This Final Decision and Order was vacated and superceded on Mar. 16, 2011.

(Slip Opinion)

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BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)	
Smith Farm Enterprises, LLC	)	CWA Appeal No. 08-02
Docket No. CWA-03-2001-0022	)	

[Decided September 30, 2010]

FINAL DECISION AND ORDER

Before Environmental Appeals Judges Anna L. Wolgast, Charles J. Sheehan, and Kathie A. Stein.

IN RE SMITH FARM ENTERPRISES, LLC

CWA Appeal No. 08-02

FINAL DECISION AND ORDER

Decided September 30, 2010

Syllabus

Appellant Smith Farm Enterprises, LLC ("Smith Farm") appeals from a Decision Upon Remand issued by Administrative Law Judge William B. Moran (the "ALJ"). In his decision, the ALJ applied the Supreme Court's decision in *Rapanos v. U.S.*, 547 U.S. 715 (2006) ("*Rapanos*"), and held that the United States Environmental Protection Agency ("EPA") had properly asserted Clean Water Act ("CWA") jurisdiction over the wetlands into which Smith Farm had discharged without a permit in violation of the CWA, 33 U.S.C. §§ 1311, 1342, 1344. The single question presented on appeal is: Did the ALJ err in determining that EPA has CWA jurisdiction over the Smith Farm wetlands?

In *Rapanos*, Justice Scalia, writing for a plurality of the Supreme Court ("the Plurality") and Justice Kennedy, concurring in the result of remand only, each articulated a new and distinct test for determining CWA jurisdiction over wetlands. The Environmental Appeals Board ("Board") first considers which jurisdictional test (or tests) from *Rapanos* applies in light of the fractured decision. Following the advice in Justice Stevens' dissent in *Rapanos*, the lead of the U.S. Circuit Courts of Appeal for the First and Eighth Cicuits, and the position of the United States in post-*Rapanos* appeals, the Board determines that CWA jurisdiction lies with EPA if either the Plurality's or Justice Kennedy's test is met. *See Rapanos,* 547 *U.S.* at 764 (J. Stevens, dissenting) (explaining that the "either test" approach is "a simple and pragmatic way to assess what grounds would command a majority of the Court").

The Board next considers whether the Smith Farm wetlands fall within EPA's CWA jurisdiction under Justice Kenendy's test. Justice Kennedy opined that when wetlands are adjacent to a non-navigable tributary, a "significant nexus" must be demonstrated between the subject wetlands and the downstream navigable-in-fact waters in order for those wetlands to be considered "waters of the United States" under the CWA. That "significant nexus" standard is met if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as "navigable."

The Board concludes that the ALJ correctly determined that the Smith Farm wetlands perform various ecological functions including: (1) temporary and long term water storage (i.e., flood control or desynchronization); (2) water pollutant filtration

(denitrification); and (3) biological production for plants and wildlife. Moreover, the evidence in the record demonstrates that these functions, both alone and in combination with other similarly situated lands, significantly affect the chemical, physical and biological integrity of the downstream navigable-in-fact receiving waters (i.e., the Nansemond River and the Western Branch of the Elizabeth River, each of which flow into the Chesapeake Bay) by preventing flooding and erosion (flood storage/flood control/desynchronization), reducing the quantity of nitrates in the water (denitrification), and by producing food for downstream organisms. Additionally, contrary to Smith Farm's assertions, the ALJ's assessment of the credibility of the witnesses, and the appropriate weight to be afforded the witnesses' testimony, is supported by the record. The Board also disagrees with the level of evidence Smith Farm suggests is required to prove a "significant nexus" under Justice Kennedy's test. Accordingly, the Board concludes the ALJ appropriately determined that there is a significant nexus, as intended by Justice Kennedy in *Rapanos,* between the Smith Farm wetlands and the downstream navigable-in-fact waters. As such, the Smith Farm wetlands fall within EPA's CWA jurisdiction.

Because the Board determines that EPA has jurisdiction over the Smith Farm wetlands under Justice Kennedy's test, the Board need not analyze whether the EPA *also* has jurisdiction under the Plurality's test.

Held: The ALJ did not err in determining that EPA has CWA jurisdiction over the wetlands at Smith Farm. Thus, the Board affirms the decision of the ALJ, and Smith Farm is ordered to pay the total civil penalty of $34,000.

Before Environmental Appeals Judges Anna L. Wolgast, Charles J. Sheehan, and Kathie A. Stein.

Opinion of the Board by Judge Anna L. Wolgast:

I. *Statement of the Case*

Appellant Smith Farm Enterprises, LLC ("Smith Farm") appeals to the Environmental Appeals Board ("EAB" or "Board") from the Decision Upon Remand that Administrative Law Judge William B. Moran (the "ALJ") issued on March 7, 2008 ("Remand Decision").[1] In the Remand Decision, the ALJ found that the United States Environmental Protection Agency ("EPA") Region 3 had properly

[1] Administrative Law Judge Carl C. Charneski was assigned to this case prior to the remand, but subsequently took a judicial position with a different federal agency. This case was then reassigned to ALJ Moran.

asserted Clean Water Act ("CWA") jurisdiction over the wetlands into which Smith Farm had discharged fill material and other pollutants without having obtained a permit, in violation of CWA sections 301(a), 402, and 404, 33 U.S.C. §§ 1311(a), 1342, 1344. The ALJ ultimately imposed a penalty of $34,000.[2]

II. *Issue on Appeal*

Smith Farm asserts that the ALJ "erred in finding Clean Water Act jurisdiction over the wetlands at issue in this case when he found jurisdiction" based on both the plurality opinion authored by Justice Scalia and the concurring opinion authored by Justice Kennedy in the Supreme Court decision in *Rapanos v. United States*, 547 U.S. 715 (2006) ("*Rapanos*").[3] Respondent's Appeal Brief ("Smith Farm Br.") at 4. The Complainant/Appellee, EPA Region 3 ("the Region") disagrees. Accordingly, this appeal presents only one issue for resolution:

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[2] ALJ Moran originally imposed an $84,000 penalty that he reduced from the original $94,000 penalty that ALJ Charneski had imposed. This penalty reduction was intended to account for the government's failure to provide a competent court reporter when the case was initially heard, which resulted in a second hearing. In a Supplement to the Decision Upon Remand, ALJ Moran further reduced the penalty to $34,000 in accordance with the parties' stipulation on this issue.

[3] In its appeal brief, Smith Farm raises only the jurisdictional question identified above, and did not raise any of the other issues it had previously raised in its appeal prior to remand. The Board indicated, in the prior Remand Order, issued October 6, 2006, that on remand, the ALJ should "take additional evidence, conduct further proceedings as necessary, and [] rule on the CWA jurisdictional question." *In re Smith Farm Enterprises, LLC*, CWA Appeal No. 05-05, at 5 (EAB Oct. 6, 2006) (Remand Order). The Board also stated that the ALJ's "new initial decision" "shall have the effect described in 40 C.F.R. § 22.27," and that "either party may appeal from the new initial decision as prescribed in 40 C.F.R. § 22.30." *Id.* at 5-6. Thus, the Board considers all issues raised in the appeal prior to remand, but not raised in this appeal, to be abandoned.

Smith Farm filed a Motion for Leave to File Supplemental Brief on July 12, 2010, more than a year after filing its appeal brief and approximately one week prior to oral argument. As explained in a separate order issued on September 28, 2010, the Board denied the motion as untimely. *In re Smith Farms Enterprises, LLC*, CWA Appeal No. 08-02 (EAB Sept. 28, 2010) (Order Denying Motion for Leave to Supplement Briefing).

Did the ALJ err in determining that EPA has CWA jurisdiction over the Smith Farm wetlands?[4]

III. *Standards of Review*

A. *Findings of Fact and Conclusions of Law*

In enforcement proceedings, such as this one, the Board generally reviews both the factual and legal conclusions of the presiding officer, in this case the ALJ, *de novo*. *See* 40 C.F.R. § 22.30(f) (providing that, in an enforcement proceeding, "[the Board] shall adopt, modify, or set aside the findings of fact and conclusions of law or discretion contained in the decision or order being reviewed"); *see also* Administrative Procedure Act, 5 U.S.C. § 557(b) ("On appeal from the review of [an] initial decision, the agency has all the powers which it would have in making the initial decision except as it may limit the issues on notice or by rule"); *see In re Friedman*, 11 E.A.D. 302, 314 (EAB 2004) (explaining, in an enforcement proceeding, that the Board reviews "the ALJ's factual and legal conclusions on a *de novo* basis"), *aff'd,* No. 2:04-CV-00517-WBS-DAD (E.D. Cal. Feb. 25, 2005)*, aff'd,* No. 05-15664, 2007 WL 528073 (9th Cir. Feb. 15, 2007).

In reviewing *de novo* an initial decision in an administrative penalty proceeding, the Board applies the "preponderance of the evidence" standard established by 40 C.F.R. § 22.24(b). *See In re Bullen Cos., Inc.,* 9 E.A.D. 620, 632 (EAB 2001) (defining standard). Also pursuant to section 22.24, the Region bears the burden of demonstrating that the alleged violation occurred. 40 C.F.R. § 22.24(a). That is, the Region must show, by a preponderance of the evidence, that the factual prerequisites exist for finding a violation of the applicable regulatory requirements. *See In re Bricks, Inc.,* 11 E.A.D. 224, 233 (EAB 2003) (rejecting an ALJ's findings of fact because the region had failed to demonstrate that the facts were supported by a preponderance of the evidence); *see also In re Julie's Limousine & Coachworks, Inc.,*

[4] The term "jurisdiction," as used in this context and throughout this decision, refers to the scope of the regulatory authority authorized by the CWA, not the ALJ's or the Board's authority to decide this matter.

11 E.A.D. 498, 507 (EAB 2004); *In re Ocean State Asbestos Removal, Inc.*, 7 E.A.D. 522, 530 (EAB 1998). A factual determination meets the preponderance standard if the fact finder concludes that it is more likely true than not. *See Julie's Limousine,* 11 E.A.D. at 507 n.20; *In re Lyon County Landfill*, 10 E.A.D. 416, 427 n.10 (EAB 2002), *aff'd*, 2004 U.S. Dist. LEXIS 10651 (D. Minn. June 7, 2004), *aff'd,* 406 F.3d 981 (8th Cir. 2005); *Bullen*, 9 E.A.D. at 632.

