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**THE NEPA IMPLIED EXEMPTION DOCTRINE: HOW A  
NOVEL AND CREEPING COMMON LAW EXEMPTION  
THREATENS TO UNDERMINE THE NATIONAL  
ENVIRONMENTAL POLICY ACT**

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*By Kyle Robisch\**

*Forty years ago, in Flint Ridge Development Company v. Scenic Rivers Association of Oklahoma, the Supreme Court reserved a critical question that the federal courts have endeavored to answer. In so doing, the lower courts forged the novel common law doctrine of “implied exemption,” which releases agencies from National Environmental Policy Act obligations when they undertake “non-discretionary” actions. This Article tracks the development and consequences of this largely unnoticed but influential doctrine and concludes that, given the chance, the Roberts Court will uphold it. It also evaluates the doctrine’s impact on agency behavior and offers modifications that would realign the incentives of agencies and courts as the doctrine matures and spreads to other statutes.*

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INTRODUCTION: HOW AN UNNOTICED COMMON LAW DOCTRINE IS  
CABINING THE NATIONAL ENVIRONMENTAL POLICY ACT

Often referred to as the Magna Carta of American environmental policy,<sup>1</sup> the National Environmental Policy Act of 1969 (“NEPA” or “the Act”)<sup>2</sup> is a cornerstone of the American environmental regulatory scheme. In an effort to force federal agencies and their private partners to consider the environmental effects of certain projects, the Act requires them to produce an “environmental impact statement” for all “major federal actions significantly affecting the environment.”<sup>3</sup>

This seemingly straightforward directive, however, is much harder to apply in practice. Indeed, NEPA generates enough litigation that the

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1. See Arthur W. Murphy, *The National Environmental Policy Act and the Licensing Process: Environmentalist Magna Carta or Coup de Grace?*, 72 COLUM. L. REV. 963 (1972) (describing NEPA as an “environmentalist Magna Carta”).

2. 42 U.S.C. § 4321 (2012).

3. *Id.*

American Bar Association published a 400-page “NEPA Litigation Guide,”<sup>4</sup> and the U.S. Supreme Court has decided 17 NEPA cases in the last 40 years.<sup>5</sup> The Act can be a powerful tool for opponents seeking to delay or derail development projects and can confound those aiming to fast-track those same projects. For both sides, the Act is formidable and not easily circumvented—at least according to common wisdom.

But what if the common wisdom is wrong? What if a federal agency *could* bypass NEPA entirely? Though the practice has received scant attention, federal agencies can, and do, circumvent NEPA’s requirements far more often than commentators and practitioners recognize. Importantly, the federal judiciary explicitly blesses this practice, allowing agencies to sidestep NEPA even when it plainly applies. In fact, all an agency needs to do is characterize its action as “non-discretionary”—a surprisingly broad class of actions that includes federal land acquisitions,<sup>6</sup> wilderness trail maintenance decisions,<sup>7</sup> and even airport landing policies<sup>8</sup>—and most courts will be willing to keep NEPA on the statutory shelf.

To date, no scholar has recognized this expanding, judicially-created exemption to NEPA, let alone its legal underpinnings or general scope. This Article fills that gap by exploring the history, contours, and future of the NEPA implied exemption doctrine. Part I describes NEPA and its basic statutory requirements. Part II analyzes the line of cases in the lower federal courts, born of a question that Justice Marshall explicitly reserved in *Flint Ridge Development Company v. Scenic Rivers Association of Oklahoma*,<sup>9</sup> that have slowly eroded NEPA’s once broad applicability. Part II demonstrates that, despite Justice Marshall’s reservation of the question 40 years ago, the federal circuits have uniformly, with little fanfare, embraced the government’s position, finding that an agency is “impliedly exempt” from NEPA in the large class of actions that are non-discretionary.

After setting this background, Part III turns to two questions: (1) did the *Flint Ridge* Court intend for NEPA to be shelved in such a wide array of

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4. AM. BAR ASS’N, NEPA LITIGATION GUIDE (Albert M. Ferlo, Karin P. Sheldon & Mark Squillace eds., 2d. ed. 2012).

5. Richard Lazarus, *The National Environmental Policy Act in the U.S. Supreme Court: A Reappraisal and a Peek Behind the Curtains*, 100 GEO. L.J. 1507, 1510 (2012).

6. *See* *Sac & Fox Nation v. Norton*, 240 F.3d 1250, 1262–63 (10th Cir. 2001) (holding federal land acquisition is non-discretionary), *superseded by statute*, 2002 Dep’t of the Interior and Related Agencies Appropriations Act, Pub.L. No. 107–63, § 134, 115 Stat. 414.

7. *See* *Sierra Club v. Hodel*, 848 F.2d 1068, 1096 (10th Cir. 1988) (holding wilderness trail maintenance policy is non-discretionary), *overruled by* *Village of Los Ranchos de Albuquerque v. Marsh*, 956 F.2d 970 (10th Cir. 1992).

8. *See* *American Airlines v. Dep’t of Treasury*, 202 F.3d 788, 813 (5th Cir. 2000) (holding certain airport landing policy decisions are non-discretionary).

9. *See* *Flint Ridge Dev. Co. v. Scenic Rivers Ass’n of Okla.*, 426 U.S. 776, 789 (1976).

circumstances, and (2) how would the current Court answer the question that Justice Marshall reserved?

Finally, Part IV explores the implications of the continued development of this body of jurisprudence. The Part begins by investigating the concept of “non-discretionary” agency actions—a theory that will shape the future of implied exemption, NEPA, and the entire landscape of administrative law. This question is more than academic: the Army Corps of Engineers recently released a detailed memo grappling with this area of case law and its impact on the agency’s policymaking agenda.<sup>10</sup> Part IV of this article then investigates the incentives produced by the doctrine and suggests some modifications to improve it. While a robust implied exemption doctrine may facilitate some gains in agency efficiency, it also creates incentives for agencies to over-characterize their actions as non-discretionary in an effort to skirt NEPA’s procedural requirements. And as the doctrine continues to mature, it continues to expand beyond NEPA. Courts are increasingly willing to release agencies from other statutory obligations, such as the Endangered Species Act, when an action is non-discretionary.<sup>11</sup>

### I. SETTING THE STAGE: NEPA’S CONTOURS

NEPA is significant, both substantively and symbolically. Passed by Congress in December 1969 and signed by President Nixon on January 1, 1970,<sup>12</sup> the Act ushered in what many refer to as “the environmental decade.”<sup>13</sup> The Act was the first of the “major” federal environmental statutes<sup>14</sup>—all passed or significantly amended in the 1970s—and even

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10. U.S. DEP’T OF DEF., DEP’T OF THE ARMY, U.S. ARMY CORPS OF ENGINEERS, MEMORANDUM FOR ALL COUNSEL, HQ, DIV, DIST, CENTER, LAB & FOA OFFICES, ESA GUIDANCE (2013) (on file with the author) [hereinafter “Corps Memo”].

11. See *Nat’l Ass’n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644, 665 (2007) (“Rather, the ESA’s requirements would come into play only when an action results from the exercise of agency discretion.”).

12. 42 U.S.C. § 4321.

13. See LETTIE M. WENNER, *THE ENVIRONMENTAL DECADE IN COURT* (1982) (referring to the 1970s as the “environmental decade”); see also Environmental Law Institute, *Public Lands, Toxic Chemicals Dominate 96th Congress, 2d Session*, 10 ELR 10231, 10237 (Dec. 1980) (describing the 1970s as “the first environmental decade”).

14. The Clean Air Act, while initially passed in 1963, took its current form at the end of 1970, almost a full year after NEPA. Clean Air Act Extension of 1970, 84 Stat. 1676, Pub. L. 91-604 (1970). Two years after NEPA, Congress enacted the Clean Water Act. Federal Water Pollution Control Amendments of 1972 (Clean Water Act), 86 Stat. 816, Pub. L. 92-500 (1972). Next came the Resource Conservation and Recovery Act (“RCRA”) in 1976 and the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”) in 1980. Resource Conservation and Recovery Act, 90 Stat. 2795, Pub. L. 94-580; Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 94 Stat. 2767, Pub. L. 96-510. Other major federal environmental statutes like the Toxic Substances Control Act (“TSCA”) and Federal Insecticide, Fungicide, and Rodenticide Control Act (“FIFRA”) also postdate NEPA. For a primer on these other significant federal environmental statutes,



predated the creation of the Environmental Protection Agency (“EPA”).<sup>15</sup> NEPA paved the way for the comprehensive and complex web of federal environmental laws that the federal government administers today.

### A. NEPA’s Procedural & Substantive Requirements

Though the Act laid the groundwork for America’s most potent environmental legislation, NEPA functions somewhat differently from statutes like the Clean Air Act (“CAA”), the Clean Water Act (“CWA”), and the Resource Conservation and Recovery Act (“RCRA”). The CWA (water), CAA (air), and RCRA (solid waste) all establish compulsory regulatory schemes grounded in various environmental media.<sup>16</sup> In contrast, NEPA applies across all environmental media; all “major federal action[s] significantly affecting the quality of the human environment” fall within the ambit of NEPA, regardless of the type of environmental impact.<sup>17</sup> Predictably, a bevy of judicial opinions attempt to give meaning to NEPA’s operative language, such as what constitutes a “major federal action”<sup>18</sup> and which actions are “significant.”<sup>19</sup>

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see CONGRESSIONAL RESEARCH SERVICE, ENVIRONMENTAL LAWS: SUMMARIES OF MAJOR ENVIRONMENTAL STATUTES ADMINISTERED BY THE ENVIRONMENTAL PROTECTION AGENCY (Oct. 8, 2010), available at <http://fas.org/sgp/crs/misc/RL30798.pdf>.

15. See *The Guardian: Origins of the EPA*, ENVTL. PROT. AGENCY, [http://www2.epa.gov/aboutepa/guardian-origins-epa?\\_\\_utma=27327421.64026050.1378313087.1378313087.1378313087.1&\\_\\_utmb=27327421.1.10.1378313087&\\_\\_utmc=27327421&\\_\\_utmz=27327421.1378313087.1.1.utmcsr=en.wikipedia.org|utmccn=%28referral%29|utmcmd=referral|utmctt=/wiki/United\\_States\\_Environmental\\_Protection\\_Agency&\\_\\_utmv=27327421.1|1=visitor%20id=one%20and%20done%20visitor=1&\\_\\_utmk=111681351](http://www2.epa.gov/aboutepa/guardian-origins-epa?__utma=27327421.64026050.1378313087.1378313087.1378313087.1&__utmb=27327421.1.10.1378313087&__utmc=27327421&__utmz=27327421.1378313087.1.1.utmcsr=en.wikipedia.org|utmccn=%28referral%29|utmcmd=referral|utmctt=/wiki/United_States_Environmental_Protection_Agency&__utmv=27327421.1|1=visitor%20id=one%20and%20done%20visitor=1&__utmk=111681351) (last updated Mar. 16, 2014). (President Nixon first proposed creation of an “independent regulatory agency responsible for implementation of federal laws designed to protect the environment” on July 9, 1970. Reorganization Plan Number 3, 116 Congressional Record H 6523 (91st Congress, 2nd session). It wasn’t until December of 1970 that Congress passed legislation bringing EPA into existence).

16. See Charles J. Gartland, *At War and Peace with the National Environmental Policy Act: When Political Questions and the Environment Collide*, 68 A.F. L. REV. 27, 30–31 (2012) (“[NEPA’s] language paints broad brush strokes of policy instead of detailed technical prescriptions. There is no limit or requirement to curtail specific pollution or activities of any kind—no micrograms per liter, parts per million, or other such limitations found in environmental statutes such as the Clear Air Act or Clean Water Act.”).

17. 42 U.S.C. § 4332.

18. See Howard Geneslaw, *Cleanup of National Priorities List Sites, Functional Equivalence and the NEPA Environmental Impact Statement*, 10 J. LAND USE & ENVTL. L. 127, 133–34 (1994) (describing major federal actions “significantly affecting the quality of human environment”).

19. See *id.* at 134. While important and interesting, these questions are outside the scope of this Article. It is sufficient to note NEPA’s broad applicability in contrast to other environmental legislation.

NEPA also stands out because it imposes procedural, rather than substantive, duties. While the CAA,<sup>20</sup> CWA,<sup>21</sup> and RCRA<sup>22</sup> establish compulsory permitting schemes, NEPA only requires an “environmental impact statement” (“EIS”).<sup>23</sup> Thus, unlike more traditional environmental regulatory programs, NEPA does not compel private citizens or government agencies to reduce air pollution or refrain from dumping waste into navigable waters.<sup>24</sup> Because NEPA is an “essentially procedural” statute, compliance may therefore seem straightforward.<sup>25</sup> But as any environmental lawyer can attest, NEPA is deceptively difficult.

For every EIS, there are Council on Environmental Quality<sup>26</sup> (“CEQ”) regulations that dictate a lengthy, multi-step compliance process with several steps. If an agency’s action is subject to NEPA,<sup>27</sup> it must first prepare an “environmental assessment” (“EA”). An EA preliminarily evaluates the environmental effects of a project, explores alternatives, and supplies the justifications for the project.<sup>28</sup> If an agency determines that the proposed action will not significantly affect the environment, it issues a “finding of no significant impact” (“FONSI”).<sup>29</sup> A FONSI excuses an agency from any further NEPA commitments.<sup>30</sup> Thus, environmental groups often challenge FONSI and EAs in court.

Should an EA conclude that a significant environmental impact *will* likely result, a “notice of intent” (“NOI”) to prepare an EIS must be published in the Federal Register.<sup>31</sup> The next step is “scoping,” which requires an agency to determine which types of environmental impacts will be analyzed within the relevant geographical range.<sup>32</sup> Once scoping is

20. 42 U.S.C. § 7401 (2012).

21. 33 U.S.C. § 1151 (2012).

22. 42 U.S.C. § 6901 (2012).

23. 42 U.S.C. § 4321.

24. 42 U.S.C. § 7401; 43 U.S.C. § 1151.

25. *Vt. Yankee v. Natural Res. Def. Council*, 435 U.S. 519, 558 (1978).

26. NEPA established CEQ, an agency in the Executive Office of the President, to promulgate regulations that would effectuate NEPA’s requirements.

27. That is, it is subject to NEPA § 102(2)(C), and is not subject to any of the exemptions discussed *infra*.

28. *See* Geneslaw, *supra* note 19, at 130–31 (“The EA documents the need for the project, the potential environmental effects arising from it and alternatives to the proposed action, thereby functioning as a basis for evaluating the project and determining if an EIS must be prepared.”); *see also* 40 C.F.R. § 1501.3 (2013) (requiring a preliminary EA); 40 C.F.R. § 1508.9 (2013) (detailing the components of an EA).

29. *See* Geneslaw, *supra* note 19, at 131 (“If [an agency] determines that the action will result in no significant environmental effects, it issues a [FONSI] and its NEPA obligations are completed.”); *see also* 40 C.F.R. § 1501.4 (describing a FONSI).

30. *See* 40 C.F.R. § 1501.4 (describing a FONSI).

31. *See* 40 C.F.R. § 1508.22 (requiring publication of a NOI if an EIS must be prepared).

32. *See* Geneslaw, *supra* note 19, at 131 (“The first step in preparation of an EIS is scoping, which identifies the issues the EIS will address in depth and eliminates from considerations

completed, actual production of the EIS begins. In reality, two impact statements must be produced: a preliminary “draft” EIS and a revised version, which takes into account public comments.<sup>33</sup> A complete EIS must consider “all reasonable alternatives” to the proposed action and contain a “full and fair discussion of significant environmental impacts.”<sup>34</sup>

Once a final EIS is submitted, lawsuits challenging the sufficiency of the document often ensue.<sup>35</sup> While these lawsuits are costly, time-consuming, and can even result in a court ordering complete reproduction of an EIS—no small task since the NEPA compliance process can easily take two to three years—they rarely result in the reversal of the agency’s substantive decision to complete a project.<sup>36</sup>

This deferential judicial approach to agency final decisions, irrespective of the potentially significant environmental impacts contemplated by an EIS, was established in a battery of Supreme Court cases decided in the 1970s and 1980s. Specifically, *Vermont Yankee Nuclear Power v. Natural Resources Defense Council*,<sup>37</sup> *Strycker’s Bay Neighborhood Council v. Karlen*,<sup>38</sup> and *Robertson v. Methow Valley Citizens Council*<sup>39</sup> all “significantly narrowed the practical impact of [NEPA’s] mandate that agencies think deeply about the environmental consequences of their

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others that are not likely to have significant impacts.”); *see also* 40 C.F.R. § 1501.7 (explaining the scoping process).

33. *See* Geneslaw, *supra* note 19, at 131 (“NEPA contemplates a two-step process in which an initial draft EIS is prepared, followed by a final EIS which responds to public comments.”).

34. 40 C.F.R. § 1502.1.

35. *See NEPA and Other Overarching Statutes*, U.S. DEP’T OF JUSTICE, ENVIRONMENT AND NATURAL RES. DIV., <http://www.justice.gov/enrd/3150.htm> (last updated Sept. 2013) (noting that “NEPA gives rise to the greatest variety of litigation” for the DOJ’s Natural Resources Section).

36. *See id.* (“Because the substantive statute [NEPA] . . . may provide broad discretionary protection to agency decision making, NEPA’s ‘procedural’ requirements are often the principal, and in some cases only available tool for dissatisfied citizens to challenge agency action in the courts.”).

37. *See generally* *Vt. Yankee*, 435 U.S. at 588. *Vermont Yankee* is one of the first instances of the Supreme Court signaling its hostility to NEPA. There, the Court essentially read NEPA’s substantive goals and provisions out of the Act by declaring the duties it imposes on agencies “essentially procedural.”

38. *See generally* *Strycker’s Bay Neighborhood Council v. Karlen*, 444 U.S. 223 (1980). In *Strycker’s Bay*, the Court further cabined NEPA’s ability to command a substantive result by allowing agencies to “reject an alternative [plan] acknowledged to be environmentally preferable solely on the ground that any change in [the plan] would cause delay.” By holding that an agency only needs to *consider* an EIS, the Court essentially prevented federal courts from second-guessing an agency’s decision making process, no matter how egregious the environmental consequences may be. This “effectively killed any possibility of judicial enforcement of NEPA’s substantive goals.” MATTHEW J. LINDSTROM & ZACHARY A. SMITH, *THE NATIONAL ENVIRONMENTAL POLICY ACT: JUDICIAL MISCONSTRUCTION, LEGISLATIVE INDIFFERENCE, & EXECUTIVE NEGLIGENCE* 119 (2001).

39. *See generally* *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989). The *Methow Valley* Court held that NEPA does not force agencies to develop or implement an environmental mitigation plan. The Court also held an agency need not integrate a “worst-case analysis” catastrophe plan in its EIS.

actions” by reading “NEPA solely as a procedural requirement devoid of any substantive value.”<sup>40</sup> Therefore, although the underlying substantive agency decision to undertake a project is usually unassailable in court, interest groups can nonetheless utilize NEPA’s procedural requirements as a device to slow down an agency project.<sup>41</sup>

### B. Established NEPA Exemptions

Given that an agency’s path to NEPA compliance is often riddled with legal obstacles, agencies usually prefer to avoid the Act altogether.<sup>42</sup> There are three situations when an agency may decline to comply with NEPA, even if its actions would otherwise be subject to the Act.

Of the three types of exemptions, *express exemptions* from Congress are the most straightforward. For an express exemption to apply, Congress must clearly indicate *in a statute* that NEPA does not apply to a particular agency action.<sup>43</sup> Two of the most common express exemptions are found in the CAA<sup>44</sup> and CWA.<sup>45</sup> One-off projects like highway construction<sup>46</sup> or pipeline expansion<sup>47</sup> are also commonly insulated from NEPA via express exemption. Congress rarely provides express exemptions, however, and

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40. David R. Hodas, *NEPA, Ecosystem Management and Environmental Accounting*, 14 Nat. Res. & Env’t 185, 186–87 (2000); *but see* Lazarus, *supra* note 5, at 1585 (arguing that although “NEPA has certainly had a tough time in the Supreme Court . . . [t]here were many important environmental victories within those losses” at the Court).

41. *See* Denis Binder, *NEPA, Nimby and New Technology*, 25 LAND & WATER L. REV. 11, 17 (1990) (stating that NEPA is “an instrument of delay for opponents of a project”).

42. *See* Kevin H. Moriarty, *Circumventing the National Environmental Policy Act: Agency Abuse of the Categorical Exclusion*, 79 N.Y.U. L. REV. 2312, 2321 (2004) (describing “agency abuse” of the NEPA categorical exemption in order to avoid undertaking an EA or EIS).

43. *See* Jonathan M. Cosco, *NEPA for the Gander: NEPA’s Application to Critical Habitat Designations and Other “Benevolent” Federal Action*, 8 DUKE ENVTL. L. & POL’Y. F. 345, 353–54 (1998) (“Occasionally Congress will exempt specific federal actions from NEPA by clearly indicating its intent to do so in a subsequently enacted statute.”).

44. *See* 15 U.S.C. § 793(c)(1) (“No action taken under the Clean Air Act shall be deemed a major federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act.”).

45. *See* 33 U.S.C. § 1731(c)(1) (“Except for the provision of Federal financial assistance for the purpose of assisting the construction of publicly owned treatment works as authorized by section 201 of this Act, and the issuance of a permit under section 402 of this Act for the discharge of any pollutant by a new source as defined in section 306 of this Act, no action of the Administrator taken pursuant to this Act shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969.”).

46. *See, e.g.,* Named Individual Members of San Antonio Conservation Soc’y v. Tx. Highway Dep’t, 496 F.2d 1017, 1022 (5th Cir. 1974) (finding a congressional express exemption for construction of the San Antonio Highway System).

47. *See, e.g.,* Earth Res. of Alaska v. Fed. Energy Regulatory Comm’n, 617 F.2d 775, 780 (D.C. Cir. 1980) (finding Congress precluded judicial evaluation of compliance with NEPA in the context of the Alaska pipeline construction project).

courts usually require a statute to include explicit and unambiguous language before freeing an agency from NEPA.<sup>48</sup>

Although they are more complex than express exemptions, *categorical exemptions* (known also as, “categorical exclusions” or “CatEx”) are more commonly applied. Unlike express exemptions created by Congress, categorical exemptions are the result of an agency-controlled process.<sup>49</sup> In a nutshell, categorical exemptions are a list of common agency actions that the agency has determined never require an EA or EIS because they do not significantly impact the environment.<sup>50</sup> Examples include wetlands restoration by the Fish and Wildlife Service, facility maintenance at EPA sites, and approvals of bicycle lane construction plans by the Department of Transportation.<sup>51</sup> To prevent agencies from using categorical exemptions as an end-around to complying with NEPA, a proposed categorical exemption class must receive CEQ review and approval, be published in the Federal Register, and be subjected to a public comment period.<sup>52</sup> CEQ recently issued new guidance strengthening these safeguards.<sup>53</sup>

Finally, *implied exemptions*, the main focus of this Article, are oft-utilized but are more malleable than both express and categorical exemptions. While express exemptions are crafted by Congress and categorical exemptions originate in the executive branch, implied exemptions are judicially-created exceptions to NEPA.<sup>54</sup> As will be explored in Part II, the implied exemption doctrine arose rather unobjectionably as a reasonable solution to a tricky jurisprudential question.

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48. See *Flint Ridge*, 426 U.S. at 788 (noting that in certain limited circumstances, where an agency's own statute or regulations conflict with NEPA, compliance with NEPA may be excused).

49. See C2HM HILL, WHITE PAPER: CATEGORICAL EXCLUSION UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) 1, 1 (2011) (“The original (and current) understanding of CatEx use is that it applies to a list of actions by an agency that do not ‘individually or cumulatively have a significant effect on the human environment.’”), *available at* [https://www.ch2m.com/corporate/services/environmental\\_management\\_and\\_planning/assets/Abstracts/2011/CH2M-HILL-categorical-exclusion.pdf](https://www.ch2m.com/corporate/services/environmental_management_and_planning/assets/Abstracts/2011/CH2M-HILL-categorical-exclusion.pdf).

50. *Id.*

51. *Id.* at 6, Table 1 (providing a list of common categorical exemptions).

52. See *id.* at 1 (“It was understood when the CatEx mechanism was made a part of the NEPA process that agencies are not free to just “make up” lists of actions for which a CatEx is applicable. Such proposed actions must first go through a review by the Council of Environmental Quality (CEQ), a Federal Register Notice, a public review, and then a final CEQ review to ensure that the CatEx conforms to NEPA.”).

53. See *id.* at 1–2. This fresh guidance was prompted by federal administrative review of the Deepwater Horizon oil spill in the Gulf of Mexico. The development and approval process for the well fell under a categorical exclusion which found that the likelihood of a spill was insignificant. Predictably, CEQ produced a bolstered guidance document that requires agencies to supply stronger evidence to win approval of their request for a categorical exemption.

54. See *Cosco*, *supra* note 44, at 353–56 (providing an introduction to the doctrine).

But as time has passed, the doctrine has expanded considerably, and there is now a risk that the exception will swallow the rule.

## II. A STONE LEFT UNTURNED: *FLINT RIDGE* & ITS PROGENY

The implied exemption doctrine can be traced back almost 40 years to the Supreme Court's decision in *Flint Ridge*.<sup>55</sup> When *Flint Ridge* reached the Supreme Court in 1976, the case law surrounding NEPA was mostly undeveloped, as the Act had been around for only six years and *Flint Ridge* was just the third case to squarely present a NEPA issue to the Court.<sup>56</sup> Two additional factors—the “extremely narrow” holdings of the two prior NEPA cases and the fact that NEPA was an ancillary issue in both—further cemented *Flint Ridge*'s position as the most significant NEPA case to reach the Supreme Court by the mid-1970s.<sup>57</sup>

### A. *Flint Ridge*

In *Flint Ridge*, the U.S. Department of Housing and Urban Development (“HUD”) appealed a Tenth Circuit decision forcing the agency to prepare an EIS before it could give legal effect to several disclosure statements from housing developers under the Interstate Land Sales Full Disclosure Act (“Disclosure Act”).<sup>58</sup> HUD advanced two theories as to why it could legally circumvent NEPA's command to produce an EIS before approving a disclosure statement.<sup>59</sup> Both of HUD's novel arguments were intended to cabin NEPA's applicability by establishing far-reaching legal doctrines that would place broad classes of agency action beyond the ambit of NEPA. Though HUD's arguments were

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55. *Flint Ridge*, 426 U.S. 776.

56. See Lazarus, *supra* note 5, at 1536–39 (noting that *Flint Ridge* represents the third “NEPA case” the Supreme Court considered).

57. See *id.* at 1537–38. Professor Lazarus describes the holdings of these cases, *United States v. Students Challenging Regulatory Agency Procedures (SCRAP)* and *Aberdeen & Rockfish Railroad Company v. Students Challenging Regulatory Agency Procedures (SCRAP II)*, as “extremely narrow” and “exceedingly narrow,” respectively. Though both *SCRAP* and *SCRAP II* required the Court to resolve NEPA questions, the cases were important primarily because of their “broad standing ruling[s].” Lazarus himself characterizes the *SCRAP* cases as “the Court's high water mark for environmental citizen-suit standing,” as the Court sustained standing despite “an extraordinarily attenuated causal chain [of injury].” See, e.g., *id.* at 1537.

58. *Flint Ridge*, 426 U.S. at 785.

59. See *id.* at 785–87 (“The Secretary and *Flint Ridge* offer essentially two theories for exempting HUD from this duty in the administration of the Disclosure Act.”).

distinct, both relied on successfully demonstrating that a statute other than NEPA can create an “implied exemption” to NEPA itself.<sup>60</sup>

First, the government argued that it was impossible for HUD to comply with both the Disclosure Act’s requirement that documents become legally effective within 30 days of issuance and NEPA’s command to produce an EIS before undertaking that very same action.<sup>61</sup> Thus, if HUD’s act of declaring a disclosure statement legally binding fell within the ambit of NEPA—because it was a “major federal action significantly affecting the quality of the human environment”—the agency would be forced to run afoul of either the Disclosure Act (because creating an EIS inevitably takes longer than 30 days) or NEPA (by declining to generate an EIS).

Justice Marshall, writing for the majority, agreed that either NEPA or the Disclosure Act must give way. He opened by noting that “[i]t is inconceivable that an environmental impact statement could, in thirty days, be drafted, circulated, commented upon, and then reviewed and revised in light of the comments.”<sup>62</sup> Of course, the Disclosure Act would not be the only federal legislation to generate such a conflict, so the Court took the opportunity to announce a new test intended to provide clear instructions to agencies facing these dilemmas: “[W]here a clear and unavoidable conflict in statutory authority exists, NEPA must give way.”<sup>63</sup> The Court located two sources of authority for this new principle. First, Justice Marshall pointed to section 102 of NEPA, which directs agencies to comply with NEPA only “to the fullest extent possible.”<sup>64</sup> Justice Marshall believed that Congress included this language to acknowledge that “NEPA must give way” in certain circumstances, including statutory conflicts.<sup>65</sup> To further bolster this position, Justice Marshall cited the Court’s prior decision in *SCRAP*, where the Court declared that “NEPA was not intended to repeal by implication any other statute.”<sup>66</sup> Finally, the Court rejected the argument that because the Disclosure Act included a statutory device enabling HUD to suspend the 30 day compliance period, the agency could comply with both the Disclosure Act and NEPA.<sup>67</sup> Together, these principles from *Flint*

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60. *See id.* (evaluating the implications of the federal government’s arguments in a broad sense and declining to confine the analysis to the facts of the case).

61. *Id.* at 786–89.

62. *Id.* at 788–89.

63. *Id.* at 788.

64. *Id.* at 787.

65. *Id.*

66. *Id.* *SCRAP* and *SCRAP II* are discussed *supra* at note 58.

67. *See id.* at 790–91 (“Not only does the Court of Appeals opinion grant the Secretary a power not conferred by statute, but the exercise of that power ordered by the court would contravene the purpose of the thirty-day provision of the Disclosure Act. The thirty-day time limit, as the Court of Appeals recognized, is designed to protect developers from costly delays as a result of the need to

*Ridge* added up to a new common law doctrine under NEPA—the doctrine of implied exemption.

Although the Court’s “clear and unavoidable conflict” test may appear to be a fairly straightforward test, the rest of the *Flint Ridge* decision raised more questions than it answered. Like the government’s first argument, its second argument was grounded in the idea of an “implied exemption” to NEPA. But rather than locating the *impossibility* of compliance as the source of exemption, the government’s argument depended on successfully characterizing the *inherent nature* of the agency action as “non-discretionary.”<sup>68</sup> Specifically, the government asked the Court to adopt a rule declaring NEPA inapplicable wherever an agency “by statute, has no power to take environmental consequences into account in deciding” whether to undertake an action.<sup>69</sup> Therefore, in *Flint Ridge*, the government contended that NEPA did not apply because HUD could not exercise any discretion in discharging its duties under the Disclosure Act, since the statute’s language compelled the agency to declare a disclosure legally effective within 30 days.<sup>70</sup>

To buttress its position, the government claimed that “NEPA is concerned only with introducing environmental considerations into the decisionmaking processes of agencies that have the *ability* to react to environmental consequences when taking action.”<sup>71</sup> If an agency’s course was predetermined, no measure of negative environmental impacts could sway the agency’s course of action. The respondents countered by noting that:

[E]ven if the agency taking action is itself powerless to protect the environment, preparation and circulation of an impact statement serves the valuable function of bringing the environmental consequences of federal actions to the attention of those who are empowered to do something about them—other federal agencies, Congress, state agencies, or even private parties.<sup>72</sup>

In the end, Justice Marshall punted. Because the Court resolved the case by adopting the clear and unavoidable conflict test, Justice Marshall

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register with HUD. Yet, the Court of Appeals’ reading the statute would make such delays commonplace, and render the thirty-day provision little more than a nullity. Environmental impact statements, and consequent lengthy suspensions, would be necessary in virtually all cases.”).

68. *Id.* at 789–90.

69. *Id.* at 786.

70. *Id.* at 787.

71. *Id.* at 786 (emphasis added).

72. *Id.* at 786–87.



expressly reserved the question of whether an agency undertaking a non-discretionary action must comply with NEPA.<sup>73</sup> At least one prominent commentator considers this outcome a victory for environmentalists,<sup>74</sup> though the dominant view is that *Flint Ridge* ushered in a long line of Supreme Court cases in conflict with NEPA's environmental protection goals.<sup>75</sup>

Conspicuously absent from the scholarly debate is any mention of Justice Marshall's reserved question. While there is a rich discourse among courts and commentators about the general nature of the Supreme Court's NEPA case law, almost none of it considers the impact of Justice Marshall's decision to cast the non-discretionary question aside, let alone the broader implications of *Flint Ridge*.

Ultimately, the question left open in *Flint Ridge* is an important one; federal agencies often rely on the non-discretionary nature of their actions to justify absolving themselves of the duty to prepare an EA or EIS. In fact, the argument that some scholars invoke to spin *Flint Ridge* as a pro-NEPA decision—that Justice Marshall's failure to adopt the government's broader non-discretionary test kept the opinion narrow in scope—is actually the proximate cause of NEPA's increasing inapplicability.<sup>76</sup> Almost 40 years have passed since the Court declined to foreclose the government's position in *Flint Ridge*. In the interim, the circuits have embraced the government's alternative argument, finding NEPA inapposite in the large class of cases where an agency lacks discretion.

#### *B. Not So Reserved: The Circuit Courts Answer the Supreme Court's Reserved Question*

Initially, the circuits split as the Department of Justice continued to advance the non-discretionary excuse in federal district and circuit courts. Although some of the early cases were based on the "clear and

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73. See *id.* at 787 ("Because we reject this argument of respondents and find that preparation of an impact statement is inconsistent with the Secretary's mandatory duties under the Disclosure Act, we need not resolve petitioners' first contention [concerning non-discretionary agency actions].").

74. Lazarus, *supra* note 5, at 1536–39.

75. See, e.g., William H. Rodgers, Jr., *NEPA at Twenty: Mimicry and Recruitment in Environmental Law*, 20 ENVTL. L. 485, 497 (1990) (discussing the twelve NEPA cases where the Court dismissed "interpretations advanced by environmental groups"); Marla A. Weiner, *Environmental Law—Flint Ridge Development Co. v. Scenic Rivers Association: Limiting the Applicability of NEPA*, 13 URB. L. ANN. 225, 236 (1977) (describing how the court created new NEPA exemptions).

76. See generally, *Flint Ridge*, 426 U.S. 776 (highlighting Justice Marshall's opinion on NEPA).

unavoidable” doctrine of statutory preemption, most of the divergence in the case law after *Flint Ridge* can be traced to the question that Justice Marshall left unresolved.

In the decade following *Flint Ridge*, the lower courts frequently rejected the government’s non-discretionary exemption argument. This line of cases typically focused on Congress’s desire to have courts “make as liberal an interpretation as [they] can to accommodate the application of NEPA.”<sup>77</sup> The lower courts usually located two distinct but complementary sources of authority for mandating agency compliance with NEPA for non-discretionary actions: NEPA’s plain language and its legislative history. The Ninth Circuit’s analysis in *Jones v. Gordon* is typical. In *Gordon*, the court first pointed to section 102 of NEPA, directing that the Act “apply to the fullest extent possible.” It then applied language from NEPA’s conference committee report that “[n]o agency shall utilize an excessively narrow construction of its existing statutory authority to avoid compliance.”<sup>78</sup>

While at first the government experienced some pushback from federal courts, the circuits have almost uniformly coalesced around the Department of Justice’s interpretation that NEPA does not apply to non-discretionary agency actions. As a result, most, if not all, circuits<sup>79</sup> now recognize an implied exemption from the EIS and EA requirements when an agency can show that its action is non-discretionary.<sup>80</sup> Somewhat surprisingly, the courts siding with the government cite the same authorities—NEPA’s language and legislative history—as the courts that foreclose an exception

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77. See, e.g., *Jones v. Gordon*, 792 F.2d 821, 826 (9th Cir. 1986) (finding a congressional desire that “we make as liberal an interpretation as we can to accommodate the application of NEPA”).

78. *Id.* at 826–27.

79. As will be discussed *infra*, two uncertainties make it difficult to determine the precise state of the jurisprudence. First, it appears that some circuits have not yet had occasion to address the question. Second, the case law in some circuits is confused at best and contradictory at worst. In any event, it is clear that the vast majority of circuits have adopted the Department of Justice’s argument.

80. See, e.g., *City of New York v. Minetta*, 262 F.3d 169, 177–78 (2d Cir. 2001) (“[W]here an agency’s decision does not entail the exercise of . . . discretion, an EIS is not required.”); *Sac & Fox Nation*, 240 F.3d at 1262–63 (“[W]e conclude the Secretary reasonably determined that no NEPA or NHPA analysis was required prior to the acquisition.”), *superseded by statute*, 2002 Dep’t of the Interior and Related Agencies Appropriations Act, Pub.L. No. 107–63, § 134, 115 Stat. 414; *American Airlines*, 202 F.3d at 803 (“Agency decisions which do not entail the exercise of significant discretion do not require an EIS.”); *Strahan v. Linnon*, 1998 U.S. App. LEXIS 16314, at \*6 (1st Cir. July 16, 1998) (“NEPA is inapplicable because . . . the Coast Guard has no discretion to consider environmental factors.”); *Hodel*, 848 F.2d at 1089 (“The EIS process is supposed to inform the decision-maker. This presupposes he has judgment to exercise. Cases finding ‘federal’ action emphasize authority to exercise discretion over the outcome.”) (quoting W. Rodgers, *Environmental Law* 763 (1977)), *overruled by* *Village of Los Ranchos de Albuquerque v. Marsh*, 956 F.2d 970 (10th Cir. 1992).

for non-discretionary actions.<sup>81</sup> Rather than reading the legislative history as congressional guidance to apply NEPA broadly, this line of cases emphasizes the role of NEPA as a practical tool for informing agency decisionmaking. Since an agency undertaking a non-discretionary course of action cannot change its course no matter how compelling an EA or EIS is, these courts reason that NEPA is superfluous in the context of non-discretionary actions.<sup>82</sup> These cases also implicitly construe NEPA's plain language narrowly, sharing the view of the *Flint Ridge* Court that section 102 requires compliance with the Act only "to the fullest extent possible."<sup>83</sup> That is, they read section 102's "fullest extent possible" language as a *limiting instruction* rather than an *unwavering command*.

As it stands now, almost every circuit to have considered the question will excuse NEPA compliance when an agency action is non-discretionary.<sup>84</sup> At the time of this writing, the First Circuit,<sup>85</sup> Second Circuit,<sup>86</sup> Third Circuit,<sup>87</sup> Fifth Circuit,<sup>88</sup> Eighth Circuit,<sup>89</sup> and Tenth Circuit<sup>90</sup> all clearly fall into this camp. On the other hand, no circuit has explicitly adopted the alternative approach, at least within the past 20 years.

There are three caveats to this assessment of the judicial landscape. First, the state of the law in some circuits is unclear as some courts have not yet had occasion to reach the question of when NEPA may be impliedly excused. However, it is likely that these courts will eventually join their sister circuits in recognizing a non-discretionary action exception. Second,

81. See *Lazarus*, *supra* note 5, at 1515 (detailing the reasoning these courts provide when they adopt the non-discretionary action NEPA exemption).

82. See, e.g., *Goos v. Int'l Commerce Comm'n*, 911 F.2d 1283, 1295 (8th Cir. 1990) (explaining that "[M]inisterial acts . . . have generally been held outside the ambit of NEPA's EIS requirement. Reasoning that the primary purpose of the impact statement is to aid agency decisionmaking, courts have indicated that nondiscretionary acts should be exempt from the requirement.").

83. See, e.g., *id.*

84. Footnote 79, *supra*, extensively details this case law.

85. *Strahan*, 1998 U.S. App. LEXIS at \*6 ("NEPA is inapplicable because . . . the Coast Guard has no discretion to consider environmental factors.").

86. *Minetta*, 262 F.3d at 177–78 ("[W]here an agency's decision does not entail the exercise of . . . discretion, an EIS is not required.").

87. *NAACP*, 584 F.2d at 634 ("Section 1122 approval, even if it 'enabled' implementation of Plan Omega, does not require the filing of an EIS because the agency's approval was not legally required and the agency was not empowered to consider environmental effects in its review of a state's recommendation.").

88. *American Airlines*, 202 F.3d at 803 ("Agency decisions which do not entail the exercise of significant discretion do not require an EIS.").

89. *Goos*, 911 F.2d at 1295.

90. *Sac & Fox Nation*, 240 F.3d at 1262–63 ("[W]e conclude the Secretary reasonably determined that no NEPA or NHPA analysis was required prior to the acquisition."), *superseded by statute*, 2002 Dep't of the Interior and Related Agencies Appropriations Act, Pub.L. No. 107–63, § 134, 115 Stat. 414.

sometimes even the intra-circuit jurisprudence is confused, with two or more cases reaching results that are impossible to reconcile.<sup>91</sup> Another complicating factor is that, on occasion, courts sometimes issue a different interpretation of NEPA without explicitly referencing or overruling a prior construction of the Act.<sup>92</sup> Third, these precedents are somewhat stale, as most of the cases were decided in the 1980s and 1990s. While this does not necessarily mean that a court today would reach a different result, it does suggest that the jurisprudence is subject to change, especially given the Supreme Court's silence since *Flint Ridge* and the relative dearth of cases on the subject (no more than a handful per circuit).

### III. IMPLIED EXEMPTION IN THE SUPREME COURT

To this point, virtually no court or commentator has catalogued, evaluated, or even merely acknowledged the existence and scope of the implied exemption doctrine. This is problematic for two reasons. First, since the issue has yet to reach the Supreme Court since *Flint Ridge*, the circuits have had free reign in one of the most important areas of federal environmental policy. The result has been a largely unnoticed but significant judicial cabining of NEPA's applicability. In and of itself, this is not an objectionable result, but there is a second concern that compounds the first: the circuits could be interpreting NEPA improperly. Given the Supreme Court's 40 year silence on the subject, Justice Marshall's language in *Flint Ridge* should be the starting point for evaluating the circuits' approach to this question. And regardless of which approach the *Flint Ridge* Court thought superior, the ultimate question is whether the Roberts Court will reject or adopt the implied exemption doctrine when it inevitably reaches the Supreme Court.

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91. The Ninth Circuit is a particularly illustrative example. *See generally* *Westlands Water Dist. v. Natural Res. Def. Council*, 43 F.3d 457 (9th Cir. 1994). Although the *Westlands* Court appears to have relied upon several independent lines of reasoning to reach its result, one of the court's foundations for holding NEPA impliedly preempted is that "Congress did not give the Secretary discretion over when he may carry out his duties." *Id.* at 460. One year later, the Ninth Circuit explicitly held that "[NEPA's] procedural requirements are triggered by a discretionary federal action." *Sierra Club v. Babbitt*, 65 F.3d 1502, 1512 (9th Cir. 1995). As a result, it is difficult to square *Babbitt* and *Westlands* with *Gordon's* (described *supra* at note 78) directive that every effort be made to accommodate NEPA. All three Ninth Circuit cases were decided within a decade of each other, although the two most recent decisions seem to adopt the broader construction of *Flint Ridge*.

92. *See supra* note 81. The current Ninth Circuit jurisprudential quagmire is likely a textbook example of this precise circumstance. It appears three different Ninth Circuit panels reached three different results without taking into account the cumulative impact of three different "binding" cases reaching three completely incompatible holdings.

A. *Implied Exemption & the Flint Ridge Court: Is Flint Ridge Anti-Environmental?*

This article now examines the Supreme Court's treatment of the NEPA implied exemption doctrine. After evaluating the *Flint Ridge* Court's attitude towards NEPA, this article turns to the future: how will the Roberts Court likely address the implied exemption doctrine when it inevitably reaches the Nation's highest court?

1. The Traditional View

Since NEPA laid the foundation for American environmental governance in 1970, the U.S. Supreme Court has decided 17 cases that posed a question about an aspect of NEPA; in all 17, the Court sided against the pro-NEPA plaintiffs.<sup>93</sup> Predictably, this seemingly unbalanced judicial treatment of NEPA has generated a flurry of scholarly commentary, almost all of which decries the Court's "hostile" attitude towards the Act.<sup>94</sup> Though most of this literature concentrates its fire on other decisions, *Flint Ridge* has not been immune from academic criticism. The little writing that does exist on *Flint Ridge*, none of which addresses the issues considered here, joins the chorus of commentators characterizing the case law as squarely anti-environmental.<sup>95</sup>

2. A New Take on NEPA Jurisprudence & *Flint Ridge*

While reading the Court's NEPA case law as anti-environmental is certainly reasonable, such a shallow reading papers over important themes in the Court's treatment of NEPA. More recent scholarship—most notably, that of Harvard Law Professor Richard Lazarus—provides a significant gloss on the case law that undermines the dominant narrative.<sup>96</sup> In a broad

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93. See Lazarus, *supra* note 5, at 1510 (detailing this history).

94. See, e.g., Oliver A. Houck, *Book Review, Is That All? A Review of the National Environmental Policy Act, An Agenda for the Future*, by Lynton Keith Caldwell, 11 DUKE ENVTL. L. & POL'Y F. 173, 184–87 (2000). In the 1990s, academic criticism of the Supreme Court's NEPA record only increased from the 1980s. See, e.g., Rodgers, *supra* note 76, at 497 (characterizing the Supreme Court's NEPA jurisprudence as "consistently rejecting interpretations advanced by environmental groups" in favor of "narrower accounts espoused by the government"). Today, with a few exceptions, the same view holds sway with the majority of commentators. See, e.g., Daniel A. Farber, *Is the Supreme Court Irrelevant? Reflections on the Judicial Role in Environmental Law*, 81 MINN. L. REV. 547, 561 (1997) (describing the Court as waging an "unrelenting campaign against NEPA").

95. See Weiner, *supra* note 76, at 237 (arguing that *Flint Ridge*'s "particularly severe" interpretation of NEPA could render the Act "a mere noble statement of purpose").

96. See generally, Lazarus, *supra* note 5 (cataloguing and analyzing the 17 NEPA cases the Supreme Court has decided).

sense, Professor Lazarus contends that upon closer examination of the full record (internal Supreme Court deliberations, oral and written arguments by counsel, and the Court's dicta), the Supreme Court's NEPA jurisprudence is far more nuanced and balanced than scholars recognize.<sup>97</sup>

Lazarus dissects each case in the Court's NEPA catalogue, including *Flint Ridge*. Interestingly, Lazarus reads the opinion differently than most circuit courts. First, he points to the *Flint Ridge* Court's invocation of section 102's language commanding that NEPA be applied "to the fullest extent possible" as evidence that Justice Marshall was trying to maximize NEPA's role in federal decisionmaking (except under a narrow range of circumstances where an unavoidable conflict exists).<sup>98</sup> Professor Lazarus believes the Court was attempting to characterize section 102 as "words of expansion rather than words of limitation,"<sup>99</sup> which is plainly at odds with how the circuits today interpret the statute.<sup>100</sup> Second, Lazarus highlighted the Court's exhortation that NEPA forces environmental considerations into the sphere of nearly every federal statute and agency decision.<sup>101</sup> In other words, agencies cannot avoid the environmental aspects of their decisions no matter how irrelevant they may seem. At first blush, this does not necessarily contradict one of the circuit courts' arguments in favor of an expansive implied exemption doctrine—that NEPA is merely a decisional tool, so it has no place in non-discretionary situations where the course of action is predetermined.<sup>102</sup> But upon closer inspection, the circuit courts take Lazarus' observation and flip it on its head: because NEPA, as a decisional tool, pushes environmental considerations into all corners, the circuits contend that it only makes sense to bring NEPA into decisional spaces where there is some discretion to be exercised.<sup>103</sup> Finally, Professor Lazarus argues that Justice Marshall "filled [*Flint Ridge*] with as much NEPA dicta favorable to environmentalists as he could muster, while keeping his majority," and intentionally injected the opinion with strong pro-environmental undercurrents.<sup>104</sup> The language that Lazarus is referring

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97. See *id.* at 1511–14 (describing Professor Lazarus' research methodology and ultimate conclusion).

98. *Id.* at 1540–41.

99. *Id.*

100. See *supra* Part II.B (observing that the circuits interpret section 102's language as a "limiting instruction rather than an unwavering command").

101. Lazarus, *supra* note 5, at 1540–41.

102. See *Goos*, 911 F.2d at 1295 ("Reasoning that the primary purpose of the impact statement is to aid agency decisionmaking, courts have indicated that nondiscretionary acts should be exempt from the requirement.").

103. See *supra* Part II.B ("[s]ince an agency undertaking a non-discretionary course of action cannot change its course no matter how compelling an EA or EIS is, these courts reason that NEPA is superfluous in the context of non-discretionary actions.").

104. Lazarus, *supra* note 5, at 1540.

to appears in the sections of *Flint Ridge* where Justice Marshall rejects the government's arguments for a broader result.<sup>105</sup>

### 3. Reconciling the Traditional View & the New View

So which interpretation of *Flint Ridge* is correct? The question is of enormous practical consequence because when the issue reaches the Supreme Court again, the Roberts Court's likely first step will be to scour *Flint Ridge* for guidance. Unfortunately, there does not appear to be a clear-cut answer. Professor Lazarus is certainly accurate in some respects, most clearly that Justice Marshall's decision to resolve the case on narrower grounds than the government preferred was a silent but significant victory for environmentalists.<sup>106</sup> And Lazarus' reading of the case is strongly supported by the Court's plain language and the additional primary sources that he cites (pool memoranda, oral argument transcripts, and bench memoranda).

But, on balance, Lazarus' analysis is hindered by two important shortcomings. Most significantly, he fails to account for the impact of Justice Marshall's refusal to foreclose the government's non-discretionary argument instead of simply rejecting it.<sup>107</sup> Lazarus even attempts to spin the Court's treatment of the non-discretionary question as evidence of *Flint Ridge*'s positive environmental bent when, in actuality, it paved the way for the circuits to develop the implied exemption doctrine.<sup>108</sup> Thus, despite Lazarus' possible intentions, *Flint Ridge* is the proximate cause of the expansive implied exemption doctrine to NEPA that exists in the status quo.

Professor Lazarus' first oversight is a corollary of his second; although his construction of the case is plausible, it is overly optimistic. Indeed, the federal judiciary's subsequent interpretations of *Flint Ridge* underscore just how out of sync Lazarus' reading of the case law is with the courts' actual behavior; every circuit to have considered the question not only expands the number of circumstances in which they will release an agency from NEPA, but also reaches conclusions flatly incongruous with Lazarus' interpretation

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105. *Id.* at 1540–41.

106. *See id.* at 1540–41. In the process of adopting a test that allows agencies to avoid complying with NEPA only where a “clear and unavoidable conflict” exists, Justice Marshall rejected several alternative theories that would have cabined NEPA far more than the test the Court settled on. Specifically, Justice Marshall foreclosed the government's arguments that federal approval of private actions is a “minor” federal role (making NEPA inapplicable entirely), that NEPA is inapposite to statutory schemes where no independent authority for environmental considerations exists (such as the Interstate Land Sales Full Disclosure Act), and that the administrative burdens of NEPA should mean the Court should construe NEPA narrowly.

107. *Flint Ridge*, 426 U.S. at 789–90.

108. Lazarus, *supra* note 5, at 1539.

of the case.<sup>109</sup> As discussed in Part II.B, the circuits almost uniformly read section 102's "fullest extent possible" language as words of limitation, not expansion. Furthermore, the circuits consider Justice Marshall's portrayal of NEPA as a decisional aid to be an instruction to limit NEPA only to discretionary actions, rather than requiring compliance where a course of action is predetermined.<sup>110</sup> And the circuit courts' arguments are just as plausible as Professor Lazarus's. That Justice Marshall interpreted section 102 at least partially as a limiting instruction can be gleaned from his observation that "section 102 recognizes [that in some circumstances], NEPA must give way."<sup>111</sup> Similarly, by explicitly declining to foreclose the government's contention that "NEPA is concerned only with introducing environmental considerations into the decisionmaking processes of agencies that have the ability to react to environmental consequences when taking action,"<sup>112</sup> it is entirely reasonable for the circuits to reason that Justice Marshall believed the argument has merit. Therefore, not only does Professor Lazarus view *Flint Ridge* through rose-colored glasses, but he also overlooks some strong evidence in support of a contrary construction of the case.

In the end, Professor Lazarus and numerous federal judges can reach contradictory conclusions about *Flint Ridge* precisely because the Court furnished few, if any, incontrovertible clues about its true view of NEPA or the non-discretionary excuse. But it is possible to draw at least a few relevant conclusions. First, if Professor Lazarus' reading of Justice Marshall's intent is correct—which it appears to be, given Justice Marshall's rejection of the government's more limiting arguments and the numerous instances of pro-environmental dicta<sup>113</sup>—the circuits, in adopting a broad non-discretionary excuse jurisprudence, appear to have read *Flint Ridge*'s pro-environmental gloss out of the case. Second, regardless of which approach is ultimately "true," there is ample support for either a pro- or anti-environmental reading of the case, rendering *Flint Ridge* of little precedential value.<sup>114</sup> Indeed, Professor Lazarus's conclusion that Justice Marshall drafted *Flint Ridge* to have "virtually no precedential effect" in order to avoid "sharply limit[ing] NEPA's reach" is a double-edged

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109. See *id.* at 1539–40 (noting Lazarus' view that *Flint Ridge* has a "positive environmental bent").

110. See *Goos*, 911 F.2d at 1295 (explaining that because "the primary purpose of the impact statement is to aid agency decisionmaking, courts have indicated that nondiscretionary acts should be exempt from the requirement").

111. *Flint Ridge*, 426 U.S. at 788.

112. *Id.* at 786.

113. *Id.* at 792.

114. Lazarus, *supra* note 5, at 1540.



sword.<sup>115</sup> The very fact that the case has little precedential value is exactly what allowed the circuits to functionally expand its holding in such a broad manner. Finally, Part II.B demonstrates that the federal judiciary has coalesced around a view of *Flint Ridge* that, if not “anti-environmental,” at least limits NEPA’s reach.<sup>116</sup>

*B. The Roberts Court Edges Towards the Circuits: Home Builders, Public Citizen, & Why Today’s Court Will Bless the Implied Exemption Doctrine*

This lack of conclusive evidence or explicit guidance from the *Flint Ridge* Court leaves open an important question: how will the Roberts Court treat the implied exemption doctrine if (and likely when) it makes its way to the Supreme Court? Because the Court can exercise a free hand, largely unconstrained by *Flint Ridge*, clues must be gleaned from elsewhere.

Two pieces of evidence strongly suggest that today’s Supreme Court would likely side with the circuits and uphold the implied exemption doctrine. First, the Court’s holdings and dicta in two cases—*Department of Transportation v. Public Citizen* and *National Association of Home Builders v. Defenders of Wildlife*—demonstrate the Justices’ tendency to release agencies from environmental statutory obligations when the action is non-discretionary.<sup>117</sup> Second, as alluded to in Part III.A, the implied exemption doctrine stands on a firm legal footing. In fact, the doctrine is a logical outgrowth of the “clear and unavoidable conflict” test from *Flint Ridge*.<sup>118</sup>

1. The Impact of *Public Citizen & Home Builders* on Implied Exemption

*Public Citizen* and *Home Builders* supply the strongest indications that the Roberts Court would cement the implied exemption doctrine if given the chance. In *Home Builders*, the Roberts Court held that the “no-jeopardy” agency consultation requirements of the Endangered Species Act are only activated when an agency’s action is non-discretionary.<sup>119</sup> After conducting the requisite analysis, the Court found that the statutory provision in question—the CWA’s nine-factor test for transferring permitting authority from the EPA to analogous state agencies—was in fact

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115. *Id.* at 1539–40.

116. *See supra* Part II.B (discussing agency abuse of the categorical exemption).

117. *See Nat’l Ass’n of Home Builders*, 551 U.S. at 666 (showing the Court’s position on releasing agency obligation for non-discretionary actions); *see also* *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 773 (2004) (releasing agencies from statutory obligations when action is non-discretionary).

118. *Flint Ridge*, 426 U.S. at 788.

119. *Nat’l Ass’n of Home Builders*, 551 U.S. at 673.

non-discretionary and, as a result, the ESA was inapplicable.<sup>120</sup> In a broad sense, this holding alone stands as substantial proof that the Roberts Court would view the circuit courts' approach with a favorable eye. Though *Home Builders* is an ESA case, its analysis and holding are not so narrow as to be confined to the facts of the case or even just to the ESA. Rather, the portion of the opinion that analyzes the inherent character of non-discretionary actions is far-reaching and applicable to other statutory schemes, like NEPA.<sup>121</sup> Thus, *Home Builders* seems to stand for the proposition that the Court is willing to release agencies from extraneous statutory obligations where the agency's action is non-discretionary, at least in the context of environmental laws such as the ESA and NEPA.

