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AGAINST THE CURRENT: FIVE STATES' UPSTREAM BATTLE AGAINST AN AQUATIC NUISANCE INVASION IN MICHIGAN V. UNITED STATES ARMY CORPS OF ENGINEERS

### I. Introduction

The Great Lakes are an interconnected system of five large bodies of freshwater that are of remarkable significance in North America.<sup>1</sup> In the United States, state and federal authorities began constructing artificial channels and canals during the early twentieth century to manipulate the lake system in the interest of commercial navigation.<sup>2</sup> A series of such channels and canals, known as the Chicago Waterway System (CAWS), connects Lake Michigan with the Mississippi River Basin.<sup>3</sup> While the CAWS has undoubtedly played a key role in the development and commercial advancement of the Chicago region and the surrounding Midwest, it has become an enabling factor for a pressing environmental problem concerning the vitality of the Great Lakes.<sup>4</sup>

The Great Lakes are in grave danger of a destructive, aquatic nuisance species establishing a breeding population in its water system.<sup>5</sup> The problem began in the 1970s when "aquatic farmers in the southern United States introduced bighead and silver Asian carp to their facilities in the hope that the fish would control unwanted plant growth." Flooding in the region where the carp were introduced enabled the fish to enter nearby freshwater systems, and the rapacious species eventually traveled through the Mississippi River Basin to an area within six miles of Lake Michigan.<sup>7</sup>

<sup>1.</sup> See Physical Features of Great Lakes, Encarta Encyclopedia, http://geo.msu.edu/extra/geogmich/phy\_feature.html (last visited Oct. 20, 2014) (discussing physical features and importance of Great Lakes).

<sup>2.</sup> Michigan v. United States Army Corps of Eng'rs, 758 F.3d 892, 893 (7th Cir. 2014) (Asian Carp II) (discussing construction of CAWS).

<sup>3.</sup> Id. (discussing features of CAWS).

<sup>4.</sup> *Id.* (explaining CAWS's positive impact on commercial development in Midwest alongside current problems associated with it).

<sup>5.</sup> *Id.* (noting two species of nonnative fish have already overwhelmed Mississippi River basin and threaten Great Lakes' ecosystem).

<sup>6.</sup> Id. (discussing introduction of Asian carp to region).

<sup>7.</sup> Asian Carp II, 758 F.3d at 894-95 (explaining introduction of carp to North America); see also Asian Carp Species, Environmental Protection Agency (EPA), available at http://www.lb7.uscourts.gov/documents/12-38002.pdf (last visited Oct. 21, 2014) (detailing history of Asian carp in North America, their rapacious, invasive qualities, and severe, adverse impact they have on ecosystems).

Asian carp devastate the ecosystems of the lakes and rivers they invade.<sup>8</sup> The carp pillage native species' food supply, multiply quickly, and congest whichever body of water they penetrate.<sup>9</sup> For example, a "fish kill" conducted in the Mississippi River near St. Louis in 1999 revealed "Asian carp constituted over 95% of the biomass . . . at that place and time."<sup>10</sup> Asian carp weigh an average of thirty to forty pounds; however, they are capable of reaching 100 pounds and "can eat between 20% and 120% of their own body weight daily."<sup>11</sup> Additionally, the carp are dangerous to humans and negatively affect recreational activity in the waters they invade.<sup>12</sup>

In 2014, in *Michigan v. United States Army Corps of Engineers*<sup>13</sup> (*Asian Carp II*), five states bordering the Great Lakes sought a permanent injunction ordering the construction of a physical barrier that would completely separate Lake Michigan from the Mississippi River Basin, the only conclusively effective means available to prevent Asian carp from establishing a breeding population in the water system.<sup>14</sup> After discussing the likelihood of the carp's migration into the Great Lakes and the ensuing irreparable harm to their ecosystems, the United States Court of Appeals for the Seventh Circuit held that the plaintiff States failed to assert a claim warranting equitable relief.<sup>15</sup> Consequently, the court denied the injunction

<sup>8.</sup> Asian Carp II, 758 F.3d at 896 (noting Asian carp's negative impact on native species they encounter); see also Asian Carp Overview, NATIONAL PARK SERVICE, http://www.nps.gov/miss/naturescience/ascarpover.htm (last visited Oct. 19, 2014) (explaining why Asian carp are problematic).

<sup>9.</sup> Asian Carp II, 758 F.3d at 896 ("The carp are rapacious eaters of plankton, algae, and other small organisms . . . they have crowded out other fish."). See also Asian Carp Overview, supra note 8 (discussing serious damage to other fish populations caused by Asian Carp).

<sup>10.</sup> Asian Carp II, 758 F.3d at 896 (noting "fish kill" results for illustration of threat). See generally Michael J. Hansen, The Asian Carp Threat to the Great Lakes, Great Lakes Fishery Commission (Feb. 9, 2010), available at http://www.glfc.org/fishmgmt/Hansen\_testimony\_aisancarp.pdf (explaining Asian carp's threat to Great Lakes).

<sup>11.</sup> Asian Carp II, 758 F.3d at 896 (noting carp's physical dimensions and rapacious nature).

<sup>12.</sup> *Id.* (discussing Asian carp's impact on recreation). "[W]hen agitated (for example, by motorboats), the carp leap out of the water, threatening damage to recreational and commercial watercraft and injury to passengers on board." *Id.*; *see generally* NorthAmericanFishing, "Silent Invaders" Asian Carp 2013, YouTube (Apr. 16, 2013) https://www.youtube.com/watch?v=rPegltbBt0A (exemplifying carp's behavior in presence of motorboats and recreational activity).

<sup>13. 758</sup> F.3d 892 (7th Cir. 2014).

<sup>14.</sup> Id. at 897 (discussing States' request for equitable relief).

<sup>15.</sup> *Id.* at 907 (holding plaintiff States failed to state claim under public nuisance theory).

request.<sup>16</sup> The Seventh Circuit reasoned that the defendant agencies already attempting to prevent the carp's invasion were better suited than the court to determine the proper remedial method necessary to avert the impending problem.<sup>17</sup>

This Note investigates the court's reasoning in *Asian Carp II* and its potential impact on future cases regarding time-sensitive environmental concerns. Part II summarizes the facts in *Asian Carp II*. Next, Part III examines the Second Restatement of Torts' role in public nuisance cases, details the legal framework surrounding environmental public nuisance theory, and explores the Seventh Circuit's reasoning in a preliminary injunction case leading up to *Asian Carp II*. Then, Part IV outlines the Seventh Circuit's reasoning in *Asian Carp II*. Subsequently, Part V assesses the court's inconsistent rationale in *Asian Carp II* and subjects the case's main issue to a comprehensive public nuisance analysis set forth in the Restatement. Lastly, Part VI considers the decision's potential impact on pressing environmental problems in the future.

### II. FACTS: NOT YOUR AVERAGE FISH TALE

The United States Army Corps of Engineers (Corps) and the Metropolitan Water Reclamation District (District) are the governmental entities responsible for the maintenance and operation of the CAWS.<sup>24</sup> For more than a decade, the Corps and District have taken preventative measures to combat the carp's invasion.<sup>25</sup> Notably, the Corps implemented underwater electrical cables with the

<sup>16.</sup> *Id.* (holding plaintiff States failed to present evidence warranting permanent injunction).

 $<sup>17.\</sup> Id.$  at 905-06 (expressing reluctance to interfere with defendants' ongoing preemptive efforts).

<sup>18.</sup> For a critical analysis of *Asian Carp II*, see *infra* notes 173-244 and accompanying text. For a discussion of the decisions potential impacts, see *infra* notes 245-68 and accompanying text.

<sup>19.</sup> For a discussion of the facts of Asian Carp II, see infra notes 24-51 and accompanying text.

<sup>20.</sup> For a discussion of the public nuisance doctrine with previous decisions interpreting them in an environmental context, see *infra* notes 52-144 and accompanying text.

<sup>21.</sup> For a narrative analysis of the court's reasoning in *Asian Carp II*, see *infra* notes 145-72 and accompanying text.

<sup>22.</sup> For a critical analysis of Asian Carp II, see infra notes 173-244 and accompanying text.

<sup>23.</sup> For an examination of the potential impacts of Asian Carp II, see infra notes 245-68 and accompanying text.

<sup>24.</sup> Michigan v. United States Army Corps of Eng'rs, 758 F.3d 892, 894 (7th Cir. 2014) (noting Corps and District are responsible for operation of CAWS).

<sup>25.</sup> Id. at 896 (noting Corps and District's preemptive efforts).

intent to kill, shock, or stun fish attempting to pass into Lake Michigan.<sup>26</sup> The Corps put three electrical barricades, officially known as "Dispersal Barrier Systems," into operation in 2002, 2009, and 2011.<sup>27</sup> Despite these efforts, concurrent evidence revealed the carp's infiltration beyond the electrically fortified zones.<sup>28</sup> For example, in 2009, Asian carp were spotted beyond an electrical barrier in the Chicago Sanitary and Ship Canal.<sup>29</sup> Further, "[i]n November of that year, 'environmental carp DNA (eDNA), which is found by collecting water samples and testing them for the presence of genetic material emitted by the carp, was detected north (lakeward) of the barrier system."<sup>30</sup> In response to tangible evidence of the carp's presence near Lake Michigan, the Corps applied a fish poison called rotenone near the barrier on several occasions.<sup>31</sup>

In 2012, Congress passed the Moving Ahead for Progress in the 21st Century Act<sup>32</sup> (Progress Act), which ordered the Corps to consider hydrological separation as a possible solution to the Asian

<sup>26.</sup> *Id.* (discussing Corps' electric barrier system). The Corps conceded the electrical barriers are merely "experimental and [a] temporary fix." U.S. Army Corps of Eng'rs, Dispersal Barrier Efficacy Study at 34 (Jan. 6, 2010), *available at* http://www.watershedcouncil.org/learn/aquatic%20invasive%20species/asiancarp/asian-carp-studies-and-reports/files/image%2012%20interim\_i\_final.pdf.

<sup>27.</sup> Asian Carp II, 758 F.3d at 896 (detailing implementation of "Dispersal Barrier Systems"); see also Electric Barriers, U.S. Army Corps of Eng'rs, http://www.lrc.usace.army.mil/Missions/CivilWorksProjects/ANSPortal/Barrier.aspx (last visited Oct. 5, 2014) (giving overview and current status of Dispersal Barrier Systems).

<sup>28.</sup> Asian Carp II, 758 F.3d at 896 (noting evidence of Asian carp presence beyond electric barriers).

<sup>29.</sup> Id. (noting evidence of Asian carp's breach of electric barrier).

<sup>30.</sup> *Id.* (discussing eDNA testing).

<sup>31.</sup> *Id.* (discussing Corps' response to presence of Asian carp beyond electric barrier). After the Corps' first application of rotenone, a dead carp was removed from the vicinity. *Id.* The Corps applied rotenone for a second time in May 2010 in another area of the CAWS, but it failed to yield any dead carp. *Id.* "The following month, however, a single bighead carp was recovered in Lake Calumet, well lakeward of the barrier and only six miles from Lake Michigan." *Id.* Conversely, the Asian Carp Regional Coordinating Committee monitored the CAWS from September 2010 through April 2014, but their tests failed to find any indication of Asian carp lakeward of the barriers. *Id.* "[T]he Coordinating Committee's tests . . . involve (among other things) a mix of electrofishing and contracting with commercial fishing crews." *Id. See also* U.S. Army Corps of Engr's, *Summary of the GLMRIS Report: Great Lakes and Mississippi River Interbasin Study*, http://glmris.anl.gov/documents/docs/glmrisreport/GLMRISSummaryReport.pdf (last visited Oct. 21, 2014); *see also Sampling Results*, ASIAN CARP RESPONSE IN THE MIDWEST, http://www.asiancarp.us/sampling/results.htm (last visited Oct. 21, 2014).

