UCLA

UCLA Journal of Environmental Law and Policy

Title

Acting with No Regret: A Twenty-Five Year Retrospective of *Marsh v. Oregon Natural Resources Defense Council*

Permalink

https://escholarship.org/uc/item/1pi5i9bf

Journal

UCLA Journal of Environmental Law and Policy, 32(2)

Authors

Smith, Maxwell C. Kanatas, Catherine E.

Publication Date

2014

DOI

10.5070/L5322022594

Copyright Information

Copyright 2014 by the author(s). All rights reserved unless otherwise indicated. Contact the author(s) for any necessary permissions. Learn more at https://escholarship.org/terms

Peer reviewed

Acting with No Regret: A Twenty-Five Year Retrospective of *Marsh v.* Oregon Natural Resources Defense Council

Maxwell C. Smith* and Catherine E. Kanatas**

"NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct."***

^{*} Maxwell C. Smith is an attorney at the United States Nuclear Regulatory Commission (NRC). The primary focus of his practice is representing the staff of the NRC in contested adjudications on nuclear reactor operating license renewals. Prior to working at the NRC, Mr. Smith clerked for the Hon. Jackson L. Kiser in the Western District of Virginia and the Hon. Charles E. Poston and Hon. Lydia C. Taylor in the Norfolk Circuit Court. He graduated from Washington and Lee University, magna cum laude in 2005 where he contributed to the Capital Defense Journal. He would like to thank his wife Angela and daughter Jasmine for their inspiring love, patience, and support. The views expressed in this article are solely those of the author and do not necessarily represent the positions of the NRC.

^{**} Catherine E. Kanatas is an attorney at the NRC and primarily represents the NRC Staff in contested adjudications on nuclear reactor operating license renewals. Before law school, Mrs. Kanatas worked in the education research field. During law school at the University of Georgia, she clerked for the Attorney General of Georgia, served as a research assistant for two professors, and met the love of her life. She would like to thank her daughter, who is and will always be her greatest accomplishment. The views expressed in this article are solely those of the author and do not necessarily represent the positions of the NRC.

^{***} Marsh v. Or. Natural Res. Def. Council, 490 U.S. 360, 371 (1989).

I.	Introduction	331
II.	BACKGROUND AND SUMMARY OF MARSH	333
	A. Duty to Prepare an EIS: A NEPA	
	Requirement	333
	B. Duty to Prepare a Supplemental EIS: The	
	Marsh Legacy	334
	C. A Closer Look at Marsh: A Dam and Two	
	Documents	335
III.	APPLICATION OF MARSH IN THE U.S. COURTS OF	
	APPEALS: WHAT KINDS OF NEW INFORMATION DO	
	COURTS FIND (AND NOT FIND) SIGNIFICANT?	341
	A. Hold the Phone! Supplementation (or at lea	ist
	more NEPA review) is Required	342
	B. Nothing to Supplement Here	346
	1. Information Previously Considered	346
	2. Speculative Environmental Impacts	351
	3. Information does not Undermine	
	Assumptions in EIS	354
	4. Common Sense	357
	5. Impacts will Ultimately be Studied	
	Elsewhere	358
	6. Summary	
IV.	THE MARSH TWO-STEP?	
	A. The Basis for the Two-Step Review in Mars	h 366
	B. Whether the Two-Step Marsh Test	
	Undermines NEPA's Rule of Reason	
	C. Application of the "Hard Look" Principle Go	oing
	Forward	
	D. Steps to Minimize Legal Risk	
	1. Marsh: the Paradigmatic "Hard Look"	
	2. Hughes River Watershed—an Incomple	
	Review	
	3. The Importance of Public Involvement .	
	4. Pragmatic Approaches to New Informat	
	5. Choreographing the <i>Marsh</i> Two-Step (a	
	One-Step)	379
V.	CONCLUSION	380

I. Introduction

We live in a world of information overload. Smartphones, Facebook, Twitter, and email alert us to breaking news instantaneously. Almost before we process new information, another sensational story takes center stage: the latest political scandal, mass shooting, plane crash, superstorm, kidnapping, or act of war or terror. How do we react to this ever-evolving information? Some people cancel travel plans, remove children from public school, or buy security systems or weapons. Others move on with their day and barely bat an eye as they process all of this new and seemingly significant information.

For federal agencies preparing environmental impact statements (EIS) under the National Environmental Policy Act (NEPA), the answer appears clear. Twenty-five years ago in *Marsh v. Oregon Natural Resources Defense Council*,¹ the Supreme Court held that an agency must supplement its EIS before taking federal action if it discovers new and significant information.² But what is significant? One might assume that it would be shocking events, like terrorism, nuclear accidents, and environmental disasters. However, as discussed below, courts rarely consider this type of information significant. Instead, it is the agency's response to new information that frequently proves decisive.

Given the prevalence and importance of this issue, *Marsh* has often been cited over the past twenty-five years.³ As major federal actions regularly take years to complete—occasionally years more than anticipated—agencies routinely confront the question of whether the analysis in an aged EIS is still legally sufficient, or whether the issuing agency must update or

^{1.} Marsh v. Or. Natural Res. Def. Council. 490 U.S. 360 (1989).

^{2.} Id. at 372

^{3.} In fact, *Marsh* has been cited more than many higher-profile decisions. For example, courts and commentators have cited *Marsh* nearly 600 times more than its companion case, the Court's seminal NEPA decision, *Robertson v. Methow Valley Citizen's Council*, 490 U.S. 332 (1989).

supplement it with new information.⁴ Unfortunately, a review of scholarly articles and case law reveals that this question has not been treated with the care it deserves. Few academic articles seriously discuss the problem of supplementation.⁵ Worse, most reviewing courts routinely provide a cursory recitation of *Marsh* boilerplate and then leap to a conclusion of whether an agency acted correctly.⁶

In honor of *Marsh*'s twenty-fifth anniversary, this article takes a fresh look at this Supreme Court decision and the Federal courts' subsequent reactions to it. First, we examine what actually constitutes new and significant information under *Marsh*. While courts do not crisply define "significant," a review of the courts' approaches to the problem may help determine what information is actually "significant" in practice. Second, we examine what procedural steps an agency must take to determine whether new information actually meets the "significant" standard. While some courts explicitly review whether the agency adequately considered new information—as opposed to simply considering whether the new information was indeed significant—all courts rely on the agency's own review to inform their appraisal of new information's importance.

In sum, this article provides NEPA practitioners with a roadmap for examining the significance of new information by better defining the concept of significance and noting elements of significance examinations that courts have viewed with approval and those that courts have found inadequate. While *Marsh* has not received its due in academic literature or the judicial reports, the decision has created some fascinating NEPA case

^{4.} E.g., Wisconsin v. Weinberger, 745 F.2d 412, 416-17 (7th Cir. 1984) (noting that Federal projects may sometimes take years to complete after the publication of the EIS).

^{5.} E.g., Michael S. Freeman & Meg Parish, Supplemental NEPA Analysis: Triggers and Requirements (Rocky Mountain Mineral Law Foundation: Special Institute on the National Environmental Policy Act, Paper No. 6, 2010) (providing one of the few analyses of supplemental EISs in recent years).

E.g., Natural Res. Def. Council, Inc. v. Fed. Aviation Admin., 564 F.3d 549, 561-62 (2d Cir. 2009).

^{7.} Given the imprecise nature of the word "significant," it would be difficult for the courts to do so. *Cf.* Jacobellis v. Ohio, 378 U.S. 184 (1964) (discussing definition of obscenity).

law. The story of *Marsh* is the story of species on the verge of extinction, gridlock and urban sprawl, advanced computer modeling, nuclear power, aviation regulation, terrorism, and ultimately the price of progress.

II. Background and Summary of *Marsh*

A. Duty to Prepare an EIS: A NEPA Requirement

Under NEPA, a federal agency must prepare an EIS if it is proposing a major federal action significantly affecting the quality of the human environment.8 Pursuant to the Council on Quality's (CEQ) Environmental regulations compliance with NEPA,9 an EIS should "provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment."10 Preparation of an EIS "furthers two important purposes: to ensure that agencies do not make decisions based on incomplete information and to provide information about environmental effects to the public and other governmental agencies in a timely fashion so that they have an opportunity to respond."11

_

^{8. 42} U.S.C. § 4332(2)(C) (2012). See also 40 C.F.R. § 1501.7 (2013). Interestingly, the EIS requirement was a last minute compromise, and there is little legislative history discussing Congress' intent. David C. Shilton, Is The Supreme Court Hostile to NEPA? Some Possible Explanations for a 12-0 Record, 20 ENVIL. L. 551, 560 (1990).

^{9.} Subchapter II of NEPA created the CEQ. See 42 U.S.C. § 4342 (2012); Exec. Order No. 11,991, 42 Fed. Reg. 26,927 (1978) (directing CEQ to issue binding regulations to federal agencies governing compliance with NEPA). See also Exec. Order 11,514, 35 Fed. Reg. 4,247 (1970) (mandating issuance of guidelines to assist the agencies in preparing EISs). The CEQ regulations require Federal agencies to develop their own implementing procedures.

^{10. 40} C.F.R. § 1502.1 (2013). CEQ regulations are found at 40 C.F.R. §§ 1500-08 and are entitled to substantial deference. *See, e.g.*, Andrus v. Sierra Club, 442 U.S. 347, 358 (1979) (citing Warm Springs Dam Task Force v. Gribble, 417 U.S. 1301, 1309-10 (1974) (Douglas, J., in chambers)).

^{11.} Town of Winthrop v. Fed. Aviation Admin., 535 F.3d 1, 3 (1st Cir. 2008).

B. Duty to Prepare a Supplemental EIS: The Marsh Legacy

In *Marsh*, the Supreme Court extended the scope of NEPA's EIS requirement. *Marsh* requires agencies to update existing EISs to account for "new and significant information" discovered before completion of the major federal action.¹² In the twenty-five years since *Marsh*, many challengers have claimed that new information triggered an agency's duty to supplement an EIS.¹³ As outlined below, the deciding courts have applied the multipart *Marsh* framework differently, including how to define new and significant information¹⁴ and whether the review is a one-step or two-step process. These different formulations and approaches make it difficult to discern (1) when a federal agency must supplement an EIS based on new and significant information and (2) the level of deference given on review to the agency's decision.

However, a careful review of the cases suggests a few trends that NEPA practitioners can rely on when considering whether new information is so significant that the agency must prepare a supplemental EIS (SEIS) to account for it. Specifically, most courts of appeals agree that federal agencies must supplement an EIS when new information presents a "seriously different picture of the environmental impact" of the Federal action or reveals previously unanalyzed impacts.¹⁵ While this standard

^{12.} Marsh, 490 U.S. at 372 (1989).

^{13.} This article does not focus on whether substantial changes in the proposed action trigger supplementation. For examples of a reviewing court considering this type of claim, see the Fifth Circuit's analysis in *Environmental Defense Fund v. Marsh*, 651 F.2d 983 (5th Cir. 1981), and the Eleventh Circuit's analysis in *National Wildlife Federation v. Marsh*, 721 F.2d 767 (11th Cir. 1983). This article does not discuss claims that environmental assessments (EA), analyses undertaken to determine whether the agency should prepare a full EIS, must be supplemented. *See, e.g.*, Tri-Valley CAREs v. DOE, 671 F.3d 1113, 1130 (9th Cir. 2012) (upholding agency's decision not to supplement EA); Native Ecosystems Council v. Tidwell, 599 F.3d 926, 937 (9th Cir. 2010) (holding that agency violated NEPA by not supplementing EA based on new and significant information).

^{14.} This is not surprising, because "the CEQ regulations 'do not in themselves provide a suitable standard for reviewing an agency's decision not to supplement an EIS." *Weinberger*, 745 F.2d at 417 (quoting Warm Springs Dam Task Force v. Gribble, 621 F.2d 1017, 1024 (9th Cir. 1980) (per curiam)).

^{15.} Notably, some courts use the "seriously different picture of the

may be vague, 16 in practice courts require agencies to when new information suggests supplement severe environmental impact. In contrast, courts do not find information significant when it: (1) is similar to information addressed in the previous analysis in the EIS; (2) is vague or speculative; (3) does not undermine an important assumption in the EIS; (4) conflicts with common sense; or in some cases, (5) will be considered elsewhere. 17 Likewise, while courts have not agreed on how to review the agency's decision not to supplement, courts are more likely to uphold a decision not to supplement when an agency documents its review, relies on established experts, directly responds to the new information, and thoroughly explains its rationale. 18

C. A Closer Look at Marsh: A Dam and Two Documents

In *Marsh*, the petitioner claimed that the Army Corps of Engineers (Corps) should have supplemented a final EIS (FEIS) for the construction of the Elk Creek Dam,¹⁹ given new information set forth in two documents.²⁰ Those documents suggested that construction of the dam could lead to greater

environmental impact" standard for changes to the project (i.e., prong one of the CEQ supplementation regulation, 40 C.F.R. § 1502.9(c) (2013)). See Ark. Wildlife Fed'n v. U.S. Army Corps of Eng'rs, 431 F.3d 1096, 1102 (8th Cir. 2005) ("A change is substantial if it presents a 'seriously different picture of the environmental impact.' S. Trenton Residents Against 29 v. Fed. Highway Admin., 176 F.3d 658, 663 (3d Cir. 1999); see also Hickory Neighborhood Def. League v. Skinner, 893 F.2d 58, 63 (4th Cir. 1990); Sierra Club v. Froehlke, 816 F.2d 205, 210 (5th Cir.1987). To determine whether a change is substantial we look at the possible environmental consequences not previously considered. Marsh, 490 U.S. at 374.").