This expansive reading of *Home Builders* is bolstered not only by the broad language Justice Alito employed, but also by the way he fused his ESA analysis with cases and principles drawn from other environmental laws. Most importantly, when the *Home Builders* Court announced the "basic principle" of appraising agency discretion, it relied extensively on *Public Citizen*, a NEPA case.<sup>122</sup> By fusing *Public Citizen* (a NEPA case) and *Home Builders* (an ESA case) to craft a universal test for determining the discretionary nature of an agency action, the *Home Builders* Court acknowledged that the ESA is not the only statute, environmental or otherwise, that might be rendered superfluous by implicit congressional command.<sup>123</sup> Even under a narrow reading of *Home Builders*, the case at

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120. *See id.* at 664–72 (holding that because the CWA's nine-factor test gave the EPA no final transfer authority at the end of the analysis, the statutory provision dictated a non-discretionary course of action). In this section of the opinion, Justice Alito appears to subtly delineate between agency actions that require discretion on the front-end of the decisional process and those that require discretion on the back-end of the decisional process. In this instance, while the analysis of the nine factors of whether a state could properly assume CWA permitting authority required some exercise of discretion on the front-end (e.g., determining whether the state water authority actually meets the enumerated factors in the first place), the final decision was not discretionary. If the EPA found that the nine factors were satisfied, the CWA dictates that the agency "shall approve" the transfer of authority. In contrast, a back-end discretionary analysis would consider whether the agency's *final decision* was discretionary. For example, if the EPA could consider the nine factors, determine the state met them, but ultimately decide to retain authority over the water pollution program, such an action would be "discretionary." Justice Alito seemed to indicate that statutory directives with front-end discretion can still be properly termed non-discretionary as long as the back-end decision is non-discretionary.

121. *See id.* Justice Alito drew on a diverse array of sources to support his contention that the ESA no-jeopardy clause is only germane to discretionary agency actions, including *Chevron* deference, compulsory language in statutory instructions to agencies, and an agency's classification of its own action as discretionary or non-discretionary. None of these factors are CWA- or ESA-specific.

122. *Id.* at 667–68.

123. *See id.* at 667–68 ("We do not suggest that *Public Citizen* controls the outcome here... these cases involve agency action more directly related to environmental concerns than the FMCSA's truck safety regulations. But the basic principle announced in *Public Citizen*—that an agency cannot be considered the legal 'cause' of an action that it has no statutory discretion not to take—supports the reasonableness of the FWS' interpretation of § 7(a)(2) as reaching only discretionary agency actions.").

least significantly informs whether there is an implied exemption to NEPA, given that the *Home Builders* Court explicitly invoked a NEPA precedent (*Public Citizen*).<sup>124</sup> And the five Justices in the majority in *Home Builders* still sit on the Court today.

And even if circuits and federal agencies are reading NEPA and *Flint Ridge* incorrectly, it might not matter, as applying *Home Builders* to the agencies' interpretation of NEPA will likely result in *Chevron* deference controlling the disposition of the issue. In *Home Builders*, Justice Alito referenced *Chevron* several times, making the point that an agency's interpretation of its own statute must be accorded significant deference.<sup>125</sup> For Justice Alito, *Chevron* counseled in favor of deferring to an agency's characterization of its own action as discretionary or non-discretionary and to the larger question of whether certain statutory requirements could be triggered.<sup>126</sup> As long as the Court believes the question of implied exemption is ambiguous, which it seemed to believe in *Home Builders*,<sup>127</sup> *Chevron* step two controls, and an agency's interpretation need not be unassailably correct. As long as the interpretation is "permissible" or "reasonable," it will survive judicial scrutiny.<sup>128</sup> Therefore, if an agency defending an action as impliedly exempt from NEPA invokes *Chevron*, the

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124. *Id.* at 667–68.

125. *See Nat'l Ass'n of Home Builders*, 551 U.S. at 672 (stating that "an agency's interpretation of the meaning of its own regulations is entitled to deference 'unless plainly erroneous or inconsistent with the regulation.')." Much has been written on *Chevron*. Here, it is sufficient to note that it is a foundational administrative law case that controls when a court is reviewing an agency's interpretation of a statute it administers and the agency's decision has the force of law. Step one requires a court to determine whether Congress unambiguously spoke to the question at issue; if so, that construction controls. If not, step two asks the court to evaluate whether the agency's interpretation of the statute is "permissible" or "reasonable"; if the agency's interpretation survives this deferential standard, its interpretation stands.

126. *See Nat'l Ass'n of Home Builders*, 551 U.S. at 666 ("When [the ESA] is read this way, we are left with a fundamental ambiguity that is not resolved by the statutory text. An agency cannot simultaneously obey the differing mandates set forth in . . . the ESA and . . . the CWA, and consequently the statutory language—read in light of the canon against implied repeals—does not itself provide clear guidance as to which command must give way. In this situation, it is appropriate to look to the implementing agency's expert interpretation, which cabins the ESA's application to 'actions in which there is discretionary Federal involvement or control.' This reading harmonizes the statutes by applying [the ESA] to guide agencies' existing discretionary authority, but not reading it to override express statutory mandates.").

127. *See id.* Since Justice Alito cited *Chevron* favorably in the context of according deference to the Fish and Wildlife Service's interpretation of the ESA, it appeared as if he believed the agency was operating within the framework of step two, since step two is where the agency is accorded deference.

128. *See Chevron U.S.A. v. Natural Res. Def. Council*, 467 U.S. 837, 838 (1984) (holding the "Court need not conclude that agency's construction of statute which it administered was only one it permissibly could have adopted to uphold construction, or even reading the court would have reached if question initially had arisen in judicial proceeding").

reasonability of the arguments in favor of an implied exemption doctrine should be enough to convince the Court to adopt it.<sup>129</sup>

Therefore, at its core, *Home Builders* is an implied exemption case that holds high predictive value for how the Court will treat the implied exemption doctrine in the context of NEPA. In *Home Builders*, the CWA was impliedly exempt from the ESA's consultation requirements in non-discretionary situations; in the status quo, a range of statutes and congressional orders are exempt from NEPA's EIS and EA requirements in non-discretionary situations.<sup>130</sup> Since it is difficult, if not impossible, to distinguish *Home Builders* in such a way as to render it inapplicable to NEPA, the case provides a strong indication that the Roberts Court would bless the circuit courts' implied exemption doctrine in its current form.

## 2. Reading *Flint Ridge* as Legal Support for Implied Exemption

Although the Supreme Court's own statements are the best predictors of how it might view the implied exemption doctrine, the independent merit of the arguments the circuit courts advance in favor of the doctrine lend further support to the view that the Court will accept the circuits' take on this issue. As discussed at length in Part II.B, the circuit courts' reading of *Flint Ridge* and NEPA's text, while not without the flaws Professor Lazarus highlights, is probably correct.<sup>131</sup> Not only does the case law tend to confirm that the Supreme Court perceives NEPA as primarily a decisional tool (lending support to the circuits' contention that it is therefore superfluous when an agency's course of action is fixed), but section 102's language requiring NEPA be complied with "to the fullest extent possible" can also be properly read as a limiting instruction, especially in light of

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129. It is important to note the distinct nature of the *Chevron* questions that would be presented to the Court in such a scenario. The threshold question would be whether a specific statute or course of action is impliedly exempt from NEPA. Since this inquiry turns on statutory construction and interpretation of Congress' instructions to the agency (specifically, did Congress intend to give the agency discretion in undertaking the course of action?), *Chevron* will likely control the analysis (subject to *Mead*, discussion of which is not necessary here). As long as the Court adopts an analysis similar to its approach in *Home Builders*, this threshold question will likely be subjected to step two deference, and an agency's interpretation will be accorded significant deference and upheld as long as it is "permissible." Given the Court's proclivity in *Home Builders* to allow an agency to interpret a statutory requirement as impliedly exempt, the same result can be expected here, for reasons already explained. Question two then becomes whether the agency properly deemed its specific action as non-discretionary. An analogous analysis must be conducted, this time guided by Part II.A's explanation of what factors the Court uses to investigate the discretionary nature of an agency's action.

130. Although Justice Alito did not use the phrase "impliedly exempt" in *Home Builders*, his result is functionally indistinguishable from how the circuits use the phrase impliedly exempt when construing the analogous NEPA doctrine, as the previous discussion demonstrates.

131. See *supra* Part II.B (discussing at length the circuit courts' reading of *Flint Ridge* and NEPA's text).

Justice Marshall's qualification that this language means "NEPA must give way" in certain circumstances.<sup>132</sup>

There is even a credible argument, yet to be ventilated in the circuits or agencies, that implied exemption in its current form is simply the logical extension of the "clear and unavoidable conflict test" that Justice Marshall adopted in *Flint Ridge*.<sup>133</sup> Since *Flint Ridge* allowed agencies to skirt NEPA wherever there is an unavoidable conflict with *another statute*,<sup>134</sup> a party appealing this issue to the Supreme Court could argue that the non-discretionary excuse doctrine is just another shade of the clear and unavoidable conflict test. The conflict in these circumstances is with *Congress' command* that an action be carried out. Indeed, stripped to their basics, both the original *Flint Ridge* test and the implied exemption doctrine are cut from the same cloth. Since conflicting statutory directives are themselves congressional commands, drawing a defensible distinction between the original clear and unavoidable conflict test and its descendant test becomes a nearly impossible task.

In sum, the balance of the available evidence leaves little doubt as to how the Roberts Court would handle the NEPA implied exemption doctrine. Both external precedent like *Home Builders* and *Flint Ridge* itself strongly suggest that the Court would almost certainly accept this doctrine with open arms, likely relying on *Flint Ridge* as the basis for the new test.

#### IV. PLOTTING THE FUTURE OF IMPLIED EXEMPTION

Since the Roberts Court will likely ratify NEPA implied jurisprudence in its current form, the focus shifts to the executive branch. Implied exemption, as contemplated by the Roberts Court both in terms of the ESA and (probably) NEPA, grants agencies enormous power to bypass certain statutory devices because of *Chevron's* long shadow in administrative law.<sup>135</sup> Part IV begins by considering two important ancillary questions raised by the forthcoming expansion of implied exemption: what is a "non-discretionary" agency action and what is the scope of this legal theory? This Part then investigates how a robust implied exemption doctrine impacts agency behavior and considers modifications to the doctrine that would more properly balance agency and court incentives.

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132. See *supra* Part II (undertaking a more thorough analysis of these points).

133. *Flint Ridge*, 426 U.S. at 788.

134. *Id.*

135. See Evan J. Criddle, *Chevron's Consensus*, 88 B. U. L. REV. 1271, 1277 (2008) (noting the *Chevron* decision cast a long shadow over federal statutory interpretation).

### A. Non-Discretionary Agency Actions

The notion of non-discretionary agency action has been articulated by both agencies and courts. Both perspectives will be analyzed here.

#### 1. The Agency View

A recent Army Corps of Engineers (“Corps”) memorandum serves as both a useful starting point for understanding the distinction between non-discretionary and discretionary agency actions and as a signal of the importance of this issue to environmental decisionmakers. On June 1, 2013, the chief counsel to the Corps issued a guidance document to all Corps counsel providing clarification of which Corps actions trigger the ESA’s section seven consultation requirements.<sup>136</sup> As will be discussed *infra*, ESA section seven consultation duties are only triggered when an agency’s action is discretionary, per the Supreme Court’s directive in *Home Builders*.<sup>137</sup> Since it appears that the non-discretionary/discretionary label will carry the same classification across different statutory schemes,<sup>138</sup> the Corps’ ESA analysis likely also illuminates which actions it thinks are exempt from NEPA. If the Corps thinks an action is non-discretionary for the purposes of the ESA, the Corps likely also views it as non-discretionary for the purposes of NEPA.

In the memo, the chief counsel isolated all Corps maintenance of civil works structures (dams, locks, etc.) as non-discretionary actions, and thus outside the ambit of ESA section seven.<sup>139</sup> Reasoning that the “responsibility to maintain civil works structures so they continue to serve their congressionally authorized purposes is inherent in the authority to construct them,” the chief counsel contended that continual maintenance and repair of civil works structures can be logically bootstrapped to the

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136. Corps Memo, *supra* note 11, at 2.

137. *Nat’l Ass’n of Home Builders*, 551 U.S. at 669–70.

138. The law of agency non-discretionary action is worthy of its own article, but for the purposes of this paper, it is sufficient to briefly note the three clues the case law supplies as to why the same label likely carries the across different statutes. First, when the *Home Builders* Court refined the “basic principle” of evaluating agency discretion, it drew heavily from *Dep’t of Treasury v. Public Citizen*, a NEPA-based case. As a result, the Court fused an ESA case (*Home Builders*) with a NEPA case (*Public Citizen*) to generate a universal test for determining the discretionary character of an action. Second, the *Home Builders* Court broadly merged the discussion of the CWA and the ESA, suggesting each statute does not get a separate non-discretionary analysis. Finally, most circuits tackling the same issue tend to apply the same designation across statutes. See *Babbitt*, 65 F.3d at 1512 (same designation across NEPA and ESA). The *Babbitt* Court noted that “[i]f anything, [the] case law is more forceful in excusing nondiscretionary [federal] action[s] from the operation of NEPA,” but nonetheless concluded that “to a large extent” resolution of the ESA claim “dictates resolution of the NEPA claim.” *Id.*

139. Corps Memo, *supra* note 11, at 3.

more obvious non-discretionary congressional command to construct the civil work in the first place.<sup>140</sup> Although the memorandum did add the caveat that the maintenance actions *themselves*, as opposed to the actual *result* of the maintenance (e.g., continued existence of a large civil work) might be discretionary,<sup>141</sup> it appears that the Corps views a potentially wide range of its actions, including most large maintenance and new construction projects, as non-discretionary and therefore properly pardoned from certain statutory obligations such as NEPA and the ESA.

## 2. The Judicial View

But agency guidance is only part of the story, as the Supreme Court appears to have provided several hints as to what characterizes a non-discretionary agency action. *Home Builders* provides the most guidance in this area.<sup>142</sup> In *Home Builders*, Justice Alito authored an opinion holding that when the EPA transfers water pollution control to an analogous state authority (per the CWA), it need not comply with a provision of the ESA requiring agencies to consult with the Fish and Wildlife Service in situations where an agency decision could jeopardize endangered or threatened species, even if the action may threaten some wildlife covered by the ESA.<sup>143</sup> To reach this result, the Court primarily relied on the argument that the ESA's no-jeopardy consultation duty is only triggered when an agency's action is discretionary; therefore, the Court was forced to drill down on the concept of discretionary and non-discretionary agency actions.<sup>144</sup>

Foundationally, the Court noted that “agency discretion presumes that an agency can exercise ‘judgment’ in connection with a particular action” and thus “an agency cannot be considered the legal ‘cause’ of an action that it has no statutory discretion not to take.”<sup>145</sup> And an action need not be purely ministerial to be classified as discretionary.<sup>146</sup> In the Court's eyes, a non-discretionary agency action may still require an agency to “exercise some judgment,” as long as the decision does not involve the agency

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140. *Id.* at 2–3.

141. *Id.* at 3.

142. *See Nat'l Ass'n of Home Builders*, 551 U.S. at 669 (describing non-discretionary actions as “actions that an agency is required by statute to undertake”).

143. *Id.* at 670.

144. *Id.* at 669–70.

145. *Id.* at 667–68.

146. *See id.* (noting as the mandatory language of § 402(b) itself illustrates, not every action authorized, funded, or carried out by a federal agency is a product of that agency's exercise of discretion).

evaluating “underlying standards or their effect.”<sup>147</sup> For instance, EPA’s decision in *Home Builders* required the EPA Administrator to consider nine factors and exercise his “judgment,” yet the Court classified the action as non-discretionary.<sup>148</sup> Finally, Justice Alito emphasized the fact that the relevant agency regulations described the action in question as discretionary, so *Chevron* deference attached to the agency’s interpretation of its own action.<sup>149</sup> Therefore, it seems that the Court is willing to afford some deference to an agency’s own characterization of its action in the name of *Chevron*.

NEPA implied exemption decisions from circuit courts are also instructive as to what courts believe constitute non-discretionary actions. As *Home Builders*’ guidance suggests, the range of actions the circuits find non-discretionary for purposes of NEPA is broad and includes federal land acquisitions,<sup>150</sup> wilderness trail maintenance decisions,<sup>151</sup> and airport policy.<sup>152</sup> Even agency actions that might seem to be squarely within NEPA’s sphere, such as the Department of Interior’s approval of a logging road construction plan in federal forestland, can be excused from NEPA if the agency can successfully couch the decision as a non-discretionary one.<sup>153</sup>

The end result, from both the agency and judicial perspectives, is a potentially broad class of agency actions that may release an agency from its NEPA obligations. Construction of major bridges and dams, extensive maintenance of civil works, and even actions with discretionary elements, all of which can significantly impact the environment, may be considered non-discretionary and outside the breadth of NEPA.

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147. *Id.* at 672.

148. *Id.* at 663–65.

149. *Id.* at 666–67.

150. *See Sac & Fox Nation*, 240 F.3d at 1262–63 (holding federal land acquisition is non-discretionary), *superseded by statute*, 2002 Dep’t of the Interior and Related Agencies Appropriations Act, Pub.L. No. 107–63, § 134, 115 Stat. 414.

151. *See Hodel*, 848 F.2d at 1096 (holding wilderness trail maintenance policy is non-discretionary), *overruled by* *Village of Los Ranchos de Albuquerque v. Marsh*, 956 F.2d 970 (10th Cir. 1992).

152. *See, e.g., Minetta*, 262 F.3d at 183–84 (holding certain airport landing policy decisions are non-discretionary); *American Airlines*, 202 F.3d at 813 (holding certain airport landing policy decisions are non-discretionary).

153. *See Babbitt*, 65 F.3d at 1512 (holding that the Department of Interior’s decision to approve a logging road’s construction on Bureau of Land Management forestland did not trigger NEPA’s requirements because “case law excus[es] nondiscretionary agency action or agency inaction from the operation of NEPA”).



*B. Implied Exemption's Impact on Agency Behavior & Policy Considerations*

As the Corps memorandum illustrates, agencies are realizing the potential power of characterizing their actions as non-discretionary.<sup>154</sup> If the Corps memorandum withstands judicial review—a likely outcome, given the analysis in Part III<sup>155</sup>—a wide array of new construction, regular maintenance on civil works, and operations on public lands would escape NEPA and the ESA. In a practical sense, this means that the agency gets to avoid preparation of a time-consuming and expensive EIS (under NEPA) and sidestep a consultation process with the Fish and Wildlife Service that could risk shutting down or delaying a project's implementation (under the ESA). And since such determinations enjoy *Chevron* deference, agencies can exercise a fairly free hand in making these decisions.<sup>156</sup>

These legal rules might appear to create the potential for agencies to run amok, classifying as many actions as possible as non-discretionary to avoid NEPA's requirements, with little prospect of effective judicial review. However, upon closer inspection, there are a variety of competing agency considerations that undermine this seemingly clear prediction. Implied exemption actually affects agency behavior in a variety of distinct ways.

The incentives and rationales pushing agencies toward liberal use of the NEPA implied exemption device are fairly clear. Efficiency gains are probably the biggest inducement for agencies to label large swaths of their actions non-discretionary.<sup>157</sup> By avoiding the EA and EIS processes, agencies can significantly streamline and expedite their decisionmaking. Completing projects expeditiously carries a corollary benefit too; agencies are able to comply with congressional commands more effectively.<sup>158</sup> If Congress truly intended for an action to be non-discretionary, engaging in NEPA review lessens the chances of agencies being able to comply with congressional directions in a straightforward and diligent manner. Invoking implied exemption also allows agencies to sidestep tricky environmental

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154. See Corps Memo, *supra* note 11, at 1 (illustrating the Corps' guidelines for determining discretionary versus non-discretionary actions).

155. See *supra* Part III (discussing implied exemptions in the Supreme Court).

156. *Chevron*, 467 U.S. at 843. Of course, if an agency attempted to classify an "unambiguously" discretionary action as non-discretionary or claim that NEPA is impliedly exempt where it is "unambiguously" applicable, a court could step in and invalidate the determination under *Chevron* step one.

157. Moriarty, *supra* note 43, at 2322.

158. See *Minetta*, 262 F.3d at 182–83 (discussing the difficulties of complying with both agency and congressional demands).

considerations that may be wholly foreign to a specific project, the agency's expertise, or Congress's intent in authorizing the agency action.<sup>159</sup> In this way, NEPA implied exemption gives agencies the ability to eliminate potentially extraneous considerations from their decisionmaking.

There are also there policy arguments and agency considerations that might prevent development of an overly broad NEPA implied exemption doctrine. From a policy perspective, implied exemption significantly lessens the prospect of rigorous judicial review, which risks transferring too much power from Congress to the Executive.<sup>160</sup> And if agencies start over-classifying their actions as non-discretionary, environmental considerations could be pushed entirely out of the decisional spaces where Congress intended for them to apply.<sup>161</sup> Fortunately, agencies are unlikely to go overboard with this new power because, by declaring an action to be non-discretionary, they lose control over the final implementation decision. Although they may retain some discretion on the front-end, like *how* to undertake a project, they give up final decisionmaking authority over *whether* to undertake a project.<sup>162</sup> Thus, a significant countervailing consideration is an agency's loss of control over a project's final disposition.

Ultimately, agencies deciding whether or not to label an action non-discretionary in order to skirt NEPA are faced with a choice: is circumventing NEPA, and its attendant procedural requirements and litigation potential, worth losing final decisional control over a project? In the end, as the Corps memorandum in Part IV.A intimates, the agency calculus seems to tilt in favor of using the non-discretionary tag in a broad range of circumstances.<sup>163</sup> Though there are obvious downsides, they do not seem to outweigh the benefits of keeping NEPA (or in the case of the Corps memo, the ESA) out of the picture from the agency's perspective.

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159. *See id.* at 178 (concluding that environmental factors cannot, and will not, affect an agency's decision in a required action).

160. That is, Congress, speaking through NEPA, directed agencies to issue EAs and if necessary, an EIS. If the courts allow agencies to abdicate this responsibility without sufficient judicial checks, Congress's instructions risk being usurped by executive branch decisionmakers.

161. Moriarty, *supra* note 43, at 2322.

162. *See generally* Corps Memo, *supra* note 11 (discussing the distinction between front-end and back-end discretion).

163. *Id.* at 4.

*C. Improving Implied Exemption: Realigning Incentives for Courts & Agencies*

If NEPA implied exemption is here to stay, how can it be modified to more properly realign the incentives of agencies and courts? There are two potential adjustments, one legislative and one judicial, that would alleviate many of the problems plaguing the current doctrine.

Congressional action is the most preferable, albeit an unlikely, option. At least two possibilities are available to Congress: (1) amend NEPA itself to resolve the ambiguity this doctrine attempts to address or (2) include a statement in each statutory scheme concerning NEPA's applicability. The latter option makes little sense for obvious reasons—chiefly the difficulty of including such a statement in each potentially pertinent legislative package.<sup>164</sup> Unfortunately, the former option, while it would be the best solution to resolve NEPA's lack of clarity vis-à-vis other statutes, is highly unlikely to gain any traction in Congress.<sup>165</sup> The benefits of such a resolution are clear. By inserting explicit language concerning when NEPA can and cannot be preempted, Congress's intent becomes abundantly clear, and the judiciary is no longer forced to offer its best guess. But, like most significant American environmental statutes, NEPA has not been substantially amended in several decades.<sup>166</sup> In fact, some members of Congress probably even *favor* a regulatory environment where environmental laws lose prominence and become outdated.<sup>167</sup> In any event, since the legislature displays little appetite for rehabilitating the entrenched environmental framework, any chance of real reform of the NEPA implied exemption doctrine will need to originate in the courts.

When the Supreme Court passes on the validity of this doctrine, it should reappraise its current approach to implied exemption cases. Specifically, the Court should tweak the way it applies *Chevron* to these cases by making clear that it will conduct a full step one analysis before shifting to step two. *Home Builders* seems to suggest that the Court will default to step two, the highest level of deference in the administrative

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164. Paul S. Weiland, *Amending the National Environmental Policy Act: Federal Environmental Protection in the Twenty-First Century*, 12 J. LAND USE & ENVTL. L. 275, 282, 294 (1997).

165. *Id.* at 294, 297.

166. See Dave Owen, *An Important Stormwater Case and it's Not the One You're Thinking Of*, ENVTL. LAW PROF. BLOG (Jan. 9, 2013) [http://lawprofessors.typepad.com/environmental\\_law/2013/01/an-important-stormwater-case-and-its-not-the-one-youre-thinking-of.html](http://lawprofessors.typepad.com/environmental_law/2013/01/an-important-stormwater-case-and-its-not-the-one-youre-thinking-of.html) (noting that "constructive amendments to federal environmental laws" are not a "possibility" in the status quo).

167. See Scott W. Reed, *No Need to "Improve" NEPA*, 48 ADVOCATE (IDAHO) 20, 21–22 (2005) (Westlaw) (illustrating Congress's preference for outdated environmental laws).

jurisprudential arena, when considering both an agency's contention that an environmental statute conflicts with another statutory scheme and that an action is non-discretionary.<sup>168</sup> Such an approach improperly abdicates the judiciary's task of rigorous judicial review by bypassing step one (asking whether the conflict or classification is ambiguous in the face of congressional instructions).<sup>169</sup> The result is a doctrine that allows agencies to pick and choose which environmental statutes they want to comply with, and when.

To alleviate this imbalance in power between agencies on one hand and the legislature and courts on the other, the Supreme Court should make clear that an agency's implied exemption arguments will be subject to the full *Chevron* analysis. This mandate would allow the judiciary to conduct an unhindered inquiry into whether Congress clearly intended for NEPA or the ESA to factor into an agency's decisionmaking process, instead of ceding that decision to the agency. Such an approach would still allow courts to exercise deference where appropriate, namely when Congress' instructions are objectively vague, either in terms of the discretionary nature of an action or whether the environmental statute is supposed to apply. It also ensures that agencies do not get a free pass on either inquiry and must comply with NEPA, the ESA, and other environmental statutes to the "fullest extent possible."

#### CONCLUSION: THE SPREAD OF NON-DISCRETION & IMPLIED EXEMPTION

For almost 40 years, the circuit courts have created a common law doctrine that has slowly cabined NEPA in a wide variety of circumstances.<sup>170</sup> To date, the NEPA implied exemption doctrine has received scant scholarly attention and surprisingly little discussion among practitioners. Given the doctrine's significant impact on how NEPA is

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168. See *Nat'l Ass'n of Home Builders*, 551 U.S. at 666 ("An agency cannot simultaneously obey the differing mandates of ESA § 7(a)(2) and CWA § 402(b), and consequently the statutory language—read in light of the canon against implied repeals—does not itself provide clear guidance as to which command must give way. Thus, it is appropriate to look to the implementing agency's expert interpretation, which harmonizes the statutes by applying § 7(a)(2) to guide agencies' existing discretionary authority, but not reading it to override express statutory mandates. This interpretation is reasonable in light of the statute's text and the overall statutory scheme and is therefore entitled to *Chevron* deference.").

169. See generally Marianne Kunz Shanor, *The Supreme Court's Impingement of Chevron's Two Step*; *Entergy Corp. v. Riverkeeper, Inc.*, 129 S.Ct. 1498 (2009), 10 WYO. L. REV. 137 (2010) (discussing the Court's approach to the *Chevron* two part test).

170. See *supra* Part II.B (exploring the circuit courts' interpretation of non-discretionary NEPA excuses).

interpreted and applied, it is vitally important that this doctrine receive more robust scrutiny.

While it seems clear that the Roberts Court is positioned to endorse the implied exemption doctrine,<sup>171</sup> this assumption should not end the inquiry. If the doctrine is set to become a permanent feature of NEPA, the Court should change the way it treats agency pronouncements on whether NEPA conflicts with another statutory directive and whether an agency's action is properly deemed non-discretionary. Restoration of full judicial review is especially important given the trend toward expanding the applicability of the implied exemption doctrine.<sup>172</sup> The NEPA implied exemption mirrors its ESA counterpart, and it is not hard to see this approach to statutory construction spreading to other environmental statutes and beyond. Before this doctrine becomes irrevocably entrenched in the common law, it should be refined to take full account of agency incentives, congressional directions, and judicial duties.

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171. *Nat'l Ass'n of Home Builders*, 551 U.S. at 667–70.

172. Taunya L. McLarty, *The Applicability of NEPA to NAFTA: Law, Politics, or Economics?*, 19 MD. J. INT'L L. & TRADE 121, 121 (1995).

**CATCHING LESS FISH WITH MORE HONEY: INTRODUCING  
INCENTIVES FOR SUSTAINABLE INTERNATIONAL FISHING  
COMPLIANCE**

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*By Lacey Curtis\**

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## INTRODUCTION

Two-thousand twelve marked the 20th anniversary of the Newfoundland cod fishery collapse,<sup>1</sup> the most well-known fishery disaster in the past century. The Newfoundland cod fishery collapse refers to the fishing moratorium that the Canadian government placed on the North Atlantic cod in 1992.<sup>2</sup> Beginning in the 1950s, new fishing technology allowed both Canadian and foreign vessels to harvest unprecedented amounts of cod from the Newfoundland stock.<sup>3</sup> The capacity to harvest increased exponentially in the 1970s and 1980s with the introduction of instruments like sonar detection and trawlers, which “vacuumed” cod from the sea.<sup>4</sup> Despite increased international fishing regulation in the 1980s, member states could defect from the fishing quotas set by regional management bodies, further exacerbating the problem.<sup>5</sup> By 1992, the catch had collapsed and the Canadian government placed a moratorium on the stock.<sup>6</sup> Some 35,000 fishers and other workers were out of a job overnight.<sup>7</sup> Despite initial hopes that the stock would rebound after a couple years, the moratorium remains in place more than 20 years later.<sup>8</sup>

Even after two decades of increased attention and louder environmentalist voices, the world’s fisheries remain in peril.<sup>9</sup> The

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1. BONNIE J. MCCAY & ALAN CHRISTOPHER FINLAYSON, *THE POLITICAL ECOLOGY OF CRISIS AND INSTITUTIONAL CHANGE: THE CASE OF THE NORTHERN COD* (1995), *available at* <http://arcticcircle.uconn.edu/NatResources/cod/mckay.html>.

2. *Id.*

3. *Id.*

4. *Id.*

5. *Id.*

6. *Id.*

7. *Id.*

8. Janet Thomson & Manmeet Ahluwalia, *Remembering the Mighty Cod Fishery 20 years After Moratorium*, CBC News (June 29, 2012), <http://www.cbc.ca/news/canada/remembering-the-mighty-cod-fishery-20-years-after-moratorium-1.1214172>.

9. FOOD & AGRIC. ORG. OF THE UNITED NATIONS, *STATE OF THE WORLD FISHERIES AND AQUACULTURE 58* (2012), *available at* <http://www.fao.org/docrep/016/i2727e/i2727e01.pdf> [hereinafter FOA STATE OF THE WORLD].

Food and Agriculture Organization of the United Nations estimates that 57.4% of fisheries are fully exploited and 29.9% of stocks are over exploited.<sup>10</sup> Recent closures, like the Japanese anchovy stock in the Bay of Biscay,<sup>11</sup> demonstrate that under the current international regime, we are still in danger of repeating the mistakes that led to the 1992 collapse.

Rather than following the current ineffective paradigm of enforcement, the international community needs to start providing incentives to enforce sustainable fishing quotas and practices; this method will allow states to overcome political and economic obstacles and make a rational decision in favor of sustainable fishing compliance.

Part I of this article begins with a brief overview of the status of the world's fisheries. Part II then summarizes the current regime that regulates and enforces international fishing standards. This includes major conventions and treaties, international governmental organizations, and regional management bodies. Next, Part III analyzes why the current regime is ineffective, focusing on its inability to successfully enforce penalty provisions, the economic and political disincentives of member states to practice and enforce sustainable fishing practices, and the negative effect of domestic policies that undermine international regulatory efforts. These issues are identified in the context of domestic fishing subsidies; illegal, unreported, and unregulated fishing; and reliance on flag state enforcement. Finally, Part IV proposes an alternative enforcement strategy, which introduces incentives for states to comply with and create sustainable fishing practices. It demonstrates this strategy with a case study where the United States provides deforestation program

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10. Fully exploited stocks refer to those that produce at or close to the maximum sustainable production. There is no room for further expansion, and if further exploited they are at risk of decline. *Id.* at 53. Over exploited stocks refer to those that are fished beyond their ecological and biological potential. *Id.* They must be carefully managed to rebuild stock supplies. *Id.*

11. The Bay of Biscay Japanese anchovy stock was closed from 2005 to 2009 after the stock experienced a collapse. *Bay of Biscay Anchovy Quota Reduce by 17%*, UNDERCURRENT NEWS (July 9, 2013), <http://www.undercurrentnews.com/2013/07/09/bay-of-biscay-anchovy-quota-reduced-by-17/>.



support to Panama in exchange for greater international fisheries regulation compliance.

### I. STATE OF THE WORLD'S FISHERIES

In 2013, the United States became the top importer of fish and fishery products, valued at \$19 billion.<sup>12</sup> This is just a portion of the preliminary estimates of the value of fish imports in 2013, which is around \$137 billion.<sup>13</sup> Indeed, the fisheries sector is the fastest growing employer in agriculture.<sup>14</sup> The primary sector provides income and livelihoods to some 54.8 million people, while an additional 660–820 million (including dependents) rely on ancillary activities like boat construction and processing for jobs.<sup>15</sup> In total, 10–12% of the world's population relies on the fisheries sector for work.<sup>16</sup> Over 100 million of these individuals are among the world's poorest people.<sup>17</sup>

Not only does the fishery industry represent a major economic endeavor, fish also provide more than half the world's population with 15% of its animal protein intake.<sup>18</sup> Four of the 30 countries most dependent on fish as a source of protein are developing nations.<sup>19</sup> As consumption of fish increases, harvested fish are now smaller and more difficult to find and catch.<sup>20</sup>

Since the first Food and Agriculture Organization ("FAO") assessment, the proportion of non-fully exploited stocks has consistently decreased.<sup>21</sup> About one-third of the top ten capture fishery stocks are over exploited, with the rest fully exploited.<sup>22</sup> The

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12. FOOD & AGRIC. ORG. OF THE UNITED NATIONS, FACT SHEET: INTERNATIONAL TRADE AND WORLD FISHERIES 1 (2014).

13. *Id.*

14. FAO STATE OF THE WORLD, *supra* note 9, at 41.

15. *Id.*

16. *Id.*

17. DAVID HUNTER ET AL., INTERNATIONAL ENVIRONMENTAL LAW AND POLICY 762 (Robert C. Clark et al. eds., 4th ed. 2011).

18. FOOD & AGRIC. ORG. OF THE UNITED NATIONS, *supra* note 12.

19. HUNTER, *supra* note 17, at 762.

20. *Id.* at 761.

21. FAO STATE OF THE WORLD, *supra* note 9, at 11.

22. *Id.* at 12.

same holds true for the seven principal tuna species, with one-third over exploited and over one-third fully exploited.<sup>23</sup> In its most recent report, the FAO expressed concern that the situation for tuna may deteriorate further unless there are significant improvements in management because of substantial demand and the overcapacity of nations' fishing fleets.<sup>24</sup>

To illustrate the impact that technology, demand, and overcapacity have on the globe's fisheries, consider the anecdote that trawlers near British Columbia recently fished their annual quota of 847 tons of herring after only eight minutes.<sup>25</sup> Between 1970 and 1990, the global fishing fleet doubled in size, excluding the millions of small fishing boats not measured in official sources.<sup>26</sup> The FAO estimates that the fishing fleet has more than doubled the capacity to harvest at maximum sustainable yield levels.<sup>27</sup> Were Iceland and the European Union to cut their fleets by 40%, they could still harvest the same number of fish.<sup>28</sup>

As the FAO writes:

The declining global catch over the last few years together with the increased percentage of over-exploited fish stocks and the decreased proportion of non-fully exploited species around the world convey a strong message—the state of world marine fisheries is worsening and has had a negative impact on fishery production.<sup>29</sup>

The FAO goes on to note that the situation is more concerning for fishery resources on the high seas that are governed by international law.<sup>30</sup> Despite oversight by international organizations like the FAO and strong warnings from conservation failures like the North Atlantic cod moratorium, international law has failed to remedy the

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23. *Id.*

24. *Id.*

25. HUNTER, *supra* note 17, at 763.

26. *Id.*

27. *Id.*

28. *Id.* at 763–64.

29. FOA STATE OF THE WORLD, *supra* note 9, at 59.

30. *Id.*

precarious situation of the world's fisheries. To understand why the current legal regime is ineffective in this purpose, a brief overview of the international fisheries legal framework is required.

## II. INTERNATIONAL FISHERIES LEGAL FRAMEWORK

For much of recorded history, freedom of capture or freedom of the seas was the dominant legal framework that governed the oceans and its natural resources, such as fisheries.<sup>31</sup> Grotius' natural law theory advocated a "global commons" idea, where no one nation could claim ownership of the high seas' resources.<sup>32</sup> Fish belonged to whichever nation caught them first. This concept of rights prevailed until the 1958 Law of the Sea Conventions.<sup>33</sup>

The advent of new technology in the 1950s, combined with a freedom of capture mentality, began to strain the oceans' natural resources like never before.<sup>34</sup> Concerns about over exploitation during this decade culminated in the 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas.<sup>35</sup> The Convention established general conservation duties such as interstate

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31. Emily Larocque, *The Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean: Can Tuna Promote Development of Pacific Island Nations?*, 4 ASIAN-PAC. L. & POL'Y J. 82, 90 (2003).

32. HUGO GROTIUS, *THE FREEDOM OF THE SEAS* 77 (James Brown Scott ed., Ralph van Deman Magoffin trans., 1916), available at [http://foll.s3.amazonaws.com/titles/552/Grotius\\_0049\\_EBk\\_v6.0.pdf](http://foll.s3.amazonaws.com/titles/552/Grotius_0049_EBk_v6.0.pdf).

33. 1958 Geneva Conventions on the Law of the Sea include the Convention on Fishing and Conservation of the Living Resources of the High Seas, Convention on the Territorial Sea and Contiguous Zone, Convention on the High Seas, Convention on the Continental Shelf, and the Optional Protocol of Signature concerning the Compulsory Settlement of Disputes. Tullio Treves, *Audiovisual Library of International Law: 1958 Geneva Conventions on the Law of the Sea*, UNITED NATIONS, <http://legal.un.org/avl/ha/gclos/gclos.html> (last visited Nov. 9, 2014).

34. Larocque, *supra* note 31, at 90; D.H. Steele et al., *The Managed Commercial Annihilation of Northern Cod*, 8 Nfld. STUDIES 34, 38 (1992).

35. Christopher J. Carr & Harry N. Scheiber, *Dealing with a Resource Crisis: Regulatory Regimes for Managing the World's Marine Fisheries*, 21 STAN. ENVTL. L.J. 45, 51 (2002).

cooperation<sup>36</sup> to achieve the optimum sustainable yield.<sup>37</sup> Yet, it was not until the passage of the 1982 United Nations Convention on the Law of the Sea (“UNCLOS”) that a comprehensive international regulatory scheme for fisheries was established.<sup>38</sup>

*A. United Nations Convention on the Law of the Sea*

UNCLOS revolutionized states’ claims to the oceans’ resources. By establishing an Exclusive Economic Zone (“EEZ”) of 200 nautical miles,<sup>39</sup> UNCLOS placed up to 90% of the oceans’ fish resources within the jurisdiction of coastal states.<sup>40</sup> UNCLOS Articles 61 through 73 deal with living natural resources, including conservation and exploitation of fish species.<sup>41</sup>

Articles 61 and 62 direct nations to determine catches based on maximum sustainable yield and optimum utilization.<sup>42</sup> However, these terms are not explicitly defined and, in some instances, have been used by nations to justify controversial activities like commercial whaling.<sup>43</sup> In addition, the Convention exhibits a bias in favor of economic exploitation rather than non-consumptive management objectives.<sup>44</sup> However, UNCLOS does place an obligation “to ensure through proper conservation and management measures that the maintenance of the living resources in the exclusive economic zone is not endangered by over-exploitation.”<sup>45</sup>

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36. Convention on Fishing and Conservation of the Living Resources of the High Seas art. 1, para. 2, April 29, 1958, 559 U.N.T.S. 285.

37. *Id.* at art. 2.

38. Zachary Tyler, *Saving Fisheries on the High Seas: The Use of Trade Sanctions to Force Compliance with Multilateral Fisheries Agreements*, 20 TUL. ENVTL. L.J. 43, 52 (2006).

39. United Nations Convention on the Law of the Sea art. 57, (Dec. 10, 1982) 1833 U.N.T.S. 397 [hereinafter UNCLOS].

40. Carr & Scheiber, *supra* note 35, at 52.

41. UNCLOS, *supra* note 39, at arts. 61–73.

42. *Id.* at arts. 61–62.

43. EUGENE H. BUCK, CONG. RESEARCH SERV., RL32185, U.N. CONVENTION ON THE LAW OF THE SEA: LIVING RESOURCES PROVISION 3 (2011).

44. *Id.*

45. UNCLOS, *supra* note 39, at art. 61, para. 2.

Conservation decisions within an EEZ are not subject to compulsory dispute settlement,<sup>46</sup> but UNCLOS provides for mandatory dispute resolution in a tribunal or other approved forum for other conflicts under the Convention.<sup>47</sup>

While UNCLOS briefly deals with migratory or straddling stocks, gaps in coverage of these special stocks were dealt with in the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (“Fish Stocks Agreement”).<sup>48</sup>

### B. UN Fish Stocks Agreement

As identified in Agenda 21 of the UN Conference on Environment and Development, the gaps left in migratory fisheries regulation under UNCLOS required state action.<sup>49</sup> Among those gaps, Agenda 21 recognized that “there are problems of unregulated fishing, over-capitalization, excessive fleet size, vessel reflagging to escape controls, insufficiently selective gear, unreliable databases, and lack of sufficient cooperation among countries.”<sup>50</sup> The Fish Stocks Agreement entered into force in 2001 and regulates highly migratory fish stocks, meaning those that travel between the high seas and areas subject to national jurisdictions.<sup>51</sup> As of early 2014, 81

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46. UNCLOS, *supra* note 39, at art. 297, para. 3, sub. a.

47. Tyler, *supra* note 38, at 54.

48. Jacqueline Peel, *A Paper Umbrella Which Dissolves in the Rain? The Future for Resolving Fisheries Disputes Under UNCLOS in the Aftermath of the Southern Bluefin Tuna Arbitration*, 3 MELB. J. INT’L L. 53, 54 (2002) (also known as the “Straddling Stocks Agreement”).

49. United Nations Resumed Review Conference on the Agreement Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, New York City, U.S.A., May 24–28, 2010, *Fish Stocks Agreement: Overview of what the Agreement Says and its Impact*, 1, U.N. Doc. DPI/2556 B, available at [http://www.un.org/depts/los/convention\\_agreements/reviewconf/FishStocks\\_EN\\_B.pdf](http://www.un.org/depts/los/convention_agreements/reviewconf/FishStocks_EN_B.pdf).

50. *Id.*

51. *Id.*

nations have ratified the Fish Stocks Agreement.<sup>52</sup> This includes nearly all the major fishing nations such as the United States, Japan, Russia, and the European Union.<sup>53</sup> Most of all, the Fish Stocks Agreement hoped to create a framework for state cooperation between coastal states and high seas fishing states in migratory stock conservation.<sup>54</sup>

Signatories to the Fish Stocks Agreement agree to a variety of conservation-based obligations for migratory species.<sup>55</sup> Notably, the treaty adopts the precautionary approach in the context of conservation and exploitation of fish resources.<sup>56</sup> The precautionary approach is the idea that in the face of scientific uncertainty, measures exercising caution in favor of environmental protection should be applied.<sup>57</sup> States should promote long-term sustainability in utilization decisions, use the best scientific evidence available, and adopt an ecosystem approach to conservation.<sup>58</sup>

In addition, the Fish Stocks Agreement designates Regional Fishery Management Organizations (“RFMOs”) as implementing

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52. Division for Ocean Affairs and the Law of the Sea, United Nations, Chronological Lists of Ratifications of, Accessions and Successions to the Convention and the Related Agreements as at 29 October 2013 (2013), [http://www.un.org/depts/los/reference\\_files/chronological\\_lists\\_of\\_ratifications.htm#](http://www.un.org/depts/los/reference_files/chronological_lists_of_ratifications.htm#).

53. *Id.* One notable exception is China, which has not ratified the Agreement.

54. *See generally id.*

55. Migratory species are those in areas “beyond those of national jurisdiction.” United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, New York City, U.S.A., July 24–Aug. 4, 1995, *Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks*, U.N. Doc A/CONF.164/37, art. 3, para. 1 (Sept. 8, 1995), available at [http://www.un.org/depts/los/convention\\_agreements/texts/fish\\_stocks\\_agreement/CONF164\\_37.htm](http://www.un.org/depts/los/convention_agreements/texts/fish_stocks_agreement/CONF164_37.htm) [hereinafter *Fish Stocks Agreement*].

56. *Id.* at art. 6.

57. Meinhard Schroder, *Precautionary Approach/Principle*, in MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW (Rudiger Wolfrum ed., 2009), <http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1603?rskey=TMSyTO&result=1&prd=EPIL>.

58. *Fish Stocks Agreement*, *supra* note 55, at art. 5.

bodies.<sup>59</sup> These Organizations have the ability to enforce conservation measures on the high seas by excluding non-member states from exploiting fishing stocks.<sup>60</sup> This is a major departure from the high seas freedom of fishing paradigm; it requires states to cooperate through international organizations for shared resources.<sup>61</sup> Finally, the Agreement enables non-flag states to board and inspect vessels for compliance with RFMO measures.<sup>62</sup>

### *C. Regional Fisheries Management Organizations*

There are two main categories of RFMOs: those established under the Food and Agriculture Organization of the United Nations (“FAO”) and those created outside the FAO framework by international treaty.<sup>63</sup> All RFMOs have the authority to implement the Fish Stock Agreement provisions.<sup>64</sup> These bodies can implement further regulations pursuant to their founding authority and documents.<sup>65</sup>

Those established by the FAO framework fall under authority of either Article 6 or Article 24 of the FAO Constitution.<sup>66</sup> Article 6 organizations are purely advisory bodies.<sup>67</sup> Examples include organizations like the West Central Atlantic Fishery Commission and the Fishery Committee for the Eastern Central Atlantic.<sup>68</sup> The West

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59. *Id.* at art. 8, para. 1.

60. *Id.* at art. 8, para. 4.

61. *See* Tyler, *supra* note 38, at 55 (stating that the duty to cooperate runs throughout the Fish Stocks Agreement).

62. *Fish Stocks Agreement, supra* note 55, at art. 21.

63. *See FAO and Regional Fishery Bodies*, Food & Agric. Org. of the United Nations, <http://www.fao.org/fishery/topic/16918/en> (last visited Nov. 24, 2014) (listing RFMOs established under and outside the FAO framework).

64. *See Fish Stocks Agreement, supra* note 55, at art. 21, para. 2 (stating that RFMOs can implement procedures to enforce the Fish Stocks Agreement).

65. *Id.* at art. 21, para. 15.

66. FOOD & AGRIC. ORG., CONSTITUTION arts. VI, XXIV (1945).

67. *Id.* at art. VI.

68. United Nations Committee on Fisheries, Rome, Italy, June 9–13, 2014, *Regional Fishery Bodies Established Within the FAO Framework*, U.N. Doc COFI/2014/Inf.11, para. 2 (May 2014), available at <http://www.fao.org/3/a-mk346e.pdf> [hereinafter *RFMOs Report*].

Central Atlantic Fishery Commission's main role is to aid in international cooperation efforts for the conservation and use of fishery resources.<sup>69</sup> Its activities include promotion of sustainable fishing practices.<sup>70</sup> It does not attempt to regulate or enforce provisions against states fishing in the West Central Atlantic.<sup>71</sup>

In contrast, FAO Article 24 bodies are normally created by treaties, and parties can choose to commit to binding conservation measures.<sup>72</sup> Examples include the Indian Ocean Tuna Commission, Asia-Pacific Fisheries Commission, and General Fisheries Commission for the Mediterranean.<sup>73</sup> The General Fisheries Commission for the Mediterranean has authority to adopt binding quota recommendations for fishery management in its jurisdiction,<sup>74</sup> while the Indian Ocean Tuna Commission may only provide non-binding quota recommendations.<sup>75</sup> Member states choose whether to include in these bodies the authority to create binding provisions.<sup>76</sup>

Other regional fishing bodies are established outside the FAO framework by international treaty.<sup>77</sup> Some well-known examples include the Northwest Atlantic Fisheries Organization ("NAFO"), International Commission for Conservation of Tunas ("ICCAT"), and Commission for the Conservation of Antarctic Marine Living Resources ("CCAMLR"). These bodies are tasked with responsibilities such as setting Total Allowable Catches ("TACs")<sup>78</sup>

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69. *Western Central Atlantic Fishery Commission (WECAFC)*, FOOD & AGRIC. ORG. OF THE UNITED NATIONS, <http://www.rlc.fao.org/en/about-fao/statutory-bodies/wecafc/>.

70. *Id.*

71. *Id.*

72. *RFMOs Report*, *supra* note 68, at para. 4.

73. *Id.* at para. 3.

74. *About GFCM GEN. FISHERIES COMM'N FOR THE MEDITERRANEAN*, <http://www.gfcm.org/gfcm/about/en#Org-LegalFoundation> (last visited Oct. 31 2014).

75. *Conservation and Management Measures (CMMS)*, INDIAN OCEAN TUNA COMM'N, <http://www.iotc.org/cmms> (last visited Oct. 31, 2014).

76. *RFMOs Report*, *supra* note 68, at para. 4.

77. *Fish Stocks Agreement*, *supra* note 55, at art. 8, para. 1.

78. TACs are catch limits set for fishery stocks. *TACs and Quotas*, EUROPEAN COMM'N, [http://ec.europa.eu/fisheries/cfp/fishing\\_rules/tacs/index\\_en.htm](http://ec.europa.eu/fisheries/cfp/fishing_rules/tacs/index_en.htm) (last visited Nov.



and allocating resources among member states.<sup>79</sup> Many RFMOs have scientific bodies tasked with providing information relating to conservation efforts.<sup>80</sup> Despite the revolutionary nature of RFMOs, their effectiveness in sustainable fishery conservation has been controversial.<sup>81</sup>

One anecdote of common criticism refers to ICCAT as “the International Conspiracy to Catch All Tunas.”<sup>82</sup> RFMO problems range from inability to create binding provisions to non-enforcement by member states.<sup>83</sup> As a result, the FAO attempted to fill gaps in domestic non-compliance through a recommended Code of Conduct.<sup>84</sup>

#### *D. FAO Code of Conduct*

The FAO Code of Conduct for Responsible Fisheries and Technical Guidelines (“FAO Code of Conduct”) is a voluntary document, which sets forth standards for sustainable fishing practices.<sup>85</sup> The Code is consistent with international law.<sup>86</sup> Some of

8, 2014). Most often TACs are set based on advice from scientific advisory bodies. *Id.* Limits may be annual or biennial. *Id.* Whether TACs are binding upon RFMO member states depends on the regional body’s charter and enforcement authority. *Id.*

79. See *RFMOs Report*, *supra* note 68, at para. 4 (explaining that Article XIV bodies enjoy a certain level of autonomy from the FAO).

80. Comm’n for the Conservation of Antarctic Marine Living Resources, Convention for the Conservation of Antarctic Marine Living Resources pmbl., May 20, 1980, available at <https://www.ccamlr.org/en/organisation/camlr-convention-text>.

81. See Deep Sea Conservation Coal., *A Net with Holes: The Regional Fisheries Management System*, available at <http://www.savethehighseas.org/publicdocs/rfmo.pdf> (last visited Nov. 24, 2014) (asserting that RFMOs set ineffective quotas).

82. Alex Renton, *How the World’s Oceans Are Running out of Fish*, THE GUARDIAN (May 10, 2008), <http://www.theguardian.com/environment/2008/may/11/fishing.food>.

83. See *id.* (explaining that EU ministers promise action to stop illegal fishing, but no action is actually taken).

84. FOOD & AGRIC. ORG. OF THE UNITED NATIONS, CODE OF CONDUCT FOR RESPONSIBLE FISHERIES *Introduction* (1995).

85. *Id.* at art. 1.1.

the notable goals of the Code include a multi-dimensional approach to conservation, promotion of food security in developing nations, and ecosystem research.<sup>87</sup> Increasingly, nations like the United States, Canada, and Australia have incorporated elements of the FAO Code into domestic fishing regulations.<sup>88</sup>

### *E. International Fisheries Litigation*

Another available option for international fisheries law enforcement involves litigation. Under UNCLOS, high seas fisheries disputes are subject to compulsory dispute resolution.<sup>89</sup> However, UNCLOS only requires non-binding conciliation for disputes over conservation decisions in a state's EEZ.<sup>90</sup> The UN Fish Stocks Agreement extended the UNCLOS compulsory dispute procedure to disputes arising under the Agreement or regional fishery treaties.<sup>91</sup> The *Southern Bluefin Tunas Case* was the first arbitral tribunal created to hear a dispute under part XV of UNCLOS, per authorization of the Fish Stocks Agreement.<sup>92</sup>

In that case, the tribunal decided, contrary to prior interpretations of the Fish Stocks Agreement, that a regional fishing treaty deprived the tribunal of jurisdiction under UNCLOS to decide a high seas fishery dispute.<sup>93</sup> However, despite initial concerns over this controversial ruling, later inconsistent decisions, like the *MOX Plant Case*, indicate that the *Southern Bluefin Tunas Case* tribunal is unlikely to be followed on this jurisdictional issue.<sup>94</sup> Therefore, most

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86. *Id.*

87. *Id.* at art. 1.3.

88. Tracy Cooper, *Picture This: Promoting Sustainable Fisheries Through Eco-Labeling and Production Certification*, 10 OCEAN & COASTAL L.J. 1, 10 (2004–2005).

89. UNCLOS, *supra* note 39, at art. 297, para. 3, sub. a.

90. *Id.*

91. *Fish Stocks Agreement*, *supra* note 55, at art. 3, para. 1.

92. Peel, *supra* note 48, at 53.

93. Alan Boyle, *Environmental Dispute Settlement*, in MAX PLANCK ENCYCLOPEDIA OF PUB. INT'L LAW (Rudiger Wolfrum ed., 2009), <http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1949?rskey=0DrDA5&result=1&prd=EPIL>.

94. *Id.*

disputes arising under regional fishing treaties will be subject to compulsory dispute resolution under UNCLOS.<sup>95</sup>

The International Tribunal for the Law of the Sea (“ITLOS”) also provides a forum for states to bring their international fisheries disputes.<sup>96</sup> ITLOS is a permanent judicial body established to hear disputes relating to UNCLOS.<sup>97</sup> ITLOS has the power to proscribe provisional measures to protect international fish stocks.<sup>98</sup>

Prior to UNCLOS and the establishment of the specialty ITLOS court, a few fishery disputes were heard by the International Court of Justice (“ICJ”).<sup>99</sup> Some states continue to use the ICJ as a forum to bring issues related to fisheries.<sup>100</sup>

Hopes to use the World Trade Organization (“WTO”) as an alternative forum to adjudicate environmental issues have grown over the past two decades.<sup>101</sup> However, recent cases demonstrate that this endeavor will be difficult at best.<sup>102</sup> Though Article XX of the

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95. *Id.*

96. HUNTER, *supra* note 17, at 773.

97. UNCLOS, *supra* note 39, at art. 287, para. 1, sub. a.

98. *Id.* at art. 290; *Fish Stocks Agreement*, *supra* note 48, at art. 31; *see* Southern Bluefin Tuna (N. Z. v. Japan; Austl. v. Japan), Case Nos. 3 & 4, Order of Aug. 27, 1999, <http://www.itlos.org/index.php?id=62#c596> (proscribing measures to conserve southern bluefin tuna stocks).

99. *See* Fisheries Jurisdiction (Ger. v. Ice.), 1973 I.C.J. 49, 50 (Feb. 2) (deciding a dispute over Iceland extending its fisheries jurisdiction); *see* Fisheries Jurisdiction (U.K. v. Nor.), 1951 I.C.J. 116, 118 (Dec. 18) (discussing the validity of the Norwegian fisheries zone); *see* Fisheries Jurisdiction (U. K. v. Ice.), 1973 I.C.J. 3 (Feb. 2) (adjudicating a dispute between the U.K. and Iceland over Iceland’s proposed extension of its exclusive fisheries jurisdiction); *see* Fisheries Jurisdiction (Spain v. Can.), 1998 I.C.J. 432, 435 (Dec. 4) (deliberating a dispute between Spain and Canada over a Canadian Fisheries Protection Act).

100. *See* Whaling in the Antarctic (Austl. v. Japan: N.Z. intervening), 2014 I.C.J. 18–22 (Mar. 31) (adjudicating a dispute over Japan’s obligations under the International Convention for the Regulation of Whaling).

101. *See* HUNTER, *supra* note 17, at 1226 (stating that because of a case heard by the WTO, the issue of “like products” was brought to the public’s attention).

