ESTABLISHING CAUSATION IN PRIVATE PARTY CLIMATE CHANGE SUITS: CORRECTING THE MISTAKES OF *WASHINGTON ENVIRONMENTAL COUNCIL V. BELLON*

BY

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The Ninth Circuit Court of Appeals's recent decision in Washington Environmental Council v. Bellon *dealt a heavy blow to the ability of private parties to establish standing based on climate change-related injuries. Specifically, the decision established a "particularly daunting" bar for such parties to demonstrate the causation prong of traditional Article III standing. First, the Ninth Circuit distinguished the Supreme Court's preeminent climate change decision,* Massachusetts v. EPA, *on grounds that private parties were not entitled to "special solicitude." Second, the Ninth Circuit implied that as a result, private parties were not able to demonstrate causation based on a theory of contribution. Third, the Ninth Circuit held that even if private parties were entitled to rely on contribution, they would have to demonstrate a "meaningful contribution" to global greenhouse gas concentrations, which the Ninth Circuit implied was equal to six percent of global carbon dioxide emissions. The collective impact of these interpretations led Circuit Judge Gould, writing in dissent from the Ninth Circuit's order denying rehearing en banc, to conclude that the effect of* Washington Environmental Council v. Bellon *is to effectively shut the door on the use of citizen suits to address climate change.*

This Chapter argues that the Ninth Circuit's basis for these three conclusions was unfounded, and therefore concludes that the Ninth Circuit incorrectly analyzed the element of causation. Moving forward, however, this Chapter notes that Washington Environmental Council v. Bellon *will pose a difficult barrier for parties of all types to establish causation based on climate change-related injuries.*

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I. INTRODUCTION

As the Intergovernmental Panel on Climate Change reported recently in its Fifth Assessment Report, not only is global warming "unequivocal," but it is also "*extremely likely*" that human influence has been the dominant cause of this global temperature rise since the mid-twentieth century.[1] Moreover, the effects of temperature rise—such as melting ice and snow, rising sea levels, changing ocean ecology, and intensifying weather events—are not merely hypothetical.[2] They are perceptible and quantifiable.[3] In the face of these changing conditions, which have collectively been dubbed "the most pressing environmental challenge of our time,"[4] both governmental agencies and courts have begun to grapple with the difficulties of regulating greenhouse gas emissions.[5]

In the United States, one staple environmental enforcement tool that has recently garnered judicial attention in the context of climate change is the citizen suit.[6] Statutory citizen suit provisions empower citizens as private attorneys general to bring enforcement actions against either a party alleged to be in violation of the individual statute, or an administrative agency

1 INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2013: THE PHYSICAL SCIENCE BASIS: SUMMARY FOR POLICY MAKERS 17 (Thomas F. Stocker et al. eds., 2013), *available at* https://www.ipcc.ch/report/ar5/wg1/ (emphasis in original). The term "extremely likely" is used within the Intergovernmental Panel on Climate Change's (IPCC) report to represent an assessed likelihood of 95%–100%. *Id.* at 4 n.2.

2 *See* CHRIS WOLD, DAVID HUNTER & MELISSA POWERS, CLIMATE CHANGE AND THE LAW 20–32 (2d ed. 2013) (cataloguing the observed changes to the climate and ecosystem).

3 *Id.*

4 Mass. v. EPA, 549 U.S. 497, 505 (2007) (quoting Petition for Writ of Certiorari, at 23, Mass. v. EPA, 549 U.S. 497 (2007) (No-1120), 2006 WL 558353 (2006) (internal quotation marks omitted)).

5 *See, e.g.*, *id.* at 517, 527 (tackling issues of whether EPA has the power to regulate greenhouse gases, and whether the effects of climate change are enough to provide a petitioner with standing); Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31,514 (June 3, 2010) (codified at 40 C.F.R. pts. 51, 52, 70, 71) ("EPA is tailoring the applicability criteria that determine which stationary sources and modification projects become subject to permitting requirements for greenhouse gas (GHG) emissions under the Prevention of Significant Deterioration (PSD) and Title V programs of the Clean Air Act (CAA or Act).").

6 *See, e.g.*, Mass. v. EPA, 549 U.S. at 505 (discussing citizen suit to compel regulation of vehicle greenhouse gas emissions); Wash. Envtl. Council v. Bellon, 732 F.3d 1131, 1135 (9th Cir. 2013) (discussing citizen suit to compel regulation of greenhouse gas emissions from five oil refineries), *reh'g denied*, 741 F.3d 1075 (2014).

alleged to have failed to perform a nondiscretionary duty.[7] The purpose of citizen suits is to "spur" and "supplement" governmental enforcement actions, and both the Environmental Protection Agency (EPA) and the Department of Justice openly support citizen suits as a means to augment federal enforcement efforts.[8] Historically, citizen suits have grown in prominence over time and are now considered "the engine that propels the field of environmental law."[9] This has led some environmental law experts to describe citizen suits as "[o]ne of Congress's most important innovations."[10] However, citizen suits are also controversial, especially in states trying to create or maintain favorable business climates.[11] During the debate on whether to include the original citizen suit provision in the Clean Air Act,[12] critics argued that citizen suits would result in a multiplicity of lawsuits that would overload the courts and interfere with the Executive's ability to carry out its traditional enforcement duties.[13] More recently, critics have characterized citizen suits as an "off-budget entitlement program for the environmental movement."[14]

The Ninth Circuit Court of Appeals's recent decision in *Washington Environmental Council v. Bellon* (*Bellon*)[15] dealt a heavy blow to the potential viability of citizen suits in the climate change context.[16] In *Bellon*, the Ninth Circuit held that a collection of private environmental groups (WEC) lacked Article III standing to compel the Washington State Department of Ecology to regulate greenhouse gas emissions from the state's five oil refineries under the Clean Air Act.[17] Specifically, the Ninth Circuit held that WEC failed to establish the causation and redressability prongs of the three-part standing analysis laid out by the Supreme Court in

7 *See* Jeannette L. Austin, *The Rise of Citizen-Suit Enforcement in Environmental Law: Reconciling Private and Public Attorneys General*, 81 NW. U. L. REV. 220, 220–21 (1987) (describing citizen suits).

8 David R. Hodas, *Enforcement of Environmental Law in A Triangular Federal System: Can Three Not Be A Crowd When Enforcement Authority Is Shared by the United States, the States, and Their Citizens?*, 54 MD. L. REV. 1552, 1619–20 (1995) (quoting S. REP. NO. 99-50, at 28 (1985) (internal quotation marks omitted)).

9 James R. May, *Now More Than Ever: Trends in Environmental Citizen Suits at 30*, 10 WIDENER L. REV. 1, 7–8 (2003) (presenting data to show that between 1973 and 2002 "citizens accounted for more than 1,500 reported federal decisions in civil environmental cases," and that between 1993 and 2002, roughly 75% of environmental cases brought were citizen suits).

10 CRAIG N. JOHNSTON, WILLIAM F. FUNK & VICTOR B. FLATT, LEGAL PROTECTION OF THE ENVIRONMENT 508 (3d ed. 2010).

11 Hodas, *supra* note 8, at 1620.

12 42 U.S.C. §§ 7401–7671q (2006).

13 *See* Natural Res. Def. Council v. Train, 510 F.2d 692, 726–27 (D.C. Cir. 1974) (recounting Senator Hruska's objection to the inclusion of the citizen suit provision in the Clean Air Act).

14 Michael S. Greve, *The Private Enforcement of Environmental Law*, 65 TUL. L. REV. 339, 341 (1990).

15 732 F.3d 1131 (9th Cir. 2013), *reh'g denied*, 741 F.3d 1075 (9th Cir. 2014).

16 *Cf. id.* at 1135 (holding that plaintiffs lacked Article III standing to bring the suit for failure to satisfy causality between the defendants' greenhouse gas emissions and climate change).

