or monitoring program had been established. *Id.* at 887-95.

Finally, NWP 27 presents a very different kind of problem from the perspective of tailoring. On their face, the projects authorized by NWP 27 would be environmentally beneficial, and therefore would not have more than minimal impacts.⁹³ However, environmental restoration projects can be technically demanding, uncertain as to success, and may be the cover for otherwise detrimental development projects.⁹⁴ Manipulation of habitat to restore certain kinds of functions or resources may result in negative impacts on other functions or resources (e.g., conversion of a degraded freshwater marsh to a saltwater marsh will have a negative impact on species that depend on freshwater habitat, even if it benefits species that depend on saltwater habitat).⁹⁵

Through the terms of NWP 27, the Corps tries to minimize some of these risks – for instance, by stating that certain kinds of activities do not qualify for inclusion under the permit.⁹⁶ However, certain other kinds of potential restoration activities are controversial as to the benefits they provide but remain covered by NWP 27.⁹⁷ The Corps relied heavily on the requirement under

speculative form of mitigation, but instead require mitigation through stream rehabilitation and enhancement. 77 Fed. Reg. 10,184, 10,207 (Feb. 21, 2012); NWP 21 decision document pp. 13-14.

⁹³ See p. 32 2014 NMFS Biological Opinion (explaining that all “activities [authorized under NWP 27] must result in net increases in aquatic resource functions and services”)

⁹⁴ See, e.g., 77 Fed. Reg. 10,184, 10,214 (Feb. 21, 2012) (commenter expressing fears that NWP 27 would instead lead to “loss of waters rather than a net gain.”)

⁹⁵ See p. 30 NWP 27 decision document (noting potential impacts to aquatic habitats that “favor certain species at the expense of other species”).

⁹⁶ For instance, conversion of one habitat type to another habitat type does not qualify. As noted above, such conversion raises difficult questions of trading-off one environmental resource versus another. Channelization of stream habitat – which is unlikely to provide environmental benefits, and may be part of an overall development project that is harmful – is also excluded. See pp. 31-32 2014 NMFS Biological Opinion.

⁹⁷ For instance, relocation of non-tidal waters and wetlands on a project site – which might be part of mitigation for an overall development project – is included. 77 Fed. Reg. 10,184, 10,215-16 (Feb. 21, 2012) (comments arguing for restricting these activities under the permit).

NWP 27 that the project must provide a “net increase in resource functions and services.”⁹⁸ The Corps also relied upon the ability of regional Corps offices to impose additional conditions on permit applicants through the PCN process, or determine the activity does not qualify for NWP authorization.⁹⁹

As with NWP 21, activities authorized under NWP 27 may in many cases require site-specific analysis to determine whether they will truly provide net environmental benefits.¹⁰⁰ This would cut against the use of general permits. On the other hand, overall activities under NWP 27 are much more likely to provide net environmental benefits than activities under other NWP.

Politics: General permits may allow for regulation that would otherwise be impracticable given the political power of regulated entities. On the other hand, political pressure might force the inappropriate use of general permits instead of special permits.

Some of the activities covered by the general permits we examined are activities that are undertaken on a regular basis by a large number of actors: aids to navigation (NWP 1) and placement of fishing equipment (NWP 4). On the one hand, the widespread use of these activities might make it difficult for political mobilization to occur by regulated parties, making political pressure unlikely. On the other hand, given the common, everyday nature of these activities, the political backlash should the agency seek to prohibit or impose major roadblocks on those activities could be significant. Development by individual property owners under NWP 29 also likely falls within this category.

Other activities are pursued by a limited number of actors, but there are major economic benefits from those activities, producing both incentives and resources to organize to protect the activities from regulation. NWP 21 and the use of NWP 29 by developers fall within this category. There have been claims that various provisions of NWP 21, regulating surface mining, are the product of lobbying by the coal industry. For instance, the dissenting judge in *Black Warrior Riverkeeper* noted that the grandfathering provision in the 2012 version of NWP 21 was added in after a meeting between the Office of Management and Budget and the National Mining

⁹⁸ 77 Fed. Reg. 10,184, 10,215 (Feb. 21, 2012). We were unable to find any specification in the relevant documents as to how the Corps would determine whether a project would cause a net increase in resource functions or services.