102. *See* Panel Report, *United States—Restrictions on Imports of Tuna*, WT/DS21/R (Sept. 3, 1991) (discussing restrictions on tuna imports to the United States) [hereinafter *WTO Restrictions on Tuna Imports*]; *see* Panel Report, *United States—Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/R

General Agreement on Tariffs and Trade (“GATT”) seemingly allow states to create trade restrictions based on environmental considerations,<sup>103</sup> the standard has proven an elusive one to meet.<sup>104</sup> Yet, application of approved RFMO trade sanctions, such as those passed by ICCAT in 1994,<sup>105</sup> may survive GATT scrutiny because of their multilateral nature.<sup>106</sup>

Ultimately, litigation relating to enforcement of fisheries is infrequent.<sup>107</sup> And the peril of fisheries remains, despite the plethora of legal enforcement options available to the international community.<sup>108</sup>

In summary, states have several international fisheries enforcement options through UNCLOS, the Fish Stocks Agreement, RFMOs, the FAO Code of Conduct, and litigation. However, the FAO continues to publish warnings about the perilous situation of the world’s fisheries.<sup>109</sup> Despite the conservation goals and cooperative framework that have been established, many stocks are over-exploited and nearly all the rest are fully exploited.<sup>110</sup> An inquiry into the failures and weaknesses of the current legal system explains why the danger to the world’s fisheries remains.

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(May 15, 1998) (discussing a ban in the U.S. on certain imported shrimp) [hereinafter *WTO Panel Report on Shrimp Ban*].

103. General Agreement on Tariffs and Trade art. XX, para. g, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

104. See *WTO Restrictions on Tuna Imports*, *supra* note 102 (holding that the Pelly Amendment may violate GATT Article XX); see *WTO Panel Report on Shrimp Ban*, *supra* note 102 (holding that the U.S. restrictions did not meet the requirements under GATT Article XX *chapeau*).

105. Carr & Scheiber, *supra* note 35, at 73.

106. See Tyler, *supra* note 38, at 87–90 (explaining that trade sanctions and other RFMOs probably do not “run afoul” of Article XX of GATT, due in part to their requirement to make good faith efforts to negotiate multilateral agreements).

107. See HUNTER, *supra* note 17, at 775 (stating that the Tribunal has only heard 15 cases since 2009).

108. See FAO STATE OF THE WORLD, *supra* note 9, at 59 (concluding that the state of world marine fisheries is worsening).

109. *Id.*

110. *Id.* at 53.

## III. WEAKNESSES AND FAILURES OF THE CURRENT LEGAL REGIME

Before UNCLOS, no state had an incentive to limit their fleet's catch to a sustainable level.<sup>111</sup> While it may be in the common interest of each state to conserve fishery captures to a sustainable limit, it is in each state's immediate interest to capture as many fish as possible.<sup>112</sup> This freedom of catch approach represents a classic case of the tragedy of the commons.<sup>113</sup> In this situation, each fisher catches as many fish as possible because "if one person does not capture it, another person will."<sup>114</sup>

A frequent solution to this commons problem is to allocate property rights to the resource, thereby providing a direct incentive for a party to conserve the resource.<sup>115</sup> In the context of fisheries, a state "owner" has the right to exclude other states' fishers from the stock, and the absence of competition creates an incentive for sustainable conservation.<sup>116</sup> Therefore, when UNCLOS created EEZs, most assumed that putting 90% of the world's fisheries under national jurisdiction would encourage conservation and sustainable practices through strict national oversight.<sup>117</sup> However, the exact opposite occurred.<sup>118</sup>

Two of the biggest problems resulting from this regulatory change in fishing resources include subsidies and illegal, unreported,

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111. Andrew Fagenholz, *A Fish in Water: Sustainable Canadian Atlantic Fisheries Management and International Law*, 25 U. PA. J. INT'L ECON. L. 639, 643 (2004).

112. HUNTER, *supra* note 17, at 763.

113. Many environmental resources, such as fish, are "public goods," meaning that everyone shares the benefits but no one owns the resource. There are no market signals, like price, to signal scarcity. While each individual's decision to use as many resources as possible is rational in the short term, it ultimately leads to the exhaustion of the resource in the long term. If the primary objective of fishing states is to maximize individual wealth, the market failure to place sustainable limits on fish stocks will ultimately result in the exhaustion of the ocean's resources. *Id.* at 104–05.

114. Fagenholz, *supra* note 111, at 643.

115. HUNTER, *supra* note 17, at 763.

116. Fagenholz, *supra* note 111, at 644.

117. HUNTER, *supra* note 17, at 763.

118. *Id.*

and unregulated fishing.<sup>119</sup> Both represent significant problems that the current international regulatory framework is inadequate to control. This inability results in over-exploitation of stocks and enforcement difficulties.<sup>120</sup> An analysis of these two issues illustrates the weaknesses and failures of the current international framework.

### A. Subsidies

After the creation of EEZs and the resultant eagerness to exploit their new national resources, states began to subsidize their national fishing industries.<sup>121</sup> National fishing subsidies include low-cost government loans, tax breaks, guarantees against defaults, funding of new technology and boat construction, and other services like harbor improvement.<sup>122</sup> Subsidies distort traditional markets by investing and hiding losses in sectors that competition would otherwise prevent.<sup>123</sup> Fishing subsidies amount to a loss of \$16 billion per year,<sup>124</sup> or about 25% of the value of the world's fish catch.<sup>125</sup> Additionally, Oceana estimates that American fishing subsidies cost taxpayers nearly \$520 million per year.<sup>126</sup>

Ultimately, subsidies combine to encourage the overcapacity of national fishing fleets,<sup>127</sup> which exploit high seas fisheries once

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119. Tim Eichenberg & Mitchell Shapson, *The Promise of Johannesburg: Fisheries and the World Summit on Sustainable Development*, 34 GOLDEN GATE U. L. REV. 587, 597 (2004); see also Tyler, *supra* note 38, at 51 (explaining that illegal, unreported and unregulated fishing continues to be a major problem, despite regulatory efforts).

120. See HUNTER, *supra* note 17, at 764 (referring to fact that coastal states, under UNCLOS, bear the primary responsibility to conserve fish stocks).

121. *Id.*

122. Eichenberg, *supra* note 119, at 597; Fagenholz, *supra* note 111, at 644.

123. Fagenholz, *supra* note 111, at 644.

124. U. Rashid Sumaila et al., *A Bottom-up Re-Estimation of Global Fisheries Subsidies*, 12 J. BIOECON 201, 201 (2010).

125. *More on Fisheries Subsidies*, OCEANA, <http://oceana.org/en/our-work/promote-responsible-fishing/fishing-subsidies/learn-act/more-on-fisheries-subsidies> (last visited Oct. 25, 2014).

126. HUNTER, *supra* note 17, at 764.

127. Eichenberg, *supra* note 122, at 597.

national EEZ stocks are depleted.<sup>128</sup> Subsidies may also place downward pressure on global fish prices, further exacerbating overexploitation.<sup>129</sup> With a global fishing fleet estimated to be 250% larger than necessary to catch sustainable amounts of fish, governments face internal economic and political pressures to support overfishing practices.<sup>130</sup> The FAO recognizes that eliminating national fishing subsidies lies outside the scope of the current international legal regime: “[F]isheries reform would ‘require broad-based political will founded on a social consensus’ with a ‘common vision that endures changes of governments,’ which would take time to build.”<sup>131</sup> The problem is further exacerbated in regionally shared waters managed by multiple states in RFMOs.<sup>132</sup> Subsidies represent a significant problem that the international fishing legal regime currently cannot effectively manage.<sup>133</sup>

*B. Illegal, Unreported, and Unregulated Fishing and Flag State Enforcement*

Subsidies also support another weakness within the current legal regime known as illegal, unreported, and unregulated (“IUU”) fishing, sometimes called pirate fishing.<sup>134</sup> IUU fishing is any fishing that does not comport with national, regional, or global fisheries obligations.<sup>135</sup> Estimates consider IUU fishing to be responsible for up to \$25 billion of the fish catch each year.<sup>136</sup> In addition, developing countries suffer the brunt of this practice.<sup>137</sup> While countries are able to pursue IUU vessels operating in their EEZs,

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128. See HUNTER, *supra* note 17, at 764 (explaining that developing nations will sell their EEZ fishing rights to foreign vessels to fish in their waters).

129. *Id.*

130. Eichenberg, *supra* note 119, at 597.

131. FAO STATE OF THE WORLD, *supra* note 9, at 200.

132. *Id.* at 201.

133. Sumalia, *supra* note 124, at 204–06, 217.

134. FAO STATE OF THE WORLD, *supra* note 9, at 201.

135. NAT’L OCEANIC AND ATMOSPHERIC ADMIN., IMPROVING INTERNATIONAL FISHERIES MANAGEMENT 8 (2013) [hereinafter IMPROVING FISHERIES MANAGEMENT].

136. *Id.* at 9.

137. FAO STATE OF THE WORLD, *supra* note 9, at 17.

enforcement on the high seas remains within the exclusive control of the flag state, pursuant to UNCLOS.<sup>138</sup> Although UNCLOS requires a genuine link between a state and a ship registered there, this standard is open to exploitation by states that permit vessel registration without strict requirements for nationality, safety, or fishing practices.<sup>139</sup> Thus, ships fly flags of convenience and engage in IUU, knowing that their flag states will not enforce international standards against them.<sup>140</sup>

IUU fishing is one manifestation of the deeper problem—that the organizations responsible for enforcing international sustainable fishing practices must rely on flag state enforcement.<sup>141</sup> The Fish Stocks Agreement attempted to solve this problem by granting RFMO member states the authority to inspect non-flag states.<sup>142</sup> However, inspecting states have little enforcement authority, which is always subject to the intervention of a flag state.<sup>143</sup>

Dependence on flag states for the primary authority in investigation and sanctioning international violations means “the success of the [Fish Stocks] Agreement will depend on the willingness of flag states to contribute equitably to the required reduction in excessive fishing effort which characterizes many high seas fisheries.”<sup>144</sup> In addition, “there will always be a risk that investigations will not be thorough or that penalties will not be strong enough” to deter violation.<sup>145</sup> Thus, much like subsidies, flag states

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138. UNCLOS, *supra* note 39, arts. 21, 94, & 111.

139. Jessica K. Ferrell, *Controlling Flags of Convenience: One Measure to Stop Overfishing of Collapsing Fish Stocks*, 35 ENVTL. L. 323, 328–29 (2005).

140. HUNTER, *supra* note 17, at 766.

141. Ferrell, *supra* note 139, at 356.

142. *Id.* at 355.

143. On clear grounds of a serious violation, an inspecting state may board a ship. It must notify the flag state and secure evidence of any violations. Inspecting states may take a ship to the nearest port and impose sanctions, subject to the permission or failure of a flag state to respond to a report. Flag states may assert supervening jurisdiction over the vessel at any time. All actions taken by inspecting states must be proportionate. *Id.* at 355–57.

144. Eichenberg, *supra* note 119, at 610–11.

145. *Id.* at 610.



must overcome significant political and economic obstacles to pursue greater enforcement objectives.<sup>146</sup>

Flag states face strong domestic opposition from subsidized fishing industries,<sup>147</sup> making enforcement decisions politically and economically difficult. Furthermore, states permitting flag of convenience registration exist for the exact opposite purpose—to encourage lax enforcement for economic gain.<sup>148</sup> Even more, punishing IUU vessels fails to reach the states, those responsible for ensuring actual compliance and enforcement.<sup>149</sup> Just as convicting pirates of high seas violations fails to solve the broader issue of piracy, convicting IUU vessels and crew fails to solve the broader issue of lack of enforcement by flag states.<sup>150</sup>

In conclusion, both IUU fishing and subsidies illustrate the failures of the current international fishing regime. Each supports practices of over-fishing and incentivizes economic and political behavior that discounts sustainability.<sup>151</sup> Countries must overcome these obstacles if they wish to change their laws and behavior in favor of sustainable quotas and fishing practices. Thus, if the global community wishes to solve the fisheries problems, these weaknesses and failures of the current system demand a new approach.

#### IV. ALTERNATIVE ENFORCEMENT STRATEGY: THE INTRODUCTION OF INCENTIVES TO INDUCE COMPLIANCE

Despite the common adage that “you catch more flies with honey than vinegar,” the majority of international law scholarship focuses on the imposition of sanctions rather than the provision of incentives to engender compliance with international law.<sup>152</sup> Notable theories argue that: states comply with international law because compliance

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146. Ferrell, *supra* note 139, at 368.

147. HUNTER, *supra* note 17, at 764.

148. Ferrell, *supra* note 139, at 361.

149. *Id.* at 364.

150. *Id.* at 365.

151. HUNTER, *supra* note 17, at 764.

152. Andrew T. Guzman, *A Compliance-Based Theory of International Law*, 90 CAL. L. REV. 1823, 1825 (2002).

is efficient;<sup>153</sup> consent generates a legal obligation that leads to compliance;<sup>154</sup> obligations generated through a legitimate process, such as a democratic mechanism, encourage states to comply;<sup>155</sup> certain patterns or norms of international behavior are incorporated within states' domestic legal institutions, leading to compliance;<sup>156</sup> or compliance is due to states' concerns about their reputation and fear of direct sanctions for law violations.<sup>157</sup> Neorealist theorists posit that compliance with international law is merely a coincidence, a matter of course when national self-interest and international law overlap.<sup>158</sup> In contrast, others argue that institutions reduce the transaction costs of punishing violators and increase the occurrence of state interaction, making cooperation between states more likely than with the imposition of sanctions.<sup>159</sup>

While the idea of rational, self-interested state actors has great explanatory power, the confinement of the model to the imposition of sanctions or transaction costs is limiting. For example, when using the popular game theory of the "prisoner's dilemma" to explain two countries' rational decision-making in the context of an arms control treaty, the equilibrium is for both states to violate their obligations under international law.<sup>160</sup> The common solution to this problem is to create a law that increases the cost of violation to make the rational decision tip in favor of compliance rather than defection.<sup>161</sup> Of course, this method is only an effective model of international law compliance if there is some mechanism by which violators of the law

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153. *Id.* at 1831–33.

154. *Id.* at 1833.

155. *Id.* at 1834.

156. *Id.* at 1835.

157. *Id.* at 1827.

158. *Id.* at 1836–37.

159. *Id.* at 1840.

160. *Id.* at 1842–43. The default model is one where countries decide in a single instance whether to comply with the arms control treaty. In a basic prisoner's dilemma model, each country is better off if it violates the treaty and the other country complies. In contrast, both are better off if they both comply compared with when both violate the treaty. The equilibrium in this scenario is for the states to violate the arms control treaty seeking to improve their position.

161. *Id.* at 1844.

may be sanctioned.<sup>162</sup> Critics of international law and its effectiveness claim that the sanctioning mechanisms of the international law system are never sufficient for states to tip the balance in favor of compliance.<sup>163</sup>

It is simple to perceive this situation in the current international legal framework for fisheries. While there is a comprehensive system of international fishery regulations and obligations, there are weak enforcement strategies that are never able to tip the balance away from the economic and political costs states must overcome to comply with fishery obligations. Instead, states overfish and deplete stocks in favor of the short-term economic and political gains that accompany unsustainable fishing practices. To deal with this problem, scholarship calls for stronger enforcement mechanisms such as trade sanctions,<sup>164</sup> stricter technology and monitoring regulations,<sup>165</sup> and legal proceedings.<sup>166</sup> Absent from these writings is the idea that states should introduce incentives to induce compliance rather than increase the strength of punishment to prevent violation.

By introducing incentives, states will be able to tip the balance of a rational, self-interested state's decision in favor of compliance. Unlike the difficulties that the international fishery law system faces to strengthen enforcement mechanisms, which must overcome political and economic obstacles, incentives allow states to overcome these obstacles by generating the necessary capital to implement compliance measures. Similar to sanctions, bilateral incentives (meaning those provided country-to-country) will be most effective because the incentive-providing country enjoys the benefits of the potential violator's compliance.<sup>167</sup> Multilateral incentives, on the other hand, open up the potential for free-riding states to enjoy the benefits of other states' efforts,<sup>168</sup> reducing the benefit for a state that

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162. *Id.* at 1845.

163. *Id.*

164. Tyler, *supra* note 38, at 82; Carr & Scheiber, *supra* note 35, at 50.

165. Nicola Kieves, *Crisis at Sea: Strengthening Government Regulation to Save Marine Fisheries*, 89 MINN. L. REV. 1876, 1912 (2005).

166. Peel, *supra* note 48, at 53.

167. Guzman, *supra* note 152, at 1869.

168. *Id.*

expends the resources to provide incentives for compliance. Therefore, the most suitable strategy to create greater compliance with sustainable fishing quotas and practices is to introduce bilateral incentives into the existing system of international regulation, enabling states to generate the necessary capital to make a rational decision in favor of compliance. Indeed, there is historical precedent establishing the effectiveness of introducing incentives to get states to comply with international law—the peace agreement between Israel and Egypt in 1979.

#### A. *Israel–Egypt Peace Treaty of 1979*

A 1985 *New York Times* poll indicated that the American public considered the Camp David Accords (which produced the Israel–Egypt Peace Treaty) the most successful American foreign policy initiative to date.<sup>169</sup> Despite criticisms that the peace negotiation failed to find an effective solution to the Palestine question or solve the tensions between Israel and other Arab nations, the agreement did bring peace to Egypt and Israel, an outcome impossible to imagine a decade earlier.<sup>170</sup> It resulted in Israel’s withdrawal from Sinai, the dismantling of civilian settlements located there, and the establishment of diplomatic relations between Israel and Egypt.<sup>171</sup> What made the Camp David negotiations unique was that threats were rarely uttered and the United States did not use heavy-handed pressure with either side.<sup>172</sup> Instead, the United States was able to offer incentives to both Israel and Egypt that induced compliance with the peace agreement. This tactic ultimately changed each state’s decision-making calculation in favor of compliance rather than violation of international law. To understand the difference that the provision of incentives made in the Israeli–Egyptian case, an

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169. William B. Quandt, *Camp David and Peacemaking in the Middle East*, 101 POL. SCI. Q. 357, 358 n.1 (1986).

170. *Id.* at 359; John B. Quigley, *Camp David Accords (1978)*, in MAX PLANCK ENCYCLOPEDIA OF PUB. INT’L LAW (Rudiger Wolfrum ed., 2009), <http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1264?rskey=6jOPt4&result=1&prd=EPIL>.

171. Quigley, *supra* note 170.

172. Quandt, *supra* note 169, at 360.

overview of the states' obligations and incentives that the United States offered is necessary.

The Israel–Egypt Peace Treaty certainly created international obligations for both states. Article I stated that each state would “refrain from the threat or use of force, directly or indirectly, against each other and will settle all disputes between them by peaceful means.”<sup>173</sup> It also required Egypt to establish diplomatic relations with Israel, while Israel agreed to withdraw its troops from the Sinai.<sup>174</sup> Both states would have faced international sanctions for failure to comply with these obligations.<sup>175</sup> However, the United States offered additional incentives to both states for complying with their obligations.

This unique approach proved to be a breakthrough in securing both states' cooperation. Up until that point, the mere reciprocity of obligations between Israel and Egypt did not produce a peace agreement. Indeed, of the four agreements between Israel and Egypt between 1974 and 1979, each one featured heavy participation from the United States.<sup>176</sup> The introduction of incentives tipped the balance of the obligations for peace in favor of compliance. The United States committed significant financial resources to both Egypt and Israel, in addition to military support and oil supplies for Israel.<sup>177</sup> Egypt not only received its territory back, but the introduction of United States financial aid would allow it to turn its attention to domestic development, reducing the need for Egypt to rely on the political capital of a broader pan-Arab movement.<sup>178</sup> Similarly, Israel, with the promise of American military support, in addition to an Egyptian promise of peace, could focus its attention on

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173. Peace Treaty Between Israel and Egypt, Isr.-Egypt, art. III, Mar. 26, 1979, 18 I.L.M. 362.

174. *Id.* at arts. 1, 3.

175. International Law Commission, *Draft Articles on Responsibility of States for Internationally Wrongful Acts* art. 2 (November 2001), available at <http://www.ilsa.org/jessup/jessup06/basicmats2/DASR.pdf>.

176. Quandt, *supra* note 169, at 359.

177. Quigley, *supra* note 170.

178. See Quandt, *supra* note 169, at 357 (stating that Egypt resumed diplomatic relations with other Arab countries without renouncing its peace with Israel).

other threats without fear of Egyptian military aggression.<sup>179</sup> For both states, incentives provided by the United States allowed each to make a rational decision in favor of peace treaty compliance. This same model can work in the international fisheries context.

*B. The United States and Panama: A Case Study of Possible Incentives for International Fisheries*

The United States is Panama's largest trading partner, accounting for approximately 23% of all of its two-way trade.<sup>180</sup> In 2013, United States exports to Panama totaled \$10.5 billion, and its imports from Panama totaled \$448 million.<sup>181</sup> The US–Panama Trade Promotion Agreement indicates that United States and Panama trade relations will continue to grow.<sup>182</sup> In recent trade between the two countries, fish and seafood was the second largest import category.<sup>183</sup> Unfortunately for Panama, its status as one of the largest sources of flags of convenience vessels complicates this relationship.<sup>184</sup>

As discussed above, flags of convenience vessels are a major source of IUU fishing.<sup>185</sup> Of Panama's vessel registrations, 80.4% of vessels are foreign-owned.<sup>186</sup> The United States department responsible for fishery oversight identified Panama as one of six

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179. *Id.*

180. *Fact Sheet: U.S.-Panama Relations*, WHITE HOUSE OFFICE OF THE PRESS SEC'Y (Nov. 19, 2013), <http://www.whitehouse.gov/the-press-office/2013/11/19/fact-sheet-us-panama-relations> [hereinafter *Panama Relations Fact Sheet*].

181. U.S. CENSUS BUREAU, FOREIGN TRADE: TRADE IN GOODS WITH PANAMA, available at <http://www.census.gov/foreign-trade/balance/c2250.html> (last visited Nov. 8, 2014).

182. *Panama Relations Fact Sheet*, *supra* note 180.

183. *Panama*, OFFICE OF THE U.S. TRADE REPRESENTATIVE, <http://www.ustr.gov/countries-regions/americas/panama> (last visited Oct. 31, 2014).

184. *Flags of Convenience*, INT'L TRANSP. WORKERS' FED'N, <https://www.itfglobal.org/flags-convenience/flags-convenience-183.cfm> (last visited Nov. 16, 2014) [hereinafter *Flags of Convenience*].

185. Ferrell, *supra* note 139, at 329.

186. CIA WORLD FACTBOOK: PANAMA, <https://www.cia.gov/library/publications/the-world-factbook/geos/pm.html> (last visited Nov. 8, 2014).

nations engaging in IUU fishing during 2012 and 2013, and one of ten nations engaged in IUU fishing based on violations of international conservation and management measures during 2011 and 2012.<sup>187</sup> Several Panamanian-flagged vessels have been documented violating Inter-American Tropical Tuna Commission (“IATTC”) resolutions.<sup>188</sup> These violations include illegal tuna discarding, violating the purse seine net closure period,<sup>189</sup> and fishing without registering with the IATTC.<sup>190</sup>

While the National Marine Fisheries Service (“NMFS”) determined that the government of Panama took appropriate action to address IUU fishing practices during 2009 and 2010, Panamanian-flagged vessels continued to violate international fisheries law during 2011 and 2012.<sup>191</sup> Therefore, it appears that the current enforcement strategy, where the Panamanian government fines individual vessels and crew, is doing little to prevent IUU fishing.<sup>192</sup> Prosecution of criminal vessels and crews does not result in the Panamanian registry changing its standards—the true source of IUU problems.<sup>193</sup> Indeed, vessels and crew remain undeterred by judicial prosecution and

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187. IMPROVING FISHERIES MANAGEMENT, *supra* note 135, at 3.

188. *Id.* at 28.

189. A purse seine is a vertical net. It encircles a school of tuna and entraps the school by connecting back up with a smaller ship. Large-scale tropical tuna purse seine vessels have the capacity to hold 637,000 tons of fish at once. Purse Seine, INT’L SEAFOOD SUSTAINABILITY FOUND., <http://iss-foundation.org/purse-seine/> (last visited Oct. 31, 2014). The practice is not without controversy however. The capacity and process have the potential of causing large by-catch and putting unsustainable pressure on stock populations. Willie Mackenzie, *When Purse-seining Goes Bad*, GREENPEACE INT’L BLOG (May 18, 2010, 7:32 PM), <http://www.greenpeace.org/international/en/news/Blogs/makingwaves/when-purse-seining-goes-bad/blog/11803/> (last visited Oct. 31 2014). Out of concern, IATTC limits the period when purse seine tuna vessels may operate. Inter-American Tropical Tuna Commission [IATTC], *Recommendation on a Multiannual Program for the Conservation of Tuna in the Eastern Pacific Ocean in 2011-2013* para. 3, C-10-01 (Oct. 1, 2010).

190. IMPROVING FISHERIES MANAGEMENT, *supra* note 135, at 28, 46.

191. *Id.* at 49.

192. *Id.*

193. Ferrell, *supra* note 139, at 364.

simply evade responsibility by re-registering.<sup>194</sup> Therefore, the enforcement strategy must reach the flag state itself to encourage it to change its approach towards sustainable fishery management practices.

The United States has two possible options to engender greater compliance from Panama. First, it may impose sanctions on Panama to force compliance, or second, it may offer incentives to Panama in exchange for compliance. Part 1 analyzes why imposing sanctions in this context would be ineffective to produce greater compliance from Panama. In contrast, Part 2 demonstrates why introducing incentives will result in greater compliance by Panama.

### 1. The United States and Panama: Sanctions

One possible sanction that the United States could pursue against Panama to force fisheries compliance is a process of “naming and shaming.” The idea is that the threat of a negative reputation encourages a state to comply with international law.<sup>195</sup> In fact, the United States already pursues this option by publishing an annual IUU report that identifies countries that do not comply with their international fishing obligations.<sup>196</sup> Panama is a frequent fixture in those reports.<sup>197</sup> Indeed, Panama’s reputation for registering flags of convenience that result in IUU violations is well known.<sup>198</sup> Panama’s repeated IUU violations are evidence that Panama does not care about its reputation in the context of fishing. Panama simply does not care about its fishing compliance reputation on the international stage, at least not enough to change its compliance behavior. Instead, the only way to incentivize Panama to change its behavior in favor of compliance is to entice it with the opportunity to improve its reputation. Further reputation deterioration will not affect Panama in a significant way because it faces no additional punishments as a

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194. *Id.* at 365; IMPROVING FISHERIES MANAGEMENT, *supra* note 135, at 48.

195. Guzman, *supra* note 152, at 1827.

196. IMPROVING FISHERIES MANAGEMENT, *supra* note 135, at 3.

197. *Id.*

198. *Flags of Convenience*, *supra* note 184.



result, leaving intact the political and economic incentives for its non-compliance.

Instead of trying to shame Panama's reputation, the United States may pursue sanctions against specific Panamanian vessels violating international fishing regulations. Authority granted under the Fish Stocks Agreement and IATTC regulations permit the United States to board, inspect, and impose sanctions on violators if it has sufficient evidence.<sup>199</sup> However, this authority is contingent upon Panama's permission.<sup>200</sup> As the flag state, Panama has the purview to intervene at any time and usurp prosecutorial action that the United States may wish to take against a Panamanian-flagged ship.<sup>201</sup> Indeed, the United States' prosecution of vessels likely will not be permitted by Panama due to political and economic obstacles. Since Panama's economy relies heavily on foreign vessel registration,<sup>202</sup> it may worry that an increased threat of United States prosecution will drive foreign vessels to competitor registrars, such as El Salvador. In addition, Panama has a record of pursuing sanctions against identified vessel violators in its own domestic courts,<sup>203</sup> further bolstering the chance that Panama will choose to intervene and prosecute vessels itself rather than allowing the United States the right of prosecution.

Moreover, the endeavor of monitoring and prosecuting Panamanian vessel violators in IATTC waters is a geographic and monetary near-impossibility for the United States.<sup>204</sup> The United States' jurisdiction over its own EEZ fishery resources covers more than 100,000 miles of United States coastline and more than 2.2 million nautical square miles of the sea.<sup>205</sup> This area is nearly double the size of the country and includes nearly 20% of the world's capture fisheries.<sup>206</sup> Despite an elaborate domestic statutory framework, political and budgetary enforcement fails to sustain even

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199. Ferrell, *supra* note 139, at 355–56.

200. *Id.* at 356.

201. Eichenberg, *supra* note 119, at 610.

202. CIA WORLD FACTBOOK, *supra* note 186.

203. IMPROVING FISHERIES MANAGEMENT, *supra* note 135, at 48.

204. HUNTER, *supra* note 17, at 776.

205. *Id.*

206. *Id.* at 776–77.

the most commercially important domestic fish stocks.<sup>207</sup> Attempting to expand regulatory and enforcement efforts beyond the United States' EEZ to international waters is infeasible.<sup>208</sup> If the implementation of domestic enforcement has failed to manage EEZ fisheries effectively, what reason is there to think that enforcement in international IATTC waters will prove more successful or even possible?<sup>209</sup>

Finally, as discussed above, prosecuting individual violators fails to address the underlying issues of state non-compliance.<sup>210</sup> Individual Panamanian vessel owners and crew may disregard judgments and simply reflag in a new country or join a new crew.<sup>211</sup> Instead, what is needed is an incentive for Panama to alter its flag of convenience vessel registrations from the state level. Sanctions cannot engender the political or economic will needed to do this.

Instead of seeking to punish individual vessel violators, the United States may seek to sanction Panama under the current international fishery framework. One possibility is for the United States to sue Panama in an international tribunal for violations of its international fishery obligations.<sup>212</sup> However, a *prima facie* case of an international law violation would be difficult to make out, as shown in the previous failures of international fishery litigation.<sup>213</sup> Indeed,

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207. *Id.* at 777.

208. *Id.*

209. *See id.* (asserting that the United States has managed its fishing resources poorly).

210. Ferrell, *supra* note 139, at 365.

211. Eichenberg, *supra* note 119, at 614.

212. *Fish Stocks Agreement*, *supra* note 55, at art. 3, para. 1.

213. *See* Southern Bluefin Tuna (N. Z. v. Japan; Austl. v. Japan), Case Nos. 3 & 4, Order of Aug. 27, 1999, <http://www.itlos.org/index.php?id=62-c596> (stating that the parties failed to make a *prima facie* case); *see* Fisheries Jurisdiction (Ger. v. Ice.), 1973 I.C.J. 49, 50 (Feb. 2) (deciding a dispute over Iceland extending its fisheries jurisdiction); *see* Fisheries Jurisdiction (U.K. v. Nor.), 1951 I.C.J. 116 (Dec. 18) (discussing the validity of the Norwegian fisheries zone); *see* Fisheries Jurisdiction (U. K. v. Iceland), 1973 I.C.J. 3 (Feb. 2) (adjudicating a dispute between the U.K. and Iceland over Iceland's proposed extension of its exclusive fisheries jurisdiction); *see* Fisheries Jurisdiction (Spain v. Can.), 1998 I.C.J. 432, 468 (Dec. 4) (holding that the court did not have jurisdiction to adjudicate the dispute between Spain and Canada over a Canadian fisheries statute).

Panama has a strong argument that it complies with all its international obligations, at least to the extent that it should not be held liable for damages.<sup>214</sup> The very fact that flags of convenience exist demonstrates a gap in the international fishery law framework.<sup>215</sup> Panama's vessel registry is de jure compliant, even if it leads to de facto non-compliance by individual vessels.<sup>216</sup>

In addition, Panama will likely argue that it cannot be held liable as a state for the non-compliance of individual vessels. It cooperates with states under the IATTC framework and does pursue some remedial action against violators in its domestic courts.<sup>217</sup> Furthermore, what is the remedy to be granted by an international tribunal? Any tribunal is unlikely to have the authority to order Panama to change its domestic law to prevent flag of convenience registration.<sup>218</sup> While a negative judgment against Panama may generate some political will to alter domestic policies, the economic obstacles remain, favoring no behavior change on the part of Panama.

Seeking to change this economic situation, the United States may try to impose trade sanctions against Panama. However, trade sanctions based on environmental fishing considerations have yet to prevail in the WTO.<sup>219</sup> The United States cannot impose trade sanctions unilaterally under current interpretations of GATT restrictions,<sup>220</sup> and it will have to seek negotiation and permission for sanctions under the multilateral auspices of IATTC.<sup>221</sup> Currently,

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214. See *Whaling*, 2014 I.C.J. at 18–22 (assessing Japan's liability).

215. Ferrell, *supra* note 139, at 329.

216. *Flags of Convenience*, *supra* note 184.

217. IMPROVING FISHERIES MANAGEMENT, *supra* note 135, at 48–49.

218. UNCLOS, *supra* note 39, at art. 297, para. 1, sub. b.

219. See *WTO Restrictions on Tuna Imports*, *supra* note 102 (holding that the U.S. restrictions did not meet the requirements under GATT Article XX); see *WTO Panel Report on Shrimp Ban*, *supra* note 102 (holding that the U.S. restrictions did not meet the requirements under GATT Article XX *chapeau*).

220. See *WTO Restrictions on Tuna Imports*, *supra* note 102 (holding that the U.S. restrictions did not meet the requirements under GATT Article XX); see *WTO Panel Report on Shrimp Ban*, *supra* note 102 (holding that the U.S. restrictions did not meet the requirements under GATT Article XX *chapeau*).

221. See Tyler, *supra* note 38, at 88 (stating that “unilateral trade measures are appropriate when all of Article XX's requirements have been met, and . . . multilateral solutions are a precursor to such actions”).

IATTC's authority does not include such far-reaching, binding authority.<sup>222</sup> This means that multilateral sanctions under IATTC will require a change of law approved by the IATTC member states.<sup>223</sup> As Panama is a voting member in IATTC,<sup>224</sup> any attempt to alter the organization's authority towards this outcome is unlikely at best. Therefore, the United States' ability to impose trade sanctions will also be ineffective.

The imposition of sanctions under the current international fishery framework simply cannot deal with the problem of Panamanian-flagged IUU fishing vessels. Whether the United States attempts to name and shame, seek individual vessel enforcement, sue Panama, or impose trade sanctions, there is not enough force behind these actions to incentivize Panama to overcome the political and economic obstacles to engender better compliance. Instead, the United States could offer an incentive for Panama to comply with sustainable fishing practices. This method would change the rational equation in favor of Panama's compliance by offering it both political and economic benefits for its actions.

## 2. The United States and Panama: Incentives

Since Panama heavily relies on the United States for trade, especially fish exports,<sup>225</sup> the United States is in a unique position to offer incentives that encourage fisheries regulation compliance from Panama. Similar to the financial and diplomatic position the United States found itself in during the Israel–Egypt negotiations,<sup>226</sup> this position allows the United States to negotiate an innovative solution. In addition, as the United States valued stability in the Middle East,<sup>227</sup> the United States values sustainable fishing compliance,<sup>228</sup>

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222. See *Rules of Procedure*, INTER-AM. TROPICAL TUNA COMM'N, <https://www.iattc.org/PDFFiles/IATTC-Rules-of-procedureENG.pdf> (last visited Oct. 31, 2014) (providing the rules that govern the IATTC).

223. *Id.*

224. INTER-AMERICAN TROPICAL TUNA COMM'N, <https://www.iattc.org/HomeENG.htm> (last visited Nov. 9, 2014).

225. *Panama Relations Fact Sheet*, *supra* note 180.

226. Quigley, *supra* note 170.

227. *Id.*

and finding the right incentives to offer Panama grants the United States many benefits in which it declares an interest.<sup>229</sup>

If the United States enables Panama to better comply with sustainable fishing practices, the United States will be able to fulfill many domestic statutory goals.<sup>230</sup> These include: strengthening its leadership in improving international fisheries management and enforcement, especially for IUU fishing; helping the Secretaries of Commerce and State improve the effectiveness of international RFMOs; incorporating market-related measures to combat governments whose vessels participate in IUU fishing; encouraging other nations to take necessary steps to prevent IUU fish harvesting; and improving compliance for high seas and RFMO-regulated fisheries.<sup>231</sup> Furthermore, the United States “is a member of or has substantial interests in numerous international fisheries and related agreements and organizations,” which have sustainability and compliance goals of their own.<sup>232</sup> NMFS further believes that IUU activities jeopardize the United States’ ability to manage its fisheries sustainably and unfairly disadvantages national fishers.<sup>233</sup> It is clear that the United States places a lot of value, in the form of economic and political capital, in combating IUU fishing and helping other nations do the same.<sup>234</sup> Therefore, it is plausible that incorporating another enforcement mechanism—the introduction of incentives to generate other nations’ compliance towards this goal—is possible.

However, the United States must first find an appropriate incentive that will tip the balance of the decision in favor of Panama’s compliance with international law. As the United States

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228. IMPROVING FISHERIES MANAGEMENT, *supra* note 135, at 7.

229. *Id.* at 7–8; *see also* Shark Conservation Act of 2010, 16 U.S.C. § 1801 (2012); Moratorium on Taking and Importing Marine Mammals and Marine Mammal Products, 16 U.S.C. § 1371 (2012); Lacey Act, 16 U.S.C. § 3371 (2001); Pelly Amendment to the Fisherman’s Protective Act of 1967, Pub. L. No. 92-219, 85 Stat. 786 (1971); Marine Mammal Protection Act, 16 U.S.C. § 1361 (2012); Endangered Species Act, 16 U.S.C. §§ 1531–1544 (2012); International Dolphin Conservation and Protection Act, Pub. L. No. 105-42, 111 Stat. 1122 (1997).

230. IMPROVING FISHERIES MANAGEMENT, *supra* note 135, at 7.

231. *Id.* at 7–9.

232. *Id.* at 9.

233. *Id.* at 15.

234. *Id.* at 7–8.

identified the appropriate financial and political incentives to offer Israel and Egypt for peace in 1979,<sup>235</sup> it must similarly identify the appropriate incentives to offer Panama to engender its fishing compliance. Deforestation is one area where this trade-off is possible.

Deforestation in Panama is a significant problem, requiring United Nations and United States Agency for International Development (“USAID”) assistance.<sup>236</sup> Agriculture is the largest driver of deforestation.<sup>237</sup> Small farmers often engage in “slash and burn” tactics, cutting and burning a few acres of forest to feed their families.<sup>238</sup> In addition, loggers not only cut down trees, but also continually build roads to access more remote forests.<sup>239</sup>

The results of deforestation are many, including the loss of habitat.<sup>240</sup> Deforestation is also a driver of climate change.<sup>241</sup> While the quickest solution to the issue is to place a moratorium on all tree-harvesting activities, the international community recognizes that because of the involvement and reliance of indigenous communities on the forest, sustainable management is a more workable solution.<sup>242</sup>

Panama lacks a national forest program to deal with its deforestation problem on its own.<sup>243</sup> Indicative of this are the USAID

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235. Quigley, *supra* note 170.

236. *See generally* Panama’s Efforts to Reduce Emissions, UNEP NEWS CTR. (Dec. 13, 2013), <http://www.unep.org/newscentre/default.aspx?DocumentID=2756&ArticleID=10680> (last visited Oct 31, 2014) (discussing Panama’s efforts to stop deforestation); UNITED STATES AGENCY FOR INT’L DEV., PANAMA: ENVIRONMENT (2013), *available at* <http://www.usaid.gov/where-we-work/latin-american-and-caribbean/panama/environment> [hereinafter USAID PANAMA].

237. *Deforestation: Modern-Day Plague*, NAT’L GEOGRAPHIC, [http://environment.nationalgeographic.com/environment/global-warming/deforestation-overview/?rptregcta=reg\\_free\\_np&rptregcampaign=20131016\\_rw\\_membership\\_r1p\\_us\\_se\\_c1#](http://environment.nationalgeographic.com/environment/global-warming/deforestation-overview/?rptregcta=reg_free_np&rptregcampaign=20131016_rw_membership_r1p_us_se_c1#).

238. *Id.*

239. *Id.*

240. *Id.*

241. *Id.*

242. *Id.*

243. *See* FOOD & AGRIC. ORG. OF THE UNITED NATIONS, GLOBAL FOREST RESOURCES ASSESSMENT 302 (2010) (reporting that while Panama has passed a national forest program, it has not implemented it yet).

and United Nations programs that provide resources for Panama to fight deforestation practices.<sup>244</sup> USAID's regional program, the Management of Aquatic Resources and Alternative Development ("MAREA"), established a Sustainable Community Forestry in Darien, Panama.<sup>245</sup> The program promotes sustainable forestry management by building capacity in indigenous communities.<sup>246</sup> It does this by targeting the use of unsustainable resources in indigenous reserves of Panama.<sup>247</sup> Increasing the budget of MAREA for deforestation assistance is an incentive the United States could offer in exchange for greater Panamanian compliance with international fisheries regulation.

To start, Panama faces great international pressure to deal with deforestation<sup>248</sup> because deforestation is closely related to climate change and involves the rights of indigenous communities protected under international law.<sup>249</sup> Panama would be able to "clean up" its environmental record on the international stage with increased USAID assistance to fight deforestation. Furthermore, because the United Nations recognizes indigenous issues as the most important in Panama's deforestation efforts, and because the existing USAID program builds capacity in indigenous communities and focuses on climate change adaptation,<sup>250</sup> the United Nations program could further support the initiative.<sup>251</sup> This UN support could help underwrite USAID requests for increased budget allocations. In addition, connecting the deforestation effort to the United States' statutory obligations to assist Panama in fighting IUU fishing<sup>252</sup> would help

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244. See *Panama's Efforts*, *supra* note 236 (discussing how the UN helps Panama's anti-deforestation efforts); USAID PANAMA, *supra* note 236.

245. USAID PANAMA, *supra* note 236.

246. *Id.*

247. See *id.* (targeting unsustainable resources in Panama).

248. See *Panama's Efforts*, *supra* note 236.

249. See *id.* (discussing the agreement between the Panama government and indigenous people to work together).

250. USAID PANAMA, *supra* note 236.

251. See *Panama's Efforts*, *supra* note 236 (discussing the United Nations' involvement with anti-deforestation efforts in Panama).

252. 16 U.S.C.A. § 1801; 16 U.S.C. § 1371; 16 U.S.C. § 701; Pelly, *supra* note 229; 16 U.S.C. § 1361; 16 U.S.C. §§ 1531–1544; International Dolphin Conservation and Protection Act § 111.

generate economic and political capital for increased MAREA budgetary allocations. It is also easier to fund an existing program than to create a new program.<sup>253</sup>

Moreover, because Panama would exchange fisheries compliance for deforestation assistance, its reputation on environmental issues on the international stage could be strengthened. Because Panama is recognized by many states—including its largest trading partner, the United States—for poor environmental compliance when it comes to international fisheries,<sup>254</sup> the incentive to repair its reputation will be meaningful to Panama. Indeed, one international legal scholar identified a positive reputation as the main driving force behind state compliance with its international obligations.<sup>255</sup> Unlike the ineffectiveness of deteriorating Panama's reputation, the prospect of improving Panama's reputation provides Panama with tangible political benefits it could leverage internationally and domestically.

The United States receives at least 21% of Panamanian imports as fish and seafood products.<sup>256</sup> This benefit, combined with its domestic duty to fight IUU fishing and to assist nations like Panama, allows the United States to enjoy the benefits of its resources expended for greater Panamanian compliance. While other states party to the IATTC will also receive benefits from greater Panamanian compliance, this “free riding” will not be enough to offset the United States' benefits because it receives them directly.

Of course, Panama must value the benefits of the deforestation program as greater than those it receives from engaging in IUU fishing. Given the negative attention, the poor reputation, and the costs of IUU investigations and judicial proceedings that Panama receives for non-compliance activities,<sup>257</sup> the benefits of the

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253. See *Glossary: Continuing Resolution/Continuing Appropriations*, U.S. SENATE, [http://www.senate.gov/reference/glossary\\_term/continuing\\_resolution.htm](http://www.senate.gov/reference/glossary_term/continuing_resolution.htm) (last visited Oct. 31, 2014) (defining a continuing resolution/appropriation as a resolution that provides continuing funding to current programs at the beginning of each fiscal year).

254. IMPROVING FISHERIES MANAGEMENT, *supra* note 135, at 36.

255. Guzman, *supra* note 152, at 1827.

256. *Panama*, *supra* note 183.

257. IMPROVING FISHERIES MANAGEMENT, *supra* note 135, at 46–49.



deforestation program could plausibly change Panama's rational decision making in favor of compliance. In contrast, the sanctions that the United States could impose on Panama are not strong enough to tip the balance in favor of compliance. Therefore, offering Panama the incentive of deforestation assistance is one example where the introduction of a bilateral incentive by the United States creates greater international fisheries regulation compliance.

#### CONCLUSION

The world does not want to repeat the same mistakes that led to the Newfoundland cod fishery collapse. Fishery resources remain an important food and economic resource for developed and developing countries alike.<sup>258</sup> Despite the addition of the Fish Stocks Agreement and RFMOs to the regulatory framework in recent decades, the fish stocks of the world remain in peril.<sup>259</sup> Many continue to be over-exploited, and the majority are fully exploited.<sup>260</sup> Given the inexact science of predicting stock numbers and maximum sustainable yields, even those stocks supposedly exploited at "sustainable" levels may also be in danger.<sup>261</sup> While the international fishery law framework is expansive, many regulatory gaps allow countries to rationalize noncompliance with sustainable fishing practices.<sup>262</sup> Furthermore, scholarship focuses on the imposition of sanctions to engender greater sustainable fishing compliance.<sup>263</sup> This approach is simply ineffective in the international fishery context. Instead, countries like the United States need to learn from the example of the Israel–Egypt Peace Treaty of 1979 and start offering countries incentives to comply with sustainable fishing practices. The introduction of incentives allows non-compliant states, like Panama, to overcome political and economic obstacles and make rational decisions in favor of compliance. Indeed, the world will catch less

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258. FAO STATE OF THE WORLD, *supra* note 9, at 10.

259. *Id.* at 59.

260. *Id.* at 53.

261. *Id.*

262. Tyler, *supra* note 38.

263. Guzman, *supra* note 152, at 1825.

fish when countries start offering more honey in furtherance of this goal.

# CLIMATE CHANGE LEGAL REMEDIES: HURRICANE SANDY AND NEW YORK CITY COASTAL ADAPTATION

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*By Jenna Schweitzer\**

*In the wake of Hurricane Sandy and legislative changes to the federal flood insurance program, flood insurance costs have or will increase for many coastal property owners due to climate change causing activities. Property owners that wish to be compensated for either property damage or their insurance premium increases may seek to file a claim against their local government based upon the premise that the city did not adapt reasonably to climate change in light of the risks known. Yet, for the government to be found liable, it must have breached a legal duty. There is no affirmative duty for governments to provide protection from natural hazards, including climate change. Yet, it has been argued that once a city decides to adapt, it triggers a duty to adapt reasonably under the circumstances. The failure to do so can result in liability for negligence.*

*New York City has decided to adapt to climate change, as it instituted adaptation measures in “PlaNYC,” prior to Sandy and re-affirmed this commitment after Sandy in its updated “Resiliency Plan.” This paper analyzes whether, under New York law, coastal property owners could claim successfully that the City acted unreasonably in its pre- and post-Sandy adaptation measures. Examining these claims reveals that the City is unlikely to be held liable for failing to adapt reasonably to climate change under current law. Given this outcome, New York common law (and many state jurisdictions) signals to cities that they do not need to adapt to climate change and consequently, coastal homeowners must bear their own risk. These signals show why legislation is necessary to properly address climate adaptation on a large-scale.*

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## INTRODUCTION

New York City (“NYC” or “the City”) has over 520 miles of coastline, more than any other American city, and over 200,000 New Yorkers own

property in the 100-year floodplain, making them vulnerable to storms.<sup>1</sup> NYC coastal property owners endured significant physical damage to their homes and businesses during “superstorm” Hurricane Sandy (“Sandy”), the “worst natural disaster ever to hit New York City.”<sup>2</sup> And now, they face exponential increases in their flood insurance premiums due to the Biggert-Waters Act of 2012 and the Homeowner Flood Insurance Affordability Act of 2014.<sup>3</sup> These coastal property owners may potentially seek relief for the aforementioned physical and monetary damages under common law.<sup>4</sup> Climate adaptation<sup>5</sup> claims against polluters that contribute to climate

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1. CITY OF NEW YORK, PLANYC UPDATE APRIL 2011: A GREENER, GREATER NEW YORK 10, 155 (Apr. 2011), available at [http://nytelecom.vo.llnwd.net/o15/agencies/planyc2030/pdf/planyc\\_2011\\_planyc\\_full\\_report.pdf](http://nytelecom.vo.llnwd.net/o15/agencies/planyc2030/pdf/planyc_2011_planyc_full_report.pdf) [hereinafter PLANYC]; NEW YORK CITY OFFICE OF EMERGENCY MANAGEMENT, NEW YORK CITY NATURAL HAZARD MITIGATION PLAN, 147 (Mar. 2009), available at [http://s-media.nyc.gov/agencies/planyc2030/pdf/planyc\\_2011\\_planyc\\_full\\_report.pdf](http://s-media.nyc.gov/agencies/planyc2030/pdf/planyc_2011_planyc_full_report.pdf); FED. EMERGENCY MGMT. AGENCY, THE 100 YEAR FLOOD MYTH 2–4, available at <http://www.training.fema.gov/EMIWeb/edu/docs/hazrm/Handout%203-5.pdf> (last visited Oct. 29, 2014). Note that in this article, “New York City” is referred to as “the City” or “NYC.” “New York State” is referred to as “New York” or “N.Y.”.

2. CITY OF NEW YORK, PLANYC: A STRONGER, MORE RESILIENT NEW YORK (2013), available at <http://www.nyc.gov/html/sirr/html/report/report.shtml> [hereinafter NYC RESILIENCY PLAN].

3. Laura Vecsey, *Coastal Area Residents Stunned by Flood Insurance Rate Hikes*, FORBES (Oct. 22, 2013), <http://www.forbes.com/sites/zillow/2013/10/22/coastal-area-residents-stunned-by-flood-insurance-rate-hikes/>; Bruce Alpert, *For Those Who Overpaid Flood Insurance Premiums, Refunds Start Flowing on Wednesday*, NOLA.COM (Oct. 26, 2014), [http://www.nola.com/politics/index.ssf/2014/09/for\\_those\\_who\\_overpaid\\_flood\\_i.html](http://www.nola.com/politics/index.ssf/2014/09/for_those_who_overpaid_flood_i.html).

4. Karen Sudol, *N.J.’s Superstorm Sandy Victims Turn to Court for Unpaid Flood Claims*, NORTHNEWJERSEY.COM (Apr. 27, 2014), <http://www.northjersey.com/news/n-j-s-superstorm-sandy-victims-turn-to-court-for-unpaid-flood-claims-1.1003818?page=all> (explaining that over 2,000 coastal homeowners in New York and New Jersey have filed suit against their flood insurance providers—private insurance companies that work with FEMA to provide flood insurance—for monetary compensation for property damage from Hurricane Sandy; they claim that their flood insurance did not adequately cover their substantial property damage, and according to some, “the number of cases filed so far is not indicative of large-scale dissatisfaction.”).

There is debate as to whether homeowner compensation for increased flood insurance premiums or even property damage is a positive action, since such compensation signals that homeowners shall continue living on the coast, which is risky behavior. But the focus of this paper is primarily on the legal duty of local governments to adapt to climate change and the government incentives that stem from the duty, or lack thereof, as determined by the courts.

5. MICHAEL B. GERRARD, *THE LAW OF ADAPTION TO CLIMATE CHANGE: U.S. AND INTERNATIONAL ASPECTS* 3 (Michael B. Gerrard & Katrina Fischer Kuh eds., 2012) (explaining that “adaptation” describes “efforts to moderate, cope with, and prepare for the current and anticipated impacts of climate change on human and natural systems;” whereas “resilience” is a “closely related” concept that describes “the capability to anticipate, prepare for, respond to, and recover from climate

change are largely precluded under common law.<sup>6</sup> Yet, Professor Maxine Burkett of the University of Hawaii School of Law advocates that climate adaptation claims against cities for negligence may provide relief; because, once cities institute climate adaptation measures, they have a legal duty to adapt reasonably.<sup>7</sup>

New York City has taken significant steps to adapt to climate change. In 2007, the City released PlaNYC, which included a preliminary climate adaptation plan focused primarily on information gathering and risk assessment of local climate change vulnerabilities. Under Burkett's theory, NYC property owners may seek to file claims against NYC for failing to adapt to Sandy reasonably through PlaNYC.<sup>8</sup> After Sandy, the City adopted "A Stronger, More Resilient New York," a plan to further prepare the City for the next major storm. In the plan, the City promotes a more resilient re-development in vulnerable coastal areas, as opposed to a more stringent policy of managed coastal retreat.<sup>9</sup> Thus, NYC property owners injured in the future may seek to file claims after the next major storm, asserting that the City did not adapt reasonably after Sandy.<sup>10</sup>

To file a successful climate adaptation claim under a tort theory of negligence, a plaintiff must first show that a defendant has a legal duty.<sup>11</sup> In

impacts." When describing the City's efforts in PlaNYC and "A Stronger, More Resilient New York," I primarily use the word "adaptation" because I am referring to the City's efforts to "moderate, cope with, and prepare for" increased climate risks, primarily more frequent and intense storms like Sandy, as opposed to its efforts to bounce back from Sandy. Yet, I also use the word "resilient" in instances where the City does to refer to its adaptation measures in its pre- and post-Sandy plans.

6. See Native Vill. of Kivalina v. ExxonMobil Corp. (*Kivalina*), 696 F.3d 849, 869 (9th Cir. 2012) (holding plaintiffs' claim against polluters for public nuisance under federal common law was precluded by the Clean Air Act and Environmental Protection Agency action authorized thereunder).

7. Maxine Burkett, *Duty and Breach in an Era of Uncertainty: Local Government Liability for Failure to Adapt to Climate Change*, 20 GEO. MASON L. REV. 775, 790–91 (2013). This note builds on Burkett's analysis by applying her argument to a concrete case, NYC and Hurricane Sandy, and by analyzing the signals that common law is sending as a result of that application.

8. *Id.* at 781–82 (suggesting that NYC's failure to adapt actually exacerbated Sandy's physical damage and caused an increase in flood insurance rates).

9. Robert R.M. Verchick & Lynsey R. Johnson, *When Retreat is the Best Option: Flood Insurance After Biggert-Waters and Other Climate Change Puzzles*, 47 J. MARSHALL L. REV. 695, 697 (2013) (stating coastal retreat "involves the migration of people, property, businesses, and perhaps wildlife. Its goal is to minimize hazards and environmental impacts by removing development (or animal habitat) from the most vulnerable areas. In its most extreme form, retreat means abandoning development that cannot reasonably be protected or serviced in another way. But retreat can also mean imposing limits, such as restricting development in existing communities or prohibiting development in sensitive undeveloped landscapes.").

10. Joshua Dawsey, *Cuomo Lays Out Plan for Sandy Recovery Money*, WALL ST. J. (Jan. 7, 2014), <http://online.wsj.com/news/articles/SB10001424052702304617404579307033953274754> (explaining that according to New York Governor Andrew Cuomo, "[t]he new reality in New York is we are getting hit by 100-year storms every couple of years.").

11. David Hunter & James Salzman, *Negligence in the Air: The Duty of Care in Climate Change Litigation*, 155 U. PA. L. REV. 1741, 1744–45 (2007).

determining a city's legal duty, New York common law (like many other state jurisdictions) distinguishes between government structural measures, such as dikes and levees, and non-structural measures, which are discretionary decisions.<sup>12</sup> The City is afforded sovereign immunity for the latter, which courts are unlikely to waive to consider a climate adaptation negligence claim. Nevertheless, examining claims of both structural and non-structural breaches of duty reveals that NYC is unlikely to be held liable for failing to adapt reasonably to climate change prior to and after Sandy under New York common law.

Generally, common law doctrine in any substantive area of the law sends signals as to preferred modes of conduct and thus encourages or discourages certain behavior. An analysis of the above claims under New York tort common law reveals certain signals. To cities, common law in New York (and states with similar laws) indicates that cities do not need to adapt to climate change because they are immune from most climate adaptation claims. As such, the common law signals to coastal property owners that they cannot depend on their municipalities to adapt adequately to climate risks. Rather, they must bear their own risk of occupying property on the coast, even if that means relocating somewhere else. Overall, these signals are problematic because they fail to encourage climate adaptation measures on a larger scale, which are critically needed given the increased climate risks that NYC and the rest of the country face. Thus, in the absence of national or state climate legislation, "tort litigation has the power to determine the course of climate adaptation."<sup>13</sup>

While tort litigation can and should play a role in encouraging local climate adaptation, the analysis below suggests that tort litigation is not the ideal tool to address local adaptation; rather, legislation is. When federal or state regulations are passed that properly address climate adaptation on a larger scale, plaintiffs, litigators, and legal scholars will no longer need to rely on torts as the primary mechanism to mandate adaptation. Further, with legislation, courts will be empowered to analyze cities' adaptation efforts more effectively.