17 *Id.*

Lujan v. Defenders of Wildlife (*Defenders of Wildlife*).[18] In so doing, the Ninth Circuit distinguished the Supreme Court's preeminent climate change decision, *Massachusetts v. EPA* (*Mass. v. EPA*),[19] on grounds that Massachusetts' sovereign status and procedural interest entitled it to "special solicitude."[20] The Ninth Circuit held that because WEC could not avail itself of similar special solicitude, it could not rely on the Supreme Court's standing analysis from *Mass. v. EPA*.[21] The practical effect of this decision, according to Circuit Judge Gould, who dissented from the Ninth Circuit's decision to deny en banc review, was to "essentially read private citizens out of the equation when it comes to using courts to address global warming."[22] And while Circuit Judge Smith, who drafted the original opinion, countered that the decision did nothing to restrict environmental litigation beyond the limitations already established by the Supreme Court,[23] even the victorious party expressed reservations about the ramifications of *Bellon* on future private party lawsuits.[24]

This Chapter analyzes the element of causation within the Ninth Circuit's standing analysis in *Bellon*, and more generally attempts to understand the decision's wider ramifications for climate change litigation. Part II outlines established Article III standing jurisprudence and provides relevant case law particularly regarding the element of causation. Part III argues that the Ninth Circuit's analysis in *Bellon*: 1) misinterpreted the Supreme Court's application of special solicitude in *Mass. v. EPA* and therefore erroneously distinguished its causation analysis; 2) applied a causal chain analysis that inappropriately required WEC to show that the specific greenhouse gases from Washington's oil refineries caused—as opposed to contributed to—WEC's alleged injuries; and 3) misinterpreted the Supreme Court's reference to "meaningful contribution" in *Mass. v. EPA* to be much higher than the Supreme Court intended. As such, Part IV concludes that the Ninth Circuit incorrectly analyzed the causation element in *Bellon*. However, Part IV also notes that, moving forward, *Bellon* will make it incredibly difficult for parties of all types to address climate change in the legal arena.

18 Lujan v. Defenders of Wildlife, 504 U.S. 555, 560–61 (1992); *Bellon*, 732 F.3d at 1147.

19 549 U.S. 497 (2007).

20 *Bellon*, 732 F.3d at 1144–45.

21 *Id.* at 1145.

22 Wash. Envtl. Council v. Bellon, 741 F.3d 1075, 1079 (9th Cir. 2013) (order denying reh'g en banc) (Gould, C.J., dissenting).

23 *Id.* at 1078.

24 Writing in opposition to en banc review, the State of Washington said that "[t]he panel may want to rehear the matter to determine whether its decision contains unnecessarily broad dicta" and asserted that "[t]he panel's opinion . . . includes dicta suggesting that it might be difficult for private plaintiffs ever to establish causation in a climate change lawsuit." *Id.* at 1081 n.1 (internal quotation marks omitted).

II. BACKGROUND FACTS AND LEGAL DOCTRINES

Modern standing jurisprudence derives its authority from Article III of the Constitution.[25] Although Article III does not explicitly refer to standing, Section Two limits federal court jurisdiction to "cases" or "controversies."[26] In *Defenders of Wildlife*, the Supreme Court consolidated its previous case law interpreting this limitation to require that a plaintiff demonstrate: 1) the plaintiff has suffered an "injury in fact" that is a) concrete and particularized and b) actual or imminent, not conjectural or hypothetical; 2) there is a causal connection between the injury and the conduct complained of; and 3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.[27] A plaintiff must support each of these elements with the degree of evidence required at the successive stages of litigation.[28] As such, pleadings may rely on general factual allegations, but a response to a summary judgment motion requires more "specific facts."[29] Associations have "standing to bring suit on behalf of [their] members when": 1) "members would otherwise have standing to sue in their own right;" 2) "the interests at stake are germane to the organization's purpose;" and 3) "neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit."[30] In essence, the purpose of the standing analysis is to determine whether "a party has a sufficient stake in an otherwise justiciable controversy to obtain judicial resolution of that controversy."[31]

The most controversial of the *Defenders of Wildlife* elements with regard to private party climate change litigation is causation.[32] Prior to 1970, courts did not require plaintiffs to establish causation.[33] In fact, earlier courts interpreted the Supreme Court's *Federal Communications Commission v. Sanders Bros. Radio Station*[34] line of cases as recognizing the constitutional legitimacy of statutory causes of action for private parties based solely on protecting the public interest.[35] However, this changed drastically in the 1970s primarily in response to the passage of a wave of environmental

25 Friends of the Earth, Inc. v. Laidlaw Envtl. Servs., 528 U.S. 167, 180 (2000). The Supreme Court also noted that standing encompasses prudential considerations, which it attributed to judicial self-government, but in doing so it maintained that Article III standing is the "core component." *Defenders of Wildlife*, 504 U.S. at 560.

26 U.S. CONST. art. III, § 2.

27 *Defenders of Wildlife*, 504 U.S. at 560.

28 *Id.* at 561.

29 *Id.* (quoting Fed. R. Civ. P. 56(e)).

30 *Laidlaw Envtl. Serv.*, 528 U.S. at 181 (citing *Hunt v. Washington State Adver. Comm'n*, 432 U.S. 333, 343 (1977)).

31 Sierra Club v. Morton, 405 U.S. 727, 731–32 (1972).

32 Bradford Mank, *Standing for Private Parties in Global Warming Cases: Traceable Standing Causation Does Not Require Proximate Causation*, 2012 MICH. ST. L. REV. 869, 876 (2012) (citing Mary Kathryn Nagle, *Tracing the Origins of Fairly Traceable: The Black Hole of Private Climate Change Litigation*, 85 TUL. L. REV. 477, 480–81 (2010)).

33 Nagle, *supra* note 32, at 483.

34 309 U.S. 470 (1940).

35 *See* Elizabeth Magill, *Standing for the Public: A Lost History*, 95 VA. L. REV. 1131, 1139 (2009).

statutes, the majority of which included "citizen suit" provisions.[36] Perceiving that the American economic system was under siege, the Supreme Court, and in particular Justice Lewis Powell, authored a series of decisions that significantly limited Congressional power to authorize citizens to sue federal agencies on behalf of the public at large.[37] In one such decision, *Simon v. Eastern Kentucky Welfare Rights Organization*, the Supreme Court required that the alleged injury "fairly can be traced to the challenged action of the defendant, and not . . . th[e] result[] [of] the independent action of some third party not before the court."[38] The Supreme Court subsequently transformed this wording into the causation prong of contemporary standing jurisprudence.[39]

In the Supreme Court's preeminent climate change decision, *Mass. v. EPA*, the Court held that the Commonwealth of Massachusetts was able to establish causation with regard to its challenge to an EPA order denying a petition for rulemaking to regulate greenhouse gas emissions from motor vehicles under the Clean Air Act.[40] Specifically, the Supreme Court noted that EPA did not dispute the causal relationship between greenhouse gases and global warming, and addressed only EPA's argument that greenhouse gases from new motor vehicles were too insignificant to establish causation.[41] The Supreme Court dismissed this argument, explaining that, "[a]gencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop."[42] Instead, the Supreme Court held that evidence that domestic automobiles were responsible for more than 6% of worldwide carbon dioxide emissions was sufficient to show that domestic automobiles constituted a "meaningful contribution" to global greenhouse gas concentrations.[43]

Controversially, however, the Supreme Court introduced its standing analysis in *Mass. v. EPA* by noting that Massachusetts was entitled to "special solicitude," implying that Massachusetts had a lower burden for establishing standing.[44] The Supreme Court based its recognition of special solicitude on two factors: a procedural right and a quasi-sovereign interest.[45] However, the Supreme Court's subsequent application of special solicitude was relatively indefinite and the extent to which the concept affected the Supreme Court's standing—and in particular, causation—analysis remains unsettled.[46]

36 *Nagle*, supra note 32, at 484–86.

37 *Id.* at 486–87, 488–91 n.52.

38 426 U.S. 26, 41–42 (1976).

39 *Defenders of Wildlife*, 504 U.S. at 560–61.

40 Mass. v. EPA, 549 U.S. 497, 523–25 (2007).

41 *Id.* at 523.

42 *Id.* at 524.

43 *Id.* at 524–25.

44 *Id.* at 520.

45 *Id.*

46 See Mank, *supra* note 32, at 882, 886, 915 (arguing that the Supreme Court "was ambiguous about whether the Commonwealth of Massachusetts needed 'special solicitude' to meet the three-part standing test, including causation").

Lower courts have generally split with regard to the question of whether private party plaintiffs can establish causation in the climate change context.[47] Those courts that have found causation—including the Second Circuit in *Connecticut v. American Electrical Power Company Inc.* (*AEP*),[48] and the District of Oregon in *Northwest Environmental Defense Center v. Owens Corning Co.*[49]—have generally held that it is sufficient for plaintiffs to show that greenhouse gas emissions attributable to defendant's action "contribute to" climate change.[50] Those courts that have rejected causation—including the D.C. Circuit in both *Wildearth Guardians v. Salazar*[51] and *Center for Biological Diversity v. United States Department of the Interior*[52] and the Northern District of California in *Native Village of Kivalina v. ExxonMobil Corp* (*Kivalina*)[53]—have generally held that the causal chain has been too attenuated and not supported by sufficient scientific evidence.[54] Furthermore, those courts that reject causation also generally draw a strict distinction between parties that are entitled to special solicitude, and parties that are not.[55] The Ninth Circuit's decision in *Bellon* falls squarely into this latter category.