<sup>32.</sup> Moving Ahead for Progress in the 21st Century Act, Pub. L. No. 112-141, 126 Stat. 405 (2012) (noting Progress Act set February 6, 2014 as deadline for Report).

carp problem.<sup>33</sup> The Corps completed the required document the Great Lakes and Mississippi River Interbasin Study Report (Report)—and released it on January 6, 2014.<sup>34</sup> In the Report, the Corps presented "eight alternative plans for preventing the spread of aquatic nuisance species between the Mississippi River Basin and the Great Lakes Basin."35 The Report asserts six of the proposed plans would stop the spread of Asian carp within twenty-five years, which, interestingly, is when the Corps expects the aquatic nuisance species will invade Lake Michigan.<sup>36</sup> Two of the Report's suggested plans utilize "nonstructural" means (i.e. chemical control and netting) that would merely maintain the current situation and would have no impact on the spread of the carp.<sup>37</sup> Another two of the proposed plans assessed complete hydrological separation of the Mississippi River from Lake Michigan; however, the Corps predicted complete separation would negatively affect the navigability, water quality, and ecosystems in the surrounding bodies of water.<sup>38</sup>

In 2014, five states bordering the Great Lakes—Michigan, Wisconsin, Minnesota, Ohio, and Pennsylvania (States)—sued the Corps and District based on their belief that Asian carp pose an imminent threat of invasion into the Great Lakes.<sup>39</sup> Also, a Native

<sup>33.</sup> Asian Carp II, 758 F.3d at 898 (noting purpose of Progress Act). The Progress Act required the Corps to complete a report that was previously assigned by a 2007 statute. *Id. See also* Water Resources Development Act, Pub. L. No. 110-114, 121 Stat. 1041 (2007). Moreover, the Progress Act authorized the Corps to proceed to preliminary stages of development if the Secretary of the Army determined that hydrological separation is the most suitable means of addressing the Asian carp problem surrounding the CAWS. *Id.* 

<sup>34.</sup> Asian Carp II, 758 F.3d at 898 (noting Corps' completion of Report). Interestingly, the date the Corps released the Report was two weeks before the Seventh Circuit heard oral arguments in Asian Carp II. Id. See generally Summary of the GLMRIS Report, supra note 31, for a summary of the Report.

<sup>35.</sup> Asian Carp II, 758 F.3d at 898 (explaining what Report entails).

<sup>36.</sup> Id. (expressing Corps' predictions based on proposed plans).

<sup>37.</sup> *Id.* at 899 (explaining nonstructural options would merely maintain status quo and were projected to have no impact on spread of carp).

<sup>38.</sup> *Id.* (discussing Corps' assessment of hydrological separation options). One of these plans intends to utilize lakefront barriers, while the other proposes barriers in the CAWS and the Cal-Sag Channel. *Id.* The Corps' Report noted that the hydrological separation plans would be the most expensive. *Id.* Two more of the plans involve partial hydrological separation, which would completely disconnect Lake Michigan from the Mississippi River at most intersections, but would leave at least one of the five CAWS pathways unblocked. *Id.* The final two proposed plans do not involve hydrological separation, but, rather, create a "buffer zone" between the Mississippi River and Lake Michigan, which would give the Corps time to respond to imminent threats of invasion when they arise. *Id.* Moreover, the Corps' final propositions depend on the construction of additional locks, barriers, and sluice gates to form the necessary "buffer zone." *Id.* 

<sup>39.</sup> *Id.* at 894 (explaining States believe Asian carp will invade or already have invaded Great Lakes).

American tribe, the Grand Traverse Band of Ottawa and Chippewa Indians (hereinafter included in "States"), intervened as a plaintiff.<sup>40</sup> In *Asian Carp II*, the plaintiff States contended that the Corps and District, in their capacity as the governmental entities responsible for the CAWS's operation, failed to protect the Great Lakes.<sup>41</sup> Consequently, the States asserted that the Asian carp's invasion stood to inflict billions of dollars of damage on the Great Lakes and their ecosystems.<sup>42</sup>

The plaintiff States sought "a permanent injunction requiring the Corps and District to take all appropriate and necessary measures expeditiously to develop and implement plans to effect a hydrological separation between Lake Michigan and the Mississippi River Basin." Further, the States claimed that the Corps' and District's manner of operating the CAWS made it possible for Asian carp to migrate towards Lake Michigan. The States thereby alleged that joint failure of the Corps and District endangered a public right—the right to enjoy and benefit from the Great Lakes—thus, creating a public nuisance.

The Corps and District pointed to several statutes, which, they asserted, "add up to a congressional mandate to keep the waterway open no matter the cost." <sup>46</sup> Moreover, the Corps and District alleged they were "fully authorized" to operate the CAWS in order to facilitate navigation between Lake Michigan and the Mississippi River. <sup>47</sup> The Seventh Circuit relied on the information gathered in the Corps' Report as well as evidence of the Corps and District's efforts to prevent the aquatic nuisance intrusion. <sup>48</sup> Additionally, the court assessed the States' request for hydrological separation alongside the study compiled in the Report and decided it was an

<sup>40.</sup> Asian Carp II, 758 F.3d at 895 (noting Indian tribe intervening as plaintiff).

<sup>41.</sup> *Id.* at 894 (explaining States' belief that Corps and District failed to protect Great Lakes).

<sup>42.</sup> *Id.* (discussing alleged monetary detriment caused by Corps and District's failure to protect Great Lakes).

<sup>43.</sup> *Id.* at 897 (detailing States' request for equitable relief). Hydrological separation entails the construction of a physical barrier that would prevent any water transfer between the currently connected systems. *Id.* 

<sup>44.</sup> *Id.* at 903 (clarifying that States' nuisance claim parallels Corps and District's manner of operation of CAWS).

<sup>45.</sup> Asian Carp II, 758 F.3d at 903-04 (explaining States' public nuisance claim rationale).

<sup>46.</sup> Id. at 902 (discussing Corps and District's argument).

<sup>47.</sup> Id. at 902-03 (addressing "fully authorized exception").

<sup>48.</sup> Id. at 902-06 (assessing Corps and District's preventative efforts).

impractical measure under current circumstances.<sup>49</sup> In sum, the Seventh Circuit held that the States' complaint failed to "plausibly allege that the Corps and District are creating a current or imminent public nuisance by their manner of operating the CAWS[,]"<sup>50</sup> and, therefore, "the States . . . failed to state a claim under which relief can be granted, either under a public nuisance theory or under the APA."<sup>51</sup>

### III. BACKGROUND: ANGLING THE PUBLIC NUISANCE DOCTRINE

### A. Public Nuisance Doctrine's Role in the Second Restatement

In Asian Carp II, the Seventh Circuit noted that courts deciding public nuisance claims under federal common law typically refer to the Second Restatement of Torts for guidance.<sup>52</sup> The Restatement defines a public nuisance as "an unreasonable interference with a right common to the general public."<sup>53</sup> The Restatement also suggests conduct is a public nuisance when it significantly interferes with the public health, safety, peace, comfort, or convenience.<sup>54</sup> Additionally, if actors know, or reasonably should know, their conduct permanently or continuously affects a public right, the actor is usually liable under public nuisance doctrine.<sup>55</sup>

Further, the Restatement affirms that courts hearing a public nuisance complaint generally assess a negligent defendant's unin-

Are listed in the disjunctive; any one may warrant a holding of unreasonableness. They also do not purport to be exclusive. Some courts have shown a tendency . . . to treat significant interferences with recognized aesthetic values or established principles of conservation of natural resources as amounting to public nuisance.

<sup>49.</sup> Id. at 904-05 (discussing what injunction requiring hydrological separation would entail).

<sup>50.</sup> Asian Carp II, 758 F.3d at 905 (holding States' complaint does not show Corps and District's operations caused alleged imminent public nuisance).

<sup>51.</sup> *Id.* at 897, 907 (treating States' claims under public nuisance doctrine and APA as one single claim). "The complaint raised claims under both the federal common law of public nuisance and the judicial review provisions of the Administrative Procedure Act (APA), 5 U.S.C. § 702 . . . we noted that those claims were functionally the same." *Id.* at 897.

<sup>52.</sup> Id. at 894 (referring to Restatement's definition as "common reference point").

<sup>53.</sup> Restatement (Second) of Torts § 821B(1) (1979) (defining public nuisance).

<sup>54.</sup> Restatement (Second) of Torts § 821B(2)(a) (1979) (listing factors that trigger public nuisance claim). These factors aid courts in determining whether an actor's conduct was unreasonable. *Id.* at cmt. e. The factors:

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<sup>55.</sup> Restatement (Second) of Torts  $\S$  821B(2)(c) (1979) (noting characteristics of conduct rising to public nuisance).

tentional conduct under a tortious private nuisance analysis.<sup>56</sup> This analysis balances the gravity of the harm suffered by the plaintiff with the utility of the defendant's conduct.<sup>57</sup> If the gravity of the harm outweighs the utility of the conduct, the defendant's activity is deemed unreasonable and, thus, a public nuisance warranting equitable relief.<sup>58</sup> The Restatement avers, "Consideration must be given not only to the interests of the person harmed but also the interests of the actor and to the community as a whole."59 In certain public nuisance actions, legislation may warrant the conduct in question and, therefore, insulate the defendant from liability.60 Nonetheless, these "crystallizations" of legally permissible conduct "should not obscure the fact that in every case the question is one of reasonableness. They are applied only in particular fact situations and are constantly re-examined in light of changing community conditions and views."61 Furthermore, a defendant's conduct rises to the level of public nuisance if compensation to the plaintiff for resulting

<sup>56.</sup> Restatement (Second) of Torts § 821B cmt. e (1979) (explaining proper common law public nuisance claims analysis). "If the interference was unintentional, the principles governing negligent or reckless conduct, or abnormally dangerous activities all embody in some degree the concept of unreasonableness."

<sup>57.</sup> Restatement (Second) of Torts § 826 cmt. a (1979) (discussing application of private nuisance analysis to common law public nuisance claim).

<sup>58.</sup> *Id.* (describing balance of harm and utility in nuisance analysis). "The process of comparing the general utility of the activity with the harm suffered as a result is adequate if the suit is for an injunction prohibiting the activity." *Id.* at cmt f

<sup>59.</sup> *Id.* at cmt. c (noting unreasonableness of conduct is determined from objective point of view). "Determining unreasonableness is essentially a weighing process, involving a comparative evaluation of conflicting interests in various situations according to objective legal standards." *Id.* 

<sup>60.</sup> *Id.* at cmt. d (noting legal rules may insulate defendant from public nuisance liability). The Restatement explains that sometimes "there has been a crystallization of legal opinion as to gravity and utility, with the result that the . . . [defendant's actions] are held to be reasonable or unreasonable as a matter of law." *Id.* 

<sup>61.</sup> *Id.* (emphasizing legal rules that permit potentially harmful conduct must be assessed under particular facts and reexamined under changing circumstances). These "crystallizations" of legally permissible conduct "may appear in the form of legislative enactment or it may be the result of a series of judicial decisions." *Id.* Moreover, legislatively enacted permission of certain conduct does not authorize other activities outside of the specifically approved conduct. Restatement (Second) of Torts § 821B cmt. f (1979). For instance:

In the case of negligence as a matter of law, the standard defined by a legislative enactment is normally a minimum standard, applicable to ordinary situations contemplated by legislation. Thus traveling at less than the speed limit may still be negligence if traffic conditions indicate that a lesser speed is required . . . The same general principle applies to public nuisance.

harm would place an unbearable burden on the defendant and, consequently, render the conduct at issue infeasible.<sup>62</sup>

# B. Case Law Framing Public Nuisance Doctrine in an Environmental Context

In Asian Carp II, the Seventh Circuit recognized several prior cases as sound applications of public nuisance doctrine in situations dealing with environmental concerns. 63 First, in Missouri v. Illinois (Missouri I), Missouri sued Illinois in the United States Supreme Court and requested an injunction, claiming the Sanitary District of Chicago's drainage system threatened the health and prosperity of Missouri's constituents residing near the Mississippi River.<sup>64</sup> The Court found the threat of polluting the Mississippi River, the main water source for an area of Missouri, and subsequent threat of typhoid in the region rose to the level of a public nuisance caused by Chicago's Sanitary District.<sup>65</sup> The Court acknowledged that Missouri's complaint did not allege the Sanitary District's conduct violated its responsibilities prescribed by the state legislature; rather, the complaint asserted the conduct deemed permissible by Illinois law would facilitate a public nuisance in the future.<sup>66</sup> The purpose of Missouri's complaint was "to subject this public work to judicial supervision, upon the allegation that the method of its construction and maintenance will create a continuing nuisance."67

In making its determination, the U.S. Supreme Court relied on *Attorney General v. Jamaica Pond Aqueduct Corp.*,<sup>68</sup> a case in which the Massachusetts Supreme Court assessed a public nuisance claim asserting the defendant's lowering of water in a public pond would infringe on the public's right to enjoy the pond as well as threaten their health.<sup>69</sup> The Massachusetts Supreme Court found that equi-

<sup>62.</sup> Restatement (Second) of Torts § 826(b) (1979) (asserting if required compensation for harm would inhibit defendant's conduct, then such conduct is public nuisance).