This paper also argues that both cities and property owners should bear the costs of adaptation. While cities should be subject to climate adaptation legislation, coastal property owners should be subject to flood insurance premiums that reflect the true cost of their behavior. The affordability of

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12 *Id.* at 1748 (explaining that discretionary decisions include: whether to adapt and if so, how to adapt).

13. Maxine Burkett, *Litigating Climate Change Adaptation: Theory, Practice, and Corrective (Climate) Justice*, 42 ENVTL. L. REP. 11,144, 11,147 (2012).

such premiums can be addressed without encouraging property owners to live on the coast.

Section I presents the relevant background information regarding climate science and increased flood insurance premiums. Section II describes NYC's climate change adaptation efforts prior to Sandy and Sandy's effects on NYC, as well as NYC's climate change adaptation plan after Sandy in light of the potential adaptation tools available today. Section III gives a brief background on climate change common law, explains why local governments are viable defendants in a climate change adaptation suit, and lays out the legal framework for such a suit under New York common law. Section III applies the factors that a court would use to assess claims against NYC that the City failed to adapt reasonably prior to and after Sandy under New York common law. Section IV takes a step back to examine the signals that both New York common law and common law more generally are sending to coastal property owners, particularly local governments, and concludes by making policy suggestions to address climate adaptation going forward.

## I. BACKGROUND

### A. *Climate Science*

Today, it is widely accepted that anthropogenic climate change is occurring, as the increase in greenhouse gas emissions from burning fossil fuels is altering earth's climate.<sup>14</sup> Observed climate change effects include a rise in average temperatures, sea level, and more frequent and intense storms.<sup>15</sup> Regarding the latter, "public awareness about the role of climate change in the development of so-called 'superstorms' seems to be gaining some traction, in part due to Superstorm Sandy."<sup>16</sup> The heightened risk of such "superstorms" threatens coastal areas and river floodplains.<sup>17</sup> Indeed,

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14. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC), SUMMARY FOR POLICYMAKERS 4, 13 (2013), available at [http://www.climatechange2013.org/images/report/WG1AR5\\_SPM\\_FINAL.pdf](http://www.climatechange2013.org/images/report/WG1AR5_SPM_FINAL.pdf) ("Warming of the climate system is unequivocal . . . [and] . . . [n]atural and anthropogenic substances and processes that alter the Earth's energy budget are drivers of climate change.").

15. *Id.* at 7.

16. Kate Margolis & Bradley A. B. Cummings, *Insurance Coverage Crossroads: The Industry Appears Largely Unprepared to Weather Risks of Climate Change*, BLOOMBERG LAW (July 2, 2013, 3:32 PM), <http://www.bna.com/insurance-coverage-crossroads/>.

17. J. PETER BYRNE & JESSICA GRANNIS, *Coastal Retreat Measures*, in THE LAW OF ADAPTATION TO CLIMATE CHANGE 267, 267 (Michael B. Gerrard & Katrina Fischer Kuh eds., 2012) ("Recent disasters should serve as a wake-up call—climate change will cause serious harm in both coastal and riverine floodplains.").



“[S]cientists predict that, over the next century . . . storms that batter coastal communities will be more intense, and storm surges will push farther inland. Large portions of low-lying coast will be permanently inundated. Climate change is also predicted to increase precipitation and rapidly melt snowpack, with resultant flooding in river valleys.”<sup>18</sup> In 2008, Mayor Bloomberg convened the New York City Panel on Climate Change (“NPCC”) to develop the first official climate change projections for NYC.<sup>19</sup> After Hurricane Sandy, Mayor Bloomberg convened the second NPCC (“NPCC2”) to provide updated climate risk information for NYC.<sup>20</sup> According to the NPCC2’s latest report, sea level around NYC is expected to rise 4–8 inches by the 2020s and between 11–24 inches by the 2050s, a significant increase from the NPCC’s initial sea level rise projections in 2010.<sup>21</sup> (Appendix, Figure 1). The NPCC2 also states that the number of intense hurricanes, extreme hurricane winds, and intense hurricane precipitation will “more likely than not” increase by the 2050s.<sup>22</sup>

### B. Flood Insurance Premiums

#### 1. Nationally

The National Flood Insurance Program (“NFIP”), administered by the U.S. Federal Emergency Management Agency (“FEMA”), was created in 1968 to “provide subsidized insurance to communities in areas particularly vulnerable to floods,” as privatized insurance became “prohibitively expensive.”<sup>23</sup> Property owners can choose to purchase flood insurance from

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18. *Id.*

19. Modeled on the IPCC, the NPCC consists of leading climate and impact scientists, academics, economists, and risk management, insurance, and legal experts. The purpose of the NPCC is to provide state-of-the-art climate projections to the New York City Climate Adaptation Task Force, which, based on the science and other relevant factors, decides which adaptation strategies to implement. PLANYC, *supra* note 1, at 150; Interview with Leah Cohen, Deputy Director for Federal Policy, NYC Mayor’s Office of Long-Term Planning and Sustainability (July 2012).

20. NEW YORK CITY PANEL ON CLIMATE CHANGE, CLIMATE RISK INFORMATION 2013: OBSERVATIONS, CLIMATE CHANGE PROJECTIONS, AND MAPS 1 (2013), available at [http://www.nyc.gov/html/planyc2030/downloads/pdf/npcc\\_climate\\_risk\\_information\\_2013\\_report.pdf](http://www.nyc.gov/html/planyc2030/downloads/pdf/npcc_climate_risk_information_2013_report.pdf) [hereinafter NPCC].

21. *Id.* at 19 (“For sea level rise, the timeslice represents a 10-year average centered around the given decade (i.e., the time period for the 2020s is from 2020-2029), and changes are expressed relative to the 2000–2004 baseline. Projections rounded to the nearest half degree, five percent and inch.”).

22. *Id.* at 22 (explaining that “[m]ore likely than not” means greater than 50% probability of occurrence, as defined by the IPCC).

23. ANNE SIDERS, COLUM. CTR. FOR CLIMATE CHANGE LAW, MANAGED COASTAL RETREAT: A HANDBOOK OF TOOLS, CASE STUDIES, AND LESSONS LEARNED 9 (2013), available at [http://web.law.columbia.edu/sites/default/files/microsites/climate-change/files/Publications/Fellows/ManagedCoastalRetreat\\_FINAL\\_Oct%2030.pdf](http://web.law.columbia.edu/sites/default/files/microsites/climate-change/files/Publications/Fellows/ManagedCoastalRetreat_FINAL_Oct%2030.pdf).

the NFIP if their community joins the NFIP. Regardless, the NFIP requires that property owners purchase flood insurance if they live in a “Special Flood Hazard Area” (“SFHA”) and have a mortgage from a federally backed or regulated lender.<sup>24</sup> By providing subsidized flood insurance to coastal properties, the NFIP encourages Americans to purchase property on the coast.<sup>25</sup> Almost 50 years later, the NFIP is \$25 billion in debt, partly because of these subsidized rates that do not reflect the true cost of owning coastal property.<sup>26</sup>

To help mitigate this debt, Congress enacted the Biggert-Waters Flood Insurance Act in 2012.<sup>27</sup> Biggert-Waters is designed to eliminate the NFIP’s debt by increasing flood insurance rates to reflect the true cost of owning coastal property.<sup>28</sup> Upon Biggert-Waters’ enactment, the U.S. Government Accountability Office estimates that about 438,000 policies nationwide had higher premiums immediately. Additionally 715,000 policies will undergo premium increases through one of the legislative triggers: an insurance policy lapse, a sale of the insured property, substantial flood damage to the insured property, substantial improvement to the property, or the purchase of a new policy.<sup>29</sup>

In areas where FEMA Flood Insurance Rate Maps (“FIRMs”) have not yet been updated, insurance rates on existing properties suffering repetitive losses would increase 25 percent annually until the premium represented

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24. CAROLYN KOUSKY & HOWARD KUNREUTHER, RESOURCES FOR THE FUTURE & THE WHARTON RISK MGMT. & DECISION PROCESSES CTR., ISSUE BRIEF: ADDRESSING AFFORDABILITY IN THE NATIONAL FLOOD INSURANCE PROGRAM 2–3 (Aug. 2013), available at <http://www.rff.org/RFF/Documents/RFF-IB-13-02.pdf> (explaining that SFHAs refer to properties in the 100-year-flood zone. To join the NFIP, communities must “adop[t] a floodplain ordinance based on the most up-to-date maps and flood data provided by FEMA. At a minimum, communities must require that new development and substantially improved or damaged properties in high hazard areas be built at or above the level of the 100-year flood. Only then is flood insurance made available for purchase by residents in the community.”).

25. See James Wilkins, *Is Sea Level Rise “Foreseeable”? Does it Matter?*, 26 J. LAND USE & ENVTL. L. 437, 438 (2011) (“Government efforts to reduce flooding damage through programs like the National Flood Insurance Program have not been very effective and have actually encouraged risky development by providing flood insurance that would be difficult to obtain otherwise.”).

26. CAROLYN KOUSKY & HOWARD KUNREUTHER, WHARTON RISK MGMT. & DECISION PROCESSES CTR., ISSUE BRIEF: ADDRESSING AFFORDABILITY IN THE NATIONAL FLOOD INSURANCE PROGRAM: MEANS-TESTED VOUCHERS COUPLED WITH MITIGATION LOANS, (2013), available at [http://opim.wharton.upenn.edu/risk/library/WRCib2013d\\_Affordability\\_NFIP.pdf](http://opim.wharton.upenn.edu/risk/library/WRCib2013d_Affordability_NFIP.pdf) (stating that pre-Biggert Waters “FEMA estimates that about 20 percent of flood insurance policies currently receive premium discounts of about 40–45 percent of full-risk rates.”).

27. *Flood Insurance Reform – The Law*, FED. EMERGENCY MGMT. AGENCY, <https://www.fema.gov/flood-insurance-reform-law> (last updated Nov. 18, 2014).

28. KOUSKY & KUNREUTHER, *supra* note 24, at 4–5.

29. *Id.* at 5.

the actual risk of owning that property.<sup>30</sup> For all other properties, the premiums' rate of increase was capped at 20 percent annually.<sup>31</sup> The biggest rate increases were expected to occur in areas affected by changes in FEMA flood maps, since Biggert-Waters phased out grandfathering, a practice that enables property owners to keep their old premium prices when a new FEMA flood map reclassifies them into a higher-risk flood zone.<sup>32</sup> As such, property owners who were affected by FEMA map changes would have had their subsidies phased out over five years.<sup>33</sup> (Appendix, Figure 2).

To improve the affordability of premiums for coastal homeowners, the Homeowners Flood Insurance Affordability Act of 2014 ("Act" or "Affordability Act") was passed in March 2014 as an amendment to Biggert-Waters.<sup>34</sup> The Act favors a more gradual increase to full-risk premiums and thus softens the "blow" of Biggert-Waters on coastal homeowners.<sup>35</sup> Under the Act, FEMA must still raise premiums by at least 5 percent annually, but cannot increase most premiums more than 18 percent annually (reduced from 20 percent).<sup>36</sup> Accordingly, the Act repeals the Biggert-Waters provision that phased out grandfathering and required premiums for properties affected by FIRMs to increase 20 percent annually for five years.<sup>37</sup> Now, previously grandfathered properties cannot have premium increases that exceed 18 percent annually and properties newly mapped into the SFHA will have their first year premium remain the same as properties outside of the area.<sup>38</sup>

The Act retains the 25 percent annual premium increase for severe repetitive loss properties with subsidized rates, older business and non-primary residential properties with subsidized rates, and properties damaged or built before the FIRMs went into effect (pre-FIRM

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30. NYC RESILIENCY PLAN, *supra* note 2, at 96 (explaining that losses are defined as when cumulative NFIP claims payments exceed the fair market value of the property); KOUSKY & KUNREUTHER, *supra* note 24, at 4, 8.

31. KOUSKY & KUNREUTHER, *supra* note 24, at 5.

32. *Id.*

33. NYC RESILIENCY PLAN, *supra* note 2, at 96.

34. FED. EMERGENCY MGMT. AGENCY, HOMEOWNER FLOOD INSURANCE AFFORDABILITY ACT OVERVIEW (2014), available at [http://www.fema.gov/media-library-data/1396551935597-4048b68f6d695a6eb6e6e7118d3ce464/HFIAA\\_Overview\\_FINAL\\_03282014.pdf](http://www.fema.gov/media-library-data/1396551935597-4048b68f6d695a6eb6e6e7118d3ce464/HFIAA_Overview_FINAL_03282014.pdf).

35. Verchick & Johnson, *supra* note 9, at 711 ("In the spring of 2014, Congress blunted the impact of [Biggert-Waters] by repealing its most dramatic changes and delaying most 'actuarial' reform until 2017. This turn of tide can be credited, at least in part, to Hurricane Sandy.").

36. *Id.* at 716. In other words, FEMA has latitude in deciding a flood insurance policy's premium increase. In addition, under the Act, policyholders who renewed their policy after the Act passed in March 2014, and whose premium increased more than 18 percent may be eligible for refunds.

37. *Id.*

38. *Id.*

properties).<sup>39</sup> (Appendix, Figure 2). But the Act enables new coastal property purchasers, as well as policyholders renewing their policies, to keep their property's pre-FIRM rates while FEMA develops revised premium rates under the Act.<sup>40</sup> Consequently, policyholders in high-risk areas who purchased flood insurance after Biggert-Waters went into effect, and had to pay a full-risk rate, are eligible for a refund under the Act.<sup>41</sup>

To compensate for the Act's increased subsidies compared to Biggert-Waters, a \$25 surcharge will be added to all primary residential policies and a \$250 surcharge will be added to all other policies.<sup>42</sup> FEMA will develop regulatory proposals to address the affordability of flood insurance premiums, especially for low-income policyholders.<sup>43</sup> In addition, FEMA will designate a "Flood Insurance Advocate" to inform policyholders of mitigation measures that can reduce their premiums and assist them in implementing such measures.<sup>44</sup> Accordingly, the Act seemingly broadens FEMA's ability to account for flood mitigation measures in determining a property's premium.<sup>45</sup> In sum, while the Act alleviates Biggert-Water's financial effect, coastal homeowners will still face substantial increases in their flood insurance premiums.

## 2. Locally

In NYC, most large commercial property owners purchase flood insurance through the private market, while homeowners and small business owners purchase flood insurance through the NFIP.<sup>46</sup> When Sandy hit NYC, most NYC homeowners did not own flood insurance for the following reasons: they were unaware that their homeowner's insurance did not cover flood damages, they neglected the mortgage requirement to purchase flood insurance, or they were unaware that their properties were

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39. FED. EMERGENCY MGMT. AGENCY, *supra* note 34, at 2-3; Verchick & Johnson, *supra* note 9, at 716-717 (noting that "[r]ental properties are not covered by the 18 percent cap, but rather seem governed by the 25 percent cap that remains in place for commercial properties.").

40. FED. EMERGENCY MGMT. AGENCY, *supra* note 34 at 3.

41. *Id.* at 2.

42. *Id.* at 3.

43. *Id.* at 4 (providing an exhaustive explanation of the Act's amendments to Biggert-Waters).

44. *Id.* at 3.

45. FED. EMERGENCY MGMT. AGENCY, *supra* note 34 at 4 ("The new law permits FEMA to account for property specific flood mitigation that is not part of the insured structure in determining full-risk rate.").

46. NYC RESILIENCY PLAN, *supra* note 2 at 15. This paper focuses on the NFIP, as opposed to private flood insurance, because Sandy had the most dramatic impact on the NFIP.

subject to heightened flood risk since the FEMA FIRMs for NYC were last updated in 1983.<sup>47</sup> (Appendix, Figures 2 and 3).

NYC property owners that suffered substantial property damage from Sandy are now facing large increases in their flood insurance premiums, due to Biggert-Waters, and will continue to do so even under the Affordability Act.<sup>48</sup> Specifically, it is estimated that 75 percent of the roughly 26,000 NFIP policies that New Yorkers had during Sandy received heavily subsidized premiums.<sup>49</sup> In 2015, when FEMA's new FIRMs are published for NYC, the updated maps will likely affect these policyholders and consequently, their insurance subsidies will begin to phase out.<sup>50</sup> Additionally, the many new policyholders that are classified into the FIRM will have to pay significantly more for their flood insurance.<sup>51</sup> (Appendix, Figures 3 and 4).

The true cost of living on the coast is much greater than the NFIP subsidized premiums indicated, and New York residential property owners are now facing premiums that range from about \$9,000 to \$15,000 annually.<sup>52</sup> Though the Affordability Act may reduce these premiums, property owners will still face significant premium increases. Undoubtedly, these rate increases would not be as sharp if coastal properties had adequate adaptation measures. But could the local government's failure to institute coastal adaptation measures be a basis for liability?

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47. *Id.* at 15, 93-94, 97 (“In fact, the City estimates that less than 20 percent of residential buildings in areas inundated by Sandy had coverage through the NFIP. The numbers are believed to have been even lower for businesses; approximately 26,400 businesses with fewer than 50 employees were in the Sandy inundation zone in New York, but only 1,400 commercial NFIP policies were in effect when Sandy hit . . . The new [FEMA] maps show a significantly expanded 100-year floodplain compared with the 1983 maps, with approximately 32,000 more buildings in the floodplain (an increase of 91 percent).”).

48. Jenny Anderson, *Outrage as Homeowners Prepare for Substantially Higher Flood Insurance Rates*, N.Y. TIMES (July 28, 2013), <http://www.nytimes.com/2013/07/29/nyregion/overhaul-and-a-hurricane-have-flood-insurance-rates-set-for-huge-increases.html?pagewanted=all>.

49. NYC RESILIENCY PLAN, *supra* note 2, at 96; Press Release, Fed. Emergency Mgmt. Agency, FEMA Overview of Homeowner Flood Insurance Affordability Act (April 4, 2014), *available at* <http://meeks.house.gov/press-release/overview-homeowner-flood-insurance-affordability-act-provided-fema> (explaining this is so despite the fact that FEMA states that “[C]lose to 80 percent of NFIP policyholders [nationally] paid a full-risk rate prior to either [Biggert-Waters] or [the Affordability Act], and are minimally impacted by either law.”).

50. NYC RESILIENCY PLAN, *supra* note 2 at 96.

51. *Id.*

52. Anderson, *supra* note 48; *see generally* Lizette Alvarez & Campbell Robertson, *Cost of Flood Insurance Rises, Along With Worries*, N.Y. TIMES (Oct. 12, 2013), [http://www.nytimes.com/2013/10/13/us/cost-of-flood-insurance-rises-along-with-worries.html?pagewanted=2&\\_r=0](http://www.nytimes.com/2013/10/13/us/cost-of-flood-insurance-rises-along-with-worries.html?pagewanted=2&_r=0) (stating that coastal property owners are “Confronted with premiums that can range from \$3,000 to \$33,000 or much more, depending on the cost of the home and its risk.”).

## II. NYC'S CLIMATE ADAPTATION EFFORTS

## A. NYC's Pre-Sandy Adaptation Efforts

In 2007, Mayor Bloomberg undertook the effort to create and implement PlaNYC, NYC's sustainability plan to be achieved by 2030.<sup>53</sup> In 2011, the City issued an update report to PlaNYC, in which the City described its climate adaptation goal to increase the "resilience" of communities, natural systems, and infrastructure to climate risks by 2030.<sup>54</sup> The City's approach to climate adaptation was one of risk-management, meaning the City focused primarily on information gathering and risk assessment.<sup>55</sup> The NPCC's findings suggest that the City promoted action only when it made sense to do so given the risk involved.<sup>56</sup> The City's general adaptation goals, as relevant to sea level rise and storm surge, included the following: "assess vulnerabilities and risks from climate change;" "increase the resilience of the city's built and natural environment;" "increase the city's preparedness for extreme climate events;" and "create resilient communities through public information and outreach."<sup>57</sup>

In assessing future climate change risks, the City planned to keep abreast of climate change projections and develop tools to more accurately measure the City's climate risks.<sup>58</sup> Additionally, the City intended to work with FEMA to update their FIRMs "to better represent our current climate exposure to improve the risk management available through the NFIP."<sup>59</sup> Yet, FEMA did not release updated FIRMs for NYC prior to Sandy; therefore, outdated 1983 FIRMs were in effect when Sandy hit.<sup>60</sup> (Appendix, Figure 3).

The City planned to increase the resiliency of its environment and infrastructure through:

1. Updating regulations, such as amending zoning regulations to require "freeboard"<sup>61</sup> for a larger variety of buildings;

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53. CITY OF NEW YORK, *About PlaNYC*, NYC.GOV, <http://www.nyc.gov/html/planyc2030/html/about/about.shtml> (last visited Nov. 22, 2014).

54. PLANYC, *supra* note 1 at 151.

55. Interview with Leah Cohen, *supra* note 19.

56. *Id.*

57. PLANYC, *supra* note 1 at 151.

58. *Id.* at 151.

59. *Id.* at 151, 155.

60. *See supra* Section I.B.1.

61. NYC RESILIENCY PLAN, *supra* note 2 at 72 (explaining that "freeboard" means raising buildings "an incremental elevation" above the FEMA base flood elevation).

2. Working with the insurance industry to “understand the current state of flood insurance and protection in the City”<sup>62</sup> and to develop strategies to encourage flood protections in buildings;
3. Safeguarding the City’s infrastructure through coastal protection measures; and
4. Identifying and evaluating potential coastal protective measures.<sup>63</sup>

Prior to Sandy, coastal protections such as bulkheads and floodgates were already in place.<sup>64</sup> In PlaNYC the City identified and began implementing additional coastal protection measures,<sup>65</sup> including infrastructure elevation, sea walls and levees, as well as measures that involve natural infrastructure, such as restoring wetlands and nourishing beaches.<sup>66</sup>

Ultimately though, PlaNYC was an “indirect procedural adaptation of a process for deciding among substantive adaptations,” rather than a plan of substantive climate adaptations itself.<sup>67</sup> In other words, in PlaNYC the City focused more on information gathering and risk assessment in anticipation of future implementation, rather than implementing a range of coastal retreat measures and structural coastal protections. Yet, had the City known

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62. PLANYC, *supra* note 1, at 157.

63. *Id.* at 151.

64. NYC RESILIENCY PLAN, *supra* note 2, at 43, 53, 276 (explaining how bulkheads and tidegates were destroyed during Sandy; bulkheads are structures made of stone or concrete at the water’s edge and floodgates (or tidegates) are devices that prevent water from flowing backwards through the drainage system).

65. Interview with Leah Cohen, *supra* note 19 (describing, for example, that the City designed a new park and public spaces on Governor’s Island with sea level rise in mind. Certain areas were created to flood, based on projections. Salt-water species were planted in these areas. To protect trees that depend on fresh groundwater, the City raised the roots of newly planted trees above projected flood zones by altering the island’s topography. The Sims Recycling Center and Willets Point Redevelopment, a new neighborhood, were raised out of the future 1-in-100 year flood plain.); Cynthia Rosenzweig et al., *Developing Coastal Adaptation to Climate Change in the New York City Infrastructure-shed: Process, Approach, Tools, and Strategies*, 106 CLIMATIC CHANGE 93, 114, 123 (2011), available at <http://pubs.giss.nasa.gov/abs/ro06110e.html> (describing that at La Guardia Airport, the Port Authority of New York and New Jersey has surrounded exposed structures with local sea walls and dykes (levees). The NYC Department of Environmental Protection is currently raising the pumps and electrical equipment in its Far Rockaway Treatment Plant from below sea level to fourteen feet above sea level.).

66. NYC RESILIENCY PLAN, *supra* note 2 at 58 (explaining that beach nourishment is a coastal protection measure that involves adding large quantities of sand to the beach on a regular cycle to prevent sand erosion and protect infrastructure during storm surges).

67. GERRARD, *supra* note 5 at 9 (citing Alejandro E. Camacho, *Adapting Governance to Climate Change: Managing Uncertainty Through a Learning Infrastructure*, 59 EMORY L. J. 1, 17–25 (2009)).

that Hurricane Sandy was headed its way, PlaNYC might have read differently.<sup>68</sup>

### 1. Hurricane Sandy Hits NYC

Hurricane Sandy, which was three times the size of Hurricane Katrina, hit New York City on October 29, 2012.<sup>69</sup> Mayor Bloomberg proclaimed Sandy “the worst natural disaster ever to hit New York City.”<sup>70</sup> Causing over \$19 billion in damages, Sandy’s storm surge eroded shorelines and flooded entire communities, damaging and destroying homes, buildings, and critical infrastructure.<sup>71</sup> South Queens, Southern Brooklyn, and the East and South Shores of Staten Island were hit particularly hard. Also hit hard, were the Brooklyn-Queens Waterfront and Southern Manhattan.<sup>72</sup> These neighborhoods accounted for over 90 percent of inundated areas in the City.<sup>73</sup> Many of these neighborhoods were outside the 100-year-floodplain boundaries set in the 1983 FEMA FIRMs for NYC, as “Sandy’s storm tide caused flooding that exceeded the 100-year floodplain boundaries by 53 percent citywide.”<sup>74</sup> (Appendix Figure 3).

Seventy-thousand NYC housing units were registered with FEMA as sustaining at least some level of damage.<sup>75</sup> Elevated developments, such as Battery Park City in Lower Manhattan, survived Sandy with minimal damage compared with nearby locations that were not elevated.<sup>76</sup> Despite barges, bulkheads, dunes, and nourished beaches, which helped to mitigate the storm’s impact, the storm had an “incredibly destructive” impact on the City’s coastline and an “extensive” impact on waterfront infrastructure,

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68. NYC RESILIENCY PLAN, *supra* note 2 at 1 (“[S]andy’s magnitude, its effects on so many parts of the city, and the threat of ever greater risks from climate change also taught a second lesson: we needed to redouble our efforts.”).

69. NYC RESILIENCY PLAN, *supra* note 2 at 5; see Kim Ann Zimmermann, *Hurricane Katrina: Facts, Damage, and Aftermath*, LIVE SCIENCE (Aug. 20, 2012, 12:47 PM), <http://www.livescience.com/22522-hurricane-katrina-facts.html>. Hurricane Katrina hit New Orleans in 2005 and was one of the deadliest hurricanes in U.S. history.

70. NYC RESILIENCY PLAN, *supra* note 2 at 1.

71. *Id.* at 5.

72. *Id.* at 11, 18.

73. *Id.* at 18.

74. *Id.* at 13, 69 (“Sandy’s waters inundated an area that included approximately 88,700 buildings, more than half of which were located outside the 1983 floodplain boundaries that were in effect when the storm arrived.”).

75. NYC RESILIENCY PLAN, *supra* note 2 at 14–15, 74 (explaining that building damage varied widely; of 70,000 housing units inspected by FEMA, 49 percent sustained damage in excess of \$10,000 and 12 percent in excess of \$30,000; of 22,000 rental-housing units inspected, 26 percent sustained “substantial damage.”).

76. *Id.* at 43.



such as boardwalks and terminals.<sup>77</sup> Most relevant to this analysis, the storm “overtopped” and even “destroyed” bulkheads around the City, and also damaged several tide and floodgates.<sup>78</sup>

In reflecting on Sandy’s impact, the City stated, “The long-term sustainability plan we launched in 2007—PlaNYC—included forward-looking resiliency initiatives that provided important protections during Sandy. But the storm set the bar higher—and as the possibility of more severe weather increases with climate change, we must rise to the occasion.”<sup>79</sup> The City is attempting to rise to the occasion with PlaNYC: “A Stronger, More Resilient New York.”

### B. NYC’s Post-Sandy Adaptation Efforts

In “A Stronger, More Resilient New York,” (“the Resiliency Plan”) the City acknowledged that the combined risk of storm surge and sea level rise threatens the City’s coasts and buildings, and consequently, could cause flood insurance rates to increase.<sup>80</sup> The Resiliency Plan strives to make NYC safer and more resilient to these expected future climate change impacts.<sup>81</sup>

Generally, the City’s coastal planning strategy involves:

1. “Hard armoring,” which are man-made coastal protection structures such as bulkheads, dikes, and levees;
2. “Soft armoring,” which describe natural infrastructure measures such as restoring wetlands, beach nourishment, and beach dunes; and
3. Further research on effective coastal and flood protections with the U.S. Army Corps of Engineers (“USACE”).<sup>82</sup>

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77. *Id.* at 14, 43.

78. *Id.* at 276, 374.

79. *Id.* at 1 (explaining that the City stated: “New York City had been right to invest in protections against extreme weather. Our resiliency investments performed well during Sandy: recently restored wetlands helped to soak up floodwaters like sponges; new, elevated buildings in inundated areas emerged with significantly less damage; much of the sewer system continued to operate and was restored almost completely within five days of the storm. But Sandy’s magnitude, its effects on so many parts of the city, and the threat of ever greater risks from climate change also taught a second lesson: *we needed to redouble our efforts.*”) (emphasis added).

80. *Id.* at 44–46, 76, 100.

81. NYC RESILIENCY PLAN, *supra* note 2 at 1–2.

82. *Id.* at 48, 51–56 (providing on pages 51–52 a comprehensive map of planned hard armoring and soft armoring protection measures around NYC, which include: beach nourishment, armor stone (revetments), bulkheads, and tide gates to increase coastal edge elevations; dunes, offshore breakwaters, wetlands, living shorelines, reefs, and groins to minimize upland wave zones, and integrated flood protection systems, floodwalls/levees, local storm surge barriers, and multi-purpose levees to protection against storm surge. See pages 53–56 for definitions and graphics of these coastal protection measures; and see page 48 for a comprehensive graphic of all coastal resiliency measures.).

The City plans to begin implementing this strategy through 37 Phase-I initiatives, which are specific, localized, and marked for completion either in the near future or sometime in the next decade.<sup>83</sup>

To increase the resiliency of its buildings, the City has a two-prong approach: (1) Strengthen both new and “substantially improved” buildings to meet the highest possible resiliency standards; and (2) Protect existing buildings by encouraging targeted retrofits of “core flood resiliency measures” over time.<sup>84</sup>

Substantially improved buildings are “buildings for which the cost of alteration is greater than 50 percent of their previous value.”<sup>85</sup> The City plans to improve the resiliency of new and substantially improved buildings primarily through regulations that require “increased resiliency measures” during construction or major retrofits.<sup>86</sup> For instance, the City now requires new and substantially improved buildings in the updated FEMA 100-year-floodplain to include freeboard, which raises buildings above the FEMA base flood elevation level.<sup>87</sup>

Though not a central part of its buildings resiliency plan, the City is also cooperating with New York State in identifying NYC communities that are eligible for the state’s \$171 million New York Smart Home Buyout Program, which encourages highly vulnerable property owners to relocate through a “buyout” of their properties.<sup>88</sup>

The City’s real challenge is retrofitting existing buildings, many of which were built prior to the issuance of FEMA maps, and thus “it is either prohibitively expensive, physically infeasible, or both, to retrofit these buildings to meet national flood-resistant construction standards in full.”<sup>89</sup> In this situation, some local governments might choose to pursue a policy

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83. See *id.* at 57–65 (explaining the City’s description of these initiatives).

84. *Id.* at 78.

85. *Id.*

86. NYC RESILIENCY PLAN, *supra* note 2 at 78–81 (explaining that the City has six initiatives to strengthen new and substantially improved buildings: (1) “Improve regulations for flood resiliency of new and substantially improved buildings in the 100-year floodplain;” (2) “Rebuild and repair housing units destroyed and substantially damaged by Sandy;” (3) “Study and implement zoning amendments to encourage retrofits of existing buildings and construction of new resilient buildings in the 100-year-floodplain;” (4) “Launch a competition to encourage development of new, cost-effective housing types to replace vulnerable stock;” (5) “Work with New York State to identify eligible communities for the New York Smart Home Buyout Program;” and (6) “Amend the Building Code and complete studies to improve wind resiliency for new and substantially improved buildings.”).

87. *Id.* at 71–72, 79 (defining base flood elevations as the “height to which floodwaters potentially could rise”).

88. *Id.* at 79, 81 (supporting the assertion that NYC is not pursuing a policy of managed retreat from the coast, which would mean more buyouts; the City states “buyouts would be a tool in the City’s tool kit, but one that would be used sparingly and, where used, would most commonly be used with the goal of redeveloping acquired properties in a more resilient fashion”).

89. *Id.* at 79.

of retreat from the coast. Yet, the City claims that pursuing a policy of managed coastal retreat is “not a practical option” given the many buildings on the coast and the limited alternatives for a growing population in NYC. The City also contends that new buildings can be constructed to address the flood risks faced by most coastal neighborhoods.<sup>90</sup>

Thus, the City is consciously *not* pursuing a coastal retreat strategy. Rather, it is encouraging existing buildings in the updated 100-year-floodplain to strengthen their resiliency by taking advantage of over one billion dollars in monetary incentive programs, such as grant, loan, and sales tax abatement programs, to implement its “core flood resiliency measures.”<sup>91</sup> Core resiliency measures involve elevation and other flood protections for critical equipment and utilities in buildings.<sup>92</sup> Through these monetary incentive programs, the City encourages property owners to implement core resiliency measures and to develop additional innovative strategies to improve building resiliency.<sup>93</sup>

The City plans to mandate resiliency in existing buildings through enacting and amending applicable regulations; for example, by requiring large buildings to undertake certain flood-protection measures by 2030.<sup>94</sup> A Community Design Center will assist property owners in resilient reconstruction and retrofits, and also connect them to available City programs.<sup>95</sup>

In addition to coastal protection and building resiliency, the City is addressing flood insurance. The City publicly supports the Biggert-Waters Act because it believes in principle that flood insurance premiums should reflect the true risk of living near the coast.<sup>96</sup> At the same time, the City

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90. *Id.*

91. NYC RESILIENCY PLAN, *supra* note 2 at 79, 83, 85 (explaining that the City is (1) Providing a \$1.2 billion incentive program of grants and loans; (2) Dedicating \$108 million to retrofit public housing units damaged by Sandy for increased resiliency; (3) Launching a sales tax abatement program to subsidize flood resiliency in industrial buildings; and (4) Launching a competition to increase flood resiliency in building systems, with grants from the competition’s \$40 million budget to be awarded to winners in 2014).

92. *See id.* at 83 (providing more information on these core measures).

93. *Id.*

94. *Id.* at 85 (explaining that the mandatory resilience regulation for large buildings applies to buildings with seven or more stories that are over 300,000 sq. ft. in size; additionally, the City plans to “clarify regulations relating to the retrofit of landmarked structures in the 100-year floodplain,” and “amend the Building Code to improve wind resiliency for existing buildings and complete studies of potential wind resiliency retrofits”).

95. *Id.* at 84.

96. Katherine Greig, Senior Policy Advisor at the NYC Mayor’s Office of Long Term Planning and Sustainability, Presentation at the Penn. Program on Regulation and the Wharton Risk Management Center Seminar on Learning from Hurricane Sandy: A Panel Discussion on Reducing Future Disaster Losses (Nov. 12, 2013) [Presentation at the Penn. Program]; *see also* Katherine Greig, *A Stronger, More Resilient New York*, PLANYC 9 (Nov. 12, 2013),

encourages New Yorkers to buy flood insurance policies in order to enhance their storm resiliency. Thus, the City also supports the Affordability Act so that FEMA can address the affordability of rising premiums.<sup>97</sup>

To promote the purchase of flood insurance, the City had FEMA release preliminary work maps (“PWMs”) for NYC’s FIRMs in June 2013. The City expects FEMA to release the updated FIRMs for NYC in 2015.<sup>98</sup> An important point to note—these maps do not represent the full flood risk to NYC because they are based on historical data and do not account for expected changes in coastal storms or projected sea level rise going forward.<sup>99</sup> (Appendix Figure 4).

In addition, the City is calling on New York State, with the help of insurers, brokers, and agents, to educate the public about flood insurance by raising policyholder awareness at the point of a policy’s sale or renewal.<sup>100</sup> The City also plans to encourage the purchase of flood insurance by launching a consumer education campaign.<sup>101</sup> To address affordability, the City is considering joining FEMA’s Community Rating System, which would require NYC to implement extra floodplain management activities in exchange for reduced premiums for all NYC policyholders.<sup>102</sup> Additionally, the City is calling on FEMA to develop premium mitigation credits, which would enable policyholders to reduce their premium costs by implementing resiliency measures. Lastly, the City is asking FEMA to offer policyholders flexible pricing options to make flood insurance more affordable.<sup>103</sup>

If no progress is made on the affordability of flood insurance policies under the Affordability Act by the time FEMA’s new FIRMs take effect in 2015, the City may directly increase affordability by creating a fund to cost-share premiums or deductibles in the event of the next major storm.<sup>104</sup> Yet,

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<http://opim.wharton.upenn.edu/risk/downloads/2013-StrongerNewYork.pdf> (presenting WHARTON SCHOOL, *Learning from Hurricane Sandy: A Panel Discussion on Reducing Future Disaster Losses*, YOUTUBE (Dec. 17, 2013) [https://www.youtube.com/watch?v=Xz\\_-9R-8TIE](https://www.youtube.com/watch?v=Xz_-9R-8TIE)).

97. See Presentation at the Penn. Program, *supra* note 96 (supporting the idea that flood insurance premiums should be more reflective of the actual risk of owning coastal property, but also supports premium affordability for its constituents).

98. NYC RESILIENCY PLAN, *supra* note 2 at 45, 80 (“[The 2013 PRMs] reflect an expansion of the city’s 100-year floodplain by 15 square miles, or 45 percent, over the 1983 FIRMs. The new floodplain consists of larger portions of all five boroughs, with significant expansion in Brooklyn and Queens. The new 100-year floodplain on the PWMs now includes 67,700 structures (an increase of 91 percent over the number of structures in the 100-year floodplain in the 1983 FIRMs).”).

99. *Id.* at 69 (warning that sea level rise could expand the size of the City’s floodplain to include more than 88,000 buildings by the 2020s and more than 114,000 buildings by the 2050s).

100. *Id.* at 102–03.

101. *Id.* at 103.

102. *Id.* at 102.

103. NYC RESILIENCY PLAN, *supra* note 2 at 102.

104. *Id.* at 101.

the City emphasized that it is not able to “take broad action on this issue,” which is why its focus is on FEMA regulations.<sup>105</sup>

In sum, after Sandy’s devastating impact, the City is strengthening its resiliency to the next major storm through: installing hard and soft coastal protection measures; offering monetary incentives and enacting regulations to encourage “core” building resiliency measures; and advocating for affordable flood insurance premiums to encourage New Yorkers to purchase flood insurance.

### 1. NYC’s Adaptation Tools vs. Potential Adaptation Tools

While NYC is using many resiliency tools to adapt to the aforementioned climate risks, there are additional resiliency tools, and variations of tools, that the City is not using.<sup>106</sup>

For example, the City is instituting “building and rebuilding restrictions” through requiring freeboard and other core resiliency measures to be implemented in certain new and existing buildings.<sup>107</sup> Yet, the City does not plan to impose a temporary building moratorium. This would forestall new building permits while the new regulations are enacted to ensure that all buildings receiving new permits are subject to the latest resiliency restrictions.<sup>108</sup> Nor is the City “limit[ing] the extent or number of repairs after disasters,” though doing so could maximize the City’s adaptation efforts.<sup>109</sup> Additionally, although the City is using information disclosure to encourage resiliency awareness and implementation, it can make more use of this tool by requiring coastal property sales to inform prospective purchasers of the risks of coastal living.<sup>110</sup>

As mentioned, the City is cooperating with New York State’s Buyout Program in a limited fashion. For those few NYC properties deemed eligible under the Program, the City plans to redevelop the space with high resiliency as opposed to converting the property to open space.<sup>111</sup> Yet some argue that abandoning development of highly vulnerable, bought-out properties and creating a floodplain in those areas instead would most effectively increase the City’s resiliency in future storms.<sup>112</sup>

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105. *Id.*

106. *See* SIDERS, *supra* note 23 at 5–7 (outlining coastal management tools).

107. SIDERS, *supra* note 23 at 6; NYC RESILIENCY PLAN, *supra* note 2 at 79, 83.

108. SIDERS, *supra* note 23 at iii (explaining that, in implementing regulations quickly, the City will also prevent further “grandfathering” of buildings under the old regulations).

109. *Id.* at 6.

110. *Id.* at iii.

111. NYC RESILIENCY PLAN, *supra* note 2 at 79, 81.

112. *See* SIDERS, *supra* note 23 at iv (“Managed Retreat is not only about re-locating existing communities but also about preventing new development in vulnerable areas.”).

Indeed, the City's no-retreat policy manifests itself through its decision not to pursue numerous coastal retreat measures such as: downzoning,<sup>113</sup> zoning overlays,<sup>114</sup> conservation easements,<sup>115</sup> setbacks,<sup>116</sup> exactions,<sup>117</sup> and condemnations,<sup>118</sup> all of which limit development on vulnerable coastal property and none of which are mentioned in the City's Resiliency Plan. If the City were to implement some of these tools, it could mitigate the resulting economic burden on vulnerable property owners. This can be done through transferrable development credits ("TDCs"), which "sever development rights from property ownership" so that "landowners in vulnerable areas can sell their development rights to landowners in less-vulnerable areas."<sup>119</sup> But the City does not use TDCs.

In sum, rather than using coastal retreat tools to discourage coastal property development, the City is using incentives and regulations to encourage development on the coast, albeit in a more resilient way. For instance, the City's capital improvement plans provide an opportunity to "study the vulnerability of their infrastructure to projected climate change impacts and then decrease investment in infrastructure in vulnerable areas."<sup>120</sup> In its plan, the City states that 58 "at-risk" pumping stations, which are located in low-lying areas and are vulnerable to storm surges, are scheduled for capital improvement.<sup>121</sup> Yet, rather than decrease investment at these sites and re-build pumping sites in a safer location, the City plans to implement resiliency projects at these vulnerable pumping stations.<sup>122</sup>

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113. *Id.* at 6 (explaining that downzoning "[l]imit[s] potential uses and intensity of use in areas vulnerable to the effects of climate change to decrease development potential").

114. *Id.* (explaining that zoning overlays "provide an additional layer of zoning requirements in specialized areas such as coastal hazard areas").

115. WOLTERS KLUWER, *BOUVIER LAW DICTIONARY* 367 (Stephen Michael Sheppard, ed. 2011) (explaining that conservation easements are "a limitation on the use and development of lands owned by a governmental agency or charitable organization, that thereby may prohibit the owner of the property from engaging in certain activities on the land or require certain practices on the land that would protect the environment"). Although there could be a takings issue if the City tried to limit development through a conservation easement, the latter action has been upheld in New York courts. *See* JON A. KUSLER & EDWARD A. THOMAS, *NO ADVERSE IMPACT AND THE COURTS: PROTECTING THE PROPERTY RIGHTS OF ALL* 34–35 (2007) (citing *Smith v. Town of Mendon*, 822 N.E.2d 1214 (N.Y. 2004)).

116. SIDERS, *supra* note 23 at 6 (explaining that setbacks "[r]equire new development to be sited upland to avoid flooding").

117. *Id.* (explaining that exactions, also known as conditional permits, "[g]rant development permits with retreat conditions (e.g. no armoring, setback requirement, rolling easement)").

118. *Id.* (explaining that condemnations "[e]stablish [a] policy of declaring homes too close to shore (and therefore exposed to erosion and storms) as being unsafe for habitation").

119. *Id.* at 7.

120. *Id.* at 5.

121. NYC RESILIENCY PLAN, *supra* note 2 at 330.

122. *Id.*

The City's coastal resiliency plan is primarily dependent on hard armoring tools, such as bulkheads, levees, and dikes.<sup>123</sup> While these tools offer "strong and predictable levels of security" and can be integrated into other infrastructure to enhance development, they have significant long-term economic and environmental costs, including: eliminating ocean beaches, estuarine beaches, and wetlands; decreasing intertidal habitats; increasing maintenance costs; and fostering a false sense of security that encourages development in vulnerable areas.<sup>124</sup> The City is also using soft armoring tools like beach nourishment, dunes, and restoring wetlands, which have their own environmental consequences, but overall are more cost efficient and environmentally friendly.<sup>125</sup> Consequently, "[m]any scientists, planners, and civil engineers now argue that the use of soft armoring should be dramatically expanded, and . . . soft armoring should be preferred to hard armoring."<sup>126</sup> Thus, the City should arguably prioritize soft-armoring measures over hard-armoring measures in its planning.

In sum, the City is using adaptation tools that promote coastal resiliency as opposed to coastal retreat. Yet, according to Burkett, "Balancing retreat against the current approaches of armoring, rebuilding, and starting all over again increasingly demonstrates that *reasonable conduct will militate in favor of actively moving away from the coasts*."<sup>127</sup> In other words, potential plaintiffs could argue that coastal cities are not adapting reasonably "when they neither seriously consider nor actively pursue [coastal] retreat through regulation," and instead continue rebuilding.<sup>128</sup> In looking at NYC's pre and post Sandy adaptation measures,

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123. ROBERT R.M. VERCHICK & JOEL D. SCHERAGA, *Protecting the Coast, in THE LAW OF ADAPTION TO CLIMATE CHANGE: U.S. AND INTERNATIONAL ASPECTS* 241 (Michael B. Gerrard & Katrina Fischer Kuh eds., 2012).

124. *Id.* at 241. Additionally, if these structures fail, there will be huge costs in life and property, as seen during Hurricane Katrina when the levees broke. *Id.* And, as discussed *infra*, if these structures fail in the next storm, the City can be held liable.

125. VERCHICK & SCHERAGA *supra*, note 123 at 250–51; *see also Shoreline Stabilization Techniques*, N.Y. DEP'T OF ENVTL. CONSERVATION (July 2010), [http://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/stabiltechguid.pdf](http://www.dec.ny.gov/docs/permits_ej_operations_pdf/stabiltechguid.pdf) (stating that "softer" shoreline protections can be more efficient because they have lower maintenance costs and are more durable and resilient, aesthetically pleasing, and environmentally friendly). For example, beach nourishment has environmental consequences, such as the introduction of species from additional foreign sand and the impact of removing large quantities of sand from another ecosystem. Yet, overall soft infrastructure tools enhance ecosystem services and are more flexible, making incremental adaptation management easier.

126. VERCHICK & SCHERAGA *supra*, note 123 at 251.

127. Burkett, *supra* note 7 at 799 (emphasis added).

128. Burkett, *supra* note 7 at 799; Paul M. Coltoff et al., *Continuing Immunity for Performance of Governmental Functions, Generally*, 62 N.Y. JUR. 2D GOV'T TORT LIAB. § 17 (2014) (stating that the process of a city "considering" an adaptation action involves a decision based on "adequate deliberation and study").

would a New York court rule that NYC was unreasonable for failing to pursue a more stringent climate adaptation plan that promotes a policy of coastal retreat?

### III. CLIMATE CHANGE LIABILITY

#### A. *Climate Change Common Law Precedent*

In the last decade a series of climate mitigation suits, known as “carbon torts,” were filed wherein defendants sued polluters (primarily oil, energy, and utility companies) under tort claims of nuisance and negligence, seeking an injunction to reduce or stop the emission of greenhouse gases.<sup>129</sup> These claims have largely proved unsuccessful on “standing or justiciability grounds.”<sup>130</sup> The Supreme Court basically closed the door on climate change torts in *American Electric Power Company, Inc. v. Connecticut*, when it held that, “the Clean Air Act and the [Environmental Protection Agency] actions it authorizes displace any federal common law right to seek abatement of carbon-dioxide emissions from fossil-fuel fired power plants.”<sup>131</sup> In short, based on common law precedent, “it does not appear that tort litigation is a fruitful legal avenue for addressing climate change.”<sup>132</sup>

While common law precedent has largely precluded successful carbon torts, such precedent has not precluded all climate adaptation claims. This is primarily because there have not been many adaptation claims filed in U.S. court and thus the courts have yet to rule on the issue.<sup>133</sup> Despite proving unfruitful so far, Burkett argues that tort law can potentially “address climate impacts directly, by spurring compensation for harms incurred, and

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129. See, e.g., *Comer v. Murphy Oil USA, Inc.*, 718 F.3d 460, 465 (5th Cir. 2013); *Am. Elec. Power Co., Inc. v. Connecticut*, 131 S. Ct. 2527, 2532–34 (2011) (providing examples of “carbon tort” suits). See also WOLTERS KLUWER, *supra* note 115 at 741, 1109 (explaining that a “Private Nuisance” is “the use of one’s property in a manner that creates a significant harm in another’s use or enjoyment of private lands,” while a “Public Nuisance” “includes not only unlawful conduct on private property but also...persistent conduct that is not associated with real property but can still create a harm or risk of harm to the public health, safety, or convenience,” as opposed to a “Negligent Tort” which is “a wrongful act resulting in an unintended harm.”).

130. David Rivkin, Jr. et al., *Climate Change Litigation Since Mass v. EPA*, 9 ENGAGE: J. FEDERALIST SOC’Y PRAC. GRPS. 1 (2008); WOLTERS KLUWER, *supra* note 115 at 1047. A plaintiff does not have standing to sue when he “cannot demonstrate an interest sufficient” for the court to hear his claim. See Michael B. Gerrard, *What the Law and Lawyers Can and Cannot Do About Global Warming*, 16 SOUTHEASTERN ENVTL. L.J. 33, 40 (2007) (“The district courts in *Connecticut*, *Comer*, and *General Motors* all expressed a strong reluctance to forge a judicial solution to what they considered a political problem, especially when difficult technical questions were involved.”).

131. 131 S. Ct. at 2537.

132. Gerrard, *supra* note 130 at 40.

133. Burkett, *supra* note 13 at 11,146.



indirectly, by galvanizing both mitigation and adaptation measures to avoid the threat of liability.”<sup>134</sup> In other words, she argues plaintiffs could potentially succeed on a climate adaptation claim seeking direct damages from climate impacts (i.e. monetary compensation), as opposed to a claim seeking an injunction on a given action to mitigate climate change. If a claim for climate adaptation damages did succeed (which seems unlikely given this paper’s analysis), the court would encourage defendants and similarly situated entities to institute adaptation or mitigation measures, or both, to prevent future liability.<sup>135</sup>

Suing the appropriate defendant is “key” to a successful climate change adaptation suit.<sup>136</sup> But common law precedent seemingly precludes climate adaptation claims against polluters in *Kivalina*.<sup>137</sup> In *Kivalina*, the Alaskan native village of Kivalina sued oil, energy, and utility companies seeking monetary damages to compensate the cost of relocating their village, which would no longer be habitable due to climate change impacts.<sup>138</sup> The Ninth Circuit dismissed the case on standing and judiciability grounds.<sup>139</sup> Specifically, the plaintiffs could not satisfy the causation requirement needed to assert Article III standing, as they could not show that the defendants’ emissions in particular contributed to the erosion of Arctic sea ice near their village, forcing them to relocate.<sup>140</sup> A similar causation issue would likely arise if New Yorkers tried to sue polluters for monetary damages to compensate for property destruction or increased flood insurance premiums after Hurricane Sandy. It would be difficult to prove that a polluter’s particular emissions exacerbated the effects of Hurricane Sandy, and in doing so, caused particular property damage or insurance rate increases.

Yet, if NYC coastal property owners sued the City for negligence in instituting adequate adaptation measures prior to Sandy, thereby exacerbating Sandy’s damage and subsequent flood insurance rate increases, causation would be easier to prove. Indeed, “a defendant’s unreasonable action with respect to climate hazard preparedness and its link to plaintiff’s harms will be much easier to prove, at least in theory, than the

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134. *Id.* at 11,144.

135. BEN SCHUELER, *Governmental Liability: An Incentive for Appropriate Adaptation?* in CLIMATE CHANGE LIABILITY 237 (Michael Faure & Marjan Peeters, eds., 2011) (“Liability systems are supposed to stimulate actors to make the right decisions, because these actors are expected to limit their responsibility for compensation.”).

136. Burkett, *supra* note 13 at 11,144.

137. *Kivalina*, 696 F.3d at 854.

138. *Id.* at 853.

139. *Kivalina*, 696 F.3d at 867.

140. *Id.* at 867–68 (Pro, J., concurring).

causal link between a carbon emitter's actions and a given harm."<sup>141</sup> This is especially so given that the probability of damages attributed to climate change is documented more frequently, which "allow for stronger arguments on causation," and thus "strengthen[s] plaintiffs' cases for a breach of the duty of reasonable care."<sup>142</sup> Even though NYC is not responsible for the weather, Burkett argues that if the City is aware of climate risks and takes on an affirmative duty to adapt to those risks, negligence in its adaptation efforts could result in liability.

### *B. Why Sue the Local Government?*

Local governments are appropriate defendants in climate adaptation suits because they have the ability to implement local adaptation measures and in many cases have done so. Thus, climate adaptation suits can hold cities responsible for adapting responsibly and encourage them to do so.<sup>143</sup> Local governments have the jurisdiction to implement adaptation measures as they "are responsible for everything from land-use planning and development to infrastructure management to public health and emergency planning."<sup>144</sup> Not only can cities institute adaptation measures, cities are the appropriate scale of government to address the issue because "experiences of climate-induced weather events will vary at much smaller geographical scales."<sup>145</sup> Climate adaptation suits can motivate cities to implement adaptation measures, either directly as the result of a particular suit, or indirectly to avoid the liability risk of a potential suit. Yet, local governments have sovereign immunity in certain contexts and thus do not always have a legal duty for which they can be held accountable in court.

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141. Burkett, *supra* note 13 at 11,148.

142. Hunter & Salzman, *supra* note 11 at 1764.

143. "Local government" can include municipalities, boroughs, towns, districts, and more. Given this paper's focus on NYC, "local government" refers to a municipality or a city, but can apply to other forms of local government as well. Of course, other entities might be appropriate defendants in climate adaptation suits, such as the state government, the federal government, a developer, an insurance agency, or a utility company. Indeed, the New York State Public Commission Service recently ordered Con Edison to implement climate adaptation measures in its gas, steam, and electric systems, indicating that utilities in NY will have a legal duty to adapt to climate change. Ethan Strell, *Public Service Commission Approves Con Ed Rate Case and Climate Change Adaptation Settlement*, COLUMBIA CLIMATE LAW BLOG (Feb. 21, 2014), <http://blogs.law.columbia.edu/climatechange/>.

144. Burkett, *supra* note 7 at 783. In a poll, New Yorkers found that the local government had the most potential to improve environmental quality in NYC [in addition to individuals]. PlaNYC, *supra* note 1 at 174-75.

145. Burkett, *supra* note 7 at 778.

### C. Local Government Climate Adaptation Liability

#### 1. Legal Duty: Ministerial vs. Discretionary Actions

To file a successful climate adaptation claim under a common law tort negligence theory, a plaintiff must satisfy the four classic elements of a tort suit: duty, breach, causation, and injury.<sup>146</sup> Before a plaintiff can assert the latter three elements, a defendant must first have a legally recognized duty.<sup>147</sup> NYC does not have a statutory mandate from New York State or the federal government to adapt to climate change and thus has no specific legal duty. Given the City's lack of an affirmative duty, New York common law is significantly less likely to hold the City liable for its climate adaptation efforts.

Generally, New York State has sovereign immunity against lawsuits unless it waives its immunity.<sup>148</sup> New York State partially waived sovereign immunity on behalf of its municipalities, including NYC, so that NYC is "subject to that liability for which an individual or corporation would have been liable" but "it is not liable for the exercise of governmental functions, which are sovereign in character."<sup>149</sup> This principle manifests in New York common law, which like other jurisdictions, distinguishes between ministerial functions and governmental functions in determining the City's legal duties and thus potential liability.<sup>150</sup>

NYC can be held liable for landowner actions that it conducts as part of its "ministerial" or operational duties.<sup>151</sup> In this capacity, the City is subject to liability for impacts from the design, construction, operation, and maintenance of structural measures, such as dams, levees, and groins.<sup>152</sup>

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146. Hunter & Salzman, *supra* note 11 at 1744–45.

147. John J. Dvorske, *Existence of Legal Right and Duty* 103 N.Y. JUR. 2D TORTS § 6 (2014).

148. Paul M. Coltoff et al., *Sovereign Immunity and Waiver Thereof, Generally*, 62 N.Y. JUR. 2D GOV'T TORT LIAB. § 1 (2014).

149. Coltoff, *supra* note 128 (citing *McLean v. New York*, 905 N.E. 2d 1167 (2009)).

150. JON A. KUSLER, ASS'N OF STATE FLOODPLAIN MANAGERS, A COMPARATIVE LOOK AT PUBLIC LIABILITY FOR FLOOD HAZARD MITIGATION, 13–15 (Feb. 2009), available at [http://www.floods.org/PDF/Mitigation/ASFPM\\_Comparative\\_look\\_at\\_pub\\_liability\\_for\\_flood\\_haz\\_mitigation\\_09.pdf](http://www.floods.org/PDF/Mitigation/ASFPM_Comparative_look_at_pub_liability_for_flood_haz_mitigation_09.pdf) (explaining that in regards to the legal duties of local governments, general common law distinguishes between "discretionary" acts done in a "governmental capacity" and "landowner" acts done in a "ministerial capacity").