The Ninth Circuit in *Bellon* held that WEC could not establish causation.[56] The court explained that the causal chain alleged by WEC—linking the defendant's failure to set greenhouse gas emission limits on the state's five oil refineries to WEC's alleged injuries—lacked any support other than "conclusory, generalized statements of 'contribution,' without any plausible scientific or other evidentiary basis."[57] In fact, in a section anticipated to "haunt and infuriate future private plaintiffs filing [greenhouse gas-related] suits,"[58] the Ninth Circuit postulated that the prospects of a private party plaintiff ever establishing a causal nexus in such a case would be a "particularly daunting" task because of the "natural disjunction" between the greenhouse effect and localized injuries.[59]

Furthermore, in holding that WEC was unable to establish causation, the Ninth Circuit distinguished the Supreme Court's causation analysis in

47 *Id.* at 872.

48 582 F.3d 309, 347 (2d Cir. 2009), *rev'd on other grounds*, 131 S. Ct. 2527 (2013).

49 434 F. Supp. 2d 957, 967 (D. Or. 2006).

50 *AEP*, 582 F.3d at 347; *Owens Corning*, 434 F. Supp. 2d at 967.

51 880 F. Supp. 2d 77, 85–86 (D.D.C. 2012), *aff'g*, 738 F.3d 298 (D.C. Cir. 2013).

52 563 F.3d 466, 478–79 (D.C. Cir. 2009).

53 663 F. Supp. 2d 863, 880 (N.D. Cal. 2009), *aff'g*, 696 F.3d 849 (9th Cir. 2012), *cert. denied*, 133 S. Ct. 2390 (2013).

54 *Ctr. for Biological Diversity*, 563 F.3d at 478–79; *Wildearth Guardians*, 880 F. Supp. 2d at 85–86; *Kivalina*, 663 F. Supp. 2d at 877–80.

55 *Ctr. for Biological Diversity*, 563 F.3d at 476–77; Comer v. Murphy Oil USA, Inc., 839 F. Supp. 2d 849, 861 (S.D. Miss. 2012), *aff'g*, 718 F.3d 460 (5th Cir. 2013). *Kivalina*, 663 F. Supp. 2d at 882.

56 *Bellon*, 732 F.3d 1131, 1143 (9th Cir. 2013), *reh'g denied*, 741 F.3d 1075 (9th Cir. 2014).

57 *Id.* at 1142.

58 Bradford C. Mank, *No Article III Standing for Private Plaintiffs Challenging State Greenhouse Gas Regulations: The Ninth Circuit's Decision in Washington Environmental Council v. Bellon*, 63 AM. U. L. REV. 1525, 1570 (2014).

59 *Bellon*, 732 F.3d at 1143.

Mass. v. EPA on the grounds that, unlike the Commonwealth of Massachusetts, WEC lacked the sovereign status and procedural right required for special solicitude.[60] Interestingly, and arguably unnecessarily, the Ninth Circuit went on to infer that even if WEC were entitled to a comparably relaxed standard, WEC could still not establish causation.[61] The Ninth Circuit concluded that the 5.9% of Washington greenhouse gas emissions at issue in *Bellon*, unlike the 6% of global carbon dioxide emissions at issue in *Mass. v. EPA*, did not constitute a meaningful contribution to global greenhouse gas concentrations.[62]

The practical ramifications of the Ninth Circuit's decision in *Bellon* are significant. As one expert in the field of standing has argued, *Bellon* is a potentially "precedent-setting . . . decision . . . mak[ing] future [greenhouse gas related] suits by private parties more difficult."[63] As noted above, Judge Gould concluded that the effect of *Bellon* is to "essentially read private citizens out of the equation when it comes to using courts to address global warming."[64] Such a de facto bar on private citizen involvement in environmental enforcement runs directly contrary to congressional intent.[65] In promulgating the foundational environmental statutes, Congress recognized that government enforcement alone would be insufficient to ensure that the goals of the statutes were met.[66] Given the constant flow of environmental law violations and limited governmental resources, it is unreasonable to assume that state and federal regulatory authorities could engage in the inspections and enforcement measures necessary to ensure adequate compliance.[67] Accordingly, Congress included citizen suit provisions as a means to ensure that "if the Federal, State, and local agencies fail to exercise their enforcement responsibility, the public is provided the right to seek vigorous enforcement action."[68] Therefore, it is not a difficult leap to acknowledge that by limiting the viability of citizen suits in the climate change context, *Bellon* will have drastic effects on society's ability to effectively regulate greenhouse gases.

60 *Id.* at 1145.

61 *Id.*

62 *Id.* at 1145–46.

63 Mank, *supra* note 58, at 1531.

64 Wash. Envtl. Council v. Bellon, 741 F.3d 1075, 1079 (9th Cir. 2013) (denying reh'g en banc).

65 *See* Anuradha Sivaram, *Why Citizen Suits Against States Would Ensure the Legitimacy of Cooperative Federalism Under the Clean Air Act*, 40 ECOLOGY L.Q. 443, 458–59 (2013) (discussing congressional intent for citizen enforcement provisions of the Clean Air Act "to be read broadly and to create opportunities for widespread citizen participation in environmental enforcement").

66 Hodas, *supra* note 8, at 1555.

67 *Id.* at 1559–60; Richard Lazarus, Symposium Discussion, *Panel II: Public vs. Private Environmental Regulation*, 21 ECOLOGY L.Q. 431, 472 (1994).

68 S. REP. NO. 92-414, at 64 (1971).

III. THE NINTH CIRCUIT'S DECISION THAT WEC FAILED TO ESTABLISH CAUSATION WAS INCORRECT

The Ninth Circuit's causation analysis in *Bellon* was flawed for three reasons. First, the Ninth Circuit misunderstood the Supreme Court's reference to "special solicitude" in *Mass. v. EPA* and erroneously distinguished the Supreme Court's causation analysis.[69] Second, the Ninth Circuit applied an incorrect causal chain analysis that inappropriately required WEC to show that the specific greenhouse gases from Washington's oil refineries caused—as opposed to contributed to—WEC's alleged injuries.[70] Finally, the Ninth Circuit misinterpreted the Supreme Court's reference to "meaningful contribution" to be much higher than the Supreme Court intended.[71]

A. The Ninth Circuit Misinterpreted "Special Solicitude"

In rejecting WEC's reliance on *Mass. v. EPA* as a means to establish causation, the Ninth Circuit in *Bellon* inferred that the Supreme Court's entire standing analysis was reliant on the special solicitude extended to the Commonwealth of Massachusetts.[72] However, such an interpretation of the Supreme Court's treatment of special solicitude not only misunderstands the basis on which the concept was recognized, but also ignores the plain language the Supreme Court used to integrate special solicitude into its opinion.[73] Instead, looking to the actual wording in *Mass. v. EPA*, as well as to the sources from which the Supreme Court drew its authority to recognize special solicitude, it is evident the Supreme Court never intended the concept to have any impact on the causation element of Article III standing.[74]

As judges and academics have noted, the Supreme Court's treatment of special solicitude in *Mass. v. EPA* was relatively muddled.[75] Against a backdrop in which the Supreme Court had never before recognized greater

69 *See infra* Part III.A.

70 *See infra* Part III.B.

71 *See infra* Part III.C.

72 *Bellon*, 732 F.3d 1131, 1145 (9th Cir. 2013) (holding that the Supreme Court's standing analysis from *Mass. v. EPA* was inapplicable because WEC was not entitled to special solicitude), *reh'g denied*, 741 F.3d 1075 (9th Cir. 2014).

73 *See Mass. v. EPA*, 549 U.S. 497, 519–20 (2007) (explaining that Massachusetts has a "stake in protecting its quasi-sovereign interests," which affords the state special solicitude in the Court's standing analysis).