B. *Witness Credibility Determinations*

Although findings of fact are reviewed *de novo,* the Board generally defers to an ALJ's factual findings when those findings rely on witness testimony and when the credibility of the witnesses is a factor in the ALJ's decisionmaking. *See Ocean State*, 7 E.A.D. at 530 (explaining that the appellant failed to demonstrate that any of the ALJ factual findings were unsupported by a preponderance of the evidence after giving due deference to the ALJ's observation of witnesses). This approach recognizes that the ALJ observes first-hand a witness's demeanor during testimony and therefore is best suited to evaluate his or her credibility. *Id.; Julie's Limousine*, 11 E.A.D. at 507 n.19; *In re Echevarria*, 5 E.A.D. 626, 639 (EAB 1994) (explaining that when a presiding officer has "the opportunity to observe the witnesses testify and to evaluate their credibility, his factual findings are entitled to considerable deference");*In re Port of Oakland*, 4 E.A.D. 170, 193 n.59 (EAB 1992) (citing *Universal Camera v. NLRB*, 340 U.S. 474 (1951), (stating that the presiding officer's findings are entitled to weight because he has "lived with the case"); *accord NLRB v. Transpersonnel, Inc.*, 349 F.3d 175 (4th Cir. 2003) ("The balancing of the credibility of witnesses is at the heart of the fact-finding process, and it is normally not the role of reviewing courts to second-guess a fact-finder's determinations about who was the more truthful witness"). When an ALJ's credibility determinations are unsupported by the record, however, the Board will not defer to the ALJ and is not bound by any findings of fact derivatively made. *See In re Bricks, Inc.,* 11 E.A.D. 224, 233, 236-39 (EAB 2003) (identifying unexplained ambiguities in testimony and rejecting an ALJ's rationale for crediting that testimony as unsupported in the record) (citing *W.F. Bolin Co. v. NLRB*, 70 F.3d 863, 872 (6th Cir. 1995) (explaining that an administrative law judge's opportunity to

observe a witness's demeanor "does not, by itself, require deference with regard to his or her derivative inferences") (some citations omitted)).

IV. *Summary of Decision*

For reasons explained below, the Board concludes that EPA has CWA jurisdiction over the wetlands at Smith Farm. Accordingly, the Board affirms the decision of the ALJ.

V. *Procedural and Factual History*

A. *Procedural History*

This matter returns to the Board following the Board's 2006 remand for further fact finding as a result of the Supreme Court decision in *Rapanos*, 547 U.S. 715 (2006). At the time *Rapanos* was issued, the Board was preparing to issue a decision in this matter. In response to *Rapanos,* the Board directed the Region and Smith Farm to submit a statement explaining what, if any, next steps they believed the Board should take with respect to the jurisdictional issues raised by *Rapanos*. The Region recommended a remand for the limited purpose of reopening the record to take additional evidence as to CWA jurisdiction in light of *Rapanos*; Smith Farm argued that the facts were sufficiently developed in the record to make a jurisdictional determination. After weighing the arguments from both sides, the Board found that the facts required to make a jurisdictional determination were either not present or not fully developed in the record and remanded the matter to the ALJ for additional fact finding as to CWA jurisdiction in light of *Rapanos.*

The ALJ held a remand hearing from May 14 to May 23, 2007, and issued his Remand Decision on June 27, 2008. On July 14, 2008, Smith Farm appealed. The matter was stayed for nine months, pending ultimately unsuccessful settlement discussions, and Smith Farm submitted its brief on April 17, 2009. The Region filed its response brief on June 2, 2009, which was followed by Smith Farm's reply brief on July 6, 2009, and the Region's surreply brief on July 20, 2009. The Board heard oral argument on July 20, 2010.

B. *Facts*

1. *Physical Description of Smith Farm*

The property at issue in this case is known as Smith Farm and it is owned by Smith Farm Enterprises, LLC, a family-owned Virginia company created to oversee the property. ALJ Charneski's Initial Decision at 3 ("Init. Dec."). Smith Farm consists of approximately 300 acres of undeveloped land, approximately 100 acres of which is crop land, and the remainder of which is forested or wooded. Remand Decision at 1 n.2; Init. Dec. at 2-3. Much of the forested land on the property is wetlands or swamp. Remand Decision at 5, 24 n.40; Init. Dec. at 20-21. The property straddles portions of both Chesapeake and Suffolk, Virginia, and sits on a drainage divide. Remand Decision at 1; ALJ Remand Hearing Transcript at 317 (May 2007) ("Remand Tr."). This means that precipitation that falls on the property flows in opposite directions depending on where it lands. Remand Decision at 1. Water flows westerly from the western portion of Smith Farm through a number of tributary drainages known collectively as Quaker Neck Creek. Remand Decision at 6-7; Init. Dec. at 26, 29. The distance along the drainage from Smith Farm to the portion of Quaker Neck Creek that becomes tidally influenced is approximately 2,600 feet.[5] Remand Decision at 7; (citing Init. Dec. at 28); *see also* Complainant's Exhibit "CX-SF" 102; ALJ Hearing Transcript, vol. II, at 31-32 (Oct. 2003) ("2003 Tr")[6]; Init. Dec. at 29 (accepting testimony regarding the characterization of the water bodies on, and flowing from, Smith Farm).

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[5] As stated below, wetland regulations provide that "waters of the United States" include "[a]ll waters [that] are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters [that] are subject to the ebb and flow of the tide[.]" 40 C.F.R. § 122.2; *see also* 33 C.F.R. § 328.3(a)(1).

[6] This decision cites to transcripts from both the ALJ hearing in 2003 and the remand hearing before the ALJ in 2007. The transcripts from the 2003 hearing are cited by volume as well as page number because those transcripts are not consecutively paginated. The remand hearing transcripts on the other hand are consecutively numbered, so no volume number is provided.

From Quaker Neck Creek, water flows to Bennett's Creek and then to the Nansemond River. Remand Decision at 6, 7. Portions of Quaker Neck Creek and Bennett's Creek are tidally influenced. *Id.* The U.S. Army Corps of Engineers maintains navigation channels on the Nansemond River. *Id.* The Nansemond eventually flows to the James River and on to the Chesapeake Bay. *Id.* Water on the eastern and southern side of the property flows east and south into tributaries of Bailey's Creek, which in turn discharges into the Western Branch of the Elizabeth River. *Id.* The Corps has issued permits for docks and marinas on portions of Bailey's Creek and the Western Branch, and they are tidally influenced. *Id.* The distance along the drainage from Smith Farm to the portion of Bailey's Creek that becomes tidally influenced is approximately 4,200 feet. Remand Decision at 7 (citing Init. Dec. at 28 (citing 2003 Tr., vol. II, at 31-32 and CX-SF-102o); *see also* Init. Dec. at 29. Like the Nansemond River to the west of Smith Farm, the Western Branch of the Elizabeth River flows into the James River and then on to the Chesapeake Bay. *Id.*

2. *History of Tulloch Ditching*

Some time after Smith Farm acquired its property in 1985, the rural character of the surrounding region began to change. Init. Dec. at 3. An interstate highway was constructed (I-664) and a large residential community was proposed for development adjacent to the property. *Id.*; 2003 Tr., vol. I, at 49, vol. III, at 207, 248-54. Robert and James Boyd, father/son managers of Smith Farm at the time the violations in this case took place, each testified that after the construction of the interstate, the property became wetter. 2003 Tr., vol. III, at 208, 256. After learning that nearby property owners planned to dig special "Tulloch"-style ditches to remove the wetlands from their properties, Smith Farm began to explore the idea as well. Init. Dec. at 3; 2003 Tr., vol. III, at 222-23.

Tulloch ditches are V-shaped ditches that are constructed in the wetlands themselves and are generally used to drain the wetlands to convert them to uplands. Init. Dec. at 4. In 1998, the U.S. Circuit Court of Appeals for the District of Columbia upheld the legality of digging Tulloch ditches without a CWA section 404 permit, provided that no more than "incidental fallback" of dredged material is added to the

wetlands. *See Nat'l Mining Ass'n v. U.S. Army Corps of Eng'rs*, 145 F.3d 1399, 1410 (D.C. Cir. 1998) (overturning what was known as the "Tulloch Rule," which had expanded the Corps' definition of discharge of dredged material to include all redeposits of dredged material and finding, in the context of a petition for review, that the CWA does not authorize regulation of "incidental fallback" as a "discharge of dredged material" under section 404).[7]

3. *Ditching Activities at Smith Farm*

Availing itself of the *National Mining* ruling, Smith Farm, like other property owners in the region, engaged Vico Construction Corporation ("Vico Construction")[8] to construct 12,350 linear feet of Tulloch ditches on the property. *See* Init. Dec. at 6-7; 2003 Tr., vol. IV, at 79-80; Respondent's Ex. ("R. Ex.") 12 & 13. In the course of constructing the ditches, contractors logged approximately 11.34 acres in the forested areas on Smith Farm and cleared pathways, leaving behind wood chips that were approximately one-half to three-quarter inch square and one-quarter inch thick, as well as saplings, branches, treetops, small trees, branches, underbrush, and other woody debris, known as "slash." *See* Init. Dec. at 8-9; 2003 Tr., vol.I, at 229, 231-32, vol. II at 156, vol. V, at 196-97, 202. The slash was then ground on site into chips and scattered across the area. Init. Dec. at 9; 2003 Tr., vol.1, at 229-30, 268, vol. V, at 190-92, vol. VI, at 71-73, 105. The scattering of these wood chips formed the primary basis for the Region's CWA 404 claim and ALJ Charneski's conclusion that Smith Farm discharged "fill material"

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[7] "Incidental fallback" refers to the unintentional and unavoidable deposition of small quantities of material during dredging or digging that "fall back" from the dredging or digging equipment onto the disturbed area. *See Nat'l Mining*, 145 F.3d at 1403. Prior to the *National Mining* decision, all redeposits of dredged material were considered to be discharges of dredged material subject to regulation. The Board notes that *National Mining* addressed only dredged, not fill, material.

[8] The Region named Vico Construction as a co-respondent in the original complaint. Prior to the start of the hearing before ALJ Charneski, however, the Region and Vico Construction settled their dispute and entered into a consent agreement and final order. Accordingly, Vico Construction is no longer a party to this action. *See* Init. Dec. at 1 n.1.

into its wetlands. Init. Dec. at 9. That conclusion has not been challenged in this appeal.

The resulting ditches were approximately four feet deep, had a two-foot flat bottom and measured 12 feet or less across. Init. Dec. at 10; 2003 Tr., vol.VI, at 76, 81. The ditches were sloped to drain toward collector ditches or other receiving waters that either preexisted or were constructed by Smith Farm, and were intended to drain water from the property. Init. Dec. at 10; 2003 Tr., vol. VI, at 125, 131-33.

4. *Wetland Enforcement Investigation*

As noted above, Tulloch ditching became prevalent in the Tidewater region following the 1998 *National Mining* decision. 2003 Tr., vol.1, at 224-25; *see also* Init. Dec. at 4. All over the region, people were moving to construct Tulloch ditches and were consulting with the Corps in how to construct the ditches in a manner that would avoid the need for a permit. Init. Dec. at 4, 6. Smith Farm and its contractors were no exception. *Id.* at 3-4. Contractors for Smith Farm initially contacted the Corps in October 1998. Work began on the property in November 1998. *Id.* at 6.