<sup>63.</sup> Michigan v. United States Army Corps of Eng'rs, 758 F.3d 892, 900 (7th Cir. 2014) (referring to several environmental public nuisance decisions).

<sup>64.</sup> Missouri v. Illinois, 180 U.S. 208, 209-11 (1901) (Missouri I) (discussing Missouri's claim and request for injunction).

<sup>65.</sup> *Id.* at 246-47 (holding defendants' demurrers cannot be sustained). In *Asian Carp II*, the Seventh Circuit acknowledged that "one state's introduction of typhoid into a river that runs off into another state" was an example of a public nuisance. *Asian Carp II*, 758 F.3d at 900 (referring to *Missouri I*).

<sup>66.</sup> Missouri I, 180 U.S. at 241-42 (noting specifics of Missouri's complaint).

<sup>67.</sup> Id. (explaining object of Missouri's complaint).

<sup>68. 133</sup> Mass. 361 (1882).

<sup>69.</sup> Missouri I, 180 U.S. at 243 (discussing Jamaica Pond Aqueduct Corp., 133 Mass. 361 (1882)). The complaint alleged that the defendant's conduct would

table relief is meant to "remedy the whole mischief."<sup>70</sup> The Court averred, "The preventative force of a decree in equity, restraining the illegal acts before any mischief is done, gives . . . [an] efficacious and complete remedy."<sup>71</sup>

Next, in *Missouri I*, the United States Supreme Court discussed the purpose of equitable relief in comparison to legal remedies.<sup>72</sup> The Court emphasized that, in public nuisance cases, courts of equity can promptly provide a permanent remedy, such as an injunction, that effectively prevents a threatened nuisance before the infliction of harm occurs.<sup>73</sup> Conversely, courts of law are retroactive and can only provide a remedy after a defendant's conduct actually creates a nuisance and inflicts harm on the plaintiff.<sup>74</sup> The Court also noted that, in complaints requesting equitable relief for a threat of future harm, defendants tend to emphasize the lack of evidence and tangible proof that such harm will actually reach fruition; this argument, however, does not preclude an injunction.<sup>75</sup>

"impair the rights of the people in the use of the pond for fishing, boating, and other lawful purposes, and to create and expose upon the shores of said pond a large quantity of slime, mud, and offensive vegetation, very detrimental to the public health." *Id.* at 243-44 (discussing complaint in Jamaica Pond Aqueduct Corp., 133 Mass. 361, 362 (1882)).

 $70.\ {\it Id.}$  at 244 (examining Jamaica Pond Aqueduct Corp., 133 Mass. 361, 363-64 (1882)).

71. *Id.* at 244 (detailing Court's finding in Jamaica Pond Aqueduct Corp., 133 Mass. 361, 363-64 (1882)). The Massachusetts Supreme Court found that "when the nuisance is a public one, an information by the attorney general is the appropriate remedy." *Id.* at 244. An "information in equity" is "an equitable action brought by a sovereign or a governmental unit to preserve or protect a public interest through a public remedy." *Black's Law Dictionary* 712 (9th ed. 2009) (clarifying "information" is equitable remedy similar to injunction).

72. Missouri I, 180 U.S. at 245 (discussing temporal differences of equitable and legal remedies and correlating effects).

73. *Id.* (discussing equitable relief for public nuisance claims). Courts of equity "can not only prevent nuisances that are threatened, and before irreparable mischief ensues, but arrest or abate those in progress, and by perpetual injunction protect the public against them in the future." *Id.* at 244 (quoting Mugler v. Kansas, 123 U.S. 623, 673 (1887)).

74. Id. (discussing retroactive quality of legal remedy).

75. *Id.* at 245 (acknowledging tendency of defendants to argue relief should not be rewarded without proof of harm). The Court explained,

If he [the plaintiff] comes to the court and complains very early . . . you get evidence after evidence for the defendants (the pollution being slight and perhaps only observable at sometimes and on some occasions), saying 'You have no proof at all that there is any appreciable pollution, and you must wait until it becomes a nuisance.' Then he waits six years, until it is obvious to everybody's sense that the pollution is considerable.

Id. (citation omitted).

Consequently, in *Missouri I*, the Supreme Court denied the defendants' motion to dismiss.<sup>76</sup> The Court, however, clarified that plaintiffs must present satisfactory evidence showing a real and imminent threat of harm to effectuate an injunction during the case's full adjudication on the merits.<sup>77</sup> Moreover, the Court explained that if the plaintiffs and defendants presented conflicting evidence that cast doubt on the actuality of the alleged injury, "that conflict and doubt will be a ground for withholding an injunction."<sup>78</sup>

Five years later, in Missouri v. Illinois<sup>79</sup> (Missouri II), the Supreme Court heard the full merits of the case and held that Missouri's claim did not suffice to warrant an injunction.<sup>80</sup> The Court based its decision on the fact that the parties presented conflicting evidence.81 Contrary to Missouri's claim, the defendants contended that a new drainage plan was implemented since the Court last examined the case; thus, the sanitary district's drain water was "much purer than it was before."82 Moreover, both parties presented conflicting expert testimony regarding whether there was an increase of typhoid disease in the region at issue.83 The Court also noted that Missouri's claim was based on "nothing which can be detected by the unassisted senses."84 Conversely, the defendants proved the water at issue was clearer than before, was capable of sustaining an edible fish population, and was potable.85 Further, the Court's finding that Missouri or other states may have contributed to the pollution weakened the plaintiff State's claim.<sup>86</sup>

<sup>76.</sup> *Id.* (denying demurrers filed by defendants). The Supreme Court realized that Missouri's request for relief was "not merely [against] the creation of a nuisance, but against its maintenance." *Id.* at 248.

<sup>77.</sup> *Missouri I*, 180 U.S. at 248 (asserting satisfactory evidence was required for injunction in future case).

<sup>78.</sup> *Id.* (explaining conflicting evidence and doubt of actual injury may disallow future injunction).

<sup>79. 200</sup> U.S. 496 (1906).

<sup>80.</sup> Missouri v. Illinois, 200 U.S. 496, 525-26 (1906) (*Missouri II*) (holding present evidence failed to sufficiently prove allegations warranting injunction).

 $<sup>81.\</sup> Id.$  at  $517,\ 522\text{-}25$  (revealing contradictions between parties' presented evidence).

<sup>82.</sup> Id. at 517 (noting defendants' new contention).

<sup>83.</sup> *Id.* at 522-24 (acknowledging typhoid increase was plaintiff's only tangible evidence and parties presented conflicting evidence on matter).

<sup>84.</sup> *Id.* at 522 (noting lack of tangible proof in plaintiff's favor). "The plaintiff's case depends upon an inference of the unseen." *Id.* 

<sup>85.</sup> Missouri II, 200 U.S. at 272 (finding defendants' tangible evidence persuasive).

<sup>86.</sup> *Id.* at 521 (assessing that Missouri may contribute to problem at issue). "The presence of causes of infection from the plaintiff's action makes the case weaker in principle as well as harder to prove than one in which all [pollution] came from a single source." *Id.* at 526.

Public nuisance doctrine in the environmental realm was characterized further in *Georgia v. Tennessee Copper Co.*,<sup>87</sup> a case in which Georgia sought to enjoin copper plant companies from discharging noxious gas that traveled over the plaintiff State's land.<sup>88</sup> The U.S. Supreme Court found the defendant companies' mode of plant operation facilitated a public nuisance.<sup>89</sup> Consequently, the Court held that Georgia was entitled to an injunction if the defendant companies could not effectively prevent the spread of their plants' fumes within six months.<sup>90</sup>

In making its assessment, the Court acknowledged that a "state has an interest independent of and behind the titles of its citizens, in all the earth and air within its domain. It has the last word as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air." Further, the U.S. Supreme Court weighed the threatened irreparable harm to Georgia against the potential collapse of the defendants' businesses, the pollution's impact on public health, the wellbeing of Georgia's forests, and the commercial practicality of reducing the fumes. The Court asserted that Georgia should not suffer current or future destruction to its natural territory by operations beyond its control. Accord-

<sup>87.</sup> Georgia v. Tennessee Copper Co., 206 U.S. 230 (1907).

<sup>88.</sup> *Id.* at 236 (discussing complaint that noxious gas traveled from defendants' copper plants to plaintiffs' territory). Before this case was tried by the Supreme Court, the plaintiff State's request for a preliminary injunction was denied, but an earlier date was fixed for full adjudication of the merits because "there was ground to fear that great and irreparable damage might be done." *Id.* 

<sup>89.</sup> *Id.* at 238-39 (finding plaintiffs should not suffer from public nuisance caused by defendants).

<sup>90.</sup> *Id.* at 239 (holding plaintiffs deserve injunction under current circumstances). "[T]here is no alternative to issuing an injunction, after allowing a reasonable time to the defendants to complete the structures that they now are building, and the efforts that they are making to stop the fumes." *Id.* 

<sup>91.</sup> *Id.* at 238 (explaining State's interest in protecting its natural territory).

<sup>92.</sup> Tennessee Copper Co., 206 U.S. at 238 (discussing factors under consideration). The court explained,

Without excluding the considerations that equity always takes into account, we cannot give the weight that was given them in argument to a comparison between the damage threatened to the plaintiff and the calamity of a possible stop to the defendants' business, the question of health, the character of the forests as a first or second growth, the commercial possibility or impossibility of reducing the fumes to sulphuric acid, the special adaptation of the business to the place.

Id

 $<sup>93.\</sup> Id.$  (explaining Georgia was not at fault for copper companies' actions). The court reasoned:

It is a fair and reasonable demand on the part of the sovereign that the air over its territory should not be polluted on a great scale . . . that the forests on its mountains . . . and whatever domestic destruction they have suffered, should not be further destroyed or threatened by the act of per-

ingly, the Court determined that Georgia provided a requisite showing of future harm to its forests, vegetation, and constituents' health, which warranted an injunction against the defendants' copper plant operations.<sup>94</sup>

## C. When Discretionary Legislation Displaces Federal Common Law

In July 2004, a group of eight States and New York City, in addition to three non-profit land trusts, sued four private companies and the Tennessee Valley Authority, "a federally owned corporation that operated fossil fuel fired power plants in several states." These defendants were notably the "five largest emitters of carbon dioxide" in the country. 96

The plaintiffs argued that the defendants' carbon dioxide emissions violated the federal common law of interstate nuisance due to their contribution to global warming. Moreover, the eight states and New York City asserted that climate change created a risk to public lands, infrastructure, and health. The trusts urged that animal habitats as well as rare tree and plant species conserved on their lands were in danger of destruction due to climate change. Collectively, the plaintiffs sought injunctive relief "requiring each defendant to cap its carbon dioxide emissions and then reduce them by a specified percentage each year for at least a decade. Relying on Supreme Court precedent indicating that states may sue to "abate air and water pollution produced by other states or by out-of-state" industries, the Second Circuit held the plaintiffs successfully stated a claim under the federal common law of public nui-

sons beyond its control, that the crops and orchards on its hills should not be endangered from the same source.