- 17. See infra Section III.B.
- 18. See infra Section IV.

^{16.} Following its introduction, one commenter immediately noticed that this test does not provide any additional clarity beyond the phrase "significant" in the CEQ regulation. Peter A. Turchick, Supplemental Environmental Impact Statements: How Significant Should New Information Be?, 2 PACE ENVI'L L. REV. 298, 309 (1985).

^{19.} As the Court noted, the Elk Creek Dam is on the Elk Creek "near its confluence with the Rogue River." *Marsh*, 490 U.S. at 363. The Rogue River is "one of the Nation's premier fishing grounds." *Id.* at 365.

^{20.} Id. at 378-79.

downstream impacts on fish and increased levels of turbidity²¹ in the water.²² Specifically, the Corps' FEIS explained that water quality studies prepared in 1974 and 1979 supported its conclusion that the dam would not have a major effect on fish production, but that "the effect of the Lost Creek and Elk Creek Dams on turbidity might, on occasion, impair fishing."23 Following the 1980 publication of the FEIS.²⁴ two new documents questioned the FEIS' analysis. The first, "an internal memorandum prepared by two Oregon Department of Fish and Wildlife (ODFW) biologists based upon a draft ODFW study[,] suggested that the dam will adversely affect downstream fishing."25 The second, "a soil survey prepared by the United States Soil Conservation Service[,] contained information that . . . indicate[d] greater downstream turbidity than did the [FEIS]."26 Based on this information, the petitioners moved to enjoin the Corps' construction of the dam and claimed that the Corps must supplement the FEIS before finishing construction.²⁷

In considering the claim, the Supreme Court noted that supplementation of an EIS, while not discussed in NEPA, "is at times necessary to satisfy the Act's 'action-forcing' purpose." The Court explained that NEPA focuses attention on the environmental effects of the agency's proposed action, and in so doing ensures that the agency "will not act on incomplete

^{21.} Turbidity expresses the clarity of water, i.e., whether suspended matter in the water scatters and absorbs light rather than transmitting it through in straight lines. *Id.* at 365.

^{22.} Id. at 380, 384.

^{23.} Id. at 365-66.

^{24.} An initial EIS was completed in 1971, but the EIS recommended that "further studies concerning the project's likely effect on turbidity be developed." *Id.* at 364.

^{25.} Marsh, 490 U.S. at 369.

^{26.} Id

^{27.} *Id.* at 368. The Court of Appeals' majority agreed, holding that the Corps did not evaluate the "significant new information" in these two documents with sufficient care. *Id.* at 370 (noting that the significant new information regarded "turbidity, water temperature, and epizootic fish disease"). The dissenting Judge Wallace found that the Corps' review of the information was reasonable and that the information was insignificant. *Id.*

^{28.} Id. at 371. See Nicholas C. Yost & Gary Widman, The Action-Forcing Requirements of NEPA and Ongoing Actions of the Federal Government, 34 ENVTL. L. REP. 10435 (2004) (discussing action-forcing NEPA requirements).

information, only to regret its decision after it is too late to correct."²⁹ The Court noted that both the Corps and the CEQ regulations required the preparation of a supplemental EIS if there was new and significant information.³⁰

The Court established a multi-factored framework to evaluate whether an agency should have supplemented an EIS in light of new information. As an initial matter, the new information must relate to the environmental impacts of the proposed action.³¹ Without this threshold requirement, the NEPA process would be unworkable because agencies would be continually forced to consider a constantly emerging stream of new information, largely unrelated to the project.³² Second, the new information must relate to a federal action that is not yet completed.³³

Upon finding those threshold requirements met, the *Marsh* Court discussed what type of information would be significant enough to require supplementation. The Court stated that "an agency need not supplement an EIS every time new information comes to light after the EIS is finalized"³⁴ because this "would render agency decision making intractable, always awaiting updated information only to find the new information outdated by the time a decision is made."³⁵ Instead, the Court determined that when new information indicates that the project significantly impacts "the quality of the human environment" in a manner or to an extent not already considered, the agency must prepare a supplemental EIS.³⁶

The *Marsh* Court did not define "significant." However, it cited with approval the CEQ regulations defining "significant." CEQ explained that for purposes of NEPA, "significantly" requires

^{29.} Marsh, 490 U.S. at 371.

^{30.} Id. at 372-73.

^{31.} Id.

^{32.} Id. at 373 n.19.

^{33.} *Id.* at 374. *See* Norton v. S. Utah Wilderness Alliance, 542 U.S. 55, 73 (2004) (overturning decision requiring agency to supplement EIS to account for new information discovered after completion of the federal action).

^{34.} Marsh, 490 U.S. at 373.

^{35.} Id.

^{36.} Id. at 374 (quoting 42 U.S.C. § 4332(2)(C)).

^{37.} Id. at 374 n.20.

considerations of both context and intensity.³⁸ Both context and intensity are defined in detail in the CEQ regulations.³⁹ In short, "context" means that the agency must consider the significance of the action within several contexts (local, national, regional, etc.) with the awareness that the impact can vary with the setting.⁴⁰ "Intensity" refers to the severity of impact.⁴¹ The CEQ regulations provide ten factors regarding intensity: severity, effect on health and safety, unique site characteristics, controversy, uncertainty, precedential value, other cumulative actions, effect on historic places, effect on endangered species, and possible violations of Federal, State or local law.⁴² Despite the Court's endorsement of these factors, lower courts have seldom seriously considered them in evaluating the significance of new information.⁴³

As further discussed in Section IV, the Court held that an agency must take a "hard look" at significant new information.⁴⁴ However, the Court also held that the deferential "arbitrary and

^{38. 40} C.F.R. § 1508.27 (2013).

^{39.} These regulations are largely the same as those in effect today. *Compare* 40 C.F.R. § 1508.27 (2013) with Marsh, 490 U.S. at 374 n.20.

^{40.} See 40 C.F.R. § 1508.27(a) (2013) ("[A]n action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality [and] varies with the setting of the proposed action.").

^{41. 40} C.F.R. § 1508.27(b) (2013).

^{42.} See Marsh, 490 U.S. at 374 n.20; 40 C.F.R. § 1508.27 (2013). See also Robert F. Blomquist, Supplemental Environmental Impact Statements Under NEPA: A Conceptual Synthesis and Critique of Existing Legal Approaches to Environmental and Technological Changes, 8 TEMP. ENVIL. L. & TECH. J. 1, 13-14 (1989) (asserting that factors 4, 5 and 7 are of special importance in evaluating the gravity of new circumstances or information that may trigger an agency's duty to file a SEIS).

^{43.} See infra notes 55-59 and accompanying text.

^{44.} Marsh, 490 U.S. at 372. See also Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976) (explaining that a reviewing court's role "is to insure that the agency has taken a 'hard look' at environmental consequences"); Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989) (explaining that the hard look requirement "ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.").

capricious standard" applies when analyzing an agency's decision not to supplement an EIS.⁴⁵ Notably, the Court stated that resolving a dispute related to supplementation does not turn on how the word "significant" is legally defined; instead, it primarily involves issues of fact.⁴⁶ The Court made clear that while the agency's inquiry must be searching and careful, ultimately the standard of judicial review is narrow.⁴⁷

Under this narrow standard, the Court stated that when specialists "express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts, even if, as an original matter, a court might find contrary views more persuasive." The Court stated further that a reviewing court "should not automatically defer to the agency's express reliance on an interest in finality without carefully reviewing the record and satisfying themselves that the agency has made a reasoned decision based on its evaluation of the significance—or lack of significance—of the new information." 49

Applying this framework to the case before it, the *Marsh* Court found that the Corps took a "hard look" at the new information in the two documents and, "having determined that based on careful scientific analysis that the new information was of exaggerated importance, the Corps acted within the dictates of NEPA in concluding that supplementation was unnecessary."⁵⁰ The Court noted that the Corps had responded to the new information by preparing a formal Supplemental Information Report (SIR), which disputed the claims regarding the impacts on the fish⁵¹ and considered more reliable data in determining

^{45.} Marsh, 490 U.S. at 374-75. In so holding, the Court addressed a split in the circuits on the issue, but noted that its holding would "not require a substantial reworking of long-established NEPA law." *Id.* at n.23.

^{46.} Id. at 377.

^{47.} Id. at 378.

^{48.} Id.

^{49.} Id.

^{50.} Id. at 385.

^{51.} For example, the internal memorandum, the alleged new and significant information, suggested that the dam would (1) increase the water temperature downstream during fall and early winter, which would reduce survival of spring Chinook fry and (2) cause high fish mortality from an epizootic disease. *Id.* at 380. However, the SIR determined that the dam would not reduce or actually decrease downstream temperatures. *Id.* at 381.

the turbidity level. Additionally, the Corps hired two independent experts to verify its conclusions that the two new documents were of exaggerated importance.⁵² Thus, the Court reasoned that the Corps fulfilled NEPA's requirements to take a hard look at the new information. The Court stated that "[e]ven if another decisionmaker might have reached a contrary result, it was surely not 'a clear error of judgment' for the Corps to have found that the new and accurate information contained in the documents was not significant and that the significant information was not new and accurate."⁵³

Thus, *Marsh* established that when faced with new and significant information, an agency must supplement an EIS. Although the Court did not find that supplementation was required under the facts of the case, it did state that "if all of the information contained in the [two new documents] was both new and accurate, the Corps would have been required to prepare a second supplemental EIS."⁵⁴ Therefore, while not explicitly defining "significant" in its holding, the Court indicated in dicta what type of information was significant (e.g., data that showed unusually high mortality rates for a species directly resulting from the federal action).

^{52.} Id. at 383.

^{53.} Id. at 385.

^{54.} *Id. But see* Envtl. Def. Fund v. Armstrong, 352 F. Supp. 50 (N.D. Cal. 1972), a challenge was made to an EIS the Corps had prepared regarding the New Melones Dam. In that case, the court concluded:

Under the circumstances presented in this case . . . where the ultimate operation of a project is still in doubt at the time the EIS must be filed, a tentative discussion or 'best estimate' of the possible uses to which the project may be directed is nonetheless required. As such, the EIS should be viewed as an interim statement, the first part of a two-step process whereby the responsible Federal officials would first give their best estimate of the uses to which the project will be put, and then prior to actual use, a revised or supplemental statement should be filed either reaffirming those estimates or describing the newer proposed uses and their environmental impacts. *Id.* at 56.

III.

APPLICATION OF *MARSH* IN THE U.S. COURTS OF APPEALS: WHAT KINDS OF NEW INFORMATION DO COURTS FIND (AND NOT FIND) SIGNIFICANT?

Since *Marsh*, many courts have considered claims that an agency must further consider new information or update an existing EIS before taking action.⁵⁵ Like *Marsh*, these cases do not emphasize or define precisely what "significant" means. Instead, the cases typically repeat the *Marsh* framework, cite the CEQ regulations, and state that an SEIS would be required if new information painted a seriously different picture of impacts compared to the description of impacts in the EIS.⁵⁶ While the cases do not provide a bright-line definition, their fact-specific holdings, discussed in Sections III.A and III.B, provide insight into what new information courts view as significant under NEPA.

For example, courts are more likely to find information "significant" when it: (1) suggests a greater likelihood or magnitude of severe consequences on an environmental resource; (2) reveals previously unanalyzed impacts; or (3) undermines critical assumptions in the previous EIS.⁵⁷ Courts will also remand if the agency's review of the information is not sufficiently robust, so agencies should respond to new information by performing additional studies commensurate with the information's significance.⁵⁸ While most courts uphold

^{55.} E.g., Sierra Club v. Slater, 120 F.3d 623, 631 (6th Cir. 1997).

^{56.} See, e.g., Blue Ridge Envtl. Def. League v. Nuclear Regulatory Comm'n, 716 F.3d 183, 196 (D.C. Cir. 2013), citing Hydro Res., Inc., CLI-99-22, 50 NRC 3, 14 (1999) and Marsh, 490 U.S. at 374; see also Town of Winthrop v. Fed. Aviation Admin., 535 F.3d 1 (1st Cir. 2008) (employing a dramatically different picture test); Davis v. Latschar, 202 F.3d 359, 369 (D.C. Cir. 2000) (citing Marsh's rule of reason, arbitrary and capricious standard of review, and deference to the informed discretion of the federal agency). Some courts also note that the party challenging the agency's decision not to supplement has the burden to demonstrate that the agency's action was arbitrary and capricious. See Lomak Petroleum, Inc. v. FERC, 206 F.3d 1193, 1198 (D.C. Cir. 2000), quoting San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm'n, 789 F.2d 26, 37 (D.C. Cir. 1986) (en banc).

