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CLEAN WATER ACT

WETLANDS

This article analyzes the potential impacts of the 2012 National Wetland Plant List, released earlier this year. The author concludes that the 2012 NWPL could effect a sea change in wetland regulation, as it classifies far more plants as "wetland" species than ever before, and includes scores of new plants, the majority of which are classified as wetland species. As a result, it almost certainly will cause substantially more areas to qualify as wetlands, and therefore, be subject to Clean Water Act jurisdiction.

Army Corps' New Plant List Expected to Increase Number of Wetlands, Assertions of Clean Water Act Jurisdiction

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Bloomberg

I. Introduction

W etlands regulation and the scope of Clean Water Act jurisdiction have been the subject of heated debate since the U.S. Supreme Court issued its 2006 split decision in *Rapanos v. United States.*¹ Much of the controversy has focused on a stream of guidance documents that the U.S. Army Corps of Engineers and Environmental Protection Agency have proposed for interpreting Clean Water Act jurisdiction in the wake of $Rapanos.^2$ Lost in the commotion, however, has been something with potentially far greater implications the new list of plant species used for classifying an area as either a wetland or as a nonjurisdictional upland.

In May 2012, the Army Corps, in partnership EPA, the U.S. Fish and Wildlife Service (FWS), and the Natural Resources Conservation Service (NRCS), issued the 2012 National Wetland Plant List (2012 NWPL).³ The 2012 NWPL is the official reference for determining

¹ Rapanos v. United States, 547 U.S. 715, 62 ERC 1481.

 $^{^2}$ See, e.g., EPA/Corps Final Guidance on Identifying Waters Protected by the Clean Water Act, see also 183 DEN A-13, 9/21/12.

³ Publication of Final National Wetland Plant List, 77 Fed. Reg. 27,210 (May 9, 2012), see also 90 DEN A-3, 5/10/12.

whether a particular area contains a prevalence of hydrophytic (*i.e.*, wetland) vegetation — one of the three requirements for identifying a wetland.

The 2012 NWPL replaces the previous plant list, which had been in place since 1988. Upon issuing the new list, the Army Corps acknowledged that the 2012 NWPL made numerous changes to the previous version, but it claimed that those changes generally would not affect wetland identification and delineation. The facts do not bear that out, however.

A closer examination shows that the 2012 NWPL could effect a sea change in wetland regulation. The new list classifies far more plants as "wetland" species than ever before. It also includes scores of new plants, the majority of which are classified as wetland species. As a result, the 2012 NWPL almost certainly will cause substantially more areas to qualify as wetlands. And where wetlands are found, assertions of Clean Water Act jurisdiction are not far behind.

II. Background

The Clean Water Act prohibits any person from discharging "dredged or fill material" into waters of the United States, including jurisdictional wetlands, unless authorized by a Section 404 permit.⁴ The Army Corps defines the term "wetlands" to mean "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."⁵ That means that an area qualifies as a wetland only if it satisfies three parameters: hydric soils, hydrophytic vegetation, and wetland hydrology.

A. Identifying a Wetland

To assist with the identification of the three wetland parameters, and thus the identification of a wetland, the Army Corps issued the Wetlands Delineation Manual (1987 Manual).⁶ The 1987 Manual provides detailed information about the three parameters and the methods for evaluating them.

According to the 1987 Manual, a hydric soil is "a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation."⁷ Thus, hydric soils are soils that exhibit characteristics of prolonged low oxygen conditions and that typically support the growth of wetland plants.

Those plants are known as hydrophytic vegetation, the second parameter in wetland identification. The Army Corps explains that hydrophytic vegetation is "the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present."⁸ In plain English that means that, to satisfy the hydrophytic vegetation parameter, the majority of the plants living in a given area must be species that typically grow in wetlands.

To inform that vegetation analysis, the 1987 Manual establishes five "indicator status" categories for plant (and tree) species, indicating the likelihood that a species will grow in wetlands or uplands under natural conditions:

- Obligate Wetland Plants (OBL): Almost always occur in wetlands;
- Facultative Wetland Plants (FACW): Usually occur in wetlands;
- Facultative Plants (FAC): Equally likely to occur in wetlands and uplands;
- Facultative Upland Plants (FACU): Usually occur in uplands; and
- Obligate Upland Plants (UPL): Almost always occur in uplands.