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 $<sup>94.\</sup> Id.$  at  $238\mbox{-}39$  (finding that evidence of public nuisance warrants injunction).

<sup>95.</sup> See American Elec. Power Co. v. Connecticut, 131 S. Ct. 2527, 2534-35 (2011) (noting parties to lawsuit).

<sup>96.</sup> *Id.* at 2534 (recognizing plaintiffs' assertion that defendants were extensive contributors to global warming problem). "Their collective annual emissions . . . constitute [twenty-five] percent of emissions from the domestic electric power sector, [ten] percent of emissions from all domestic human activities . . . and [two and a half] percent of all anthropogenic emissions worldwide." *Id.* 

<sup>97.</sup> Id. (discussing plaintiffs' claim).

<sup>98.</sup> Id. (stating first plaintiff group's nuisance concerns).

<sup>99.</sup> Id. (stating second plaintiff group's nuisance concerns).

<sup>100.</sup> American Elec., 131 S. Ct. at 2534 (internal quotations omitted) (discussing plaintiffs' request for injunctive relief).

sance.<sup>101</sup> Further, the Second Circuit held the Clean Air Act did not "displace" federal common law.<sup>102</sup>

On appeal before the U.S. Supreme Court, the plaintiffs relied on cases that permitted states to challenge activity detrimental to the health and welfare of their constituents.<sup>103</sup> The defendants, however, argued that the universal scale and complexity of global warming distinguishes it from more narrow degrees of pollution that are generally at issue in federal nuisance suits.<sup>104</sup> The Court "recognized that public nuisance law, like common law generally, adapts to changing scientific and factual circumstances."105 The Court, nevertheless, held the Clean Air Act's delegation of regulatory authority to the Environmental Protection Agency (EPA) displaced "any federal common law right to seek abatement of carbon dioxide emissions from fossil fuel fired power plants."106 In reaching its determination, the Court found that the legislation encompassed the relief sought by the plaintiffs, giving deference to Congress's discretionary power.<sup>107</sup> In sum, the Court determined that "[t]he appropriate amount of regulation . . . cannot be prescribed in a vacuum," and the balance between environmental benefit and possible economic disruption must be weighed properly. 108 The Court, thus, decided the EPA was better suited to make decisions regarding greenhouse gas regulation than individual district

<sup>101.</sup> See id. at 2534-35 (noting Second Circuit's holding).

<sup>102.</sup> Id. (noting Second Circuit's subsequent ruling).

<sup>103.</sup> *Id.* at 2536 (acknowledging precedent relied on by plaintiffs). The U.S. Supreme Court acknowledged that it had never "held that a State may sue to abate any manner of pollution originating outside its borders." *Id.* Moreover, the Court never answered whether "the plaintiffs could state a federal common law claim for curtailment of greenhouse gas emissions because of their contribution to global warming" due to its final holding that federal common law was displaced. *Id.* at 2537.

 $<sup>104.\,</sup>$  Id. at 2536 (stating defendants' argument against federal public nuisance claim).

<sup>105.</sup> American Elec., 131 S. Ct. at 2536 (acknowledging adaptive nature of public nuisance law).

<sup>106.</sup> Id. at 2537 (stating Supreme Court's holding).

<sup>107.</sup> Id. at 2538 (discussing Clean Air Act's purpose).

<sup>108.</sup> *Id.* at 2539 (discussing flaws of deciding appropriate environmental regulation in court). The Court asserted:

The appropriate amount of regulation in any particular greenhouse gasproducing sector cannot be prescribed in a vacuum, as with other questions of national . . . policy, informed assessment of competing interests is required. Along with the environmental benefit potentially achievable, our Nation's energy needs and the possibility of economic disruption must weigh in the balance.

judges who lacked the scientific, economic, and technological resources available to the agency.<sup>109</sup>

### D. Asian Carp I: Casting a Line in the Seventh Circuit

Asian Carp II was not the first time the Seventh Circuit addressed the threat carp pose to the Great Lakes. <sup>110</sup> In 2011, the same five states and Native American tribe bordering the Great Lakes brought a lawsuit against the Corps and District regarding the migration of Asian carp from the Mississippi River Basin into Lake Michigan. <sup>111</sup> Michigan v. U.S. Army Corps of Engineers (Asian Carp I), reveals the Seventh Circuit's reasoning at the outset of the carp problem. <sup>112</sup>

In the United States District Court for the Northern District of Illinois, the plaintiff States moved for a preliminary injunction "that would require the defendants to put in place additional physical barriers throughout the CAWS, implement new procedures to stop invasive carp, and expedite a study of how best to separate the Mississippi and Great Lakes watersheds permanently."<sup>113</sup> The plaintiffs were unable to persuade the District Court that the carp posed a significant threat to the Great Lakes and their ecosystems as well as industries relying on them; thus, the District Court denied the requested preliminary injunction. <sup>114</sup> Subsequently, the States appealed to the Seventh Circuit to prove their fears of ecological disaster and the collapse of billion-dollar industries were warranted. <sup>115</sup>

The evidence presented by the States successfully persuaded the Seventh Circuit that the chance of carp invading the Great Lakes in a manner rising to the level of public nuisance was likely.<sup>116</sup> The appellate court asserted, "[I]f the invasion comes to

<sup>109.</sup> *Id.* at 2539-40 (discussing expert agencies' suitability to make decisions rather than district judges). "Judges may not commission scientific studies or convene groups of experts for advice, or issue rules under notice-and-comment procedures inviting input by any interested person, or seek the counsel of regulators in the States where the defendants are located." *Id.* at 2540.

<sup>110.</sup> Michigan v. United States Army Corps of Eng'rs, 667 F.3d 765, 768 (7th Cir. 2011) (*Asian Carp I*) (addressing the Asian carp issue in 2011).

<sup>111.</sup> Id. at 768-69 (noting plaintiffs' concern of carp's threat to Great Lakes).

<sup>112.</sup> *Id.* at 769 (discussing Seventh Circuit's reasoning on carp issue leading up to the case at hand).

<sup>113.</sup> Id. (noting plaintiffs' request for preliminary injunction).

<sup>114.</sup> Id. (noting District Court's denial of preliminary injunction).

<sup>115.</sup> Asian Carp I, 667 F.3d at 768-69 (discussing plaintiffs' appeal due to fear of carp invasion's consequences).

<sup>116.</sup> *Id.* at 769 (revealing Seventh Circuit's belief that carp stand to invade Great Lakes and such qualifies as public nuisance).

pass, there is little doubt that the harm to the plaintiff [S]tates would be irreparable."<sup>117</sup> The Corps and District argued that they could not be sued under a federal common law public nuisance claim because they merely owned and operated the CAWS connecting the Mississippi River Basin to the Great Lakes.<sup>118</sup> The court, however, found that, while the defendants were not physically moving carp from one body of water to the other, they were still responsible for nuisances caused by their operation of the CAWS.<sup>119</sup> Still, the defendants emphasized that they never emitted "traditional pollutants" into the water systems.<sup>120</sup> After comparing the invasive species to a toxic spill, the Seventh Circuit affirmed that the carp qualified as a public nuisance.<sup>121</sup>

In *Asian Carp I*, the Seventh Circuit stressed that the plaintiffs' request was for a preliminary injunction, rather than a permanent injunction; thus, the States only had to prove "a likelihood of success on the merits rather than actual success." While the plaintiff States sufficiently proved that Asian carp pose a threat of irreparable harm, the Seventh Circuit was primarily concerned with whether such harm was imminent enough to require the defendants to take new action that would effectively abate the public nuisance before full adjudication of the case's merits. 123

In making its determination regarding the threat's temporal proximity, the court assessed several factors. The court found that certain measures implemented by the Corps, including electric barriers, netting, electrofishing, and rotenone poisoning, had "at least some deterrent effect" on the carp's lakeward movement. Moreover, a 2010 eDNA sampling showed positive results indicating

<sup>117.</sup> Id. (finding carp's invasion stands to inflict irreparable harm).

<sup>118.</sup> *Id.* at 771 (discussing defendants' belief that common law does not extend to their situation).

<sup>119.</sup> *Id.* (showing defendants' operation of CAWS renders them responsible should public nuisance arise).

<sup>120.</sup> Asian Carp I, 667 F.3d at 771 (noting defendants' argument that they merely operated facilities that allowed invasive species to freely travel).

 $<sup>121.\</sup> Id.$  (finding carp qualify as public nuisance despite traditional examples).

<sup>122.</sup> *Id.* at 782 (quoting Amoco Prod. Co. v. Village of Gambell, 480 U.S. 531, 546 n. 12 (1987)).

<sup>123.</sup> Id. 781 (stating central question of States' public nuisance claim).

<sup>124.</sup> Id. at 783-86 (assessing factors that suggest imminence of invasion).

<sup>125.</sup> Asian Carp I, 667 F.3d at 783 (noting preventative procedures used by Corps). Considering the results of eDNA testing, the court realized the impossibility of definitively knowing whether positive results indicate the presence of living carp lakeward of electronic barriers, but gave some weight to the plaintiffs' evidence because even the defendants and other federal agencies utilize eDNA testing to monitor the carp. *Id.* at 783-84. The court found, "If the tests are good

the presence of carp in approximately a dozen areas of the CAWS.<sup>126</sup> Despite the common consensus in 2011 that the carp would not be able to thrive in the Great Lakes, the Seventh Circuit relied on information presented by the Obama Administration and found that once the carp migrate beyond the Great Lakes' threshold, they will not have any problem adapting, reproducing, or establishing themselves there.<sup>127</sup> Additionally, the court noted that, in 2009, a carp population existed about sixty miles from Lake Michigan.<sup>128</sup>

The Seventh Circuit ultimately found that the risk of harm was significant and the threat of invasion was imminent. Consequently, the court determined that a satisfactory risk of nuisance existed to satisfy the "likelihood-of-success" requirement for preliminary injunctive relief. In addition, the court recognized that the ecological impact of the threatened harm suggested the need for a broad perspective of the carp problem. The Seventh Circuit emphasized that "[i]t is especially chilling to recall that in just . . . [forty] years the fish have migrated all the way from the lower Mis-

enough for expert agencies, it is hard to see why we should flatly forbid their consideration."  $\mathit{Id}$ . at 784.

 $126.\ \textit{Id.}$  (acknowledging  $2010\ \text{eDNA}$  test results as indication of carp presence).

The district court thought that this evidence, in combination with the discovery of two invasive carp specimens (one dead and one living) in the CAWS, supported a theory that invasive carp are present in the CAWS in 'low numbers.' This conclusion was reasonable. The carp may even be present in larger numbers but for present purposes we do not need any more precision.

Id.

127. *Id.* at 784-85 (finding carp would not have any problem thriving in Great Lakes). On April 24, 2011, the Obama Administration presented two pieces of newly developed information.

[F]irst, it said that while it was once thought the carp could not establish breeding populations in Lake Michigan because of the low levels of plankton (the carp's normal food source) . . . new evidence suggests that the fish will happily switch from eating plankton to consuming green algae that now covers the lake floor . . . and (2) while experts had thought the carp needed coastal rivers between [thirty] and [sixty] miles long to spawn, it turns out they can make do with much shorter breeding grounds.

Id

128. Id. at 785 (noting carp presence was sixty miles from Lake Michigan in 2009).

129. *Id.* (noting risk of substantial harm may be growing with each passing day).

130. Asian Carp I, 667 F.3d at 785 (finding States' evidence combined with magnitude of harm fulfilled "likelihood-of-success" requirement).