151. *Valdez v. New York*, 960 N.E.2d 356, 362 (2011). See also KUSLER, *supra* note 150 at 21 (stating that "operation or administration of a hazard mitigation measure is considered ministerial," as opposed to discretionary).

152. Burkett, *supra* note 13 at 11,154 (citing KUSLER, *supra* note 150 at 13–14 ("Structural flood loss reduction activities are *not* exempted from suit at state or local levels.")). Structural measures are physical adaptation tools, whereas non-structural measures are non-physical adaptation tools, such as an adaptation plan, a building code regulation, or a FEMA map.

But under New York law, NYC can only be held liable for its ministerial actions if it violates a special duty to the plaintiff; in other words, a plaintiff must prove that he had a special relationship with the City.<sup>153</sup> To demonstrate a special relationship with the City, plaintiffs must demonstrate that the municipality violated a special duty owed to the plaintiff apart from any duty to the public in general.<sup>154</sup> Specifically, under the *Valdez* test plaintiffs must show: (1) “an assumption by the municipality, through promises or actions, of an affirmative duty to act on behalf of the party who was injured [the individual, not the public at large];” (2) “knowledge on the part of the municipality’s agents that inaction could lead to harm;” (3) “some form of direct contact between the municipality’s agents and the injured party;” and (4) “that party’s justifiable reliance on the municipality’s affirmative undertaking.”<sup>155</sup>

Proving a special relationship with the City in a climate adaptation suit is a high burden for plaintiffs, as adaptation measures are typically implemented for the public at large. It is arguable that the City erects coastal barriers to prevent flooding of coastal properties and thus the City owes a special duty to coastal property owners. Indeed, NYC coastal property owners might be able to show with relative ease that in implementing a particular structure, the City assumed an affirmative duty by instituting structural adaptation measures on behalf of the plaintiffs. Further, that the City knew that failure to institute such structural adaptation measures could lead to harm in the event of a storm. It might be a bit more difficult, but not impossible, for such plaintiffs to show that they relied on the City’s implementation of this structural measure by choosing to live on the coast or failing to institute their own measures. Yet, assuming the plaintiffs could get over these hurdles, it would be more difficult to show that some form of direct contact between the City and the property owners occurred regarding the structure at issue. Thus, even though the City can be held liable for negligence regarding its structural measures, the special relationship requirement limits the extent of this liability.

Outside of structural measures, NYC retains its immunity for “discretionary” actions performed in the exercise of “governmental

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153. *Valdez*, 960 N.E.2d at 361. In other jurisdictions, local governments can be held liable for their ministerial actions regardless of whether or not there is a special relationship between the government and the plaintiff. *See also* Burkett, *supra* note 13 at 11,154; KUSLER, *supra* note 150 at 14–15 (discussing “ministerial” liability in common law jurisdictions generally where no duty must be shown to establish liability).

154. *Valdez*, 960 N.E.2d at 362.

155. *Id.* at 365.

functions.”<sup>156</sup> In other words, the City is immune from claims against non-structural measures, which are “governmental and administrative decisions based on adequate deliberation and study.”<sup>157</sup> Such non-structural measures include decisions to institute an adaptation plan, and if so, what measures the subsequent adaptation regulation should contain.<sup>158</sup> Specifically, NYC’s decisions to both enact PlaNYC and decide what initiatives PlaNYC’s climate adaptation strategy should include are considered discretionary actions that are generally immune from liability.<sup>159</sup> Additional municipal discretionary acts that are afforded sovereign immunity include: the issuance of City building permits, weather and flood predictions, inspections, and regulation enforcement.<sup>160</sup>

In sum, discretionary measures, such as the planning of adaptation measures, are generally not subject to liability; only once a structural measure is implemented may the government potentially be held liable for negligence.<sup>161</sup> An exception to the City’s immunity from discretionary decisions is if the City is statutorily mandated to implement an action, such as an adaptation plan.<sup>162</sup> In that case, the City would have an affirmative duty to institute such measures and could be held liable for failing to do so reasonably.<sup>163</sup>

NYC does not have an affirmative duty to implement climate adaptation measures.<sup>164</sup> But “[Federal] [c]ourts have repeatedly held that once a governmental unit elects to undertake government activities, even

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156. *Id.* at 361 (“[T]he common-law doctrine of governmental immunity continues to shield public entities from liability for discretionary actions taken during the performance of governmental functions.”).

157. Coltoff et al., *supra* note 128.

158. KUSLER, *supra* note 150 at 12–14, 16 (“Courts at all levels of government have held, with few exceptions, that [municipalities’] decisions whether or not to mitigate hazards or adopt loss reduction measures are “legislative,” “discretionary,” or “policy” decisions which are not in themselves subject to liability.”).

159. *See id.* at 14 (explaining generally that courts typically consider plan design and project design to be discretionary and not subject to liability).

160. *Id.* at 21, 22. Note that while inspections or enforcement are not subject to liability, maintenance of structural measures for adaptation are subject to liability, as mentioned *supra*. *See, e.g.*, *Tuffley v. Syracuse*, 442 N.Y.S.2d 326, 330 (N.Y. 1981) (holding the City liable for failure to conduct building inspections in New York). Also, NYC cannot be held liable for failing to accurately predict the weather. *See Brown v. United States*, 790 F.2d 199, 203 (1st Cir. 1986) (holding that the United States government was not liable for a fisherman’s death because the government failed to predict the weather and labeling the maintenance of a weather buoy as a “discretionary undertaking”); *but see* discussion *infra* Part I.C.2 (explaining that when NYC takes on the responsibility to adapt to predicted climate risks, it must do so reasonably).

161. KUSLER, *supra* note 150 at 14.

162. Coltoff et al., *supra* note 128.

163. *Id.*

164. KUSLER & THOMAS, *supra* note 115 at 17 (“Courts have generally held that landowners and governments have no affirmative duty to remedy naturally occurring hazards.”).

where no affirmative duty exists for such action, it must exercise reasonable care.”<sup>165</sup> Similarly, a New York court held that the City could be held negligent for violating an assumed duty.<sup>166</sup> And in negligence cases, New York courts employ the standard of review common to most jurisdictions: “reasonable care under the circumstances.”<sup>167</sup> Thus, Professor Maxine Burkett’s argument that “while there is no affirmative duty to act to reduce naturally occurring flooding, for example, a municipality’s ultimate decision to act triggers the duty to act reasonably,” may be used by plaintiffs who wish to challenge NYC’s voluntary climate adaptation efforts.<sup>168</sup>

## 2. Breach of Duty? Determining Reasonableness

There is no universal test that courts use to determine reasonable conduct in negligence cases.<sup>169</sup> However, courts widely use some version of Judge Learned Hand’s utility “BPL” formula, which states that a local government is negligent when “the burden (B) of preventing injury is less than the product of the probability of loss (P) and the magnitude of injury or loss (L) ( $B < P \times L$ ).”<sup>170</sup> Though New York courts may not use the BPL

165. *Id.* (citing *Indian Towing Co. v. United States*, 350 U.S. 61, 69 (1955) (holding that “[O]nce [the Coast Guard] exercised its discretion to operate [the lighthouse] and engendered reliance on guidance afforded by the light, it was obligated to use due care . . . [and] [i]f the Coast Guard failed in its duty and damage was thereby caused to petitioners, the United States is liable under the Tort Claims Act.”)).

166. *Weyant v. New York*, 616 N.Y.S.2d 428, 430 (N.Y. 1994) (“This Court upholds a jury finding of negligence for the violation of an assumed duty in the face of a statutory exemption.” (citing *Indian Towing*, 350 U.S. at 61)).

167. *Scurti v. New York*, 354 N.E.2d 794, 795 (N.Y. 1976) (holding that “[t]he liability of a landowner to one injured upon his property should be governed . . . by the standard applicable to negligence cases generally, i.e., the ‘standard of reasonable care under the circumstances whereby foreseeability shall be a measure of liability.’”) (citation omitted).

168. Burkett, *supra* note 7 at 785–86 (citing KUSLER *supra* note 150 at 10 and KUSLER & THOMAS, *supra* note 115 at 10). *See also* Christopher City, Note, *Duty and Disaster: Holding Local Governments Liable for Permitting Uses in High-Hazard Areas*, 78 N.C. L. REV. 1535, 1552 (2000) (“Under present law, a local government may be held liable for breaching a duty assumed when it takes actions that place third parties at risk of injury or otherwise induces reliance by third parties.”). Courts are unlikely to waive the City’s sovereign immunity in their discretionary decisions, but this paper shows that even if the City were to consider the plaintiff’s substantive tort claims, the City is unlikely to be held liable for its pre- or post- Sandy adaptation efforts under current law.

169. *Hunter & Salzman*, *supra* note 11 at 1768 (“It is therefore not surprising to find that the problem of duty is as broad as the whole law of negligence, and that no universal test for it ever has been formulated . . . ‘Duty’ is not sacrosanct in itself, but is only an expression of the sum total of those considerations of policy which lead the law to say that the plaintiff is entitled to protection.”).

170. *Id.* at 1756, 1768 (“Despite the attractive simplicity of the BPL calculus, in practice, no simple formula exists to determine the duty of care. Rather . . . courts generally balance a range of considerations [which include the utility factors].”).

formula explicitly, they do use a utility analysis in negligence cases,<sup>171</sup> which incorporates the BPL factors.<sup>172</sup>

In the climate change adaptation context, “where the costs of accidents [such as floodwalls breaking] exceed the costs of preventing the accidents,” the utility approach will impose liability.<sup>173</sup> And since the probability of damages caused by climate change is documented more frequently, plaintiffs will face an easier burden proving “two prongs of the BPL formula—the probability of harm (P) and the severity of the harm (L).”<sup>174</sup> Thus, “a BPL inquiry is possible and . . . the likely costs of avoidance may in some cases be less than the likely damages from climate change. Under Hand’s formula, a defendant’s failure to take those steps could be considered a breach of its duty to act reasonably under the circumstances.”<sup>175</sup> In a climate change adaptation suit against NYC, a New York court would likely apply some version of the utility formula to assess the City’s reasonableness in instituting adaptation measures.

Indeed, rather than applying the simple BPL formula, courts use a multifactor test to determine reasonable conduct, which includes the BPL elements: (1) the foreseeability of harm to the plaintiff; (2) the probability of harm; (3) proximate causation between the defendant’s conduct and the injury suffered;<sup>176</sup> (4) moral blame attached to the defendant’s conduct; (5)

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171. This is especially true in New York product liability cases—a type of negligence case—though New York courts recognize that the utility test is a traditional negligence test. *See, e.g., Denny v. Ford Motor Co.*, 662 N.E.2d 730, 735 (N.Y. 1995) (“The adoption of this risk/utility balance as a component of the ‘defectiveness’ element has brought the inquiry in design defect cases closer to that used in traditional negligence cases, where the reasonableness of an actor’s conduct is considered in light of a number of situational and policy-driven factors . . . [T]he reality is that the risk/utility balancing test is a ‘negligence-inspired’ approach, since it invites the parties to adduce proof about the manufacturer’s choices and ultimately requires the fact finder to make ‘a judgment about [the manufacturer’s] judgment.’”) (citing *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947) [Judge Learned Hand]).

172. *Id.* (“This [risk/utility] standard demands an inquiry into such factors as (1) the product’s utility to the public as a whole, (2) its utility to the individual user, (3) the likelihood that the product will cause injury, (4) the availability of a safer design, (5) the possibility of designing and manufacturing the product so that it is safer but remains functional and reasonably priced, (6) the degree of awareness of the product’s potential danger that can reasonably be attributed to the injured user, and (7) the manufacturer’s ability to spread the cost of any safety-related design changes.”).

173. *Hunter & Salzman, supra* note 1 at 1757.

174. *Id.* at 1764.

175. *Id.* at 1768.

176. Note that causation is a separate element in the tort analysis, but one that is also considered in determining reasonableness or breach of duty.

policy of preventing future harm;<sup>177</sup> (6) the burden of preventing the injury; and (7) the availability and cost of insurance for the risk involved.<sup>178</sup>

In assessing municipalities' climate change adaptation efforts, courts typically consider the following factors: (1) the magnitude of harm threatened; (2) the foreseeability of the harm; (3) industry custom;<sup>179</sup> (4) whether the municipality acted in an emergency situation; (5) whether a special relationship exists between the injured party and the government; and (6) relevant statutes, ordinances, or regulations.<sup>180</sup> New York courts use multifactor tests in negligence cases<sup>181</sup> but do not apply a standard multifactor test in all negligence cases, let alone in climate change adaptation cases. Still, in analyzing a climate change adaptation case against NYC, a New York court might use some of the aforementioned factors.

The negligence standard is "reasonable care under the circumstances."<sup>182</sup> It is unclear what "under the circumstances" means in the climate-change context. However Burkett purports that "local governments will need to act reasonably in light of the increased risk of extreme events caused by climate change, not the absolute certainty of their cause or occurrence."<sup>183</sup>

### 3. Filing Suit: Timing and Policy Concerns

A plaintiff who wishes to file a climate adaptation suit against NYC under a negligence theory must file his complaint within 90 days after "the accrual of such claim."<sup>184</sup> Alternatively, within 90 days after the accrual of the claim the plaintiff can provide the Attorney General with a written

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177. Hunter & Salzman, *supra* note 11 at 1770, 1775 ("Tort law is partly designed to deter [the] unreasonably risky conduct" of a case's particular defendants, as well as similarly situated defendants in the future. As such, courts adjudicating tort claims consider deterrence in determining liability.).

178. *Id.* at 1775–76 ("Despite the attractive simplicity of the BPL calculus, in practice, no simple formula exists to determine the duty of care. Rather, according to Prosser and Keeton, courts generally balance a range of considerations.").

179. KUSLER, *supra* note 150, at 13–14 (noting that industry custom is more informative with regard to structural adaptation; however, there is "no bright light to determine the unreasonableness of government decisions pertaining to nonstructural measures . . ."). Nevertheless, "Advances in hazard loss reduction measures create an increasingly high standard of care for reasonable conduct." KUSLER & THOMAS, *supra* note 115, at 14.

180. KUSLER & THOMAS, *supra* note 115 at 20–21.

181. See, e.g., *Denny*, 662 N.E.2d at 735 ("[I]n traditional negligence cases . . . the reasonableness of an actor's conduct is considered in light of a number of situational and policy-driven factors.").

182. *Scurti*, 354 N.E.2d at 795.

183. Burkett, *supra* note 7 at 788.

184. Paul M. Coltoff et al., *Injuries to Property or Personal Injuries Caused By Negligence or Unintentional Tort*, 62A N.Y. JUR. 2D GOV'T TORT LIAB. § 301 (2014).



notice of intent to file a claim, in which case the plaintiff has two years after the accrual of the claim to file suit.<sup>185</sup> The statute of limitations has expired as of February 2013 for plaintiffs wishing to sue NYC for direct damages incurred due to Hurricane Sandy, except for plaintiffs who filed a notice of intent to sue with the Attorney General. Yet for those seeking indirect damages from Sandy, like increased flood insurance rate compensation, the “event giving rise to the action” is presumably the day plaintiffs were notified of their new premium. When the next “Sandy” hits NYC, potential plaintiffs have 90 days from the day of the storm to file a complaint or a notice of intent to sue.<sup>186</sup> Since a legitimate claim does not arise until the damaging event occurs, a plaintiff seeking *preventative* adaptation action in anticipation of future damages will likely not have a claim that is “ripe” or sufficient for adjudication.<sup>187</sup>

Even if a plaintiff can file suit and a court finds a municipality negligent in its adaptation efforts, it may refuse to hold the City liable for several reasons. For one, the duty to act reasonably does not extend to the unforeseeable plaintiff.<sup>188</sup> In the context of local adaptation, foreseeable plaintiffs seem to be restricted to property owners, workers, or residents in the municipality. A plaintiff outside of this group may not receive legal relief. Additionally, courts may not hold defendants liable if doing so would result in “an endless scope of liability” or a very large number of potential plaintiffs, which is counter to public policy.<sup>189</sup> Yet, courts can also prevent a large scope of liability by limiting the City’s liability in a particular case.<sup>190</sup>

Plaintiffs may seek to file suit against NYC under a theory of negligence claiming that either a structural measure implemented by the City exacerbated damages during Sandy, or more generally, that the City did not adapt reasonably prior to Sandy. Assuming that a court was willing

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185. *Id.* at 1 (stating the time and requirements of accrual in regards to suits against a municipality, compared to claims against a state).

186. *Id.*

187. “Ripeness” is defined as “the timeliness of a claim for relief. Ripeness is the aspect of a plaintiff’s claim for relief that would make a judgment timely and useful, rather than too early or too late.” WOLTERS KLUWER, *supra* note 115 at 603. In other words, a plaintiff seeking an adaptation order in anticipation of damages from the next superstorm would likely have a claim that is too early to assess adequately and would thus be untimely.

188. *Palsgraf v. Long Island R.R. Co.*, 162 N.E. 99, 99, 101 (N.Y. 1928); *see also* Hunter & Salzman, *supra* note 11 at 1780 (“Judge Cardozo found that Mrs. Palsgraf was not within the foreseeable zone of risk created by the defendant conductor’s negligent effort to help another passenger on to the train. Thus, Mrs. Palsgraf, standing at the other end of the platform, was owed no duty, and, as a result, no liability was found.”).

189. Hunter & Salzman, *supra* note 11 at 1781. This point will be discussed more in depth, *infra*.

190. *Id.* at 1782. This point is also discussed further, *infra*.

to forgo the City's sovereign immunity for the latter claim—which is unlikely—its analysis of both claims might read as follows.

*D. Filing Suit Against New York City for Pre-Sandy Adaptation*

1. Structural Measures

NYC could potentially be held liable for structures that it put in place before Sandy hit, which—due to improper design, construction, operation, or maintenance—failed during the storm in some way and thus worsened or exacerbated the storm's effects.<sup>191</sup> Specifically, assuming that the statute of limitations has not expired, property owners could file a claim against the City for the destroyed bulkheads and the damaged tidal gates and floodgates, all of which failed to reduce Sandy's inundation.<sup>192</sup>

The statute of limitations has expired for most structural claims from plaintiffs seeking compensation for property damage, as it has been over 90 days since Sandy hit the coast of NYC.<sup>193</sup> Yet, at the time of this writing, the statute of limitations has not expired if a plaintiff provided the Attorney General with a written notice of intent to file a claim, in which case the statute of limitations is extended to two years (to about November 2014).

As discussed, to successfully assert a claim against the City in its ministerial capacity under New York law, these plaintiffs need to show that the City had a "special duty" to them regarding the structural measures at issue.<sup>194</sup> This is practically impossible to assert in the climate adaptation context unless the plaintiffs are property owners in the flood zone. If the latter were the case, such plaintiffs could potentially claim a special relationship with the City if they could prove the more difficult prongs in the *Valdez* test: (1) direct contact with the City involving the structure and (2) reliance on the City's structure.<sup>195</sup> If plaintiffs were able to assert that the City had a special duty to them, they would still have the burden of showing the additional elements of a tort claim: breach of duty, causation, and proper damages. Thus under New York law, the City is unlikely to be

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191. KUSLER, *supra* note 150 at 23 (“[Governments] have been held liable for inadequate design, construction, operation, and (especially) maintenance of structures which *increase* natural hazard damages on private property.”) (emphasis added).

192. Burkett, *supra* note 7 at 794 (“The clearest examples [of successful liability claims] are suits against governments for increased natural hazards or hazard risks resulting from government drainage ditches, fills, or structural flood hazard reduction measures. When a government acts in its capacity as a landowner it is similarly obligated. This will remain relevant under climate-change conditions.”).

193. Coltoff et.al., *supra* note 184.

194. *Valdez*, 960 N.E.2d at 361.

195. *Id.* at 365.

held liable for negligence in its adaptation structures, such as bulkheads or levees that were implemented prior to Sandy. In state jurisdictions that do not require proof of a special relationship to assert the ministerial liability of cities, cities are more likely to be held liable for negligence in their adaptation structures.<sup>196</sup>

## 2. Non-Structural Measures

The City's decision as to what adaptation measures PlaNYC should propose is a discretionary decision and the City is typically immune from claims regarding such decisions.<sup>197</sup> But, as Burkett argues, the City's decision to institute adaptation measures through PlaNYC triggers the duty to adapt reasonably under the circumstances.<sup>198</sup> Consequently, a New York property owner who has or can still file suit under the timing constraints (either by having filed an intent to sue with the Attorney General or by suing for compensation of increased insurance rates that occurred in the past 90 days) might be able to assert that the City breached its duty to adapt reasonably prior to Hurricane Sandy because it failed to institute more concrete adaptation measures. Specifically, the City could have: strengthened and heightened its existing bulkheads and floodgates to prevent their destruction and mitigate the flooding during the storm; implemented additional hard and soft armor measures like bulkheads, dunes, and restored wetlands to mitigate the coastal erosion and flooding; and ensured the elevation of critical infrastructure in buildings to mitigate building damage and electrical outage.<sup>199</sup> There is an argument that any

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196. See KUSLER, *supra* note 150, at 23 (discussing how cities can be held liable for failure of structural measures which increase a storm's impact, without mention of a special relationship requirement). As a side note, under the Flood Control Act of 1928, the federal government is immune from flood damages, as affirmed by the Supreme Court in *United States v. James*, 478 U.S. 597, 612 (1986). This is why in the first *Katrina Canal Breaches* case, the "private tort claims based on the failure of that flood-control project [levees] consistently foundered on the shoals of *United States v. James*." See also VERCHICK & SCHERAGA, *supra* note 123, at 246–47. See *In re Katrina Canal Breaches Consolidated Litigation*, 577 F. Supp. 2d 802, 808-17 (E.D. La. 2008). Yet in the *Katrina Canal Breaches II* case, plaintiffs were successful in claiming that the government's negligence in the design, construction, and maintenance of the Mississippi River Gulf Outlet (MR-GO) "increased Katrina's storm surge and made the levee system more vulnerable than it otherwise would have been," because the MR-GO was not a flood-control project. *In re Katrina Canal Breaches Consolidated Litigation (Katrina Canal Breaches I)*, 577 F. Supp. 2d 802, 826 (E.D. La. 2008) (holding the Army Corps of Engineers liable for constructing faulty flood protections); *In re Katrina Canal Breaches Consolidated Litigation (Katrina Canal Breaches II)*, 696 F.3d 436 (5th Cir. 2012).

197. Coltoff et al., *supra* note 128; Valdez, 960 N.E.2d at 362.

198. Burkett, *supra* note 7 at 787–88.

199. See generally NYC RESILIENCY PLAN, *supra* note 2 (discussing NYC's failure to utilize physical and policy measures which could have mitigated Sandy's damage).

combination of such measures on a large scale could have significantly alleviated Sandy's damage on coastal properties.

In analyzing such a claim, a New York court might adopt some version of the Hand utility test or the multifactor test, tests widely used in common law jurisdictions to assess reasonableness and inform breach of duty in negligence claims. However, even if the court found a breach of duty in these analyses, the causation and proper damages elements would also need to be fulfilled.

*i. Utility Test*

Under the Hand utility test, a court would hold the City unreasonable in its pre-Sandy adaptation measures if the burden of instituting preventative measures were less than the product of the magnitude of the harm resulting from Sandy and the likelihood of Sandy's occurrence.

In monetary terms, the magnitude of the harm Sandy caused cost about \$19 billion.<sup>200</sup> This figure is a conservative estimate, as it does not include non-financial impacts like the loss of life and injury that occurred as a result of the storm.<sup>201</sup> The current likelihood that a storm as damaging as Sandy will occur in NYC again is 1.4 percent annually, and the likelihood increases to 1.7 percent in the 2020s and 2 percent in the 2050s.<sup>202</sup> Taken together, the monetary product of the magnitude (\$19 billion) and likelihood (.014%) of Sandy occurring at around the time it occurred is about \$266 million per year.<sup>203</sup> It is difficult to measure the monetary burden of NYC in either executing PlaNYC or instituting greater adaptation measures (such as more structural measures). But, NYC's post-Sandy adaptation plan, "A Stronger, More Resilient New York"—which resembles what plaintiffs would argue the City should have done pre-Sandy—will cost about \$19.5 billion to implement the Phase 1 initiatives over the next ten years.<sup>204</sup> PlaNYC presumably costs significantly less than the Resiliency Plan because it involved more information gathering and risk assessment within City agencies as opposed to substantive implementation of structural measures on the ground.

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200. *Id.* at 33. The \$19 billion figure is comprised of \$13 billion of physical damage and about \$6 billion of lost economic activity.

201. *Id.* (explaining that forty-three New Yorkers died during the storm. This figure does not discuss the disproportionate impact of the storm on the elderly or medically vulnerable. According to the City, "these and other non-financial impacts should be and have been critical inputs.").

202. NYC RESILIENCY PLAN, *supra* note 2 at 34; *see* Dawsey, *supra* note 10.

203. NYC RESILIENCY PLAN, *supra* note 2 at 34. This is the total cost of the storm multiplied by the likelihood of a storm happening in any given year. Meaning, based upon the current risk, that there is a total cost to the City of \$266 million per year.

204. *Id.* at 6, 401.

Even though it is unclear what the City's pre-Sandy adaptation burden was in monetary terms, it is clear under the utility test that a Court would not hold the City liable for failing to institute a \$19.5 billion plan, or anything close to that value, to adapt to a \$266 million per year storm. Under the utility test, the City's actual pre-Sandy adaptation measures, which were significantly less than \$19.5 billion, would likely be held reasonable in light of the storm's estimated monetary damage. If the City's pre-Sandy adaptation burden was calculated accurately and it turned out to be less than \$266 million per year, then the City could be held liable under the utility test for not adopting a more stringent, and thus costly, adaptation plan.

*ii. Multifactor Test*

In analyzing a claim against NYC's pre-Sandy adaptation, a New York court would potentially apply the following factors to determine the City's reasonableness:

Foreseeability. NYC could arguably have foreseen Sandy's effects prior to the storm. In *PlaNYC*, Mayor Bloomberg acknowledged that "New York was especially vulnerable to the storms that climate change was expected to bring," and the City specifically anticipated storm surges that would overtop the Battery and flood critical infrastructure like the Holland Tunnel, which is what happened during Sandy.<sup>205</sup> Based on foreseeability it is arguable that the City was unreasonable in failing to institute increased adaptation measures such as higher bulkheads, stronger floodgates, and dikes, as well as elevating critical infrastructure to mitigate the flooding. Foreseeability of a storm's results heightens the City's duty to adapt reasonably prior to the storm.

Proximate Causation. Causation is an independent element in the negligence analysis, but is also analyzed by some courts in determining reasonableness to inform breach of duty. The City's adaptation measures were a proximate cause of Sandy's impact. After the storm, the City acknowledged that some of its pre-Sandy adaptation efforts did mitigate Sandy's impacts.<sup>206</sup> The City also admitted that its pre-Sandy adaptation efforts did not do enough to mitigate the storm's devastating effect, implying that the City had the ability to further ameliorate Sandy's effects on NYC.<sup>207</sup> Indeed, additional bulkheads and dikes, as well as elevated infrastructure, would have certainly mitigated the storm's effects. Thus,

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205. *Id.* at 1.

206. *Id.* at 14, 43.

207. *Id.* at 1.

similar to the foreseeability analysis, given the City's proximate causation, it is arguable that the City was unreasonable in failing to institute more adaptation measures in PlaNYC and at least the City's adaptation duty is heightened.

Industry custom. When PlaNYC was released in 2007, and even when it was updated in 2011, the plan was considered ahead of the curve, as most cities did not have climate adaptation plans.<sup>208</sup> Thus in considering industry custom, NYC's pre-Sandy adaptation plan is reasonable.

Moral Blame. In the climate change negligence context, moral blame is attached to the City's conduct when its actions are unreasonable as compared with its peers.<sup>209</sup> According to this analysis, NYC was certainly reasonable in its pre-Sandy adaptation efforts as compared to other cities, which did not even have adaptation plans. But if NYC were judged for its moral blameworthiness irrespective of other cities, it is arguable that the City's failure to adapt more adequately in time for Sandy was unreasonable, especially in light of a storm's foreseeability and the City's ability to adapt. Yet, given that NYC attempted some adaptation through PlaNYC, it is unlikely a court would find the City to be so unreasonable in its adaptation efforts as to be morally blameworthy.

Policy of Preventing Future Harm. Since the court is adjudicating a tort claim, it will consider the deterrence of NYC and other cities from risky adaptation behavior in determining liability.<sup>210</sup> If the court sought to deter cities from unreasonable adaptation measures, then it would hold NYC's pre-Sandy adaptation efforts unreasonable to encourage local governments to strengthen their own adaptation measures.

The Availability and Cost of Flood Insurance. Prior to Sandy and the passage of Biggert-Waters and the Affordability Act, flood insurance was readily available and affordable for NYC residential and small business properties due to subsidies under FEMA's NFIP. Consequently, a court might be less inclined to hold NYC's adaptation measures unreasonable

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208. VICKI ARROYO & TERRI CRUCE, *State and Local Adaptation, in THE LAW OF ADAPTATION TO CLIMATE CHANGE* 585 (Michael B. Gerrard & Katrina Fischer Kuh eds. 2012). See *State and Local Adaptation Plans*, GEO. CLIMATE CTR., <http://www.georgetownclimate.org/node/3325> (last visited Nov. 6, 2014) (listing local adaptation plans in the U.S.); see also Wilkins, *supra* note 25 at 438 ("[M]ost local governments do little more land use planning and building regulation than is required by the National Flood Insurance Program, or than other laws may require of them.").

209. Hunter & Salzman, *supra* note 11 at 1773 ("For a negligence theory, at least, the key inquiry may be what level of emissions is reasonable—or at what point did it become (or will it become) unreasonable to expand GHG emissions or other climate-changing activities without taking effective mitigation steps. In this regard, the issue of moral blameworthiness may be made in reference to the specific defendant's behavior as compared to industry custom.").

210. See *id.* at 1775 (explaining why courts consider deterrence in tort claims).

because many property owners did not minimize their property damage costs by purchasing readily available flood insurance.

Emergency Situation. Since the City instituted PlaNYC in a non-emergency situation,<sup>211</sup> its duty to act reasonably remains status quo.

Special Relationship. Whether a special relationship exists between the City and potential plaintiffs, and thus heightens the City's duty to adapt reasonably, is case specific. Given the high bar necessary to establish a special relationship with the City under New York law, especially in the climate adaptation context, such a relationship will likely only exist in unique cases involving coastal property owners.<sup>212</sup> As such, the City will typically not be held to a higher standard of reasonableness in pre-Sandy climate adaptation cases.

Relevant Laws. The City's adaptation measures were not statutorily mandated. Thus, the City did not have an affirmative duty to adapt, and a court will likely refuse to hold the City to a higher standard of reasonableness.

Act Reasonably "Under the Circumstances." In looking at the climate risks that were known to the City when PlaNYC was updated in 2011, a court might be inclined to hold the City unreasonable for failing to institute more adaptation measures. But NPCC's most recent climate change science report, released in 2013, reveals that the climate risks to NYC are greater than the City previously thought during PlaNYC's implementation.<sup>213</sup> Thus, a court could find the City's actions more reasonable in light of the risks known at the time. The court's determination of reasonable adaptation under the circumstances is also informed by the City's financial, legislative, and political constraints, which may lead a court to hold the City reasonable. For instance, it would be politically unfavorable for the City to enact a costly adaptation plan with limited financial resources during a time when climate science was still largely debated.

In sum, the City's pre-Sandy adaptation actions were reasonable because: (1) the actions were more advanced than those taken by peer cities; (2) flood insurance was readily available through the NFIP; and (3) the City volunteered to institute adaptation measures despite financial and political limitations. The utility analysis adds weight to the latter determination. At the same time, the City's foreseeability of Sandy and its

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211. See KUSLER & THOMAS, *supra* note 115 at 21 ("An emergency is a sudden and unexpected situation which deprives an actor of an opportunity for deliberation.").

212. See KUSLER, *supra* note 150 at 16, 26 (discussing that governments are generally not held liable absent a special relationship or duty and providing examples of when a special duty is present in a liability suit).

213. NPCC, *supra* note 20 at 4; cf. PLANYC, *supra* note 1 at 154.

effects, its conscious ability to mitigate those effects, and the court's desire to encourage other cities to address their own climate risks, all point toward holding NYC unreasonable in its pre-Sandy adaptation efforts. In weighing these factors, the City is unlikely to be held liable for not instituting more adaptation measures, such as building stronger structural measures and elevating critical infrastructure.

*iii. Policy Limitations on Liability*

Even if a court determined that the City was liable for its pre-Sandy adaptation measures, it might still refuse to hold the City liable if doing so would expose the City to an "endless scope of liability," which is counter to public policy.<sup>214</sup> This policy limitation is less of a concern in analyzing the City's pre-Sandy adaptation liability, since the statute of limitations has expired on most claims. This policy limitation is a real concern in assessing the City's adaptation liability after the next major storm hits NYC.

*E. Filing Suit Against New York City for Post-Sandy Adaptation*

The following analysis examines the potential claim of property owners against NYC for its failure to adapt reasonably after Hurricane Sandy in anticipation of the next major storm.<sup>215</sup> Specifically, future plaintiffs might argue that the City should have enacted a more stringent adaptation strategy; namely, a managed coastal retreat policy that included a heavier use of buyouts of highly vulnerable properties and land-use regulations that discouraged coastal development.

This analysis is hypothetical in nature, since there is no actual storm to measure the City's adaptation efforts against. It assumes that a future storm will be at least as strong, if not stronger, than Sandy given the expected increase in storm magnitude going forward.<sup>216</sup>

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214. Hunter & Salzman, *supra* note 11 at 1782; Burkett, *supra* note 7 at 790 ("Tort liability might be so great that it exceeds the bounds of adjudication and is more appropriate for legislative resolution. In these instances, arguably ones that climate change will introduce, courts may not impose a duty.").

215. The word "adaptation" is used here because this analysis primarily refers to the City's post-Sandy adaptation efforts, as oppose to its resiliency efforts to bounce back from Sandy. Since NYC also uses the word "resiliency" in describing its post-Sandy adaptation efforts, it is used here as well.

216. SIDERS, *supra* note 23 at 1.



### 1. Structural Measures

Given that NYC is implementing many structural measures as part of its Resiliency Plan, it faces a greater risk of liability for the design, construction, operation, and maintenance of these structures.<sup>217</sup> After the next storm the City could potentially be held liable for structures that it put in place after Sandy, which—due to improper design, construction, operation, or maintenance—exacerbated the storm’s effects.<sup>218</sup> Yet again, this claim would only be successful if the plaintiff could assert a special relationship with the City.<sup>219</sup> This burden may prove easier for coastal property owners in the post-Sandy context. The first two elements of the *Valdez* test are arguably satisfied: (1) through enacting “A Stronger, More Resilient New York,” the City is voluntarily instituting adaptation measures on behalf of NYC coastal property owners; and (2) the City knows that its failure to implement stronger adaptation measures will make coastal properties more vulnerable to harm in the next storm.<sup>220</sup> A plaintiff may be able to prove “some form” of direct contact with the City more easily in light of the City’s increased public outreach and education efforts to encourage individual resiliency measures. Also, plaintiffs may have an easier time asserting that they relied on the City’s structural adaptation measures, either by choosing not to move or by choosing not to implement their own adaptation measures. The reliance of plaintiffs is more probable post-Sandy given coastal property owners’ increased awareness of both their vulnerability and the City’s resiliency efforts. Most plaintiffs will still face a high burden to assert a special relationship with the City. Coastal property owners, however, may have a stronger argument in the post-Sandy context, and thus the City may more likely be liable for its structural measures.<sup>221</sup>

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217. KUSLER, *supra* note 150 at 23.

218. *Id.*

219. *Valdez*, 960 N.E.2d at 361.

220. *Valdez*, 960 N.E.2d at 365; NYC RESILIENCY PLAN, *supra* note 2 at 1 (“Sandy’s magnitude, its effects on so many parts of the city, and the threat of ever greater risks from climate change also taught a second lesson: *we needed to redouble our efforts.*”) (emphasis added).

221. Again, in another jurisdiction that does not require a “special relationship,” but merely that a municipal adaptation structure failed in some way and exacerbated the storm’s effects, a plaintiff may be more successful in structural adaptation claims against a City.

## 2. Non-Structural Measures

### *i. Utility Test*

As stated, the current likelihood that a storm as damaging as Sandy will occur in NYC is 1.4 percent annually.<sup>222</sup> If a storm like Sandy were to occur now, it is estimated to have a magnitude of about \$19 billion in damages, similar to Sandy itself.<sup>223</sup> Thus, the current estimate of the cost of the next major storm's damages is \$266 million per year.<sup>224</sup> In the early 2020s, the City estimates that a storm like Sandy is expected to have a magnitude of about \$35 billion in damages and have a 1.7 percent likelihood of occurring.<sup>225</sup> Thus in the early 2020s, when the Resiliency Plan's Phase 1 initiatives are still being implemented—based upon the increased risk—the estimated cost of a storm like Sandy is about \$595 million per year.

Given that the Resiliency Plan's Phase 1 initiatives will cost about \$19.5 billion to implement over the next decade, the adaptation burden to the City costs significantly more—between four and eight times more—than the storm's estimated damages of \$266–595 million per year. Thus, under a utility analysis, the City is reasonable in implementing this plan and a court would not hold the City unreasonable for failing to institute more stringent adaptation measures.<sup>226</sup>

Further research is needed to determine the cost savings of the City's specific adaptation measures through avoided risks. A cross-sector working group of New York's "Storm Hardening and Resiliency Collaborative" is developing this type of cost-benefit model in the public utilities climate adaptation context.<sup>227</sup> Knowledge of the full costs *and* benefits of an

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222. NYC RESILIENCY PLAN, *supra* note 2 at 34.

223. *Id.*

224. *Id.* This is the total cost of the storm multiplied by the likelihood of a storm happening in any given year. Meaning, based upon the current risk, that there is a total cost to the City of \$266 million per year.

225. *Id.* This is the estimated total cost of the storm in 2020 multiplied by the estimated likelihood of a storm happening in any given year. Meaning, based upon the increased risk in the 2020s, there is a total cost to the City of \$595 million per year.

226. *Id.* at 401–02 (providing a breakdown of Phase 1 initiative costs).

227. Jenna Schweitzer, *ConEd Invests \$1 Billion in Infrastructure Resilient to Climate Change*, REGBLOG (Mar. 25, 2014), <http://www.regblog.org/2014/03/25-shweitzer-infrastructure.html> (stating that the Collaborative's innovative model considers a project's full societal benefit, meaning costs that are avoided when an outage is prevented or shortened, as opposed to just a project's risk reduction ability. This cost-benefit model will continue to be developed through another Commission proceeding, in which the Commission ordered a 'complete overhaul' as to how New York utilities measure the costs and benefits of energy efficiency projects.); *see also* CON EDISON, INC., STORM HARDENING AND RESILIENCY COLLABORATIVE REPORT 7 (Dec. 2013), *available at* <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={E6D76530-61DB-4A71-AFE2-17737A49D124}> ("Resiliency work that has been performed during 2013, and to present for the

adaptation strategy in monetary terms would help to demonstrate the effectiveness of various adaptation measures and help the City to prioritize measures in its adaptation strategy. This information would also enable courts to conduct higher quality utility analyses in determining a City's reasonableness.

*ii. Multifactor Test*

The multifactor test for a post-Sandy claim is analogous to the pre-Sandy analysis regarding most of the prongs: foreseeability,<sup>228</sup> proximate causation,<sup>229</sup> moral blame,<sup>230</sup> policy of preventing future harm, the lack of an emergency situation, special relationship, and relevant laws. Industry custom, the availability of insurance, and relevant circumstances vary a bit in the post-Sandy context.

Industry Custom. Since 2007, when PlaNYC was initially released, many more U.S. cities now have climate adaptation plans.<sup>231</sup> NYC's decision to institute the Resiliency Plan is on par with most of its peer cities in the U.S.<sup>232</sup> Whether the City's adaptation strategy is aligned with its peer cities is difficult to say, since there is no standard climate adaptation plan and such plans are local in nature. Yet, the more stringent coastal retreat tools are not considered the norm in adaptation plans.<sup>233</sup> For instance, Louisiana's 2012 Coastal Master Plan does not prioritize coastal retreat, but promotes a policy of development on the coast combined with structural and non-structural measures to protect against coastal hazards, similar to

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Commission's consideration Con Edison's proposed plans for resiliency work to commence during the period of 2014 to 2016.").

228. NYC RESILIENCY PLAN, *supra* note 2 at 1–3, 34 (noting that the City is aware of the approximate likelihood and magnitude of the next major storm to hit NYC. Indeed, NYC created the Resiliency Plan to prepare effectively for such an event).

229. *Id.* at 1 (explaining that the City's adaptation measures will directly affect the magnitude of the next storm's damages on NYC. The City acknowledges this fact in the Resiliency Plan, stating "Sandy's magnitude, its effects on so many parts of the city, and the threat of ever greater risks from climate change also taught a second lesson: we needed to redouble our efforts.").

230. *Id.*; *see also* Hunter & Salzman, *supra* note 11 at 1773 (discussing corporations' moral blameworthiness in risky or reckless behavior). Compared with its peers, NYC's post-Sandy adaptation measures are reasonable and so a court is unlikely to find the City morally blameworthy for them.

231. *See* Coltoff et.al., *supra* note 184.

232. *See State and Local Adaptation Plans*, GEO. CLIMATE CTR., <http://www.georgetownclimate.org/node/3325> (last visited Nov. 6, 2014) (listing local adaptation plans in the U.S.).

233. SIDERS, *supra* note 23 at i. ("This Handbook collects examples, case studies, and lessons learned from some of these *early innovators* in the hope that their lessons can inform future efforts to limit the exposure of our communities to coastal threats.") (emphasis added).

NYC's Resiliency Plan.<sup>234</sup> Thus, the industry custom analysis points to NYC's reasonableness in climate adaptation.<sup>235</sup>

The Availability and Cost of Flood Insurance. Even though the Affordability Act mitigates insurance premium spikes from Biggert-Waters and strives to implement additional affordability measures, coastal property owners will still face significant rate increases in the foreseeable future. Consequently, public flood insurance for coastal homeowners and small businesses is arguably less available due to its increased cost. As such, a court may be more inclined to hold the City unreasonable for its adaptation efforts after Sandy, since flood insurance is no longer as cheap and attainable under the NFIP, which lessens the adaptation burden on property owners and heightens the City's adaptation duty. FEMA's development of mitigation measures would enhance the affordability and availability of NFIP for property owners, which would heighten owners' adaptation burden. In addition, the court might also consider the City's work to encourage New Yorkers to purchase flood insurance, which would enhance the City's reasonableness.

Act Reasonably "Under the Circumstances." The post-Sandy context increases the City's duty to adapt reasonably, as the City is more aware of the risk of the next storm, which is expected to be greater in magnitude than Sandy. Here too, the City's adaptation efforts are considered in light of its financial, legislative, and political constraints. It is arguable that the issue of climate change is less politically charged post-Sandy than it was pre-Sandy. Many New Yorkers, especially those in the flood zones, support stronger adaptation measures after Sandy.<sup>236</sup> Yet, given the high-density development in NYC, a coastal retreat strategy is still politically unfavorable to most stakeholders.<sup>237</sup> Further, the City is spending a lot of money on its Resiliency Plan despite its financial limitations. Thus, a court is likely to hold the City's post-Sandy adaptation measures reasonable under the circumstances. This is especially true given that more coastal property owners are also aware of the next storm's risk. As such, these plaintiffs might have a hard time holding the City liable for a failure to

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234. *Louisiana's 2012 Coastal Master Plan*, GEO. CLIMATE CTR., <http://www.georgetownclimate.org/resources/louisianas-2012-coastal-master-plan> (last visited Nov. 6, 2014).

235. NYC Resiliency Plan, *supra* note 2 at 27–28. NYC's reasonableness is further supported by the fact that New Jersey, which suffered tremendous damage from Sandy, does not have a state or local climate adaptation plan.

236. Presentation at the Penn. Program, *supra* note 96.

237. See Verchick & Johnson, *supra* note 9 at 695 (“We Americans are more interested in fortifying our castles or buildings than higher than in moving out of harm’s way. And that is despite warnings of rising seas and stronger storms associated with climate change.”).

adapt more stringently when they chose to remain on the coast in spite of the known risks.

In sum, the facts that the City's post-Sandy adaptation actions were at least on par with its peer cities and that the City volunteered to increase its adaptation efforts both weigh in favor of holding NYC reasonable in its post-Sandy adaptation efforts. The utility analysis adds weight to the latter determination. These factors outweigh the City's foreseeability of the next Sandy and its ability to significantly mitigate those effects through a coastal retreat strategy. Indeed, a court would likely hold that a coastal retreat strategy is unfeasible politically and financially for a high-density area like NYC.<sup>238</sup> Thus, the City is unlikely to be held unreasonable for its post-Sandy adaptation efforts.

### *iii. Policy Limitations on Liability*

A court may refuse to hold the City liable for its post-Sandy adaptation measures due to large-scale practical concerns. Holding the City liable could open the floodgates to liability claims against the City or impose adaptation liability on municipalities that cannot afford to implement such measures effectively.<sup>239</sup> Such limitations are more relevant in the post-Sandy context because there is likely to be a greater number of plaintiffs after the next storm.<sup>240</sup> This is partly because timing is not a barrier to filing suit since the next storm has not hit yet and because public awareness of both climate change adaptation and adaptation lawsuits is increasing.<sup>241</sup>

At the same time, given the legal challenges to filing a successful adaptation suit against the City, absent an affirmative duty to adapt, it is likely that a court will only hold the City liable in a small number of cases, which mitigates the potential of widespread liability.<sup>242</sup> Additionally, a court can assign limited liability to the City on a case-by-case basis, so as

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238. *Id.* at 698 (“[Coastal] retreat can be expensive, particularly where government bears the cost buying out owners or providing space for relocation. When residents and businesses leave, local governments lose tax revenue. Owners on the coast or river shorelines also pack political clout and may resist efforts to drive them away.”).

239. Hunter & Salzman, *supra* note 11 at 1782; Burkett, *supra* note 7 at 790 (“In adaptation litigation, courts will have to weigh the injuries of property owners against the costs to local governments of imposing adaptation measures. Courts may reject liability out of concern that the scale of liability will have the capacity to ‘crush’ defendant municipalities.”).

240. Margolis & Cummings, *supra* note 16.

241. See Sudol, *supra* note 4 (explaining that George Kasimos, founder of *Stop FEMA Now*, stated that the number of people filing suits for property damage compensation from storms like Sandy “should be much higher,” but “a lot of people still don’t know they can file suit in federal court.”).

242. Burkett, *supra* note 7 at 799 (“At the moment, these issues may be beyond the reach of the courts as nonstructural and policy-oriented planning decisions, for which courts do not uniformly find a cognizable duty or, if they do, they allow immunity to apply, respectively.”).

not to overburden the City with responsibility it cannot handle.<sup>243</sup> For example, the court could limit the City's liability to the damages its negligent adaptation measures caused the particular defendants, as opposed to holding it liable for its adaptation efforts more broadly (i.e. by *not* issuing a general order for the City to institute more stringent adaptation measures). Alternatively, a court could reduce the City's liability in a given case based on its voluntary adaptation measures that have arguably mitigated potential damages to the defendants (though this might be hard to calculate). Still, a court reviewing post-Sandy adaptation claims may be more inclined to defer to the legislative branch to impose climate adaptation responsibilities on NYC and other municipalities.<sup>244</sup>

Overall, Section III has demonstrated that: (1) it is unclear whether coastal plaintiffs will be able to hold NYC liable for the failure of its structural measures, given the novelty of establishing a special relationship with the City in the climate adaptation context; and (2) potential plaintiffs have legitimate claims that NYC's choice of adaptation measures, pre- and post-Sandy, were unreasonable. Yet, plaintiffs' success depends on a court willfully bypassing the City's sovereign immunity for discretionary decisions and applying some form of the utility or multifactor tests to assess the City's reasonableness under a negligence claim, which is unlikely. Moreover, even if a plaintiff's claim is successful, a court may still refuse to assign liability due to the policy concerns. Thus, even though plaintiffs may have legitimate claims regarding the City's choice of adaptation measures, the City is not likely to be held unreasonable for its adaptation measures under current law.

#### IV. POLICY ANALYSIS

##### A. *Common Law Signals and Implications*

###### 1. Signals to Cities

Under current New York law, NYC will not likely be held liable for failing to adapt to climate change reasonably because it is not statutorily mandated to do so and sovereign immunity protects its discretionary adaptation decisions. The same liability scheme applies to many U.S.

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243. Hunter & Salzman, *supra* note 11 at 1782 (“[S]uch [policy concerns] may be mitigated in ways other than dismissing the entire lawsuit. For example, courts could limit liability to the percentage of climate change attributable to the defendants in the case.”).

244. Burkett, *supra* note 7 at 790 (“Tort liability might be so great that it exceeds the bounds of adjudication and is more appropriate for legislative resolution.”).

jurisdictions, where municipal discretionary decisions are immune from liability and climate adaptation is not statutorily mandated.<sup>245</sup> In the absence of most state climate adaptation regulation, the most recent federal legislation—the Affordability Act—encourages governments to continue subsidizing the risky behavior of occupying the coast. In this way, common law signals to cities that they are not legally responsible for adapting to climate change because they will not be liable for their discretionary decisions regarding adaptation.

Similarly, with regard to structural measures, NYC will unlikely be held liable for failing to implement additional bulkheads and levees because this is a discretionary decision protected by sovereign immunity. But once the City builds a structural measure, potential liability attaches and the City can be liable if the structure is negligent in its design, construction, maintenance, or operation. The same is generally true in other U.S. jurisdictions.<sup>246</sup> In this way, cities can potentially be held liable for negligent adaptation structures, thus incurring some liability risk.<sup>247</sup> Consequently, common law may discourage risk-averse or under-resourced cities from instituting structural adaptation measures.

New York’s special relationship requirement in proving structural liability can be a significant hurdle for plaintiffs, which makes it less likely that NYC will face liability for its structural measures. The degree of NYC’s liability risk for structural measures depends on whether New York courts hold that the City owes a special duty to coastal property owners with respect to coastal structural measures, or whether such structures are built for the public at large. If the former is the case, then the City is more likely to be liable for its negligent structures when sued by coastal property owners. NYC presumably perceives such risk as minimal, as it plans to implement many structural measures in its Resiliency Plan. Yet, in jurisdictions that do not have the special relationship requirement, cities may be more discouraged from instituting structural adaptation measures because they are more likely to face liability for negligence.

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245. See KUSLER, *supra* note 150 at 16 (explaining that generally, absent statutory or regulatory requirements, discretionary decisions are not subject to liability); see also Burkett, *supra* note 13, at 11,154.

246. Burkett, *supra* note 13 at 11,154 (“[W]hen governments act as landowners they are subject to liability for impacts from their construction and operation of structural measures, such as dams, levees, and groins.”).

247. See SCHUELER, *supra* note 135 at 238 (“If the liability standards for failure to act imply higher risk than the standards applying to action, the system will stimulate the development of appropriate adaptation policies. If, on the other hand, the risk is higher for actions than it is in case of not acting, the system will discourage the taking of adaptation measures.”).

While some liability risk attaches to cities' structural measures, cities' discretionary adaptation actions (i.e. pursuing a particular adaptation strategy) have practically no liability risk because cities will not be held liable for these decisions. Although Burkett argues that a court should enable plaintiffs to sue on a theory of negligence of failure to adapt reasonably, it is unlikely that a court would waive a city's longstanding sovereign immunity for discretionary decisions. Thus, current common law does not discourage cities from adapting to climate change for fear of potential liability risk, but it does not encourage them either. If cities knew they could be held liable for failure to adapt they would be encouraged to adapt.

Further, common law's indifference to cities' adaptation may contribute to a city choosing not to institute the most effective adaptation strategy in light of the risks, knowing that it will not be held legally accountable for this decision. For example, coastal retreat may be the most effective adaptation regulation for a city, but since it knows it will not be liable for refusing this option, the city may opt for more resilient coastal buildings instead. Yet, other financial and political factors contribute to cities' decisions as well.

In sum, common law in New York, and potentially other jurisdictions, signals to cities that they are not legally responsible to adapt to climate change because they will not be liable for their lack of adaptation or negligent adaptation measures. Potential liability risk may attach to cities' negligent structural measures depending on the existence of a special relationship requirement and how courts apply it in the coastal adaptation context. Yet, there is no liability risk for cities' discretionary decisions regarding adaptation, which neither discourages cities from adapting nor encourages them. As more climate adaptation suits are filed and common law shifts in response, these signals may change. Indeed, scholars anticipate that as more suits are filed, cities will be held liable for their adaptation measures.<sup>248</sup>

## 2. Signals to Property Owners

There are many challenges facing plaintiffs who wish to reclaim damages from NYC for pre- or post-Sandy adaptation through New York

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248. Burkett, *supra* note 7 at 799. ("Expanded liability appears to be an emerging trend . . . which may have serious implications for local governments that do not opt for the most climate-adaptive conduct in light of the high degree of risk to person and property." (citing Adam Liptak, *Justices Broaden the Basis for Damages Over Floods*, N.Y. TIMES, Dec. 4, 2012, at A23.)); *see also* Sudol, *supra* note 4 (providing information on increased coastal adaptation claims).



courts. The 90-day statute of limitations provides a short window for plaintiffs to assert their claims, and both the City's sovereign immunity for non-structural measures and the special relationship requirement for structural measures weigh in the City's favor. These challenges pertain to establishing an initial claim, let alone the additional challenges involved in establishing causation and damages that are required for a successful suit. Ultimately, common law in New York and other jurisdictions signal to coastal property owners that they bear the burden of adapting to local climate risks, as cities are not legally responsible for implementing adaptation measures.

Given property owners' lack of recourse in the courts, common law also signals to property owners that they should not purchase or occupy property on the coast, and if they do, they are responsible for the ensuing risk. For property owners who live in highly vulnerable coastal properties, personal responsibility for adapting to their local climate risks may translate into moving away from the coast, as they cannot depend on the City to institute reasonable adaptation measures or compensate them for supposed climate-related damages. In this way, common law passively supports coastal retreat.

This "you're on your own" signal is positive in that it encourages property owners to institute adaptation measures for themselves, and as such, may increase coastal resiliency and retreat in highly vulnerable areas. At the same time, this signal has negative consequences because complacent property owners will not take the appropriate adaptation actions in light of the risks they face, increasing the public's overall vulnerability and potential storm damages.<sup>249</sup>

According to Burkett, since "[t]ort litigation has the power to determine the course of climate adaptation [in the absence of legislation] . . . those seeking to advance greater safety and well-being would do well to harness tort liability to stimulate more affective and aggressive capacity building."<sup>250</sup> Burkett argues that property owners who wish to shift their adaptation burden to cities or other parties could potentially do so through litigation, using tort law as a *de facto* policy instrument. If successful (though unlikely), such plaintiffs could shift the common law signals regarding climate adaptation away from individual responsibility and toward more government responsibility. Yet, there are two problems with this approach. First, both government and coastal property owners should

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249. See Wilkins, *supra* note 25 at 438 ("We have learned that government will usually rush to our assistance in a disaster even if we are largely responsible for our own predicaments.."). Such knowledge may encourage complacent behavior.

250. Burkett, *supra* note 13 at 11,147.

bear the costs of adaptation. Second, just because tort liability can encourage cities' climate adaptation, it does not mean that it is the best tool to do so. The next section will suggest how legislation supplemented by tort liability can encourage proper climate adaptation in NYC and other U.S. cities by both cities and coastal property owners.

### *B. Policy Suggestions*

As demonstrated, tort lawsuits are not the ideal tool to address local adaptation; rather, legislation is. Unlike tort cases, which focus on individual or group cases, legislation can mandate large-scale adaptation action. Indeed, the number of potential plaintiffs in climate adaptation cases "may exceed the bounds of adjudication," demanding a public policy response.<sup>251</sup> Similarly, if climate mitigation case law is any indication, courts might also be reluctant to pin responsibility for climate adaptation, which is essentially a policy issue, on a given defendant. In addition, tort cases cost a lot of money and ironically drain defendants of funds that could otherwise be used to implement adaptation measures. This is especially true in lawsuits against municipalities, which have the authority to institute climate adaptation measures, but often lack the resources to do so. The process of litigating a tort case is also time consuming, whereas climate adaptation action is needed immediately. Tort litigation has a role to play in encouraging local climate adaptation, but the above reasons suggest that this role is a limited one which must be supplemented by legislation.

Municipalities are reluctant to enact climate adaptation regulation—especially in coastal areas—because such regulations can be costly, stifle development which is often the "lifeblood" of local governments, and may trigger lawsuits claiming an infringement on private property rights.<sup>252</sup> Accordingly, some cities may believe that if they institute climate adaptation measures they will be at an economic disadvantage compared to cities that do not (at least in the short term). Since local governments have no legislative mandate to adapt to climate change, they are typically immune from lawsuits for failing to adapt.

