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June 17, 2009

MICHIGAN CITIZENS FOR WATER CONSERVATION V. NESTLÉ WATERS NORTH AMERICA INC. AND THE PUBLIC TRUST DOCTRINE: A MORAL APPROACH

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If you expand the right for people to extract it [water] because you’re not recognizing the public trust in water, then the limitation on selfish exploitation is removed, and that slippery slope is a pretty big hole.¹

During the next one hundred years the world will be increasingly divided into two groups: the water ‘haves’ and the water ‘have-nots . . . .’²


²
I. INTRODUCTION

The United States Supreme Court in Brown v. Board of Education\(^3\) stated on moral grounds that “education is perhaps the most important function of state and local governments” because “[i]t is required in the performance of our most basic public responsibilities.”\(^4\) Aside from being a requirement for performance, water is an essential human need.\(^5\) Thus, similar to education, the control of such a necessity should be viewed from a moral approach, and it should be placed in the hands of state and local governments for the public good. The alternative is an economic approach with corporations controlling the basic human need.\(^6\) This alternative begs the question: what kind of world do we want to live in?—the kind that says no money, no water?\(^7\)

Precedent does not always keep up with vital societal changes.\(^8\) Fortunately, our Supreme Court has exercised its interest in preserving a moral and just society by severing itself from antiquated rules when society’s needs evolve.\(^9\) It has stated that overruling precedent is justified when the “facts have so far changed or come to be seen so differently as to have robbed the old

\(^2\) Peter Annin, The Great Lakes Water Wars 3 (Island Books 2006).
\(^4\) Id. at 493.
\(^5\) See Annin supra note 2, at 10 (“If all the water on earth disappeared, however, life would come to a screeching halt.”).
\(^7\) Id. at 1343 (“After privatization, the poor are being cut off from the systems under a simple equation: no money, no water.”).
\(^9\) See Brown, 347 U.S. at 493.
rule of significant application or justification.”

The Brown Court could have rejected a moral approach; it could have chained itself to outdated precedent instead. However, this would have resulted in the law sanctioning the treatment of African Americans as inferior by denying access to an essential human need. Unfortunately, the Michigan Court of Appeals chained itself to outdated precedent; consequently, it has paved the way to deny Michigan citizens access to an essential human need.

In Michigan Citizens for Water Conservation v. Nestlé Waters North America Inc., (Nestlé) the court erred by using the outdated log-floatation test to determine navigability—and hence—public trust eligibility. A moral approach that includes all of Michigan’s water in the public trust must be embraced to accommodate vital social and scientific facts that did not exist during the adoption of the log test.

How did the Brown Court become aware of the changes that robbed the old rule of significant application or justification? It turned to sources outside of the law; it looked to social science: “Whatever may have been the extent of psychological knowledge at the time of Plessy, this finding is amply supported by modern authority.” Part IV of this Casenote will analyze the changes in physical and social science present today that rob the log test of its significance. This section will also consider the harsh consequences of not placing Michigan’s water in the public trust. Further, Part IV will discard the clichéd reaction to the public trust.

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11 See Brown, 347 U.S. at 493 (“In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education.”).
13 Id. at 222 (stating that the trial court properly determined that the correct navigability test in Michigan is the log-floatation test).
14 See Moore v. Sanborne, 2 Mich. 519 (1853) (implementing the log-floatation test and not considering the social and scientific studies that will be discussed in this Casenote—the interconnectivity of water, the non-renewability of the Great Lakes, climate change, population strains, water scarcity, virtual water, etcetera).
15 Planned Parenthood, 505 U.S. 833.
16 Brown, 347 U.S at 494.
Finally, this section will examine how the public trust can be broadened to meet modern environmental challenges by including non-navigable water. But first in part II, this Casenote will provide a brief history of Michigan water law, and it will address the origin of the public trust doctrine. In Part III, the essential facts, holding, reasoning, and procedure of the Nestlé case will be discussed.

II. BACKGROUND

A. A Brief History of Michigan Water Law

There are two distinct paths in Michigan water law: riparian and groundwater use. Riparian rights govern the use and withdrawal of surface streams; groundwater rights govern “[w]ater found in layers of permeable rock or soil.”

1. Riparian Water Rights

The riparian-rights doctrine is the rule that owners of land bordering on a waterway have equal rights to use the water passing through or by their property. There are three classifications: the natural flow doctrine; the reasonable use doctrine; and the appropriation or “prior use” doctrine. The natural flow doctrine allows owners to use as much water as needed for domestic purposes—“personal human consumption, drinking, bathing, etc.” Aside from these uses, the owner may use water for “reasonable artificial or commercial” purposes, but the

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18 Nestlé, 709 N.W.2d at 194.
20 BLACK’S LAW DICTIONARY 1622 (8th ed. 2004).
21 Id. at 1352.
22 Nestlé, 709 N.W.2d at 194 (citing WILLIAM B. STOEBUCK & DALE A. WHITMAN, THE LAW OF PROPERTY § 7.4, 422-25 (3d ed. 2000)).
23 Id.
use must not “substantially or materially diminish the quantity or quality of water.”

Under this doctrine, reasonable does not include the transportation of water beyond the riparian land.

The majority in Nestlé followed the reasonable use doctrine; it states that “a riparian owner may make any and all reasonable uses of the water, as long as they do not unreasonably interfere with the other riparian owners’ opportunity for reasonable use.” To determine what is reasonable, the court balances the interests of the user against the interests of the other riparian owners. No one factor is determinative; however, “domestic uses are so favored that they will generally prevail over other uses.”

The prior use doctrine, though not applicable in Michigan, states that “one who makes prior use of water for some ‘beneficial’ purpose, even if not a riparian owner, may gain the right to continue doing so.”