^{57.} See infra notes 60-82 and accompanying text.

^{58.} See infra notes 83-87 and accompanying text.

the agency's decision not to supplement after considering the facts,⁵⁹ NEPA practitioners should not take this to mean that *Marsh* has no teeth. As discussed below, courts have enjoined agencies from acting after finding the agency failed to adequately supplement its EIS based on new and significant information.

A. Hold the Phone! Supplementation (or at least more NEPA review) is Required

Most courts find allegedly new and significant information either not new or insignificant. 60 However, as Marsh indicated and the following cases demonstrate, when new information likelihood greater or magnitude ofsuggests consequences than already considered or reveals unconsidered impact, then courts are likely to deem information significant, or at least require further NEPA review.

In *Portland Audubon Soc'y v. Babbitt*,⁶¹ the Ninth Circuit held that the Bureau of Land Management's (BLM) decision not to supplement EISs related to timber management plans (TMP) was arbitrary and capricious in light of new and significant information concerning the effects of logging on the northern spotted owl. The BLM prepared the EISs at issue between 1979 and 1983 and decided not to supplement them in 1987.⁶² The agency contended that, given the information available in 1987 and subsequent binding precedent, it was not required to supplement the EISs. Like the district court, the court of appeals disagreed:

At the very least, the body of scientific evidence available by 1987 concerning the effect of continued logging on the ability of the owl to survive as a species raised serious doubts about the BLM's ability to preserve viability options for the owl if logging

^{59.} E.g., S. Trenton Residents Against 29 v. Fed. Highway Admin., 176 F.3d 658, 666, 668 (3d Cir. 1999); N. Idaho Commc'n Action Network v. Dep't of Transp., 545 F.3d 1147, 1158 (9th Cir. 2008); Sierra Club v. U.S. Army Corps of Eng'rs, 295 F.3d 1209, 1221-22 (11th Cir. 2002); Vill. of Grandview v. Skinner, 947 F.2d 651, 659 (2d Cir. 1991).

^{60.} See infra Section III.B.

^{61.} Portland Audubon Soc'y v. Babbitt, 998 F.2d 705, 708 (9th Cir. 1993).

^{62.} Id. at 708.

continued at the rates and in the areas authorized by the TMPs. A supplemental EIS should have been prepared. 63

The court also dismissed the idea that supplementation was unnecessary because "its new Resources Management Plans and EISs [would] address accompanying all the relevant information."64 As an initial matter, the court noted that the Resources Management Plans were originally due in 1990 and that Congress acted "to insulate the BLM from legal challenges to the old TMPs so that the BLM could get on with the expeditious preparation of the new plans."65 The court pointed out that the agency had not done so and that the Resources Management Plans were still incomplete. 66 Thus, the court reasoned that if it were to permit the BLM "to continue to log in owl habitat pursuant to the old plans, pending finalization of the new Resource Management Plans, [it] would sanction the BLM's deliberate, protracted refusal to comply with applicable environmental laws, and countenance irreparable harm to plaintiffs" (oddly, the court did not mention any irreparable harm to the owl).67

In another case involving the Forest Service, the Ninth Circuit held that the agency's EIS for its spotted owl habitat management plan did not comply with NEPA because it did not consider. among other things, "intervening adequately information on the status of the [spotted] owl."68 The court explained that underlying timber sales are driven by these owl plans⁶⁹ and that a "chief concern of scientists of all persuasions has been whether the [spotted] owl can survive the near-term loss of another half-million acres of its habitat."70 The agency prepared the plan in response to a court's order, enjoining timber sales in the owl's habitat until it prepared an owl management plan complying with both the National Forest Management Act

^{63.} Id. at 708-09.

^{64.} Id. at 710.

^{65.} Id

^{66.} Portland Audubon Soc'y, 998 F.2d at 710.

^{67.} Id.

^{68.} Seattle Audubon Soc'y v. Espy, 998 F.2d 699, 701 (9th Cir. 1993).

^{69.} Id. at 703.

^{70.} Id. at 704.

and NEPA.⁷¹ The agency's spotted owl management plan adopted a strategy formulated in 1990 (the ISC Strategy).⁷² The purpose of this plan was to "ensure the viability of the owl."⁷³ But after the agency adopted the ISC Strategy, the U.S. Fish and Wildlife Service prepared another report, which concluded that "the spotted owl population is declining more substantially and more quickly than previously thought."⁷⁴ In fact, the report specifically stated that the rate of population decline raised "serious questions about the adequacy of the ISC Conservation Strategy and the current Consultation Process."⁷⁵

In considering whether the agency's EIS supporting the plan adequately considered this new information, the court cited to Marsh and stated that "[i]t would not further NEPA's aims for environmental protection to allow the Forest Service to ignore reputable scientific criticisms that have surfaced with regard to the once 'model' ISC Strategy."76 The court concluded that the EIS "did not address in any meaningful way the various uncertainties surrounding the scientific evidence upon which the ISC rested."77 The court cited CEQ regulation 40 C.F.R. § 1502.9(b), which imposes a duty to respond to credible opposing views, and stated that "[e]ven if the Forest Service concludes that it need not undertake further scientific study regarding owl viability and the impact of further habitat loss, the Service must explain in the EIS why such an undertaking is not necessary or feasible." 78 Moreover, the court noted that the agency's EIS failed "to include a meaningful discussion of what effect, if any, a decrease in owl viability will have on other old-growth dependent species."79 It was not enough, in the court's opinion, to discuss these impacts in future owl-plans. 80 Instead, the court reasoned:

^{71.} Id. at 701.

^{72.} Id. at 703.

^{73.} Id. at 704.

^{74.} Seattle Audubon Soc'y, 998 F.2d at 704.

⁷⁵ Io

^{76.} Id. (citing Marsh, 490 U.S. at 370-74).

^{77.} Id.

^{78.} Id.

^{79.} Id.

^{80.} Seattle Audubon Soc'y, 998 F.2d at 704.

Each individual forest management plan must be adopted in compliance with the regional guidelines and standards. If it is based on an incomplete NEPA analysis of the consequences continued logging will have on owl and other old growth dependent species' viability over both the short and long term, there will be a gap in planning that cannot be closed. The district court correctly held that the Forest Service's adoption of the ISC Strategy inadequately dealt with its effect on other old growth dependent species.⁸¹

Although the Ninth Circuit did not use the words "new and significant information" or "supplementation," it explicitly cited *Marsh* and required additional analysis given the new scientific information that undermined the assumptions in the EIS.⁸²

Other courts have also found that additional NEPA review is required to address new and significant information. For example, in *Hughes River Watershed Conservancy v. Glickman*,⁸³ the Fourth Circuit held that the Corps had not "take[n] a hard look at the problem of zebra mussel infestation resulting from the Project" and remanded back to the Corps.⁸⁴ The zebra mussel infestation was discovered after the Corps prepared an EIS on the impacts of a proposed dam. Specifically, the EPA advised the Corps that the dam would lead to an infestation of zebra mussels on the North Fork of the Hughes River in West Virginia,⁸⁵ which the EPA claimed would destroy indigenous mussels, clog intake structures, and negatively

^{81.} *Id.* (citations omitted). The court also found that the Forest Service's owl viability assessment was improperly based on its "assumption that all agencies involved were going to follow the ISC Strategy or some similar plan and that the [Endangered Species Act] would apply." In particular, the court noted that "to date, the BLM has not announced that it will follow the ISC Strategy." Instead, the BLM's plan for the owl, "the less protective Jamison Strategy, has so far failed to pass muster under the ESA."

^{82. &}quot;Because the Forest Service's EIS rests on stale scientific evidence, incomplete discussion of environmental effects vis-a-vis other old-growth dependent species and false assumptions regarding the cooperation of other agencies and application of relevant law, the district court did not err in concluding that the Forest Service must re-examine its chosen alternative." *Id.* at 704-05.

 $^{83.\ \}mathrm{Hughes}$ River Watershed Conservancy v. Glickman, $81\ \mathrm{F.3d}$ 437 (4th Cir. 1996).

^{84.} Id. at 445.

^{85.} Id. at 444.

impact the entirety of the North Fork ecosystem.⁸⁶ In response to this information, the Corps consulted with an employee in its water quality section who predicted that all waters in the area would eventually become infested, possibly through bait buckets.⁸⁷ While the court did not explicitly find information regarding the zebra mussel infestation significant, the court's remand suggests that the information was at least significant enough to warrant further review.

Therefore, these cases illustrate what type of information can be considered significant under *Marsh*—namely, impacts threatening the survival of a species, particularly when the previous EIS did not consider such impacts.

B. Nothing to Supplement Here

Reviewing cases in which courts did not require supplementation further illustrates what type of information is significant under *Marsh*.⁸⁸ In sum, the cases demonstrate that courts will not find information significant when it: (1) relates to previously considered information; (2) is speculative or vague; (3) does not undermine an assumption in the existing EIS; (4) challenges a common sense understanding of the project, or (5) will be addressed elsewhere.

1. Information Previously Considered

Under *Marsh*, supplementation is required only for new information. Therefore, courts are not likely to find a NEPA violation under *Marsh* if the agency has in fact already considered information similar to the allegedly new information.⁸⁹ For example, in *City of Olmsted Falls v. Fed. Aviation Admin.*,⁹⁰ a city located two miles from an airport

87. Id. at 444-45.

^{86.} Id.

^{88.} These categorizations are rules of thumb. Many of these cases could fall under one or more categories.

^{89.} But see Hughes River Watershed Conservancy, 81 F.3d at 455 (finding an insufficient look when an agency only made two phone calls in response to new information presented after the final EIS and failed to supplement).

^{90.} City of Olmsted Falls v. Fed. Aviation Admin., 292 F.3d 261 (D.C. Cir. 2002).

challenged the Federal Aviation Administration (FAA) decision approving a runway improvement project. Among other things, the city alleged that the FAA had violated NEPA by not preparing an SEIS in response to new information regarding undisclosed construction projects and the status of certain water quality analyses.⁹¹ The city claimed this information was significant because it related "directly to non-compliance with the purpose and substantive requirements of the Clean Air Act and the Clean Water Act."92 In considering the claim, the D.C. Circuit noted that much of the allegedly "new" information was not, in fact, new at all. Instead, it was "known to the FAA prior to the issuance of the Record of Decision."93 After rejecting many of the city's claims, the court noted that the environmental landscape in this case remained unchanged given information in the existing EISs. The court therefore held that the city had failed to show that the FAA's decision not to supplement was arbitrary and capricious.94

Likewise, in National Committee for the New River v. Fed. Energy Regulatory Comm'n,95 the D.C. Circuit found that the allegedly new information had in fact already been considered and addressed in the agency's FEIS. In New River, an environmental group (New River) petitioned for review of two Federal Energy Regulatory Commission (FERC) orders approving construction of a natural gas pipeline extension.96 New River claimed that FERC should have supplemented the draft EIS (DEIS) based on a report provided by East Tennessee Natural Gas Company97 one month before the DEIS was issued.98 The report regarded a site-specific plan for crossing the

^{91.} *Id.* at 274. *See also id.* at 268-69 (outlining four principal objections to the FAA's approval of the ROD for the runway improvements project).

^{92.} Id. at 274.

^{93.} Id.

^{94.} Id.

^{95.} Nat'l Comm. for the New River v. Fed. Energy Regulatory Comm'n, 373 F.3d 1323 (D.C. Cir. 2004).

^{96.} East Tennessee Natural Gas Company (East Tennessee) submitted an application to FERC. *Id.* at 1324.

^{97.} The Park representatives were apparently from a park along the New River waterway. *Id.* at 1330.

^{98.} Id.

river and the Park.⁹⁹ As explained by the court, the report revealed that:

'[The] exit hole of the pipeline drill will coincide with a farm access road and cleared area that exists adjacent to the trail.'... It also set out the contingency plan, in case [horizontal directional drill (HDD)] technology were to fail, to use standard construction techniques for crossing New River Trail State Park land. In addition, the report identified factors that could result in HDD failure: the large diameter of the pipeline, and the difficulties in penetrating long lengths of difficult subsurface conditions in the form of fractured rock, gravel, or cobbles. 100

The court recognized that this information was both new and environmentally significant. 101 However, the court found that FERC "could reasonably conclude that the information did not significantly transform the nature of the environmental issues raised in the DEIS and comments."102 The court noted that the DEIS addressed the problems raised in the report and, in any event, the agency received comments on matters discussed in the report in response to the DEIS.¹⁰³ The court also noted that "the FEIS responded to the new information, and included responsive proposed conditions, which were ultimately adopted by [FERC]." Thus, "[a]ny defects there may have been in the DEIS were cured by [FERC's] consideration of comments on the FEIS... [and] in the *Initial Order* the Commission responded to the new information, in part, by conditionally issuing the certificate."104 Therefore, the court held that New River failed "to demonstrate that the information provided in the . . . report seriously changed the environmental landscape."105

Similarly, in Westlands Water District v. Department of the Interior, 106 the Ninth Circuit held that allegedly new information

^{99.} Id.