⁹⁹ 77 Fed. Reg. 10,184, 10,216 (Feb. 21, 2012); *see also* NWP 27 decision document, pp. 5, 12, 14. For example, in Colorado, NWP 27 “is revoked for activities that include a fishery enhancement component in perennial streams, [and]. . . must [now] be authorized under Regional General Permit 12 Aquatic Habitat Improvement for Stream Channels in Colorado.” U.S. Army Corps of Engineers, *2012 Regional Conditions in Colorado* (Sept. 5, 2015), http://www.spk.usace.army.mil/Portals/12/documents/regulatory/nwp/2012_nwps/CO_Regional_Conditions_Revison_20140509.pdf.

¹⁰⁰ *See* 77 Fed. Reg. 10,184, 10,217 (Feb. 21, 2012) (stating that district engineers may “add conditions to the NWP” through the PCN process or even require individual permits)

Association and after public comment period had ended. (n.3 of dissent)¹⁰¹ The almost-impossible-to-answer question is whether if there were no general permit for surface coal mining, there would instead simply be a complete exemption from Section 404 for surface coal mining because of political pressures; a complete exemption might produce a worse outcome from an environmental perspective.

The water-based renewable energy pilot projects covered by NWP 52 might eventually produce significant economic revenue, but they are probably more marginal compared to coal or housing development. Certainly the size of the renewable energy industry does not (yet) compare in economic or political power to either coal or housing construction. Nonetheless, these are still substantial projects pursued by relatively large entities compared to the activities covered by NWP 1 and NWP 4, and therefore likely to result in some level of political lobbying on behalf of the permit.

NWP 27 is perhaps the permit that can least be explained or justified on the basis of politics. Some economic revenue is produced by restoration projects (e.g., for environmental consulting and engineering firms), but not on the level of coal mining or housing development. The benefits of environmental restoration are broadly distributed across the public, making organization in favor of restoration difficult. And environmental restoration efforts are not activities pursued by many people in their everyday lives.

Enforcement: By providing significant amounts of information about permitted parties and setting specific standards, specific permits can make enforcement of regulatory programs easier for agencies compared to general permits. Again, this is more important to the extent that the negative impacts of a regulated activity are more significant.

Here the PCN process makes enforcement easier for those general permits that require PCN. As noted above, the permits that do not require PCNs (NWP 1 and 4) as categories should cause minimal environmental harms. The permits that generally do require PCNs (NWP 21, 27, 29, and 52) are much more likely to trigger significant environmental harms, particularly if the terms and conditions of the general permits (general conditions, acreage/stream length limits, restrictions on the activities covered by the permit, mitigation requirements) are not enforced. Thus, for these nationwide permits, the requirement that applicants submit PCNs is much more important to ensuring that these permits are an appropriate use of the general permit form.

¹⁰¹ The grandfathering provision allows projects permitted before 2012 to continue without regard to the acreage, stream length, or valley fill limits imposed in the 2012 renewal of NWP 21.

Most of the activities that require PCNs also are activities that would be easier for enforcement staff to identify even without a PCN. It is difficult to conduct a clandestine surface coal mining operation, for instance. Complete disregard of the PCN requirement for these activities is unlikely. However, it is possible that some violations of the terms and conditions of the general permits might still not be easily detected even for these large operations. It is possible for a surface coal mining operation to cause impacts on wetlands that are not easily discovered, for instance if the operation destroys a small patch of wetlands in the middle of a facility in between inspections by the agency.

Constraining Discretion: Specific permits often require significant procedural steps for issuance, such as public notice and comment, that allow the public to participate in the issuance of a permit to a particular entity. General permits shift that participation to discussion about the category as a whole, and the public may not have any notice or opportunity to comment about the application of a general permit to a particular entity. This can make public scrutiny or judicial review of permitting decisions – an important form of accountability that reduces agency discretion – more difficult. To the extent we are concerned that agencies may not adequately implement statutory requirements, this discretion that agencies have under general permits might be concerning.

Likewise, specific permits give greater information to an agency about the identity and nature of regulated entities compared to general permits – by facilitating agency enforcement, the information that specific permits provide can allow agencies to exercise greater discretion in whether and how they enforce permit terms. Thus, with respect to regulated parties, agency discretion for general permits may be less than for specific permits. If we are concerned about agency abuse of its enforcement discretion, general permits would be preferable.