2. Groundwater Rights

Resembling riparian water law, there are three primary common-law doctrines that apply to groundwater disputes. The first is the absolute ownership rule; it states that “a possessor of land may withdraw as much underground water as he wishes, for whatever purpose he wishes,

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24 Id.
25 Id.
26 Id. (citing STOEBUCK, supra note 22, at 423).
27 Nestlé, 709 N.W.2d at 195.
28 Id. (citing STOEBUCK, supra note 22, at 423).
29 Id. at 194 (citing STOEBUCK, supra note 22, at 424).
31 Nestlé 709 N.W.2d at 195 (citing STOEBUCK, supra note 22, at 427).
and let his neighbors look elsewhere than the law for relief.”32 While not followed in Michigan, this doctrine remains the law in a minority of states.33

The second groundwater doctrine, which Michigan follows, is reasonable use. It has developed into the idea that “all uses of water upon the land from which it is extracted are ‘reasonable,’ even if they more or less deplete the supply to the harm of neighbors, unless the purpose is malicious or the water simply wasted.”34 While the Nestlé court did not define “malicious” or “wasted,” it applied a balancing test, and it identified three factors:

[First,] the court should attempt to strike a proper balance between protecting the rights of the complaining party and preserving as many beneficial uses of the common resource as is feasible under the circumstances.35 Second, the law will only protect a use that is itself reasonable. . . .36 Third, the law will not redress every harm, no matter how small, but will only redress unreasonable harms.37

The court next provided “factors to be balanced when determining whether the harm caused by the defendant’s use is unreasonable under the circumstances.”38

(1) the purpose of the use, (2) the suitability of the use to the location, (3) the extent and amount of the harm, (4) the benefits of the use, (5) the necessity of the amount and manner of the water use, and (6) any other factor that may bear on the reasonableness of the use.39

While the court described this balancing test as an improvement to the absolute dominion test, “[u]nlimited withdrawals, even to the detriment of another groundwater user, may still be reasonable.”40

32 Id. (citing STOEBUCK, supra note 22, at 428).
33 Id.; see also Tuholske supra note 30, at 206 (“Five states recognize the absolute dominion rule in some form.”).
34 Id. at 197 (citing STOEBUCK, supra note 22, at 428-29).
35 Id. at 202 (“The law seeks to ensure a ‘fair participation’ in the use of water for the greatest number of users.” (quoting Dumont v. Kellogg, 29 Mich. 420, 422 (1874))).
36 Nestlé, 709 N.W.2d at 202 (citing People v. Hulbert, 91 N.W. 211, 218 (Mich. 1902)).
37 Id. (citing Dumont, 29 Mich. at 422).
38 Id. at 203.
39 Id. at 203.
40 Tuholske, supra note 30, at 207.
The final ground water doctrine is correlative rights; the Nestlé court defined it as
“owners of land within an aquifer are viewed as having equal rights to put the water to beneficial
uses upon those lands.”41 Here, the use cannot deplete other owners’ supply. California added
this rule to replace the absolute dominion, which was not suited for arid climates.42 However, it
has proven to lack conservation principles because “[s]urface owners are free to use all of an
aquifer, as long as they do not damage another in the process.”43

B. The Evolving Public Trust Doctrine44

Of all the concepts known to American law, only the public trust doctrine
seems to have the breadth and substantive content which might make it useful as a
tool of general application for citizens seeking to develop a comprehensive legal
approach to resource management problems.45

The public trust is a common-law principle that “provides that lands, waters and living
resources in a State are held by the State in trust for the benefit of all of the people, and
establishes the right of the public to fully enjoy public trust lands, waters and living
resources.”46 The doctrine is rooted in the Institutes of Justinian in Roman Law where the public
had the right to use the tidelands and navigable waters.47 The doctrine found its way to English
common law where the King held the tidelands to benefit the subjects of the crown.48 In The
United States, after the original thirteen colonies broke from England, “the states stepped into the

41 Nestlé, 709 N.W.2d at 197 (citing STOEBUCK, supra note 22, at 428-29).
42 Tuholske, supra note 30, at 209.
43 Id.
44 See generally Shafer supra note 8, at 71.
47 Id. at 124 (“Use of the common water resource typically meant navigation, commerce, and fishing.”).
48 Shafer supra note 8, at 71.
shoes of the king as the sovereigns responsible for holding in a fiduciary capacity the public trust
resources for the benefit of their citizens.”\(^{49}\)

The landmark U.S. Supreme Court case, *Illinois Central Railroad Co. v. Illinois*,\(^ {50}\) brought the public trust to Michigan; the Court applied it to the Great Lakes as it did to the seas
and oceans.\(^ {51}\) After granting more than a thousand acres in fee simple of submerged lands to
Illinois Central Railroad in 1869, the Illinois Legislature repealed the grant 1873.\(^ {52}\) The Railroad
then brought action where the Supreme Court held the original grant invalid.\(^ {53}\) The Court
reasoned that, by essentially granting the entire city waterfront to a private company, the state
would be stripping itself of its police power—consequently; its ability to govern would be
abdicated.\(^ {54}\) The Court also distinguished the lands that the state could sell from the lands that
were submerged in Lake Michigan.\(^ {55}\)

When a state holds a resource which is available for the free use of the general
public, a court will look with considerable skepticism upon *any* governmental
conduct which is calculated *either* to reallocate that resource to more restricted
uses *or* to subject public uses to the self-interest of private parties.\(^ {56}\)

While Michigan confines the public trust to its navigable waters, “a more modern view extends
the doctrine to other natural resources.”\(^ {57}\) The *Illinois Central* Court embodied this view by
expanding the doctrine from saltwater to freshwater.\(^ {58}\) While this does not necessarily mean that
the Court would support the extension of the public trust to non-navigable water, it does stand
for the Court’s flexibility regarding the doctrine. For example, most recently the Court expanded

\(^{49}\) *Id.* (citing Shively v. Bowlby, 152 U.S. 1, 14 (1894)).


\(^{51}\) *Saeger supra* note 46, at 124 (citing *Illinois Central*, 146 U.S. at 435).

\(^{52}\) *Sax supra* note 42, at 489.

\(^{53}\) *Id.*

\(^{54}\) *Id.* (citing *Illinois Central*, 146 U.S. at 387).

\(^{55}\) *Shafer supra* note 8, at 74.

\(^{56}\) *Shafer supra* note 8, at 490.

\(^{57}\) *Shafer supra* note 30, at 216.