74 *Mass. v. EPA* was the first case in which the Supreme Court recognized special solicitude. Such a distinction is significant and foundational to the concept moving forward because the Supreme Court never explained the effect special solicitude would have on the traditional Article III standing analysis. *Id.*

75 Mank, *supra* note 32, at 882 (explaining that "[a] serious problem with the [*Mass. v. EPA*] decision is that it did not clearly delineate" the extent to which each of the materials cited as foundational for special solicitude affected its implementation); Mass. v. EPA, 549 U.S. at 540 (Roberts, C.J., dissenting) ("It is not at all clear how the Court's 'special solicitude' for Massachusetts plays out in the standing analysis.").

standing rights between litigants,[76] the Supreme Court in *Mass. v. EPA* implied that Massachusetts was entitled to a lowered burden for establishing standing because of its special solicitude.[77] However, after making this introductory distinction, the Supreme Court proceeded through a standing analysis that—especially with regard to causation—failed to make clear the manner in which special solicitude manifested itself.[78]

The omission of any further guidance as to the application of special solicitude has led both judges and scholars to diverge on the manner in which its presence or absence should affect causation analysis.[79] Some, including Judge Gould of the Ninth Circuit, have interpreted the Supreme Court's consideration of special solicitude to be limited to the injury prong of standing analysis.[80] In *Bellon*, however, the Ninth Circuit interpreted the Supreme Court's recognition of special solicitude to have lowered the burden of establishing all three traditional standing prongs.[81] From this assumption, the Ninth Circuit in *Bellon* distinguished the Supreme Court's causation analysis in *Mass. v. EPA* on the grounds that WEC was neither a state nor had a procedural right, and therefore was not entitled to a similar relaxed causation threshold.[82] In fact, citing to a smattering of sources, including a judge's dissent from the denial of a rehearing en banc, a casebook supplement, and a law review article, the Ninth Circuit implied that private parties could never rely on *Mass. v. EPA* since it was easily distinguishable on the ground that it involved state litigants.[83]

However, in so concluding, the Ninth Circuit failed to account for the only paragraph in the Supreme Court's *Mass. v. EPA* decision that directly addressed the implementation of special solicitude.[84] Immediately following the concept's introduction, the Supreme Court noted, "[w]ith [special solicitude] in mind, it is clear that petitioners' submissions as they pertain to Massachusetts have satisfied the most demanding standards of the adversarial process."[85] The Supreme Court then identified two such

76 *See* Bradford C. Mank, *Standing and Future Generations: Does Massachusetts v. EPA Open Standing for Generations to Come?*, 34 COLUM. J. ENVTL. L. 1, at 68–69 (2009) (explaining that *Mass. v. EPA* was the first time the Supreme Court recognized that states have greater standing rights than other litigants pursuant to the parens patriae doctrine).

77 *Mass. v. EPA*, 549 U.S. at 520.

78 *Id.* at 521–27.

79 *See infra* notes 80–81 and accompanying text.

80 Wash. Envtl. Council v. Bellon, 741 F.3d 1075, 1080 (9th Cir. 2013) (order denying reh'g en banc) (Gould, J., dissenting); Nagle, *supra* note 33, at 496.

81 *See Bellon*, 732 F.3d 1131, 1144–45 (9th Cir. 2013) (explaining that special solicitude relaxed the standing requirement for Massachusetts), *reh'g denied*, 741 F.3d 1075 (9th Cir. 2014).

82 *Id.* at 1145.

83 *Id.* (citing Amnesty Int'l USA v. Clapper, 667 F.3d 163, 197 n.2 (2d Cir. 2011) (Livingston, J., dissenting from denial of reh'g en banc)); RICHARD H. FALLON, JR., ET AL., HART AND WECHSLER'S THE FEDERAL COURTS AND THE FEDERAL SYSTEM 146 (6th ed. 2009); Calvin Massey, *State Standing After Massachusetts v. EPA*, 61 FLA. L. REV. 249, 253, 260–68 (2009).

84 Mass. v. EPA, 549 U.S. 497, 521 (2007).

85 *Id.*

standards—immediacy[86] and redressability—and concluded that Massachusetts could satisfy both of them—the implication being that it was due to Massachusetts' special solicitude.[87] The Supreme Court first held, "EPA's steadfast refusal to regulate greenhouse gas emissions presents a risk of harm to Massachusetts that is both 'actual' and 'imminent.'"[88] The Supreme Court next held that there is "a 'substantial likelihood that the judicial relief requested' will prompt EPA to take steps to reduce that risk."[89] Significantly, the Supreme Court omitted any reference to causation.[90] Therefore, there exists a fair inference from the text of the Supreme Court's decision in *Mass. v. EPA* that the Supreme Court only intended special solicitude to affect the injury and redressability prongs of standing analysis, not the causation prong.

The composition of special solicitude strengthens this inference. As the Supreme Court explained in *Mass. v. EPA*, special solicitude is reliant on two factors: a procedural right and a quasi-sovereign interest.[91] Assuming that special solicitude is nothing more than the sum of its parts, it is significant that neither a procedural right nor a quasi-sovereign interest, analyzed individually, affect a plaintiff's ability to establish causation.

First analyzing a procedural right, the Supreme Court made clear in *Defenders of Wildlife* that one "accorded a procedural right to protect his concrete interests can assert that right without meeting all the normal standards for redressability and immediacy."[92] By clearly referencing the other two elements of standing without noting any effect on causation, the Supreme Court made clear it did not intend a procedural right to affect a plaintiff's ability to establish standing causation.

Second analyzing a quasi-sovereign interest, it is enlightening to dissect the Supreme Court's legal support. In recognizing the special position of states as a result of their quasi-sovereign interests, the Supreme Court relied almost exclusively on its prior holding in *Georgia v. Tennessee Copper Co.* (*Tennessee Copper*),[93] which, in turn, relied almost exclusively on its prior decision in *Missouri v. Illinois* (*Missouri I*).[94] "Read together, the *Missouri* [*I*] and *Tennessee Copper* decisions support relaxing the immediacy and redressability portions of the modern standing test," but not the causation

86 As mentioned in Part II, the "injury in fact" element under *Defenders of Wildlife* comprises the two requirements that the injury be "(a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical." *Defenders of Wildlife*, 504 U.S. at 560 (internal quotations and citations omitted). As such, lowering the immediacy standard would affect the injury prong of Article III standing.

87 *See* Mass. v. EPA, 549 U.S. at 520–21 (finding that Massachusetts satisfied the injury requirement with special solicitude "in mind," but not explaining such solicitude's precise effect on the injury analysis).

88 *Id.* at 521 (quoting *Defenders of Wildlife*, 504 U.S. at 560).

89 *Id.* (quoting Duke Power Co. v. Carolina Envtl. Study Grp., 438 U.S. 59, 79 (1978)).

90 *Id.* at 519–21.

91 *Id.* at 520.

92 *Defenders of Wildlife*, 504 U.S. at 572 n.7.

93 206 U.S. 230 (1907).

94 180 U.S. 208 (1901); *Mass. v. EPA*, 549 U.S. at 518–519 (citing *Tennessee Copper*, 206 U.S. at 237); *Tennessee Copper*, 206 U.S. at 237 (citing *Missouri I*, 180 U.S. at 241).

prong.[95] In *Missouri I*, the Supreme Court recognized that states have a parens patriae right to bring suit on behalf of their citizens "if the health and comfort of the inhabitants of a state are threatened."[96] This parens patriae right manifested itself in a relaxed immediacy requirement in which the Supreme Court allowed Missouri to base its injury on the potential—rather than just the actual—risks of discharging Chicago's sewers into the Mississippi River.[97] In *Tennessee Copper*, the Supreme Court built on *Missouri I* and, besides lowering the immediacy requirement,[98] also inferred that Georgia was entitled to a relaxed redressability prong insofar as it brought suit in its parens patriae capacity.[99] The Supreme Court recognized that in joining the union, states "did not renounce the possibility of making reasonable demands on the ground of their . . . quasi-sovereign interests," and therefore concluded that a state could "insist that an infraction [against] them shall be stopped" even if an individual could not sue to do the same.[100] Since states are therefore entitled to greater remedies than are private parties, it follows that states are entitled to a lower redressability standard than are private parties.[101]

As such, the Supreme Court's prior decisions in *Missouri I* and *Tennessee Copper* together indicate that states bringing suit in their parens patriae capacity are entitled to a relaxed standard of proof for the injury and redressability prongs of standing.[102] However, like the Supreme Court's discussion of procedural rights in *Defenders of Wildlife*, it is of considerable relevance that neither decision directly mentioned, nor indirectly implied,

95 *See* Bradford Mank, *Should States Have Greater Standing Rights Than Ordinary Citizens?: Massachusetts v. EPA's New Standing Test for States*, 49 WM. & MARY L. REV. 1701, 1778 (2008).

96 *Missouri I*, 180 U.S. at 241.

97 *See id.* (discussing potential risks of discharging sewer contents into the river).

98 *Tennessee Copper*, 206 U.S. at 238–39 ("We are satisfied, by a preponderance of evidence, that the sulphurous fumes cause *and threaten* damage on so considerable a scale to the forests and vegetable life, if not to health, within the plaintiff State as to make out a case within the requirements of [*Missouri I*].") (emphasis added).

99 Mank, *supra* note 95, at 1776.

100 *Tennessee Copper*, 206 U.S. at 237–38.