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251. Burkett, *supra* note 7 at 790 ("Tort liability might be so great that it exceeds the bounds of adjudication and is more appropriate for legislative resolution.").

252. See Wilkins, *supra* note 25 at 438–39 ("The reasons so many local governments are loathe to enact and enforce regulations limiting development in hazardous coastal areas are undoubtedly varied; however, there are two obvious reasons that come to mind. Development is the lifeblood of local governments, resulting in increased business, population, and tax revenues upon which these governments depend. Another factor revolves around private property rights and the issues surrounding the protection of such rights.").

To directly encourage climate adaptation efforts at the local level, adaptation should be mandated through federal or state legislation or both. This way, local governments will have an affirmative duty to adapt to climate change for which it can be held accountable for in the courts.<sup>253</sup> Indeed, going forward, climate adaptation claims will only increase.<sup>254</sup> If cities have statutory mandates to adapt to climate change, then tort litigation can be more effective in analyzing whether cities are reasonably carrying out their affirmative legal duty to adapt. Rather than relying on common law multifactor analyses that were not created to address climate change claims, courts will have a clear objective standard as to what “reasonable adaptation” is from the cities’ statutes. To ensure that such claims can be litigated properly on the merits, states should enact a statutory waiver of immunity for adaptation claims against cities.

To further facilitate climate adaptation claims going forward, New York courts should remove the special relationship requirement to prove structural measure liability, in accordance with many other state jurisdictions, to ensure that cities are held accountable for negligent adaptation structures.<sup>255</sup> If climate adaptation statutes are not enacted and courts still need to resort to common law negligence analyses in assessing climate adaptation claims, then courts should at least modify their industry custom prong as it applies to cities’ adaptation behavior. Specifically, courts should compare a city’s actions to local climate risks the city faces, as opposed to other cities’ actions. Since industry custom for climate adaptation in U.S. cities is for politics to lag behind science, courts are reinforcing this inefficient behavior.

If the above suggestions are enacted, climate adaptation advocates will no longer need to rely on tort claims as a de facto policy tool to mandate adaptation, which is ineffective compared to legislation. Legislation supplemented by tort claims will ensure that cities are held accountable in their mandate to adapt to climate change reasonably and thus encourage appropriate adaptation.

Yet, in assigning climate change adaptation responsibility, one is essentially deciding who should bear the cost of adaptation. If NYC institutes specific coastal adaptation measures, this signals to coastal property owners that it is primarily the responsibility of the government,

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253. See Burkett, *supra* note 7 at 786. (“[D]uty is ‘an expression of the sum total of those considerations of policy which lead the law to say that the particular plaintiff is entitled to protection.’ In short, foreseeability coupled with other compelling policy concerns will determine whether or not a legal obligation [to adapt] exists or emerges.”).

254. Sudol, *supra* note 4.

255. See Burkett, *supra* note 13 at 11,154; see also KUSLER, *supra* note 150 at 13–14 (discussing ministerial liability in common law jurisdictions generally).

and thus collective taxpayers, to address coastal resiliency. In other words, such a policy signals that collective taxpayers should subsidize, at least in part, the risky behavior of coastal property owners.<sup>256</sup>

Coastal property owners who heighten climate change coastal risks should bear proportionate responsibility to increased coastal resiliency. For instance, in alignment with Biggert-Waters and the Affordability Act, coastal homeowners who live in FEMA flood zones should pay higher flood insurance premiums that accurately reflect their risky behavior. Thus, NYC should have an affirmative, yet limited, duty to institute adaptation measures—meaning that the City should be responsible for adapting in a reasonable way in light of its legislative authority and available resources.<sup>257</sup> At the same time, property owners should pay the full cost to insure their risky behaviors, as doing so will force them to internalize the negative externalities of their actions and will encourage further individual adaptation.

Fortunately, there are policy tools available to address the affordability of increased flood insurance premiums under recent federal regulation, while encouraging adaptation implementation. Specifically, the City advocates for a mitigation program that would enable residents who reduce their flood risk to receive a discount from their higher flood insurance premiums.<sup>258</sup> To help low-income residents afford the initial adaptation investment, the City proposes a home-improvement loan to cover the full costs, which will be repaid with the money saved from the premium reductions that result from the adaptation measure.<sup>259</sup> The Wharton Center for Risk Management and Decision Processes advocates for a combined voucher and mitigation loan program. This combined program offers eligible homeowners vouchers to reduce their premiums upfront on the condition that they implement adaptation measures.<sup>260</sup> Once adaptation

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256. The City should arguably have an increased burden to institute *general* climate adaptation actions with collective taxpayer money. A general climate adaptation plan that addresses not only the coasts, but also the resiliency of critical infrastructure and buildings across the City benefits the public at large from collective risky behavior contributing to climate change.

257. Ideally, state or federal legislation should clarify what “reasonable” adaptation means. For example, a city could be mandated to adapt where it makes sense to do so under a utility or cost benefit analysis. Yet, if this approach were used, costs must include externalities as best as possible to reflect true costs of potential actions, and the full benefits of adaptation actions should be accounted for. *See Valdez*, 960 N.E.2d. at 356. Also, a proper discount rate should be used to accurately reflect the short v. long-term adaptation investment.

258. NYC RESILIENCY PLAN, *supra* note 2 at 100.

259. *Id.* (explaining that the money saved from the flood insurance premium reduction would be greater than the loan amount, thus enabling homeowners to re-pay the loan).

260. KOUSKY & KUNREUTHER, *supra* note 26 (proposing that the insurance voucher would be decided based upon the policyholder’s income and the mitigation loan would be decided based upon the policyholder’s property).

measures are installed, homeowners' premiums should decrease, enabling the homeowner to repay the mitigation loan.<sup>261</sup> As the property owners' premiums decrease, the voucher amounts will decrease as well.<sup>262</sup> The combined voucher and loan program would save both the government and homeowner significant adaptation costs, while encouraging adaptation by vulnerable property owners.<sup>263</sup>

#### CONCLUSION

New York City (and cities with similar laws) is unlikely to be held liable for the quality of their adaptation efforts, as they are immune from liability for their adaptation decisions in the absence of climate adaptation legislation. If a court were willing to waive NYC's sovereign immunity and examine its adaptation efforts for reasonableness, based on the above analysis, it would be unlikely to hold NYC liable for failing to adapt to climate change reasonably either prior to or after Hurricane Sandy. In this way, common law signals to cities that they are not legally responsible for climate adaptation and, thus, do not need to adapt. Cities' immunity from adaptation negligence does not discourage voluntary adaptation, but this same immunity does not encourage cities to adapt either.

New York City may be liable for negligent adaptation structures, depending on whether plaintiffs can establish a special relationship with the City. Cities in jurisdictions that do not have a special duty requirement may be discouraged from instituting adaptation measures because of the greater risk of liability.

Given the overall ineffectiveness of tort law to mandate local climate adaptation, legislation is necessary to adequately address this large-scale issue and hold both cities and property owners responsible for their adaptation actions. Ultimately, the extent of adaptation measures mandated through legislation and enforced by the courts reflects a societal value preference between public and private rights, as well as long and short-term benefits. If New York City and the rest of the U.S. prioritize environmental and economic sustainability, then intelligent adaptation investments need to be made now to ensure the longevity of our coasts and cities going forward.

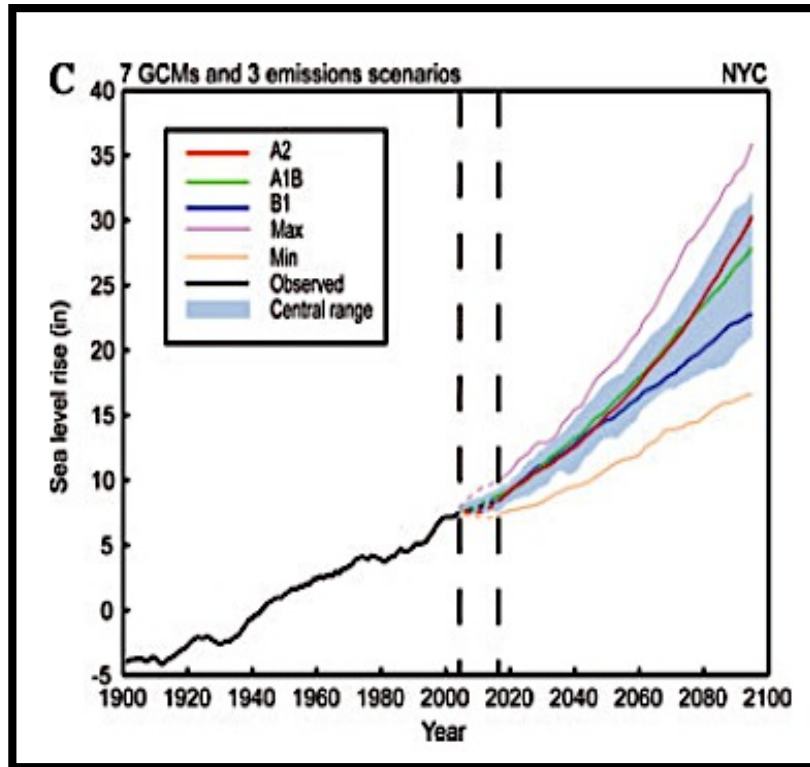
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261. KOUSKY & KUNREUTHER, *supra* note 24 at 15.

262. *Id.*

263. KOUSKY & KUNREUTHER, *supra* note 26.

## APPENDIX



**Figure 1. NPCC's 2010 Sea Level Rise Projections**

Observed sea level rise (black line) and projected temperature, precipitation, and sea level rise as applied to the observed historical data, using 7 global climate models (GCMs) and 3 emissions scenarios, A2, A1B, and B1. 2002–2015 is not covered due to the “smoothing procedure.” The central value is the middle 67 percent of values. According to the 2010 NPCC projections, sea level is expected to rise 2-5 in. in the 2020s, 7-12 in. in the 2050s, and 12-23 in. in the 2080s. Under the rapid ice-melt scenario, sea level is expected to rise even more. Radley Horton et al., *Climate Observations and Projections*, 1196 ANNALS OF THE N.Y. ACAD. OF SCI., CLIMATE CHANGE ADAPTATION IN NEW YORK CITY: BUILDING A RISK MGMT. RESPONSE 52 (2010).

Summary of Changes to NFIP Premiums Required by Biggert-Waters		
Date of Implementation	What Will Happen	Who is Affected
January 1, 2013	<ul style="list-style-type: none"> <li>• 25% premium increase per year until premiums reflect full-risk rates</li> </ul>	<ul style="list-style-type: none"> <li>• Homeowners with subsidized insurance rates on second homes or other non-primary residences</li> </ul>
October 1, 2013	<ul style="list-style-type: none"> <li>• 25% premium increase per year until premiums reflect full-risk rates</li> </ul>	<ul style="list-style-type: none"> <li>• Owners of business properties with subsidized premiums</li> <li>• Owners of properties with severe repetitive loss (cumulative NFIP claims payments exceeding the fair market value of the property)</li> </ul>
October 1, 2013	<ul style="list-style-type: none"> <li>• Up to 20% premium increase per year</li> </ul>	<ul style="list-style-type: none"> <li>• All policyholders not subject to other phase-outs</li> </ul>
Late 2014	<ul style="list-style-type: none"> <li>• 5 year phase-out of subsidies on existing policies</li> <li>• Immediate requirement to pay full-risk rate for new or lapsed policies</li> </ul>	<ul style="list-style-type: none"> <li>• All policyholders affected by map changes (FEMA's revised Flood Insurance Rate Maps are expected for New York City in 2015)</li> </ul>

Source: FEMA

Figure 2. NYC RESILIENCY PLAN, *supra* note 2 at 96.

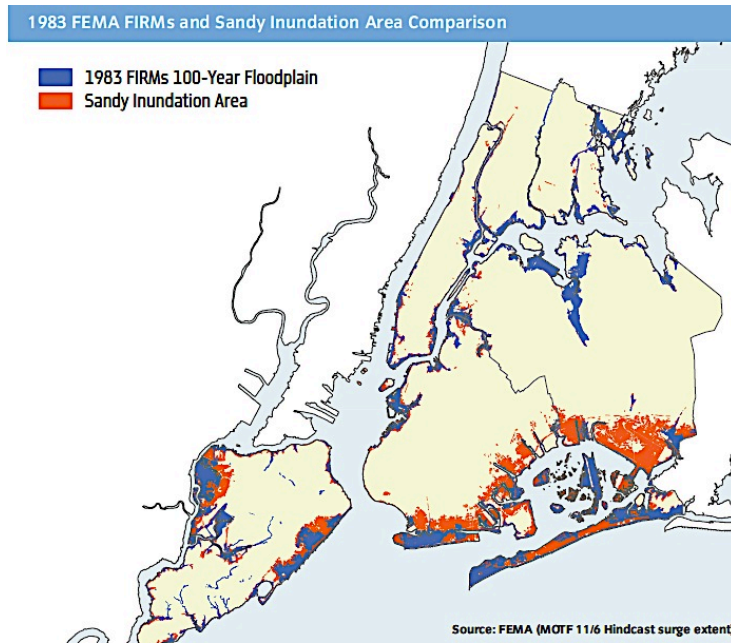


Figure 3. NYC RESILIENCY PLAN, *supra* note 2 at 24.



**Figure 4.** “The potential areas that could be impacted by the 100-Year flood in the 2020s and 2050s based on projections of the high-estimate 90th percentile sea level rise scenario.” NPCC, *supra* note 20 at 6. (The June 2013 estimated 100-year-flood zone parallels FEMA’s 1983 100-year-floodplain for NYC in addition to the area inundated by Hurricane Sandy. *See* Figure 3.)



**USING ESA SECTION 9 TO PROTECT COHO SALMON  
HABITAT IN WESTERN OREGON**

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*By Miles Johnson*

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## INTRODUCTION

Habitat loss and degradation have devastated coho salmon (*Oncorhynchus kisutch*) in Oregon's coastal rivers.<sup>1</sup> Partly because of habitat destruction, Oregon's coho salmon populations declined precipitously in the latter half of the 1900s and remain depressed today.<sup>2</sup> Functional freshwater habitat is essential to Oregon's coastal coho populations because, although these fish migrate to the ocean, coho spend more than half of their lives rearing and spawning in rivers and estuaries.<sup>3</sup> Coho in Western Oregon prefer lowland streams and rivers, which are typified by low stream gradients, low water velocities, and off-channel pools and backwaters.<sup>4</sup> Specifically, juvenile coho rear and overwinter extensively in the deep, slow, and complex pool habitats that beaver dams create.<sup>5</sup> Unfortunately, humans continue to remove beaver dams and beaver (*Castor canadensis*) from many coastal rivers to facilitate logging operations, agriculture, and real estate development, depriving juvenile coho of this important source of rearing habitat and ultimately reducing the number of juvenile coho that survive to adulthood.<sup>6</sup>

Partly in response to the extensive degradation of coho habitat in Western Oregon, the National Marine Fisheries Service ("NMFS") listed the Oregon Coast Coho Evolutionarily Significant Unit ("ESU")<sup>7</sup> as a

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1. OR. DEP'T OF FISH & WILDLIFE, THE IMPORTANCE OF BEAVER (*CASTOR CANADENSIS*) TO COHO HABITAT AND TREND IN BEAVER ABUNDANCE IN THE OREGON COAST COHO ESU 5-6 (2005) *available at* <http://www.nativefishsociety.org/conservation/misc/documents/Beavers/ODFWBeaverFinalReport5-6-05.pdf>.

2. OR. DEP'T OF FISH & WILDLIFE, ESTIMATED NUMBERS OF NATURALLY PRODUCED ADULT COHO IN THE OREGON COAST COHO ESU (RUN YEARS 1950 TO 2013) (2013), *available at* <http://oregonstate.edu/dept/ODFW/spawn/pdf%20files/coho/CoastalCohoESUSpawnHarvestChart.pdf>.

3. NAT'L MARINE FISHERIES SERV., UPDATED STATUS OF FEDERALLY LISTED ESUS OF WEST COAST SALMON AND STEELHEAD 311 (Thomas P. Good, Robin S. Waples & Pete Adams eds., 2005), *available at* <http://swfsc.noaa.gov/publications/fed/00749.pdf>.

4. Final Threatened Listing Determination, Final Protective Regulations, and Final Designation of Critical Habitat for the Oregon Coast Evolutionarily Significant Unit of Coho Salmon, 73 Fed. Reg. 7,816, 7,827 (Feb. 11, 2008) (codified at 50 C.F.R. pts. 223 and 226) [hereinafter Listing Determination]; GORDON H. REEVES ET AL., U. S. FOREST SERV., IDENTIFICATION OF PHYSICAL HABITATS LIMITING THE PRODUCTION OF COHO SALMON IN WESTERN OREGON AND WASHINGTON 3 (1989); NAT'L MARINE FISHERIES SERV., *supra* note 3.

5. Reeves et al., *supra* note 4; NAT'L MARINE FISHERIES SERV., *supra* note 3.

6. Michael M. Pollock et al., *The Importance of Beaver Ponds to Coho Salmon Production in the Stillaguamish River Basin, Washington, USA*, 24 N. AM. J. FISHERIES MGMT. 749, 751, 756 (2004), *available at* <http://duff.ess.washington.edu/grg/publications/pdfs/Pollock.pdf>.

7. A pacific salmon stock will be considered a distinct population, "and hence a species under the ESA, if it represents an evolutionary significant unit (ESU) of [its] species. The stock must satisfy two criteria to be considered an ESU: (1) It must be substantially reproductively isolated from other nonspecific population units; and (2) it must represent an important component in the evolutionary

threatened species under the Endangered Species Act (“ESA”).<sup>8</sup> The Oregon Coast Coho ESU includes the coho populations in every watershed on the Oregon Coast south of the Columbia River and north of Cape Blanco.<sup>9</sup> NMFS also designated “critical habitat,” which encompasses most of the accessible freshwater habitat in this region.<sup>10</sup> Finally, because ESA section 9’s prohibition on “take”<sup>11</sup> does not automatically attach to threatened species,<sup>12</sup> NMFS also promulgated a rule making it illegal to take Oregon coast coho under most circumstances.<sup>13</sup>

Despite the Oregon coast coho’s threatened status and NMFS’s protective regulations, many land-use practices continue to degrade Oregon’s coastal rivers. This is because the Oregon Coast Coho ESU’s freshwater habitat exists mostly on private and state land.<sup>14</sup> Private entities and states, unlike federal agencies, are not required to formally analyze the impacts of their actions on listed species and critical habitat.<sup>15</sup> Rather, non-federal entities—like private timber companies, developers, and state resource management agencies—are only prohibited from taking listed species.<sup>16</sup> Even though NMFS defines take to include “harm,” meaning habitat degradation that kills or injures wildlife by impairing breeding, feeding, or sheltering,<sup>17</sup> private plaintiffs have only occasionally attempted to use the ESA’s prohibition against take and harm to protect coho salmon habitat.<sup>18</sup> Thus far, the threatened listing, the critical habitat designation, and the take prohibition have done little to protect Oregon coast coho from

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legacy of the species.” Policy on Applying the Definition of Species Under the Endangered Species Act to Pacific Salmon, 56 Fed. Reg. 58,612, 58,612 (Nov. 20, 1991).

8. Listing Determination, *supra* note 4, at 7,816.

9. *Id.* at 7,817; *see also* HABITAT CONSERVATION DIV., NAT’L MARINE FISHERIES SERV., NAT’L OCEANIC & ATMOSPHERIC ADMIN., [MAP OF] OREGON COAST COHO SALMON ESU (1999), available at [http://www.nwfsc.noaa.gov/trt/maps/map\\_cohoorc.pdf](http://www.nwfsc.noaa.gov/trt/maps/map_cohoorc.pdf).

10. Listing Determination, *supra* note 4, at 7,844–59.

11. 16 U.S.C. § 1532(19) (2012) (explaining that “take,” within the ESA, “means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”).

12. 16 U.S.C. § 1533(d) (2012).

13. 16 U.S.C. § 1538(a)(1)(B) (2012); Listing Determination, *supra* note 4, at 7,829–30.

14. *See* HABITAT CONSERVATION DIV., *supra* note 9.

15. 16 U.S.C. § 1536 (2012) (requiring federal agencies to consult with U.S. Fish and Wildlife Service or NMFS whenever a listed species is “likely to be affected” by a federal action, to ensure that the federal actions will not “jeopardize” the listed species or “destroy or adversely modify” its critical habitat).

16. 16 U.S.C. § 1538(a)(1)(B) (making it “unlawful for *any person*” to take any take-protected species) (emphasis added).

17. 50 C.F.R. § 17.3 (2011).

18. *See generally* Pac. Rivers Council v. Brown, No. CV 02-243-BR, 2002 WL 32356431, at \*11 (D. Or. Dec. 23, 2002) (discussing plaintiff’s attempt to use the ESA’s prohibition against take and harm to protect Coho salmon habitat); Coho Salmon v. Pac. Lumber Co., 61 F. Supp. 2d 1001, 1004 (N.D. Cal. 1999) (suing to permanently enjoin Pacific Lumber Co. from causing a “take” of Coho salmon through its timber harvesting operations in various watersheds).

harmful land-use practices occurring on non-federal lands, such as the removal of beaver and beaver dams from coho streams.

The limited use of the ESA's harm prohibition to challenge habitat destruction stems, at least partly, from some uncertainty as to what harm actually means and when habitat modification constitutes harm.<sup>19</sup> One reason that plaintiffs hesitate to bring take-through-harm claims is what this paper refers to as the "actually kills or injures" requirement.<sup>20</sup> The U.S. Fish and Wildlife Service ("FWS") and NMFS define harm to exist only when a member of a take-protected species has been killed or injured,<sup>21</sup> and the Supreme Court specifically emphasized the "actually kills or injures" requirement by stating that the entire "definition of 'harm' is subservient to the phrase 'an act which actually kills or injures wildlife.'"<sup>22</sup> Some commentators, and potential plaintiffs, have understood the "actually kills or injures" requirement to require nothing less than death or direct physical injury to a member of a protected species.<sup>23</sup> Because finding a dead or maimed member of a protected species is often impractical or impossible, potential plaintiffs who believe that such a showing is necessary may hesitate to bring take-through-harm claims.

Another area of confusion in take-through-harm litigation is whether the harm provision prohibits injury to members of protected species (hereinafter referred to as "individual protected organisms") or to populations and entire species. Some courts have held that the harm provision prohibits harm to entire species (i.e., driving a species to

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19. When the causal link between a defendant's action and harm to a member of a protected species is severely attenuated, the proper causation standard may also become a legitimate concern for litigants. In *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon* (*Sweet Home*), six out of nine Supreme Court justices agreed, in dicta, that the harm prohibition was subject to familiar tort principles of proximate causation and foreseeability. 515 U.S. 687, 696 n. 9, 700 n.13, 712–13 (1995). Nevertheless, the requisite level of causation remains murky for two reasons. First, proximate causation and foreseeability are inherently difficult to define. *Id.* at 713 (O'Connor, J., concurring) ("Proximate causation is not a concept susceptible of precise definition."). Second, few courts since *Sweet Home* have actually considered the question of causation in take claims; fewer still have stated the test for causation in terms of proximate causation and foreseeability. See, e.g., *Strahan v. Cox*, 127 F.3d 155, 163–64 (1st Cir. 1997); *Seattle Audubon Soc'y v. Sutherland*, No. CV06-1608MJP, 2007 WL 1300964, at \*11–12 (W.D. Wash. May 1, 2007); *Pac. Rivers Council*, 2002 WL 32356431, at \*5. Because courts do not seem overly concerned with causation in the take context, and because discussions about the meaning of proximate causation and foreseeability already abound, this paper does not examine causation.

20. See 50 C.F.R. § 17.3; 50 C.F.R. § 222.102 (2013) ("Harm in the definition of 'take' in the [ESA] means an act which actually kills or injures fish or wildlife.").

21. *Id.*

22. *Sweet Home*, 515 U.S. at 700 n.13.

23. Andrew J. Doyle, *Sharing Home Sweet Home with Federally Protected Wildlife*, 25 STETSON L. REV. 889, 917–20 (1996) ("[B]y requiring proof that an individual, specific animal has been killed, Justice O'Connor practically requires ESA plaintiffs and prosecutors to bring a carcass to court!").

extinction),<sup>24</sup> while other courts have held that it forbids harm to individual protected organisms.<sup>25</sup> Still other courts would require a showing of injury to individual protected organisms *and* the entire species before harm-through-habitat-modification can be considered a take.<sup>26</sup> Not surprisingly, this uncertainty makes it difficult for prospective plaintiffs to plead and argue take-through-harm claims.

This paper points the way towards using a take-through-harm lawsuit to curtail the removal of beaver from Oregon coast coho habitat, and along the way discusses some of the legal issues that may discourage litigants from bringing such claims. Part I outlines the scientific evidence establishing how juvenile coho in coastal streams use, and in fact rely upon, beaver dams for rearing and sheltering. Additionally, this part describes how trapping and removing beavers from these streams causes the loss of existing beaver dams, reducing available coho habitat. Part II briefly explains ESA section 9's take prohibition, including the regulatory definition of harm, which prohibits habitat destruction that injures individual protected organisms.<sup>27</sup> Part III explains that injury within the definition of harm is not limited to instances of bodily injury or maiming to individual protected organisms.<sup>28</sup> Instead, injury occurs whenever an "essential behavior pattern" of a protected organism, such as rearing, spawning, or sheltering, is significantly impaired.<sup>29</sup> Part VI explains why and how the take and harm prohibitions apply to individual organisms rather than populations or entire species. First, this part explains why alleging harm to an entire population is unwise and suggests how plaintiffs can tailor their take-through-harm claims to instead focus on harm to individual protected organisms. Next, this part argues that it is unnecessary to show population- or species-level effects in addition to harm to individual protected organisms in order to establish take-through-harm. Finally, this part explains why plaintiffs and courts need not specify which exact individual organisms will be injured in order to establish that injury to individual protected organisms will occur. Part V applies the facts in the beaver/coho scenario to the legal issues discussed in Parts III and VI and

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24. See, e.g., *Palila v. Haw. Dep't of Land & Natural Res. (Palila II)*, 852 F.2d 1106, 1107 (9th Cir. 1988) (defining "harm" as causing habitat degradation that could result in extinction).

25. See, e.g., *Forest Conservation Council v. Rosboro Lumber Co.*, 50 F.3d 781, 788 (9th Cir. 1995) (holding that "harm" would occur even where just two northern spotted owls would be injured).

26. See, e.g., *Coal. for a Sustainable Delta v. McCamman*, 725 F. Supp. 2d 1162, 1170 (E.D. Cal. 2010) (suggesting that a population-level impact is required for habitat modification to be considered a take).

27. 50 C.F.R. § 17.3 (2011).

28. *Id.* (explaining that the term "injury" is part of the regulatory definition of "harm").

29. 50 C.F.R. § 222.102.

briefly explains why removing beaver from Oregon coast coho habitat could constitute harm. The paper concludes by discussing how take claims function within the ESA's larger framework for protecting listed species' habitat, and highlighting the importance of take claims for protecting habitat when that habitat exists largely or entirely on private or state-owned land.

#### I. KILLING BEAVER NEGATIVELY IMPACTS JUVENILE OREGON COAST COHO

Beaver dams and ponds alter stream morphology and in-stream habitat in a variety of ways. First, beaver dams create areas of deeper water than would typically be found in small streams.<sup>30</sup> Second, dams decrease current velocity, creating areas of slow or still water in an otherwise moving-water environment.<sup>31</sup> Third, beaver ponds actually expand the amount (not just the quality) of available salmon habitat; the impounded waters upstream of a beaver dam cover a much greater area than the pre-existing stream channel.<sup>32</sup> Fourth, beaver ponds and dams create complex shorelines and in-stream habitats.<sup>33</sup> Finally, beaver ponds and dams dissipate stream energy during floods or high flow events.<sup>34</sup> The presence or absence of beaver activity in a stream or watershed has a strong impact on the stream hydrology and in-stream habitat.

All the effects of beaver dams and ponds on stream hydrology and in-stream habitat described above benefit juvenile Oregon coast coho. Juvenile coho rear, feed, and shelter most successfully in deep, complex pools and other off-channel habitats with low gradients and low water velocities—precisely the types of habitats created by beaver dams and ponds.<sup>35</sup> Various scientific studies conducted in coastal rivers from Oregon to Southeast Alaska all concluded that juvenile coho salmon used beaver dams more than other habitat types (especially during the winter, when

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30. OR. DEP'T OF FISH & WILDLIFE, *supra* note 1, at 2–3.

31. *Id.*

32. Robert J. Naiman et al., *Ecosystem Alteration of Boreal Forest Streams by Beaver (Castor canadensis)*, 67 *ECOLOGY* 1254, 1258, 1266 (1986).

33. Robert J. Naiman, Carol A. Johnston & J.C. Kelley, *Alteration of North American Streams by Beaver*, 38 *BIOSCIENCE* 753, 753–62 (1988).

34. Ming-Ko Woo & James M. Waddington, *Effects of Beaver Dams on Subarctic Wetland Hydrology*, 43 *ARCTIC* 223, 229–30 (1990), available at <http://pubs.aina.ucalgary.ca/arctic/Arctic43-3-223.pdf>.

35. Listing Determination, *supra* note 4, at 7,827; REEVES ET AL., *supra* note 4; NAT'L MARINE FISHERIES SERV., *supra* note 3.

shelter from high flows may be critical to juvenile coho survival),<sup>36</sup> and occurred at greater densities and grew faster in beaver ponds than in other habitat types.<sup>37</sup> Overall, stream reaches with beaver dams produced more and larger juvenile coho than stream reaches where beaver dams were absent.<sup>38</sup>

Killing beaver means that fewer dams will be built in the future, but also that existing beaver dams will quickly be destroyed and stop providing quality coho habitat. In coastal Oregon rivers, beaver dams in small streams often wash out during high winter flows and beaver rebuild them the following summer.<sup>39</sup> Accordingly, killing the beaver that would otherwise repair and rebuild existing dams causes the destruction of dams that currently provide rearing habitat for juvenile coho.

Unfortunately, it is difficult to know just how many beaver are being removed from coho habitat in Oregon, or even where beaver trapping is happening. Oregon law authorizes private land owners to kill beaver on their land without any limitation on the means of killing or the number of beaver they can kill.<sup>40</sup> On private land, which constitutes the majority of Oregon coast coho critical habitat, land owners are not required to inform the Oregon Department of Fish and Wildlife before killing beaver, or report the number or location of beaver killed.<sup>41</sup> Because beavers' propensity for cutting trees and impacting roads and agricultural land by redirecting streams makes these animals a nuisance to timber companies and landowners, some level of beaver eradication undoubtedly occurs in coho habitat.<sup>42</sup>

## II. EFFECTS OF THE ESA'S TAKE PROHIBITION ON OREGON COAST COHO

Congress' goal of preventing extinctions and preserving endangered species—regardless of cost—is reflected throughout the ESA.<sup>43</sup> To those

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36. Thomas E. Nickelson et al., *Seasonal Changes in Habitat use by Juvenile Coho (Oncorhynchus kisutch) in Oregon Coastal Streams*, 49 CANADIAN J. FISHERIES AND AQUATIC SCI. 783, 785–788 (1992).

37. OR. DEP'T OF FISH & WILDLIFE, *supra* note 1, at 3.

38. *Id.*

39. *Id.* at 2.

40. See OR. REV. STAT. ANN. § 610.002 (West 2011); OR. REV. STAT. ANN. § 610.105 (West 2011).

41. OR. DEP'T OF FISH & WILDLIFE, *supra* note 1, at 6.

42. See WILDLIFE SERV., BEAVER DAMAGE MANAGEMENT FACTSHEET 1–3 (2011), available at [http://www.aphis.usda.gov/publications/wildlife\\_damage/content/printable\\_version/fs\\_beaver.pdf](http://www.aphis.usda.gov/publications/wildlife_damage/content/printable_version/fs_beaver.pdf).

43. *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978).

ends, section 9 of the ESA broadly prohibits any person<sup>44</sup> from taking any organism that is a member of an endangered species within United States territory or on the high seas.<sup>45</sup> To “take” an organism “means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect” that organism.<sup>46</sup> As the Senate report on the ESA explained, take is defined in “the broadest possible manner to include every conceivable way in which a person can ‘take’ or attempt to ‘take’ any fish or wildlife.”<sup>47</sup>

The term “take” and its statutory definition may call to mind acts done directly and intentionally to particular animals, such as hunting or harvesting.<sup>48</sup> Nevertheless, FWS and NMFS have interpreted the word harm in the definition of take in a way that somewhat expands upon this traditional meaning. FWS was the first agency to define “harm”—and therefore “take”—to encompass “significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.”<sup>49</sup> In 1995, the Supreme Court upheld the legality of FWS’s regulatory definition of harm in *Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, but cautioned that the whole definition was subservient to the phrase “actually kills or injures” wildlife.<sup>50</sup> While FWS’s definition of harm expanded the range of actions that could constitute take, habitat destruction that does not kill or injure an endangered organism does not violate ESA section 9.

Following the validation of FWS’s rule, NMFS adopted a similar regulation defining harm to include members of endangered species under NMFS’s jurisdiction, including Oregon coast coho.<sup>51</sup> The major difference between FWS’s and NMFS’s regulations is that NMFS specifically added “spawning, rearing, [and] migrating” to the list of “essential behavior patterns” which when disrupted could constitute harm.<sup>52</sup> Additionally, the preamble to NMFS’s rule identifies several examples of habitat-modifying

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44. 16 U.S.C. § 1532(13) (explaining that for the purposes of the ESA, the term “person” means any “individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States.”).

45. 16 U.S.C. § 1538(a)(1)(B) & (C) (2012).

46. 16 U.S.C. § 1532(19).

47. S. REP. NO. 93-307, at 7 (1973).

48. *Sweet Home*, 515 U.S. at 718 (Scalia, J., dissenting).

49. 50 C.F.R. § 17.3 (2011).

50. *Sweet Home*, 515 U.S. at 697, 700 n. 13.

51. Endangered and Threatened Wildlife and Plants; Definition of Harm, 64 Fed. Reg. 60,727, 60,727 (Nov. 8, 1999) (codified at 50 C.F.R. pt. 222) [hereinafter NMFS Definition of Harm].

52. Compare 50 C.F.R. § 222.102 (2009) (NMFS’s rule), and 50 C.F.R. § 17.3 (FWS’s rule).



activities that could constitute harm.<sup>53</sup> These activities include “[r]emoving . . . plants, fish, *wildlife*, or other biota required by the listed species for feeding, sheltering, or other essential behavioral patterns” or “[r]emoving or altering . . . *physical structures* that are essential to the integrity and function of a listed species’ habitat.”<sup>54</sup> Clearly, this guidance could encompass removing beaver and beaver dams from coho streams. However, the preamble to NMFS’s rule also reiterates that “a causal link must be established between the habitat modification and the injury or death of listed species” before a take can be found.<sup>55</sup>

Oregon coast coho are protected from take, including death or injury caused by habitat modification. While take protection automatically applies to all endangered species,<sup>56</sup> NMFS may promulgate regulations protecting threatened species under NMFS’s jurisdiction from take.<sup>57</sup> NMFS has extended take protection to Oregon coast coho and all other threatened anadromous salmonids.<sup>58</sup> Accordingly, modifying Oregon coast coho habitat in any way that causes death or injury to these fish by significantly impairing their rearing, sheltering, or feeding is illegal.

### III. INJURY WITHIN THE DEFINITION OF HARM IS NOT LIMITED TO DIRECT PHYSICAL INJURY

Injury, within the definition of harm, should be interpreted broadly and not limited to direct physical injury to protected organisms. In *Sweet Home*, the Supreme Court noted that the entire definition of harm is subservient to the phrase “actually kills or injures,” meaning that no matter how much habitat modification occurs, there is no harm, and therefore no take, until a protected organism is actually killed or injured.<sup>59</sup> However, the *Sweet Home* majority never explored the meaning of “injury” within the definition of harm.<sup>60</sup> Because of the misperception that “injury” means only “direct physical injury” to an organism,<sup>61</sup> proving that a protected organism will be injured often appears to pose an insurmountable hurdle to showing that

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53. NMFS Definition of Harm, *supra* note 51.

54. *Id.* at 60,730 (emphasis added).

55. *Id.*

56. 16 U.S.C. § 1538(a)(1) (2012).

57. 16 U.S.C. § 1533(d).

58. 50 C.F.R. § 223.203 (2014); *See also* Listing Determination, *supra* note 4, at 7,843–44.

59. *Sweet Home*, 515 U.S. at 700 n.13.

60. *Marbled Murrelet v. Babbitt*, 83 F.3d 1060, 1067 (9th Cir. 1996).

61. Endangered and Threatened Wildlife and Plants; Final Redefinition of Harm, 46 Fed. Reg. 54,748, 54,748 (Nov. 4, 1981) (codified at 50 C.F.R. pt. 17) [hereinafter FWS Definition of Harm].

habitat modification caused a take.<sup>62</sup> Fortunately for plaintiffs and endangered species, the definition of injury is not nearly so narrow.

*A. Significant Impairment of Essential Behavior Patterns  
Constitutes Injury*

The significant impairment of an organism's essential behavior patterns, in and of itself, constitutes injury.<sup>63</sup> The preambles to FWS's and NMFS's rules defining harm make clear that this is how the agencies interpreted the word "injury" within their own definitions of harm.<sup>64</sup> NMFS explicitly rejected suggestions "that impairment of essential behavior patterns is not 'injury' in and of itself but a means to injury" and that impairment of essential behavior patterns and injury "are two separate elements in establishing harm."<sup>65</sup> In response to such comments, NMFS clarified that "[a]n injury is demonstrated if the habitat modification significantly impairs the listed species' ability to feed, breed, rear, migrate or any other behavior essential to its biological processes and behavioral patterns."<sup>66</sup> For its part, FWS stated that injury within the definition of harm was not limited "to direct physical injury" to an organism, but rather that "injury . . . may be caused by impairment of essential behavioral patterns."<sup>67</sup> FWS and NMFS both interpreted injury to include significant impairment of essential behavioral patterns such as sheltering and rearing.

FWS's and NMFS's shared interpretation of injury as including significant impairment of essential behavioral patterns is controlling. When an agency interprets its own legally-promulgated regulations, and the interpretation reflects the agency's "fair and considered judgment," courts must defer to the agency's interpretation unless it is "plainly erroneous or inconsistent with the regulation."<sup>68</sup> In this instance, NMFS and FWS

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62. Doyle, *supra* note 23, at 917-920 ("[B]y requiring proof that an individual, specific animal has been killed, Justice O'Connor practically requires ESA plaintiffs and prosecutors to bring a carcass to court!").

63. FWS Definition of Harm, *supra* note 61, at 54,750; NMFS Definition of Harm, *supra* note 51, at 60,728 ("'Significant' impairment of essential behavioral patterns constitutes injury."); see also *Swinomish Indian Tribal Cmty. v. Skagit Cnty. Dike Dist.* No. 22, 618 F. Supp. 2d 1262, 1269 (W.D. Wash. 2008) ("NMFS has . . . explained that habitat modification that significantly impairs essential behaviors constitutes injury and a prohibited 'take.'").

64. NMFS Definition of Harm, *supra* note 51, at 60,727.

65. *Id.* at 60,728.

66. *Id.*

67. FWS Definition of Harm, *supra* note 61, at 54,748, 54,749 ("Significant modification or destruction of such habitat, where an actual injury occurs, including impairment of essential behavioral patterns, will still be viewed as being subject to section 9 of the Act.").

68. *Auer v. Robbins*, 519 U.S. 452, 461-62 (1997) (citing *Bowles v. Seminole Rock & Sand Co.*, 325 U.S. 410, 416-18 (1945)) (internal quotations omitted).

interpreted the word “injury” in their own regulatory definitions of harm,<sup>69</sup> which the Supreme Court has upheld as legally promulgated.<sup>70</sup> In light of the broad meaning of the word “injury,” the ESA’s objective of protecting imperiled species and the ecosystems they need to survive,<sup>71</sup> and Congress’ intent that take be defined as broadly as possible,<sup>72</sup> NMFS’s and FWS’s interpretation of injury to include significant impairment of essential behavioral patterns is not plainly erroneous or inconsistent with the regulation defining harm. Nowhere would NMFS or FWS be expected to exercise their fair and considered judgment on the meaning of injury within the harm regulations more than in the preambles that the agencies wrote to explain what the harm regulations mean. Accordingly, the agencies’ interpretation that injury includes the significant impairment of essential behavior patterns controls.

Several court opinions buttress the agencies’ interpretation. Even though the *Sweet Home* majority did not address the definition of injury,<sup>73</sup> Justice O’Connor’s concurrence explained that she understood that impairing breeding—an essential behavior pattern—injures individual animals.<sup>74</sup> The Ninth Circuit, both before and after *Sweet Home*, held that significant interference with breeding or other essential behavior patterns constituted injury within the definition of harm, without any showing of direct physical injury to a protected organism.<sup>75</sup> As recently as 2009, a district court acknowledged that this definition of injury remains valid in the Ninth Circuit.<sup>76</sup> The persistent idea that proving harm requires showing that a take-protected organism will be killed or maimed is incorrect; significant impairment of essential behavior patterns is the only injury necessary to prove harm.

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69. NMFS Definition of Harm, *supra* note 51, at 60,727; FWS Definition of Harm, *supra* note 61, at 54,750.

70. *Sweet Home*, 515 U.S. at 697.

71. 16 U.S.C. § 1531(b) (2012).

72. S. REP. NO. 93-307, at 7 (1973) (“‘Take’ is defined . . . in the broadest possible manner to include every conceivable way in which a person can ‘take’ or attempt to ‘take’ any fish or wildlife.”).

73. *Marbled Murrelet*, 83 F.3d at 1067.

74. *Sweet Home*, 515 U.S. at 709–10 (O’Connor, J., concurring).

75. *See Marbled Murrelet*, 83 F.3d at 1067 (holding that “[h]arm’ under the ESA, therefore, includes the threat of future harm”).

76. *Grand Canyon Trust v. U.S. Bureau of Reclamation*, 623 F. Supp. 2d 1015, 1041 (D. Ariz. 2009); *but see Swan View Coal. Inc. v. Turner*, 824 F.3d 923, 938–39 (D. Mont. 1992) (a much older, pre-*Sweet Home* decision to the contrary holding that habitat modifications must “actually kill or injure grizzly bears and gray wolves”).

*B. Significant Impairment of an Essential Behavior Pattern is a Take*

To prove a take, a plaintiff need only show that a habitat-modifying activity will significantly impair an essential behavior pattern such as breeding, rearing, or sheltering. Agencies define “harm,” in pertinent part, as “significant habitat modification or degradation where it actually kills or injures wildlife.”<sup>77</sup> When an injury (e.g., the significant impairment of essential behavior patterns) to a take-protected organism occurs, harm exists if that injury was caused by significant habitat modification. As the Ninth Circuit succinctly stated, “habitat modification which significantly impairs the breeding and sheltering of a protected species amounts to ‘harm’ under the ESA.”<sup>78</sup> Because ESA section 3 defines “take” to include harm, any activity constituting harm is a take within the meaning of ESA section 9.<sup>79</sup> Accordingly, a take occurs whenever a significant habitat modification significantly impairs an essential behavior pattern of a take-protected organism.

*C. Ramifications*

The main benefit of this approach is that it allows environmental plaintiffs to bring take claims without proving that a protected organism has suffered direct physical injury or death as the result of habitat modification. This is important. Sometimes habitat modification, however destructive, simply does not cause direct physical injury or death. Even if direct physical injury or death results, it may be difficult or impossible to find the dead or damaged organism; imagine trying to locate an injured 50 millimeter-long juvenile coho in a fast-flowing river. Finally, even when there has been habitat modification and a dead or physically injured organism can be located, it may be difficult or impossible to satisfy a court that the habitat-modifying activity caused the death or direct physical injury. Often, it is simply not practical to prove that habitat modification resulted in the direct physical injury or death of a protected organism. However, when injury can also mean significant impairment of essential behavior patterns, these difficulties need not spell the end of a take claim.

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77. NMFS Definition of Harm, *supra* note 51; FWS Definition of Harm, *supra* note 61, at 54,750.

78. *Marbled Murrelet*, 83 F.3d at 1067; *see also* NMFS Definition of Harm, *supra* note 51, at 60,728 (“‘Significant’ impairment of essential behavioral patterns constitutes injury; therefore, establishing the former with respect to listed species establishes harm.”).

79. 16 U.S.C. § 1532(19).

This is not to suggest that proving take-through-harm where the injury is impairment of an essential behavior pattern would be easy; merely that it might be possible where a dead or maimed member of a protected species could not be produced. Several issues would still need to be litigated. First, questions about the proper definition of “significant impairment” and which behavior patterns are “essential” would doubtless arise. Second, the evidentiary challenges to establishing how a particular habitat modification causes the impairment of a protected organism’s essential behavior patterns would be substantial. Take-through-harm litigation would present a variety of legal and evidentiary challenges, but could succeed in proving harm without showing death or direct physical injury to protected organisms.

#### IV. THE ESA’S PROHIBITIONS ON TAKE AND HARM APPLY TO INDIVIDUAL ORGANISMS

The ESA exists to prevent species, and populations of species, from going extinct.<sup>80</sup> ESA section 9 helps effectuate that goal by prohibiting people from taking the individual organisms that comprise those species and populations. While the take—by harm or otherwise—of individual protected organisms usually impacts the overall population of a protected species, it is the taking of individual members of the protected species, and not the corresponding decline in population levels, that ESA section 9 illegalizes.<sup>81</sup> Unfortunately, courts analyzing take-through-harm claims occasionally confuse harm to individual members of a protected species with impacts to the population or the entire species.<sup>82</sup>

Such confusion is understandable, perhaps, because the language of ESA section 9 uses the word “species” as a stand-in for the phrase “individuals of a protected species.” ESA section 9(a) states in pertinent part:

- (1) . . . with respect to any endangered species of fish or wildlife . . .  
 . . . it is unlawful for any person . . . to—  
 (A) import any such species into, or export any such species from the United States;

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80. *Sweet Home*, 515 U.S. at 715 (Scalia, J., dissenting).

81. 16 U.S.C. § 1538 (2012). *See also* FWS Definition of Harm, *supra* note 61, at 54,750 (explaining the term wildlife can refer to as few as one member of a species).

82. *See* Doyle, *supra* note 23, at 917–20; *Palila v. Haw. Dep’t of Land and Natural Res. (Palila I)*, 649 F. Supp. 1070, 1077 (D. Haw. 1986) (“Until the bird has reached a sufficiently viable population to be delisted, it should not be necessary for it to dip closer to extinction before the prohibitions of section 9 come into force.”).

- (B) take any such species within the United States or the territorial sea of the United States;
- (C) take any such species upon the high seas;
- (D) possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any such species taken in violation of subparagraphs (B) and (C);
- (E) deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of a commercial activity, any such species.<sup>83</sup>

Even a cursory reading of the above text makes it clear that Congress used “species” when it actually meant individuals of a protected species; Congress did not intend ESA Section 9 to illegalize only taking an *entire* species “upon the high seas” or illegalize shipping an *entire* species “in interstate or foreign commerce.” The only reasonable way to read ESA section 9 is that Congress intended the section’s prohibitions to apply to each individual member of an endangered species (i.e. individual protected organisms), and simply used the word “species” as a stand-in.

Because FWS’s and NMFS’s regulations defining harm merely describe one category of take, it should follow that harm (a type of take) also focuses on individual protected organisms rather than species. Nevertheless, the language of the harm regulations is worth examining because it reinforces the conclusion that take, including harm, focuses on individual members of protected species rather than populations or entire species.<sup>84</sup> NMFS defines harm to “include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns.”<sup>85</sup> In turn, NMFS defines “wildlife” to mean “*any member* of the animal kingdom.”<sup>86</sup> By using the phrase “any member,” NMFS made clear that “wildlife” refers to individual organisms, and when the word “wildlife” appears as the subject of the harm regulation, it means that the harm regulation pertains to

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83. 16 U.S.C. § 1538(a)(1) (2012).

84. Nevertheless, many courts speak of impairment, injury, or harm to an entire species rather than to individual organisms. *See, e.g., Nat’l Wildlife Fed’n v. Burlington N.R.R.*, 23 F.3d 1508, 1513 (9th Cir. 1994) (holding that in order to show harm, plaintiffs “would have to show significant impairment of the *species’* breeding or feeding habits and prove that the habitat degradation prevents, or possibly, retards, recovery of the *species.*”) (emphasis added). While it may make grammatical sense to refer to impairing, harming, or injuring an entire species, the word “kills” in the definition of harm gives these courts away; populations and entire species cannot be “killed,” they can only be extirpated or go extinct. Accordingly, only individual protected organisms, which can be both killed *and* injured, are what the harm regulation protects.

85. 50 C.F.R. § 222.102.

86. *Id.* (emphasis added).

individual members of protected species, not to populations or species in general.

Other authorities support the idea that take and harm directly protect individual organisms rather than populations or species. In *Sweet Home*, Justice O'Connor's concurrence explained that the harm regulation only prohibits killing or injuring individual protected organisms, but not injuring populations of protected species, as the dissent feared.<sup>87</sup> Additionally, FWS, in the preamble to its regulation defining harm, declared that "section 9's threshold [focuses] on individual members of a protected species," not populations.<sup>88</sup> These authorities agree that the inquiry over whether a take or harm has occurred focuses on the effects on individual protected organisms. The remainder of this part explores some of the issues that arise when courts, and plaintiffs, conflate harm to individual protected organisms with damage to populations or species.

#### A. Future Harm to Individual Protected Organisms

One major difficulty with the idea that the harm prohibition relates only to "individual members of [a] protected species" arises when plaintiffs attempt to enjoin habitat-modifying activities that will harm protected organisms only in the future, perhaps even the distant future.<sup>89</sup> Courts can enjoin habitat-modifying activities that will harm protected organisms in the future.<sup>90</sup> However, when the harm of which plaintiffs complain will not impact any living members of a protected species, but rather will be felt many years hence, perhaps only by future generations of protected organisms, it becomes more difficult to explain how an activity will harm individual protected organisms. Some courts, particularly in the Ninth Circuit, responded to this difficulty by allowing plaintiffs to establish harm by showing that the habitat-modifying activity would cause extinction or other population-level effects.<sup>91</sup> This approach may be an invalid application of the harm provision because it forsakes any nexus to the injury of individual animals. To avoid such uncertain legal ground, and the unfortunate possibility of losing a take-through-harm suit, plaintiffs should carefully explain how the habitat modification at issue will injure individual protected organisms in the future.

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87. *Sweet Home*, 515 U.S. at 709–10 (O'Connor, J., concurring).

88. FWS Definition of Harm, *supra* note 61, at 54,749.

89. *Sweet Home*, 515 U.S. at 711 (O'Connor, J., concurring).

90. *See Marbled Murrelet*, 83 F.3d at 1064–66 (concluding that a court may issue an injunction when a "reasonably certain threat of imminent harm to a protected species" exists).

91. *See Palila II*, 852 F.2d at 1107 (holding that the definition of harm includes causing habitat degradation that could result in extinction).

The following case illustrates why using population decline as a stand-in for injury to individual protected organisms is a risky legal proposition and how plaintiffs can re-phrase their arguments to satisfy the requirement of injury to individual protected organisms, even if harm to individuals will only occur in the distant future. In *Palila II*, environmental groups sued the Hawai'i Department of Land and Natural Resources for maintaining a herd of non-native mouflon sheep. Overgrazing by the mouflon inhibited the regeneration of mamane trees that endangered palila birds depended on for food.<sup>92</sup> Because the mouflon sheep prevented new mamane trees from growing, the existing trees were dying of old age; unless the grazing regime changed, the mamane forest would eventually be extirpated and the endangered palila would go extinct.<sup>93</sup> The district court held that the Hawai'i Department of Land and Natural Resources' destruction of the palila's habitat constituted harm because it forced the palila, as a *species*, toward extinction.<sup>94</sup> The Ninth Circuit affirmed the judgment and agreed with the district court's reasoning on this point.<sup>95</sup> Justice O'Connor, in her *Sweet Home* concurrence, pointed out that *Palila II* was an illegal application of the harm prohibition because the Ninth Circuit and the district court based their decisions on injury to the palila *population* (what Justice O'Connor called "hypothetical" animals) rather than describing how individual palila birds would ultimately be injured.<sup>96</sup>

While the reasoning in *Palila II*—that habitat modification leading to population decline and extinction of a species constitutes harm—may have been erroneous, the facts of the case also support a finding that Hawai'i's grazing management would harm actual, individual palila birds in the future. Instead of focusing on the "hypothetical" palilas that would never be born as a consequence of the habitat modification, or the fact that the palila species faced extinction as a consequence of the habitat modification, the plaintiffs should have focused their harm claim on the individual palila birds that would, in the future, inhabit the mamane forests.<sup>97</sup> The plaintiffs'

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92. *Palila I*, 649 F. Supp. at 1071, 1073.

93. *Palila II*, 852 F.2d at 1107.

94. *Palila I*, 649 F. Supp. at 1075, 1077 ("The key to the Secretary's definition is harm to the species as a whole through habitat destruction or modification. If the habitat modification prevents the population from recovering, then this causes injury to the species and should be actionable under section 9.").

95. *Palila II*, 852 F.2d at 1110.

96. *Sweet Home*, 515 U.S. at 709, 713–14 (O'Connor, J., concurring). Justice O'Connor's concern about the harm prohibition protecting hypothetical animals is essentially a restatement of FWS's concern that habitat modification should never be sufficient to prove harm. This concern ultimately prompted FWS to re-define "harm." See FWS Definition of Harm, *supra* note 61, at 54,749–50 (explaining that Congress did not intend for habitat modification alone to prove a harm).

97. *Sweet Home*, 515 U.S. at 709 (O'Connor, J., concurring).



argument could have gone something like this: left unchecked, the mouflon would prevent the mamane forest from regenerating and the mature trees would eventually begin to die, causing the mamane forest to shrink or disappear entirely. At that point, be it in 5 or 50 years, the individual palilas that would be alive at that time and relying on the remaining mature mamane trees for feeding (an essential behavior pattern) would be injured by Hawai'i's decision to graze mouflon in palila habitat.

One possible criticism of this approach is that courts may balk at the idea of enjoining an activity that may not injure a protected organism until some indeterminate future time. After all, any number of intervening events occurring between the lawsuit and the ultimate injury to palilas could destroy the scenario set forth above. What if someone planted other mamane trees? What if the entire palila or mouflon population was wiped out by disease before the mamane forest died? While there is inherent uncertainty whenever plaintiffs allege that harm to individual protected organisms will manifest in the future, such arguments are not necessarily too speculative to succeed. First, and most relevantly, the *Palila II* court was unfazed by such concerns. While that court considered harm to a population rather than harm to individuals, the harm that provoked the *Palila II* court to enjoin grazing (extinction of the palila as a species) was not imminent by any stretch of the imagination.<sup>98</sup> The fact that *something* could happen in the indeterminate amount of time before the harm materialized that might change the existing dynamic between mouflon, mamane, and palilas did not discourage the Ninth Circuit from finding harm, and take, through habitat modification and upholding the district court's injunction.<sup>99</sup> Second, when plaintiffs seek to enjoin activities that may cause harm in the future, there is almost always the possibility that intervening events could ultimately stop the harm from occurring. In most such instances, the defendant has the power to stop the habitat modification or otherwise mitigate the harm. Thus, courts assessing take claims require only that harm is "reasonably certain" to occur, not that harm is inevitable.<sup>100</sup>

There may be situations where the impacts on individual protected organisms cannot be neatly explained, even when there is strong evidence that the habitat modification at issue will cause population decline. And even when a clear connection between habitat modification and injury to individual protected organisms can be articulated, such claims may fail if

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98. *Palila II*, 852 F.2d at 1108–11.

99. *Id.*

100. *Marbled Murrelet*, 83 F.3d at 1066; *Sierra Club v. Babbitt*, 65 F.3d 1505, 1512 (9th Cir. 1995); *Coho Salmon*, 61 F. Supp. 2d at 1006.

the alleged harm would occur so far in the future that courts find the claim of harm speculative. However, given the uncertainty as to whether population-level impacts, even extinction, are sufficient to prove injury in take-through-harm cases, plaintiffs attempting to establish that harm will occur in the future should do their utmost to articulate how the habitat modification at issue will injure individual protected organisms rather than populations.<sup>101</sup>

*B. Population Decline is Not an Element of Harm-Through-Habitat-Modification*

Injury to a single individual protected organism as a result of habitat modification is harm and, therefore, a prohibited take under ESA section 9; there is no additional requirement to prove an impact on the population of the protected species to which the organism belongs.<sup>102</sup> Unfortunately, the District Court for the Eastern District of California, in *Coalition for a Sustainable Delta v. McCamman*, held that the Ninth Circuit's case law imposes such an additional requirement.<sup>103</sup> In that case, an environmental group brought a harm-through-habitat-modification claim against the California Department of Fish and Game for enforcing sport fishing regulations designed to increase the population of nonnative striped bass in the Sacramento–San Joaquin delta even though the bass prey upon ESA-listed fish species including Chinook salmon.<sup>104</sup> After deciding that state regulations increasing the number of predators in a listed species' habitat could constitute harm through habitat modification, the district court concluded that plaintiffs *also* needed to show that California's regulations were causing the entire population of listed Chinook in the delta to decline before that harm could constitute a take.<sup>105</sup> This erroneous requirement would place an unwelcome additional hurdle in the path to proving take. Moreover, a showing of population decline is redundant because the responsible agency has, by listing the species and granting its members take-protection, already concluded that its population is dangerously low.<sup>106</sup> This section explains why the *Coalition for a Sustainable Delta* court's

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101. Doyle, *supra* note 23.