^{100.} Id. (citations omitted).

^{101.} Nat'l Comm. for the New River, 373 F.3d at 1330.

^{102.} Id.

^{103.} Id. at 1331.

^{104.} Id.

^{105.} Id. (citing Olmsted Falls v. FAA, 292 F.3d 261, 274).

^{106.} Westlands Water Dist. v. U.S. Dep't of the Interior, 376 F.3d 853, 873 (9th Cir. 2004).

did not trigger the requirement to supplement because it had already been considered and did not have an "intense" impact. Specifically, in *Westlands*, the court found that the California energy crisis and mitigation measures proposed by another agency did not constitute new and significant information when the EIS had previously determined that the project would have a minimal impact (less than one percent) on available power in California and evaluated the mitigation measure in question. ¹⁰⁷ The court found that the discussion in the initial EIS was adequate by itself, without an additional scientific or technical study responding to the allegedly new and significant information. ¹⁰⁸

Likewise, in Western Watersheds Project v. Salazar, 109 the Ninth Circuit upheld the agencies' decision not to supplement an EIS when the court determined that the agency's existing environmental analysis considered the allegedly significant information. Specifically, the court held that petitioners failed to show "that new information concerning genetic diversity, changes in livestock grazing, the bison seroprevalence rate, development of a brucellosis vaccine, and risk of brucellosis transmission has affected the quality of the environment 'in a significant manner or to a significant extent not already considered." The FEIS prepared by the agencies anticipated that there would be changes to the bison habitat and considered how to prepare for such changes."

Finally, in *Blue Ridge Envtl Def. League v. Nuclear Regulatory Comm'n* (*BREDL*), ¹¹² the D.C. Circuit held that the Nuclear Regulatory Commission (NRC) already considered the allegedly significant information and therefore did not need to supplement its EIS for the new Vogtle reactors. In *BREDL*, the court considered a claim that the NRC must supplement a

^{107.} This case could also serve as an example in the common sense category. *See infra* notes 159-71 and accompanying text.

^{108.} Westlands Water Dist., 376 F.3d at 875.

^{109.} W. Watersheds Project v. Salazar, 494 Fed.Appx. 740 (9th Cir. 2012).

^{110.} Id. at 742.

^{111.} Id.

^{112.} Blue Ridge Envtl Def. League v. Nuclear Regulatory Comm'n, 716 F.3d 183, 200 (D.C. Cir. 2013).

reactor EIS based on new and significant information related to 2011, Fukushima accident. Specifically, March 11. petitioners claimed that an NRC expert report related to the Fukushima accident was new and significant information triggering the requirement to supplement because the NRC deemed the accident "significant" from a safety standpoint. 113 As an initial matter, the court pointed out that this argument was "clearly unavailing" because "it relie[d] on Petitioners' elision of 'safety significance' with 'environmental significance." 114 The court also noted that the NRC had already considered the environmental consequences of similar, and potentially more severe, reactor accidents. In fact, the court distinguished a previous NRC decision, in which the NRC had declined to consider any environmental consequences resulting from terrorism, 115 because the NRC already "thoroughly analyzed the environmental consequences of severe accidents for [the] Vogtle" nuclear power plant in the Vogtle EIS. 116 The court explained that simply claiming there was new information about nuclear power plant safety was not enough to trigger supplementation. 117 Instead, the court suggested that the obligation for further NEPA review would be triggered only if petitioners explained "what specific 'new and significant' environmental information NRC failed to consider, or what deficiency in the existing EIS it failed to rectify."118 Because Petitioners did not meet this standard, the court held that the NRC reasonably did not supplement its EIS for Vogtle. 119

^{113.} *Id.* at 198. Petitioners also argued that the recommendations "give rise to an obligation to supplement the Vogtle EIS because the recommendations may alter NRC regulations in the years ahead." *Id.* at 197.

^{114.} Id. at 198.

^{115.} San Luis Obispo Mothers for Peace v. Nuclear Regulatory Comm'n, 449 F.3d 1016 (9th Cir. 2006).

^{116.} Blue Ridge Envtl Def. League, 716 F.3d 183 at 197, 198 (explaining the types of things the EIS considered).

^{117.} *Id.* at 198 (noting that "Petitioners' attempts to rely on future safety concerns in lieu of present environmental risks do not create an obligation for further NEPA review").

^{118.} Id. at 198.

^{119.} See also Colorado Envtl. Coalition v. Dombeck, 185 F.3d 1162, 1178 (10th Cir. 1999) (providing another example of information already considered).

Collectively, these cases establish that if agencies have previously considered information sufficiently similar to that alleged to be new and significant in the EIS, courts will not hold them to the meaningless task of supplementing to consider redundant data.

2. Speculative Environmental Impacts

The BREDL decision also illustrates another trend in the supplementation cases: courts are unlikely supplementation based on new and significant information when a petitioner's environmental claims are speculative or overly general. As discussed above, the BREDL court held that not even new information related to severe nuclear power plant accidents was per se significant. Instead, the BREDL court stated that a petitioner must demonstrate "what specific 'new and significant' environmental information [the agency] failed to consider, or what deficiency in the existing EIS it failed to rectify."120 If a petitioner is unable to do so, a court is likely to uphold the agency's decision not to supplement. 121

In Mid States Coalition for Progress v. Surface Transportation Board, the Eighth Circuit followed the idea that overly general claims will not qualify as significant under Marsh. 122 In that case, the Eighth Circuit considered a claim that the terrorist attacks of September 11, 2001, constituted new and significant information requiring supplementation of an EIS for a railroad project. 123 Instead of providing specific claims of how the terrorist attack related to the agency action at issue, the petitioners offered only a general claim that "if similar incidents occurred in Rochester, it would be difficult to evacuate its

^{120.} Blue Ridge Envt'l Def. League, 716 F.3d at 198.

^{121.} See La. Crawfish Producers Ass'n-West v. Rowan, 463 F.3d 352, 358 (5th Cir. 2006) (holding that it was not enough to claim that data in an EIS was out of date when making a *Marsh* claim). See also Nat'l Wildlife Fed'n v. Harvey, 574 F.Supp. 2d 934, 955 (E.D. Ark. 2008) (noting that plaintiffs, who claimed that the rediscovery of ivory-billed woodpecker in the project area was new and significant information, overstated overall impacts of the changes on the environment).

^{122.} Mid States Coal. for Progress v. Surface Transp. Bd., 345 F.3d 520, 549 (8th Cir. 2003).

^{123.} Id. at 543.

medical facilities immediately."¹²⁴ The court stated that, "while the events of September 11, 2001, have certainly raised awareness of the potential threats to our nation's transportation systems, the [Surface Transportation] Board exercised its permissible discretion when it determined that any increased threat was general in nature and did not bear specifically on Mayo, Rochester, or the proposed . . . project."¹²⁵

Furthermore, it is not only information related to terrorist attacks and nuclear power plant accidents that courts have considered speculative. For example, the Second Circuit has held environmental claims related to future construction are too speculative to trigger supplementation. 126 Specifically, in Village of Grand View v. Skinner, petitioners sought "to require further environmental review of a highway interchange project in Rockland County, New York, and to prevent the project from going forward pending that review."127 Certain improvements to the interchange were "considered during the environmental review of the overall I-287 Project, which was concluded in 1982."128 However, in 1988, the New York State Department of Transportation proposed additional improvements. 129

The question on judicial review was whether the EIS adequately considered these proposed modifications in conjunction with other intervening developments. Among other things, the petitioners argued that the agency failed to consider whether the improved Interchange design, taken in conjunction with reasonably foreseeable developments in the

^{124.} Id.

^{125.} *Id.* at 544. The court did remand for further NEPA consideration on other matters. *Id.* at 533, 537. Petitioners also claimed that a Maryland train derailment was new and significant information requiring supplementation, but the court did not agree, stating that "[i]n light of the safety analysis already performed by [the agency], we do not think that it was arbitrary or capricious for the Board to conclude that further proceedings in light of the Maryland train derailment were not warranted." *Id.* at 543.

^{126.} Village of Grand View v. Skinner, 947 F.2d 651, 659 (2d Cir. 1991).

^{127.} Id

^{128.} *Id.* at 653-54, citing Cnty. of Bergen v. Dole, 620 F.Supp. 1009, 1038 (D.N.J. 1985).

^{129.} Id. at 654.

^{130.} Id.

Tappan Zee Corridor, [would] ultimately require a second span of the Tappan Zee Bridge."¹³¹ In support of this proposition, petitioners cited the agency's draft environmental assessment, as well as a 1987 study for a high occupancy vehicle lane and a second span of the Tappan Zee Bridge.¹³² Notwithstanding these documents, the agency considered plans for a second span "speculative and contingent."¹³³

In setting out the standard for when supplementation of an EIS is required based on new and significant information, the Second Circuit acknowledged that "NEPA requires the sponsoring agency to consider the impact on the environment resulting from the *cumulative* effect of the contemplated action and other past, present, and 'reasonably foreseeable' future actions."134 Even so, the court agreed with the agency that the second span of the bridge was speculative and contingent. 135 The court reasoned that it would "obviously be impractical to coordinate consideration of the Interchange project, and other similarly limited proposals for Thruway improvements, with the massive studies required for a future second-bridge project."136 The court also noted that one of the 1987 studies considered a second span of the Tappan Zee Bridge as an alternative. 137 Further, the court reasoned that a 1980 study indicated that traffic had increased and would continue to increase on the Tappan Zee Bridge. This increase arose independent of the redesigned interchange and would "continue to occur whether or not the redesigned Interchange [was] constructed."138 Thus, the court held it was reasonable for the agency to conclude that the impact of the redesigned Interchange on regional traffic patterns would be minimal, meaning that petitioner's claims regarding a second span on the Tappan Zee Bridge were speculative and did

^{131.} Id. at 659.

^{132.} Village of Grand View, 947 F.2d at 659.

¹³³ Id

^{134.} Id. at 659 (citing 40 C.F.R. § 1508.7 (2013)).

^{135.} Id.

^{136.} Id.

^{137.} Id.

^{138.} Village of Grand View, 947 F.2d at 660.

not require supplementation of the agency's EIS.139

This line of cases fits with the frequently articulated "seriously different picture" standard for significance. If a petitioner cannot articulate likely impacts with any specificity, or point to non-speculative impacts, how could a supplement to an EIS paint a seriously different picture?

3. Information Does Not Undermine Assumptions in EIS

One might wonder what information could possibly be significant if courts have ruled that information concerning terrorist attacks and nuclear power plant accidents are insignificant. Recall that plaintiffs bring supplementation claims when an agency has already prepared an environmental analysis in an EIS. Under *Marsh*, the agency's analysis is typically given substantial deference. Thus, even if the existing environmental analysis did not consider events, impacts, or consequences similar to the allegedly significant information, courts are still likely to uphold the agency's decision not to supplement when the allegedly new and significant information does not undermine the assumptions supporting the EIS.

For example, in *Massachusetts v. NRC*,¹⁴¹ the First Circuit turned to the agency's existing environmental analyses for a nuclear power plant license renewal to see if information related to the accident at the Fukushima nuclear power plant in Japan undermined any assumptions in the EIS. Specifically, the First Circuit considered a claim that the NRC acted arbitrarily and capriciously in not supplementing the existing severe accident mitigation alternatives (SAMA) analysis in an EIS for a nuclear plant's license renewal.¹⁴² Petitioners alleged that the Fukushima accident presented new and significant information, particularly with regard to spent fuel pool fires, core damage

^{139.} *Id.* Notably, the court explained that in making its decision, the agency was entitled to use common sense, which in the court's view "may provide a reasonable substitute for [the] additional empirical data and expert testimony the [petitioners] would require." *Id.* at 658. *See infra* Section IV for discussion of use of common sense in cases applying *Marsh*.

^{140.} Marsh, 490 U.S. at 372.

^{141.} Massachusetts v. U.S. Nuclear Regulatory Comm'n, 708 F.3d 63, 66 (1st Cir. 2013).