In January 1999, a representative from the Corps visited the property, was surprised at what he found, and questioned the legality of the ditching and filling activities. Init. Dec. at 10, 11. A discussion with Corps headquarters ensued. *Id.* at 12-13. In June 1999, EPA obtained lead enforcement status over the Smith Farm site.[9] *Id.* at 13; 2003 Tr., vol. II at 16. At the time EPA assumed the lead enforcement role, the Corps still had not determined whether Smith Farm's activities violated the Clean Water Act. 2003 Tr., vol. I, at 92. After conducting its own investigation, the Region determined that Smith Farm had violated CWA section 301(a) by discharging dredged and/or fill material into wetlands that are waters of the United States without a permit issued under CWA

[9] The U.S. Army Corps of Engineers and EPA share enforcement authority for the CWA provisions at issue. *See* 33 U.S.C. § 1319; *see also* U.S. EPA and U.S. Army Corps of Engineers, *Memorandum of Agreement Concerning Federal Enforcement for the Section 404 Program of the Clean Water Act* (Jan. 19, 1998) (provided in CX-SF-59).

section 404, and filed an administrative complaint on May 21, 2001. The Region alternatively alleged that Smith Farm violated CWA section 301(a) by discharging pollutants into wetlands that are waters of the United States without a section 402 NPDES permit.[10]

VI. *Analysis*

As stated above, the question the Board must resolve in this appeal is: Did the ALJ err in determining that EPA has CWA jurisdiction over the Smith Farm wetlands? Resolution of this issue requires examination of additional questions. The first is to determine which jurisdictional test (or tests) applies in light of the Supreme Court decision in *Rapanos*. The second is to apply the appropriate test (or tests) to the facts of this case to determine whether EPA properly asserted jurisdiction over the wetlands.

A. *Which Jurisdictional Test Applies from Rapanos: The Plurality's, Justice Kennedy's, or Both?*

For the reasons articulated below, the Board concludes that EPA may assert CWA jurisdiction over wetlands if either the Plurality's test or Justice Kennedy's test from *Rapanos* is met. We begin with a brief summary of wetlands statutory and regulatory framework, and relevant judicial decisions interpreting that framework.

1. *Relevant Statutory and Regulatory Framework and Related Judicial Decisions*

a. *CWA*

Congress enacted the CWA "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." CWA § 101(a), 33 U.S.C. § 1251(a). Section 301(a) of the CWA makes

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[10] In a second count, the Region charged Smith Farm with violating CWA section 301(a) by discharging storm water associated with construction activity without a section 402 NPDES permit. First Amended Complaint (Nov. 19, 2001) (Docket No. CWA-3-2002-022).

it unlawful for any person to discharge pollutants from any point source into navigable waters without first obtaining an appropriate CWA permit. CWA §§ 301(a), 502(12), 33 U.S.C. §§ 1311(a), 1362(12).

As relevant here, the "discharge of a pollutant" means "any addition of any pollutant, to navigable waters from any point source."[11] CWA § 502(12), 33 U.S.C. § 1362(12). "Navigable water" is a defined term in the CWA that expressly includes all "*waters of the United States*." CWA § 502(7), 33 U.S.C. §1362(7) (emphasis added). While the CWA does not define "waters of the United States," federal regulations promulgated under the authority of the CWA contain detailed definitions of this phrase. *See* 40 C.F.R. §§ 122.2, 232.2; *see also* 33 C.F.R. § 328.3(a).[12]

b. *Regulatory Provisions*

Agency regulations define "waters of the United States" as encompassing not only traditional navigable waters of the kind susceptible to use in interstate commerce (navigable-in-fact waters), but also waters that are subject to the ebb and flow of the tide as well as tributaries of traditional navigable waters and wetlands adjacent to covered waters. *See* 40 C.F.R. §§ 122.2, 232.2; 33 C.F.R. § 328.3(a). Wetlands are further defined as "those areas that are inundated or saturated by surface or groundwater 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. Wetlands generally include swamps, marshes, bogs, and

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[11] The Board has previously noted that the definition of "pollutant" includes dredge and fill material. *See In re Phoenix Constr. Servs., Inc.*, 11 E.A.D. 379, 383 n.5 (EAB 2005) (and cases cited therein).

[12] As noted above, the Corps and the EPA share enforcement authority for the CWA provisions at issue. *See* note 9, above. Each of these agencies has promulgated regulations that are similar, if not identical. For ease of discussion, the term "agency" as used in this discussion refers to the applicable enforcing agency, whether the Corps or the EPA. "Agencies" refers to both agencies. For the particular violations at issue in this case, the Region was the lead enforcing agency.

similar areas." 40 C.F.R. § 122.2; *accord* 40 C.F.R. § 232.2; 33 C.F.R. § 328.3(b).

The crux of the matter before the Board is whether the wetlands on Smith Farm, into which fill material was deposited,[13] are "waters of the United States," rendering them subject to CWA jurisdiction and its permitting requirements.

c. *Relevant Judicial Interpretations*

The Supreme Court has on several occasions addressed the proper interpretation of the phrase "waters of the United States," as applied to wetlands. The Supreme Court upheld the agency's jurisdiction (as well as the relevant regulations) over wetlands adjacent to navigable-in-fact waterways in *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 139 (1985). That case concerned a wetland that "was adjacent to a body of navigable water," because "the area characterized by saturated soil conditions and wetland vegetation extended beyond the boundary of respondent's property to * * * a navigable waterway." *Id.* at 131. The Court deferred to the agency's judgment that wetlands perform important functions such as filtering and purifying water draining into adjacent water bodies, 33 C.F.R. § 320.4(b)(2)(vii), slowing runoff into lakes, rivers, and streams to prevent flooding and erosion, §§ 320.4(b)(2)(iv), (v), and providing critical habitat for aquatic animal species, § 320.4(b)(2)(i). 474 U.S. at 134-35. In doing so, the Court recognized that "the [agency's] ecological judgment about the relationship between waters and their adjacent wetlands provides an adequate basis for a legal judgment that adjacent wetlands may be defined as waters under the [CWA]," but reserved judgment on the question of whether the federal government had authority under the CWA to regulate wetlands other than those adjacent to open waters. 474 U.S. at 131-32, 134.

[13] ALJ Charneski held, in his Initial Decision, that Smith Farm violated CWA § 301 by discharging pollutants without the appropriate CWA permits required by law. Although Smith Farm challenged that determination before the Board prior to remand, Smith Farm has not reasserted that issue in this appeal.

Following *Riverside Bayview*, both the EPA and the Corps "clarified" the reach of their jurisdiction by promulgating the Migratory Bird Rule, which purported to extend federal jurisdiction to solely intrastate waters that are or would be used as habitat by migratory birds. *Final Rule for Regulatory Programs of the Corps of Eng'rs*, 51 Fed. Reg. 41,206, 41,217 (Nov. 13, 1986). The Supreme Court considered the Corps' application of the Migratory Bird Rule to an abandoned sand and gravel pit that was isolated in the sense that it was unconnected to other waters covered by the CWA. *Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs*, 531 U.S. 159, 168, 171 (2001) ("*SWANCC*"). The sand and gravel pit had evolved into a scattering of permanent and seasonal ponds that the Corps sought to regulate because they were used as habitat by migratory birds. *Id.* at 164-65. In *SWANCC*, the Court determined that the Corps' jurisdiction did not extend to (and the statutory phrase "waters of the United States" did not include) "nonnavigable, isolated, intrastate waters" that, unlike the wetlands in *Riverside Bayview*, did not "actually abu[t] * * * a navigable waterway." *Id.* at 167. In so holding, the Court observed that it was the "significant nexus" between the wetlands and the navigable waters in *Riverside Bayview* that had informed its reading of the CWA, and because such a nexus was lacking with respect to the isolated ponds in *SWANCC*, the agency regulations were overreaching as clarified and applied to those ponds in *SWANCC*. Although the Supreme Court invalidated the Migratory Bird Rule, the relevant regulations remained unaltered in response to this ruling.

In 2006, while this case initially was pending before the Board, the Supreme Court considered yet again what is meant by "waters of the United States." *Rapanos*, 547 U.S. 715. In two consolidated cases, *Rapanos* and *Carabell,* the Supreme Court considered whether four wetlands lying near ditches or manmade drains that eventually emptied into traditional navigable waters were covered by the CWA. *Id.* The federal district courts and appellate courts in these cases had found CWA jurisdiction over the subject wetlands based on "adjacency" and "hydrological connections" between the subject wetlands and nonnavigable tributaries. The result was a 4-1-4 decision, in which a plurality of the Supreme Court, in an opinion authored by Justice Scalia and joined by Chief Justice Roberts and Justices Alito and Thomas ("the

Plurality"), concluded that the term "navigable waters" under the CWA means only "relatively permanent, standing or flowing bodies of water," not "intermittent or ephemeral" flows of water (although in a footnote, the Plurality stated that "by describing waters as relatively permanent," it "[did] not necessarily exclude" seasonal waters or waters that dry up under extraordinary circumstances, such as drought). 547 U.S. at 731 & n.5, 739. Further, according to the Plurality, only those wetlands with a continuous surface connection to the bodies of water that are waters of the United States in their own right are properly categorized as "adjacent" to such waters and are covered by the CWA. *Id.* at 733, 739. Because, in the Plurality's view, the facts in the record were not developed sufficiently to apply this test, the Plurality concluded the case warranted remand.

Justice Kennedy, concurring in the result of remand only, authored a separate opinion espousing his own test, which requires that, when adjacency is not present, a "significant nexus" must be demonstrated between the subject wetlands and the downstream "navigable-in-fact" waters. That "significant nexus" is established if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as "navigable." *Id.* at 759, 780.[14]

Consequently, the Supreme Court decision in *Rapanos* articulates two new and distinct tests for determining CWA jurisdiction over wetlands such as those that are the subject of this appeal. Much debate and confusion has ensued over which of these tests should be applied in subsequent jurisdictional determinations. The United States Circuit Courts of Appeal are currently split on the subject. The First and Eighth Circuits have concluded that jurisdiction may be established using either the Plurality's test or Justice Kennedy's. The Eleventh, Seventh, and Ninth Circuits have determined that Justice Kennedy's test, alone, controls. The remaining circuit courts, including the Fourth Circuit, have

[14] Justice Stevens, joined by Justices Souter, Ginsburg, and Breyer, dissented and would have deferred to the Corps' reasonable interpretation of the CWA and affirmed the judgments below. *Rapanos*, 547 U.S. at 787-810.

yet to make a decision in this regard. The issue of which test (or tests) applies is the first question the Board must decide.