\(^{58}\) *Shafer supra* note 8, at 72.
the public trust to non-navigable bottomlands under tidal influence.\(^\text{59}\) It reasoned, “States have the authority to define the limits of the lands held in public trust.”\(^\text{60}\) It also stated that states have other interests—beyond navigation—in lands beneath tidal waters.\(^\text{61}\)

Today, states have also applied the public trust doctrine to protect evolving public needs.\(^\text{62}\) This expansion has included “recreational and ecological concerns;”\(^\text{63}\) “wetland protection;”\(^\text{64}\) “reducing diversions from non-navigable tributaries to protect a navigable lake;”\(^\text{65}\) and “assuring public access to coastal beaches and tidelands for swimming and sunbathing.”\(^\text{66}\)

Two primary principles exist for these expansions:

(1) states hold these resources in trust for the citizens of their respective jurisdictions and cannot divert or convey the resources to private parties, except for uses that enhance the trust, without first determining that the remaining trust resources will not be significantly impaired;\(^\text{67}\) and (2) states have an affirmative duty to ‘protect the people’s common heritage of streams, lakes, marshlands and tidelands, surrendering that right of protections only in the rare cases when the abandonment of that right is consistent with the purposes of the trust.\(^\text{68}\)

III. STATEMENT OF THE CASE

\(^{59}\) Id. at 72 (citing Phillips Petroleum Co. v. Mississippi, 484 U.S. 469 (1988)); see also Nat’l Audubon Soc’y v. Superior Court of Alpine County, 658 P.2d 709, 719 (1983) (“In administering the trust the state is not burdened with an outmoded classification favoring one mode of utilization over another.”).

\(^{60}\) Phillips Petroleum, 484 U.S. at 476.

\(^{61}\) Id. at 476. The Court listed other state interests in the public trust:

[T]his Court has previously observed that public trust lands may be used for fishing—for both ‘shell-fish and floating fish.’ See, e.g., Smith v. Maryland, 18 How. 71, 75 15 L.Ed. 269 (1855). On several occasions the Court has recognized that lands beneath tidal waters may be reclaimed to create land for urban expansion. E.g., Harding v. Jordan, 140 U.S. 371, 381-382, 11 S.Ct. 808, 811-812, 35 L.Ed. 428 (1891); Den v. Jersey Co., 15 How. 426, 432, 14 L.Ed. 757 (1854), Because of the State’s ownership of tidelands, restrictions of the planting and harvesting of oysters there have been upheld. McCready v. Virginia, 94 U.S. (4 Otto) 391, 395-397, 24 L.Ed. 248 (1877).

\(^{62}\) Id. at 72 (citing Phillips Petroleum Co. v. Mississippi, 484 U.S. 469 (1988)); see also Nat’l Audubon Soc’y v. Superior Court of Alpine County, 658 P.2d 709, 719 (1983) (“In administering the trust the state is not burdened with an outmoded classification favoring one mode of utilization over another.”).

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\(^{65}\) Id. at 72 (citing Phillips Petroleum Co. v. Mississippi, 484 U.S. 469 (1988)); see also Nat’l Audubon Soc’y v. Superior Court of Alpine County, 658 P.2d 709, 719 (1983) (“In administering the trust the state is not burdened with an outmoded classification favoring one mode of utilization over another.”).

\(^{66}\) Phillips Petroleum, 484 U.S. at 476.

\(^{67}\) Id. at 72 (citing Phillips Petroleum Co. v. Mississippi, 484 U.S. 469 (1988)); see also Nat’l Audubon Soc’y v. Superior Court of Alpine County, 658 P.2d 709, 719 (1983) (“In administering the trust the state is not burdened with an outmoded classification favoring one mode of utilization over another.”).

\(^{68}\) Phillips Petroleum, 484 U.S. at 476.
In 2001, Defendant Nestlé installed four wells on the Sanctuary Springs site in Mecosta County located in northwestern, lower Michigan. The body of water at issue—The Dead Stream—originates from the Sanctuary Springs. The four wells had a combined maximum pumping rate of 400 gallons per minute. Nestlé also built a bottling facility twelve miles away from the wells and constructed a pipeline connecting it to the site. The plaintiffs, Michigan Citizens for Water Conservation (MCWC), filed three principle complaints that challenged Nestlé’s groundwater pumping.

A. Riparian Rights Claim

Plaintiffs first alleged that Nestlé violated their riparian rights in the recreational use of the surface waters. The circuit court held that Nestlé’s groundwater pumping had a “negative and measurable impact on riparian water bodies [and was] a violation of the riparians’ rights.” The court of appeals affirmed, and found that Nestlé’s 400 gallons per minute was unreasonable because they exceeded “more than a fair participation.” However, the court stated that the economic benefits (tax revenues and employment opportunities) offset the plaintiff’s riparian

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69 Nestlé, 709 N.W.2d at 183.
70 Id.
71 Id. at 184.
72 Id.
73 Ellen Kohler, Ripples in the Water; Judicial, Executive, and Legislative Developments Impacting Water Management in Michigan, 53 WAYNE L. REV. 5 (2007) (“Plaintiffs were a group of over 1300 concerned citizens formed in response to this project, called Michigan Citizens for Water Conservation (MCWC), and included riparians along several nearby bodies of water, most importantly in terms of evidence at trial, the Dead Stream.”).
74 Id. at 6.
75 Id.
77 Nestlé, 709 N.W.2d at 207 (explaining that Nestlé’s actions are “more than a fair participation” because “it will effectively appropriate for its own needs approximately 24 percent of the base flow of the Dead Stream.”).
injuries.\textsuperscript{78} Thus, the court concluded that Nestlé should not be totally enjoined from pumping; it remanded the case to the trial court to determine a reasonable gallons per minute amount.\textsuperscript{79}

\textbf{B. MEPA Claim}\textsuperscript{80}

The plaintiffs also complained that Nestlé violated the Michigan Environmental Protection Act (MEPA).\textsuperscript{81} The trial court ruled in favor of the plaintiffs on this claim because Nestlé violated the Inland Lakes and Streams Act (ILSA),\textsuperscript{82} “which prohibits the ‘diminishment’ of an inland lake or stream without a state permit.”\textsuperscript{83} However, the court of appeals reversed due to the plaintiff’s failure to provide a prima facie showing.\textsuperscript{84} The issue was remanded to the circuit court for further findings.\textsuperscript{85}