^{142.} Id. at 71.

events, and recommendations from a report prepared by senior-level NRC employees regarding the accident. Italian In considering the claim, the court noted that the agency's EIS Italian Contained a discussion regarding SAMAs and that the discussion included consideration of accident scenarios similar to what happened at Fukushima (e.g., "complete loss of offsite power, various sorts of operator failures during core damage events, the possibility of [hydrogen-fueled explosions], and the use of filtered vents"). Italian Therefore, the court held that the NRC took the requisite hard look at the new information and that Massachusetts' claims regarding core damage frequency and methodology did not demonstrate the existence of a significant environmental issue. Italian I

Likewise, in *Town of Winthrop v. Federal Aviation Administration*,¹⁴⁷ the Town of Winthrop and two local residents claimed that the FAA had "acted arbitrarily and capriciously" in its decision not to prepare an SEIS before issuing a final order permitting the construction of a new taxiway at the Logan Airport.¹⁴⁸ Specifically, the court considered claims that three letters "raise[d] questions about the adequacy of the FAA's consideration of the health impacts of the Centerfield Taxiway."¹⁴⁹ After describing ways in which the FAA was

^{143.} *Id.* at 66. Among other things, Massachusetts provided an expert's opinion that based on the new and significant Fukushima information, "a new SAMA analysis should consider low-density, open-frame storage racks." *Id.* at 77. The Massachusetts' expert also argued that new information about hydrogen explosions during reactor accidents could alter the SAMA analysis because "the potential for such explosions has not been adequately considered in the [instant] license extension proceeding." *Id.* Similarly, Massachusetts claimed that "containment venting and other hydrogen control systems at the [subject] plant should be upgraded, and should use passive mechanisms as much as possible." *Id.*

^{144.} The court explained that there was both a site specific EIS prepared, which discussed certain issues, and a generic EIS, which covered other issues. The court also discussed the other measures the NRC took in response to the Fukushima accident (e.g., Task Force, orders, additional studies). *Id.* at 70.

^{145.} Id. at 69.

^{146.} Massachusetts v. U.S. Nuclear Regulatory Comm'n, 708 F.3d at 72.

^{147.} Town of Winthrop v. Fed. Aviation Admin., 535 F.3d 1 (1st Cir. 2008).

^{148.} Id. at 1

^{149.} Id. at 11. "These letters primarily urged greater data collection and analysis." Id.

responding to the letters' requests to gather additional data and perform further analysis, the court held that "it was not arbitrary and capricious for the FAA to conclude that it had enough data to make a reasoned decision. There will always be more data that could be gathered; agencies must have some discretion to decide when to draw the line and move forward with decisionmaking." The court reasoned that the key in deciding whether the new information presented a seriously different picture than that described in the EIS was whether the data that the agency collected regarding emissions inventory "drew into question the health impact analyses in the EIS." The court held that the FAA reasonably concluded that the data did not raise such questions.

Similarly, in Tinicum Township v. U.S. Department of Transportation, 153 the Third Circuit upheld an agency's decision not to supplement an EIS based on new information when it found the information merely confirmed the agency's conclusions. Specifically, the court considered an agency's decision not to supplement its EIS for an expansion of Philadelphia International Airport given air quality studies that followed the FAA's approval of the expansion. 154 The petitioners claimed that a letter EPA submitted four months after the FAA's approval. which discussed two new emissions studies. constituted significant information new and requiring supplementation. 155 The court determined that the studies referenced in EPA's letter confirmed the FAA's conclusions and did not indicate any significant environmental impacts beyond those contemplated in the EIS.¹⁵⁶ The Court stated that "[w]here new information merely confirms the agency's original analysis, no supplemental EIS is indicated."157 Thus, the court held that

^{150.} Id.

^{151.} Id. at 12.

^{152.} Id.

^{153.} Tinicum Township v. U.S. Dep't of Transp., 685 F.3d 288 (3d Cir. 2012).

^{154.} Id. at 298.

^{155.} Id. at 294 n.5.

^{156.} Id. at 298.

^{157.} Id. See also Town of Winthrop, 535 F.3d at 10 (citing Vill. of Bensenville v. Fed. Aviation Admin., 457 F.3d 52, 71 (D.C. Cir. 2006) (finding that when more recent data are consistent with original data, it is reasonable to conclude

the agency was not arbitrary and capricious in not supplementing the EIS based on the new information in EPA's letter. 158

4. Common Sense

Agencies can and should use common sense in determining whether new information provides a "seriously different picture" of the environmental impacts of an agency action. As the Second Circuit explained in *Skinner*, using common sense in deciding whether to supplement an EIS "may provide a reasonable substitute for [the] additional empirical data and expert testimony the [petitioners] would require." ¹⁵⁹

The court in *Town of Winthrop* also relied on common sense instead of additional research. Specifically, the court stated, "[i]t is a matter of common sense that an action quantitatively projected to reduce all air pollutants that were studied would also reduce the amount of air pollutants not studied." ¹⁶⁰ The court further stated that an SEIS is not a research document ¹⁶¹ and held that the FAA "acted within reason" in response to the new studies on potential health effects from the project. ¹⁶² Ultimately, the court found that the EIS considered the health effects of the particulate matter and while newer studies might have provided more information, the FAA reasonably declined to supplement. ¹⁶³

South Trenton Residents Against 29 v. Federal Highway Administration¹⁶⁴ also rested on a "common sense" approach to

that all the data reflect current conditions)).

^{158.} Tinicum Township, 685 F.3d at 298. See also Northwoods Wilderness Recovery, Inc., v. Dep't of Agric. Forest Serv., 192 Fed. Appx. 369, 376 (6th Cir. 2006) (holding that agency's decision to not supplement EIS based on excessive harvesting was not arbitrary and capricious because agency had prepared additional report considering the harvesting and all relevant factors and had concluded that the excess harvest "did not have unforeseen impacts to the environment").

^{159.} Vill. of Grand View v. Skinner, 947 F.2d 651, 658 (2d Cir. 1991).

^{160.} Town of Winthrop, 535 F.3d at 12 (internal citations omitted).

^{161.} Id. at 13.

^{162.} *Id.* at 12.

^{163.} Id. (citing FAA Order 1050.1E ¶ 516a).

 $^{164.\ \}mathrm{S}.$ Trenton Residents Against 29 v. Fed. Highway Admin., 176 F.3d 658 (3d. Cir. 1999).

following *Marsh*. In *South Trenton*, the Third Circuit considered petitioners' challenges to an order of the Federal Highway Administration approving a four-lane highway project in New Jersey. The agency had completed an EIS on a previously proposed six-lane highway alternative but considerable time had passed and the preferred alternative had changed. Therefore, the agency prepared an "Environmental Reevalutation," which was prepared to "determine whether the [original FEIS] remained valid, or whether [an SEIS] was necessary." The agency concluded that the environmental impacts of the proposed four-lane highway were "substantially less than those impacts identified in the [FEIS] for the previously proposed six-lane alternative." The agency of the previously proposed six-lane alternative.

In evaluating the FHA's decision not to supplement, the court stated that it was "clear from the record that the four-lane alternative, if anything, would mitigate any environmental impact associated with the originally approved six-lane highway design," including impacts to "water quality, floodplains, wetlands, and aquatic habitat." Further, the agency's Environmental Reevaluation showed that impacts from the four-lane highway could either be mitigated, would not result in a significant impact, and/or would not change. Thus, the court held that the decision not to draft an SEIS was reasonable under the circumstances.

5. Impacts will Ultimately be Studied Elsewhere

Courts have also upheld an agency's decision not to supplement when it is clear that the environmental impacts associated with the new information have been considered by the agency and that any future action implicating the new

^{165.} A six lane highway alternative had been approved years before. 176 F.3d 658, 660. Ultimately, however, a "four-lane highway/boulevard with a depressed cut and cover section" was selected. *Id.* at 661.

^{166.} Id. at 661.

^{167.} Id.

^{168.} Id. at 665.

¹⁶⁰ Id

^{170.} S. Trenton Residents Against 29, 176 F.3d at 666.

^{171.} Id.

information will receive separate NEPA treatment.¹⁷² For example, in Natural Resources Defense Council v. FAA,173 petitioners challenged the FAA's decision to approve a new airport at the West Bay Site, which was supported by the FAA's EIS.¹⁷⁴ The FAA "found that a new airport at the West Bay Site would have a significant adverse effect on natural resources but nevertheless approved the project because it found that no prudent alternative existed."175 Petitioners argued that the FAA violated NEPA by "declining to issue a supplemental EIS evaluating the impact of the proposed airport on the endangered ivory-billed woodpecker."176 Petitioners alleged that the FAA was required to supplement the EIS because eleven days after the FAA issued its Record of Decision (ROD) approving the project, "ornithologists from Auburn University announced that they had detected ivory-billed woodpeckers in the wetlands of the Choctawatchee River approximately 20 miles northwest of the proposed West Bay Site."177

The court noted that in this case, the FAA responded to the new information regarding the ivory-billed woodpecker by conducting a Biological Assessment (BA) and transmitted its assessment to the United States Fish and Wildlife Service (USFWS).¹⁷⁸ In preparing the BA, the FAA:

[A]scertained the potential habitat types for the ivory-billed woodpecker [and] examined field and aerial surveys of the 4,000-acre West Bay Site and 75,000-acre West Bay Sector Plan for evidence of such habitats. It found small areas that would serve as potential habitat, but no areas sufficiently large to support the woodpecker within the surveyed region. The agency further concluded, based on its review of the scientific literature, that overhead flight noise was unlikely to have an adverse effect on the ivory-billed woodpecker.¹⁷⁹

^{172.} But see *infra* note 206 for cases where this was questioned as being inconsistent with NEPA.

^{173.} Natural Res. Def. Council v. FAA, 564 F.3d 549 (2d Cir. 2009).

^{174.} Id. at 554.

^{175.} Id.

^{176.} Id. at 556

^{177.} Id. at 561.

^{178.} Id.

^{179.} Natural Res. Def. Council v. FAA, 564 F.3d at 562 (quotations omitted).

The BA concluded that the airport might affect the woodpecker but would probably not adversely affect the woodpecker should the woodpecker's existence be subsequently confirmed by the USFWS.¹⁸⁰ The USFWS concurred with this BA, which became the basis for the FAA not supplementing the SEIS.¹⁸¹ The court considered but rejected the petitioners' claims that the FAA's BA was "arbitrarily circumscribed because the FAA did not consider the effects of secondary development in areas outside the West Bay Sector Plan." The court noted that the BA already took into account many of petitioners' secondary concerns and that the FAA would study construction beyond the West Bay Sector plan separately under NEPA. Therefore, the court found that the agency took a "hard look" at the new information and that its findings and its decision not to supplement were neither arbitrary nor capricious. 184

The Seventh Circuit applied a similar rationale in *Habitat Education Center, Inc. v. U.S. Forest Service*. ¹⁸⁵ In *Habitat*, the Seventh Circuit considered claims that the Forest Service's approval of logging projects in the Chequamegon-Nicolet National Forest violated NEPA. ¹⁸⁶ Among other things, petitioners claimed that the Forest Service acted arbitrarily and capriciously in declining to supplement its SEISs on two planned logging projects, the McCaslin and Northwest Howell projects, based on new information related to a future logging project, the Fishel project. ¹⁸⁷

^{180.} Id. at 561.

^{181.} *Id.* It would be interesting to see how the court's analysis might have changed if the agency concluded that the endangered woodpecker existed at the site. Perhaps that would have been deemed significant information triggering supplementation.

^{182.} Id. at 562.

^{183.} Id.

^{184.} Id.

^{185.} Habitat Educ. Ctr., Inc. v. U.S. Forest Serv., 673 F.3d 518 (7th Cir. 2012). The court also relied on the fact that "the record is devoid of any new scientific evidence that might have caused the Forest Service to reassess the assumptions underlying its previous cumulative impacts analysis." *Id.* at 531. *See infra* Section III.B.3. for discussion of courts upholding agencies decisions not to supplement when new information does not undermine assumptions.

^{186.} Id. at 518.

^{187.} Id. at 528.

The court determined that the Fishel project was too "inchoate to be meaningfully discussed" in the agency's EISs and that it would "eventually be analyzed as a 'present' action." ¹⁸⁸ In addition, the court cautioned that if information about the Fishel project became clear while the current projects were pending, the agency would have to consider it and supplement the EIS, if necessary. 189 The court went on to discuss Marsh at length. contrasting it with the case at bar. In particular, the court noted that the "plaintiffs here have not identified any evidence to support their claim that the Fishel project significantly altered the environmental landscape presented in the McCaslin and Northwest Howell final statements."190 The court stated that even if it were to assume that the Fishel project was significant, the agency had taken the requisite "hard look" at "the concerns raised by the plaintiffs." 191 The court explained that the agency had effectively done this in two ways:

First, it included in its cumulative impacts analysis for McCaslin and Northwest Howell an assumption that all future projects, including Fishel, "must be consistent with the protective requirements for [Regional Foresters' Sensitive Species] of the 2004 Forest Plan," and that such projects "will not occur if their additive effects are unacceptable." Second, it made clear that the cumulative impacts of all three projects would be addressed in the Fishel project's EIS. 193

^{188.} Id. at 529.

^{189.} Id.

^{190.} Id.