131. *Id.* (acknowledging nature of threat). The court viewed the sixty-mile distance between the carp and Lake Michigan in 2009 as an unsafe margin. *Id.* 

sissippi River to within striking distance of the lakes and have come to dominate the ecosystem in the process."<sup>132</sup> Accordingly, the court found the plaintiffs successfully established the likelihood of impending irreparable harm to the degree necessary for preliminary relief.<sup>133</sup>

Next, the court decided whether ordering a preliminary injunction would cause the defendants harm that would substantially outweigh the benefit to the plaintiffs.<sup>134</sup> The Seventh Circuit held that a preliminary injunction would cause more harm than it would prevent.<sup>135</sup> In reaching its conclusion, the court found that the vague steps suggested by the plaintiffs might not effectively reduce the risk of invasion before the full merits of the case were subsequently adjudicated.<sup>136</sup> Furthermore, the court found that a preliminary injunction would be costly for the defendants and would hinder existing emergency response units and the Coast Guard as well as recreation and tourism.<sup>137</sup>

Notably, the Seventh Circuit found that federal legislation regarding the navigability of waterways and aquatic nuisance species did not displace federal common law.<sup>138</sup> The court recognized that the statutes enacted by Congress regarding the invasive species problem did not meet the same level of particular authority granted to the EPA in *American Electric.*<sup>139</sup> Rather, the relevant legislation merely appropriated funds to the Corps for routine maintenance of

<sup>132.</sup> *Id.* (discussing carp's rapid travel and dominating presence). Additionally, the court noted the commercial harvesting of carp in the Mississippi basin increased from five to fifty-five tons between 1994 and 1997. *Id.* Also, the court looked at evidence suggesting "that by 1999 invasive carp made up . . . [ninety-seven percent] of the Mississippi's biomass; and as of 2007[,] commercial fishers were catching . . . [twelve] tons of invasive carp each day." *Id.* 

<sup>133.</sup> *Id.* at 789 (finding plaintiffs established likelihood of irreparable harm).

<sup>134.</sup> *Id.* (describing need to balance party-specific equities). Additionally, the court found that the usual inquiry of whether the injunction would advance or impede the public interest was unnecessary because the defendants are governmental entities that inherently represent the interests of the public. *Id.* 

<sup>135.</sup> Asian Carp I, 667 F.3d at 789 (finding preliminary injunction was not warranted).

<sup>136.</sup> *Id.* at 789-94 (assessing whether suggested steps such as closing locks, putting screens over sluice gates, placing block nets in rivers, rotenone poisoning, and accelerating Corps' completion of Report would reduce risk of invasion).

<sup>137.</sup> Id. at 795 (assessing harm preliminary injunction would cause to defendants and public).

<sup>138.</sup> *Id.* at 776-80 (assessing whether legislation displaced federal common law in this area).

<sup>139.</sup> *Id.* at 778-79 (finding "congressional efforts to curb the migration of invasive species, and of invasive carp in particular, have yet to reach the level of detail one sees in the air or water pollution schemes"); *see also* American Elec. Power Co. v. Connecticut, 131 S. Ct. 2527, 2529 (2011) (holding EPA actions displace federal common law).

the CAWS and granted agencies or, more commonly, informal task forces the authority to study the invasive species problem and propose solutions.<sup>140</sup>

The Seventh Circuit, however, emphasized that federal and state actors were contemporaneously working to prevent the carp invasion.<sup>141</sup> In the tradition of *American Electric*, the Seventh Circuit reasoned that it was less equipped to decide the proper method for alleviating the carp problem than expert agencies currently working to avert the invasion.<sup>142</sup> The court decided that a preliminary injunction might hamper existing efforts.<sup>143</sup> Finally, the Seventh Circuit suggested, "[a]s the case proceeds, the district judge should bear in mind that the risk of harm here depends upon both the probability of the harm and the magnitude of the problem that would result."<sup>144</sup>

### IV. NARRATIVE ANALYSIS: THE SEVENTH CIRCUIT'S CATCH AND RELEASE OF THE ASIAN CARP PROBLEM

In Asian Carp II, the Seventh Circuit found that public nuisance actions arise when an actor's conduct negatively affects a public right. Moreover, the court determined that federal entities are not immune from nuisance liability because public nuisance doctrine does not discriminate among culpable actors. As long as a public right is endangered, the entity that caused the harm is accountable for its misconduct.

The court chronologically analyzed statutes that authorized the Corps and District to maintain and operate the CAWS, and, in doing so, it abrogated the defendants' and district court's assertion

<sup>140.</sup> Asian Carp I, 667 F.3d at 780 (discussing legislation in relevant area).

<sup>141.</sup> See id. at 796 (giving final reason why preliminary injunction would cause harm).

<sup>142.</sup> See id. at 796-99 (discussing agency efforts to prevent invasion). "Environmental problems require the balancing of many complicated interests, and agencies are better suited to weigh competing proposals and select among solutions." *Id.* at 797.

<sup>143.</sup> See id. at 799 (deciding preliminary injunction might impede existing efforts).

<sup>144.</sup> Id. at 800 (stating Seventh Circuit's suggestion).

<sup>145.</sup> See Michigan v. United States Army Corps of Eng'rs, 758 F.3d 892, 900-01 (7th Cir. 2014) (noting when public nuisance complaints arise).

<sup>146.</sup> See id. (finding federal entities are not immune under public nuisance doctrine).

<sup>147.</sup> See id. (explaining when public nuisance defendants are held accountable). Additionally, the court disclaims the view that "the federal common law doctrine of public nuisance exists only to create a uniform rule for resolving disputes between states in a way that comports with the national interest." *Id.* at 899.

that the series of statutes indicate a congressional mandate to keep the CAWS open no matter the cost, environmental or otherwise. 148 Further, the court found that, while the statutes imposed a "duty to operate and maintain the CAWS in the interests of navigation,"149 there was no indication that legislative intent "requires the Corps to keep the CAWS open for navigation at all times and under all circumstances."150 The Seventh Circuit explained that the relevant statutory authority merely implied the Corps should facilitate navigation to the best of its ability under existing conditions. <sup>151</sup> The court also found that the Corps and the District are not "fully authorized" to keep the CAWS open without regard for the potential invasion of Asian carp into the Great Lakes. 152 The fact that the defendants are authorized to operate and maintain the CAWS does not justify any unlawful consequences that may stem from their conduct, including the permission of a rapacious species' migration into the Great Lakes. 153

After concluding that federal entities may be held accountable for endangering a public right, the Seventh Circuit still had to decide whether the Corps and District's operation of the CAWS is a facilitating cause of the impending carp invasion.<sup>154</sup> Despite acknowledging the Second Restatement of Torts' role in federal common law's public nuisance doctrine; referencing *Missouri I, Missouri II*, and *Tennessee Copper Co.* as relevant case law; and deeming *American Electric* inapplicable, the court primarily relied on the defendant agencies' past efforts and the Corps' Report in making its final determination.<sup>155</sup> The court reasoned that "the manner of operation

<sup>148.</sup> See id. at 901-02 (rejecting defendants' "congressional mandate" argument and reasoning behind District Court's holding).

<sup>149.</sup> *Id.* at 902-03 (discussing District Court's reliance on original Rivers and Harbors Act, Energy and Water Development Appropriations Act of December 4, 1981, and Supplemental Appropriations Act of July 30, 1983).

<sup>150.</sup> Id. at 903 (distinguishing legislative intent from defendants' argument).

<sup>151.</sup> See Asian Carp II, 758 F.3d at 902 (finding Corps' duty entails facilitation of navigation). "Even the original Rivers and Harbors Act cannot fairly be understood as a mandate to force the waterway to remain open to navigation even if there is an oil spill, or if the waters have become contaminated with some kind of noxious bacteria." *Id.* 

<sup>152.</sup> *Id.* at 903 (rejecting "fully authorized" argument). Further, the court reasoned that because the Corps and District are not immune from public nuisance liability, "it follows that the Corps' duty to operate a navigable waterway does not 'fully authorize' it to create the nuisance alleged in the States' complaint." *Id.* 

<sup>153.</sup> See id. (explaining defendants' authorization to operate CAWS does not authorize any resulting adverse consequences).

<sup>154.</sup> See id. at 904 (acknowledging question of whether alleged facts demonstrate defendants' cause of public nuisance).

<sup>155.</sup> See id. (discussing Restatement's role in federal common law); see id. at 899 (referring to prior environmental public nuisance decisions); see id. at 897

involves more than maintenance of a manmade waterway between the Mississippi River and Lake Michigan. It also involves the steps that the Corps is taking and has already taken" to prevent Asian carp from penetrating the Great Lakes' threshold. <sup>156</sup> Furthermore, the court pointed to the Corps' implementation of electronic barriers, installation of screens on sluice gates, application of rotenone when potential threats arose, and regular monitoring activity as evidence of the Corps' proactive efforts to combat the migration of Asian carp toward Lake Michigan. <sup>157</sup>

The Seventh Circuit emphasized the Corps' issuance of the "Great Lakes and Mississippi River Interbasin Study Report" as an indication of its preemptive diligence in crafting a plan to inhibit the carp's intrusion even though the defendant agency was forced to compile the Report by a 2012 mandate under the Progress Act.<sup>158</sup> The Corps released the Report two weeks before the Seventh Circuit heard oral arguments in Asian Carp II.<sup>159</sup> Moreover, the court recognized the Corps' prediction that, without the implementation of extra measures, there is a "'medium' risk of Asian carp establishing themselves in the Great Lakes within 25 years."160 In the Report, the Corps explained that a "medium risk" indicates the carp's invasion is "likely but not certain." The Corps also asserted that there is a "low risk" of invasion within the next twentyfive years. 162 Relying on the information gathered by the Corps in the Report, the court decided the manner in which the Corps and District currently operate the CAWS is sufficient to prevent the Asian carp from passing into the Great Lakes. 163

(noting 2012 Progress Act furthered 2007 Water Resources Development Act's demand that Corps compile Report).

<sup>156.</sup> See Asian Carp II, 758 F.3d at 894 (expanding on defendants' "manner of operation").

<sup>157.</sup> *Id.* (noting preventative steps taken by Corps). "The defendants have been diligent in their efforts to operate a waterway that blocks the passage of Asian carp to Lake Michigan." *Id.* 

<sup>158.</sup> See id. at 896 (expressing importance of Corps' issuance of Report); see also id. at 897 (discussing 2012 Progress Act mandate for Corps' issuance of Report).

<sup>159.</sup> See id. at 897 (noting publication date of Report).

<sup>160.</sup> Id. (acknowledging Corps' risk assessment of invasion).

<sup>161.</sup> Asian Carp II, 758 F.3d at 897 (noting court's understanding of what Corps meant by "medium risk" and noting Corps' short-term risk assessment of invasion).

<sup>162.</sup> Id. at 898 (noting Corps' short-term risk assessment of invasion).

<sup>163.</sup> See id. at 904-05 (relying on information in Report in determining Corps' current methods are sufficient). In sum, the court found "a notable lack of factual allegations that the Asian carp are passing or about to pass the barriers that the Corps has established, and the [States'] complaint does not plausibly allege that

The court was tasked with weighing several factors in making its determination.<sup>164</sup> The States' belief "that nothing short of hydrological separation will prevent the spread of Asian carp from the Mississippi to the Great Lakes" complicated the amount of clout their equitable relief request held due to its alleged impracticality.<sup>165</sup> On the contrary, the court relied heavily on the Corps and District's "intensive efforts" as well as hydrological separation concerns expressed by the defendants (i.e. water quality, navigation, public enjoyment, and cost).<sup>166</sup> The Seventh Circuit stated, "it is the defendants' apparent diligence, rather than their claimed help-lessness that is key to our holding today."<sup>167</sup>

Furthermore, the Seventh Circuit deduced that the States' "complaint [was] careful not to ask for the barrier itself" because the Rivers and Harbors Act would undoubtedly bar the court from issuing an injunction requiring construction of a structure for the purpose of hydrological separation. Because the complaint requested an injunction "to take all appropriate and necessary measures to expeditiously develop and implement plans to permanently and physically separate [the waterways]," the Seventh Circuit found that such an injunction would be "an extraordinary and likely inappropriate use of a federal court's equitable powers." Accordingly, the court reasoned that the requested injunction would

the Corps cannot or will not respond to more urgent threats if and when they arise."  $\mathit{Id}$ . at 905.

<sup>164.</sup> See id. at 905-07 (discussing factors weighed by Seventh Circuit).