\textbf{C. The Public Trust Claim}

\textsuperscript{78} \textit{Id.} at 206.
\textsuperscript{80} See Mich. Citizens for Water Conservation v. Nestlé Waters N. Am. Inc., 737 N.W.2d 447 (Mich. 2007) (addressing standing issue regarding MEPA claim only and holding that plaintiffs did have standing in regards to the Dead Stream and Thompson Lake, but not to Osprey Lake). \textit{But see Nestlé}, 709 N.W.2d at 225 (Murphy, J., concurring). The court stated:

\begin{quote}
[P]laintiffs have standing with respect to all the natural resources at issue . . . because of the hydrologic interaction, connection, or interrelationship between these natural resources, the springs, the aquifer, and defendant Nestlé’s pumping activities, where impact on one particular resource caused by Nestlé’s pumping necessity affects other resources in the surrounding area.
\end{quote}

\textit{Id.}
\textsuperscript{81} Kohler \textit{supra} note 73, at 7 (“[W]hich allows ‘any person’ to bring an action ‘for the protection of the air, water, and other natural resources and the public trust in these resources from pollution, impairment, or destruction.’” (quoting \textit{Mich. Comp. Laws Ann. §§ 324.1701-1706} (West 1995))).
\textsuperscript{83} Kohler \textit{supra} note 73, at 10.
\textsuperscript{84} Bednarz \textit{supra} note 17, at 739 n.55 (quoting \textit{Nestlé}, 709 N.W.2d at 216). Bednarz explains the requirements for the claim:

\begin{quote}
Under MEPA, a party may maintain an action against any person ‘for the protection of the air, water, and other natural resources and the public trust in these resources from pollution, impairment, or destruction.’ To maintain the action, the plaintiff must first make out a prima facie case that the defendant has or is likely to pollute, impair, or destroy the air, water, or other natural resources.
\end{quote}

\textit{Id.}
\textsuperscript{85} \textit{Nestlé}, 709 N.W.2d at 216.
The plaintiffs finally alleged that Nestlé violated the public trust by bottling and selling the groundwater outside of the source watershed.\(^8\) The trial court dismissed the plaintiff’s motion for summary judgment because it determined the Dead Stream was non-navigable (the public trust in Michigan only covers navigable water).\(^7\) The appeals court affirmed; it relied on the log-floatation test developed by the Michigan Supreme Court in *Moore v. Sanborne.*\(^8\)

**D. The Log-Floatation Test**

While implementing the log-floatation test,\(^8\) the *Moore* Court stressed the importance of the lumber industry in the state’s economy and determined navigability as, “whether a stream is inherently and in its nature, capable of being used for the purpose of commerce for the floating of vessels, boats, rafts, or logs.”\(^9\)

The log test remained Michigan’s navigability standard until the 1974 Michigan Court of Appeals case *Attorney General, ex rel. v. Hallden*\(^1\) adopted the more modern recreational boating test.\(^2\) The court stated that “[w]e must resist, therefore, the temptation to apply mechanically the rules expounded in an earlier and vastly different era [referring to the 19th century lumber era], and must, instead, strive to mold the concept of navigability to the needs of the later 20th century.”\(^3\) In other words, the court viewed the recreational boating test as a

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\(^8\) *Id.*

\(^7\) *Id.*

\(^8\) *Moore,* 2 Mich. 519 (1853).

\(^9\) For a detailed account of the log-floatation test, see generally Shafer *supra* note 8, at 14-40.

\(^9\) *Id.* (citing *Moore v. Sanborne,* 2 Mich. 519 (1853)).


\(^2\) Shafer *supra* note 8, at 34. The court in *Attorney General,* 214 N.W.2d 856 stated the following: Time and change have rendered the log flotation test of navigability an anachronism and we today join the growing number of our sister states in adopting the recreational use test. [M]embers of the public have the right to navigate . . . on waters of this state which are capable of being navigated by oar or motor propelled small craft.

*Id.*

\(^3\) Shafer *supra* note 8, at 35 (citing *Attorney General, ex rel. v. Hallden,* 214 N.W.2d 856 (Mich. Ct. App. 1974)).
modern evolvement of the public trust. The Hallden court also noted that the Michigan Supreme Court’s adoption of the log test was an expansion of navigability based on the importance of the waterways in facilitating the lumber industry. The court added that “today the public looks on Michigan’s rivers and forests ‘as recreational resources to be preserved and enjoyed and not as commercial windfalls to be exploited.’”

Unfortunately, the recreational test was short-lived, lasting only eight years. A deeply divided Michigan Supreme Court in Bott v. Commission of Natural Resources reinstated the more restrictive log test relying on “settled rules of property.” Its rationale was that changing the definition of navigability might create a taking of private property. The majority in Nestlé relied on Bott’s established law that “the title of a riparian or littoral owner includes the bed to the thread or midpoint of the water, subject to servitude for commercial navigation of ships and logs” and that the “public-trust doctrine applies only to navigable waters and not to all waters of the state.”

IV. Analysis

The Nestlé court erred by using the outdated log-floatation test to determine navigability—and hence—public trust eligibility. A moral approach that includes all of

\[\text{References}\]

94 See id.
95 Id.
96 Id.
97 Id. at 36.
99 Shafer supra note 8, at 35 (quoting Bott, 327 N.W.2d at 842) (referring to the dead-end lakes rule of Winans v. Willetts, 163 N.W. 993 (Mich. 1917)).
100 Id. at 11 (citing Bott, 327 N.W.2d at 847). But see discussion infra Part IV.C.
101 Nestlé, 709 N.W.2d at 218 (citing Bott, 327 N.W.2d at 841).
102 Id. (citing Bott, 327 N.W.2d at 846).
103 Id. at 222 (stating that the trial court properly determined that the correct navigability test is the log-floatation test).
Michigan’s water in the public trust must be embraced to accommodate vital social and scientific facts that did not exist during the adoption of the log test.\textsuperscript{104}