^{191.} Habitat Educ. Ctr., Inc., 673 F.3d at 529. This portion of the court's discussion is atypical as it seems to accept that the Fishel project was significant ("even accepting the Fishel project's significance..."). If in fact the information was significant, and of course new, then supplementation would be required. However, this case could fall under the "previously considered" category because if the information was considered, it is not new.

^{192.} The dissent disagreed on this point, stating that "the Forest Service is merely stating that (a) it intends to comply with its Forest Plan, and (b) it will not approve future projects like Fishel if the additive effects of Fishel, McCaslin and Northwest Howell are 'unacceptable.' This is nothing but a statement that the Forest Service intends to follow the" law. *Id.* at 535 (Gottschall, J., dissenting).

^{193.} Id. at 529-30.

Given this review, the court was satisfied that the Forest Service "made a 'reasoned decision based on its evaluation of the [Fishel project's] significance' that the project did not significantly alter the environmental landscape, and that the cumulative impact of the Fishel, McCaslin, and Northwest Howell projects together would be adequately addressed in the not-too-distant future."¹⁹⁴

These "subsequent study" cases are perhaps the most out of sync with *Marsh*'s framework because the *Marsh* Court focused on the ways in which the agency's previous environmental consideration accounted for the allegedly new and significant information. However, these cases may be consistent with the common sense approach to *Marsh*, based on the extent to which they rest on a pragmatic determination not to conduct the same study twice.¹⁹⁵

6. Summary

Taken together, these cases provide a framework, beyond vague assertions about "seriously different pictures," for what new information courts will actually find significant. Courts will find new information regarding a devastating impact on a species significant. However, courts will not find information significant if it: (1) is similar to previously discussed information, (2) is vague or speculative, (3) does not undermine an important assumption in an EIS, (4) is not significant in light of common sense, or (5) will potentially be discussed elsewhere.

^{194.} Id. at 530. Similarly, in Friends of the Bow v. Thompson, 124 F.3d 1210 (10th Cir. 1997), the Tenth Circuit held that the Forest Service could rely on its expertise and subsequent consideration to reject allegedly new and significant information in a timber demand and supply study. The court also determined that neither the study nor other information offered were "new." See supra Section III.B.1. for discussion of cases where courts upheld an agency's decision not to supplement an EIS because allegedly new information was not new/already considered.

^{195.} Thus, it is hardly a surprise that *Habitat* drew a sharp dissent. *Habitat*, 673 F.3d at 535 (Gottschall, J., dissenting).

IV.

THE MARSH TWO-STEP?

In addition to the variety of approaches to *Marsh* illustrated above, the U.S. Courts of Appeals have also split over whether to conduct a review under *Marsh* in a one-step or two-step process. For example, the Second and Fourth Circuits have held,

In reviewing an agency's decision not to prepare a supplemental EIS, a court must undertake a two-step inquiry. First, the court must determine whether the agency took a hard look at the proffered new information. Second, if the agency did take a hard look, the court must determine whether the agency's decision not to prepare a supplemental EIS was arbitrary or capricious. 196

In contrast, most other federal appellate courts, including the First, Third, Fifth, Seventh, Eighth, Eleventh, and D.C. Circuits, do not conduct a two-step review. Instead, those courts pursue a single inquiry guided by the principle that an agency's determination "not to issue an SEIS cannot be set aside by a reviewing court unless that decision is arbitrary and capricious. An agency's decision is not arbitrary and capricious if that decision is based on consideration of the relevant factors and if it did not commit a clear error of judgment." 197 Still other

^{196.} Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 443 (4th Cir. 1996); see also Natural Res. Def. Council, 564 F.3d at 561, (citing Skinner, 947 F.2d at 657). Although the Ninth Circuit has not explicitly stated that it conducts a two-step inquiry, the court has noted that an agency must take a "hard look" at new information and then prepare a supplemental EIS when it is significant. Friends of the Clearwater v. Dombeck, 222 F.3d 552, 557 (9th Cir. 2000). See also Freeman & Parish, supra note 5.

^{197.} Town of Winthrop, 535 F.3d 1, 8 (1st Cir. 2008); see, e.g., Nat'l Comm. for the New River v. Fed. Energy Regulatory Comm'n, 373 F.3d 1323, 1330 (D.C. Cir. 2004) ("Under the arbitrary and capricious standard of 5 U.S.C. § 706(2)(A), the Commission's determination that the new information was not significant enough to warrant preparation of a supplement to the DEIS, is entitled to deference."); S. Trenton Residents Against 29 v. Fed. Highway Admin., 176 F.3d 658, 663 (3d Cir. 1999) (noting that the inquiry before it was only whether the "changes were significant enough to require preparation of a Supplemental Environmental Impact Statement despite the defendant agency's conclusion to the contrary"); Sierra Club v. Froehlke, 816 F.2d 205, 210 (5th Cir. 1987); Habitat Educ. Ctr., Inc. v. U.S. Forest Serv., 673 F.3d 518 (7th Cir. 2012).; Mid States Coal. for Progress v. Surface Transp. Bd., 345 F.3d 520 (8th Cir. 2003).; United States v. Van Antwerp, 526 F.3d 1353 (11th Cir. 2008).

circuits do not appear to have a clear stance on this issue. For example, the Tenth Circuit has at various times used both formulations. Additionally, while the Sixth Circuit has never explicitly announced a two-step review under *Marsh*, it has indicated that it expects agencies faced with potentially new and significant information to document the agency's "hard look" in a "Supplemental Information Report." 199

The difference between a one-step and a two-step review process can be significant. Several courts have determined that agencies did not meet NEPA's "hard look" requirement in the first part of the two-step review.²⁰⁰ Without reaching the second step, these courts instructed the agencies to take the requisite "hard look" at the new information on remand.²⁰¹ For example, in *Hughes River Watershed Conservatory v. Glickman*, the Fourth Circuit found that the Army Corps did not take a "hard look" at information suggesting that a dam would lead to an infestation of zebra mussels downstream with devastating ecological consequences.²⁰² In that case, the Corps responded to the information by contacting two unidentified employees in its water quality section who indicated that the infestation would likely occur regardless of the dam.²⁰³ While it did not determine

^{198.} Compare Friends of Marolt Park v. U.S. Dep't of Transp., 382 F.3d 1088, 1096 (10th Cir. 2004) ("This court reviews the Agency's decision regarding the need for a supplemental EIS under the arbitrary and capricious standard.") with S. Utah Wilderness Alliance v. Norton, 301 F.3d 1217, 1238 (10th Cir. 2002), vacated on other grounds, 542 U.S. 55 ("In evaluating an agency's decision not to develop a SEIS or supplemental EA, courts utilize a two part test. First, they look to see if the agency took a 'hard look' at the new information to determine whether [a supplemental NEPA analysis] is necessary Second, after a court determines that an agency took the requisite 'hard look,' it reviews an agency's decision not to issue an SEIS or a supplemental EA under the APA's arbitrary and capricious standard.").

^{199.} See Northwoods Wilderness Recovery, Inc., v. Dep't of Agric. Forest Serv., 192 Fed. Appx. 369, 376 (6th Cir. 2006) ("When new circumstances arise suggesting that a Supplemental Impact Statement might be necessary, the agency conducts a Supplemental Information Report. To satisfy NEPA, this report must take a 'hard look' at whether the new circumstances will significantly differ from those that the original Impact Statement discussed." (citations omitted)).

^{200.} E.g., S. Utah Wilderness Alliance, 301 F.3d at 1238-39.

^{201.} Hughes River Watershed Conservancy, 81 F.3d at 446.

^{202.} Id. at 445-46.

^{203.} Id.

the information's significance, the Fourth Circuit found that the Corps' reliance on the cursory analysis from employees of unknown qualifications did not constitute a "hard look." Likewise, in conducting its own two-step review, the Ninth Circuit has found that an agency failed to take a "hard look" at new information when nothing in the record indicated that the agency considered the information until after the lawsuit commenced. 205

In contrast, courts that use the one-step approach to Marsh tend to focus only on the ultimate question: whether the new sufficiently significant information was to supplementation.²⁰⁶ As discussed above, this is a factual question requiring the agency's technical expertise, to which courts routinely show deference.²⁰⁷ Therefore, these courts are typically reluctant to find that an agency arbitrarily determined that new information was not significant under Marsh.²⁰⁸ As a result, appellate courts that undertake a single-step review are much less likely to find that an agency erred by not supplementing an EIS. Indeed, the Tenth Circuit has suggested that it applies a less deferential standard to the first step of the review, and "after a court determines that an agency took the requisite 'hard look,' it reviews an agency's decision not to issue an SEIS or a supplemental EA under the APA's arbitrary and

^{204.} Id.

^{205.} Friends of the Clearwater v. Dombeck, 222 F.3d 552, 558-59 (9th Cir. 2000).

^{206.} E.g., Nat'l Comm. for the New River v. FERC., 373 F.3d 1323, 1330-31 (ruling that in light of the Corps' discussion of pipe failure in an EIS, new information regarding such failures was not sufficiently significant to require supplementation); Habitat Educ. Ctr., Inc. v. U.S. Forest Serv.,673 F.3d 518, 529-30 (7th Cir. 2012) (finding that information regarding a new Federal project was adequately considered by the existing EIS that found the future project would need to comply with existing environmental standards and would require a NEPA cumulative impacts analysis itself that would consider the current project and the future projects' combined impact). This is not to say that reviewing courts employing a one-step Marsh analysis never look at the underlying process. Rather, those courts typically use the process to support their position on the ultimate question.

 $^{207.\ \}textit{E.g.},$ Town of Winthrop v. Fed. Aviation Admin., 535 F.3d 1, 8 (1st Cir. 2008).

^{208.} E.g., S. Trenton Residents Against 29 v. Fed. Highway Admin., 176 F.3d 658, 666 (3rd Cir. 1999).

capricious standard."²⁰⁹ This formulation indicates that a court only applies the deferential "arbitrary and capricious" standard in the second step of the review and, by implication, applies a less-deferential standard in the first step.

As discussed below, while the *Marsh* Court did not explicitly engage in a two-step review, the Court's opinion frequently referenced NEPA's requirement to take a "hard look" at new information, which offers considerable support for that approach. Nonetheless, strict application of the "hard look" requirement may undermine the philosophical edifice supporting *Marsh*. The "hard look" standard is effectively the same standard courts use to review the adequacy of an initial EIS. As a result, *Marsh* could imply that reviewing courts should scrutinize an agency's consideration of new but insignificant information as thoroughly as they would review the agency's initial discussion in an EIS.

However, that exercise would undermine Marsh's central observation that requiring agencies to consider insignificant new information in an EIS would yield intractable decision making.²¹⁰ To survive potential court challenges, agencies would have to prepare the functional equivalent of an EIS whenever they responded to claims of new and significant information. Thus, courts should cautiously apply the "hard look" standard and consider the context surrounding the decision to supplement in determining how thorough a consideration of new information the "hard look" standard demands. Ultimately, agencies that thoroughly consider and document their decision to supplement will stand a better chance of meeting a "hard look" standard. However, these agencies' responses to new information should ultimately be governed by reason and employ measures that are proportionate to the significance of the new information in light of the discussion in the existing EIS.

A. The Basis for the Two-Step Review in Marsh

Although many courts do not employ a two-step review to consider an agency's evaluation of new information, the Supreme

^{209.} S. Utah Wilderness Alliance v. Norton, 301 F.3d 1217, 1238 (10th Cir. 2002).

^{210.} Marsh v. Or. Natural Res. Def. Council, 490 U.S. 360, 373 (1989).

Court's analysis in *Marsh* supports such a review.²¹¹ The Court noted that the parties before it agreed that NEPA requires agencies to "take a 'hard look' at the environmental effects of their planned action, even after a proposal has received initial approval."²¹² Thus, the Court concluded, "[i]t is also clear that, regardless of its eventual assessment of the significance of this information, the Corps had a duty to take a hard look at the proffered evidence."²¹³ Indeed, the Court relied on this very analysis, undertaken by the Corps, to determine that the new information did not rise to a level of significance that would require supplementation.²¹⁴ Moreover, in a later case describing *Marsh*, the Court noted that NEPA requires "an agency to take a 'hard look' at the new information to assess whether supplementation might be necessary."²¹⁵

Consequently, although the Court did not explicitly engage in a two-step analysis in *Marsh*, it examined whether the agency in fact took a "hard look" at the new information and then whether the agency's decision pertaining to the significance of the new information was arbitrary and capricious. Such an inquiry is largely equivalent to the two-step analysis applied by the Second and Fourth Circuits in implementing *Marsh*. ²¹⁶

B. Whether the Two-Step Marsh Test Undermines NEPA's Rule of Reason

While the two-step review process for supplementation finds strong support in the language of the *Marsh* opinion itself, a literal interpretation of the test—particularly a requirement that agencies conduct a searching, "hard look" examination of all new information—conflicts with other language in the case. *Marsh* explicitly recognized that NEPA's "rule of reason" did not require an agency to "supplement an EIS every time new information

^{211.} Id. at 385.