General permits without PCN, such as NWP 1 and NWP 4, both increase agency discretion vis-à-vis the public or non-regulated parties, and decrease agency discretion vis-à-vis regulated parties. Without the PCN process, the public has little or no idea which entities are using the general permits and how the agency is implementing the program; without the information provided by PCNs, the agency has little ability to determine which entities are covered by the program and against whom it might enforce regulatory standards.

Given the relatively minimal impacts of activities covered by NWP 1 and NWP 4, and the minimal risk of political pressure on the agency from the entities covered by those permits, we may not have much need for the public to hold the agency accountable for how it implements these permits. Reciprocally, given the relatively minimal impacts of activities covered by these permits, aggressive agency enforcement here might represent inappropriate political or personal

motivations by agency staff – thus, making discretionary enforcement by the agency difficult appears beneficial.¹⁰²

On the other hand, the public has greater information through the PCN process for NWP 21, 27, 29, and 52. Given the potentially larger impacts of actions under these permits, greater accountability to the public seems beneficial.¹⁰³ Moreover, given the possibility of political pressure on the agency from regulated parties covered by NWP 21 (coal industry), NWP 29 (developers), and NWP 52 (renewable energy), greater public accountability to offset that political pressure seems beneficial. Indeed, for high-stakes permitting processes such as NWP 21, we might want even greater accountability than would be available through the individual permitting process.

On the other hand, the greater information from the PCN process also allows the agency to be more selective in its enforcement, raising the risk of abusive enforcement practices. At least for NWP 21 and 52, however, the relative political power of the regulated entities might reduce our concerns that this kind of abusive enforcement might occur. These regulated parties, we might believe, can protect themselves in the political process. For NWP 29, the concerns about selective enforcement might be stronger for individual homeowners who both have to provide PCN and may not have the political weight that larger entities might have, like developers who use NWP 29.

Reducing Administrative Burdens: Compared to specific permits, general permits reduce administrative burdens on both agencies and regulated parties. This might be particularly helpful when the regulated activity is subject to multiple regulatory programs. A general permit system for one of the regulatory programs can “piggy-back” on the information and review conducted under other regulatory programs, increasing efficiency overall.

NWP 1 and 4 reduce administrative burdens significantly for all parties, since there is no PCN process.¹⁰⁴ In the public comments on NWP 21, regulated parties argued that the paperwork

¹⁰² Of course, the agency could tighten standards for all regulated parties by (for instance) eliminating NWP 1 or NWP 4. This might, or might not, be wise as a policy matter, but it eliminates the concerns about selective enforcement.

¹⁰³ The Corps generally argued that nationwide general permits are appropriate for activities that would otherwise not attract much public attention or interest. *See* 77 Fed. Reg. 10,184, 10,185 (Feb. 21, 2012) (“The NWPs authorize minor activities that result in minimal adverse effects on the aquatic environment that would likely generate little, if any, public comment, if they were evaluated through the standard permit process with a full public place.”). This seems to be less likely to be true for activities such as those permitted under NWP 21.

¹⁰⁴ NWP 1 also is congruent with separate Corps regulation of the placement of navigational aids; thus, the use of a general permit for Section 404 compliance for these navigational aids represents an effort to eliminate duplicative and burdensome regulation.

burdens from the PCN process under these permits were too heavy.¹⁰⁵ Commenters also argued that the regulatory burden could be more substantially lightened for some of these permits because there were other regulatory schemes that would apply to the regulated activities and would minimize negative impacts. For instance, commenters argued that surface coal mining was already substantially regulated under SMCRA and therefore significant regulation under NWP 21 was unnecessary.¹⁰⁶ The agency did eliminate PCN requirements under NWP 27 when the restoration project had already been approved by another government agency, though it still required documentation of that approval from the applicant.¹⁰⁷

Overall Assessment:

As a whole, the Section 404 general permits that we examined seem to track fairly well the factors that we identified as relevant for whether to use a general versus specific permit. Fewer informational and approval requirements were generally imposed for activities that were less likely to impose significant environmental impacts (either individually or cumulatively). NWP 1 and 4 are likely to impose the least environmental impacts, and had the least informational requirements (no PCN required at all). Stricter PCN requirements were imposed for more significant projects under NWP 21, 27, 29, and 52, consistent with the greater environmental impacts that those projects might impose.