101 Mank, *supra* note 95, at 1777.

102 Such an interpretation is consistent with Justice Brennan's concurring opinion in *Alfred L. Snapp & Son, Inc. v. Puerto Rico, ex rel., Barez*, 458 U.S. 592 (1982), onto which Justice Stevens, who later authored the majority opinion in *Mass. v. EPA*, signed. In that concurring opinion, Justice Brennan implied that the majority's specific parens patriae standing analysis applied only when the Supreme Court was exercising its original jurisdiction capacity over cases "in which a State shall be a Party." *Id.* at 611 (Brennan, J., concurring) (citing U.S. CONST. art. III, § 2, cl. 2). In cases originally brought in federal court, however, Justice Brennan implied that state standing would be analyzed in the same manner as private parties, but that states would be entitled to special recognition in meeting these requirements. *Id.* at 611–12 (concluding "at the *very least*, the prerogative of a [s]tate to bring suits in federal court should be commensurate with the ability of private organizations" and "a [s]tate is no ordinary litigant").

that a state party could relax the standard of proof for establishing causation.[103]

Therefore, it is clear not only from the textual language used by the Supreme Court in *Mass. v. EPA*, but also from the sources of authority the Supreme Court relied upon to recognize special solicitude, that the Supreme Court never intended special solicitude to lower the standard required to establish causation. Consequently, in applying special solicitude in *Mass. v. EPA*, it is evident the Supreme Court did not lower the standard required for Massachusetts to demonstrate causation. As a result, the Ninth Circuit's decision to distinguish the Supreme Court's causation analysis in *Mass. v. EPA* on grounds that it applied only to parties entitled to special solicitude was a mistake.

The most straightforward counterargument to this assertion is that the Supreme Court's recognition of special solicitude was merely an attempt by Justice Stevens to persuade Justice Kennedy, a well-recognized proponent of states' rights, to sign on to the opinion.[104] As such, the argument might continue, the majority opinion in *Mass. v. EPA* painted with a broad brush and any attempt to dissect the specific effects of special solicitude misunderstands the manner in which the Supreme Court treated the concept. Such an argument, while plausible, is purely speculative. In the absence of more specific direction from the Supreme Court, the only acceptable basis on which to interpret the Court's intent is to look at the specific words used and the specific cases cited.[105] In doing so, the most logical inference is that the Supreme Court's recognition of special solicitude did not affect its analysis of causation in *Mass. v. EPA*.

B. The Ninth Circuit Analyzed an Incorrect Causal Chain

Once it is apparent the Ninth Circuit in *Bellon* mistakenly distinguished the Supreme Court's causation analysis in *Mass. v. EPA*, it also becomes apparent the Ninth Circuit mistakenly analyzed an inappropriate causal chain. In concluding that WEC could not establish causation, the Ninth Circuit implied that to do so, WEC would have to prove that the specific greenhouse gases emitted from Washington's five oil refineries caused the

103 *See* Lujan v. Defenders of Wildlife, 504 U.S. 555, 560 (1992) (explaining that injury has to be the result of defendant's challenged action and not attributable to a third party); *Tennessee Copper*, 206 U.S. at 237–38 (discussing the power of a state to bring suits apart from the interests of its citizens); Mo. v. Ill., 180 U.S. 208, 241 (1901) (conceding a state is the proper party to address the threatened health and safety of its inhabitants).

104 *See* Dave Owen, *A Few Initial Thoughts on Windsor (and Massachusetts v. EPA)*, ENVIRONMENTAL LAW PROF BLOG (June 26, 2013), http://lawprofessors.typepad.com/environmental_law/2013/06/a-few-initial-thoughts-on-windsor-and-massachusetts-v-epa.html ("It seems fairly likely that Justice Stevens' opinion was written in large part to appeal to Justice Kennedy's concerns.").

105 *See* Otoe–Missouria Tribe of Indians v. N.Y. State Dep't of Fin. Servs., 974 F. Supp. 2d 353, 357–58 (S.D.N.Y. 2013) (noting that tribes, like states, enjoy special solicitude, but then engaging in a traditional standing analysis, including causation).

specific injuries WEC alleged.[106] However, this assumption is incorrect. Instead, following appropriate judicial precedent as laid out in *Mass. v. EPA* and applied correctly in *AEP*, the *Bellon* court should have required WEC to show only 1) that the oil refineries in question constituted a meaningful contribution to global climate change, and 2) a causal link between global climate change and WEC's alleged injuries.[107]

The Supreme Court in *Mass. v. EPA* explicitly recognized that it is acceptable to establish causation in the climate change context based on a modified theory of contribution.[108] In the second sentence of its causation analysis, the Supreme Court noted, "at a minimum . . . EPA's refusal to regulate such emissions 'contributes' to Massachusetts' injuries."[109] The Supreme Court subsequently noted that "[a]gencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop," as well as, "[t]hat a first step might be tentative does not by itself support the notion that federal courts lack jurisdiction to determine whether that step conforms to law."[110] As such, it is evident the Supreme Court believed it unnecessary for a plaintiff to show that specific greenhouse gas sources *caused* the alleged injuries. Instead, the Supreme Court concluded in *Mass. v. EPA* that it was sufficient for plaintiffs to show that the sources in question constituted a "meaningful contribution to greenhouse gas concentrations."[111] Accordingly, the Supreme Court clearly accepted a contribution framework for establishing causation, but qualified it by requiring the contribution to be "meaningful." The effect of this additional requirement is to essentially establish a de minimis threshold below which the Supreme Court believed contributions to be too insignificant to maintain an acceptable causal chain.[112]

Although the Supreme Court did not mention the case by name, such a theory of establishing causation based on contribution has strong roots in the Third Circuit's famous decision, *Public Interest Research Group of New Jersey, Inc. v. Powell Duffryn Terminals, Inc.* (*Powell Duffryn*).[113] In that

106 *See* Wash. Envtl. Council v. Bellon, 732 F.3d 1131, 1143 (9th Cir. 2013) (noting that there existed limited scientific ability to link particular greenhouse gases to localized climate impacts and citing an expert from the intervenor, Western State Petroleum Association, who asserted "it is not possible to quantify a causal link . . . between [greenhouse gas emissions] from any single oil refinery . . . and direct, indirect or cumulative effects on climate change in Washington"), *reh'g denied*, 741 F.3d 1075 (9th Cir. 2014).

107 Mass. v. EPA, 549 U.S. 497, 523–24 (2007); *Bellon*, 732 F.3d at 1145–46 (discussing *Mass. v. EPA*'s "meaningful contribution" standard for causation, but distinguishing that case as limited to a sovereign).

108 *See* Mass. v. EPA, 549 U.S. at 523–24 (rejecting EPA's argument that new motor vehicles' "insignificant" contribution to climate change should preclude a finding of causation).

109 *Id.* at 523.

110 *Id.* at 524.

111 *Id.* at 525.

112 *Cf.* Amigos Bravos v. U.S. Bureau of Land Mgmt., 816 F. Supp. 2d 1118, 1136 (D.N.M. 2011) (describing the *Mass. v. EPA* court's "alternative" causation analysis, which requires a determination of whether a contribution is "a meaningful contribution to global [greenhouse gas] levels," but "[w]here exactly the Court should draw this line is not clear").

113 913 F.2d 64 (3d Cir. 1990), *cert. denied*, 498 U.S. 1109 (1991).

case, the Third Circuit held "[t]he requirement that plaintiff's injuries be 'fairly traceable' to the defendant's conduct does not mean that plaintiffs must show to a scientific certainty that defendant's effluent, and defendant's effluent alone, caused the precise harm suffered by the plaintiffs."[114] The Third Circuit went on to explain that in a multi-polluter context, it was unnecessary to sue every individual discharger of the injury-causing pollutant because the pollution attributable to any individual party could theoretically be shown to cause some part of—i.e., contribute to—the injury suffered.[115]A number of other circuit courts have adopted similar logic.[116] Most notably, the Fifth Circuit in *Sierra Club, Lone Star Chapter v. Cedar Point Oil* held that in a scenario where it was "virtually impossible" to trace the plaintiff's injury to any specific discharger, it was sufficient for the plaintiff to show that the defendant discharged a pollutant that *contributed* to the alleged injury.[117]

Although the majority of courts that have accepted contribution as a means to establish causation have done so in the Clean Water Act[118] context, the Second Circuit explicitly applied the framework to climate change in *AEP*.[119] In *AEP*, the Second Circuit held that a group of plaintiffs could sufficiently establish standing to bring a public nuisance suit against six electric power corporations for the corporations' ongoing contribution to global warming.[120] Acknowledging the "widely accepted case law" deriving from *Powell Duffryn*, the Second Circuit explained, "[f]or purposes of Article III standing [Plaintiffs] are not . . . required to show that Defendants' emissions alone cause their injuries. . . . It is sufficient that they allege that Defendants' emissions contribute to their injuries."[121]

However, this precedent is not universal. Other courts have concluded that using contribution as a means to establish causation is inappropriate in the context of climate change.[122] In doing so, these courts have generally relied on three points, which, upon analysis, approximate the three concerns

114 *Id.* at 72.

115 *Id.* at 72 n.8.