\textit{A. Facts That Rob the Antiquated Log Test of Its Significance}

1. Water in the Great Lakes’ Basin is Indivisible

During the mid 1800’s when the log test was created, “[s]ome courts went so far as to describe the movement of water to and within groundwater aquifers\textsuperscript{105} as ‘secret,’ ‘occult,’ and ‘concealed’\textsuperscript{106}. This lack of knowledge of the hydrologic cycle\textsuperscript{107} has led the “legal classification of water to include ‘percolating waters,’ ‘defined underground streams,’ ‘underflow of surface streams,’ ‘water-courses,’ and ‘diffuse surface waters’; even though all these waters are actually interrelated and interdependent[]”\textsuperscript{108}

As science and law recognize that the Great Lakes, its tributary lakes, streams, and groundwater are a single or wholly interconnected body of water, there is no

\begin{itemize}
\item \textsuperscript{104} \textit{See Moore}, 2 Mich. 519 (implementing the log-floatation test and not considering the social and scientific studies that will be discussed in this Casenote—the interconnectivity of water, the non-renewability of the Great Lakes, climate change, population strains, water scarcity, virtual water, etcetera).
\item \textsuperscript{105} \textit{DANTE A. CAPONERA, PRINCIPLES OF WATER LAW AND ADMINISTRATION NATIONAL AND INTERNATIONAL} 258 (Marcella Nanni 2d ed. 2007) (defining aquifer as “a geologic formation receiving, retaining and storing groundwater.”).
\item \textsuperscript{106} Timothy Weston, \textit{Harmonizing Management of Ground and Surface Water Use Under Eastern Water Law Regimes}, 11 U. DENVER WATER L. REV. 239, 245 (2008). Weston explains this phenomena: \[\text{[This reflects] the view of the English court in Acton v. Blundell that there could be no liability for interference with percolating groundwater, since \textquote{the percolation and underground flow of water are out of sight, and their exact operation and courses are conjectural, and not susceptible of actual observation and proof.}}\]
\item \textsuperscript{107} \textit{CAPONERA, supra note 105, at 4. Caaponera defines the hydrologic cycle:} \[\text{[The hydrologic cycle] is the cyclic movement of water in the globe, from the sea to the atmosphere, from the atmosphere to the earth and subsequently back to the sea. With the heat of the sun, water evaporates from the oceans and other bodies of water and rises into the atmosphere. Atmospheric water condenses in clouds which are moved by the wind and then descend to the earth in the form of rain, snow hail or dew, part of which evaporates immediately, some is absorbed by plants (evapo-transpiration), part of it infiltrates into the ground to form underground aquifers, and some of it flows on the surface (water flow) forming watercourses, rivers, lagoons, swamps, etc., which in turn flow into the seas. From the seas, the hydrologic cycle starts again. Both surface and underground water flowing into the sea are part of the hydrologic cycle.}}\]
\item \textsuperscript{108} \textit{Id. at 245 (quoting Harold E. Thomas & Luna B. Leopold, \textit{Ground Water in North America}, 143 SCIENCE 1001, 1003 (1964)).}
\end{itemize}
reason the public trust doctrine, or at least its protective standards, should not apply to protect the public trust in the waters of the Great Lakes Basin from being alienated, impaired, or diminished.109

In Michigan, most groundwater is a significant supplier of surface water.110 Additionally, fifty percent of the streams that discharge into the Great Lakes are made up of groundwater.111 It follows that “the pumping of connected groundwater affects both inland surface water and the Great Lakes.”112 Thus, Nestlé’s pumping of groundwater affects both the Dead Stream and the Great Lakes.113

The Nestlé court failed to include the groundwater in the public trust because it determined that the surface water connected to it was not navigable according to the log test.114 Even though it found the Dead Stream non-navigable, the Great Lakes are navigable.115 Due to the inter-connectivity of the Great Lakes Basin, the groundwater pumping affects navigable waters and should be barred by the public trust.116

The court must consider that “the public trust should focus on the protection of common resources, not arcane distinctions of navigability.”117 In this country, the public trust doctrine has tied itself to “state’s ownership of property-tidelands, lake shores, the bed and banks of navigable streams.”118 However, Justinian’s view of the public trust was not as narrow; it fostered a “wider

110 Bednarz, supra note 17, at 741 (citing GROUNDWATER CONSERVATION ADVISORY COUNCIL, FINAL REPORT OF THE MICHIGAN LEGISLATURE IN RESPONSE TO PUBLIC ACT 148 OF 2003, 15 (2006)).
111 Id.
112 Id. (citing GROUNDWATER CONSERVATION ADVISORY supra note 110, at 2, 7).
113 Id.
114 Nestlé, 709 N.W.2d 174; see also Bednarz supra note 17, at 740.
115 Illinois Central, 146 U.S. 387 (1892).
116 See Olson supra note 109, at 1130-1131 (“The public trust in water may well extend to waters upstream, and to any tributary water, upstream, or connected ground water, the diminishment of which impairs the public trust water.”).
117 Tuholske, supra note 30, at 222.
118 Id.
view of the commons." Further, science has recognized (and recently some courts) that groundwater is connected to surface water—"[i]t’s all just water." Ultimately, the public trust doctrine must embrace the water itself.

2. Water Is Unique

The roots of private property in water have simply never been deep enough to vest in water users a compensable right to diminish lakes and rivers or to destroy the marine life within them. Water is not like a pocket watch or a piece of furniture, which an owner may destroy with impunity. The rights of use in water, however long standing, should never be confused with more personal, more fully owned property.

Water is not merely property or a means of trade—both of which are assumptions Michigan courts have used in perpetuating navigability tests for public trust waters. First, the *Bott* Court, which *Nestlé* relied on, stated that the log-floatation test should not be expanded to cover non-navigable water because many property owners have “invested their savings or wealth in reliance on a long-established definition of navigability.” However, water is not a product: “[p]roperty rights in water have been delineated in very limited terms. Water has been described as . . . belonging to the public; as subject to public servitudes; as incapable of full ownership . . .” Other Great Lakes Basin states have embraced this concept.