^{212.} Id. at 374.

^{213.} Id. at 385.

^{214.} Id.

^{215.} Norton v. S. Utah Wilderness Alliance, 542 U.S. 55, 73 (2004).

^{216.} Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 443 (4th Cir. 1996); see also Natural Res. Def. Council v. FAA, 564 F.3d at 561.

comes to light after the EIS is finalized."217 Rather, as discussed above, imposing such a requirement "would render agency decisionmaking intractable, always awaiting information only to find the new information outdated by the time a decision is made."218 Thus, Marsh rested on the pragmatic principle that, in light of the "rule of reason," agencies should not have to supplement an EIS to discuss trivial new matters; agencies should only have to do so when the matters are truly significant in light of the existing EIS.219 The mildest imagination can conjure the difficulties a NEPA practitioner would face otherwise—harried analysts would frantically scribble an assessment of all new information, whether probative of the actual impacts of the project or not, only to discover a fresh newspaper on the stoop on the way to the publisher, resetting the entire process. Intractable indeed.²²⁰

Yet, the Court's application of the "hard look" standard to this review unfortunately detracts from the policy goal of allowing agencies to move forward with decision-making unless faced with truly significant new information.²²¹ The "hard look" standard is a familiar one throughout NEPA law.²²² Among other things, courts routinely employ the "hard look" standard in reviewing the adequacy of an EIS.²²³ Under this review, the court judges the adequacy of the EIS by ensuring that it reflects a "hard look" at all relevant issues.²²⁴ Such review is hardly trivial. The review must account for "all foreseeable direct and indirect impacts," discuss adverse impacts without "improperly

^{217.} Marsh, 490 U.S. at 373.

^{218.} Id.

^{219.} Id.

^{220.} See Town of Winthrop, 535 F.3d at 8 (noting that an agency evaluation can never be "current" because new information is always emerging).

^{221.} See DANIEL R. MANDELKER, NEPA LAW AND LITIGATION 2D at § 10.16 (2013) (noting the general tension between "hard look" review and the rule of reason).

^{222.} E.g., Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976).

^{223.} E.g., League of Wilderness Defenders-Blue Mountains Biodiversity Project v. U.S. Forest Serv., 689 F.3d 1060, 1075 (9th Cir. 2012) ("Our role in reviewing an EIS is to ensure that the agency has taken a 'hard look' at the potential environmental consequences of the proposed action." (quotations omitted)).

^{224.} Id.

minimiz[ing] negative side effects," and not rely on "[g]eneral statements about possible effects and some risk... absent a justification regarding why more definitive information could not be provided."²²⁵

As a result, applying the "hard look" standard to an agency's decision on whether to prepare a supplemental EIS threatens to undermine the very logical foundation underlying Marsh. If an agency's review of new information must provide the level of detail a reviewing court would expect of an initial EIS, then the simple act of considering whether to prepare an SEIS would constitute a de facto EIS itself, which would be a perverse result. Given that courts have set the bar for "significance" very high in this context, 226 these reviews could result in a considerable expenditure of agency resources to conduct intricate reviews of information that is very likely not "significant." This result contravenes the pragmatic recognition in Marsh that agencies need not prepare a new EIS every time they discover some new but insignificant information.²²⁷ Such an application of the "hard look" doctrine leads to exactly the type of "intractable" agency decision-making the Court sought to avoid.²²⁸

Therefore, although the Court stated that agencies must take a "hard look" at new information in *Marsh*, literal application of this rule may conflict with the Court's companion observation that NEPA's "rule of reason" only requires agencies to supplement an EIS when faced with truly significant information.

C. Application of the "Hard Look" Principle Going Forward

As discussed above, the "hard look" standard exists in considerable tension with the pragmatic recognition in *Marsh* that agencies should only supplement an EIS in the face of truly significant information.²²⁹ In many ways, this tension in *Marsh*

^{225.} Id.

 $^{226.\} See,\ e.g.,\ S.$ Trenton Residents Against 29v. Fed. Highway Admin., 176 F.3d 658, 666 (3rd Cir. 1999).

^{227.} Marsh, 490 U.S. at 373-74.

^{228.} Id.

^{229.} While commenters generally understand Marsh to establish the deferential "arbitrary and capricious" standard for most NEPA questions, see

reflects a fundamental tension in NEPA—agencies must provide a thorough consideration of environmental impacts in an EIS to meet NEPA's "hard look" requirement, but only to the extent required by reason.²³⁰ Resolving this tension always requires a full consideration of the context to ensure than an environmental review is sufficiently meaningful to inform the public but not riddled with trivialities.²³¹ Thus, reviewing courts should apply the "hard look" doctrine in the context of supplementing a previously prepared EIS with an eye toward NEPA's "rule of reason."²³² As part of this review, the court should be aware that in the context of a *Marsh* claim, the agency has already prepared a thorough discussion of the impacts of the proposed project in the initial EIS. Thus, that earlier discussion, among other factors, should inform a consideration of the significance of the new information.²³³

For example, when the EIS has already considered the new information or information similar to it, the agency's "hard look" may necessarily be less thorough than when the new information postulates some type of entirely new impact.²³⁴ In other cases, a full discussion by experts with documented qualifications may be necessary to reasonably ascertain the significance of the new information under NEPA.²³⁵ Therefore, while *Marsh* indeed instructs agencies to take a "hard look" at new information, this command should be tempered by the "rule of reason," also

Shilton, *supra* note 8, at 562, many courts have taken the first step of the review as a call to conduct a more searching, and less deferential, review. *See, e.g.*, Utah Wilderness Alliance v. Norton, 301 F.3d 1217, 1238-39 (10th Cir. 2002).

^{230.} See MANDELKER, supra note 221.

^{231.} See Warm Springs Dam Task Force v. Gribble, 621 F.2d 1017, 1024 (9th Cir. 1980) ("Reasonableness depends on such factors as the environmental significance of the new information, the probable accuracy of the information, the degree of care with which the agency considered the information and evaluated its impact, and the degree to which the agency supported its decision not to supplement with a statement of explanation or additional data.").

^{232.} See Marsh, 490 U.S. at 373-74.

^{233.} See Wisconsin v. Weinberger, 745 F.2d 412, 418 (7th Cir 1984).

^{234.} See Village of Grand View v. Skinner, 947 F.2d 651, 659 (2nd Cir. 1991) (concluding that agency took an adequate "hard look" at alleged new information that did not present any traffic impacts beyond those considered in the original EIS).

^{235.} Marsh, 490 U.S. at 378-85.

discussed in *Marsh*, to permit something less than the full review of information when circumstances warrant.

As a result, the court in *Hughes River* may have been mistaken in finding that the Corps failed to take a hard look at the new information regarding zebra mussel infestation. The Corps consulted with members of its expert staff and determined that the alleged new information suggested an impact that, while severe, was ultimately unavoidable.²³⁶ Upon reaching such a determination, very little could be gained by further studying the zebra mussel infestation. Arguably then, NEPA's rule of reason required nothing more than the Corps provided, as the dissent in this case suggested.²³⁷

As a result, reviewing courts should cautiously apply the "hard look" standard under *Marsh* and consider the context provided by the existing EIS in deciding whether NEPA requires an EIS supplement.

D. Steps to Minimize Legal Risk

While the "hard look" step of the Marsh inquiry rests on disputable legal ground, it is an established article of law in several circuits.²³⁸ Moreover, even in circuits that conduct a onestep Marsh review, the courts often rely on the depth of the agency's review of new information to inform their own consideration of whether the new information mandated a supplemental EIS.²³⁹ As a result, when faced with new and potentially significant information, agencies in every jurisdiction have a strong interest in building a thorough record of their that information. Documenting the agency's review of consideration of the new information can help satisfy the "hard look" requirement in circuits that conduct a two-step review and can provide the court with an explanation for how the agency reached its ultimate decision in those circuits that only conduct a one-step review. In light of NEPA's "rule of reason," the fact-

^{236.} Hughes River Watershed Conservancy, 81 F.3d at 443.

^{237.} *Id.* at 451 (Hall, J., dissenting).

^{238.} E.g., id. at 443.

^{239.} E.g., Delaware Dep't of Natural Res. and Envtl. Control v. U.S. Army Corps of Eng'rs, 685 F.3d 259, 272-73 (3d Cir. 2012).

specific context surrounding the agency's consideration of new information should inform the actual steps an agency takes to respond to it. Below are some factors on which courts have relied in determining whether an agency's review met the "hard look" standard, as well as a synthesis of those factors that may help guide future agency considerations.

1. Marsh: the Paradigmatic "Hard Look"

Marsh itself provides an example of an extremely thorough response to claims of alleged new information. In response to new documents that indicated a proposed dam would raise downstream temperatures, negatively impacting downstream fish production levels, and water turbidity, the Corps prepared an SIR.240 While not a supplemental EIS, the SIR contained a complex technical analysis that specifically addressed the concerns in the new documents.²⁴¹ In so doing, the SIR supplied additional context for the environmental impacts at issue and also weighed the impacts against potential beneficial effects from the dam.²⁴² Moreover, the Corps' experts reviewed the new information, hired outside experts to provide an independent review, and then prepared the SIR to document this review.²⁴³ In light of the rigor of the Corps review, the Court had little difficulty finding that the Corps took a "hard look" at the new information.244

2. Hughes River Watershed—an Incomplete Review

In contrast, the court in *Hughes River Watershed* found that the Corps' response to a claim of new information was not

^{240.} Marsh, 490 U.S. at 379.

^{241.} *Id*.

^{242.} Id.

^{243.} *Id.* at 379, 381. The SIR was a report that did not supplement the EIS but rather explained the Corps' decision not to prepare a supplement.

^{244.} *Id. See also* S. Trenton Residents Against 29 v. Fed. Highway Admin., 176 F.3d 658, 666 (3rd Cir. 1999) (noting with approval the extensive studies conducted by the federal agency in determining whether to issue a supplemental EIS); Northwoods Wilderness Recovery v. U.S. Dep't of Agric. Forest Serv., 192 Fed. Appx. 369, 376 (6th Cir. 2006) (stating that supplemental written reports satisfied the agency's hard look requirement).

sufficiently thorough to constitute a "hard look." 245 The new information alleged that issuing a Clean Water Act Section 404 permit for a dam would lead to an infestation of zebra mussels on the North Fork of the Hughes River, which would obliterate the river's local population of mussels.²⁴⁶ The Corps initially dismissed these claims in its statement of findings for a draft Clean Water Act Section 404 permit for the project, concluding that the infestation would likely occur regardless of the project.²⁴⁷ In response, EPA and the Fish and Wildlife Service provided the Corps with a report from Dr. Richard Neves, a professor of fisheries.²⁴⁸ Dr. Neves disputed the Corps' conclusion that the infestation was inevitable.²⁴⁹ Instead, he claimed that the North Fork would not likely become infested because it did not host frequent boating activities, which are the primary catalyst for the spread of zebra mussel larvae. 250 In response to this new information, the Corps' biologist made two phone calls to employees in the agency's water quality division who assured the biologist that all of the waters in the area would eventually become infested and that the North Fork could potentially become infested through bait buckets.²⁵¹ With this response in hand, the Corps essentially reprinted its earlier determination on the zebra mussel infestation from the draft Clean Water Act

^{245.} Hughes River Watershed Conservancy, 81 F.3d at 445.

^{246.} Id. at 444.

^{247.} *Id.* In *Hughes River Watershed*, the primary federal actor was the Natural Resources Conservation Service (NRCS), which provided assistance (funding, design, planning, and construction) to a local dam project on the Hughes River. *Id.* at 440. In deciding whether to take the action, the NRCS prepared an EIS. *Id.* at 441. Because the project involved discharging a fill material into the river, a local entity also applied to the Corps for a permit under Section 404 of the Clean Water Act. *Id.* at 441; see also 33 U.S.C. § 1344(a) (2012) (requiring a permit from the Corps for any activities that result in the dredging or discharge of fill material into navigable waters). In considering the Section 404 application, the Corps relied on the EIS prepared by NRCS and determined whether any new information required the Corps to supplement that EIS. *Hughes River Watershed Conservancy*, 81 F.3d at 443. *See infra* note 253 (discussing why the Fourth Circuit found that NRCS did not violate NEPA).

^{248.} Id. at 444.

^{249.} Id.

^{250.} Id.

^{251.} Hughes River Watershed Conservancy, 81 F.3d at 445.

Section 404 permit in its record of decision and again declined to supplement the EIS.²⁵²

The Fourth Circuit found this response to the alleged new information inadequate for a number of reasons.²⁵³ The court noted that the "record provides no basis for determining whether the opinions of the water quality section employees were reasonable or whether the employees were qualified to render opinions about zebra mussel infestation."254 The court further complained, "[t]he only glimmer of reasoning behind the Corps' conclusion that the North Fork would become infested regardless of the Project is the notation, 'If there is fishing now then possible infestation from fish bait buckets [sic]."255 Moreover, the Fourth Circuit found the Corps' reliance on its experts was "misplaced" because they did not respond directly to Dr. Neves' concerns.²⁵⁶ Several elements in the Corps' response contributed to the Fourth Circuit's determination. Most importantly, the response (1) was not fully documented, (2) rested on the opinions of unknown experts, (3) did not specifically address the new information, and (4) only provided a cursory explanation.²⁵⁷ When compared to the thorough study undertaken by the Corps in Marsh, the Fourth Circuit's frustration with the paucity of the Corps' response in Hughes River Watershed is easier to appreciate.