116 *See, e.g.*, Friends of the Earth, Inc. v. Gaston Copper Recycling Corp., 204 F.3d 149, 161 (4th Cir. 2000) (holding that "rather than pinpointing the origins of particular molecules, a plaintiff must 'show that a defendant discharges a pollutant that causes or contributes to the kinds of injuries alleged'" in order to establish causation); Natural Res. Def. Council v. Sw. Marine, Inc., 236 F.3d 985, 995 (9th Cir. 2000) (holding that traceability does not require proof that defendant's effluent caused the alleged injury, but could instead be satisfied through a showing that the defendant discharges a pollutant that causes or contributes to the kinds of injury alleged), *cert. denied*, 533 U.S. 902 (2001); Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., 73 F.3d 546, 558 (5th Cir. 1996), *cert. denied*, 519 U.S. 811 (1996).

117 *Sierra Club, Lone Star Chapter*, 73 F.3d at 558.

118 Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2006).

119 *See supra* notes 113–118 and accompanying text; *AEP*, 582 F.3d 309, 346 (2d Cir. 2009).

120 *AEP*, 582 F.3d at 314, 349.

121 *Id.* at 347.

122 Comer v. Murphy Oil USA, Inc., 839 F. Supp. 2d 849, 860–61 (S.D. Miss. 2012), *aff'g*, 718 F.3d 460 (5th Cir. 2013); Native Vill. of Kivalina v. Exxonmobil Corp., 663 F. Supp. 2d 863, 879–80 (N.D. Ca. 2009), *aff'g*, 696 F.3d 849 (9th Cir. 2012), *cert. denied*, 133 S. Ct. 2390 (2013).

addressed by the *Powell Duffryn* causation analysis.[123] First, in line with the required showing that a defendant violate its permit, these courts have concluded that because there are no federal standards limiting the emission of greenhouse gases, there is no presumption of harm when a party exceeds these standards.[124] Second, in line with the required showing that the discharged pollutant cause or contribute to the kinds of injuries alleged, these courts have concluded that it is impossible for a climate change plaintiff to show a defendant was the "seed" of its alleged injuries.[125] Finally, in line with the required showing that the discharge flows into a waterway in which plaintiffs have an interest, these courts have concluded that since greenhouse gas emission sources do not have a "zone of discharge" that plaintiffs can show they are within, such plaintiffs are categorically barred from using such a method to establish causation.[126] However, each of these points has significant deficiencies.

The first argument regarding regulatory standards conflicts directly with the Second Circuit's decision in *AEP* and is out of date. In arguing that the contribution theory was inapplicable outside of the Clean Water Act context, the Northern District of California in *Kivalina* pointed to the Clean Water Act's effluent discharge regulations, which EPA or respective state authorities set specifically to protect the designated uses of the receiving waterways.[127] The Northern District of California argued that because of this foundational structure, whenever a party exceeds these regulations, there is a presumption "that 'there is a substantial likelihood that defendant's conduct caused plaintiffs' harm,' even if other parties have also made similar discharges."[128] In contrast, the Northern District of California argued, since no federal standards limit the discharge of greenhouse gases, there is no parallel presumption that plaintiffs are harmed after a certain amount of greenhouse gases are emitted.[129]

That reasoning conflicts with the Second Circuit's holding in *AEP*. In *AEP*, the defendants made a similar case, arguing that the *Powell Duffryn* approach to establishing causation was inapplicable to climate change because the plaintiffs were unable to show that the emitter had "discharged some pollutant in concentrations greater than allowed by its permit."[130] However, rather than finding that a lack of a regulatory reference against

123 *Comer*, 839 F. Supp. 2d at 859; *Kivalina*, 663 F. Supp. 2d at 878–82. The three prongs that *Powell Duffryn* laid out to establish causation in a multi-polluter context are showings that "a defendant has 1) discharged some pollutant in concentrations greater than allowed by its permit 2) into a waterway in which the plaintiffs have an interest that is or may be adversely affected by the pollutant and that 3) this pollutant causes or contributes to the kinds of injuries alleged by the plaintiffs." *Powell Duffryn*, 913 F.2d 64, 72 (3d Cir. 1990), *cert. denied*, 498 U.S. 1109 (1991).

124 *Comer*, 839 F. Supp. 2d at 860; *Kivalina*, 663 F. Supp. 2d at 879–80.

125 *Kivalina*, 663 F. Supp. 2d at 880–81; *see Comer*, 839 F. Supp. 2d at 861–62.

126 *Kivalina*, 663 F. Supp. 2d at 881–82; *see Comer*, 839 F. Supp. 2d at 860–61.

127 *Kivalina*, 663 F. Supp. 2d at 879.

128 *Id.* (quoting *Powell Duffryn*, 913 F.2d at 72).

129 *Id.* at 880.

130 *AEP*, 582 F.3d 309, 346 (2d Cir. 2009) (quoting *Powell Duffryn*, 913 F.2d at 72, and noting that the defendants focused exclusively on the first prong of the *Powell Duffryn* test).

which to measure the offending conduct barred the court from applying the *Powell Duffryn* analysis, the Second Circuit held that the lack of a regulatory reference point simply made that aspect of the *Powell Duffryn* analysis inapplicable to greenhouse gas emissions.[131] Therefore, the Second Circuit held that the defendants' effort to impose such a requirement on causation was "neither legally nor factually meaningful."[132]

Furthermore, the argument that there are no federal standards limiting the discharge of greenhouse gases is out of date.[133] In 2010, EPA promulgated the Prevention of Significant Deterioration (PSD) and Title V Greenhouse Gas Tailoring Rule (*Tailoring Rule*),[134] which states that new sources that emit, or have the potential to emit, at least 100,000 tons per year of carbon dioxide equivalent (CO_2e), and existing sources that emit, or have the potential to emit, at least 100,000 tons per year of CO_2e and that undertake a modification that increases net greenhouse gas emissions by at least 75,000 tons per year of CO_2e, will be subject to the PSD and Title V programs of the Clean Air Act.[135] One of the explicit purposes of the PSD program is to protect public health and welfare.[136] Therefore, even if a court were to require a regulatory reference against which to measure the allegedly meaningful conduct, the Tailoring Rule now provides a regulatory benchmark that reflects EPA's determination of the level of greenhouse gas emissions that represent an unacceptable harm to the public health and welfare.

The second argument courts have used to reject contribution as a means to establish causation in the climate change context is that plaintiffs are unable to show the defendant's emissions are the "seed" of the their injuries. This requirement is adopted from the Fourth Circuit's decision in *Friends of the Earth v. Gaston Copper* (*Gaston Copper*).[137] In *Gaston Copper*, the Fourth Circuit accepted *Powell Duffryn*'s method of establishing causation,[138] but went on to infer that, because courts have generally interpreted the causation requirement to ensure the alleged injury was not the result of a third party not before the court, it can be satisfied only "[w]here a plaintiff has pointed to a polluting source as the seed of his injury, and the owner of the polluting source has supplied no alternative culprit."[139] In *Kivalina*, the Northern District of California applied this single sentence to the complex and indirect nature of climate change and subsequently

131 *Id.*

132 *Id.*

133 *See infra* notes 134–135 and accompanying text.

134 75 Fed. Reg. 31,514 (June 3, 2010) (codified at 40 C.F.R. pts. 51, 52, 70).

135 *Id.* at 31,516.

136 *Id.* at 31,558.

137 204 F.3d 149, 161–62 (4th Cir. 2000); *see also* Tex. Indep. Producers & Royalty Owners Ass'n v. EPA, 410 F.3d 964, 974 (7th Cir. 2005) (adopting the reasoning from *Gaston Copper*).

138 *Gaston Copper*, 204 F.3d at 161 ("Rather than pinpointing the origins of particular molecules, a plaintiff 'must merely show that a defendant discharges a pollutant that causes or contributes to the kinds of injuries alleged.'") (quoting Natural Res. Def. Council v. Watkins, 954 F.2d 974, 980 (4th Cir. 1992)).

139 *Id.* at 162.

concluded that climate change plaintiffs could never establish causation because they could never allege a specific source, or group of sources, was the "seed" of their injury.[140]

However, this argument essentially represents a rhetorical rehashing of the same issue decided by the Supreme Court in *Mass. v. EPA*—whether contribution to climate change can satisfy the causation requirement for Article III standing.[141] Looking to the other circuit court decision that adopted *Gaston Copper*'s requirement that plaintiffs show the defendant was the "seed" of their injury, *Texas Independent Producers and Royalty Owners Ass'n v. EPA* (*Texas Producers*), it is clear the requirement merely obligates the plaintiff to establish a proper causal chain.[142] In *Texas Producers*, the Seventh Circuit held that the plaintiffs had failed to provide evidence the defendant had made an actual discharge into the water body in question.[143] Because this was a critical link in the plaintiff's chain of causation, the Seventh Circuit held the plaintiff had "failed to establish any seed of [its] injury."[144] As such, it is clear the requirement that plaintiffs show the defendant was the "seed" of their injury is merely an alternative way of stating plaintiffs are required to establish an adequate causal chain. Because the Supreme Court, in *Mass. v. EPA*, decided that parties could establish standing through showing the defendant's greenhouse gas emission source constituted a meaningful contribution to global climate change,[145] such a showing would therefore also satisfy the requirement that plaintiffs show the defendant was the "seed" of their injury.