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119 Id.
120 See discussion infra Part IV.D.
121 Tuholske *supra* note 30, at 222.
122 Id.
124 *Nestlé* 709 N.W.2d at 220 (citing *Bott*, 327 N.W.2d at 838; *Moore*, 2 Mich. at 526).
125 Id. (citing *Bott*, 327 N.W.2d at 838).
127 Id.
Just as water cannot be classified as a product, it also cannot be classified as a commodity. Because it can be captured from the surface or pumped from the ground, some assume water is similar to other mineral commodities—like oil. However, this is not true; unlike oil, water is an essential human need.

The problem is that water is not like oil. Ecosystems don’t depend on oil for their survival; they count on water for that. If all the oil on earth disappeared tomorrow, the world would be a very different place, but it would survive. If all the water on earth disappeared, however, life would come to a screeching halt.

Second, the Moore Court stated that the log test was implemented to “meet the condition and wants of the public necessities of trade and commerce.” Joseph L. Sax, the preeminent natural resource public trust scholar, stated, “Our legal system tends to provide specific and limited responses to particular problems.” This perhaps can help explain the restrictiveness of the log-flotation test—it was implemented simply to address the issue of navigability to facilitate commerce. However, groundwater cannot support navigation—it is physically impossible. Thus, the Nestlé court failed to realize that “[t]here is no principled reason to tie the public’s right to wise management of water resources to arcane concepts of navigability and state ownership of land. It is time to recognize that the public trust doctrine embraces the water itself.”

3. The Great Lakes Are Essentially a Non-Renewable Source

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128 Id. (citing Bradshaw v. Duluth Imperial Mill Co., 53 N.W. 1066, 1068 (Minn. 1892); People ex rel. Att’y Gen. v. Kirk 45 N.E. 830, 833 (Ill. 1896); Scranton v. Wheeler, 57 F. 803, 813 (6th Cir. 1893); Bodi v. Winous Point Shooting Club, 48 N.E. 944, 944 (Ohio 1897); Coxe v. State, 39 N.E. 400, 400 (N.Y. 1895)).
129 Id.
130 ANNIN supra note 2, at 10.
131 Id.
132 Id.
133 Moore, 2 Mich. at 522.
134 See Shafer supra note 8, at 27.
135 See id.
136 See Tuholske supra note 30, at 222.
137 Id. at 222-23.
In Michigan, there are certain seasonal guarantees—lots of rain and snow. It is easy to assume that this large amount of precipitation replenishes the Great Lakes. However, “less than one percent of the waters of the Great Lakes is renewed annually by precipitation, surface water runoff and inflow from groundwater sources.” The remaining ninety-nine percent is the result of melted glaciers from the last ice age.

Some believe that this statistic is misleading because it fails to consider consumptive use. However, the problem with this argument is that “they [industrialists] ignore the fact that the water in the Great Lakes region is already being used by the ecosystem, and it’s not clear how increased water consumption might affect the region’s unique water dependent environment.” In other words, considering all the uses in the Basin, “there is never a ‘surplus’ of water in the Great Lakes system; every drop of water has several potential uses.” Consequently, the non-renewable nature of the Great Lakes is a modern, vital fact that must be considered when determining public trust protection.

4. The Great Lakes Are a Threatened Resource

In a 2005 Michigan speech, Newt Gingrich, former Speaker of the U.S. House of Representatives, stated that the idea that the Great Lakes could be drained was “nutty.”

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139 CLEAN WATER ACTION, DON’T PRIVATIZE THE WATER 6 (2005), available at http://www.cleanwateraction.org/publication/dont-privatize-water-keeping-michigans-water-public-hands (citing The International Joint Commission, Protection of the Waters of the Great Lakes: Final Report to the Governments of Canada and the United States, Feb. 22, 2000) (“The waters of the Great Lakes are, for the most part, a nonrenewable resource. They are composed of numerous aquifers (groundwater) that have filled with water over the centuries, waters that flow in the tributaries of the Great Lakes, and waters that fill the lakes themselves.”).
140 ANNIN supra note 2, at 13.
141 Olson Interview supra note 1 (defining consumptive use as the “manufacturing use of water in various products, or as a medium of carrying products.”).
142 ANNIN supra note 2, at 18 (quoting Jim Nicholas, director of the U.S. Geological Survey’s Water Science Center in Lansing, Michigan).
143 Id. at 13.
144 ANNIN supra note 2, at 38.
hand, it is easy to see how Mr. Gingrich could make such a cavalier remark —the vastness of the Great Lakes is awesome; they hold about “ninety-five percent of the United States’ fresh surface water and twenty percent of the Earth’s fresh surface water supply.” However, levels fell to all-time lows in 2001. While fluctuations are a natural and essential part of the Great Lakes, when combined with climate change, they can create a vicious cycle. As a result, the likelihood of Great Lakes instability increases, along with the need to closely scrutinize diversions—both large and small.

“Officials say the pressure is growing to allow small water exports, especially from the Great Lakes. And they fear that once a precedent has been established, California and Arizona could come calling.” The U.S. Department of the Interior predicts a water crisis by the year 2025 due to the unsustainable practices in the American southwest. Las Vegas is the poster

145 But see Aral Sea tragedy discussion infra Part IV.B.1.
147 ANNIN supra note 2, at 38 (citing MAUDE BARLOW & TONY CLARKE, BLUE GOLD: THE FIGHT TO STOP THE CORPORATE THEFT OF THE WORLD’S WATER 9 (2002) (“In 2001, the water was more than a meter below its seasonal average in the Port of Montreal, and Lakes Michigan and Huron were down by 57 centimeters.”)).
148 Id. at 41 (“The [Great Lakes] plant and animal communities are not only adapted to that variability, but they absolutely require that variability to provide habitat and food, and nesting/spawning [areas] to maintain their populations.” (quoting Douglas Wilcox, a wetlands expert with the U.S. Geological Survey’s Great Lakes Science Center)).
149 Id. at 42 (“Climate change—or global warming—is caused by the accumulation of excess carbon dioxide and other heat-trapping gases in the atmosphere.”)
150 Id. at 44. George Kling, a University of Michigan biology professor and lead author of Great Lakes climate report stated:

In the next hundred years we will have the same warming that has occurred since the last ice age. . . . That’s why people are so worried about a 6-to10-degree Fahrenheit increase in temperature—because it’s happening in only 100 years, and not in 10,000 or 20,000 years. . . . We do not know which of the organisms on earth are going to be able to adapt to such a rapid temperature change.