If more than 50 percent of the dominant species in an area are OBL, FACW, or FAC, then the area satisfies the hydrophytic vegetation parameter.⁹

The final parameter, wetland hydrology, "encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season."10 Because hydrology is "often the least exact of the parameters, and indicators of wetland hydrology are sometimes difficult to find in the field" (many wetlands rarely contain surface water), the 1987 Manual identifies a number of indicators of wetland hydrology, any one of which may satisfy the parameter. One such indicator, known as the "FAC-neutral test," allows wetland hydrology to be established based on the vegetation inhabiting the subject area. The test is so named because FAC plants are considered neutral, neither wetland nor upland, under the test.¹¹ When applying the test, an area meets the wetland hydrology parameter if the number of species that are wetter than FAC (i.e., OBL or FACW) is greater than the number drier than FAC (i.e., UPL or FACU).

B. The National Wetland Plant List

Each of the three wetland parameters must be met to identify an area as a "wetland," and each is therefore a necessary part of the equation. Because hydrophytic plant growth typically is contingent on the presence of hydric soils and the availability of sufficient water, however, satisfaction of the vegetation parameter oftentimes is determinative of whether an area qualifies as a wetland or an upland – that is particularly true when the FAC-neutral test also is used to establish the hydrology parameter. Accordingly, each plant species present is carefully scrutinized when performing a wetland delineation. The tool used for that is the National Wetland Plant List.

In 1988, the U.S. Fish and Wildlife Service issued the first NWPL, known as the National List of Plant Species

^{4 33} U.S.C. §§ 1311, 1344.

⁵ 33 C.F.R. § 328.3(b).

⁶ Corps of Engineers Wetlands Delineation Manual (1987), available at http://el.erdc.usace.army.mil/wetlands/pdfs/ wlman87.pdf.

⁷ Id. at 26.

⁸ Id. at 12.

⁹ *Id.* at 17-18. The manual provides several other tests for identifying hydrophytic vegetation, but the dominance test is described as the most reliable, and it is therefore the most frequently used. *See id.* at 19-20.

¹⁰ *Id.* at 34.

¹¹ Id. at 22-23.

That Occur in Wetlands (List 88).¹² List 88, the result of a cooperative effort between FWS, the Army Corps, EPA, and NRCS, identified 6,728 plant species occurring in the United States and assigned each with an indicator status (OBL, FACW, FAC, FACU, or UPL) to reflect its affinity for living in wetlands or uplands. List 88 became essential for evaluating wetland vegetation. Because it was the only agency-approved index of wetland plants, List 88 also became the go-to reference for performing the FAC-neutral test when evaluating areas with more subtle signs of wetland hydrology. As a result, List 88 has played a powerful role in determining whether an area is a wetland or an upland.

Originally, FWS had primary responsibility for overseeing the NWPL and the influence accompanying it. That changed in December 2006 when, just six months after the Supreme Court issued its controversial *Rapanos* opinion, FWS transferred that responsibility to the Army Corps by Memorandum of Agreement. Almost immediately, the Army Corps began making plans to revise List 88 in cooperation with EPA, FWS, and NRCS. Their work culminated in the issuance of the 2012 NWPL earlier this year.

C. 2012 National Wetland Plant List

On May 9, 2012, the Army Corps issued the 2012 NWPL.¹³ The new list makes several important changes to the original plant listings and to the format of the index.

First, the 2012 NWPL changed the indicator status of 807 – or 12 percent – of the species that were previously categorized in List 88. Some, but certainly not all, of those revisions resulted from the agencies' decision to scuttle plus and minus modifiers that had been assigned to some plants in each indicator status type in List 88. For example, "FAC-" indicated that although a species occurred relatively equally in both wetland and upland environments, it occurred slightly more often in uplands. The new list eliminated those gradations due to a lack of supporting data.

In removing the plus and minus modifiers, the 2012 NWPL placed most species previously categorized with those modifiers into their broader indicator category. For example, a species previously listed as FAC+ would be become a FAC species. FAC- species were not automatically merged, however. The Army Corps and its partnership agencies, together with a group of invited academics, reviewed each FAC- species individually to determine its future designation on the new list and categorized those species accordingly.

Second, the 2012 NWPL contains 8,200 species, compared with 6,728 contained in List 88. Thus, the new list added nearly 1,500 new species to the index, increasing the number of species classified by 22 percent.

These changes to the plant index, which took effect June 1, 2012, will have far-reaching implications.

III. Analysis

Notwithstanding the significant changes made in the 2012 NWPL, the Army Corps suggests the new index

will have little practical effect on identifying wetlands in the field. To support that claim, the Army Corps cites several statistics that appear to show that the changes to the list will offset each other: 35 percent of the reclassified species were rated wetter; 36 percent were rated drier; and the species that previously fell under the FAC- category were evenly re-classified as FACU and FAC.¹⁴ Appearances are deceiving.