Finally, the third argument courts have used to reject contribution as a means to establish causation in the climate change context—that a plaintiff outside the "discharge zone" of a specific pollution source is categorically too remote to establish causation to that source[146]—misunderstands the purpose for which plaintiffs within the discharge zone are differentiated from those outside the discharge zone. In adopting this argument, the courts again relied on reasoning put forward by the Fourth Circuit in *Gaston Copper*.[147] In *Gaston Copper*, the Fourth Circuit made a clear distinction between plaintiffs who lie within the "discharge zone" of a polluter, and plaintiffs who do not.[148] The Northern District of California in *Kivalina*

140 Native Vill. of Kivalina v. Exxonmobil Corp., 663 F. Supp. 2d 863, 880–81 (N.D. Cal. 2009), *aff'g*, 696 F.3d 849 (9th Cir. 2012), *cert. denied*, 133 S. Ct. 2390 (2013).

141 *See supra* notes 40–43 and accompanying text.

142 Tex. Indep. Producers & Royalty Owners Ass'n v. EPA, 410 F.3d 964, 972–73 (requiring plaintiffs to "tie the[ir] asserted injury . . . to the [defendant's] conduct" by more than "conclusory allegations").

143 *Id.*

144 *Id.* at 974 (internal quotation marks omitted).

145 Mass. v. EPA, 549 U.S. 497, 523–24 (2007).

146 *See infra* notes 147–158 and accompanying text.

147 See Native Vill. of Kivalina v. Exxonmobil Corp., 663 F. Supp. 2d 863, 881 (N.D. Cal. 2009), *aff'g*, 696 F.3d 849 (9th Cir. 2012), *cert. denied*, 133 S. Ct. 2390 (2013), which cites *Tex. Indep. Producers*, 410 F.3d at 973, which in turn cites *Gaston Copper* 204 F.3d 149, 162 (4th Cir. 2000), to establish a distinction between plaintiffs within the discharge zone and those too far downstream.

148 *Gaston Copper*, 204 F.3d 149, 162 (4th Cir. 2000).

inferred from this distinction that plaintiffs must show they fall within the alleged polluter's zone of discharge in order to establish causation.[149] Applied to the context of climate change, in which greenhouse gas emissions combine in the atmosphere and produce a non-differentiable effect on the entire planet, the Northern District of California held that private party plaintiffs could not do so.[150] The Court reasoned that the only logical zone of discharge for greenhouse gas sources was one that encompassed the entire world, and that accepting such a zone of discharge would "effectively eliminat[e] the issue of geographic proximity."[151]

However, not only have courts explicitly held that a zone of discharge encompassing the entire world is acceptable in the context of climate change,[152] but limiting causation to those within the zone of discharge misunderstands the manner in which the Fourth Circuit introduced the concept. The Fourth Circuit, in *Gaston Copper*, supported its distinction by comparing the Fifth Circuit's decision in *Friends of the Earth, Inc. v. Crown Central Petroleum Corp.* (*Crown Central*),[153] which held an eighteen-mile distance was too large for the court to infer causation,[154] and the Eastern District of Texas's decision in *Friends of the Earth, Inc. v. Chevron Chemical Co.*,[155] which held a two-to-four-mile distance was sufficient to show causation.[156] However, the distinction was not between plaintiffs who could *establish* causation and those who could not; it was between plaintiffs who could *infer* causation and those who could not.[157] As the Fifth Circuit held in *Crown Central*, "plaintiffs who use 'waterways' far downstream from the source of unlawful pollution may [still] satisfy the 'fairly traceable' element by relying on alternative types of evidence," such as water samples or expert testimony.[158] Therefore, the intended purpose of the distinction between plaintiffs inside and outside the zone of discharge was merely to note who could establish the requirement that they have an interest in the waterway that is adversely affected by the pollutant in question based solely on their physical location, and who had to present further evidence. Applied to the climate change context, this would mean that even if a plaintiff could not prove she was inside the "discharge zone" of a specific polluter, she could

149 *See Kivalina*, 663 F. Supp. 2d at 881 ("[T]o satisfy the 'fairly traceable' causation requirement, there must be a distinction between 'the plaintiffs who lie within the discharge zone of a polluter and those who are so far downstream that their injuries cannot fairly be traced to that defendant.'") (quoting *Tex. Producers*, 410 F.3d at 973).

150 *Id.*

151 *Id.*

152 *See, e.g.*, Amigos Bravos v. U.S. Bureau of Land Mgmt., 816 F. Supp.2d 1118, 1136 (D. N.M. 2011).

153 95 F.3d 358 (5th Cir. 1996).

154 *Id.* at 359.

155 900 F. Supp. 67 (E.D. Tex. 1995).

156 *Id.* at 75–76; *Gaston Copper*, 204 F.3d 149, 162 (4th Cir. 2000) (citing *Crown Central*, 95 F.3d at 361–62, and *Friends of the Earth*, 900 F. Supp. at 75).

157 *Crown Central*, 95 F.3d at 361; *see Friends of the Earth*, 900 F. Supp. at 75–76 (pointing to "strong evidence" to infer the harm was "fairly traceable" to the defendant's conduct).

158 *Crown Central*, 95 F.3d at 362 (citing Sierra Club, Lone Star Chapter v. Cedar Point Oil Co. Inc., 73 F.3d 546, 558 n.24 (5th Cir. 1996), *cert. denied*, 519 U.S. 811 (1996)).

still establish causation by providing other evidence that she has an interest in an area that is negatively affected by the defendant's emissions.

Concluding, therefore, that the three arguments courts have used to argue the *Powell Duffryn* contribution framework was inapplicable to climate change context are without merit, it becomes evident the methodology used by Second Circuit in *AEP* to interpret the Supreme Court's decision in *Mass. v. EPA* was correct. Rather than postulating about a hypothetical percentage of climate change caused by defendant's emissions and requiring plaintiffs to do the impossible by showing this specific portion directly caused their alleged injuries, judicial precedent instead requires only that a plaintiff show 1) the greenhouse gases in question constitute a meaningful contribution to global climate change, and 2) there is a causal link between global climate change and plaintiff's injuries.[159]

C. The Ninth Circuit Misinterpreted "Meaningful Contribution"

Although the Ninth Circuit in *Bellon* implied that a private party could not use a meaningful contribution approach to establish causation in climate change cases,[160] the court nonetheless went on to discuss the standard anyway.[161] In so doing, the Ninth Circuit compared the 5.9% of Washington's greenhouse gas emissions that were at issue in *Bellon*, to the 6% of global carbon dioxide emissions the Supreme Court found sufficient to constitute a meaningful contribution in *Mass. v. EPA*.[162] From this comparison, the Ninth Circuit concluded that the 5.94 million metric tons of CO_2e did not constitute a meaningful contribution to global greenhouse gas concentrations.[163] However, this conclusion was erroneous for three reasons. First, the Ninth Circuit misinterpreted the Supreme Court's reference to meaningful contribution in *Mass. v. EPA*. Second, the Ninth Circuit imposed an emissions threshold for meaningful contribution that was far too high. Finally, the Ninth Circuit completely ignored EPA's prior determination of the level of greenhouse gas emissions that qualifies as a significant increase. These points are addressed in order below.

First, the Ninth Circuit's reliance on the Supreme Court's reference to 6% of global carbon dioxide emissions—at issue in *Mass. v. EPA*—as adequate to constitute a meaningful contribution to global greenhouse gas concentrations was misplaced. It is clear from the plain language of *Mass. v. EPA* that the Supreme Court did not intend 6% of global carbon dioxide emissions to represent a threshold for determining what constitutes a

159 *See supra* notes 108–112 and accompanying text.

160 *See supra* notes 106–107 and accompanying text.

161 Wash. Envtl. Council v. Bellon, 732 F.3d 1131, 1145–46 (9th Cir. 2013), *reh'g denied*, 741 F.3d 1075 (9th Cir. 2014). The Ninth Circuit's discussion of "meaningful contribution" is therefore unnecessary to the decision; it is dicta and therefore not precedential.

162 *Bellon*, 732 F.3d at 1145.

163 *Id.* at 1145–46 (noting the absence of evidence to support a finding of "meaningful contribution").

"meaningful contribution."[164] Indeed, the Supreme Court described 6% of global carbon dioxide emissions as "hardly a tentative step," an "enormous quantity," and an amount that, on its own, would qualify the United States "as the third-largest emitter of carbon dioxide in the world."[165] As such, the Supreme Court clearly viewed 6% of global carbon dioxide emissions as an amount far greater than that required to constitute a meaningful contribution to global greenhouse gas concentrations. Therefore, the Ninth Circuit presented a false comparison when it juxtaposed the 5.9% Washington state carbon dioxide emissions, at issue in *Bellon*, against the 6% of global carbon dioxide emissions, at issue in *Mass. v. EPA*.