2. *The Parties' Contentions Regarding Which Test from Rapanos Applies*

Smith Farm acknowledges that some federal appellate courts have held that jurisdiction may be established if either the Plurality's or Justice Kennedy's test is satisfied. *See* Smith Farm Br. at 49, 50; Oral Arg. Tr. at 10:12-14. Smith Farm then interprets this to mean that "the Board has the discretion" to apply either test and urges the Board to use the Plurality's test in this case because it: (1) "represents the opinions of four Justices of the Supreme Court"; and (2) "encompasses a two-part definable test for jurisdiction" that is "simple and easily applied to the case, while the Kennedy opinion provides a test which is murky and ill-defined." Smith Farm Br. at 49-50; Reply at 8.

The Region posits that neither the Plurality's nor Justice Kennedy's test controls. Rather, CWA jurisdiction may be found whenever either the Plurality's standard or Justice Kennedy's standard is satisfied. Response Br. at 8. To answer the question posed – which test from *Rapanos* applies – the Board must first examine the principles of law governing the application of plurality decisions.

3. *Relevant Principles of Law Governing the Application of Plurality Decisions*

As stated above, the Circuit Courts of Appeal are divided over the issue of which test from *Rapanos* applies. The principles for each view are set forth below.

a. *Some Courts View Neither Test as Controlling*

Justice Stevens spoke directly to this issue in his *Rapanos* dissent:

> [W]hile both the plurality and Justice Kennedy agree that there must be a remand for further proceedings,

> their respective opinions define different tests to be applied on remand. Given that all four Justices who have joined [the dissent] would uphold the Corps' jurisdiction * * * in all * * * cases in which either the plurality's or Justice Kennedy's test is satisfied[, jurisdiction may be established] if *either* of those tests is met.

547 U.S. at 810 (Stevens, J., dissenting). Justice Stevens further indicated that he assumed that Justice Kennedy's approach would be controlling in most cases because "it treats more of the Nation's waters as within the Corps' jurisdiction, but in the unlikely event that the Plurality's test is met but Justice Kennedy's is not, courts should also uphold the Corps' jurisdiction. *In sum, in * * * future cases, the United States may elect to prove jurisdiction under either test." Id.* at 810 n.14 (emphasis added). None of the other opinions authored in *Rapanos* expressed disagreement on this point.

In post-*Rapanos* cases, the First and Eighth Circuit Courts of Appeal have concluded that jurisdiction under the CWA may be established using either Justice Kennedy's standard or the Plurality's standard. *See United States v. Johnson*, 467 F.3d 56, 64 (1st Cir. 2006); *United States v. Bailey*, 571 F.3d 791, 799 (8th Cir. 2009). In *Johnson*, the First Circuit found Justice Stevens' instruction that jurisdiction may be established if either test is satisfied as "a simple and pragmatic way to assess what grounds would command a majority of the Court." 467 F.3d at 64. In so holding, the First Circuit rejected arguments against combining dissenting Justices with a concurrence to find a ground embraced by a majority of the Supreme Court, *id.* (*referring to King v. Palmer,* 950 F.2d 771 (D.C. Cir. 1991)), and also rejected any application of *Marks v. United States*, 430 U.S. 188 (1977) (see discussion in Part VI.A.3.b, below). The Eighth Circuit agreed with the reasoning from the First Circuit. *Bailey,* 571 F.3d at 799.

b. *Other Courts View Justice Kennedy's Test as Controlling*

In contrast, several courts have construed the Supreme Court's decision in *Marks v. United States*, 430 U.S. 188 (1977), to require that Justice Kennedy's "significant nexus" standard be treated as "the governing definition of 'navigable waters' under *Rapanos*." *See, e.g., United States v. Robison*, 505 F.3d 1208 (11th Cir. 2007), *cert. denied sub nom. United States v. McWane, Inc.*, 129 S. Ct. 627 & 129 S. Ct. 630 (2008); *United States v. Gerke Excavating, Inc.*, 464 F.3d 723 (7th Cir. 2006), *cert. denied,* 128 U.S. 45 (2007); *N. Cal. River Watch v. Healdsburg*, 457 F.3d 1023, 1029 (9th Cir. 2006).

In *Marks*, the Supreme Court stated that "[w]hen a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, the holding of the Court may be viewed as that position taken by those Members who concurred in the judgment[] on the *narrowest grounds*." 430 U.S. at 193 (internal quotation marks omitted) (emphasis added). In some (if not most) fractured decisions, the narrowest rationale adopted by one or more Justices who concur in the judgment will be the only controlling principle on which a majority of the Court's members agree. For example, in *Memoirs v. Massachusetts*, 383 U.S. 413 (1966) – a case considered by the Supreme Court in *Marks* – a three-Justice plurality concluded that under the First Amendment a state could not ban sexually explicit books "unless [a book] is found to be *utterly* without redeeming social value," while a two-Justice concurrence wrote that, under the First Amendment, a state could not suppress obscenity at all. 383 U.S. at 419 (emphasis added) (discussed in *Marks*, 430 U.S. at 193-94). Under the "narrowest grounds" approach, where one ground for a decision offered in a fractured ruling is a logical subset of another broader ground, applying the narrower test will, as a practical matter, garner the support of a majority of Justices. So, in the case of *Memoirs*, the three-Justice opinion that would only have allowed the government to suppress obscenity under limited circumstances would also garner the support of the two-Justice concurrence who would have held that the First Amendment would not have allowed the suppression of obscenity at all.

The Eleventh Circuit relied on *Marks* and determined that Justice Kennedy's test is the narrower of the two competing rationales based solely on the conclusion that Justice Kennedy's test, at least in wetlands cases, will classify a water as "navigable" more frequently than the Plurality's test. *McWane,* 505 F.3d at 1221. The Eleventh Circuit did not explain how the broader application of jurisdiction equated to a "narrower" rationale, but presumably this is because it least altered the status quo (which was the agency's more expansive view of jurisdiction).

The Seventh Circuit also relied on *Marks* to determine that Justice Kennedy's test controls the jurisdictional question, after concluding that Justice Kennedy's test is narrower because it will "rein in" federal authority the least (i.e., have the smallest effect on the status quo) and in *most* cases will command the support of five Justices (Justice Kennedy plus the four dissenting Justices). *Gerke Excavating,* 464 F.3d at 725. The Seventh Circuit also acknowledged that in cases in which Justice Kennedy would vote against federal authority, he could be outvoted 8 to 1. *Id.*

The Ninth Circuit similarly concluded, without analysis, that Justice Kennedy's concurring opinion in *Rapanos* constitutes the controlling rule of law based on *Marks. See N. Cal. River Watch*, 457 F.3d at 1029. In a separate decision, the Ninth Circuit also recognized that applying Justice Kennedy's rationale would result in a decision "to which a majority of the Justices would assent if forced to choose in *almost* [but not] *all cases*." *N. Cal. River Watch v. Healdsburg,* 496 F.3d 993, 999-1000 (9th Cir. 2007), *cert. denied*, 128 S. Ct. 1225 (2008) (emphasis added) (citing *Gerke,* 464 F.3d at 724; *Marks,* 430 U.S. at 193; *Rapanos*, 547 U.S. at 810 n.14 (Stevens, J., dissenting)).[15]

[15] The Sixth Circuit Court of Appeals also considered which test applies, but ultimately determined it was unnecessary to decide based on the facts of the case before it. *See United States v. Cundiff*, 555 F.3d 200, 210 (6th Cir. 2009), *cert. denied* 130 S. Ct. 74 (Oct. 5, 2009); *see also United States v. Lucas*, 516 F.3d 316, 327 (6th Cir. 2008), *cert. denied* 130 S. Ct. 74 (Oct. 5, 2009) (concluding that jurisdiction was established under any test espoused in *Rapanos*).

4. *The Board Concludes Jurisdiction Is Established If Either the Plurality's or Justice Kennedy's Test Is Met*

For the reasons articulated below, the Board concludes that jurisdiction may be demonstrated if either the Plurality's or Justice Kennedy's test is met. First, Smith Farm provides no valid support or legal authority for its suggestion that the Board may opt to apply only the Plurality's test in this case. Indeed, no court that has examined this issue has determined that the Plurality's test alone controls the jurisdictional question, and there is no support for such a reading of the law. In urging this option (while also urging the Board to adopt the First Circuit holding),[16] Smith Farm appears to be misreading circuit court precedent and equating agency discretion to establish jurisdiction using either test to Board discretion to determine which test applies in an appeal. Smith Farm Br. at 49-50. As such, the Board concludes that the Plurality's test, alone, cannot control this case.

Second, notwithstanding the views of the Seventh, Ninth, and Eleventh Circuits, there are strong arguments against using *Marks* to determine the controlling law in *Rapanos.* In particular, the approach described in *Marks* will only reliably effectuate the views of the majority of the Supreme Court when one ground of decision offered in a fractured opinion is a logical subset of another, broader, opinion. Several courts have recognized that neither Justice Kennedy's nor the Plurality's basis for ruling in *Rapanos* is a logical subset of the other and, thus, neither can constitute a ruling on "narrower grounds." As explained by the First Circuit in *United States v. Johnson,* 467 F.3d 56 (1st Cir. 2006), *cert. denied*, 552 U.S. 948 (2007), "[t]he cases in which Justice Kennedy would limit federal jurisdiction are not a subset of the cases in which the [P]lurality would limit jurisdiction" because Justice Kennedy's standard will exclude at least some waters that the Plurality would find to be covered. 467 F.3d at 64 (considering that "a small surface water

[16] Smith Farm also urges the Board to adopt the Sixth Circuit holding, and describes the Sixth Circuit in *Cundiff* as concluding that "the [CWA] confers jurisdiction whenever either Justice Kennedy's or the [P]urality's test is met." Smith Farm Br. at 49, 50. As explained in note 15, above, however, the Sixth Circuit specifically declined to rule on the issue of which test from *Rapanos* controls the jurisdictional question. *See Cundiff*, 555 F.3d at 210. Thus, Smith Farm misreads the holding in that case.

connection to a stream or brook" would satisfy the Plurality's standard for CWA jurisdiction but might not constitute a "significant nexus" to traditional navigable waters under Justice Kennedy's standard). The United States has argued that "the *Marks* test is designed to identify a legal principle that enjoys the support of a majority of the Court in a fragmented decision" and that "[n]either precedent nor logic supports the * * * conclusion that Justice Kennedy's 'significant nexus' standard must be treated as the controlling rule of law even when it yields an outcome inconsistent with a controlling legal principle endorsed by eight members of the Supreme Court." Petition for Writ of Certiorari at 23, *United States v. McWane*, No. 08-223 (S. Ct. Aug. 21, 2008). The Supreme Court, itself, has acknowledged that "[i]t does not seem 'useful to pursue the *Marks* inquiry to the utmost logical possibility'" in every case. *Grutter v. Bollinger*, 539 U.S. 306, 325 (2003) (quoting *Nichols v. United States*, 511 U.S. 738, 745 (1994)); *cf. Rapanos*, 547 U.S. at 758 (Roberts, C.J., concurring) (citing *Grutter* and *Marks* and noting that "[l]ower courts and regulated entities will now have to feel their way on a case-by-case basis" in determining whether particular waters are covered by the CWA under the fractured decision in *Rapanos*); *see also* Complainant's Response Br. ("EPA Br.") at 8-9.