<sup>165.</sup> *Id.* at 905-06 (showing how plaintiffs' unwieldy request seemed to weaken their entire claim). The court reasoned, "We know there is no quick fix here. Under these conditions, it would take an unusually strong showing to meet the requirements for equitable relief." *Id.* 

<sup>166.</sup> See Asian Carp II, 758 F.3d at 905, 907 (discussing role of defendants' exemplified efforts and their concerns associated with hydrological separation in court's determination). The Seventh Circuit found that "[t]he Corps and the District . . . are engaged in intensive efforts to prevent the carp from reaching the Great Lakes, and there is a great deal of evidence that indicates they have succeeded thus far in doing so." Id. Further, "[t]he complaint does not present facts that, if believed, would show that hydrological separation is the only way to prevent the spread of the Asian carp." Id. (emphasis original).

<sup>167.</sup> Id. at 906 (acknowledging defendants' "diligence").

<sup>168.</sup> *Id.* (analyzing legislative purpose of Rivers and Harbors Act and showing difference between States' request in complaint and what they sought in practice). "A court could not direct the Corps to build a dam in contravention of the Act, because '[c]ourts of equity can no more disregard statutory and constitutional requirements and provisions than courts of law." *Id.* (quoting Hedges v. Dixon County, 150 U.S. 182 (1893)). In sum, the Rivers and Harbors Act disallows the construction of barriers that would impede commercial navigation without Congress's consent. *Id.* 

<sup>169.</sup> *Id.* at 907 (noting injunction would likely be improper use of court's equitable powers).

require the Corps "to exercise its discretion of a certain plan and essentially . . . lobby Congress to adopt and provide funds for that plan." <sup>170</sup> In conclusion, the Seventh Circuit decided that the States' complaint failed to "plausibly allege that the Corps and District are creating a current or imminent public nuisance by their manner of operating the CAWS." <sup>171</sup> Therefore, the court held that the plaintiff States "failed to state a claim under which relief can be granted." <sup>172</sup>

### V. Critical Analysis: Tangling the Reel Under Public Nuisance Doctrine

In Asian Carp II, the Seventh Circuit's reliance on the Corps and District's past and present preventative efforts in reaching its final holding does not logically follow its previous reasoning.<sup>173</sup> In Asian Carp I, the court properly found that legislation granting informal task forces authority to research the invasive carp problem and propose solutions did not amount to displacement of federal common law.<sup>174</sup> Under that finding, the States were not barred from asserting a public nuisance claim against the Corps and District in Asian Carp II.<sup>175</sup> The court's final determination, however, mirrored the rationale set forth in American Electric; failed to consider environmental public nuisance cases such as Missouri I, Missouri II, and Tennessee Copper Co.; and effectively allowed legislation to override federal common law.<sup>176</sup>

Based on the specious diligence exemplified by the Corps, the court determined that the defendants were best suited to deal with the carp problem internally.<sup>177</sup> As a result, the Seventh Circuit failed to provide the defendants with any instruction regarding fu-

<sup>170.</sup> Id. at 907 (assessing what States' request would actually entail).

<sup>171.</sup> Asian Carp II, 758 F.3d at 905 (holding States' complaint does not show Corps and District's operations are cause of alleged imminent public nuisance).

<sup>172.</sup> *Id.* at 907 (holding plaintiffs failed to state claim warranting equitable relief).

<sup>173.</sup> For a discussion of the court's contradictions, see *supra* notes 154-63 and accompanying text.

<sup>174.</sup> For a discussion of the relevant legislation, see *supra* notes 138-40, 148-53 and accompanying text.

<sup>175.</sup> For a further discussion of the nuisance claim, see *supra* notes 39-45 and accompanying text.

<sup>176.</sup> For a further discussion of the court's determination, see *supra* notes 154-57 and accompanying text.

<sup>177.</sup> Michigan v. United States Army Corps of Eng'rs, 758 F.3d 892, 907 (7th Cir. 2014) (finding future prevention of invasion should be left to defendants' judgment).

ture prevention of the carp's invasion.<sup>178</sup> This determination is effectively equivalent to legislative displacement of federal nuisance law and, therefore, contrary to the Seventh Circuit's previous finding.<sup>179</sup> Moreover, the court emphatically relied on the Report as evidence of the defendants' satisfactory operation of the CAWS and their competent ability to address the carp problem in the future.<sup>180</sup>

The Corps, a defendant in the suit, personally compiled the Report, and, thus, the court relied on biased material as determinative evidence.<sup>181</sup> The fact that the Corps and District contended that they essentially maintained a congressional mandate and were "fully authorized" to operate the CAWS regardless of the environmental cost implies their predisposition, conscious or not, to refrain from drastically changing their current mode of operation. 182 Also, the Report's finding that the risk of Asian carp reaching the Great Lakes is "low" for the next twenty-five years and "medium" ("likely but not certain") after that time lapse is disconcerting. 183 In light of the defendants' current preemptive procedures, the Corps' risk assessment in the Report is seemingly unfounded based on the fact that the invasive carp traveled from the lower Mississippi River to within sixty miles of Lake Michigan by 2009, eviscerating the ecosystem along the way, and, further, established a population as near as six miles from Lake Michigan by 2010.<sup>184</sup>

The Seventh Circuit avoided a full public nuisance analysis of the issue by finding that the defendants were in the best position to determine the proper preventative method and subsequently holding that the plaintiff States failed to assert a claim for which relief can be granted. An application of the proper public nuisance analysis set forth in the Second Restatement of Torts suggests there is sufficient evidence of the defendants' facilitation of an inevitable

<sup>178.</sup> Id. (determining Corps' current methods are satisfactory).

<sup>179.</sup> For a further discussion of legislative displacement of federal common law, see *supra* notes 106-09 and accompanying text.

<sup>180.</sup> For a further discussion of the court's reliance on the Report, see *supra* notes 158-67 and accompanying text.

<sup>181.</sup> For a further discussion of the Report's creation, see *supra* notes 32-38 and accompanying text.

<sup>182.</sup> For a further discussion of the defendants' argument, see *supra* notes 146-53 and accompanying text.

<sup>183.</sup> See Asian Carp II, 758 F.3d at 897-98 (noting Report's risk assessment).

<sup>184.</sup> *Id.* (discussing Report's findings regarding invasion risk probability). *See also* Michigan v. United States Army Corps of Eng'rs, 667 F.3d 765, 785 (7th Cir. 2011) (finding carp within sixty miles of Lake Michigan in 2009).

<sup>185.</sup> For a further discussion of the court's reasoning and consequent incomplete analysis, see *supra* notes 155-72 and accompanying text.

public nuisance under past, current, and, now, future circumstances. Under the Restatement's analysis, the court should consider the gravity of the harm suffered by the plaintiff States, their constituents, the industries relying on the Great Lakes' vitality, and the public as a whole. Furthermore, the court should balance those factors against the utility of the Corps and District's continuing operation and maintenance of the CAWS.

In determining the gravity of the harm, the court must objectively consider the extent and character of the harm, the social value the law attaches to the inhibited use or enjoyment, the suitability of the use or enjoyment to the locality at issue, and the burden of avoiding the harm placed on those deprived of their use and enjoyment. The extent of the harm caused by the carp invasion would be significant because it would perpetually interrupt the fishing and tourism industries of the plaintiff States as well as the public's use and enjoyment of the Great Lakes. The evisceration of ecosystems and domination of water systems already suffering from the aquatic nuisance, such as the Mississippi River Basin, characterize the harm inflicted by the carp's invasion.

In assessing the gravity of the harm, the social value attributed to the inhibited use or enjoyment is a central consideration. The impacted parties' beneficial uses of the Great Lakes for industrial purposes such as tourism, business (i.e. commercial fishing), and

<sup>186.</sup> See RESTATEMENT (SECOND) OF TORTS §§ 292, 821B, 826-828 (1979) (establishing proper public nuisance analysis). For a further discussion of the defendants' past and ongoing preventative efforts, see *supra* notes 25-31, 157 and accompanying text.

<sup>187.</sup> See Asian Carp II, 758 F.3d at 894 (discussing impending harm). See also Restatement (Second) of Torts §§ 292, 821B, 826-828 (1979) (discussing proper public nuisance analysis).

<sup>188.</sup> See RESTATEMENT (SECOND) OF TORTS §§ 292, 821B, 826-828 (1979) (explaining public nuisance analysis).

<sup>189.</sup> Id. § 827(a)-(e) (1979) (listing factors for determining gravity of harm). These rules "usually are . . . applied to conduct resulting in a public nuisance." Id. at cmt. a.

<sup>190.</sup> See id. at cmt. c (explaining extent of harm assessment). "The extent of harm in a particular case depends not only upon the degree of interference with the use or enjoyment . . . but also upon its duration." Id.

<sup>191.</sup> See id. at cmt. d (discussing character of harm assessment). "Physical damage . . . involves a more tangible obvious loss than discomfort and annoyance . . . Furthermore, if the invasion involves physical damage . . . the gravity of the harm is ordinarily regarded as great." *Id.* 

<sup>192.</sup> See id. at cmt. f (explaining importance of social value in assessment). "The greater the general social value of the particular type of use or enjoyment of land which is invaded, the greater the gravity of the harm from the invasion." Id.

recreation have an intrinsic social value.<sup>193</sup> Generally, any interference with these types of uses is considered serious because they advance and protect the public good.<sup>194</sup>

The Great Lakes are a suitable locality for the affected uses at issue. Fishing, tourism, and recreation are timelessly connected to the water system. The carp's destruction of the ecosystem involved, which upholds an innate environmental value itself, would deprive traditional industries of billions of dollars in revenue and extinguish the recreational enjoyment of countless members of the public community. These uses are inextricable from the definitive nature of the Great Lakes and cannot be transferred or replicated if the Asian carp invasion comes to fruition because there is not a comparable water system in the world, let alone this specific locality. Consequently, the burden of avoiding the harm is great considering the carp's intrusion would plague the entire water system and alternative avenues of replicating the Great Lakes' uses are nonexistent.

On the contrary, to determine the utility of the Corps and District's operation and maintenance of the CAWS, a combination of a public nuisance analysis and negligence analysis should be ap-

<sup>193.</sup> See Restatement (Second) of Torts § 827(a)-(e) (1979) (discussing beneficial uses with correlating social value).

<sup>194.</sup> *Id.* (explaining social value level derives from use's relation to public good). These types of use "are essential to the functioning of organized society and substantial interferences with them under almost any circumstances are relatively serious. How much social value a particular type of use has . . . depends upon the extent to which . . . [it] advances or protects the general public good."

<sup>195.</sup> For a further description of the features of Great Lakes and monetary harm to traditional industries, see *supra* notes 1, 41-42 and accompanying text.

<sup>196.</sup> See Asian Carp II, 758 F.3d at 894 (noting deprivation of public right). For a general discussion of the water system's importance and features, see *Physical Features of Great Lakes, supra* note 1 and accompanying text.

<sup>197.</sup> For a further discussion of potential harm, see *supra* notes 41-42 and accompanying text.

<sup>198.</sup> For a further discussion of the history of Great Lakes, see *Physical Features of Great Lakes, supra* note 1 and accompanying text.

<sup>199.</sup> See RESTATEMENT (SECOND) OF TORTS § 827 at cmt. i (discussing assessment of affected parties avoidance of the harm).

This factor of the burden to the person harmed of avoiding the harm is not often decisive as to gravity. It merely embodies the common sense idea that persons living in society must make a reasonable effort to adjust their uses . . . to those of their fellowmen before complaining that they are being unreasonably interfered with in what they are doing.

plied.<sup>200</sup> The Corps and District's past operation of the CAWS unintentionally facilitated the carp's migration thus far.<sup>201</sup> Additionally, the defendants are now aware that there is a significant chance their current and future maintenance will allow the carp to establish a population in the Great Lakes.<sup>202</sup> In determining the utility of the defendants' conduct, this hybrid analysis encompasses all relevant inquiries.<sup>203</sup>

Under a public nuisance analysis, the court must consider the social value the law attaches to the facilitation of navigability in the CAWS, the suitability of aquatic navigation for commercial purposes to the locality at issue, and the impracticality of preventing or avoiding the establishment of an Asian carp population in the Great Lakes. The only effective addition to this assessment, taken from negligence analysis, inquires whether alternative means exist that advance or protect the commercial navigability of the CAWS by another, less dangerous course of conduct. On the court of the commercial navigability of the CAWS by another, less dangerous course of conduct.