151 Id. 42-43.
153 ANNIN supra note 2, at 8 (citing POTENTIAL WATER SUPPLY CRISIS BY 2025, DEPT. OF INTERIOR (2003)) (“Virtually every state on the map except South Dakota has some sort of a water trouble spot, with the most serious areas of concern being Arizona, Texas, California, New Mexico, Colorado, Utah, and Nevada.”).
child of a city living beyond its water means—“Americans have some of the highest per capita water use in the world, and Las Vegas residents use more than twice as much as the average American.” As the rapid growth of Las Vegas continues, water from the Great Lakes becomes the prime candidate to sustain its sprawl. While some claim that a nationwide pipeline would not be economically or environmentally feasible, others do not rule out the possibility. Noah Hall, professor at Wayne State University Law School who spent years with the National Wildlife Federation stated:

To me it's not even a question, it’s an inevitability. You look at what’s happening to water supplies in almost every other part of the country—it used to be just the Southwest and California, but now you are seeing it in the Southeast, and the Northeast—the economics are fluid. It’s a simple supply-and-demand model.

With water scarcity, population increases, and climate change creating an ever-increasing demand, supply via diversions could become a political reality. Speaking at a political fundraising luncheon in Traverse City, Michigan, former U.S. House Majority Leader Dick Army stated, “I’m from Texas and, down there, we understand that whiskey is for drinking and that water is for fighting over. You are going to have to protect your Great Lakes.” Further, once there is a precedent in place—like Nestlé’s bottled water diversion—a pipeline

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154 See also Scanlan, supra note 6, at 1334 (“[G]lobal consumption of water is doubling every 20 years, more than twice the rate of population,” and that “every eight seconds, a child dies from drinking contaminated water.” (quoting MAUDE BARLOW & TONY CLARKE, BLUE GOLD: THE FIGHT TO STOP THE CORPORATE THEFT OF THE WORLD’S WATER 7 (2002))).
155 ANNIN supra note 2, at 9 (citing Fen Montaigne, Water Pressure, NATIONAL GEOGRAPHIC, Sept., 2002, at 9.).
156 See id. at 10 (“Water is a commodity. . . . It’s a lot like oil. We use oil to heat Boston, but that oil doesn’t come from Boston. It comes from Saudi Arabia.” (quoting Hal Rothmon in a report by Peter Jennings in Las Vegas Shows Strains of Population Boom, Learning Lessons from One of the Country’s Fastest Growing Cities, ABC World News Tonight, Nov. 30, 2004)).
157 Id. at 11.
158 Id. at 12.
159 See id. at 12.
161 CLEAN WATER ACTION, supra note 139, at 8 (“The withdrawal and bottling of such water for sale in interstate commerce outside the Great Lakes Basin would constitute a diversion or export ‘for use outside the basin’ and
connecting the Great Lakes to the southwest does not seem out of the question.  Even without an actual pipeline, Nestlé’s appropriation could easily turn into a surrogate; they could supply a continual stream of westbound railroad cars full of bottled water pumped from the Great Lakes.

When the log-floatation test was implemented, appropriation threats due to these destabilizing changes to the nation’s water supply did not exist. Placing Michigan’s water in the public trust would prevent private corporations—like Nestlé—from profiting off of a humanitarian crisis by selling a basic human need to the highest bidder. More importantly, the public trust would add a layer of protection to the vulnerable Michigan waters. However, this does not mean that “the Great Lakes governments [should] turn their collective backs on areas of the world suffering severe water shortages . . . the [governments] should allow the Great Lakes to be used outside the Basin for humanitarian, non-commercial purposes.”

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162 See Olson Interview supra note 1 (“If you expand the right for people to extract it because you’re not recognizing the public trust in water, then the limitation on selfish exploitation is removed, and that slippery slope is a pretty big hole.”)

163 See id.

164 See generally Tuholske supra note 30, at 222 (listing examples of destabilizing changes “caused by the disparate, outdated legal framework for managing groundwater.”).

165 See Olson supra note 109, at 1130 (citing Ill. Cent. R.R. v. Illinois, 146 U.S. 387, 423 (1892); Collins v. Gerhardt, 211 N.W. 115, 117-18 (Mich. 1926)) (“Once water is subject to the public trust doctrine, it cannot be disposed of, alienated, or transferred for private commercial purposes, unless there is explicit legislative authority and the purpose is primarily a public one.”).

166 See Olson Interview supra note 1 (“The [public trust] doctrine is a democratic doctrine that assures things like water that are common are not controlled by private interests.”).

167 See Olson supra note 109, at 1130 (stating that Great Lakes appropriations would be barred “unless there is explicit legislative authority and the purpose is primarily a public one.”).

168 Scanlan supra note 6, at 1334.
The Great Lakes—St. Lawrence River Basin Water Resources Compact (Compact)\(^{169}\) allows for this humanitarian relief, even though it was designed “to prevent diversions of water outside of the Great Lakes Basin, and to impose consumptive use limits within the Basin.”\(^{170}\) That is, manufacturing use of water in various products, or as a medium of carrying products.\(^{170}\)

While the Compact does have three problem areas: a product exception,\(^{171}\) no public trust standard,\(^{172}\) and no conservation standard,\(^{173}\) it does allow withdrawals from the Great Lakes Basin to be used “in a non-commercial project on a short-term basis for firefighting, humanitarian, or emergency responses.”\(^{174}\) This non-commercial approach (which would be funded by humanitarian aid\(^ {175}\) ) is better than a commercial one because there is evidence that the privatization of water in developing countries “often increases water costs, which drives those most in need back to unsafe water supplied by contaminated rivers or streams.”\(^{176}\) Thus, this


\(^{170}\) Olson Interview supra note 1.

\(^{171}\) Id. (“[A]nything more than 5.7 gallons would be treated as a diversion, and therefore only small containers could go outside the basin—i.e. bottled water.”).

\(^{172}\) Id. (“It’s strange that that the Compact does not include a public trust standard, which is the most basic, and the highest ethical standard, or stewardship standard recognized by law, by the US Supreme Court, and by the states of the Great Lakes.”).