However, we did identify some concerns, particularly with NWP 21. This permit allows activities that regularly cause substantial environmental impacts; the level of those impacts may vary substantially depending on the context and nature of the particular projects; reduction or

¹⁰⁵ 77 Fed. Reg. 10,184, 10,209 (Feb. 21, 2012) (NWP 21); *see also* 77 Fed. Reg. 10,184, 10,258 (Feb. 21, 2012) (commenters stating that PCN preparation can take “several days to weeks for an applicant to prepare pre-construction notification at the high level of detail required by district offices. Several commenters stated that they did not have the time and resources to prepare a pre-construction notifications for all activities.”). The agency responded that the average time to prepare a PCN is 11 hours, 77 Fed. Reg. 10,184, 10,268 (Feb. 21, 2012), but did concede that PCNs “require substantial resources to evaluate proposed activities and determine whether they result in minimal individual and cumulative adverse effects on the aquatic environment, and whether compensatory mitigation is needed to comply with the minimal adverse environmental effects requirement for general permits. The substantial amount of review required for both NWP 21 pre-construction notifications and individual permit applications both involve considerable amounts of resources from the Corps.” 77 Fed. Reg. 10,184, 10,210 (Feb. 21, 2012).

The agency did justify grandfathering prior permitted activities under the earlier version of NWP 21 on the grounds that the prior permittees have “expended substantial resources to obtain their authorizations” and if they could not comply under new NWP 21, that “would impose a significant hardship to require those operators to cease surface coal mining activities in waters of the United States while they apply for individual permits and wait for a decision.” 77 Fed. Reg. 10,184, 10,209 (Feb. 21, 2012).

¹⁰⁶ 77 Fed. Reg. 10,184, 10,208-09 (Feb. 21, 2012). The agency responded that SMCRA standards were different from the Section 404 standards, and thus the need for additional controls under Section 404. 77 Fed. Reg. 10,184, 10,204, 10,208-09 (Feb. 21, 2012).

¹⁰⁷ *See* p. 33 2014 NMFS Biological Opinion.

mitigation of those impacts also depends substantially on the context and nature of the particular projects or mitigation efforts. The permit as revised in 2012 seeks to minimize the impacts of permitted activities in three ways: limits on the size and nature of the projects; review of PCNs by regional officials who may impose additional constraints; and mitigation requirements. However, there are concerns with using all three of these tools in the context of general permits. The effectiveness of limits on the size and nature of the projects depends heavily on the effectiveness of enforcement of the terms of general permits. Enforcement may be relatively easier for the surface coal mining projects that are approved under NWP 21, since they are fewer in number and relatively large. However, if close enforcement of individual projects is essential to the success of a regulatory program, the significant informational and tailoring benefits of specific permits seem important. The review of PCNs by regional officials entails project-specific tailoring of permit conditions to individual projects – this is effectively specific permitting, but perhaps without the public participation, accountability, and informational benefits of specific permitting. Likewise, some kinds of mitigation entail project-specific tailoring given the highly variable nature of the resources impacted by the activities and the uncertain and contingent nature of mitigation of those impacts. Again, if such project-specific approval and tailoring is going to occur anyway, use of specific permits seems preferable. Thus, we might want to distinguish between mitigation that can be analyzed at a more general level (e.g., mitigation banking or in-lieu fees) and mitigation that requires specific analysis (e.g., permittee-responsible mitigation) in deciding on the parameters of general permits.

There are tradeoffs, of course. First, individual permits in the Section 404 context would trigger the full range of procedural and analysis requirements – public notice and comment, public interest review by the Corps, compliance with ESA and NEPA procedures, judicial review for each permit issuance, etc. These will be costly. Moreover, as we noted above, political constraints may be an important reason to use general permits – without the flexibility of general permits, there might not be Section 404 regulation of certain activities such as surface coal mining at all. But our review indicates that political constraints are a, if not the, primary reason for using a general permit for the activities covered by NWP 21, and this raises concerns about the effectiveness of that permit.¹⁰⁸

¹⁰⁸ We would add that the situation is much better after the 2012 revision of NWP 21, which imposed the limits on acreage, stream impacts, and valley fills – albeit with a grandfathering provision for previously permitted activities. Indeed, given the strict limits on acreage for the permit, it seems unlikely that many new projects will fall within the scope of NWP 21. Once grandfathering of old projects ends, there may be relatively little use of NWP 21.

Thus, if we have concerns about the current Section 404 general permitting system, it might be that it relies a little too much on general permits for some of the large-scale projects that present highly variable, potentially large, and context-specific impacts.