Finally, for all of the reasons articulated by Justice Stevens and the First and Eighth Circuit Courts of Appeal, the United States (arguing on behalf of EPA and the Corps) has consistently taken the position that CWA jurisdiction may be found whenever either the standard described in the Plurality opinion or the standard described by Justice Kennedy is satisfied. This position is consistent with guidance issued jointly by EPA and the Corps subsequent to the *Rapanos* decision. *See generally* U.S. EPA & U.S. Army Corps of Engineers, *Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States* (Dec. 2, 2008). The Board sees no reason to determine otherwise.

Based on the foregoing, the Board concludes that CWA jurisdiction lies with EPA if either the Plurality's test or Justice Kennedy's test is met.

B. *Do the Smith Farm Wetlands Fall Within EPA's CWA Jurisdiction under Justice Kennedy's Test?*

Smith Farm argues that the Region failed to demonstrate that the Smith Farm wetlands meet Justice Kennedy's standard for jurisdiction. More specifically, Smith Farm argues that: (1) the Region failed to demonstrate that the Smith Farm wetlands *affect* the physical, chemical, and biological integrity of the receiving navigable-in-fact waters; and (2) for any effects the Region did demonstrate, the Region failed to demonstrate the *significance* of such effects on the water quality of the navigable water. Smith Farm Br. at 40. In support of these arguments, Smith Farm also asserts that the ALJ afforded excessive weight to the testimony of EPA witnesses and inappropriately rejected the testimony of its own witnesses.

The Region argues that the ALJ appropriately determined that the Smith Farm wetlands fall within EPA's CWA jurisdiction under Justice Kennedy's test. More specifically, the Region argues that it demonstrated through field observation and documentation of field indicators that the Smith Farm wetlands perform and deliver certain ecological functions that contribute to the physical, chemical, and biological integrity of the Nansemond River and the Western Branch of the Elizabeth River and, therefore, constitute a "significant nexus" as defined by Justice Kennedy.

Thus, the Board must decide whether the Smith Farm wetlands fall within EPA's jurisdiction under Justice Kennedy's test. To make that determination, the Board must first examine in greater detail the principles of law espoused by Justice Kennedy in *Rapanos* on the subject of CWA jurisdiction over wetlands. Then, the Board must apply these principles to the facts of this case.

1. *Justice Kennedy's Test*

As explained in Part VI.A.1, above, EPA has jurisdiction over wetlands that fall within the scope of "waters of the United States." According to Justice Kennedy, "waters of the United States" covers wetlands that "possess a 'significant nexus' to waters that are or were

navigable-in-fact or that could reasonably be so made." *Rapanos*, 547 U.S. at 759, 779-82 (citing *SWANCC*, 531 U.S. at 172; *Riverside Bayview*, 474 U.S. at 133).[17] "The required nexus must be assessed in terms of the statute's goals and purposes," which are to "'restore and maintain the chemical, physical and biological integrity of the nation's waters.'" *Id.* at 779. A significant nexus exists if the wetlands, "either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.' When in contrast, wetlands' effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term 'navigable waters.'"[18] *Id.* at 780.

Justice Kennedy explained that where wetlands are *adjacent* to navigable-in-fact waters, a reasonable inference of ecological interconnection between the wetlands and the navigable-in-fact waters could be made, and jurisdiction could be presumed. *Id.* at 780, 782. But where wetlands are not adjacent to navigable-in-fact waters, but instead feed into nonnavigable tributaries of those waters, then agencies cannot assume that wetlands have ecological effects on the downstream navigable-in-fact waters. This is in part because, in Justice Kennedy's view, the definition of "tributary" is overbroad. *Id.* at 781-82. Importantly, Justice Kennedy acknowledged that for many nonnavigable tributaries, the "volume of flow," "proximity to navigable waters," or other relevant considerations would likely be significant enough to presume that adjacent wetlands would perform important functions for an aquatic system incorporating the navigable waters. *Id.* at 780-81.

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[17] As noted previously, the Supreme Court in *SWANCC* determined that the Corps exceeded its authority under the CWA by defining "navigable waters" to include intrastate waters used as habitat by migratory birds. In that decision, the Court noted that "[i]t was the *significant nexus* between the wetlands and the navigable waters that informed [the Court's] reading of the CWA" in *Riverside Bayview. SWANCC*, 531 U.S. at 168. The Supreme Court also explained that "navigable waters include waters that are or were navigable-in-fact or that could reasonably be so made." *Id.* at 172.

[18] As does Justice Kennedy in his concurring opinion, the Board uses the terms "navigable-in-fact waters" and "downstream navigable waters" interchangeably to mean "covered waters more readily understood to be 'navigable,'" as intended by Justice Kennedy. *See, e.g., Rapanos*, 547 U.S. at 779-80.

Nevertheless, Justice Kennedy expressed concern that the existing definition of "tributary" in agency regulations also leaves room for regulation of tributaries "little more related to navigable-in-fact waters than were the isolated ponds held to fall beyond the [CWA's] scope in *SWANCC*." *Id.* at 782. Thus, Justice Kennedy concluded that, until agency regulations more clearly define the term "tributary," agencies seeking to invoke jurisdiction over wetlands that feed into nonnavigable tributaries must establish the requisite nexus between the wetlands and the navigable-in-fact waters on a case-by-case basis. *Id.*

Justice Kennedy specifically identified the following "critical" functions that wetlands can provide as potentially affecting the "integrity" of downstream navigable-in-fact waters: pollutant trapping, flood control, and runoff storage. *Id.*, 547 U.S. at 779-80 (citing 33 C.F.R. § 320.4(b)(2)). In addition to these functions, agency regulations identify food chain production and habitat provision as important wetland functions as well, among others. 33 C.F.R. § 320.4(b)(2); *see also* Remand Decision at 14, 15.

2. *Application of Justice Kennedy's Test to the Facts of this Case*

The ALJ found that the Smith Farm wetlands perform various ecological functions: namely, temporary and long-term water storage (desynchronization), pollutant filtration (denitrification), and biological productivity for plants and wildlife. Remand Decision at 46-48, 55-57. As explained below, these functions significantly affect the chemical, physical and biological integrity of the downstream navigable-in-fact waters. Also, as discussed below, these functions are precisely the kind of critical functions that Justice Kennedy contemplated as satisfying his "significant nexus" test. Moreover, the record supports that the Smith Farm wetlands function in concert with similarly situated lands in the area, and its effects are not minimal or insubstantial. *See, e.g., id.* at 54, 57-58. None of the arguments offered by Smith Farm in this appeal persuade the Board to determine otherwise. Contrary to Smith Farm's assertions, and as explained more fully in Part VI.B.2.c., below, the ALJ's assessment of the credibility of the witnesses, and the appropriate weight to be afforded the witnesses' testimony, is supported by the

record. Additionally, as discussed in Part VI.B.2.d., below, the Board disagrees with the level of evidence Smith Farm suggests is required to prove a significant nexus under Justice Kennedy's test. As such, and for all of the reasons articulated below, the Board concludes that the ALJ correctly found that Justice Kennedy's significant nexus test was met.

a. *The Smith Farm Wetlands Perform Various Ecological Functions Affecting Downstream Navigable Waters*

The ALJ relied heavily on the testimony of Charles Rhodes, the Region's expert witness on wetlands ecology. *See* Remand Decision at 46-47, 55-57. Mr. Rhodes was tasked with determining if ecological functions were being performed by the wetlands on Smith Farm and if the benefits of such functions were being delivered to the navigable waters. *Id*. at 46 (citing Remand Tr. at 664-69); *see also* Remand Tr. at 659, 667, 674. He stated unequivocally that, in his opinion, the Smith Farm wetlands perform ecological functions that are delivered from those wetlands to traditionally navigable waters, including flood flow storage and flow moderation, denitrification, and biological productivity. *Id.* at 46-47 (citing Remand Tr. at 669, 670, 674). Each of these functions is discussed further below.

(i) *Water Storage (Desynchronization)*

Wetlands function like natural tubs or sponges by storing water and slowly releasing it. This process slows the water's momentum and erosive potential, reduces flood heights, and allows for ground water recharge, which effects the flow of surface water. Ecologists use several terms to describe these effects: e.g., desynchronization, flow moderation, flow retention, flood flow reduction, temporary and long-term storage of water. Remand Decision at 48 n.81 (citing Remand Tr. at 674). All of these terms essentially mean that wetlands can slow the flow of water from precipitation events into downstream navigable-in-fact waters. *See* Remand Decision at 26, 46-48; Remand Tr. at 498, 677-679, 686; *see also* Office of Water, U.S. EPA, EPA 843-F-01-002c, *Functions and Values of Wetlands,* at 1-2 (Sept. 2001) [hereinafter *Wetland Functions and Values*].

Mr. Rhodes testified that the Smith Farm wetlands perform the function of desynchronization. Remand Decision at 46, 47. During his two visits to Smith Farm, Mr. Rhodes – who was qualified as an expert in the field of wetland ecology and has visited approximately one hundred thousand acres of wetlands during his career – observed that the Smith Farm wetlands appeared similar to other forested wetlands on mineral flats. *Id.* at 26 (citing Remand Tr. at 669). He also noted the basic structure of the Smith Farm wetlands, including the hummocky microtopography[19] and the hydric soils. *Id.* at 26, 46-48, 57; *see also* Remand Tr. at 674-80. Mr. Rhodes used several analogies to explain how these features serve to perform the function of desynchronization. For example, he explained that the soils act as a "sponge" to soak up the water and hold it, and then let it dribble out into the ditches and on to the receiving waters. Remand Decision at 48; Remand Tr. at 675 (cited in Remand Decision at 47 n.80). He also analogized the vegetation to a "shock absorber" because precipitation that falls onto the horizontal leaves and branches of the forested wetland (which consists of a tree canopy, sub-canopy, a shrub layer, and a base layer) is slowed considerably before it reaches the hydric soils. Remand Decision at 26 (citing Remand Tr. at 677-79); *see also* Remand Tr. at 676. Mr. Rhodes also described the highs and lows of the hummocky topography at Smith Farm as providing short-term storage in the low spots. Remand Decision at 26; *see also* Remand Tr. at 677.

Testimony from the Region's witness Steve Martin, an environmental scientist with significant training and experience in wetlands delineation in the area of Smith Farm, supported Mr. Rhodes' observations. Remand Tr. at 370, 418-19, 496-98 (scattered depressions at Smith Farm serve to store rainwater). Both Mr. Rhodes and Mr. Martin testified that physical characteristics of the Smith Farm wetlands serve to moderate the volume, velocity, and kinetic energy of water that is delivered downstream and that, in turn, serves to reduce flooding, erosion, and sedimentation downstream. Remand Decision at 48 (citing, *inter alia,* Remand Tr. at 639, 675-76); *see also* Remand Tr. at 678-80.