A. Many Plants Reclassified as Wetland Species

The Army Corps' assertion that the indicator status changes reflect "an equal split between species that received wetter ratings and those that received drier ratings" is a red herring.¹⁵ When evaluating whether an area satisfies the hydrophytic vegetation parameter used in wetland identification, it is irrelevant whether a particular species is "wetter" or "drier." What matters is whether the species is hydrophytic (*i.e.*, classified as OBL, FACW or FAC) or not (*i.e.*, classified as FACU or UPL).

By way of example, a species listed as FACU in List 88 but reclassified as UPL in the 2012 NWPL technically has received a "drier rating." But that does not change that the species would not be considered hydrophytic under either list. On the other hand, if a species was classified as FACU in List 88 but is reclassified as FACW in the 2012 NWPL, that would cause the species not only to be considered "wetter," but also now to be considered hydrophytic.

That hydrophytic designation is what is important. As discussed above, an area cannot be considered a wetland unless 50 percent or more of the plant species growing there have a hydrophytic indicator status (OBL, FACW or FAC). Accordingly, when a plant is reclassified from an upland indicator status to a hydrophytic (or wetland) status, that change makes it more likely that any area containing the plant will satisfy the vegetation parameter, and thus more likely that the area will qualify as a wetland. And – although not mentioned when the Army Corps issued its new list – the 2012 NWPL made hundreds of changes of that sort, while making far fewer the other way around.

The following chart illustrates the true impact of the indicator status changes in the 2012 NWPL broken down by the number of species in the "Lower-48" regions¹⁶ that were reclassified from an upland indicator status to a wetland status and vice versa.

These figures readily contradict the Army Corps' claim in issuing the 2012 NWPL. In the Arid West Region, nearly ten times more species were reclassified from upland to wetland statuses than the opposite direction. And that lopsided ratio is the *closest* to being equal of any of the Lower-48 regions in the 2012 NWPL.

With so many more species now being considered wetland plants, it is virtually certain that many more areas now will meet the hydrophytic vegetation param-

¹² National List of Plant Species That Occur in Wetlands: 1988 National Summary (Sept. 1988), available at http:// www.fws.gov/pacific/ecoservices/habcon/pdf/National% 20List%20of%20Plant%20Species%201988.pdf.

¹³ Publication of Final National Wetland Plant List, 77 Fed. Reg. 27,210 (May 9, 2012).

¹⁴ 77 Fed. Reg. 27,210 (May 9, 2012).

¹⁵ Id.

¹⁶ In many instances a species occurs in more than one region, and its indicator status changed in some or all of those regions. This analysis views each region individually. As a result, the status change to a single species may affect the numbers in each region in which a similar change was made for that species. That does not in any way minimize the impact of the changes in the 2012 NWPL, however, because an area of land is evaluated based on the region in which it occurs.

eter, that many of those areas for the first time will be considered wetlands, and that the boundaries of other wetlands will expand under the 2012 NWPL. These effects will only be compounded when the FAC-neutral test is used to evaluate whether are area also satisfies the wetland hydrology parameter because the presence of wetland vegetation can then be used to satisfy both the hydrology and vegetation parameters.

2012 NWPL Region	Species Changed fromUpland (UPL or FACU) to Wet- land (OBL, FACW or FAC)	Species Changed fromWetland (OBL, FACW or FAC) to Upland (UPL or FACU)
Eastern Moun- tains and Pied- mont	264	15
Arid West	247	28
Atlantic & Gulf Coastal Plain	398	21
Western Moun- tains, Valleys, and Coast	347	27
Great Plains	604	22
Northcentral and Northeast	328	7
Midwest	407	22

Source: http://rsgisias.crrel.usace.army.mil/apex/f? p=703:2:0::NO.

Methodology: These figures compare all species from List 88 to their counterparts in the 2012 NWPL. In cases where List 88 provided a range of statuses for a species, these calculations use the first status in the range as the point of comparison. These figures do not include species for which List 88 used a question mark in its status range (for example, "FAC?"), or listed a species as "NI" (No Indicator).