Critical Analysis of Our Factors: Our review of the Section 404 general permits highlights a point we made in our original piece – while we divided our analysis into seven factors to highlight some of the specific issues that general permitting programs raise, at heart the decision about whether to use general versus specific permits is a tradeoff between the variability and size of the harm that the regulated activity might pose versus the administrative burdens that information collection and agency permit approvals impose on regulated parties and agencies. In general, the higher the level of the harm caused by a regulated activity and the more that the harm varies across different projects, the more benefits specific permits can provide, even given the administrative burdens they impose. On the other hand, the more we are concerned about administrative burdens (particularly where the regulated activity involves large numbers of small actors), the more benefits general permits can provide.

Our review also indicates the potential risks of political constraints for permitting systems. In our original work, we highlighted the political benefits of general permits in allowing the possibility of tailoring the level of regulation to take into account political constraints – a single, one-size-fits-all level of stringent regulation will necessarily produce fewer areas of regulation than one that can be tailored (and lightened) where needed where political resistance is strongest.

But the flip-side is that political constraints might push a regulatory system to heavily adopt general permits, even where our other factors (e.g., tailoring, barriers to entry, enforcement, etc.) indicate that general permits are not appropriate. Thus, policymakers may want to think carefully when designing an overall regulatory program about ways to ensure that political pressures do not result in the inappropriate use of general permits. The requirements in Section 404 for the use of general permits (that the regulated activities pose only minimal harms and are similar in nature) are efforts to reduce this risk.

Our review also identified some additional considerations in choosing between general and specific permits.

First, the sheer number of regulated activities or permits may weigh in favor of running a general permit program. The amount of paperwork needed to permit every single navigational aid

in the United States would swamp both the agency and the regulated community. This weighs in favor of a general permit program, and it is no surprise that NWP 1 exists.¹⁰⁹

The extent to which the harm from a regulated activity is more or less the same no matter where it occurs (fungibility) also weighs in favor of a general permit. If the location of the regulated activity is more or less irrelevant, then specific locational information is not necessary for reviewing the permit. The less information required, the more general the permit system can be. Often minimal environmental impacts will be relatively fungible – given the minor impacts of a navigational aid, it doesn't generally matter where they are located. In contrast, it may well matter where the large impacts of surface coal mining operations occur.

Where the harm from a regulated activity is invariant and fungible, the analysis of the impacts of that regulated activity will be the same for each instance of the activity. Thus, when there are a large number of regulated activities, there will be significant economies of scale to doing the analysis once, and thoroughly, for the category of the regulated activities, and then applying that analysis uniformly – as through a general permit system.

Finally, we want to note that there may well be regulated activities that do not fit easily into either the general permit or the specific permit box. That might be (for instance) that they have high variation or uncertainty in the impacts they cause, but they are also activities that we want to encourage and therefore want to lessen the administrative burdens for. NWP 27 is an example of this conundrum. As a policy matter, we do wish to encourage restoration of wetlands.¹¹⁰ But there is a lot of uncertainty about the effectiveness of wetlands restoration (and even desirability in some circumstances), and resolving that uncertainty often depends on the particulars of who is doing the restoration, why they are doing it, how they are doing it, and where they are doing it. The Corps has sought to address this dilemma by streamlining the general permit process for some restoration activities (those previously approved by other agencies) and otherwise imposing relatively low PCN requirements on restoration projects. But the public comments on NWP 27 reflect concerns about effectiveness and the desire for more searching review. NWP 27 reflects a hard case about the use of general versus specific permits.¹¹¹

¹⁰⁹ Of course, this large amount of paperwork might be a more manageable if only a few large entities installed all of the navigational aids in the country. The agency might then issue permits authorizing the installation of navigational aids by certain entities, but not approve individual installations.

¹¹⁰ See p. 28 NWP 27 decision document (noting the “convenience and time savings” of a general permit and that permitted activities should benefit the environment).

¹¹¹ While environmental groups remain skeptical that the implementation of NWP 27 will effectively avoid harm, developers consider NWP 27's restrictions “unduly burdensome.” See Claudia Copeland, *The Army Corps of*

Engineers' Nationwide Permits Program: Issues and Regulatory Developments 15 (2012), <https://www.fas.org/sgp/crs/natsec/97-223.pdf>.

NWP 52 may be another example of a hard case, especially to the extent that promotion of renewable energy is seen as an important environmental goal.