102. 16 U.S.C. § 1538 (2012).

103. 725 F. Supp. 2d 1162, 1170 (E.D. Cal. 2010) (“The balance of the authority suggests that a population level effect is necessary for harm resulting from habitat modification to be considered a take.”).

104. *Id.* at 1164.

105. *Id.* at 1170.

106. *Palila I*, 649 F. Supp. at 1077 (“Until the bird has reached a sufficiently viable population to be delisted, it should not be necessary for it to dip closer to extinction before the prohibitions of section 9 come into force.”).

conclusion was incorrect and why no showing of population decline is necessary for harm through habitat modification to constitute a take.

### 1. NMFS's Harm Regulation Focuses on Individuals, Not Populations

The *Coalition for a Sustainable Delta* court ignored the plain language of NMFS's regulations, which protect “any member of a threatened or endangered species.”<sup>107</sup> As explained above, NMFS's harm regulations expressly protect “wildlife” which is defined to mean “any member of the animal kingdom.”<sup>108</sup> The Supreme Court has consistently read the word “any” expansively, noting that “any” means “one or some indiscriminately of whatever kind.”<sup>109</sup> Accordingly, by protecting “any member” of a threatened or endangered species, NMFS's harm regulation prohibits harm to even one individual protected organism. By requiring a showing that an entire population will be impacted, the *Coalition for a Sustainable Delta* court read “any” out of NMFS's regulations because the effect of this additional showing is that wildlife would be protected only when all or many of the individuals in a population—rather than “any” of those individuals—face harm.

Moreover, if FWS and NMFS had interpreted their own definitions of harm to require a decrease in an entire protected species' population, FWS and NMFS would almost certainly have mentioned such a requirement in the preambles to their rules defining harm. However, neither FWS's nor NMFS's preambles to their rules defining harm indicate that a decline in a protected species' population is an element of proving take in a harm-through-habitat-modification claim.<sup>110</sup> In fact, FWS's preamble acknowledges that “section 9's threshold [focuses] on individual members of a protected species,” not populations.<sup>111</sup> Because neither agency mentions such a substantial additional requirement, it must be assumed that neither agency interpreted its definition of harm to include this requirement. As discussed above, FWS's and NMFS's interpretations of their own regulations defining harm are entitled to strong deference.<sup>112</sup> Accordingly, courts must accept the agencies' interpretation of their own rules and refuse

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107. 50 C.F.R. § 222.102.

108. *Id.* (emphasis added).

109. *United States v. Gonzales*, 520 U.S. 1, 5 (1997); *Dep't of Housing & Urban Dev. v. Rucker*, 535 U.S. 125, 131 (2002); *Massachusetts v. Env'tl. Prot. Agency*, 549 U.S. 497, 529 n. 25 (2007).

110. FWS Definition of Harm, *supra* note 61, at 54,748; NMFS Definition of Harm, *supra* note 51, at 60,727.

111. FWS Definition of Harm, *supra* note 61, at 54,749.

112. *Bowles v. Seminole Rock & Sand Co.*, 325 U.S. 410, 416–18 (1945); *Auer*, 519 U.S. at 461–62.

to create an additional impediment to proving harm through habitat modification.

## 2. Case Law Does Not Support the Conclusion that Population Decline is an Element of Take in a Harm-Through-Habitat-Modification Claim

The *Coalition for a Sustainable Delta* court fundamentally misread the authority it relied upon to support the additional requirement of showing population-level effects in order for harm-through-habitat-modification to constitute take. *Palila II* created a new way to meet the injury requirement in the definition of harm: if a plaintiff could not prove injury to individual protected organisms, the plaintiff could still succeed in proving injury by showing that the entire species would go extinct (or possibly have its recovery impaired) by the habitat-modifying activity.<sup>113</sup>

The *Coalition for a Sustainable Delta* court cited three harm-through-habitat-modification cases that allegedly required a showing of population-level impact *in addition to* injury to individual protected organisms.<sup>114</sup> However, those decisions did not require population-level impact *in addition to* injury to individual protected organisms; following *Palila II*, those decisions allowed a showing of population-level impacts *instead of* proof of injury to individual protected organisms.<sup>115</sup> None of the three cases cited by the *Coalition for a Sustainable Delta* court considered the effects of harm-through-habitat-modification on individual protected organisms, they *only* considered the population-level impacts on the protected species.<sup>116</sup> Therefore, these cases did not require population-level effects *in*

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113. *Palila II*, 852 F.2d at 1108–09 (holding that harm includes (but is not limited to) instances where habitat modification leads to the extinction of a protected species); *see also Forest Conservation Council*, 50 F.3d at 788 (explaining that it was immaterial that plaintiffs had not shown that the habitat modification at issue would retard recovery or cause extinction because the plaintiffs had shown that the habitat modification would injure individual protected organisms). However, the legality of this application of the harm provision is questionable, as discussed in Part V, Section A.

114. *Palila II*, 852 F.2d at 1108–09; *Nat'l Wildlife Fed'n*, 23 F.3d at 1513; *Greenpeace Found. v. Mineta*, 122 F. Supp. 2d 1123, 1134 (D. Haw. 2000).

115. *Coal. for a Sustainable Delta*, 725 F. Supp. 2d at 1170 (“The balance of the authority suggests that a population level effect is necessary for harm resulting from habitat modification to be considered a take.”).

116. *Palila II*, 852 F.2d at 1108–09 (holding that habitat destruction that caused the ultimate form of population decline—extinction of the species—would constitute harm, but not discussing how individual palilas would be harmed or injured); *Nat'l Wildlife Fed'n*, 23 F.3d at 1513 (holding that a valid harm-through-habitat-modification claim would exist where plaintiffs could show that “the habitat degradation [at issue] prevents, or possibly, retards recovery of the species,” but never discussing how habitat modification harmed individual grizzly bears); *Greenpeace*, 122 F. Supp. 2d at 1133–34 (denying Plaintiffs’ harm-through-habitat-modification claim for lack of evidence of a “causal link between lobster fishing,” the habitat modification at issue, “and the monk seal population” without considering how lobster fishing injured individual endangered Hawaiian monk seals).

*addition to injury to individual protected organisms; rather, these cases merely used the alternative means of showing injury that was created (possibly erroneously) by Palila II.*<sup>117</sup> Unfortunately, the *Coalition for a Sustainable Delta* court read those decisions inquiring into whether habitat modification would impact recovery or cause extinction to require—in every instance—proof of population-level effects before harm through habitat modification could equal a take.<sup>118</sup> Essentially, the *Coalition for a Sustainable Delta* court looked at the “either-or” standard for proving injury created by *Palila II* and followed by later decisions and mistakenly decided that both showings, rather than just one, were required.<sup>119</sup> While it is now questionable whether population decline can be an injury sufficient to satisfy harm, an injury to an individual protected organism from habitat modification still, without more, constitutes both harm and a take.

### 3. Many Courts have Found Harm-Through-Habitat-Modification without Requiring Proof of Population Decline

Contrary to the *Coalition for a Sustainable Delta* court’s assertion, courts in the Ninth Circuit do not require population decline in order for harm-through-habitat-modification to constitute take.<sup>120</sup> In fact, numerous cases (even some cited for other purposes by the *Coalition for a Sustainable Delta* court) have found that harm-through-habitat-modification constitutes take without considering the population-level impacts to the protected species. In *Forest Conservation Council v. Rosboro Lumber Company*, the Ninth Circuit held that habitat modification which would impair the essential behavior patterns of just two individual spotted owls would constitute harm, and therefore a take.<sup>121</sup> Likewise, in *Marbled Murrelet v. Babbitt*, the Ninth Circuit enjoined logging that would impair the breeding of some marbled murrelets; the Ninth Circuit decided that this habitat modification caused harm, and therefore a take, without considering the impact to the overall population of marbled murrelets.<sup>122</sup> Several district courts in the Ninth Circuit have also decided that harm through habitat modification constituted a take without considering population-level

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117. *Coal. for a Sustainable Delta*, 725 F. Supp. 2d at 1170.

118. *Id.*

119. *Id.*

120. *Id.* (“The balance of the authority suggests that a population level effect is necessary for harm resulting from habitat modification to be considered a take.”).

121. 50 F.3d at 788 (failing to discuss the potential impact of the taking of the two owls on the overall northern spotted owl population).

122. *Marbled Murrelet*, 83 F.3d at 1068.

effects.<sup>123</sup> The weight of authority in the Ninth Circuit does not require plaintiffs to show injury to individual protected organisms *and* population-level effects for harm through habitat modification to constitute a take. Injury to even one individual protected organism from habitat modification is an illegal take.

*C. Plaintiffs Need Not Specify Which Organisms will be Injured*

Even though the ESA's harm and take prohibitions relate to individual protected organisms rather than populations, these prohibitions should not be construed to require plaintiffs to point to *the* particular individual organisms that were or will be injured by the habitat-modifying activity in order to prove harm.<sup>124</sup> Fortunately, courts have not taken this approach, especially when granting forward-looking injunctions against habitat-modifying activities. In *Marbled Murrelet v. Babbitt*, the Ninth Circuit upheld an injunction against logging a stand of old growth timber used as a nesting area by a population of protected marbled murrelets.<sup>125</sup> While the court concluded that some individual murrelets would be injured by the logging, neither the Ninth Circuit nor the trial court required the plaintiffs to identify the individual birds that would ultimately be harmed.<sup>126</sup> Similarly, in *Loggerhead Turtle v. County Council of Volusia County, Florida*, the Eleventh Circuit held that a regulation which would injure juvenile sea turtles made the county liable for a take without requiring any showing as to which individual turtles would be harmed.<sup>127</sup> For these courts, it was sufficient that "actual, individual members of [a] protected species" would be injured by the habitat modifying activity, even if the plaintiffs or the court could not point to the exact organisms that would suffer.<sup>128</sup>

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123. See *Alliance for the Wild Rockies v. Bradford*, 720 F. Supp. 2d 1193, 1210–11 (D. Mont. 2010) (holding that road construction that would cause harm through habitat modification was take without considering how the road construction would impact the entire population of protected grizzly bears); *Or. Natural Desert Ass'n v. Tidwell*, 716 F. Supp. 2d 982, 1005–06 (D. Or. 2010) (explaining defendant would be liable for take if plaintiff proved that habitat modification harmed "one or more" protected organisms); *Swinomish Indian Tribal Cmty.*, 618 F. Supp. 2d at 1269–71 (concluding that a tidegate that adversely modified juvenile Chinook salmon rearing habitat caused take, without considering the impacts to the Chinook salmon population).

124. See Doyle, *supra* note 23 (raising this concern).

125. *Marbled Murrelet*, 83 F.3d at 1067–68.

126. *Id.*; *Marbled Murrelet v. Pacific Lumber Co.*, 880 F. Supp. 1343, 1366 (N.D. Cal. 1995).

127. 148 F.3d 1231, 1249 (11th Cir. 1998).

128. *Sweet Home*, 515 U.S. at 709–10 (O'Connor, J., concurring).

## V. KILLING BEAVER IN OREGON COAST COHO HABITAT COULD CAUSE A TAKE

Private land owners kill an unknown and unlimited number of beaver in Oregon coast coho habitat<sup>129</sup> in order to protect forest products, agricultural lands, and infrastructure such as roads and culverts.<sup>130</sup> In some instances, the removal of beaver from streams and rivers harms Oregon coast coho and constitutes a take within the meaning of ESA section 9. As discussed above, in order to establish that harm will occur, plaintiffs must show that (1) the habitat-modifying activity at issue will (2) injure (by significantly impairing an essential behavior pattern) (3) one or more individual protected organisms.<sup>131</sup> Removing beaver from coho streams often satisfies these three elements.

First, removing beaver modifies coho habitat because, as explained in Part I, streams without beaver dams (and beaver to maintain those dams) have markedly different hydrology and in-stream habitat than streams where beaver are present and allowed to construct and maintain dams.<sup>132</sup> Additionally, the preamble to NMFS's rule defining harm explains that "[r]emoving . . . *wildlife* . . . required by the listed species for feeding, sheltering, or other essential behavioral patterns" or "[r]emoving or altering . . . *physical structures* that are essential to the integrity and function of a listed species' habitat" are habitat-modifying activities within the definition of harm.<sup>133</sup> Beaver and their dams are wildlife and physical structures, respectively, that are extremely important to coho; removing them is, by NMFS's own definition, habitat modification.<sup>134</sup>

Second, the injury suffered by Oregon coast coho salmon is the significant impairment of juvenile coho's ability to rear and shelter without the habitat provided by beaver dams.<sup>135</sup> Numerous studies outlined in Part I document that juvenile coho survive at higher rates and rear more successfully in stream reaches containing beaver dams.<sup>136</sup> Removing beaver, and therefore beaver dams, from coho streams has a strong negative impact on the ability of coho to rear and shelter effectively. As explained in

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129. OR. REV. STAT. ANN. § 610.002 (West 2011); OR. REV. STAT. ANN. § 610.105 (West 2011); OR. DEP'T OF FISH & WILDLIFE, *supra* note 1, at 6.

130. See WILDLIFE SERV., *supra* note 42.

131. *Supra* section IV. A.

132. OR. DEP'T OF FISH & WILDLIFE, *supra* note 1, at 2–3.

133. NMFS Definition of Harm, *supra* note 51, at 60,730 (emphasis added).

134. *Id.*

135. Listing Determination, *supra* note 4, at 7,827; REEVES ET AL., *supra* note 4; NAT'L MARINE FISHERIES SERV., *supra* note 3.

136. OR. DEP'T OF FISH & WILDLIFE, *supra* note 1, at 3.

Part III, there is no need to show that coho have been killed or maimed; significant impairment of essential behavior patterns, such as rearing and sheltering, is injury enough to satisfy this element of harm.<sup>137</sup>

Third, killing beaver and the consequent destruction of beaver dams will injure individual coho salmon. While strong scientific evidence shows that removing beaver dams can dramatically impact coho populations, such habitat modification also injures individual juvenile coho.<sup>138</sup> When a beaver (or several beaver) that have maintained a dam and pond where juvenile coho rear and shelter are killed, that beaver dam and pond are likely to wash out and be destroyed in the near future.<sup>139</sup> When a dam fails, and the habitat it created is lost, the individual juvenile coho salmon that were using that dam and pond suffer the impairment of their ability to rear and shelter there. In this way, individual coho are injured by the killing of beaver and the consequent destruction of beaver dams and ponds. Because research shows that many beaver dams fail relatively quickly without beaver present to repair them, the problems with alleging harm to individuals that may only materialize decades in the future (discussed in Part IV(A)) would be minimal.<sup>140</sup> As explained in Part V, no demonstration of population-level effects is required and plaintiffs have no burden to specify which individual fish will be injured. Removing beaver from coho streams may, in many circumstances, harm Oregon coast coho and consequently violate ESA section 9.<sup>141</sup>

### CONCLUSION

The Congress that enacted the ESA understood that imperiled species do not exist in isolation; they need adequate habitat to survive, grow, and reproduce. To this end, the stated purpose of the ESA is not merely to protect imperiled species, but “to provide a means whereby the ecosystems”—the habitat and ecological relationships—“upon which

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137. FWS Definition of Harm, *supra* note 61, at 54,750; NMFS Definition of Harm, *supra* note 51, at 60,728 (“‘Significant’ impairment of essential behavioral patterns constitutes injury.”); *see also Swinomish Indian Tribal Cmty.*, 618 F. Supp. 2d at 1269 (W.D. Wash. 2008) (“NMFS has . . . explained that habitat modification that significantly impairs essential behaviors constitutes injury and a prohibited ‘take.’”).

138. Pollock et al., *supra* note 6, at 749, 756–758 (attributing a 94% reduction in smolt production potential in a western Washington basin to the loss of beaver pond habitat); Nickelson, *supra* note 36, at 785–788 (concluding that availability of beaver dams and similar off-channel habitats was a limiting factor in juvenile coho production in Oregon coastal streams).

139. OR. DEP’T OF FISH & WILDLIFE, *supra* note 1, at 2.

140. *Id.*

141. *Sweet Home*, 515 U.S. at 709–10 (O’Connor, J., concurring).



endangered species and threatened species depend may be conserved.”<sup>142</sup> The ESA provides several mechanisms for protecting habitat, such as designating critical habitat for protected species<sup>143</sup> and requiring that federal agencies not destroy or adversely modify critical habitat,<sup>144</sup> empowering federal agencies to purchase public lands that are important habitat for protected species,<sup>145</sup> and creating habitat conservation plans to offset incidental take.<sup>146</sup> When compared to the ESA’s other programs that are specifically tailored to protect imperiled species’ habitat, harm-through-habitat-modification claims may appear to be an inefficient, back-door approach.

In fact, harm-through-habitat-modification claims are probably not as efficient at protecting habitat as some of the ESA’s other programs, and in many instances these cases will be difficult to litigate and require extensive (and expensive) evidentiary support. Unfortunately, such claims are often the only vehicle for bringing the ESA to bear on private and state-owned lands that are home to protected species. Although agencies designate critical habitat for protected species on private lands,<sup>147</sup> the ESA does not generally prevent private and state actors from destroying or adversely modifying designated critical habitat.<sup>148</sup> While purchasing private land for conservation purposes may be critical in some instances, where protected species have large ranges or are widely distributed it may never be feasible for the federal government to purchase enough private land to make a difference to the conservation of these species. Finally, though habitat conservation plans on private and state lands may provide some level of habitat protection,<sup>149</sup> it is only the threat of viable take claims that encourages landowners to implement habitat conservation plans.<sup>150</sup> Harm-through-habitat-modification claims may be an unwieldy and imperfect tool for protecting habitat, but on private and state-owned land, these claims are

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142. 16 U.S.C. § 1531(b).

143. 16 U.S.C. § 1533(a)(3) (2012).

144. 16 U.S.C. § 1536(a)(2) (2012).

145. 16 U.S.C. § 1534 (2012).

146. 16 U.S.C. § 1539(a) (2012).

147. See HABITAT CONSERVATION DIV., *supra* note 9.

148. 16 U.S.C. § 1536(a)(2) (prohibiting federal agencies from destroying or adversely modifying designated critical habitat only).

149. Whether these plans actually benefit protected species is debatable and probably highly dependent on the language of the individual plans. See generally Patrick Duggan, *Incidental Extinction: How the Endangered Species Act’s Incidental Take Permits Fail to Account for Population Loss*, 41 ENVTL. L. REP. NEWS & ANALYSIS 10,628, 10,632, 10,640 (2011).

150. 16 U.S.C. § 1539(a) (providing private and state landowners limited indemnity from take claims, in the form of an Incidental Take Permit, in exchange for implementing a habitat conservation plan on their land).

often the only tool available. Sharpening this tool will help fulfill the ESA's promise of protecting the ecosystems on which Oregon coast coho rely.

**AN OPPORTUNITY TO PROTECT—  
ANALYZING FISH CONSUMPTION,  
ENVIRONMENTAL JUSTICE, AND WATER QUALITY  
STANDARDS RULEMAKING IN WASHINGTON STATE**

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*By Kelly Nokes*

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## INTRODUCTION

*“We’re talking about people’s health here, not some theoretical environmental protection for one sensitive species. In this case, the sensitive species is people.”* — Chris Wilke, Puget Soundkeeper<sup>1</sup>

It is well known that fishing plays an important role in Pacific Northwest Native culture, both individually and as a people.<sup>2</sup> For many, it provides the means to feed oneself and their families, and provides a fundamental subsistence framework—economically, spiritually, socially, and physically—yielding “a way to be Yakama, or to be Tulalip.”<sup>3</sup>

What may be lesser known, however, is that toxic contaminants from permitted industrial discharges build up in the tissues of this essential food resource.<sup>4</sup> The accumulation of a slough of toxic chemicals in the fish people ultimately eat significantly threatens the health and safety of fish consumers across the region.<sup>5</sup> In fact, “fish consumption is the primary route of exposure for many toxic contaminants . . . [a]ll else being equal, the higher the level of fish one consumes, the greater one’s exposure to any contaminants in the environment that the fish uptake, and the greater one’s risk of adverse health effects.”<sup>6</sup> Despite these recognized facts,

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1. Wendee Nicole, *Meeting the Needs of the People: Fish Consumption Rates in the Pacific Northwest*, 121 ENV’T HEALTH PERSP. A334, A338 (2013), available at <http://ehp.niehs.nih.gov/wp-content/uploads/121/11-12/ehp.121-A334.pdf>.

2. Catherine O’Neill, *Variable Justice: Environmental Standards, Contaminated Fish, and “Acceptable” Risk to Native Peoples*, 19 STAN. ENVTL. L. J. 3, 5 (2000) [hereinafter *Variable Justice*].

3. *Id.*

4. DEP’T OF ECOLOGY, STATE OF WASH., FISH CONSUMPTION RATES TECHNICAL SUPPORT DOCUMENT: A REVIEW OF DATA AND INFORMATION ABOUT FISH CONSUMPTION IN WASHINGTON, VERSION 2.0 xiii (2013), available at <https://fortress.wa.gov/ecy/publications/publications/1209058.pdf> [hereinafter ECOLOGY TECHNICAL SUPPORT DOCUMENT].

5. *Id.*

6. NAT’L ENVTL. JUSTICE ADVISORY COUNCIL, ENVTL. PROT. AGENCY, FISH CONSUMPTION AND ENVIRONMENTAL JUSTICE 24 (2002), available at [http://www.epa.gov/environmentaljustice/resources/publications/nejac/fish-consump-report\\_1102.pdf](http://www.epa.gov/environmentaljustice/resources/publications/nejac/fish-consump-report_1102.pdf) [hereinafter NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE] (describing Tribal fish consumption as it relates to water quality standards in the United States).

Washington's current water quality standards do not take into account the excess toxic exposure rates its Native peoples face because of their fundamental consumption of high quantities of fish.<sup>7</sup> The State can remedy this dilemma, however, and ensure that all of the people within its borders can safely consume fish without unfairly being exposed to excessive contamination, by taking the opportunity to protect during water quality rulemaking currently underway.

Washington began updating its water quality standards to establish human health criteria and new implementation and compliance rules for industrial dischargers in 2011.<sup>8</sup> With this rulemaking, the State has the opportunity to become a leader in water pollution prevention and to remedy environmental injustices suffered by tribal peoples who consume high amounts of fish and shellfish from the many waters of the State.<sup>9</sup> However, implementation of stricter water quality standards would necessarily result in reducing the amounts of toxins permitted in the discharges of industrial users. As such, industry opposition has proved effective at achieving further delay, and subsequent weakening, of the already decades overdue process.<sup>10</sup>

This article presents the argument that Washington State and the U.S. Environmental Protection Agency ("EPA") have a duty to protect *all* people—and especially disproportionately impacted tribal populations—from toxic water pollution on a variety of fronts. Duties arising under the Clean Water Act, tribal treaty rights to fish, the Public Trust Doctrine, Title VI of the Civil Rights Act, and the Equal Protection Clause of the United States Constitution arguably require the federal and/or state government to protect Washington citizens from the harmful effects of toxic water pollution. Accordingly, the State and EPA must establish strict human health criteria in the form of a relevant and protective fish consumption rate during the water quality standard rulemaking process currently underway.

This Note analyzes the interrelated principles of fish consumption, environmental justice, and water pollution control. Part One describes the regulation of water pollution in Washington State generally by analyzing the background of the State's water quality standards ("WQS"). Part Two focuses on the human health criteria rulemaking, which is determined by establishing a relevant fish consumption rate ("FCR") for the State. Part

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7. *Id.*

8. *Current Rule Activities*, DEP'T OF ECOLOGY, STATE OF WASH. (last visited Nov. 6, 2014) <http://www.ecy.wa.gov/programs/wq/swqs/rulemkgtimeline.html> (noting that form CR-101 initiating the water quality standards update and rulemaking was filed on October 25, 2011).

9. *See generally* NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6 (describing Tribal fish consumption as it relates to water quality standards in the United States).

10. Robert McClure, *Water Pollution Limits Stalled: Boeing, Others Challenge State on Tighter Rules*, SPOKESMAN REV., Mar. 30, 2013, at B1 [hereinafter *Water Pollution*].

Three turns to consideration of fish consumption as a serious environmental justice issue. Part Four examines industry's efforts to protect their bottom-lines, revealing a seeming desire to further continue the environmental injustices faced by Washington's tribal population by employing efforts to both delay and weaken Washington's revised FCR. Part Five presents the argument that both Washington State and EPA have the duty to implement a stringent FCR protective of tribal fish consumption habits based on a variety of legal mandates. This Note concludes by recommending that Washington State take the opportunity to protect all of the people within its borders, including its tribal populations, by adopting a stringent FCR that will be protective of all people who consume fish in the State.

#### I. AN OVERVIEW OF WATER POLLUTION CONTROL IN WASHINGTON STATE

Washington's water resources are immense. The State manages over 2,500 miles of coastline along the shorelines of the Pacific Ocean, Puget Sound, Strait of Juan de Fuca, San Juan Islands, and Hood Canal.<sup>11</sup> Over 4,000 rivers and streams meander through 50,000 miles of the State.<sup>12</sup> The State is home to over 9,700 lakes, alpine lakes, and reservoirs.<sup>13</sup> As such, it is no wonder why fishing is an essential pastime for many of the State's residents. Washington has an estimated 1.4 million fisher-people and 3.8 million fish consumers,<sup>14</sup> 104,000 of which are American Indians and Alaska natives.<sup>15</sup> With such treasured water resources, the State's regulatory scheme of water pollution control is both essential to the protection of its many waterways and vital to the health of the millions of people who enjoy fishing and eating fish caught in Washington's waterways.

##### A. *Water Pollution Control in Washington State*

Like many states, Washington's waterways face an onslaught of pollution from a variety of sources. Industrial discharges, stormwater runoff, and agriculture, among others, all contribute to the denigration of Washington's waters. Under the delegated authority of EPA and the Federal Water Pollution Control Act (commonly known as the Clean Water Act, or "CWA"), Washington's Department of Ecology ("Ecology") implements its

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11. ECOLOGY TECHNICAL SUPPORT DOCUMENT, *supra* note 4, at 7–8.

12. *Id.*

13. *Id.*

14. *Id.* at 12 (referencing an Ecology estimate resulting from 2010 demographic data).

15. *Id.* at 18.

own water pollution control program incorporating federal goals and requirements.<sup>16</sup>

The main objective of the CWA “is to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”<sup>17</sup> The Act states as its national goals that “the discharge of pollutants into navigable waters be eliminated by 1985;” “an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;” and that “the discharge of toxic pollutants in toxic amounts be prohibited.”<sup>18</sup> Forty years later, these ambitious goals have yet to be achieved.

Washington works toward these goals under the State’s Water Pollution Control Act.<sup>19</sup> Adopted in 1945, initial efforts to curb water pollution within the State pre-date even the original CWA of 1948.<sup>20</sup> In its original version, the state law declared the broad policy goal of attaining “the ‘highest possible standards’ of water quality consistent with the various water uses of the state.”<sup>21</sup> The original Washington law gave the Pollution Control Commission the right to “promulgate rules and regulations, to determine the conditions of the waters of the state, and to issue orders.”<sup>22</sup> In its current form, the State law maintains its original goals of ensuring high water quality while protecting water uses. Public policy under the law is to protect “the purity of all waters of the state” consistent with both the “protection of . . . fish” and “the industrial development of the state.”<sup>23</sup>

Analogous to the CWA, Washington’s Water Pollution Control Act prohibits the discharge of any pollutants into the State’s waterways.<sup>24</sup> Permits can be acquired for discharges.<sup>25</sup> Permits are allocated to

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16. 33 U.S.C. § 1251 (2012); Water Pollution Control, WASH. REV. CODE § 90 (2013).

17. 33 U.S.C. § 1251(a).

18. *Id.* §§ 1251(a)(1)–(3).

19. WASH. REV. CODE § 90.48.010 (stating that it is “the public policy . . . to maintain the highest possible standards to insure the purity of all waters of the state be consistent with public health . . . the propagation and protection of . . . fish, and other aquatic life, and the industrial development of the state, and to that end require use of all known available and reasonable methods by industries and others to prevent and control the pollution of the waters of the state”).

20. L.A. Powe, Jr., Comment, *Water Pollution Control in Washington*, 43 WASH. L. REV. 425, 428 (1967).

21. *Id.*

22. *Id.* at 427–28 (describing that the Pollution Control Commission was created in 1937 and comprised of the “directors of the Departments of Health, Fish and Game, and Conservation”).

23. WASH. REV. CODE § 90.48.010.

24. WASH. REV. CODE § 90.48.080 (stating “It shall be unlawful for any person to throw, drain, run, or otherwise discharge into any waters of this state.”).

25. WASH. REV. CODE § 90.48.160 (stating “[a]ny person who conducts a commercial or industrial operation of any type which results in the disposal of solid or liquid waste material into the waters of the state, including commercial or industrial operators discharging solid or liquid waste

dischargers based upon compliance with the State's Water Quality Standards for Surface Waters ("WQS").<sup>26</sup> The State's WQS require: (1) that "[a]ll surface waters are protected by numeric and narrative criteria, designated uses, and an antidegradation policy;" (2) that "[b]ased on the use designations, numeric and narrative criteria are assigned to a water body to protect the existing and designated uses;" and (3) that "[w]here multiple criteria for the same water quality parameter are assigned to a water body to protect different uses, the most stringent criteria for each parameter is . . . applied."<sup>27</sup> WQS are applied to all surface waters of the State, including "lakes, rivers, ponds, streams, inland waters, saltwaters, wetlands, and all other surface waters and water courses within the jurisdiction of the state."<sup>28</sup> In sum, each waterway in the State is assigned a designated use and associated criteria to meet that use, the combination of which constitutes a WQS. Together, these uses and criteria form the WQS that permit-holders must comply with.

The designated use of concern to this Note is fishing, and the criteria to achieve such use are human health criteria in the form of a fish consumption rate. Washington's current human health criteria, or FCR, are based on the outdated 1992 National Toxics Rule's FCR of 6.5 grams/day.<sup>29</sup>

### *B. Revising Washington's Water Quality Standards*

Though the CWA requires that states review and update their WQS every three years,<sup>30</sup> Washington's WQS for the designated use of fishing and the associated criteria of a FCR, have not been updated since the adoption of the 1992 National Toxics Rule standard.<sup>31</sup> Accordingly, at the

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material into sewerage systems operated by municipalities or public entities which discharge into public waters of the state, shall procure a permit from . . . the department").

26. Water Quality Standards for Surface Waters of the State of Washington, WASH. ADMIN. CODE § 173-201A-510(1) (2011), *available at* <http://apps.leg.wa.gov/WAC/default.aspx?cite=173-201A&full=true>.

27. *Id.* at §§ 173-201A-010(1)(a)-(c).

28. *Id.* at § 173-201A-010(2).

29. ECOLOGY TECHNICAL SUPPORT DOCUMENT, *supra* note 4, at xiii.

30. 33 U.S.C. § 1313(c)(1) (2012) (stating "[t]he [State] shall from time to time (but at least once every three year period beginning with October 18, 1972) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards").

31. DEP'T OF ECOLOGY, STATE OF WASH., FOCUS ON WATER QUALITY STANDARDS, WATER QUALITY PROGRAM, UPDATES TO WATER QUALITY STANDARDS (WAC 173-201A), Pub. No. 13-10-009, 1 (revised July 2013), *available at* <https://fortress.wa.gov/ecy/ecy/publications/publications/1310009.pdf>.



request of EPA, Ecology has embarked on the rulemaking process to adopt new human health criteria and revise its WQS.<sup>32</sup>

The rulemaking adopting new human health criteria for WQS in Washington “will take into account factors used to calculate each chemical criterion, including risk, duration of exposure, and more accurate data about how much fish and shellfish people eat in Washington.”<sup>33</sup> The purpose of the rulemaking is “to protect public health, safety, and welfare.”<sup>34</sup> Ecology acknowledges that “[u]ntil new human health criteria are adopted . . . Washington will continue using outdated federal standards that do not reflect current science on protection from toxic chemicals.”<sup>35</sup> And further, Ecology states that “[w]ith the adoption of this new rule, our state will have water quality standards for toxics that more accurately reflect the amount of fish and shellfish people eat in Washington.”<sup>36</sup> The rulemaking is currently ongoing, with adoption of a final rule tentatively expected in 2014 or later.<sup>37</sup>

## II. FISH CONSUMPTION HABITS AND RATES

### A. *Fish Consumption as it Relates to Water Pollution Control*

The “linchpin” of Washington’s human health criteria rulemaking is the establishment of a relevant FCR protective of all people who consume fish in the state.<sup>38</sup> The CWA sets a national goal for water quality that “provides for the protection and propagation of fish.”<sup>39</sup> Accordingly, a baseline designated use of most waterways is that they are “fishable,” and the criterion to protect such use is in the form of human health criteria—an

32. *Id.*

33. STATE OF WASH., WSR 12-19-056, PREPROPOSAL STATEMENT OF INQUIRY, CR-101 (Sept. 13, 2012), available at <http://www.ecy.wa.gov/laws-rules/wac173201a/d1203.pdf>.

34. *Id.*

35. *Id.*

36. *Id.*

37. Open Letter from Ted Sturdevant, Dir., Dep’t of Ecology, State of Wash., to Interested Parties, (July 16, 2012), available at [http://www.ecy.wa.gov/toxics/docs/20120716\\_FCR\\_SturdevantLetter.pdf](http://www.ecy.wa.gov/toxics/docs/20120716_FCR_SturdevantLetter.pdf) (describing Ecology’s approach to fish consumption standards in Washington State). As of the date of this publication in December 2014, Ecology has yet to adopt a final rule. Ecology released a preliminary draft rule package on September 30, 2014 and expects a formal draft to be released in 2015. The agency no longer provides a date for the expected adoption of a final rule. *Chapter 173-201A WAC, Water Quality Standards for Surface Waters of the State of Washington, Overview of Rule Making*, DEP’T OF ECOLOGY, STATE OF WASH. (last visited Dec. 7, 2014) (<http://www.ecy.wa.gov/programs/wq/ruledev/wac173201A/1203ov.html>).

38. Catherine O’Neill, *Protecting the Tribal Harvest: The Right to Catch and Consume Fish*, 22 J. ENVTL. L. LITIG. 131, 140 (2007) [hereinafter *Protecting the Tribal Harvest*].

39. 33 U.S.C. § 1251(a)(2) (2012).

FCR.<sup>40</sup> The FCR is a number that “represents the amount of fish humans eat per unit time . . . often expressed in grams per day.”<sup>41</sup>

A relevant FCR based on the amount of fish people consume is important to water pollution control because it is through the consumption of fish that toxins from permitted discharges—such as PCBs, mercury, dioxins, etc.—primarily enter the human body.<sup>42</sup> Fish bioaccumulate chemical toxins in their fatty tissues, and the people who consume those fish ingest those toxins.<sup>43</sup> The toxins are hazardous to human health, causing increased risks of “cancer, neurological damage, endocrine disruption, birth defects, and developmental problems.”<sup>44</sup> Accordingly, establishing an FCR based on the amount of fish people consume should directly relate to the amount of toxic chemicals people are exposed to from permitted discharges under the CWA.

### *B. National and Regional Fish Consumption Rates*

Unfortunately, FCRs, both in the Pacific Northwest and on the national level, do not reflect tribal fish consumption habits. Accordingly, this allows tribal peoples to be exposed to disproportionately higher amounts of toxics from permitted discharges under the CWA.<sup>45</sup> State and federal agencies have recognized that the default National Toxics Rule standard of 6.5 grams/day is inadequate.<sup>46</sup> This standard amounts to approximately “one 8-ounce fish serving per month—an amount that is outdated and inaccurate even for the general population.”<sup>47</sup> In 2000, EPA issued a revised national default rate in its updated *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health* agency guidance.<sup>48</sup> EPA now recommends an FCR of 17.5 grams/day for the general population and recreational fishers and 142.4 grams/day for subsistence fishers.<sup>49</sup>

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40. Catherine A. O’Neill, *Fishable Waters*, 1 AM. INDIAN L. J. 181, 224 (2013).

41. O’Neill, *Variable Justice*, *supra* note 2, at 43.

42. NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6, at 13.

43. O’Neill, *Variable Justice*, *supra* note 2, at 43.

44. Mary Christina Wood, Speech, *EPA’s Protection of Tribal Harvests: Braiding the Agency’s Mission*, 34 ECOLOGY L. Q. 175, 176 (2007) [hereinafter *EPA Speech*].

45. See, e.g., NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6 (discussing how tribal fish consumption increases the risk of exposure to toxins because of inadequate water quality standards in the United States); ECOLOGY TECHNICAL SUPPORT DOCUMENT, *supra* note 4, at 34; O’Neill, *Fishable Waters*, *supra* note 40.

46. STATE OF WASH., WSR 12-19-056, PREPROPOSAL STATEMENT OF INQUIRY, *supra* note 33; see also NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6, at 29 (acknowledging that the current FCR grossly underestimates consumption rates of tribes).

47. NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6, at 29.

48. *Id.* at 30.

49. *Id.*

Though EPA has established that the 6.5 grams/day value is no longer applicable, many states in the Pacific Northwest, including Washington, Idaho, and Alaska still rely on this outdated standard.<sup>50</sup> Oregon is the only exception in the region, implementing an FCR of 175 grams/day in 2011.<sup>51</sup> Though Oregon now has the most stringent FCR in the nation, the rulemaking process took over a decade to complete, and Oregon's FCR may still not be protective enough for its Native peoples.<sup>52</sup>

Professor Mary Christina Wood puts these numbers into context, explaining that 17.5 grams of fish per day:

is about the amount that fits on one cracker. A six-ounce can of tuna holds 142 grams of fish, so according to EPA, there are about eight servings in one can. Officials in the State of Washington have an even lighter appetite. Their water quality standards are still tiered to EPA's old assumption of 6.5 grams of fish consumption per day. So, if you are eating a can of tuna in the State of Washington, you would figure that it holds twenty-two servings. Or at least water quality standards will not provide protection for you if you eat any more than that per day.<sup>53</sup>

Sharing a can of tuna amongst twenty-two people would clearly be absurd to any reasonable person, let alone upon consideration of tribal fishing diets so essential to many people in Washington.

### *C. Fish Consumption in Washington State*

The State of Washington currently has an FCR of only 6.5 grams/day.<sup>54</sup> Washington itself acknowledged that the standard of 6.5 grams/day was inadequate "as early as 1999."<sup>55</sup> In 2010, upon its CWA-mandated triennial review, the state began the formal process for revising its FCR.<sup>56</sup> In September 2011, the State released its first *Fish Consumption Rate Technical Support Document* in which it recommended the new default FCR be established within the range of 157 to 267 grams/day.<sup>57</sup> However,

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50. O'Neill, *Fishable Waters*, *supra* note 40, at 232.

51. *Id.* at 232–33.

52. *Id.* at 232; *see also* ECOLOGY TECHNICAL SUPPORT DOCUMENT, *supra* note 4, at xiv (referencing the Columbia River Intertribal Fish Commission's 1994 survey, which shows local Oregon/Washington tribal member adults consume 389 grams/day at the 99th percentile).

53. Wood, *EPA Speech*, *supra* note 44, at 185–86.

54. ECOLOGY TECHNICAL SUPPORT DOCUMENT, *supra* note 4, at 1.

55. O'Neill, *Fishable Waters*, *supra* note 40, at 234–35.

56. *Id.* at 235.

57. *Id.* at 236.

in 2012, the State retracted the document and instead released its *Fish Consumption Rate Technical Support Document, Version 2.0*, in which the State no longer recommended a default FCR.<sup>58</sup> As of May 2014, this *Version 2.0* document is guiding the human health criteria rulemaking process underway.

The revised technical support document states clearly that tribal people within the State consume fish at much higher levels than the general public, and therefore face much higher exposure rates to discharged water contaminants.<sup>59</sup> The document details a variety of studies, including the 1994 Columbia River Inter-Tribal Fish Commission (“CRITFC”) survey of the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin.<sup>60</sup> The CRITFC study established a mean FCR for tribal adults of 389 grams/day and higher.<sup>61</sup> Additionally, a survey of the Squaxin Island Tribe of Puget Sound shows tribal members at the “higher central tendency” consume between 130 to 215 grams/day.<sup>62</sup> When one considers historical fish consumption rates amongst Washington’s tribal populations, the numbers are much higher—“620 grams/day, 650 grams/day, and 1,000 grams/day,” as evidenced by some historic accounts.<sup>63</sup>

Washington’s FCR of 6.5 grams/day falls far short of reality. Furthermore, based upon the studies the State itself has included in its technical support document (such as the CRITFC and Squaxin Tribal surveys), EPA default value of 17.5 grams/day fails to protect all of Washington’s people. Consequently, at the current 6.5 gram/day standard, it can be said that Natives in Washington are exposed to “an excess cancer risk between 1 in 100 and 1 in 1,000,” and women are “exposed to methylmercury at a level nearly ten times EPA’s reference dose.”<sup>64</sup> Many consider these excessive exposure amounts a serious environmental justice issue.<sup>65</sup>

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58. *Id.*

59. ECOLOGY TECHNICAL SUPPORT DOCUMENT, *supra* note 4, at 14 (stating “Pacific Northwest fish dietary information shows that certain populations—Native American tribes, Asian Pacific Islanders, and recreational fishers—consume fish at much higher rates than the average U.S. consumer and at higher rates than those used to establish surface water cleanup standards. Because these populations consume fish at much higher rates than the national rates used in Ecology’s regulations, their exposure to contaminants in fish may be underestimated and these populations may therefore be at higher risk.”).

60. *Id.* at 47.

61. *Id.* at 48.

62. *Id.* at 76.

63. O’Neill, *Protecting the Tribal Harvest*, *supra* note 38, at 135.

64. O’Neill, *Fishable Waters*, *supra* note 40, at 210–11.

65. *See generally*, e.g., O’Neill, *Protecting the Tribal Harvest*, *supra* note 38; O’Neill, *Variable Justice*, *supra* note 2; Wood, *EPA Speech*, *supra* note 44 (all describing fish consumption as an environmental justice issue).

### III. FISH CONSUMPTION AND ENVIRONMENTAL JUSTICE

#### A. *Environmental Justice Generally*

The establishment of a relevant FCR accounting for tribal fish consumption habits is a serious environmental justice issue.<sup>66</sup> “Environmental Justice” is defined by EPA as “the achievement of equal protection from environmental health hazards for *all people* regardless of race, income, culture, or social class.”<sup>67</sup> Unfortunately, environmental justice theories have yet to be implemented into law, and are therefore difficult to legally enforce.

The 1982 protests in Warren, North Carolina regarding the siting of a polychlorinated biphenyl (“PCB”) disposal site brought national attention to the issue of environmental justice.<sup>68</sup> In response, the U.S. Government Accountability Office issued a report examining the siting of hazardous waste landfills and how their location relates to the racial composition and economic status of host communities in the Southeast.<sup>69</sup> It was not until 1987, with the publication of the nationwide United Church of Christ Commission for Racial Justice report entitled *Toxic Wastes and Race in the United States* that the environmental justice movement was initially brought to the forefront as a theory deserving of true consideration.<sup>70</sup> “The UCC Report concluded that the racial composition of a community is the most significant variable in determining where to site hazardous waste treatment, storage, and disposal facilities.”<sup>71</sup> The UCC Report was revisited in 2007 with a finding reaffirming that “[r]ace continues to be an independent

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66. See generally, e.g., O’Neill, *Protecting the Tribal Harvest*, *supra* note 38; O’Neill, *Variable Justice*, *supra* note 2; Wood, *EPA Speech*, *supra* note 44 (all describing fish consumption as an environmental justice issue).

67. BARRY E. HILL, *ENVIRONMENTAL JUSTICE: LEGAL THEORY AND PRACTICE* 14 (2d ed. 2012) (emphasis added).

68. *Id.* at 16.

69. *Id.*

70. *Id.* at 19 (*Toxic Wastes and Race in the United States* hereinafter referred to as the “UCC Report”).

71. HILL, *ENVIRONMENTAL JUSTICE: LEGAL THEORY AND PRACTICE*, *supra* note 67, at 19.

predictor of where hazardous wastes are located, and [that] it is a stronger predictor than income, education, or other socioeconomic indicators.”<sup>72</sup>

In 1994, President Clinton passed Executive Order No. 12,898, entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.<sup>73</sup> The presidential proclamation is among the first major actions taken by the United States government acknowledging the environmental justice issue.<sup>74</sup> The Executive Order stated:

[E]ach Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States.<sup>75</sup>

Notably, section 4-4 of the Executive Order acknowledges the importance of understanding fish consumption in the context of environmental justice, stating:

In order to assist in identifying the need for ensuring protection of populations with differential patterns of subsistence consumption of fish and wildlife, Federal agencies, whenever practicable and appropriate, shall collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. Federal agencies shall communicate to the public the risks of those consumption patterns.<sup>76</sup>

In response to the environmental justice movement’s early beginnings, EPA established the National Environmental Justice Advisory Council (“NEJAC”) in 1993.<sup>77</sup> NEJAC was established “in order to obtain independent, consensus advice and recommendations from a broad spectrum of stakeholders involved in environmental justice.”<sup>78</sup> It provides

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72. *Id.* at 33 (quoting ROBERT BULLARD ET AL., TOXIC WASTES AND RACE AT TWENTY: 1987-2007—GRASSROOTS STRUGGLES TO DISMANTLE ENVIRONMENTAL RACISM IN THE UNITED STATES (Mar. 2007) (a report prepared for the United Church of Christ Justice and Witness Ministries)).

73. *Id.* at 196.

74. *Id.*

75. Exec. Order No. 12,898, 59 Fed. Reg. 32 (Feb. 16, 1994).

76. *Id.*

77. U.S. ENVTL. PROT. AGENCY, NAT’L ENVTL. JUSTICE ADVISORY COUNCIL FACTSHEET, PUB. NO. 300F12003, 1 (July 2012), available at <http://www.epa.gov/environmentaljustice/resources/publications/factsheets/fact-sheet-nejac.pdf>.

78. *Id.*

the EPA “Administrator with advice and recommendations on integrating environmental justice considerations into the agency’s programs, policies, and day-to-day activities.”<sup>79</sup> NEJAC has specifically addressed fish consumption as a serious environmental justice issue and has made many recommendations concerning FCRs for EPA and states to consider.<sup>80</sup>

*B. Fish Consumption as an Injustice against Washington Tribal Peoples*

The presence of an inadequate FCR that is not protective of Native fish consumption habits has been recognized as a serious environmental justice issue for tribal peoples of Washington. First, a weak FCR invokes an injustice against Native culture and ways of living, as fishing and eating fish is a vital component of Native society, tradition, and religion. Second, an inadequate FCR presents an injustice against the health of tribal peoples who consume high amounts of fish, and subsequently high amounts of the toxic contaminants that have built up in the fish themselves.

1. Cultural Injustice

Fish have played an essential role in Washington’s Tribal societies—culturally, religiously, and commercially—since time immemorial.<sup>81</sup> The adverse impacts of a weak FCR are not only an affront to physiological health, “but also to the tribes’ social, economic, political, cultural, and spiritual health—indeed, to their very identity as fishing peoples.”<sup>82</sup> Fishing is a vital component of the Pacific Northwest Native lifestyle and culture. The local fishery resource provides a staple dietary element, but even more importantly, it is deeply rooted in Native culture and religion among the most essentially important food resources. As Horace Axtell of the Nez Perce Tribe (which is located within the bounds of Washington State), explains:

According to our religion, everything is based on nature. Anything that grows or lives, like plants and animals, is part of our religion. The most important element we have in our religion is water. At all of the Nez Perce ceremonial feasts the people drink water before and after they eat. The water is a purification of our bodies before

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79. *Id.*

80. *See generally* NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6 (addressing fish consumption as an environmental justice issue).

81. Mary Christina Wood, *Restoring the Abundant Trust: Tribal Litigation in Pacific Northwest Salmon Recovery*, 36 E.L.R. 10163, 10177 (2006).

82. O’Neill, *Protecting the Tribal Harvest*, *supra* note 38, at 139.

we accept the gifts from the Creator. After the feast we drink water to purify all the food we have consumed. The next most important element in our religion is the fish because fish comes from water. It doesn't matter what kind of fish. If we have suckers or eels or steelhead or salmon, we honor it next after we drink the water. Then we name whatever fish we have, and then everyone takes a small bit before we eat the rest of the food. The next element is the game meat like deer, elk, and moose. That's how we honor the food we eat, especially the fish, because it is the next element after the water. The Chinook Salmon is more favored because it is the strongest fish and the most tasty. Chinook Salmon is the fish we try to bring to the long house.<sup>83</sup>

In addition to utilizing fish as a key dietary supplement, the act of fishing and eating fish is an essential tradition passed down from generation upon generation. For some tribal fishing peoples, not eating fish is simply “unimaginable for cultural, traditional, [and/or] religious reasons . . . to fish is to *be* Nez Perce,” as stated by one Nez Perce tribal member.<sup>84</sup> Fishing is an essential aspect of the flourishing and self-determination of entire Native cultures in the Pacific Northwest.<sup>85</sup> For example, as explained by Don Samson of the Umatilla Tribe, former Executive Director of CRITFC:

The reason I've been fishing is more for my own subsistence, to bring fish home. But maybe more importantly now these days is to maintain the tradition of fishing—of going up to the mountains where my father, my elders fished before me. So it's something that we've got to carry on—that's really why I fish. We've got to pass it on to our children. We have to have that for them in order to be Indians—in order to survive and carry on the things that were placed here for us, and carry on what our elders tell us and teach us.<sup>86</sup>

And further, as explained by Billy Frank Jr. of Puget Sound's Nisqually Tribe, former Chairman of the Northwest Indian Fisheries Commission:

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83. NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6, at 4–5 (quoting DAN LANDEED & ALLEN PINKHAM, SALMON AND HIS PEOPLE: FISH AND FISHING IN NEZ PERCE CULTURE 55 (1999)).

84. *Id.* at 8.

85. *Id.*

86. *Id.* (quoting Videotape: My Strength is from the Fish (Columbia River Inter-Tribal Fish Commission 1994)).



Fishing defines the tribes as a people. It was the one thing above all else that the tribes wished to retain during treaty negotiations with the federal government 150 years ago. Nothing was more vital to the tribal way of life then, and nothing is more important now . . . The tribes have fought too hard for too long to let the salmon and their treaty rights to harvest salmon go extinct. This summer and fall you will see tribal fishermen doing what they have always done—fish.<sup>87</sup>

As evidenced by these select tribal accounts, fishing and fish consumption play an essential role in Washington Natives' culture and religion. The presence of a weak FCR, allowing high levels of pollution to contaminate the vital fishery resource, is an injustice to the traditional and cultural viability of these peoples.

## 2. Injustice to Health

The fish consumption environmental justice issue can be viewed in light of the disproportionate, harmful health impacts a weak FCR imposes on high fish consumers as well. It is well documented that Native populations who readily rely on fish for sustenance, religious, and cultural reasons, are often exposed to dangerously high levels of toxic chemical contamination due to the above-average amount of fish they consume.<sup>88</sup> The sad fact remains that due to inadequate pollution control schemes, “[t]he rivers, streams, bayous, bays, lakes, wetlands, and estuaries that support the fish, aquatic plants, and wildlife on which communities and tribes depend have been allowed to become contaminated and . . . have become vectors of toxins.”<sup>89</sup> This contamination has caused Natives' daily practices “to serve as a source of exposure to a host of substances toxic to humans and other living things.”<sup>90</sup> As described by NEJAC, our aquatic ecosystems are tainted with a host of toxins—from DDT and pesticides, to PCBs, mercury, dioxins, fecal coliform, lead and heavy metals, and other viral and bacterial pollutants.<sup>91</sup> Many of these contaminants are especially disconcerting because they both “persist in the environment for great lengths of time and because they bioaccumulate in the tissues of fish,

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87. *Id.*

88. *E.g.* ECOLOGY TECHNICAL SUPPORT DOCUMENT, *supra* note 4, at 88; NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6; O'Neill, *Variable Justice*, *supra* note 2, at 78 (describing excess toxic exposure rates faced by Native populations).

89. NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6, at 10.

90. *Id.* at v.

91. *Id.*

aquatic plants, and wildlife, existing in greater quantities higher up the food chain.”<sup>92</sup>

The resulting human health impacts of chemical contamination are wide-ranging depending on the contaminant.<sup>93</sup> Some chemicals are carcinogenic, some affect reproductive organs, and others serve as dangerous endocrine disrupters.<sup>94</sup> In fact, “tribal members who consume 48 fish meals per month have cancer risks up to 50 times higher than those present in members of the general public, who consume fish about once per month.”<sup>95</sup> The Columbia River Basin Contaminant Survey showed the immense disparity in cancer risks between the general population and Native Americans.<sup>96</sup> Whereas someone consuming fish at a rate of 7.5 grams/day faces an excess cancer risk ranging from 1 in 10,000 to 1 in 100,000, Native Americans consuming at traditional consumption rates of 540 grams/day face a risk of almost 1 in 100.<sup>97</sup> This “disparity is stark, with tribal members facing risks perhaps 100 times that of the general population.”<sup>98</sup> Additionally, the methyl-mercury exposure risks to tribal women (consuming at the CRITFC average rate of 389 grams/day) compared to women in the general population (consuming at EPA’s default rate of 17.5 grams/day) are shocking, evidencing that women consuming at the tribal consumption rate are “exposed to methyl-mercury at levels nine to thirteen times the EPA’s reference dose.”<sup>99</sup>

One must consider the synergistic impacts of multiple contaminants combined, as well. Stuart Harris, Confederated Tribes of the Umatilla Indian Reservation, and Barbara Harper, Fourteen Confederated Tribes and Bands of the Yakama Nation, describe the situation on the Columbia River system, in which over 100 toxins have been identified in fish tissues.<sup>100</sup> Though “only a few might be at concentrations that trigger action in any given fish, the combined risk for one fish or for the many species which comprise the native diet can be quite high.”<sup>101</sup> Further, it is important to understand that other routes of exposure exist, such as from the water or

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92. *Id.*

93. *Id.* at 8.

94. *Id.*

95. Nina Bell, Symposium, *Environmental Injustice Posed by Oregon’s Water Quality Standards: Considering Fish Consumption Rates When Setting Toxics Criteria*, 20 J. ENVTL. L. & LITIG. 85, 86 (2005) [hereinafter *Environmental Injustice Posed by Oregon’s Water Quality Standards*].

96. O’Neill, *Protecting the Tribal Harvest*, *supra* note 38, at 137.

97. *Id.*

98. *Id.*

99. *Id.* at 137–38.

100. NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6, at 41.

101. *Id.*

sediment itself, and in the end, “[t]he toxicity of a mixture of dozens of carcinogens plus dozens of non-carcinogens . . . needs to be examined.”<sup>102</sup>

Tribal people are affected even when they choose not to consume their traditional fishery resource due to the associated health risks resulting from contamination.<sup>103</sup> Studies have shown that the “loss of traditional food sources is now recognized as being directly responsible for a host of diet-related illnesses among Native Americans including diabetes, obesity, heart disease, tuberculosis, hypertension, kidney troubles and strokes.”<sup>104</sup> Upon consideration of these myriad health impacts, the continued presence of an inadequate FCR in Washington presents an immense injustice to the well being of the State’s tribal population on a variety of fronts.