Second, the Ninth Circuit's implied conclusion that 5.94 million metric tons of CO_2e does not constitute a meaningful contribution to global greenhouse gas concentrations would lead to insufficient regulation of greenhouse gasses because it would remove virtually all greenhouse gas sources from regulation. The Supreme Court's reference to "meaningful contribution" in *Mass. v. EPA* established by implication a de minimis exception for emissions that contribute to global greenhouse gas concentrations.[166] Such exceptions—which exist in a variety of legal fields, including securities, hazardous waste liability, and lobbying to name just a few—are premised on the understanding that it is effective to regulate entities only when "the cost of doing so is less than the benefit."[167] As such, de minimis exceptions serve as a rough approximation for the point at which the costs of ensuring compliance exceed the benefits.[168] However, such an approach assumes, and is dependent upon, the existence of non-de minimis parties, the regulation of which can still lead to the desired outcome of the regulation.[169] Without those major parties, a de minimis exception "leaves the regulatory problem unsolved."[170] As Kenneth M. Stack and Michael P. Vandenbergh explain in a paper identifying such a situation as a "one percent problem": "[s]mall potatoes might be discarded (or discardable), but the calculation for doing so changes if there are only small potatoes."[171]

The Ninth Circuit's implied conclusion that the emissions from Washington's oil refineries did not constitute a meaningful contribution to global greenhouse gas concentrations falls directly into this "one percent problem." As Stack and Vandenbergh point out, only a small handful of entire industrial sectors emit more than 2% of the aggregate industrial total—which itself is only a fraction of the United States', and subsequently of global emissions.[172] In fact, only seven countries in the world emitted more

164 *See infra* note 165 and accompanying text.

165 Mass. v. EPA, 549 U.S. 497, 524 (2007).

166 *See supra* notes 106–112 and accompanying text.

167 Kenneth M. Stack & Michael P. Vandenbergh, *The One Percent Problem*, 111 COLUM. L. REV. 1385, 1393–96 (2011).

168 *Id.* at 1396.

169 *Id.* at 1394.

170 *Id.* at 1397.

171 *Id.* at 1397–98.

172 *Id.* at 1411.

than 2% of anthropogenic global CO_2e emissions in 2006.[173] Therefore, it is clear there are simply not enough non-de minimis sources to justify a de minimis threshold at 2% of global greenhouse gas emissions, let alone the 6% of global greenhouse gas emissions that the Ninth Circuit compared the level of emissions from Washington's oil refineries to in *Bellon*.

Finally, the Ninth Circuit's determination that 5.94 million metric tons of CO_2e did not constitute a meaningful contribution to global greenhouse gas concentrations is erroneous because it did not place any weight on EPA's determination of the threshold level at which greenhouse gas emissions constitute a "significant emissions increase" under the PSD program of the Clean Air Act (CAA).[174] In *Alabama Power v. Costle*,[175] the D.C. Circuit concluded that EPA could establish thresholds for the level of pollutant increase that would qualify as a "modification" under PSD.[176] As a result, EPA subsequently promulgated "significance levels" for various pollutants, representing its determination of what level of contribution to air quality problems it deemed to be de minimis.[177] With regard to greenhouse gases, EPA promulgated a significance level of 75,000 tons per year of CO_2e emissions.[178] While EPA emphasized that this level did not represent its estimation of the de minimis level for greenhouse gases, EPA did assert that 75,000 tons per year of CO_2e emissions represented the "lowest level . . . that sources and permitting authorities can reasonably be expected to implement at the present time in light of the costs to the sources and the administrative burdens to the permitting authorities."[179] If "meaningful contribution" is accepted as a court's approximation of the point at which the costs of limiting greenhouse gas emissions exceed the benefits,[180] such a determination by EPA would seem to be highly relevant. However, in *Bellon*, the Ninth Circuit failed to make even one reference to EPA's determination of what constitutes a "significant emissions increase."[181]

Therefore, because the Ninth Circuit: 1) presented a false comparison when it juxtaposed the emissions at issue in *Bellon* against those emissions

173 *Id.* at 1406. (citing to World Res. Inst., Climate Analysis Indicators Tool (CAIT), *Total GHG Emissions Excluding LUCF—2006*, http://cait2.wri.org/wri/Country%20GHG%20Emissions?indicator[]=Total%20GHG%20Emissions%20Excluding%20LUCF&indicator[]=Total%20GHG%20Emissions%20Including%20LUCF&year[]=2006&chartType=geo&view=table (last visited July 26, 2014)).

174 *See* 40 C.F.R. § 52.2072(b)(4)(iii) (2013) (defining a significant emissions increase for greenhouse gas emissions).

175 636 F.2d 323 (D.C. Cir. 1979).

176 *Id.* at 400.

177 *E.g.*, Requirements for Preparation, Adoption, and Submittal of Implementation Plans; Approval and Promulgation of Implementation Plans, 45 Fed. Reg. 52,676, 52,705–52,710 (Aug. 7, 1980) (codified at 40 C.F.R. §§ 51.24, 52.21, 52.24).

178 Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg., 31,514, 31,570 (June 3, 2010) (codified at 40 C.F.R. §§ 51.166, 52.21, 71, 72).

179 *Id.* at 31,560.

180 *See supra* notes 167–171 and accompanying text.

181 *See generally* Wash. Envtl. Council v. Bellon, 732 F.3d 1131 (9th Cir. 2013) (omitting discussion of EPA's "significant emissions increase" determination), *reh'g denied*, 741 F.3d 1075 (9th Cir. 2014).

at issue in *Mass. v. EPA*; 2) imposed a de minimis threshold that demonstrated a misunderstanding of the legal concept; and 3) failed to account for the expert agency's considered approach to the question at hand, the Ninth Circuit misunderstood the Supreme Court's reference to "meaningful contribution" in *Mass. v. EPA*.

IV. THE FUTURE OF CITIZEN SUITS IN THE CLIMATE CHANGE REALM

As it is evident the Ninth Circuit made a number of mistakes in holding that WEC could not satisfy the causation prong of Article III standing in *Bellon*, it is regrettable that the court subsequently denied an en banc review of its decision.[182] If the Ninth Circuit had accepted such a review, the Court could potentially have recognized: 1) it mistakenly distinguished the Supreme Court's causation analysis in *Mass. v. EPA*; 2) it analyzed a causal chain that inappropriately required WEC to prove that the specific greenhouse gases emitted from Washington's oil refineries caused—as opposed to contributed to—WEC's alleged injuries; and 3) it misinterpreted the Supreme Court's reference to "meaningful contribution" to be much higher than the threshold value was intended. Had the Ninth Circuit recognized these three points, it is highly likely it would have reversed its earlier decision, at least with regard to WEC's ability to establish causation.

However, the Ninth Circuit did not do so and, as a result, climate change mitigation efforts moving forward will have to deal with a very difficult Ninth Circuit decision. *Bellon* will hinder private individuals seeking to bring citizen suits or public nuisance claims because it essentially forbids them from relying upon *Mass. v. EPA* and sets a "particularly challenging" precedent for establishing standing.[183] *Bellon* will also significantly impact states' ability to bring enforcement suits because the Ninth Circuit's discussion of "meaningful contribution" will apply directly to their ability to establish causation. Finally, recognizing that Congress explicitly delineated the role of citizen suits to "spur and . . . supplement" governmental enforcement actions,[184] *Bellon* will negatively affect federal and state regulatory agencies that will not be able to garner support from "the engine that propels the field of environmental law."[185]

Unfortunately, such limitations come at a time when science is drawing more assured conclusions as to the nature of climate change, and the tangible effects of rising temperatures are beginning to be felt.[186] In the wake of such developments, renewed attention and dedication in the legal domain

182 Wash. Envtl. Council v. Bellon, 741 F.3d 1075 (9th Cir. 2013) (order denying reh'g en banc).

183 *Bellon*, 732 F.3d at 1143.

184 Hodas, *supra* note 11, at 1618–19.

185 May, *supra* note 13, at 7. This might also be the reason the State of Washington opposed the "unnecessarily broad dicta" it perceived in the Ninth Circuit's decision. *See supra* note 28 and accompanying text.

186 *See supra* notes 3–5 and accompanying text.

will have to focus on grappling with the "the most pressing environmental challenge of our time."[187]

187 Mass. v. EPA, 549 U.S. 497, 505 (2007) (quoting Petition for Writ of Certiorari, at 22, Mass. v. EPA, 549 U.S. 497 (2007) (No. 05-1120), 2006 WL 558353, at *22) (internal quotation marks omitted).