[19] As expressed by Mr. Rhodes, "hummocky topography" describes land having variable topography, with high spots and low spots scattered across the area. Remand Decision at 26 (citing Remand Tr. at 677-79).

Specific evidence of these characteristics also included photographs depicting areas of ponding (CX-SF-280 to 283, 291, 303, 305, 307, 348, 479, 783) and microtopography measurements (CX-SF-24, 310); *see also* Remand Decision at 48 n.83. The above-described evidence in the record, relied upon by the ALJ, amply supports the ALJ's determination that the Smith Farm wetlands are performing the functions of flood control and runoff storage that serve to slow the flow of water from precipitation events into downstream navigable-in-fact waters.

(ii) *Water Filtration (Denitrification)*

In addition to slowing the velocity of water, wetlands can also serve to filter water that passes through. Nutrients may be absorbed by plant roots or microorganisms in the soil. Other pollutants may adhere to soil particles. In many cases, this filtration process removes much of the water's nutrient and pollutant load by the time it leaves a wetland. *See Wetlands Functions and Values* at 1; *see also* Remand Decision at 48-49 & n.85 (describing how wetlands, such as Smith Farm, can filter nitrates).

Remand testimony established that the Smith Farm wetlands were functioning to filter nitrates from precipitation (i.e., denitrification). *See* Remand Decision at 26, 46-49, 57; Remand Tr. at 681-83, 641. Denitrification essentially refers to a process whereby bacteria in the soils break down nitrates as a source of energy into a form that is then released into the atmosphere. Remand Decision at 26. Mr. Rhodes stated that he observed "mottling" at the site and that this was an indicator of denitrification occurring. Remand Decision at 48 n.84 (citing Remand Tr. at 681-82). "[A] mottle is a contrasting spot of color, and in the case of denitrification, the contrast is usually a brighter, notably more orange or red color than the surrounding gray soil matrix." Remand Decision at 49 n.86. Mr. Rhodes further explained that bacteria first consume nitrates and then iron; the presence of mottled soil shows that bacteria are in this second stage and using iron as an energy source. *Id.* The water that flows downstream is thus "denitrified," such that fewer nitrates reach the receiving waters. *Id.* at 26, 49, 57 (citing CX-SF-313 (Mr. Rhodes Expert Report); *see also* Remand Tr. at 680-85; *see also* Remand Tr. at 496, 498-500 (describing the process of denitrification as it is occurring

at Smith Farm). Mr. Martin also observed the presence of mottling at Smith Farm. Remand Tr. at 411, 498.

Additionally, Mr. Rhodes testified that rainfall in the area of the Smith Farm site is known to contain nitrogen, and that nitrates are problematic to forest estuaries in general, but to the Chesapeake Bay in particular. Remand Tr. at 682-83. Similarly, Mr. Martin testified that nitrogen is a problematic pollutant for the Chesapeake Bay watershed, in which the Smith Farm wetlands are located, because in excess it can stimulate growth of phytoplankton algae that can stimulate the growth of algae blooms, which can create dead zones in the Bay. *Id.* at 640-41. Mr. Martin testified that one source of nitrogen to the Chesapeake Bay is atmospheric deposition. *Id.* at 641; *see also* Remand Decision at 49.

The above-described evidence in the record, relied upon by the ALJ, amply supports the ALJ's determination that the Smith Farm wetlands serve to denitrify, or reduce the quantity of nitrates that travel in, the drainage from Smith Farm to the Chesapeake Bay, where nitrate pollution has been linked to formation of phytoplankton algae that contributes to the impairment of the Bay. Remand Decision at 46-49, 55-56, 57 (citing Remand Tr. at 428-430, 498, 499-500, 641, 681, 682-83, 686-87).

(iii) *Biological Productivity for Plants and Wildlife*

Wetlands are also known for their biological productivity. Their physical characteristics provide diverse and nutrient-rich habitats for aquatic plants, fish and wildlife. Energy converted by low level organisms is passed up the food chain to fish, waterfowl, and other wildlife and humans as well. *See Wetlands Functions and Values* at 2.

Mr. Rhodes testified that the Smith Farm wetlands serve the ecological function of primary production, an activity performed by plants using photosynthesis, which essentially converts carbon dioxide from the atmosphere into plant biomass. Remand Tr. at 674, 686 (cited in Remand Decision at 26, 48-49, 57). That biomass is then used by the wetlands, but a portion leaves the site and goes (in several forms) to the

receiving waters as well. *Id.* at 688. Mr. Rhodes testified that there are three forms of biomass: coarse particulate organic matter (e.g., leaves), fine particulate organic matter (e.g., decomposed leaves), and dissolved organic matter (e.g., stained water). *Id.* at 689-90. All three form the base of the food chain for both the wetlands and for downstream receiving waters. *Id.* Certain organisms use the coarse material and continue to break it down. *Id.* Other plants and animals use the finer material for their ecological needs. *Id.* Primary production creates the physical structure for food material and shelter that in turn supports various wildlife species (i.e., habitat). *Id.* at 695. Mr. Rhodes used field indicators (tannic or tea-colored water, observation of debris in water, and the presence of foam in the water) to conclude that the physical structure (microtopography) of the Smith Farm wetland area would be highly likely to support a variety of plant species and a whole range of animals, primarily insects and other less complex organisms first, but other higher organisms as well, both in the wetland and downstream. Remand Decision at 46-49 (citing Remand Tr. at 686-700); *see also* Remand Tr. at 397-98, (discussing foam in water flowing from site), 481 (testifying about water flowing from site conveying tea-colored water), 496, 500-02 (testifying that Smith Farm wetlands hold carbon on-site for decomposition, which converts into dissolved carbon – one of the first links in the food chain for higher tropic species – which in turn is delivered to the receiving waters; also the scattered depressions present serve to provide breeding habitat for a number of amphibians and salamanders; the woods themselves provide breeding habitat for bird and mammal species as well).

The above-described evidence in the record, relied upon by the ALJ, amply supports the determination that the Smith Farm wetlands function to provide primary production for living organisms that form the basis of the food chain for both the wetlands and for downstream navigable-in-fact waters. *See* Remand Decision at 49 & n.87 (citing Remand Tr. 686, 687-90).

b. *Smith Farm Wetlands, Alone and in Combination with Other Similarly Situated Lands, Cumulatively and Significantly Affect the Integrity of the Chesapeake Bay Watershed*

In addition to finding that the Smith Farm wetlands perform the above ecological functions, the ALJ also determined that these ecological functions "impact the integrity" of the downstream navigable waters. *See, e.g.,* Remand Decision at 57, 58. As discussed above, the desynchronization at Smith Farm affects the integrity of downstream navigable waters by reducing flooding, erosion and movement of sediment in the downstream receiving waters. *See, e.g.,* Remand Decision at 48; citing Remand Tr. at 498, 675-76, 678-79; *United States v. Cundiff*, 480 F. Supp. 2d 940, 945 (W.D.Ky. 2007) *aff'd,* 555 F.3d 200 (6th Cir. 2009), *cert. denied* 130 S. Ct. 74 (Oct. 5, 2009). The denitrification occurring at Smith Farm affects the integrity of downstream navigable waters by reducing the number of nitrates that reach the Chesapeake Bay, where nitrate pollution is known to be problematic. Remand Decision at 49 (citing Remand Tr. at 428-30, 498, 499-500, 641, 681, 682-83, 686-87). And, finally, the biological productivity in the wetlands contributes to biological productivity in the downstream waters, which clearly affects the overall integrity of those waters. *See* Remand Tr. at 688-90; Remand Decision 49 & n.87. The Board agrees with the ALJ that these ecological functions being performed by the Smith Farm wetlands and being delivered to the downstream navigable waters affect the integrity of those connected waters. Additionally, the record supports the conclusion that these effects are chemical (e.g., fewer nitrates), physical (e.g., reduction in velocity and kinetic energy of flow), and biological (e.g., increase in biological production, decrease in phytoplankton algae). *Cf. Rapanos*, 547 U.S. at 780 (Kennedy, J., concurring).

Desynchronization and denitrification are precisely the kind of critical functions that Justice Kennedy explained would satisfy the requisite nexus to navigable waters. *Rapanos*, 547 U.S. at 779-80 (citing 33 C.F.R. § 320.4(b)(2) (describing desynchronization and pollutant trapping as important functions of wetlands, as well as food chain production)); *see also* Remand Decision at 48 (citing, *inter alia*, *Cundiff*,

480 F. Supp. 2d at 945 (holding that a wetlands' capacity to store water is a significant nexus to traditionally navigable waters downstream)). Moreover, as stated in Part VI.B.1, above, Justice Kennedy also acknowledged that, for many nonnavigable tributaries, one could presume that adjacent wetlands would perform important functions for an aquatic system incorporating the downstream navigable waters based on the "proximity" of the navigable waters alone. *Rapanos*, 547 U.S. at 780-81. As stated in Part V.B.1, above, the wetlands in this case are adjacent to nonnavigable tributaries and are approximately 2,600 to 4,200 feet upstream from navigable-in-fact waters, depending on the direction of the flow. The Board concludes that this distance falls within Justice Kennedy's category of wetlands where the "proximity" to navigable-in-fact waters is sufficient to presume that adjacent wetlands would perform important functions for an aquatic system incorporating the downstream navigable waters. *See Rapanos*, 547 U.S. at 780-81.[20]

The ALJ also recognized that the Smith Farm wetlands play a role in the overall Chesapeake Bay watershed. Remand Decision at 57.

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[20] Justice Kennedy also suggested that in some circumstances evidence regarding the significance (quantity and regularity of flow) of the tributaries to which the wetlands are connected may be important in assessing the nexus. 547 U.S. at 786. On the other hand, Justice Kennedy noted that, "[g]iven the role wetlands play in pollutant filtering, flood control, and runoff storage, it may well be the absence of a hydrological connection (in the sense of interchange of waters) that shows the wetlands' significance to the aquatic system." *Id*. at 786. Smith Farm has not argued that quantity or regularity of flow are at issue with respect to the Justice Kennedy analysis in this case, instead focusing on whether Smith Farm actually contains wetlands, whether the functions performed by the wetlands are also being performed elsewhere, and whether the functions performed are significant. Smith Farm Br. at 40-45. Nevertheless, the Board notes that the ALJ concluded that the drainages from Smith Farm are tributaries to traditionally navigable waters and that they are relatively permanent waters forming geographic features. Remand Decision at 41-42, 43. Moreover, aerial photographs and maps depicting the conveyance of water via these tributaries to navigable-in-fact waters over time, and from as early as 1920, document a quantity and regularity of flow that cannot be said to have been "remote," "irregular," insignificant or "minor" as reflected by Justice Kennedy. *See Rapanos*, 547 U.S. at 781-82, 786; *see also* Remand Decision at 44, 45, 60-62; EPA Br. at 31-32 (providing record citations for various maps and photos of each tributary). In any case, the Board is satisfied that the proximity of the Smith Farm wetlands to the downstream navigable waters, in conjunction with the functions being performed as well as the relative significance and permanence of the tributaries, is sufficient to establish a significant nexus under Justice Kennedy's analysis.