<sup>200.</sup> See id. at cmt. c (explaining appropriateness of private nuisance analysis when harm is knowingly inflicted and appropriateness of negligence analysis when harm is unknowingly inflicted).

<sup>201.</sup> For a further discussion of defendants' conduct, see *supra* notes 25-31, 157 and accompanying text.

<sup>202.</sup> See Asian Carp I, 667 F.3d at 768-69 (discussing findings regarding threat of carp).

<sup>203.</sup> See Restatement (Second) of Torts § 828 (1979) cmt. c (explaining difference between intentional and unintentional harm analyses). The utility of conduct section of a public nuisance analysis only deals with situations where the actor knowingly inflicts harm. Id. "Although the problem of determining utility in these cases is fundamentally the same as in negligence cases, the factors involved are somewhat different, since in negligence cases the actor's conduct involves merely a risk rather than certainty of harm." Id.

<sup>204.</sup> See RESTATEMENT (SECOND) OF TORTS § 828(a)-(c) (1979) (listing considerations that determine utility of defendants' conduct). The Restatement asserts that these considerations and rules are commonly used to assess:

conduct that results in a public nuisance case . . . Thus, in determining whether the gravity of the interference with the public right outweighs the utility of the actor's conduct, it is necessary to consider the social value that the law attaches to the primary purpose of the conduct, the suitability of the conduct to the character of the locality and the impracticability of preventing or avoiding the invasion.

Id. at cmt. a. Moreover, under this nuisance analysis, it is only when the defendants' conduct

has utility from the standpoint of all the factors as a whole that its merit is ever sufficient to outweigh the gravity of the harm it causes. If the conduct has no utility from the standpoint of one of the factors, the fact that it has utility from the standpoint of other factors is not controlling.

Id. at cmt. c

<sup>205.</sup> See RESTATEMENT (SECOND) OF TORTS § 292(a)-(c) (1979) (inquiring whether defendants' interest can be advanced or protected by alternative course of conduct). Under a negligence assessment, the court considered the social value of the defendants' conduct, which is effectively covered by a public nuisance analysis.

There is ample support for concluding that the law attaches significant social value to commercial navigation within the CAWS.<sup>206</sup> Commercial navigation is "an interest which is primarily of private advantage, but the public may nonetheless be interested, not merely as the protector of the private interest, but also because the general public good is advanced."207 Furthermore, legal support of navigation in the CAWS dates back to the waterway's construction.<sup>208</sup> Congress enacted the Rivers and Harbors Act of 1930, which called for the CAWS's development as "a commercially useful waterway."209 In the Energy and Water Development Appropriations Act of 1981, Congress provided funding to the Corps for the operation and maintenance of the CAWS in the "interest of navigation."210 Accordingly, in Asian Carp II, the Seventh Circuit acknowledged "the obvious point that Congress considered navigation when it funded construction of structures on the CAWS."211 Thus, it is easy to conclude that the law attaches significant social value to the defendants' facilitation of navigation within the CAWS.212 Under the Restatement, however, the court must assess the conduct's social value in light of "the community standards of relative social value prevailing at the time and place."213 Moreover, the Sev-

See id. at  $\S$  292(a). The second negligence factor inquires whether aquatic navigation will be advanced by the defendants' operation of the CAWS, and, based on past representation, the answer is intuitively affirmative. See id. at  $\S$  292(b).

<sup>206.</sup> See Restatement (Second) of Torts § 828 cmt. d (1979) (explaining what constitutes "primary purpose of conduct"). "In most cases the actor does not want to invade the interests of others. He is primarily concerned with the pursuit of his own interests and the invasion . . . is merely incidental to his main objective." *Id.* 

<sup>207.</sup> Id. at cmt. e (discussing social value of private interest).

<sup>208.</sup> Michigan v. United States Army Corps of Eng'rs, 758 F.3d 892, 902-03 (7th Cir. 2014) (noting navigation was primary purpose of CAWS's construction at "waterway's infancy").

<sup>209.</sup> Id. (noting legislative intent behind CAWS's construction).

<sup>210.</sup> *Id.* (noting Congress's 1981 funding of CAWS's operation and maintenance in the interest of navigation); *see also* Supplemental Appropriations Act of July 30, 1983, Pub. L. No. 98-63, 97 Stat. 301 (reaffirming legislative interest in navigation). "[T]he appropriations provision in the 1981 Act 'pertaining to maintenance and operation . . . of the Illinois Waterway in the interest of navigation . . . includes . . . facilities as are necessary to sustain through navigation from Chicago Harbor on Lake Michigan to Lockport on the Des Plaines River.'" *Asian Carp II*, 758 F.3d at 903.

<sup>211.</sup> Asian Carp II, 758 F.3d at 903 (noting Congress's interest in navigation in CAWS).

<sup>212.</sup> For an assessment of the social value of defendants' conduct, see *supra* notes 206-11 and accompanying text.

<sup>213.</sup> See Restatement (Second) of Torts § 828 cmt. b (1979) (explaining court must assess social value in accordance with contemporary community interests).

enth Circuit asserted that "the Corps must try to facilitate navigation; that is all. Even the original Rivers and Harbors Act cannot fairly be understood as a mandate to force the waterway to remain open to navigation even if there is an oil spill, or if the waters have become contaminated with some kind of noxious bacteria."<sup>214</sup>

Further, aquatic navigation for commercial purposes is definitively suitable to the character of the CAWS due to legislative intent and the waterway's natural attributes. While the Corps and District's interest in facilitating navigation is similar to other predominant activities carried out in the CAWS, it is not necessarily justified. Indeed, conduct "may or may not be reasonable depending on the gravity of the harm involved." 217

The determination of whether it would be impracticable for the defendants to prevent or avoid the aquatic nuisance invasion is essential to the outcome of *Asian Carp II* because the plaintiff States' request called for the Corps and District to take steps towards hydrological separation.<sup>218</sup> Under the Restatement's analysis, hydrological separation is impracticable because it would subject the Corps and District to prohibitive expense and hardship.<sup>219</sup> Nonetheless, even when a public nuisance is practicably

The amount of utility that the particular conduct has depends primarily upon the amount of social value that the law attaches to its primary purpose . . . and this is necessarily indefinite because of the fact that there is often no uniformly acceptable scale or standard of social values to which courts can refer.

Id

214. Asian Carp II, 758 F.3d at 902-03 (analyzing legislative intent).

215. See Restatement (Second) of Torts § 828 at cmt. g (1979) (explaining determination of suitability of locality). "The character of a locality depends upon the type of activity to which it is primarily devoted." *Id.* 

216. See id. (explaining suitability is determined by assessing other predominant activities carried out in locality at issue). "The mere fact that the activity or inactivity is suitable does not mean that the invasion it causes is thus made reasonable and justified." *Id.* 

217. See id. (explaining conduct's suitability does not override gravity of harm it inflicts).

218. See RESTATEMENT (SECOND) OF TORTS § 828 cmt. h (1979) (explaining when prevention of harm is impracticable); see also Asian Carp II, 758 F.3d at 905-06 (explaining why Seventh Circuit denied States' request for hydrological separation). "We know that there is no quick fix here. Under these conditions, it would take an unusually strong showing to meet the requirements for equitable relief. The complaint does not present facts that . . . show that hydrological separation is the only way to prevent the spread of the Asian carp." Id. (emphasis original).

219. See RESTATEMENT (SECOND) OF TORTS § 828 cmt. h (1979) (explaining what constitutes impracticable avoidance of harm).

unavoidable, the defendants' conduct "is not justified if the gravity of the harm is too great." <sup>220</sup>

Finally, while there is no direct alternative to commercial navigability within the CAWS, it may be beneficial to consider alternative measures that could advance the commercial purpose underlying the defendants' interest in facilitating aquatic navigation. <sup>221</sup> In light of developments in transportation availability and efficiency since the construction of the CAWS as well as the current Asian carp problem, contemporary public concerns might call for navigation in the CAWS to be supplanted by other means of commercial transportation. <sup>222</sup> For instance, the Federal-Aid Highway Act of 1956 created a transcontinental interstate highway system and cargo transportation by aircraft emerged in the 1960s. <sup>223</sup>

Implementing hydrological separation and supplanting navigation in the CAWS with alternative modes of commercial transportation are drastic, and, thus, seemingly impracticable measures.<sup>224</sup> These substitute recourses are, however, at the very least, available for consideration.<sup>225</sup> Alternatively, the past and current demonstration of the Corps and District's preventative efforts as well as their studies compiled in the Report suggest that no other means guaranteeing the vitality of the Great Lakes besides hydrological separation exist.<sup>226</sup>

The Seventh Circuit had the difficult task of choosing between: (1) the ensured vitality of the Great Lakes, their ecosystems, and the correlating use and enjoyment of the water system and; (2) the preservation of the defendant entities' interest in continuing facili-

<sup>220.</sup> See id. (emphasizing impracticality of avoiding harm does not justify defendants' conduct in light of significant gravity of harm inflicted).

<sup>221.</sup> See RESTATEMENT (SECOND) OF TORTS § 292 cmt. c (1979) (suggesting alternative means of achieving primary interest may be beneficial).

<sup>222.</sup> See id. (explaining if defendants can further their interest by alternative means, their conduct is unreasonable).

<sup>223.</sup> See Richard F. Weingroff, Federal-Aid Highway Act of 1956: Creating the Interstate System, Public Roads (Summer 1996), available at http://www.fhwa.dot.gov/publications/publicroads/96summer/p96su10.cfm (discussing development of interstate highway system); see also The History of Air Freight, Century of Flight, http://www.century-of-flight.net/new%20site/commercial/history%20of%20air%20freight.htm (last visited Oct. 20, 2014) (discussing development of air freight transportation). "In March 1964, United became the first airline in the country to offer non-stop transcontinental all-cargo service." Id.

<sup>224.</sup> See *supra* notes 164-72 and accompanying text for a discussion of hydrological separation's alleged impracticability.

<sup>225.</sup> See *supra* notes 221-26 for a discussion of alternative commercial transportation methods.

<sup>226.</sup> See *supra* notes 24-31 for a discussion of the defendants' past and current efforts as well as their shortcomings.

tation of commercial navigation in the CAWS.<sup>227</sup> The court's initial determination that the establishment of an Asian carp population in the Great Lakes would qualify as a public nuisance and cause irreparable harm is founded on the logic set forth in the Restatement's analysis.<sup>228</sup> The Seventh Circuit's subsequent finding that "the States' complaint does not plausibly allege that the Corps and the District are creating a current or imminent public nuisance by the manner of their operating the CAWS" reveals an abrupt and inconsistent leap in its reasoning.<sup>229</sup> Additionally, the court's ensuing deference to the defendant agencies currently addressing the carp problem and holding that the States "failed to state a claim upon which relief can be granted" effectively allowed the Seventh Circuit to sidestep the necessary analytical conclusion.<sup>230</sup>

The Seventh Circuit attempted to justify its inconclusive holding by asserting that a permanent injunction calling for hydrological separation would be an injudicious use of equitable authority. <sup>231</sup> The court reasoned that ordering such equitable relief would force the defendant entities to lobby Congress for permission to construct the barriers necessary to effectuate hydrological separation. <sup>232</sup> Under the Progress Act, however, Congress already gave the defendant entities permission to begin developing necessary barriers if hydrological separation is deemed the appropriate preventative plan. <sup>233</sup> The court, therefore, would not have exceeded its authority by making a conclusive determination on the hydrological separation's appropriateness. <sup>234</sup>

Furthermore, the Report compiled by the Corps proposed preventative plans that were speculative and seemed either futile or precariously similar to insufficient methods currently in use.<sup>235</sup>

<sup>227.</sup> See *supra* notes 164-72 for a discussion of the Seventh Circuit's reasoning in *Asian Carp II*.