#### IV. INDUSTRY INFLUENCE FURTHERING ENVIRONMENTAL INJUSTICE

##### *A. Industry’s Influence on Pollution Control in Washington State*

Though recognized as a serious environmental justice issue in the state, Washington’s industrial leaders seem content to further continue this injustice against Washington’s Native peoples by pushing for leaner WQS during the rulemaking currently underway. Washington is a favored state in the Pacific Northwest for industrial operations. For example, the State is home to a number of large industrial players within the aerospace and the forest products industries. However, alongside the robust economies these industries provide are the associated industrial wastes discharged into the State’s many waterways. As noted previously, the State’s CWA program mandates that every industrial facility operating in the state must obtain a permit in order to discharge its wastewaters.<sup>105</sup> Those permits, in turn, demand compliance with the State’s WQS.<sup>106</sup> As the State’s implementation of a more protective FCR would necessarily result in more stringent WQS, and therefore, more stringent discharge permit requirements, industries responsible for meeting such requirements are fighting against the implementation of a protective FCR.<sup>107</sup> As such, these

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102. *Id.*

103. O’Neill, *Protecting the Tribal Harvest*, *supra* note 38, at 138.

104. *Id.*

105. WASH. REV. CODE § 90.48.010 (2013).

106. *Id.*

107. See, e.g., Robert McClure, *Business Interests Trump Health Concerns in Fish Consumption Fight*, INVESTIGATE WEST (Mar. 30, 2013), <http://www.invw.org/article/business-interests-trump-1344>; Robert McClure & Olivia Henry, *How Boeing, Allies Torpedoed State’s Rules on Toxic Fish*, INVESTIGATE WEST (Apr. 23, 2013), <http://www.invw.org/article/how-boeing-allies-torpedo-1353>; Olivia Henry, *Timeline: Fish Consumption Rate*, INVESTIGATE WEST (Apr. 23, 2013), <http://www.invw.org/article/timeline-fish-consumption-1351>; Jason Alcorn, *The Emails and Reports*

industrial players appear content to continue the immense environmental injustice caused by toxic contaminants that end up in fish, which disproportionately affect tribal peoples of the State.

Among the groups actively working against Washington's adoption of a FCR protective of tribal fish consumption habits are the aerospace industry giant Boeing, the forest products industry's Northwest Pulp and Paper Association, and the Association of Washington Business, among others.<sup>108</sup> The industries' main arguments are that more stringent WQS would be both too costly and technologically impossible to achieve.<sup>109</sup> Chris McCabe, Executive Director of the Northwest Pulp and Paper Association, stated that a study commissioned by the trade group showed "Oregon paper mills' likely costs under the new rates [Oregon's revised FCR of 175 grams/day] . . . would cost that industry \$500 million to make the switchover, plus \$30 million to \$90 million annually in operating costs."<sup>110</sup> And Gary Chandler, chief lobbyist for the Association of Washington Business, sent the clear message in his meetings with former Washington Governor Christine Gregoire and former Ecology Director Ted Sturdevant, that WQS should not be tightened until the technology to meet new standards is available.<sup>111</sup> It is clear Ecology has listened to industrial concerns. In commenting on a Forbes article identifying "Washington as one of the top states likely to boom over the next five years," Sturdevant wrote: "Not if we pass new fish consumption rates! At least according to industry."<sup>112</sup>

Boeing's voice has been the loudest. Boeing's significant role within the state, employing 85,000 workers, gives it substantial influence over Washington's political climate.<sup>113</sup> In June 2012, "Boeing said if Ecology went ahead with plans to make fish safer to eat, it would 'cost the company hundreds of millions of dollars and severely hamper its ability to increase production in [Renton, Washington] and make future expansion elsewhere in the state cost-prohibitive,' according to a Gregoire aide's reconstruction of a conversation with a Boeing executive."<sup>114</sup> It was only one month later, in July 2012, that Washington put a stop to its rulemaking process, delaying

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*Behind Washington's Fish Consumption Debate*, INVESTIGATE WEST (Mar. 30, 2013), <http://www.invw.org/article/the-emails-and-reports-be-1346> (all describing industry's influence on Washington's fish consumption rulemaking).

108. McClure & Henry, *How Boeing, Allies Torpedoed State's Rules on Toxic Fish*, *supra* note 107.

109. McClure, *Water Pollution*, *supra* note 10.

110. *Id.*

111. *Id.*

112. *Id.*

113. McClure & Henry, *How Boeing, Allies Torpedoed State's Rules on Toxic Fish*, *supra* note 107.

114. McClure, *Water Pollution*, *supra* note 10.

its expected completion until Spring 2014 (a deadline yet to be achieved as of the date of this publication), in order to launch a “stakeholder process” many tribal people and environmentalists see as unnecessary as having already been done.<sup>115</sup> It is clear that the impacts of these industries’ political pull have been felt throughout the Washington FCR rulemaking process.<sup>116</sup>

*B. Industry’s Tactics for Delaying and Weakening Washington’s Revised Fish Consumption Rate*

As noted, the minimum FCR established by EPA is a mere 17.5 grams/day for the general population, and industry advocates appear content to comply with just the status quo.<sup>117</sup> Thus far, industry has achieved success in its efforts to weaken and delay the new FCR. Though Washington is decades overdue in updating its WQS as mandated under the CWA,<sup>118</sup> the State has further delayed the process currently underway and is not expected to have a revised FCR until 2014 or later.<sup>119</sup> This delay is largely in response to industry pressures, which include tactics such as challenging the data used by the State to develop the FCR—the same data approved by EPA and used in Oregon’s recent FCR rulemaking establishing a FCR of 175 grams/day<sup>120</sup>—and absurdly requesting salmon, a keystone cultural species, be removed from consideration of the FCR entirely.<sup>121</sup> Unfortunately, industry has been largely successful in its efforts due to the long history of agency capture it has exercised within the State.

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115. *Id.* Note that as of the date of this publication in December 2014, Ecology has yet to adopt a final rule. *See supra* text accompanying note 37.

116. *See generally* McClure, *Business Interests Trump Health Concerns in Fish Consumption Fight*, *supra* note 107; McClure & Henry, *How Boeing, Allies Torpedoed State’s Rules on Toxic Fish*, *supra* note 107; Henry, *Timeline: Fish Consumption Rate*, *supra* note 107; Alcorn, *The Emails and Reports Behind Washington’s Fish Consumption Debate*, *supra* note 107 (all describing industry’s influence on Washington’s fish consumption rulemaking).

117. *See* Erik Smith, *Fish-Consumption Issue Surfaces as Major Issue as Lawmakers Hammer Out Budget Deal*, WASHINGTON STATE WIRE (June 26, 2013), <http://washingtonstatewire.com/blog/fish-consumption-issue-is-hangup-as-lawmakers-hammer-out-budget-deal/> (describing industry’s staunch opposition to new rulemaking); *see also* McClure, *Water Pollution*, *supra* note 10 (describing industry’s stance on a revised FCR).

118. Washington State still relies on an FCR based on the 1992 National Toxics Rule even though the CWA requires states to review and, as necessary, revise their WQS every three years. As such, Washington is more than two-decades overdue in updating its WQS to account for a protective FCR. *See* ECOLOGY TECHNICAL SUPPORT DOCUMENT, *supra* note 4, at 1 (noting Washington’s reliance on an outdated standard); *see also* 33 U.S.C. § 1313(c)(1) (requiring regular updates to a state’s WQS).

119. O’Neill, *Fishable Waters*, *supra* note 40, at 236. Note that as of the date of this publication in December 2014, Ecology has yet to adopt a final rule. *See supra* text accompanying note 37.

120. *Id.* at 232 (stating that Oregon’s FCR is 175 grams/day).

121. *Id.* at 250 (stating “[a]ll participants in the process have recognized that a FCR that excludes salmon would be greatly reduced . . . However, given salmon’s anadromous habitat, and given

### 1. Challenge the Data

Industry representatives are using multiple routes to challenge the data Washington is using to determine its revised FCR, including requesting more data<sup>122</sup> and alleging flaws in existing data.<sup>123</sup> Though Washington initially began the FCR development process utilizing the same data Oregon used during its FCR revision (*i.e.* the 1994 CRITFC study referenced in Washington's Technical Support document<sup>124</sup>), which was approved as sufficiently adequate by EPA, industry leaders are insisting that more data is necessary.<sup>125</sup> In fact, industry has consistently pushed the Washington legislature to fund and require that a new study of fish consumption habits in the state be developed and utilized before adoption of a revised FCR.<sup>126</sup> A new study would be both costly and could take years to complete.<sup>127</sup>

In addition to more data, industrial players are asking for irrelevant data as well.<sup>128</sup> For example, though WQS under the CWA are "based solely on an assessment of the risks posed by toxic contaminants to be regulated and don't permit the statutory concern for human health to be 'balanced' against costs or countervailing risks[,] . . . industry has argued that data on risk-tradeoffs or cost-benefit analysis ought to be included in the FCR [Technical Support document]."<sup>129</sup>

Industrial opposition is also asserting flaws in tribal studies included in Washington's Technical Support document, questioning the scientific defensibility of the studies.<sup>130</sup> These insulting allegations come despite the fact that Ecology has already upheld the scientific defensibility of these studies, and further, "each of the tribal studies had previously been considered and affirmed in various assessments by EPA and by sister states."<sup>131</sup> Professor O'Neill plainly summarizes the industrial stance on Washington's data:

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that a portion of many salmon life histories is spent outside of the waters over which Washington asserts regulatory jurisdiction . . . it has been argued that salmon ought to be excluded from the tally of fish intake, because their contaminant body burden comes from 'elsewhere.'").

122. *Id.* at 237–38.

123. *Id.* at 242.

124. ECOLOGY TECHNICAL SUPPORT DOCUMENT, *supra* note 4, at 47–48.

125. O'Neill, *Fishable Waters*, *supra* note 40, at 237–38.

126. Smith, *Fish-Consumption Issue Surfaces as Major Issue as Lawmakers Hammer Out Budget Deal*, *supra* note 117.

127. *Id.*

128. O'Neill, *Fishable Waters*, *supra* note 40, at 237–38.

129. *Id.* at 238.

130. *Id.* at 242.

131. *Id.* at 241.

Industry . . . arguments . . . require us to deny what we know about the facts on the ground in Washington. These arguments require us to deny that we know there are actual people who consume fish at the greatest rates, from the same local places, for their entire lives, and to deny that we know precisely *who* these people are—namely, tribal people.<sup>132</sup>

Industry arguments to demand additional and unnecessary data are unwarranted, and accordingly, the State should dismiss them as such.

## 2. Remove Salmon from the FCR

Alongside data challenges, those opposing more stringent WQS are asserting that whatever FCR is eventually derived from the studies, it should be diluted to account for such factors as “diet fraction” and “site use factors.”<sup>133</sup> These concepts argue that “although contemporary fish consumption has been documented at X grams/day, (1) only a fraction of the fish captured by this rate is obtained from regulated waters, and (2) only a fraction of even this locally-obtained fish is comprised by species whose known contaminants are attributable to regulated waters.”<sup>134</sup> The first situation is referred to as a “diet fraction” and the second as a “site use factor.”<sup>135</sup>

In regards to the “diet fraction” argument, opponents argue that fish coming from waters outside of Washington’s regulatory jurisdiction should not be counted in the FCR because decreasing pollutants within Washington’s waters would not impact the toxic contamination of these fish living outside of the state.<sup>136</sup> The “diet fraction” argument has little merit when considering tribal fish consumption habits in Washington, however. It is well documented that “tribal members currently *do* obtain most or all of their fish from local waters . . . [They] are fishers who bring home their catch . . . harvesters who obtain shellfish from local beaches—and the fruits of these efforts are shared with others in the tribe, including elders and children.”<sup>137</sup>

The “site use factor” argument is equally absurd, especially as applied to the essential salmon resource in Washington. The argument contends that

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132. *Id.* at 255.

133. O’Neill, *Fishable Waters*, *supra* note 40, at 245.

134. *Id.*

135. *Id.*

136. *Id.* at 245–46.

137. *Id.* at 247.

“although locally caught fish may be contaminated, depending on the life histories of the various species . . . some portion of their contaminant body burdens may be attributable to sources and sites outside of the relevant state’s . . . jurisdiction.”<sup>138</sup> Accordingly, they argue, the state’s control of pollution within its waters would not impact those contaminants that build up in the fish while outside of the state’s waters.<sup>139</sup> This argument has been advocated to remove the consumption of salmon, an anadromous species oftentimes travelling many thousands of miles and across multiple jurisdictions from its spawning streams to the ocean and back, from consideration within the FCR entirely.<sup>140</sup> This argument has been pursued despite the fact that “[a]ll participants in the process have recognized that an FCR that excludes salmon would be greatly reduced.”<sup>141</sup> As described by Professor O’Neill, ample data exists showing that salmon contain toxins at levels that threaten human health and many fish consumption advisories warn that salmon consumption should be lessened or eliminated altogether.<sup>142</sup> But, considering salmon’s anadromous lifestyle and the fact that a portion of their lives are spent outside Washington’s jurisdictional waters, some argue that salmon should be “excluded from the tally of fish intake, because their contaminant body burden comes from ‘elsewhere.’”<sup>143</sup> Professor O’Neill recognizes that “[t]he stakes are not small,” estimating a reduced FCR “by 25% to over 50%” would result if salmon were omitted from Washington’s FCR analysis.<sup>144</sup>

These attempts by industry to dilute and weaken the revised FCR could be disastrous to the health and culture of Washington’s tribal populations. Salmon, especially, are a keystone species for Pacific Northwest Native culture. Their removal from the FCR via the “site use factor” argument, combined with a “diet fraction” removal factor, could effectively “gut” the FCR upon consideration of the multiplicative effect of these arguments combined.<sup>145</sup> For example, “[a]n FCR of 200 [grams/day] . . . would effectively become just 50 [grams/day],” if it were halved by a “site use factor of 0.5.”<sup>146</sup>

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138. O’Neill, *Fishable Waters*, *supra* note 40, at 248.

139. *Id.*

140. *Id.* at 250.

141. *Id.*

142. *Id.*

143. O’Neill, *Fishable Waters*, *supra* note 40, at 250.

144. *Id.*

145. *Id.* at 249.

146. *Id.*



### 3. Capture the Agency

Unfortunately, industry efforts to weaken and delay Washington's FCR rulemaking have proved successful, largely due to the long history of industry capture of both Washington politics and EPA in general.<sup>147</sup> Investigate West, an acclaimed non-profit investigative journalism organization,<sup>148</sup> conducted an eye-opening investigation of public records from the Washington Governor's office and Ecology senior staff.<sup>149</sup> Their investigation clearly documents the interplay between Washington officials and local industrial leaders regarding the fish consumption rulemaking issue in Washington State.<sup>150</sup> It is true Ecology staff may have begun the process with proper intentions to protect public health. This is evidenced by former Ecology Director Ted Sturdevant's statement in September 2011, when the initial Technical Support document was released: "The state knows that industry will push back but we should not worry about the political winds because we know it's the right thing to do."<sup>151</sup> But by February 2012, Sturdevant was clearly feeling the heat of industry pressure and opposition to the fish consumption rulemaking process, stating in an email to a Governor's aide that "he felt 'breathless' given the strong Republican reactions to fish consumption."<sup>152</sup> By June 2012 it was clear that the industry pressure would prevail, as the Governor's Chief of Staff met with representatives from Boeing on June 29, and by July 12, Sturdevant informed tribal stakeholders that the FCR rulemaking timeline

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147. See McClure & Henry, *How Boeing, Allies Torpedoed State's Rules on Toxic Fish*, *supra* note 107 (describing industry efforts to delay rulemaking); see also McClure, *Water Pollution*, *supra* note 10 (describing intense lobbying campaigns and subsequent agency rulemaking delays); Wood, *EPA Speech*, *supra* note 43 (describing industry capture of Washington politics and the EPA generally).

148. INVESTIGATE WEST, <http://www.invw.org/about> (last visited Nov. 8, 2013).

149. See generally McClure, *Business Interests Trump Health Concerns in Fish Consumption Fight*, *supra* note 107; McClure & Henry, *How Boeing, Allies Torpedoed State's Rules on Toxic Fish*, *supra* note 107; Henry, *Timeline: Fish Consumption Rate*, *supra* note 107; Alcorn, *The Emails and Reports Behind Washington's Fish Consumption Debate*, *supra* note 107 (all articles from a series investigating Washington's fish consumption rulemaking).

150. See generally McClure, *Business Interests Trump Health Concerns in Fish Consumption Fight*, *supra* note 107; McClure & Henry, *How Boeing, Allies Torpedoed State's Rules on Toxic Fish*, *supra* note 107; Henry, *Timeline: Fish Consumption Rate*, *supra* note 107; Alcorn, *The Emails and Reports Behind Washington's Fish Consumption Debate*, *supra* note 107 (all articles from a series investigating Washington's fish consumption rulemaking).

151. Henry, *Timeline: Fish Consumption Rate*, *supra* note 107.

152. *Id.*

would be revised (and subsequently delayed).<sup>153</sup> Ecology officially released the new, delayed timeline in an open letter to interested parties on July 16, 2012.<sup>154</sup> In less than one year, industry had prevailed in achieving delay of Washington's FCR rulemaking process.<sup>155</sup>

The outcome in Washington is of little surprise when considered against the backdrop of industry capture of EPA generally.<sup>156</sup> When the CWA was passed in 1972, it stated that it was "the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985."<sup>157</sup> Alongside this ambitious goal, however, came the permit system regulating such discharges. It is with the permitting of toxic discharges that "EPA took the permit system off course early on and never steered it back on course . . . Rather than phasing out permits, EPA has enshrined them."<sup>158</sup> As described by Professor Wood in a speech to EPA staff:

The permits have become the end-all of regulation. When tribes have asked businesses to stop dumping toxic effluent where they fish, the businesses simply say, "We have a permit to discharge." And if tribes go to state officials or EPA, they hear, "Oh that business is in compliance because they have a permit." As one tribal analyst [explained], "It's like a regulatory merry-go-round and you can't get off."<sup>159</sup>

And, unfortunately, EPA "cannot say no to business."<sup>160</sup> Accordingly, permits continue to be issued, and "the pollution keeps mounting," when in all reality, "EPA should be, quite simply, business neutral."<sup>161</sup> As so well-described by Professor Wood, "it is certainly not government's job to insulate businesses from their true costs of operation," and when businesses "cannot operate without damaging the commons, they should be replaced by innovative green businesses."<sup>162</sup> In fact, that is part of the reasoning

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153. *Id.* Note that as of the date of this publication in December 2014, Ecology has yet to adopt a final rule. Thus, Sturdevant's July 2012 delayed timeline has, again, been subsequently delayed. See *supra* text accompanying note 37.

154. Henry, *Timeline: Fish Consumption Rate*, *supra* note 107; see also *supra* text accompanying note 37 (describing the current status of the even further delayed rulemaking timeline).

155. Henry, *Timeline: Fish Consumption Rate*, *supra* note 107.

156. Wood, *EPA Speech*, *supra* note 44, at 180.

157. 33 U.S.C. § 1251(a)(1) (2012); Wood, *EPA Speech*, *supra* note 44, at 181.

158. Wood, *EPA Speech*, *supra* note 44, at 181.

159. *Id.* at 181–82.

160. *Id.* at 196.

161. *Id.*

162. *Id.* at 196–97.

underlying the fact that CWA “permits were to be issued for only five-year terms.”<sup>163</sup>

This obvious perpetuation of industry capture of EPA and state environmental departments, as evidenced by the CWA permit system, must succumb to public health and welfare at some point. EPA and states implementing CWA programs must begin to stand up to the industry pressure. It is clear that “[t]he costs of cleaning up pollution are exponentially greater than the costs of prevention[;] the chemicals EPA permitted yesterday are the legacy chemicals of today, and those allowed by permits today will be the legacy chemicals of tomorrow.”<sup>164</sup> As such, Washington and EPA must take the opportunity now, with the FCR rulemaking underway, to reject industrial opposition and stand up for the health and welfare of *all* citizens, tribal members included, as their duties in the public role mandate.

V. REMEDYING THE INJUSTICE: AN ANALYSIS OF THE GOVERNMENT’S  
DUTY TO PROTECT NATIVE AMERICANS VIA ESTABLISHMENT OF A  
PROTECTIVE FISH CONSUMPTION RATE

Though the industry pressure on the State is immense, Washington and EPA have the duty and obligation to remedy the injustice faced by Native Americans through a variety of legal mandates arguably requiring an adequate FCR be established.

First, the CWA and Washington’s own mandated revision of its WQS to establish an adequate FCR can, and rightfully should, be used to ensure the creation of a protective FCR, which remedies the environmental injustice faced by the State’s tribal peoples. A second approach stems from Native treaty rights, which have the force of “the supreme law of the land.”<sup>165</sup> Washington’s Native people have established treaty rights to catch and consume fish, and it follows that such fish must be fit for human consumption. EPA, acting as federal trustee, must consider these treaty rights upon its approval of Washington’s revised WQS. EPA should ensure that the State’s decision complies with the time-honored treaty rights as its federal trust responsibility to Native peoples mandates these rights be protected. Third, the age-old Public Trust Doctrine places an obligation on the State to protect public natural resources, including water and fish, in trust for future generations. The State should consider its public trust responsibilities and ensure its revised FCR is protective of *all* current and

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163. Wood, *EPA Speech*, *supra* note 44, at 197

164. *Id.* at 199.

165. O’Neill, *Fishable Waters*, *supra* note 40, at 194.

future inhabitants of the State. Fourth, Title VI of the Civil Rights Act of 1964 may be invoked to ensure the State does not discriminate against its tribal peoples, and accordingly, establishes a relevant and protective FCR during the human health criteria rulemaking underway. Both EPA and the State arguably have obligations under Title VI and EPA's Title VI implementing regulations to ensure the revised FCR is non-discriminatorily protective of all citizens regardless of race, color, or national origin. And finally, the Equal Protection Clause of the 14th Amendment of the United States Constitution may arguably be used to ensure the State does not discriminate against its Native population by adopting a weak FCR. Though discriminatory intent is required to invoke this Constitutional challenge, such intent is arguably present upon consideration of the data the State has ample access to.

Each of these approaches may arguably be implemented to force the State to establish a FCR protective of Native Americans during its human health criteria rulemaking. In turn, the establishment of a protective FCR will help to remedy the fish consumption environmental justice issue faced by many tribal peoples of the State.

#### A. CWA Mandates

Environmental justice issues are difficult to heal without a separate legal mandate to enforce against discrimination,<sup>166</sup> but the CWA itself provides the legal mandate here to remedy the fish consumption environmental justice issue. Both EPA and the State have the obligation—and duty—to push against negative industry tactics to weaken and delay its development of a revised FCR, and to remedy the environmental justice issue in Washington by implementing a FCR reflective of tribal fish consumption habits under the mandates of the CWA. First, the State has a duty to promulgate a FCR reflective of tribal fish consumption habits during the long-overdue WQS revision underway.<sup>167</sup> Second, EPA has a duty to step-in and promulgate a WQS protective of human health upon the

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166. See HILL, *supra* note 67 (explaining that environmental justice issues are difficult to remedy for a variety of reasons, including the difficulty of proving a “discriminatory intent” to enforce against discrimination under the Equal Protection Clause of the 14th Amendment, and the lack of a personal cause of action to enforce against discrimination under Title VI of the Civil Rights Act).

167. 33 U.S.C. § 1313(c)(1) (2012) (requiring triennial review of state WQS); see also O’Neill, *Fishable Waters*, *supra* note 40, at 228 (stating that the state must follow EPA revised guidance in which the FCR should be based “first, on local data regarding fish consumption practices; second, on data reflecting similar geography or population groups; third, on states’ or tribes’ own analysis of national data; and last, on the EPA’s national default values”). As such, the state should stick to its initially proposed range based on local data, rather than succumb to industry pressure to adopt EPA’s minimal FCR value.

State's continued failure to do so.<sup>168</sup> As such, the CWA both can, and rightfully should, be used as a viable means to remedy environmental injustices against Native Americans.

### 1. The State's Obligations under the CWA

Section 1313(c) of the CWA requires states revise their WQS every three years and submit them to EPA for approval.<sup>169</sup> The current human health criteria rulemaking underway in Washington, though long overdue, is working towards compliance with this requirement. Although EPA has set the default FCR for the general population at 17.5 grams/day, it has issued guidance stating that this value is merely the floor and individual states should base their FCRs upon local data and local fish consumption habits where available.<sup>170</sup>

EPA's 2000 guidance recommends the following process, in order of preference, for determining an adequate FCR for a particular state: (1) states should first base their criteria on local data regarding fish consumption habits in the state; (2) if local data is lacking, states should base their criteria on "data reflecting similar geography or population groups;" (3) states should base their criteria on their own analysis of national data next; and (4) finally, states may base their criteria on EPA's default values as a last resort.<sup>171</sup> EPA strongly urges states "to use a fish intake level derived from local data on fish consumption in place of [the] default value . . . ensuring that the fish intake level chosen is protective of highly exposed individuals in the population."<sup>172</sup>

Washington State has clear evidence of local fish consumption habits within its own technical report.<sup>173</sup> Accordingly, the State should use this local data to develop a FCR "protective of highly exposed individuals in the population," such as the State's tribal peoples.<sup>174</sup> Therefore, the State should adopt a FCR, at minimum, in-line with its initially proposed FCR within the range of 157–267 grams/day, as noted in the State's original

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168. 33 U.S.C. § 1313(c)(4) (requiring EPA promulgation of revised WQS when the state fails to do so or the state's revision is inadequate to meet the requirements of the CWA).

169. *Id.* § 1313(c).

170. U.S. ENVTL. PROTECTION AGENCY, *METHODOLOGY FOR DERIVING AMBIENT WATER QUALITY CRITERIA FOR THE PROTECTION OF HUMAN HEALTH*, EPA 822-B-004, 1-12-1-13 (Oct. 2000), *available at* [http://water.epa.gov/scitech/swguidance/standards/upload/2005\\_05\\_06\\_criteria\\_humanhealth\\_method\\_complete.pdf](http://water.epa.gov/scitech/swguidance/standards/upload/2005_05_06_criteria_humanhealth_method_complete.pdf) [hereinafter EPA METHODOLOGY].

171. O'Neill, *Protecting the Tribal Harvest*, *supra* note 38, at 140–41.

172. EPA METHODOLOGY, *supra* note 170, at 1-12-1-13.

173. ECOLOGY TECHNICAL SUPPORT DOCUMENT, *supra* note 4, at 47–48.

174. EPA METHODOLOGY, *supra* note 170, at 1-12-1-13.

technical support document.<sup>175</sup> The rate should arguably be even higher, considering the data available within the local CRITFC and Squaxin tribal studies. Regardless, Washington must use this local data in order to accord with the CWA and EPA guidance and to thus receive EPA approval of its revised WQS.

## 2. EPA's Obligations under the CWA

Section 1313(c)(4) of the CWA requires EPA to promulgate revised WQS when a state fails to do so or the state's revision is inadequate to meet the requirements of the CWA.<sup>176</sup> Arguably, EPA rightfully could have stepped in long ago to mandate a FCR in Washington that is at least in accordance with EPA's minimum default value under this statutory requirement. Unfortunately, EPA has not exercised the "hammer of its own [1313](c)(4) authority" to require Washington's compliance with the CWA.<sup>177</sup> And the agency faced a viable legal challenge as a result.

In October 2013, a coalition of environmental organizations filed suit against EPA for the agency's failure "to promulgate standards necessary to meet the requirements of the [CWA] and to protect designated uses including the consumption of fish."<sup>178</sup> The suit alleged that "EPA has violated its mandatory duty under the [CWA], 33 U.S.C. § 1313 (c)(4), by failing to promptly promulgate human health criteria based on an accurate fish consumption rate for Washington that adequately protects the fishable and swimmable uses required by the [CWA]."<sup>179</sup> Considering the plain facts at issue—that Washington had not revised its WQS in accordance with the mandates of the CWA, and that EPA had failed to step in and promulgate appropriate WQS in the State's absence to do so—plaintiffs presented a seemingly plausible challenge against the agency. Although the court ended up deciding against plaintiffs in this particular case because the EPA Administrator had not explicitly determined that the State's WQS were inadequate—which would have thereby triggered a mandatory duty on behalf of the EPA to act under § 1313(c)(4)—this legal route remains

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175. O'Neill, *Fishable Waters*, *supra* note 40, at 236.

176. 33 U.S.C. § 1313(c)(4).

177. O'Neill, *Fishable Waters*, *supra* note 40, at 277.

178. Complaint at 2 ¶ 1, *Puget Soundkeeper Alliance v. U.S. Env'tl. Prot. Agency*, No. 2:13-cv-01839, 2013 WL 5589817 (W.D. Wash. Sept. 18, 2014), *available at* <http://columbiariverkeeper.org/wp-content/uploads/2013/10/2013.10.11.complaint.pdf>.

179. Complaint at 3 ¶ 6, *Puget Soundkeeper Alliance v. U.S. Env'tl. Prot. Agency*, No. 2:13-cv-01839, 2013 WL 5589817 (W.D. Wash. Sept. 18, 2014), *available at* <http://columbiariverkeeper.org/wp-content/uploads/2013/10/2013.10.11.complaint.pdf>.

potentially viable for other cases so long as the EPA Administrator first makes the requisite determination that the state's WQS are inadequate.<sup>180</sup>

Accordingly, the CWA itself seems to place a viable legal obligation upon both the State and EPA to require the implementation of an adequate FCR in Washington, and subsequently, to indirectly remedy the fish consumption environmental justice issue faced by the State's Native population.

### *B. Treaty Rights & the Federal Trust Responsibility*

An additional approach to force the State and EPA to establish a relevant FCR protective of the State's tribal population—and arguably an even more powerful approach than the CWA route—stems from the overarching treaty rights afforded to tribal people within the State. Tribes are sovereign nations, recognized by the United States Supreme Court as “the undisputed possessors of the soil, from time immemorial,” which now reside as “independent political communities” within the bounds of the United States.<sup>181</sup> As such, tribes have a “government-to-government relationship” with states and the federal government.<sup>182</sup> “The cornerstone of the government-to-government relationship is the federal government's trust responsibility to federally recognized Indian tribes.”<sup>183</sup> Built upon “treaties, statutes, executive orders, and the historical relations between the federal government and tribes” the federal trust responsibility places strict fiduciary standards upon federal agencies.<sup>184</sup> The United States Supreme Court has gone so far as to state “that federal officials are ‘bound by every moral and equitable consideration to discharge the federal government's trust with good faith and fairness when dealing with tribes.’”<sup>185</sup>

Treaties “have the status under the Constitution of ‘the supreme law of the land.’”<sup>186</sup> Accordingly, tribal treaty rights in existence throughout the

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180. Puget Soundkeeper Alliance v. U.S. Env'tl. Prot. Agency, No. C13-1839-JCC, 2014 WL 4674393, \*4–6 (W.D. Wash. Sept. 18, 2014). Just before this Note went to print, the court decided against plaintiff environmental organizations in this suit. *Id.* The court reasoned that since EPA did not make an explicit determination under § 1313(c)(4) that the State's WQS were inadequate—which would thereby trigger a mandatory duty for the EPA to act under § 1313(c)(4)—the court did not have jurisdiction because EPA has not yet failed to perform a non-discretionary act or duty. *Id.* at \*4. Thus, in order to challenge the EPA under § 1313(c)(4), the agency administrator must first explicitly declare the state's WQS are inadequate. *Id.* at \*4–6.

181. Worcester v. Virginia, 31 U.S. 515, 559–60 (1832).

182. NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6, at 128.

183. *Id.* at 129.

184. *Id.* (citing Nance v. Env'tl. Prot. Agency, 645 F.2d 701, 710 (9th Cir. 1981); United States v. Payne, 264 U.S. 446, 448 (1924)).

185. *Id.*

186. O'Neill, *Fishable Waters*, *supra* note 40, at 194 (citing Worcester, 31 U.S. at 519).

State of Washington must be appropriately considered by EPA, as the federal agency “bound . . . to discharge the federal government’s trust,”<sup>187</sup> when it approves Washington’s revised WQS. EPA must ensure the revised standards accord with the long-standing rights of Native Americans affirmed by legally binding treaties. Similar “right to fish” treaty provisions are found throughout the treaties rendered between the United States and the Native American Tribes of the Pacific Northwest in the mid-1800s.<sup>188</sup> For example, the “Treaty of Point Elliott provides that ‘the right of taking fish at usual and accustomed grounds and stations is further secured to said Indians in common with all citizens of the Territory.’”<sup>189</sup> Courts have since “interpreted these provisions to secure to the tribes a permanent, enforceable right to take fish throughout their fishing areas for ceremonial, subsistence and commercial purposes.”<sup>190</sup>

Tribal reservation of the right to fish was at the heart of treaty negotiations from the start. In fact, maintenance of the essential right and fish resources was considered of the utmost importance. “[W]hile the tribes ceded vast expanses of their homelands through treaties with the United States, they nonetheless took pains to reserve their right to fish—that is, to continue to be fishing peoples, to take care of and be cared for by the fish as they always had.”<sup>191</sup> Historical evidence clearly demonstrates that “protections for the Pacific Northwest tribes’ pre-existing fishing rights were crucial to obtaining tribes’ assent to the treaties.”<sup>192</sup>

Washington courts have taken this recognized tribal treaty right to fish even farther.<sup>193</sup> In the 1980 case of *United States v. Washington*, the Federal District Court for the Western District of Washington “held that ‘implicitly incorporated in the treaties’ fishing clause is the right to have the fishery habitat protected from man-made despoliation . . . The most fundamental prerequisite to exercising the right to fish is the existence of fish to be taken.’”<sup>194</sup> Though the case was later vacated by the Ninth Circuit on jurisdictional grounds, a second case was brought in 2001—the “Culverts case.”<sup>195</sup> In 2007 the District Court again ruled in favor of upholding the

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187. NEJAC FISH CONSUMPTION & ENVIRONMENTAL JUSTICE, *supra* note 6, at 129 (citing *Nance*, 645 F.2d at 710; *Payne*, 264 U.S. at 448).

188. O’Neill, *Fishable Waters*, *supra* note 40, at 193–94.

189. *Id.* at 194.

190. *Id.*

191. *Id.* at 193.

192. *Id.* at 195.

193. O’Neill, *Fishable Waters*, *supra* note 40, at 197 (citing *United States v. Washington*, 506 F.Supp. 187, 203 (W.D. Wash. 1980) (Phase II), *vacated on jurisdictional grounds* by *United States v. Washington*, 759 F.2d 1353 (9th Cir. 1985)).

194. *Id.*

195. *Id.*; *United States v. Washington*, 2007 WL 2437166 (W.D. Wash. Aug. 22, 2007).



tribal right to fish in the Culverts case.<sup>196</sup> The Court also held that it was the State's duty to prevent diminishing the salmon runs so essential to that right.<sup>197</sup> The Court's order stated "[t]he Treaties were negotiated and signed by the parties on the understanding and expectation that the salmon runs were inexhaustible and that salmon would remain abundant forever."<sup>198</sup>

The reasoning of the Culverts case can logically be applied to obligate a duty upon EPA and the State to ensure that salmon and other fishery resources are not only in existence, but that they are also fit for human consumption (*i.e.* not contaminated at unsafe levels due to toxic pollution from inadequate WQS).<sup>199</sup> As described by Professor O'Neill:

The point of securing a "robust" fishery, from the tribes' perspectives, is not to have salmon runs to marvel at from a distance. Thus, while the Culverts case dealt with facts presenting impairment of the tribes' rights via depletion of the fish resource, its rationale applies equally to impairment of the tribes' rights via contamination that renders the fish resource unfit as a source of food for tribal fishers, their families, and others to whom they might sell their catch.<sup>200</sup>

The government's trust responsibility toward Indian tribes and the protection of treaty rights can arguably be used to "shield" the government from challenges from polluters.<sup>201</sup> In fact, courts have recently upheld the government's obligation to protect tribal interests and treaty-protected rights to catch and consume fish in multiple cases.<sup>202</sup> For example, in *Paravano v. Babbitt*, in 1995, the Ninth Circuit upheld a federal regulation under the Magnuson-Stevens Act (regulating fishery resources) to protect tribal rights to fish and fish resources based upon the government's trust responsibility to protect tribal treaty rights.<sup>203</sup> Additionally, in 1996, in *Northwest Sea Farms v. U.S. Army Corps of Engineers*, the District Court for the Western District of Washington upheld the Corps' rejection of a fish farming permit due to its potential interference with tribal fisheries that

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196. O'Neill, *Fishable Waters*, *supra* note 40, at 198.

197. *Id.*

198. *Id.* at 201.

199. *Id.* at 265.

200. *Id.* at 265.

201. Wood, *EPA Speech*, *supra* note 44, at 198.

202. *Id.* at 197.

203. *Parravano v. Babbitt*, 70 F.3d 539, 547 (9th Cir. 1995); Wood, *EPA Speech*, *supra* note 44, at 197.

were protected by treaty rights and the government's trust responsibility to protect such rights.<sup>204</sup>

Accordingly, EPA and the State of Washington must consider the long-standing tribal treaty rights to catch and consume fish—fish that are fit for human consumption—as they develop a FCR protective of *all* citizens within the State, including the 104,000 tribal members of the State's 29 federally recognized sovereign tribal nations.<sup>205</sup> EPA has a strong obligation to ensure tribal treaty rights to fish—and to eat fish without being subjected to unsafe levels of contaminants—as the agency itself must uphold the due federal trust responsibility on behalf of the United States to protect these tribal rights. As summarized by Professor O'Neill, a relevant FCR, from the tribal perspective, is not simply a matter of policy.<sup>206</sup> “Tribes reserved a right to take fish—fish fit for human consumption—not a right to be faced with a false “choice” of consuming fish with a stiff dose of carcinogens or curtailing their fish consumption and all that this would mean.”<sup>207</sup> Tribal treaty rights, therefore, mandate that Washington and EPA ensure a protective FCR is established.

### C. *The Public Trust Doctrine*

Yet another approach that may arguably be utilized to force Washington's adoption of a protective FCR has its roots in the ancient concept of the state's responsibility to hold and protect natural resources, such as water and fish, in public trust for the benefit of both current and future generations. As the “first and oldest environmental principle of this nation,” the Public Trust Doctrine (“PTD”) “is such a fundamental doctrine of government that it precedes this country, reaching back, literally, to Justinian times.”<sup>208</sup> The doctrine has been traced to “the ancient societies of Europe, the Orient, Africa, Muslim countries, and Native America.”<sup>209</sup> As described by Charles Wilkinson, “[t]he real headwaters of the [PTD] . . . arise in rivulets from all reaches of the basin that holds the societies of the world.”<sup>210</sup> Professor Wood states: “as the world has understood since time

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204. Northwest Sea Farms v. U.S. Army Corps of Eng'rs, 931 F. Supp. 1515, 1520 (W.D. Wash. 1996); Wood, *EPA Speech*, *supra* note 44, at 197.

205. ECOLOGY TECHNICAL SUPPORT DOCUMENT, *supra* note 4, at 18.

206. O'Neill, *Fishable Waters*, *supra* note 40, at 269.

207. *Id.*

208. Wood, *EPA Speech*, *supra* note 44, at 180 (citing Charles F. Wilkinson, *The Headwaters of the Public Trust: Some Thoughts on the Source of the Traditional Doctrine*, 19 ENVTL. L. 425, 429 (1989)).

209. *Id.*

210. *Id.*

immemorial, a government that fails to protect its natural resources sentences its people to misery.”<sup>211</sup>

As “the only enduring institution with control over human actions that affect natural resources,” courts characterize the state government as the “trustee of these resources.”<sup>212</sup> This means that the state “government holds the corpus—the waters and wildlife—as its property that it must manage for the citizens, the beneficiaries.”<sup>213</sup>

The PTD “has always existed in the State of Washington.”<sup>214</sup> Washington courts first formally acknowledged the PTD in 1901 and used it as the basis for protecting the public’s rights to use the State’s navigable waterways and to fish the State’s waters.<sup>215</sup> PTD principles are recognized in Washington’s Constitution, as well as in a variety of statutory provisions.<sup>216</sup> For example, Washington’s Water Code states: “‘It is the policy of the state to promote the use of the public waters in a fashion which provides for obtaining maximum net benefits arising from . . . the retention of waters within streams and lakes in sufficient quantity and *quality* to protect instream and natural values and rights.’ . . . ‘Subject to existing rights all waters within the state belong to the public.’”<sup>217</sup>

Washington case law is minimal regarding the application of the PTD to a situation such as we have here—an instance in which the state is not attempting to alienate the public trust resource at issue.<sup>218</sup> Three cases are particularly helpful in understanding the application of Washington’s PTD to a situation involving State regulatory control of a public trust resource.<sup>219</sup>

First, in *Weden v. San Juan County*, the Washington Supreme Court used a “heightened degree of judicial scrutiny” to analyze a case involving a county ordinance prohibiting motorized-watercraft use on a public waterway in order to protect resources held within the public trust (*e.g.*

211. *Id.*

212. *Id.* at 178.

213. Wood, *EPA Speech*, *supra* note 44, at 178.

214. Robin Kundis Craig, *A Comparative Guide to the Western States’ Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust*, 37 *ECOLOGY L.Q.* 53, 192 (2010) [hereinafter *Comparative Guide*].

215. Patrick Redmond, *The Public Trust in Wildlife: Two Steps Forward, Two Steps Back*, 49 *NAT. RESOURCES J.* 249, 295 (2009) (citing *New Whatcom v. Fairhaven Land Co.*, 64 P. 735 (Wash. 1901)).

216. Craig, *Comparative Guide*, *supra* note 214, at 188–91.

217. *Id.* at 190 (citing WASH. REV. CODE §§ 90.03.005–90.03.611) (emphasis added).

218. See generally Ivan M. Stoner, Comment, *Leading a Judge to Water: In Search of a More Fully Formed Washington Public Trust Doctrine*, 85 *WASH. L. REV.* 391 (2010) [hereinafter *Leading a Judge to Water*] (analyzing the question of what limits Washington’s PTD imposes on the State’s conduct when that conduct does not transfer control of public trust land to private parties but still impacts the *jus publicum*).

219. *Id.* at 407.

endangered and threatened wildlife, the public's right to access and use navigable waters, etc.).<sup>220</sup> The court upheld the county ordinance at issue, holding that it did not violate the PTD.<sup>221</sup> By balancing the benefits against the consequences of the ordinance, the court found that the conservation and wildlife protection benefits, as well as increased public access benefits—both of which are also PTD-protected rights—justified the ban, even though the ordinance negatively impacted the PTD-protected right of recreational use by motorized watercraft users.<sup>222</sup> Importantly, “[t]he court concluded that it would stretch the [PTD] too far to protect an activity that ‘actually harms and damages’ the jus publicum,” or public resources.<sup>223</sup>

Second, in *Washington State Geoduck Harvest Association v. Washington State Department of Natural Resources*, a State appellate court upheld the Department's regulation of the harvesting of commercial geoducks—a PTD-protected resource living within the beds and shorelines of the State's public trust lands—because it “promoted sustainable use and natural regeneration of the resource.”<sup>224</sup> The court found these results to be directly aligned with the values traditionally protected by the PTD—fishing, commerce, and recreation—and therefore, the regulation at issue was a valid exercise of the State's regulatory power, fitting well within the confines of the doctrine.<sup>225</sup>

Finally, in *Citizens for Responsible Wildlife Management v. State*, a Washington appellate court ruled against citizens in a suit challenging state hunting regulations under the PTD.<sup>226</sup> Although the court did not find the citizens' PTD challenge viable, Chief Judge Christine Quinn-Brintnall issued a remarkable concurrence, arguing “that no weighing of interests could sufficiently represent the enduring nature of the public trust, and that courts should strike down any law that would result in ‘unacceptably high’ damage to a public trust resource.”<sup>227</sup> In sum, these cases recognize that the courts will at least analyze the validity of State and agency actions involving the regulation of public trust resources under the PTD.<sup>228</sup>

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220. *Id.* at 408 (quoting *Weden v. San Juan Cnty.*, 958 P.2d 273, 283 (Wash. 1998)).

221. *Id.* (referencing *Weden*, 958 P.2d at 283–84).

222. *Id.* at 409 (referencing *Weden*, 958 P.2d at 283–84).

223. Stoner, *Leading a Judge to Water*, *supra* note 218, at 409 (referencing *Weden*, 958 P.2d at 284).

224. *Id.* at 410 (referencing *Wash. State Geoduck Harvest Ass'n v. Dep't of Natural Res.*, 101 P.3d 891 (Wash. Ct. App. 2004)).

225. *Id.*

226. *Id.* at 410–11 (referencing *Citizens for Responsible Wildlife Mgmt. v. State*, 103 P.3d 203 (Wash. Ct. App. 2004)).

227. *Id.* at 411 (quoting *Citizens for Responsible Wildlife*, 103 P.3d at 209).

228. Stoner, *Leading a Judge to Water*, *supra* note 218, at 411–12.

Whether this approach can be utilized to force the State to adopt a protective FCR is an open question.

The PTD is widely recognized as a flexible and ever-changing doctrine—in fact, the doctrine has been expanded over the years in Washington to include not only the traditional protections for navigation, commerce, and fishing, but also to include public rights to “boating, swimming, water skiing . . . bathing . . . skating, cutting ice . . . and skin diving.”<sup>229</sup> Courts have described the doctrine as retaining its “undiminished vitality,” stating “[t]he doctrine is not fixed or static, but one to be molded and extended to meet changing conditions and needs of the public it was created to benefit.”<sup>230</sup> It has been further described by courts that “the very purposes of the trust have evolved in tandem with the changing public perception of the values and uses of waterways.”<sup>231</sup>

Despite the PTD’s general flexibility to adapt to changing needs and times, however, Washington courts have limited its applicability.<sup>232</sup> In *Rettkowski v. Department of Ecology*, the Washington Supreme Court stated that the doctrine is not transferable to State agencies and agencies cannot “assume the State’s public trust duties and regulate in order to protect the public trust.”<sup>233</sup> Accordingly, *Rettkowski* stands for the proposition that the PTD is not directly applicable to Ecology’s implementation of the State’s water laws.<sup>234</sup> As such, though an argument may be made to expand the public’s right to fish under the PTD—and thereby the public’s right to consume fish that are safe to eat—an expansion of the PTD’s applicability to Ecology’s regulatory scheme would necessarily be required to force the State to adopt a fully protective FCR utilizing this approach. That said, however, considering the State’s precedence for analyzing state regulatory schemes under the PTD—as evidenced by *Weden*, *Washington Geoduck*, and the *Citizens* case—a novel argument may be made for using the State’s obligations under the PTD to ensure its fishery resources are safe for consumption. Ecology could achieve this duty via the establishment of a protective FCR.

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229. Craig, *Comparative Guide*, *supra* note 214, at 193; *see also* Stoner, *Leading a Judge to Water*, *supra* note 218, at 397 (describing the expansion of Washington’s PTD to protect additional uses and public rights).

230. Stoner, *Leading a Judge to Water*, *supra* note 218, at 397 (quoting *State v. Cent. Vt. Ry., Inc.*, 571 A.2d 1128, 1130 (Vt. 1989)).

231. *Id.*

232. Craig, *Comparative Guide*, *supra* note 214, at 193.

233. *Id.* (citing *Rettkowski v. Dep’t of Ecology*, 858 P.2d 232, 239 (Wash. 1993) (en banc)).

234. *Id.*

D. Title VI of the Civil Rights Act

Another obligation upon the State to force its establishment of a relevant FCR protective of tribal populations during the human health criteria rulemaking underway stems from Title VI of the 1964 Civil Rights Act. Title VI provides that “[n]o person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”<sup>235</sup> Though no private right of action exists to force implementation of Title VI,<sup>236</sup> EPA, as a federal agency providing financial assistance, and the State, as a recipient of federal funds, may justifiably be held liable under the statute and implementing regulations.<sup>237</sup> Generally, the argument is that state agencies receiving federal funds from EPA, “are the governmental bodies responsible for much of the nation’s environmental policy—[e.g.] the enforcement of pollution standards.”<sup>238</sup> If those “federally-funded state agencies create a racially discriminatory distribution of pollution, then a violation of Title VI has occurred and a civil rights lawsuit is warranted.”<sup>239</sup>

Unlike constitutional discrimination claims that require discriminatory intent be shown, claims brought under Title VI can be brought based on a showing of “disparate racial impact.”<sup>240</sup> Supreme Court precedence, including the holdings of *Guardians Association v. Civil Service Commission of New York* and *Alexander v. Choate*, has established that “actions having an unjustifiable, disparate impact on minorities could be redressed through agency regulations designed to implement the purposes of Title VI.”<sup>241</sup> EPA developed its regulations to implement Title VI in 1973, and has since revised them in 1984 and 2000.<sup>242</sup> In relevant part, Section 7.35(a) of EPA’s regulations provide:

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235. HILL, ENVIRONMENTAL JUSTICE: LEGAL THEORY AND PRACTICE, *supra* note 67, at 342.

236. Bell, *Environmental Injustice Posed by Oregon’s Water Quality Standards*, *supra* note 95, at 99 (citing *Alexander v. Sandoval*, 532 U.S. 275, 293 (2001) (holding no private right of action is available to enforce Title VI of the Civil Rights Act disparate-impact regulations)).

237. Michael Fisher, *Environmental Racism Claims Brought Under Title VI of the Civil Rights Act*, 25 ENVTL. L. 285, 317 (1995) [hereinafter *Environmental Racism*].

238. *Id.* at 287.

239. *Id.*

240. *Id.* at 291.

241. *Id.* at 319 (referencing *Guardians Ass’n v. Civil Serv. Comm’n*, 463 U.S. 582 (1983); citing *Alexander v. Choate*, 469 U.S. 287, 293 (1985)).

242. Tseming Yang, *The Form and Substance of Environmental Justice: The Challenge of Title VI of the Civil Rights Act of 1964 for Environmental Regulation*, 29 B.C. ENVTL. AFF. L. REV. 143, 164 (2002).

As to any program or activity receiving EPA assistance, a recipient shall not . . . on the basis of race, color, national origin . . . (2) Provide a person any service, aid or other benefit that is different, or is provided differently from that provided to others under the program . . . [and] (7) In administering a program or activity receiving Federal financial assistance in which the recipient has previously discriminated on the basis of race, color, sex, or national origin, the recipient shall take affirmative action to provide remedies to those who have been injured by the discrimination.<sup>243</sup>

In fact, EPA “specifically incorporate[d] section [1313] of the CWA, which includes the development of [WQS]” into its agency Title VI regulations.<sup>244</sup> EPA’s Title VI regulations are applicable to “all applicants for, and recipients of, EPA assistance in the operation of programs or activities receiving such assistance.”<sup>245</sup>

As applied here—the State’s development of a non-discriminatory and equally protective FCR—a challenge under EPA’s Title VI regulations is plausible. As noted previously, the CWA is a form of cooperative federalism, in which the State runs an approved CWA program, but gains assistance and oversight from EPA. This assistance derives in the form of “financial assistance,” through grants that have historically been given to the State from the federal government for construction and maintenance of sewage treatment systems, and today through funds in the state-revolving fund program.<sup>246</sup> Thus, the State is arguably subject to compliance with EPA’s Title VI regulations and EPA arguably has a duty to ensure that the State does not discriminate against its Native peoples under Title VI because the State receives “financial assistance” from the federal agency to implement its CWA program.<sup>247</sup> The State’s establishment of an FCR within its WQS revision is clearly part of its federally approved CWA program. As such, EPA should force the State to adopt a FCR during the human health criteria rulemaking that ensures the State’s tribal populations, based “on the ground of race, color, or national origin,” are not “subjected to discrimination” under the state-administered CWA “program . . . receiving Federal financial assistance.”<sup>248</sup>

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243. Nondiscrimination in Programs Receiving Federal Assistance from the Environmental Protection Agency, 40 C.F.R. 7.35 (1984), available at <http://www.epa.gov/ocr/docs/40p0007.pdf>.

244. *Id.* at 3.

245. *Id.* at 1.

246. 33 U.S.C. § 1381 (2012).

247. HILL, ENVIRONMENTAL JUSTICE: LEGAL THEORY AND PRACTICE, *supra* note 67, at 342.

248. *Id.*

Additionally, EPA's Title VI regulations mandate that the State cannot provide a benefit that affects some people—based on race, color, or national origin—differently than others.<sup>249</sup> Considering the fact that the State's FCR provides a different benefit to members of the general population than to Native Americans who face disproportionately higher cancer risks, such a prohibited “different benefit” is arguably being provided by the State. Further, as the State has known its FCR has disproportionately subjected its Native population to increased cancer since at least 1999, the State should justifiably be forced to implement affirmative action to remedy the history of injustices its Native peoples have faced due to an inadequate FCR under Section 7.35(a)(7).<sup>250</sup> Accordingly, the Title VI approach may prove a viable means to force the State to adopt a FCR protective of *all* of the State's inhabitants—tribal diets included.

#### *E. The Equal Protection Clause of the 14th Amendment*

A final approach for ensuring the State adopts a protective FCR, and therefore does not discriminate against its Native peoples, utilizes the Equal Protection Clause (“EPC”) of the United States Constitution. This anti-discriminatory law approach utilizes the EPC of the 14th Amendment to hold persons liable for environmental justice discrimination. The EPC states “no state shall ‘deny to any person within its jurisdiction the equal protection of the laws,’” and requires that any classification based on race be narrowly tailored to meet a compelling government interest.<sup>251</sup> The EPC approach is difficult to argue, however, as the law requires proof of intent to discriminate.<sup>252</sup>

As the Supreme Court held in *Washington v. Davis*, plaintiffs bringing an EPC challenge must prove the necessary element of intentional discrimination by the government actor.<sup>253</sup> Though the Court later held in *Village of Arlington Heights v. Metropolitan Housing Development Corporation* that such discriminatory intent could be proven by circumstantial evidence, reviewing courts have demanded a high burden of

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249. Nondiscrimination in Programs Receiving Federal Assistance from the Environmental Protection Agency, *supra* note 242, at 11.

250. O'Neill, *Fishable Waters*, *supra* note 40, at 234–35 (stating Ecology knew that the State's FCR of 6.5 grams/day was inadequate to protect tribal peoples as early as 1999).

251. HILL, ENVIRONMENTAL JUSTICE: LEGAL THEORY AND PRACTICE, *supra* note 67, at 269.

252. Fisher, *Environmental Racism*, *supra* note 237, at 303–04.

253. *Id.* at 303 (referencing *Washington v. Davis*, 426 U.S. 229 (1976)).



proof, and as a result, no environmental challenge under the EPC has yet prevailed.<sup>254</sup>

As applied here, however, an argument may justifiably be made that the discriminatory intent required under an EPC violation is readily apparent. Considering that the State has ample data and information evidencing that its Native American population is disproportionately impacted by an inadequate FCR, the intent to discriminate against this subpopulation may, potentially, be proven. Accordingly, the State will need to prove its decision to disproportionately expose a race and culture of its population is “narrowly tailored to meet a compelling government interest.”<sup>255</sup> As this is a high hurdle to achieve, if the State chooses to adopt a weak FCR not protective of its tribal peoples, the State must consider the possibility that an EPC allegation may justifiably be brought against those involved, as its action may plausibly constitute the prohibited intentional discrimination forbidden by the 14th Amendment. Accordingly, though difficult, the EPC of the 14th Amendment may also provide a successful mechanism to force the State to adopt a FCR protective of all citizens, tribal peoples included.

#### CONCLUSION

*People need to understand that the salmon is part of who the Nez Perce people are. It is just like a hand that is part of your body.*

—Del White, Nez Perce<sup>256</sup>

Catching and eating fish is vital to Washington’s Native peoples. Accordingly, Washington must take the opportunity to protect this essential resource, and the culture and way of life of its Native peoples. To do this, Washington should adopt a protective FCR during the human health criteria rulemaking currently underway. Though industry pressure is seemingly impossible to overcome, the legal mandates and obligations placed upon the State and EPA are strong enough to overcome the high hurdles weighing against such progress. The State must consider that “[e]very day that federal and state agencies permit a 6.5 grams/day-driven standard to remain in force, they leave in place a *de facto* ceiling on safe fish consumption.”<sup>257</sup> These agencies are thus conditioning native peoples’ “right to take fish . . .

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254. *Id.* at 303–04 (referencing *Vill. of Arlington Heights v. Metro. Hous. Dev. Corp.*, 429 U.S. 252 (1977)).

255. *Id.*

256. O’Neill, *Fishable Waters*, *supra* note 40, at 212 (quoting DAN LANDEED & ALLEN PINKHAM, *SALMON AND HIS PEOPLE: FISH AND FISHING IN NEZ PERCE CULTURE* 156 (1999)).

257. *Id.* at 269.

in excess of this amount on their 'willingness' to also take in toxicants at levels that have been deemed hazardous and unacceptable by these agencies."<sup>258</sup> Namely, "once tribal members eat more than twelve fish meals a year, they do so at their own peril."<sup>259</sup>

The importance of a protective outcome is clear and the real consequences of maintaining an inadequate FCR are apparent:

*It is regulatory allowance to poison a people.* That choice may be deeply hidden in all sorts of technical jargon, terms that are simply meaningless to the average American. In real human terms, however, it means you are consigning tribal people to ingesting poisons such as mercury and DDT and PCBs and 89 other toxins and pollutants that are now present in the fish they eat.<sup>260</sup>

With this rulemaking, Washington has not only the opportunity to become a national leader in protecting its water and fishery resources, and in showing the country and the world that it cares for all of its citizens—tribal populations included—but it also has the legal obligation to do so. EPA must not let Washington bow to industry desires, but must force the State to consider the environmental justice issue it is directly faced with by approving a revised FCR protective of all of the State's citizens or establishing such upon the State's failure to do so. In sum, Washington must take this opportunity it has before it to protect its peoples and adopt a FCR protective of human health and cultural ways of living during the human health criteria rulemaking underway.

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258. *Id.*

259. *Id.*

260. Wood, *EPA Speech*, *supra* note 44, at 189 (emphasis added).