With respect to that role, the ALJ cited the following testimony from Mr. Rhodes:

> There are two ultimate receiving water bodies, the Nansemond and the Western Branch of the Elizabeth. Each wetland tract contributes to the ecology and the well-being of the downstream receiving waters. It's almost like each one is a piling on a pier and if you remove one piling, the pier might stand, but the integrity is compromised. And if you keep removing piling after piling, eventually the pier is going to collapse. By the same token I've taken training in the use of cumulative environmental impacts and basically what we have here is each individual wetland contributes in total to the overall health of the ecology of the downstream receiving waters.

Remand Tr. at 708; *see also* Remand Decision at 46-47, 57; Init. Dec. at 41-43 (quoting 2003 Tr., vol. V, at 138-40, vol. I, at 76-77); EPA Br. at 42-48.[21] Based on the foregoing, the Board agrees that the Smith Farm wetlands act, not only alone, but also in combination with other lands in the watershed and, as stated by the ALJ, should not be evaluated "myopically." Remand Decision at 57. Moreover, the Board rejects Smith Farm's argument that the functions performed by the Smith Farm wetlands are insignificant because those functions are also being performed elsewhere in the watershed. *See* Smith Farm Br. at 46. Rather, the entirety of the record supports the determination that the wetlands' effects are neither speculative nor insubstantial. *See* Remand Decision at 54, 56, 58; *see also Rapanos*, 547 U.S. at 780 (Kennedy, J., concurring).

[21] Dr. Dennis Whigham (Senior Scientist with the Smithsonian Environmental Research Center, called as a rebuttal witness for EPA) largely confirmed that Smith Farm contained wetlands that flowed via ditches off-site to downstream waters, that the wetlands contained mottling, tea-colored water, and foam – all indicators of the connectivity between the wetlands and the downstream waters. (Remand Tr. at 1675, 1680-1684, 1689-90, 1699, 1702, 1708-1710, 1712-13, 1716).

In sum, the ecological functions that these wetlands provide and their proximity to the downstream navigable-in-fact waters fully support the ALJ's determinations that the Smith Farm wetlands function both alone and in combination with other similarly situated lands in the area, and that they impact the integrity of the downstream navigable-in-fact waters in a way that is not minimal or insignificant. Moreover, the record further supports the conclusion that the impact on the connected waters is chemical, physical, and biological, and that there exists precisely the kind of significant nexus that Justice Kennedy intended would render the wetlands covered under the CWA. *See Rapanos,* 547 U.S. at 779-80; *see also* discussion in Part VI.B.1, above. As discussed in the following two sections, nothing presented by Smith Farm on appeal persuades the Board to determine otherwise.

c. *Where Factual Determinations Turn on the Credibility of a Witness, the Board Generally Defers to the ALJ*

Smith Farm argues that the ALJ afforded too much credibility to EPA witnesses, and not enough to Smith Farm's experts. *See* Smith Farm Br. at 41, 42 (complaining that the ALJ failed to take into consideration Mr. Rhodes' responses on cross examination and failed to consider discrepancies in Mr. Rhodes' testimony), Smith Farm Br. at 43 ("Judge Moran completely dismissed the testimony of Dr. Pierce and Dr. Straw" when he called Dr. Pierce "agenda driven" and Dr. Straw "honest, though incorrect"), Smith Farm Br. at 44 ("Judge Moran does not make these same criticisms of the EPA's 'late in the game' witnesses with arguably less knowledge of the Site. In fact, Judge Moran places great weight on the testimony of Dr. Dennis Francis Whigham * * * who went to the Site only one time in April of 2007," and "[t]here is simply is no explanation on the record for this disparaging treatment of the Respondent's[] witnesses in this case."); *see also id.* at 45 ("Judge Moran completely failed to consider [Mr.] Martin's testimony on cross examination"; "Respondent offered an abundance of evidence on the denitrification issue which Judge Moran dismissed without consideration"; and "Judge Moran [] erred in failing to consider the discrepancies in [Mr.] Martin's testimony"). Thus, Smith Farm raises questions regarding witness credibility and whether the ALJ

appropriately relied on EPA witness testimony and appropriately disregarded Smith Farm witness testimony.

As explained in Part III.B. above, the Board generally defers to an ALJ's factual findings when those findings rely on witness testimony and when the credibility of the witnesses is a factor in the ALJ's decisionmaking. *See In re Ocean State Asbestos Removal, Inc*., 7 E.A.D. 522, 530 (EAB 1998). This approach recognizes that the ALJ observes first-hand a witness's demeanor during testimony and therefore is best suited to evaluate his or her credibility. *Id.*; *In re Julie's Limousine & Coachworks, Inc.*, 11 E.A.D. 498, 507 n.19 (EAB 2004); *In re Echevarria*, 5 E.A.D. 626, 639 (EAB 1994) (explaining that when a presiding officer has "the opportunity to observe the witnesses testify and to evaluate their credibility, his factual findings are entitled to considerable deference"). Only when an ALJ's credibility determinations are unsupported in the record will the Board second-guess those determinations. *See* Part III.B, above; *see also, e.g., See In re Bricks*, *Inc.,* 11 E.A.D. 224, 233, 236-39 (EAB 2003) (rejecting the ALJ's credibility determination as not sufficiently supported by a preponderance of evidence).

In this case, the record reveals that the ALJ gave appropriate consideration to all of the testimony, made clear credibility determinations, and provided a rational basis in the record for each of the factual findings made. With respect to Smith Farm's witnesses, for example, ALJ Moran meticulously went through Dr. William Thomas Straw's testimony and concluded that he was an "honest, though mistaken, witness." *See* Remand Decision at 26-31. Among other things, the ALJ found that Dr. Straw's testimony at trial often conflicted with the expert report he co-authored with other expert witnesses of Smith Farm. *See*, *e.g., id.* at 30 (citing RX 74, 75). When asked why the report was not corrected to reflect inaccuracies discovered, Dr. Straw's excuse (which the ALJ determined was insufficient) was that the team "had committed [them]selves to the prose in the report." *Id.* (citing Remand Tr. at 1006). The ALJ concluded that such inaccuracies rendered the entire report "suspect." *Id.* at 30. The ALJ also found Dr. Straw to have "limited knowledge of the Site," and that Dr. Straw's testimony was at times helpful to Region's case. *Id.* at 29, 30.

The ALJ also dismissed the views of Dr. Robert Pierce, Smith Farm's wetlands expert on remand. Dr. Pierce first visited the site in January 2007 and formed the opinion that the Smith Farm wetlands were isolated, disconnected from other wetlands and navigable waters, and provided little direct function to navigable waters. *Id.* at 32-36. When asked about prior testimony and National Wetlands Inventory mapping that contradicted his point of view, Dr. Pierce indicated that any mapping or prior testimony that was contrary to his opinion was simply false or wrong. *Id.* at 33 (citing Remand Tr. at 1238), 36 (citing Remand Tr. at 1594). In the Remand Decision, the ALJ described Dr. Pierce's testimony as lacking in objectivity, biased, and not credible. *Id.* at 32-36. The ALJ found it particularly telling that while surveying Smith Farm for the purpose of analyzing the location of wetlands there, Dr. Pierce conceded that there were times when he found hydric soils, but did not record them, or "click' on his GPS unit to record [them]." *Id.* at 35 (citing Remand Tr. at 1620). The ALJ found this failure to accurately record his findings to be reflective of "[some]one intent on reaching a particular result," rather than "[some]one making factual determinations." *Id.* The ALJ also indicated that Dr. Pierce's "attempt[] to find any way to diminish the role of the Site's forested wetlands" as "illustrative of Dr. Pierce's bias." *Id.* at 35 n.60.

The ALJ similarly dismissed the opinion of William Blake Parker, Smith Farm's expert in soil science. In doing so, the ALJ was unmoved by Mr. Parker's success in finding mostly nonhydric soils during his second visit to Smith Farm, in 2007, given that his "predetermined purpose" was to find nonhydric soil samples on the property. *Id.* at 31-32 (citing Remand Tr. at 1121). Judge Moran noted that when Mr. Parker took samples in 2002, he employed transects[22] and took 55 samples, of which 53 were hydric. *Id.* at 32. In contrast, when he visited the site in 2007, Mr. Parker did not employ transects, which he

[22] Transects are straight lines across an area to be sampled, along which samples are taken at regular intervals. Scientists typically use these to ensure that the data they collect is representative of the area. *See, e.g.,* Tr., vol. III, at 166, 168; EPA Br. at 17. When Mr. Parker visited Smith Farm in 2002, he sampled along transects spaced approximately every 200 feet and described two to three soil samples along each transect. 2003 Tr., vol. III, at 166; Remand Tr. at 1161-62; *see also* R. Ex. 32 (Oct. 2003 hearing exhibits).

acknowledged eliminate bias, because they were too time-consuming. *Id.* During the 2007 visit, 15 of 17 samples taken were nonhydric. *Id.* Again, the ALJ clearly explained that he found Dr. Parker's reason for not using transects as "suspect," and the results upon which his opinion was based to be predetermined. *Id.*

Finally, the ALJ found the testimony of James Boyd, the owner of Smith Farm, to be "simply not credible at all." *Id.* at 39. After testifying at length on direct examination regarding all he had done to be sure his activity would be lawful, on the important issue of whether the Corps' representative he was working with had told Mr. Boyd that there were wetlands on his property, Mr. Boyd was only able to muster the response "I don't recall." *Id.* at 39 (citing Remand Tr. at 1835).

Given the wealth of justification that the ALJ provides for why he found Smith Farm's witnesses to lack credibility, we cannot agree with Smith Farm that there is no persuasive explanation in the record for the ALJ's credibility determinations with respect to Smith Farm's witnesses in this case.