<sup>228.</sup> See *supra* notes 116-21 and accompanying text for the Seventh Circuit's opinion regarding the likelihood of irreparable harm.

<sup>229.</sup> See Asian Carp II, 758 F.3d at 905-07 (explaining court's holding).

<sup>230.</sup> See id. at 906-07 (exploring court's deference to defendant agencies and final holding).

<sup>231.</sup> See id. at 907 (detailing Seventh Circuit's belief that ordering injunction would be injudicious use of equitable power).

<sup>232.</sup> See id. (explaining court's underlying reasoning for injudicious power belief).

<sup>233.</sup> For clarification that the Progress Act permits the defendants' construction of barriers for hydrological separation, see *supra* notes 33-34 and accompanying text.

<sup>234.</sup> For a comparison of the Progress Act's intent and the court's reasoning see, *supra* notes 33-34, 168-72 and accompanying text.

<sup>235.</sup> See Asian Carp II, 758 F.3d at 898 (discussing proposed plans).

The only effective plan presented in the Report was hydrological separation, but the Corps emphasized its negative implications. Notably, the Report failed to select a recommended plan and, accordingly, requested that a "decision maker" select the proper preventative method. 237

Based on the rationale exemplified in case law involving federal environmental public nuisance claims, the circumstances surrounding Asian Carp II demanded definitive judicial instruction from the Seventh Circuit.<sup>238</sup> For example, in *Missouri I*, the Supreme Court recognized that it is sometimes necessary to subject a defendant's conduct, which strives to achieve a legitimately productive end, to "judicial supervision" when environmental interests and corollary public rights are at stake.<sup>239</sup> The Supreme Court's holding that the plaintiff State was entitled to a permanent injunction if the defendant company failed to show its ability to effectively remedy the interstate public nuisance it was facilitating within a limited timeframe in Tennessee Copper Co. provides enlightening insight on the concept of judicial supervision.<sup>240</sup> Moreover, the Seventh Circuit stopped short of motivationally instructing the defendant agencies, essentially granting them unrestrained control over a problem they show no promise of abating.<sup>241</sup> This lack of judicial instruction is especially concerning because the Corps specifically requested guidance from a third-party decision-maker in determining the proper preventative plan.<sup>242</sup>

Although this decision is complex and problematic, the Seventh Circuit, in its capacity as a decision maker, must provide judicial instruction and rule in favor of either protecting the Great Lakes or preserving commercial navigation in the CAWS at the po-

<sup>236.</sup> See id. (discussing reported implications of hydrological separation).

<sup>237.</sup> See Summary of the GLMRIS Report, supra note 31, at 1 and accompanying text for the Corps' request for a decision maker to select the proper plan.

<sup>238.</sup> For a discussion of judicial supervision in environmental public nuisance cases, see *supra* notes 67-75, 90 and accompanying text.

<sup>239.</sup> See Missouri I, 180 U.S. at 241-42 (discussing concept of judicial supervision in courts of equity).

<sup>240.</sup> See Tennessee Copper Co., 206 U.S at 238-39 (noting U.S. Supreme Court's grant of permanent injunction request and exemplifying judicial instruction that effectively motivated responsible defendants to remedy public nuisance).

<sup>241.</sup> See Asian Carp II, 758 F.3d at 907 (stating Seventh Circuit's final holding).

<sup>242.</sup> See Summary of the GLMRIS Report, supra note 31, at 1 and accompanying text for the Corps' comments on the need for a decision maker to select the appropriate plan.

tential expense of the water system.<sup>243</sup> The court's deference to defendant agencies with an inevitable unwillingness to make drastic, but possibly vital, changes to their operation effectively left the case at a standstill.<sup>244</sup>

## VI. IMPACT: A BRACKISH PRECEDENT FOR FUTURE ENVIRONMENTAL DECISIONS

In an era where human might is paramount and manipulation of the natural world for commercial benefit is commonplace, environmental concerns inevitably arise from Mother Nature's backlash. <sup>245</sup> Asian Carp II is an exhibition of humanity's obstinate will in an attempt to strong-arm nature in the face of unyielding environmental retaliation. <sup>246</sup> The Corps and District's unwillingness to make costly sacrifices in the short-term stands to wreak havoc on an invaluable water system, inflicting damage that is immune to human remedies and monetarily immeasurable. <sup>247</sup> Further, the Seventh Circuit's shortsighted holding will have long-term effects on cases addressing pressing environmental problems, namely public nuisance claims. <sup>248</sup>

Asian Carp II established precedent that, if applied in the future, will impede the remedial process of manmade environmental problems.<sup>249</sup> After repeatedly acknowledging the likelihood of irreparable harm to the Great Lakes' ecosystem by a rapacious aquatic nuisance species, the Seventh Circuit failed to make a definitive decision to protect the ecosystem or not.<sup>250</sup> The court's final ruling, in favor of the federal agencies facilitating the Asian carp invasion, effectively placed the fate of the Great Lakes in the hands

<sup>243.</sup> See Asian Carp II, 758 F.3d at 905-06 (claiming inappropriate nature of court's control over matter and subsequently holding that defendants effectively have free control to operate CAWS).

<sup>244.</sup> See id. (showing deference to defendant agencies).

<sup>245.</sup> See Asian Carp II, 758 F.3d at 894 (expressing public nuisance stemming from human manipulation of environment). "Meddling with Mother Nature is not always a good idea, as the ongoing saga of the Asian carp illustrates." *Id.* 

<sup>246.</sup> See *supra* notes 1-44 and accompanying text for a discussion of factual and background information surrounding *Asian Carp II*.

<sup>247.</sup> See Asian Carp II, 758 F.3d at 894 (asserting future harm from carp invasion).

<sup>248.</sup> See *supra* notes 156-57, 171-84 and accompanying text for a discussion of the court's reasoning and final holding.

<sup>249.</sup> See *supra* notes 173-80, 241-44 and accompanying text for a discussion of the implications stemming from the court's final holding.

<sup>250.</sup> See *supra* notes 173-80, 241-44 and accompanying text for a discussion of inconsistencies in the court's reasoning.

of those least likely to expeditiously seek satisfactory abatement of the environmental problem.<sup>251</sup>

Asian Carp II's final holding allows the defendant agencies to continue their operation of the CAWS without any fear of punitive consequences. In the public nuisance realm, an equitable remedy, such as an injunction, is immanently preemptive; it prevents unlawful damage before it occurs. Equitable remedies are crucial in situations where the threatened harm will be irreparable if it reaches fruition. Conversely, legal remedies are merely retroactive and can only provide relief after the infliction of unlawful harm transpires. If Asian carp invade the Great Lakes, it will be futile for the plaintiff States to seek a legal remedy from the defendant agencies due to the impossibility of redressing the harm monetarily.

Prevention of an aquatic nuisance invasion is vital because retroactive eradication is impossible. Accordingly, hydrological separation must be implemented immediately unless responsible, governmental agencies "redouble their efforts—both in terms of resources and in terms of vision." Moreover, without hastened attempts to discover alternative preemptive plans, "viable solutions . . . are probably decades away." Indeed, members of the citizenry "shoulder the costs and consequences of invasive species, not

<sup>251.</sup> See *supra* notes 154-57 and accompanying text for a discussion of the court's deference to defendant agencies.

<sup>252.</sup> See Asian Carp II, 758 F.3d at 905 (stating Seventh Circuit's final holding).

<sup>253.</sup> See Missouri I, 180 U.S. at 244-45 (explaining preventative quality of equitable remedies).

<sup>254.</sup> Id. (discussing purpose of equitable remedies).

<sup>255.</sup> Id. at 245 (explaining retroactive quality of legal remedies).

<sup>256.</sup> The Asian Carp Threat to the Great Lakes: Hearing Before the Subcomm. on Water Res. and Env't of the H. Comm. on Transp. and Infrastructure, 111th Cong. 6 (Feb. 9, 2010) (Dr. Michael J. Hansen, Chair, Great Lakes Fishery Commission), available at http://www.glfc.org/fishmgmt/Hansen\_testimony\_aisancarp.pdf (exemplifying impossibility of retroactively remedying aquatic nuisance invasion). Dr. Michael Hansen is a firsthand witness to destructive invasions by species that are less rapacious than Asian carp. Id. He declared, "Eradication is impossible and the ongoing program is expensive." Id.

<sup>257.</sup> Id. (averring impossibility of retroactive eradication).

<sup>258.</sup> *Id.* (discussing lack of government efforts and inexistence of sufficient alternative means to protect Great Lakes from invasion). "The Great Lakes Fishery Commission urges Congress to clearly express that end objective is ecological separation – not 'reduce the risk' or 'try to achieve separation while maintaining the status quo.'" *Id.* 

 $<sup>259.\</sup> Id.$  (emphasizing temporal distance of sufficient measures under current circumstances).

the beneficiaries of open waterways for shipping."<sup>260</sup> In sum, if the carp invasion reaches its culmination, members of the public, now deprived of their right to enjoy and benefit from the Great Lakes, will inevitably bear a double-burden.<sup>261</sup> Victimized citizens will perpetually pay for damages inflicted by means out of their control, and responsible, defendant agencies will escape penalty, scotfree.<sup>262</sup>

The Seventh Circuit's holding is particularly unfortunate for public nuisance cases involving invasive species threatening to erode sound ecosystems because, in such situations, time is of the essence.<sup>263</sup> The court's failure to make a definitive ruling essentially tossed the possible implementation of an effective preventative measure to the wayside.264 Hydrological separation may or may not have been appropriate, but the court's holding undermined its effectiveness by circumventing the final analytical determination.<sup>265</sup> In the future, time-sensitive environmental concerns will be unnecessarily hindered if courts rely on Asian Carp II because unwieldy remedies will be cast aside.<sup>266</sup> Contemporaneously, seemingly manageable practices in favor of human reluctance to relinquish control over the natural world will be adopted.<sup>267</sup> The consequent effects of Asian Carp II are to be seen, but logic and history suggest that the ostensibly onerous implementation of hydrological separation will appear surprisingly feasible if newfound

<sup>260.</sup> *Id.* (stressing burden placed on citizenry rather than entities responsible for harm). "Programs to manage invasive species are costly and borne by taxpayers." *Id.* at 7. Even if control of an invasive species as destructive as Asian carp were possible, the process would be expensive and ongoing. *Id.* Moreover, attempting to control Asian carp would not only cost taxpayers hundreds of millions of dollars, but also cause the loss of billions in dollars in revenue to parties that did not contribute to the facilitation of the carp invasion. *Id.* "[T]his figure does not include the immeasurable damage to the ecology of the Great Lakes basin." *Id.* 

<sup>261.</sup> See The Asian Carp Threat to the Great Lakes, supra note 256 (discussing unjust burdens placed on public citizenry).

<sup>262.</sup> Id. (explaining unjust placement of retroactive monetary burdens).

<sup>263.</sup> See id. at 2 (discussing time-sensitive nature of aquatic species' issues). "Invasive species are not a local or even a regional problem – they are a national and global problem. Invasive species spread readily from region to region, so species introduced into one part of the country will, in all likelihood, make it to other parts of the country." *Id.* 

<sup>264.</sup> See Asian Carp II, 758 F.3d at 905, 907 (explaining court's holding that cast aside hydrological separation option).

<sup>265.</sup> See *supra* notes 227-30, 238-44 and accompanying text for further discussion of the court's circumvention of the critical analytical step.

<sup>266.</sup> See Missouri I, 180 U.S. at 244-45 (contrasting equitable remedies and legal remedies). For further discussion of problems arising under the Seventh Circuit's approach, see *supra* notes 239-44, 252-56 and accompanying text.

<sup>267.</sup> See Asian Carp II, 758 F.3d at 905-07 (detailing hydrological separation's alleged unwieldy qualities).

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steps are not hastily implemented to prevent the Asian carp from crossing into the Great Lakes' threshold.<sup>268</sup>

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<sup>268.</sup> See supra notes 5-12, 24-31, 257-62 and accompanying text for a discussion of carp's destructive nature and the ineffectiveness of current prevention methods.

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