3. The Importance of Public Involvement

In Delaware Department of Natural Resources and Environmental Control v. U.S. Army Corps of Engineers, the Third Circuit considered whether the Corps reasonably declined to supplement an EIS for a federal project to deepen the

^{252.} Id.

^{253.} *Id.* Interestingly, because no one ever presented NRCS with information regarding the zebra mussel infestation, the Fourth Circuit did not find that NRCS violated NEPA. *Id.* at 446 n.7. This finding suggests that agencies are not under an obligation to proactively search for new information but rather must only consider the significance of new information discovered by the agency in its normal course of business or forwarded by another party.

^{254.} Id.

^{255.} Id. (quotations omitted).

^{256.} Id.

^{257.} Hughes River Watershed Conservancy, 81 F.3d at 444-46.

Delaware River.²⁵⁸ In that case, the new information related to, among other things, improved technologies for surveying that could result in the need to dredge less material to complete the project.²⁵⁹ The Third Circuit found that the Corps had taken a "hard look" at the new information. Specifically, the court noted that the Corps solicited public input on the changed circumstances regarding the project, provided the public with sufficient material to comment meaningfully, and published a thorough 179-page assessment of the information in an EA.²⁶⁰ Thus, efforts to meaningfully engage the public may also constitute an important element of a "hard look" at new and potentially significant information.

4. Pragmatic Approaches to New Information

A number of other cases have tempered the level of review required to respond to new information by considering the context provided by the existing EIS. In Town of Winthrop, the First Circuit considered a variety of challenges to the FAA's determination not to prepare an SEIS for permitting a new taxiway at the Logan International Airport.²⁶¹ In that case, the FAA relied on a report prepared by an outside contractor to find that the new information—largely regarding the health impacts of ultra-fine particle emissions—was not significant.²⁶² Many of the challenges to the FAA's decision alleged that the agency should have waited for further data from uncompleted studies or claimed that the agency inappropriately failed to consider impacts that could only be measured by "emerging" technologies.²⁶³

Despite the FAA not waiting for further data from the uncompleted studies, the existing EIS already contained a

^{258.} Delaware Dep't of Natural Res. and Envtl. Control, 685 F.3d 259, 262-69. 259. Id. at 264.

^{260.} *Id.* at 272. In addition, the Third Circuit rejected a claim that NEPA required the Corps to prepare a Finding of No Significant Impact to support its decision not to supplement. According to the court, that requirement only applies to the initial decision of whether to prepare an EIS. *Id.* at 273.

^{261.} Town of Winthrop, 535 F.3d at 3.

^{262.} Id. at 6.

^{263.} Id. at 11-12.

substantial consideration of air pollution, including a discussion of ultra-fine particles.²⁶⁴ In light of this existing consideration, the court found, "There will always be more data that could be gathered; agencies must have some discretion to decide when to draw the line and move forward with decisionmaking."²⁶⁵

In addition, the challengers claimed that the discussion of ultra-fine particles in the contractor report relied on an emissions inventory analysis instead of a dispersion model, which would have more accurately modeled human health impacts.²⁶⁶ However, the FAA noted that the earlier EIS contained such an analysis. The court found that "[t]he measurement of health effects is integral to an EIS, but the purpose of a written reevaluation is not the same. The question for the FAA at this stage was whether the data in the [Contractor] Report drew into question the health impact analyses in the EIS."267 Thus, the court recognized that the agency did not need to employ the same level of computer modeling in its consideration of health impacts in its decision on whether to supplement the EIS. Rather, the agency only needed to conduct a sufficient analysis to determine whether the original EIS remained valid.268

In *Skinner*, the Second Circuit took a similar pragmatic approach to evaluating whether an agency appropriately decided not to prepare a supplemental EIS. As noted above, in that case, the court heard claims that the Federal Highway Administration should have considered the impacts of a proposed interstate design change on traffic in the corridor of the Tappan Zee Bridge, in a supplemental EIS.²⁶⁹ However, the Court noted,

^{264.} Id. at 10-11, n.6.

^{265.} Id. at 11.

^{266.} Id. at 10-11.

^{267.} Town of Winthrop, 535 F.3d at 11.

^{268.} The First Circuit has also held that an agency may require petitioners to bring claims of new and significant information in the agency's hearing process and if the record has closed, require the petitioner to make a heightened showing to reopen the record. Massachusetts vs. U.S. Nuclear Regulatory Comm'n, 708 F.3d 63, 68-69 (2013).

^{269.} Village of Grand View v. Skinner, 947 F.2d 651, 657 (2nd Cir. 1991). See supra note 234 and accompanying text for a more thorough discussion of Skinner's factual background.

"common sense may provide a reasonable substitute for additional empirical data and expert testimony that plaintiffs would require." Because the traffic in the Tappan Zee corridor was already graded "F," the least favorable traffic grade indicating stop and go traffic, the court found as a matter of logic that any increase to the traffic in the corridor would not likely have an appreciable impact on traffic in that area. Thus, *Skinner* stands for the important principle that an agency's hard look at new and significant information can rely on common sense.

In a similar vein, the Seventh Circuit has found that an agency may assume that proposed future projects will meet existing environmental standards in determining whether those projects constitute new and significant information. ²⁷² Moreover, the court found that the agency could reasonably conclude that if those future projects would violate applicable environmental standards, then the agency could not authorize those projects. ²⁷³ Finally, the court concluded that the agency reasonably noted that any future cumulative impacts analysis for such speculative projects would necessarily consider the impacts of the existing project. ²⁷⁴ Thus, the agency could prepare a cumulative effects analysis that considered both projects when the later one crystalized.

However, the dissenting judge in *Habitat Education Center* stated that she could not "find *any* evidence in this record that the Forest Service took the hard look which the law requires," that "nothing in the record justifies the Forest Service's decision not to supplement the McCaslin and Northwest Howell SEISs to take account of Fishel," and held that "the agency's failure to supplement [was] arbitrary and capricious."²⁷⁵ In particular, the dissent pointed out that the lower court found the Fishel project "reasonably foreseeable" given a scoping notice put out about the

^{270.} Id. at 658.

^{271.} Id.

 $^{272.\} Habitat\ Educ.\ Ctr.,\ Inc.\ v.\ U.S.\ Forest\ Serv.,\ 673\ F.3d\ 518,\ 529\cdot30$ (7th Cir. 2012)

^{273.} Id.

^{274.} Id. at 530.

^{275.} Id. at 534.

project, and therefore could have been meaningfully discussed. Thus, the dissenting judge found the majority's approach "inconsistent with the design of NEPA."²⁷⁶

In *Dombeck*, the Ninth Circuit appeared to take a similar approach to allowing the previous EIS and common sense to replace a "hard look" at new and significant information, in line with the dissent in Habitat Education Center.²⁷⁷ The Dombeck court rejected the Forest Service's argument that it adequately considered a claim that it should prepare a supplemental EIS on timber harvesting to consider additional information on new standards for leaving old growth and new ESA listings in the area.²⁷⁸ In that case, the Forest Service argued that it did not need to consider the information under NEPA because the amount of old-growth left would exceed the new standards and provide an ample habitat for the listed species.²⁷⁹ The court concluded that because the agency never looked at this new information, its review was inadequate—even though the new information was arguably encompassed by the existing analysis.²⁸⁰ Thus, the agency technically violated NEPA.²⁸¹ Consequently, this opinion represents a limit on the extent to which courts, or at least the Ninth Circuit, may be willing to let common sense and the previous EIS replace a review of the new information.

In sum, a number of courts have recognized pragmatic limits on the scope of an agency's duty to take a "hard look" at new information under *Marsh*. In this vein, one court has found that agencies may employ "common sense" in considering whether to conduct a technical analysis or employ experts.²⁸² Another court

^{276.} Id. at 535.

^{277.} Friends of the Clearwater v. Dombeck, 222 F.3d 552, 558-59 (9th Cir. 2000).

^{278.} Id.

^{279.} Id.

^{280.} Id. at 558-59.

^{281.} *Id.* A number of courts have noted that when an agency already adequately considers an issue in an original EIS, there is no reason to supplement. *E.g.*, Friends of Marolt Park, 382 F.3d 1088 (10th Cir. 2004); National Comm. for the New River v. FERC, 373 F.3d 1323, 1330-31 (D.C. Cir. 2004).

^{282.} Vill. of Grand View v. Skinner, 947 F.2d 651, 658 (2nd Cir. 1991).

found that agencies may rely on less robust analyses when considering whether new information is sufficiently significant to require supplementation than the analysis they would use in writing an EIS.²⁸³ Finally, one court found that in evaluating new information regarding future projects, agencies could reasonably assume that the projects would comply with existing environmental regulations.²⁸⁴ Collectively, these cases establish a strong argument that the "hard look" standard of review for new information should be tempered by common sense and the discussion in the existing EIS.

5. Choreographing the *Marsh* Two-Step (and One-Step)

The foregoing discussion establishes a number of procedural lessons for agencies faced with allegedly new and significant information. In determining whether the information provides a "seriously different picture" of the environmental impacts of the license, agencies that: (1) document their review, (2) rely on internal experts with established qualifications, (3) vet the agency conclusion with outside experts, (4) directly respond to the new information in their review, (5) meaningfully engage the public, and (6) provide a thorough analysis of the new information's significance stand a better chance on judicial review.

In any event, agencies should tailor the scope of their review to the significance of the new information in light of common sense and the analysis in the existing EIS. An agency's review of the significance of information does not need to be as detailed as the review found in the initial EIS. Instead, the review should suffice if it simply determines whether the information is sufficiently significant to require a supplement. In making that determination, agencies should be guided by both pragmatism and the information already contained in their EIS when considering whether the new information reasonably provides a "seriously different picture" than that painted in the earlier EIS.

^{283.} Town of Winthrop v. FAA, 535 F.3d 1, 3 (1st Cir. 2008).

^{284.} Habitat Educ. Ctr., Inc. v. U.S. Forest Serv., 673 F.3d 518, 529-30 (7th Cir. 2012).

V. Conclusion

After 25 years, it is still difficult to say what exactly the *Marsh* Court meant by "significant" new information. What is clear, however, is that it will be a highly-fact specific analysis, and that ultimately NEPA is a procedural statute that does not mandate specific results.²⁸⁵ Thus, even if the allegedly new information suggests disastrous impacts, including extinction of a species, acts of terror, or nuclear accidents, an agency must only prepare a supplemental EIS before it can move forward.²⁸⁶

Marsh also raised as many questions as it provided answers. What level of impact is so severe that it demands supplementation? Did Marsh create a test that goes beyond NEPA's procedural requirements?²⁸⁷ Should courts apply a onestep or a two-step review of an agency's decision? Which is the more deferential?

While *Marsh* raises questions, the lower courts' applications of *Marsh* are not surprising. *Marsh* and its progeny have been consistent: an agency's action will usually be upheld if it methodically and rigorously considered and documented its evaluation of relevant environmental impacts. Failure to do so leaves an agency vulnerable to remand.

After reviewing the cases, we conclude that courts best apply *Marsh* if they invoke a one-step approach to reviewing an agency's decision whether to supplement, apply a deferential arbitrary and capricious standard of review, and consider

^{285.} Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989).

^{286.} See Strycker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, 227-28 (1980) (per curiam) ("once an agency has made a decision subject to NEPA's procedural requirements, the only role for a court is to insure that the agency has considered the environmental consequences; it cannot 'interject itself within the area of discretion of the executive as to the choice of the action to be taken") (quoting Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976)).

^{287.} As noted, NEPA does not address supplementation of an EIS based on new and significant information. Notably, the Supreme Court has struck down lower courts attempts to create tests when the plain language of the statute would address the issue. See, e.g., Kleppe, 427 U.S. at 390 (striking down the D.C. Circuit's four-factor test for when to prepare an EIS because the statutory language was clear); Weinberger v. Catholic Action of Hawai'i, 454 U.S. 139, 143-47 (1981) (rejecting the Ninth Circuit's hypothetical impact statement requirement). See also Shilton, supra note 8, at 558.

whether the information fundamentally altered an impact finding or identified a serious impact not previously considered. For the agency's part, information that suggests a dire environmental impact—such as severely threatening a local species—may be significant. However, information is likely not significant if it echoes the EIS, is speculative, conforms to key assumptions in the EIS, is contrary to common sense, or will be considered elsewhere. By holding to these principles, agencies should be able to confidently navigate this complex area of law.