Moreover, the Board simply disagrees that the ALJ failed to consider portions of EPA witness testimony or that the testimony of EPA witnesses cited by Smith Farm amounts to contradictions or discrepancies. *See* Smith Farm Br. at 41, 42 (asserting that the ALJ failed to consider Mr. Rhodes' reluctant responses on cross-examination and failed to consider "discrepancies" in Mr. Rhodes' testimony), 45 (asserting that the ALJ failed to consider "discrepancies" in Mr. Martin's testimony). Rather, Smith Farm's views with respect to the testimony of EPA witnesses reflect not so much "discrepancies" as a difference in view regarding what the testimony means and what is legally required to prove CWA jurisdiction. For example, Smith Farm's argument concerning Mr. Rhodes' testimony on cross-examination that the functions performed by Smith Farm wetlands may also occur in non-wetlands, albeit at different rates, does not undermine the veracity of Mr. Rhodes' testimony on direct examination. *See* Smith Farm's Br. at 41 (citing Remand Tr. at 753, 756). Instead, these attempts simply reflect Smith Farm's belief in the flawed theory that, if a function may be performed by non-wetlands, then if that function is also performed by

wetlands, such as Smith Farm's, it cannot have a "significant" effect on downstream navigable waters as required by Justice Kennedy. *See* Smith Farm Br. at 41, 42, 46; *see also* Part VI.B.2.b, above (rejecting Smith Farm's argument that functions performed by the Smith Farm wetlands are insignificant because those functions are performed elsewhere in the watershed). Thus, Mr. Rhodes' testimony during direct examination, that the Smith Farm wetlands perform certain functions that affect the watershed, is not discrepant from testimony during cross-examination, that those same functions may be being performed elsewhere, although likely at different rates. *Compare, e.g.*, Remand Tr. at 674-80 to Remand Tr. at 753-56. The same is true of Mr. Martin's testimony. Accordingly, the ALJ carefully evaluated the testimony in the record and provided rational bases for why he found the Region's witnesses to be credible, and found Smith Farm's witnesses lacking in credibility. Based on the foregoing, the Board declines to second-guess the ALJ's credibility determinations and instead defers to the ALJ's well-supported judgments.

d. *EPA Was Not Required to Demonstrate How the Activities of Smith Farm Affected or Impaired Downstream Navigable Waters to Establish Jurisdiction*

Smith Farm also argues that the evidence proffered by the Region was insufficient to demonstrate a "significant nexus" between the Smith Farm wetlands and the downstream navigable waters. *See* Smith Farm Br. at 46 (arguing that the Region failed to show the "significance" of the effects Smith Farm wetlands have on water quality, and arguing that because non-wetlands can perform the same functions as the Smith Farm wetlands, the functions identified – flood flow alteration, desynchronization, denitrification, primary production and habitat – are not significant in and of themselves), 47 (arguing that any evidence adduced was speculative or insubstantial at best), 47-48 (arguing that no evidence was adduced regarding volume of water, water storage capacity, amount of dissolved carbon leaving the site, contaminants in the water, or effects of any of the wetlands functions identified); *see also* Smith Farm Br. at 20 (listing data and information that Smith Farm views as "not collected by EPA" but "necessary to meet [EPA's] burden of proof"). To support its position, Smith Farm cites *United States v.*

Cundiff, 555 F.3d 200 (6th Cir. 2009), and *Northern California River Watch v. Healdsburg,* 496 F.3d 993, 999-1000 (9th Cir. 2009), as examples of the level of evidence required to demonstrate a significant nexus. By these challenges, Smith Farm raises the question of whether laboratory analysis of soil samples, water samples, or other such tests are required to demonstrate a significant nexus between the Smith Farm wetlands and the downstream navigable-in-fact waters.

In *Cundiff*, the Sixth Circuit examined whether a significant nexus existed between certain wetlands in Muhlenburg County, Kentucky, and the Green River, a navigable-in-fact water body. *Cundiff*, 555 F.3d at 204. The district court below had found that a nexus was established and in doing so, credited the government experts who testified that "the wetlands perform significant ecological functions in relation to the Green River * * * including: temporary and long-term storage, filtering of the acid runoff and sediment from the nearby mine, and providing an important habitat for plants and wildlife." *See Cundiff*, 555 F.3d at 211. The district court also found that the respondent's alterations to the wetlands had interfered with the wetlands' performance of those functions. *Id*. The Sixth Circuit upheld these findings. In so concluding, the Sixth Circuit stated:

> For instance, if one dropped a poison into the Cundiff's wetlands, the record indicates that it would find its way to the * * * the Green River, therefore indicating a significant chemical, physical or biological connection between the wetlands and nearby navigable-in-fact waters.

Cundiff, at 555 F.3d at 211 n.4. The fact that the district court and the Sixth Circuit also relied on evidence reflecting that the Cundiffs' activities resulted in the diminished functionality of the wetlands in that case does not provide a basis for requiring such a demonstration in order to demonstrate CWA jurisdiction. Such a requirement would necessitate illegal activity to occur and a resultant injury to be documented before any jurisdictional determination properly could be made. In the permitting context, in particular, such a requirement would be nonsensical. In fact, the Sixth Circuit specifically rejected *Cundiff's*

asserted arguments that a "significant nexus" could *only* be proved by "laboratory analysis" of soil samples or water samples or through other tests, noting that nothing in *Rapanos* or elsewhere supported such a conclusion. 555 F.3d at 211. Thus, the evidence in *Cundiff* was consistent with the evidence in this case. And *Cundiff* provides no support for Smith Farm's contention that any particular laboratory analysis of soil samples, water samples, or other such tests are required to demonstrate a significant nexus between the Smith Farm wetlands and the downstream navigable-in-fact waters.

Healdsburg involved the discharge of wastewater from a waste treatment plant into a pond that was part of a larger wetland and that was *adjacent to* a navigable-in-fact river. Thus, on that basis alone, under Justice Kennedy's test, a significant nexus could be presumed, and the facts of *Healdsburg* are not analogous to the facts of this case. Moreover, the fact that the Ninth Circuit determined that discharge of the chemical chloride from the wastewater was significantly affecting the receiving waters does not mean that this type of evidence is required in all cases. In any event, it is not analogous to the type of effect that the alteration of the wetlands in this case would have on receiving waters. Thus, *Healdsburg* is inapposite.

Smith Farm also cites *Envtl. Prot. Info. Ctr. v. Pacific Lumber Co.*, 469 F. Supp. 2d 803, 824 (N.D. Cal. 2007), as an example of a case where the evidence was insufficient to conclude that a significant nexus existed. *Pacific Lumber* did not involve wetlands, or a section 404 violation, but involved an alleged discharge of sediment via storm water runoff into nonnavigable streams that flowed into a navigable-in-fact river without an appropriate NPDES permit. On the issue of whether the nonnavigable tributaries could be considered "waters of the United States," the district court found that the complainant had provided only evidence of a hydrological connection, but no evidence that the streams "significantly affect[ed] the chemical, physical and biological integrity of the other covered waters." *Id.* at 824 (citing *Rapanos*, 547 U.S. at 780). The district court stated:

> A hydrologic connection without more will not comport with the Rapanos standard in this case. Because the

> evidence indicates that certain of the [nonnavigable] streams are intermittent or ephemeral watercourses * * * [the complainant] must demonstrate that these streams have some sort of significance for the water quality of [the downstream navigable-in-fact waters]. None of the evidence offered by [complainant] – field observation, the GIS map, or expert testimony – address this part of the [significant] nexus standard.

Id. at 823. The court goes on to describe evidence of "ecological connections" as the type of evidence that has been used to demonstrate a significant nexus, *id.* at 823-24 (citing *Nothern California River Watch v. Healdsburg*, No. 01-04686, 2004 WL 201502 (N.D. Cal. Jan. 23, 2004), *aff'd*, 457 F.3d 1023 (9th Cir. 2006), but again the district court notes that the complainant has offered "no [such] evidence." *Id.* Unlike the substantial evidence the Region offered in this case, in *Pacific Lumber* there was no ecological evidence offered. Thus, *Pacific Lumber* also is inapposite.

3. *The Board Concludes that the ALJ Appropriately Determined that Justice Kennedy's Significant Nexus Test Is Met*

Based on the foregoing, the Board concludes that a preponderance of the evidence in the record supports the ALJ's determination that the Smith Farm wetlands perform various ecological functions including: (1) temporary and long-term water storage (i.e., flood control or desynchronization); (2) water pollutant filtration (denitrification); and (3) biological production for plants and wildlife. Moreover, a preponderance of the evidence in the record demonstrates that these functions, both alone and in combination with other similarly situated lands, significantly affect the chemical, physical, and biological integrity of the downstream navigable-in-fact receiving waters (i.e., the Nansemond River and the Western Branch of the Elizabeth River, each of which flows into the Chesapeake Bay) by preventing flooding and erosion, reducing the quantity of nitrates in the water, and producing food for downstream organisms. As such, the Board concludes that the ALJ appropriately determined that a significant nexus exists between the

Smith Farm wetlands and the downstream navigable-in-fact waters, under the test set forth by Justice Kennedy in *Rapanos.* Accordingly, the Board affirms the ALJ's determination that the Smith Farm wetlands fall within EPA's CWA jurisdiction under the test set forth by Justice Kennedy.

C. *Additional Analysis Using Plurality Test Is Unnecessary*

As explained in Part VI.A., above, CWA jurisdiction may be established using either Justice Kennedy's or the Plurality's jurisdictional test. Therefore, having determined that the EPA properly has jurisdiction over the Smith Farm wetlands under Justice Kennedy's test, the Board need not analyze whether the EPA *also* has jurisdiction under the Plurality's test. *See, e.g., United States v Bailey*, 571 F.3d 791, 799 (8th Cir. 2009) (determining that jurisdiction over wetlands may be established if either the Plurality's or Justice Kennedy's test is satisfied, and then holding that jurisdiction over the wetlands in *Bailey* was proper based on application of Justice Kennedy's jurisdictional test alone). The Board's decision to refrain from analyzing the facts of this case under the Plurality's test should not be read as either agreement with the ALJ's decision on this issue, or the lack thereof. Rather, the Board's decision represents the Board's exercise of judicial restraint while taking into account the benefits of judicial economy.

VII. *Conclusion*

Based on the foregoing, the Board concludes that the ALJ did not err in determining that EPA has CWA jurisdiction over the wetlands at Smith Farm.

VIII. *Order*

The Board affirms the decision of the ALJ. Smith Farm shall pay a total civil penalty of $34,000. Payment of the entire amount of the civil penalty shall be made within thirty (30) days of service of this Final Decision and Order, by certified or cashier's check payable to the Treasurer, United States of America, and forwarded to:

U.S. Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
P.O. Box 979077
St. Louis, MO 63197-9000

A transmittal letter identifying the case name and the EPA docket number, plus the Respondent's name and address, must accompany payment. 40 C.F.R. § 22.31(c). Respondent shall serve copies of the check or other instrument of payment on the Regional Hearing Clerk and on the Complainant. If appropriate, the Region may modify the above-described payment instructions to allow for alternative methods of payment, including electronic payment options. Failure to pay the penalty within the prescribed time may result in assessment of interest on the civil penalty. *See* 31 U.S.C. § 3717; 40 C.F.R. § 22.31(c).

So ordered.

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Final Decision and Order in the matter of Smith Farm Enterprises, LLC, CWA Appeal No. 08-02, were sent to the following persons in the manner indicated.

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Dated: SEP 30 2010

Annette Duncan