But that is not the end of the story - far from it. A number of the species that the 2012 NWPL reclassifies as wetland plants are rather prevalent. For example, List 88 considered garlic mustard (Alliaria petiolata), Japanese honeysuckle (Lonicera japonica), loblolly pine (Pinus taeda) and sawtooth blackberry (Rubus argutus) - each a nearly omnipresent species in the eastern U.S. - to be upland plants. In the 2012 NWPL, however, each of those plants now is considered a wetland species in the Atlantic and Gulf Coastal Plain region. As a result, previously borderline areas in that region that did not contain 50 percent or more wetland species under List 88 now are far more likely to qualify as wetlands (particularly because vegetation oftentimes is the determinative factor between wetlands and uplands on the coastal plain).¹⁷

B. The Addition of New Wetland Plants Will Produce More Wetland Identifications

The disproportionate indicator status changes in the 2012 NWPL are not the only factor that will result in more areas of land being classified as wetlands throughout the U.S. The index includes nearly 1,500 new species that were not in List 88. And as the below table shows, the number of new wetland species in every region in the Lower-48 outnumbers the number of new upland species.

2012 NWPL Region	Number of New Wetland Species (FAC, FACW, OBL)	Number of New Upland Species- (FACU, UPL)
Eastern Moun- tains and Pied- mont	452	360
Arid West	622	575
Atlantic & Gulf Coastal Plain	713	552
Western Moun- tains, Valleys, and Coast	592	502
Great Plains	472	412
Northcentral and Northeast	353	321
Midwest	297	282

Source: http://rsgisias.crrel.usace.army.mil/apex/f? p=703:2:0::NO

Methodology: These figures include every species listed in the 2012 NWPL that was unlisted in List 88. Species for which a 1988 indicator status was listed with a question mark (for example, "FAC?") were treated as having been listed and therefore not included here. "NI" (No Indicator) listings from List 88 were treated as having been unlisted, and are included here.

Similar to the indicator status changes made in the 2012 NWPL, the addition of new species to the list skews in favor of wetland plants in each region. These new wetland species include everything from flowering shrubs that homeowners plant in their gardens, such as climbing aster (*Ampelaster carolinianus*), to trees, such as alternate-leaf dogwood (*Cornus alternifolia*). When combined with the species reclassifications made in the 2012 NWPL, these new wetland species will lead to more areas satisfying the vegetation parameter and to more areas qualifying as wetlands.

C. More Wetlands Means Broader Clean Water Act Jurisdiction

That the 2012 NWPL likely will result in many more affirmative wetland findings is significant. But it also begs the question of what impact that will have. The answer likely is not one that most landowners will welcome: more assertions of federal jurisdiction under the Clean Water Act.

Admittedly, simply because something is a wetland does not mean that it also is jurisdictional under the act. To be jurisdictional, a wetland must be a "water of the United States." But identifying an area of land as a wetland is a big first step towards establishing jurisdiction. It means that the feature in question is a "water," not an upland.

That is a critical distinction because uplands by definition are never considered to be waters of the United

¹⁷ The division of the country into different regions is another problematic aspect of the 2012 NWPL because the new list does not make uniform changes to species classifications across those regions. For example, more than 150 species that are classified as wetland or upland plants in the Atlantic and Gulf Coastal Plain region have the opposite classification in the neighboring Eastern Mountains and Piedmont region. Because the boundary between those regions bisects New Jersey, Maryland, Virginia, North Carolina, South Carolina, Georgia, Alabama, and Tennessee, areas with identical vegetation in parts of those states might be wetlands while areas in other parts of the same states might not.

States and are not subject to Clean Water Act jurisdiction. Wetlands, on the other hand, often are. Thus, by causing many more areas to be considered wetlands, the 2012 NWPL expands the universe of features eligible to be considered waters of the United States.

From there, the math is quite simple. The more wetlands there are, the more opportunities the Army Corps has to assert jurisdiction under the Clean Water Act. The Army Corps does not often squander those opportunities. Thus, it is reasonable to expect that the 2012 NWPL will result in more assertions of Clean Water Act jurisdiction.

IV. Conclusion

While most stakeholders were lining up to argue over the guidance concerning which wetlands are jurisdictional under the Clean Water Act, they overlooked a more fundamental and impactful agency initiative that will play a large part in determining which lands constitute wetlands in the first instance. Because the presence of a wetland is a prerequisite to asserting jurisdiction over the feature, the 2012 NWPL has the potential to result in the federalization of countless areas of land across the country, posing far more risk to property rights than all of the iterations of the post--*Rapanos* guidance combined. Notwithstanding the Army Corps' failure to acknowledge the extent of the changes included in the 2012 NWPL or the ramifications associated with them, those changes are real and they are meaningful. The 2012 NWPL likely will increase the number of wetlands across the United States significantly and cause the boundaries of many wetlands to expand. Those impacts will almost certainly result in additional assertions of federal jurisdiction under the Clean Water Act. It therefore is imperative for the legal and regulated communities to take a closer look at the 2012 NWPL, consider the jurisdictional issues that could arise under it, and develop strategies – including legal challenges – for minimizing the damage from the new list.

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