\(^{173}\) Id. (“[Michigan is] going to allow water to be allocated for privates (sic) use: up to 25 percent of the lakes and streams.”).

\(^{174}\) Compact, supra note 169, at § 4.13 (2).

\(^{175}\) PROVIDING HUMANITARIAN AID, CHAPTER FIVE 113 (2003), available at www.usaid.gov/fani/Chapter_5--Foreign_Aid_in_the_National_Interest.pdf (stating that in lieu of the rise in natural disasters in the latter part of the twentieth century, “humanitarian aid will remain enormously important for the international community and for the United States.”).


> In South Africa, water privatization of municipal water systems show that this strategy is not benefiting the ability of the poor to access water. In South Africa, water privatization increased the price of water up to twenty percent of household income and many people’s taps were shut off due to unpaid bills.

\textit{Id.}
further emphasizes the importance of keeping the Great Lakes water under the protection of the public trust and out of the hands of private companies like Nestlé.\(^\text{177}\)

5. Virtual Water

Our daily water use—water that we drink, use to bathe, brush our teeth, and flush the toilet—is only about forty gallons.\(^\text{178}\) This figure pales in comparison to the amount we use to manufacture the goods that fill our homes:

It takes between 250 and 650 gallons of water to grow a pound of rice. That is more water than many households use in a week . . . . It takes 130 gallons to grow a pound of wheat and 65 gallons for a pound of potatoes . . . . It takes 3000 gallons to grow the feed for enough cow to make a quarter-pound hamburger, and between 500 and 1000 gallons for that cow to fill its udders with a quart of milk. Cheese? That takes about 650 gallons for a pound of cheddar or brie or camembert. . . . A glass of wine or beer with dinner requires another 66 gallons, and a glass of brandy afterward takes a staggering 530 gallons. . . . I figure that as a typical meat-eating, beer-swilling, milk-guzzling Westerner, I consume as much as a hundred times my own weight in water every day. . . . [G]rowing the crops to feed and clothe me for a year must take between 1500 and 2000 tons—more than half the contents of an Olympic-size swimming pool.\(^\text{179}\)

The virtual water\(^\text{180}\) trade was not a factor discussed when the court implemented the log test in the mid 1800’s.\(^\text{181}\) Further, Michigan citizens grew much of their own food, watered by Michigan rains—what they had to buy was mostly grown locally.\(^\text{182}\) Now, most of the Western

\(^{177}\) Id. at 1345.
\(^{178}\) PEARCE supra note 152, at 3.
\(^{179}\) Id. at 3-5.
\(^{180}\) Id. at 5. Pearce defined the term— invented by Tony Allan, of the School of Oriental and African Studies in London:

[Virtual water is] the water involved in the growing and manufacture of products traded around the world . . . . [E]very ton of wheat arriving at a dockside carries with it in virtual form the thousand tons of water needed to grow it. . . . This trade ‘moves water in volumes and over distances beyond the wildest imaginings of water engineers.

\(^{181}\) See Moore, 2 Mich. 519 (failing to mention the existence of virtual water in the opinion).
countries’ food and clothing is imported; “whenever you buy a T-shirt made of Pakistani cotton, eat Thai rice, or drink coffee from Central America, you are influencing the hydrology of those regions—taking a share of the Indus River, the Mekong River, or the Costa Rican rains.” On the flip side of the virtual water trade, the U.S. is the biggest net exporter. Now, areas that have looming water crises are sucking millions of acre-feet from the High Plains aquifers to grow grain for beef export.

The virtual water trade is another vital fact that did not exist during the creation of the log test. In addition to the interconnectivity of water, the non-renewability of the Great Lakes, the non-possessory aspect of water, the increasing demand, climate change, population strains, and water scarcity, the virtual water trade is further evidence of the need for a moral responsibility to place Michigan’s waters in the public trust to conserve the precious resource.

B. Harsh Consequences for The Great Lakes by Not Including Non-Navigable Water in The Public Trust

1. The Aral Sea

Standing on Sleeping Bear Dunes National Lakeshore’s tallest sand mountain, Lake Michigan’s crystal, blue water stretches as far as the eye can see. It is 307 miles long and 118 miles wide; four states share the 1,638 miles of shoreline of the world’s sixth largest freshwater

At the end of the nineteenth Century, most families lived on farms or in rural towns. Families grew their own food and kept animals like cows, pigs and chickens. Farm families could sell their extra eggs, butter and milk in town and buy flour, sugar and coffee. Since the nearest town might be miles away, families generally only traveled there once a week, on foot or by horse-drawn wagon.

Id. PEARCE supra note 152, at 5. 
Id. at 5. 
Id. at 6. 
See discussion supra Part IV. A.1-4.
lake.\textsuperscript{187} It is hard to imagine that a body of water this size could ever be drained. However, the Aral Sea in Uzbekistan—the fourth largest lake in the world in 1960—“has lost ninety percent of its source waters and two thirds of surface area.”\textsuperscript{188}

This depletion is one of the greatest water policy failures ever committed; it represents “a depressing example of water arrogance run amuck.”\textsuperscript{189} Soviet water engineers diverted most of the tributaries that fed the Aral Sea to irrigate cash crops in the surrounding arid fields.\textsuperscript{190} In the name of economic progress, the Sea was severed from its fresh water supply; as a result, levels fell eighty feet in forty years.\textsuperscript{191} As a result, the once thriving fishing and tourism industries were decimated, and the climate near the shoreline grew more extreme.\textsuperscript{192}

While many argue that this could never happen to the Great Lakes, others see the Aral tragedy has a looming possibility.\textsuperscript{193} A large scale diversion—like the Aral Sea—is unlikely, but a “slower, more methodical bleeding of the ecosystem is harder to rule out, particularly when factoring in the unpredictable concerns of climate change.”\textsuperscript{194} Whether it happens in forty years or one hundred, Nestlé-like diversions could impact the Basin in ways we do not understand today.\textsuperscript{195}

\textsuperscript{189} ANNIN \textit{supra} note 2, at 26.
\textsuperscript{190} \textit{Id.} at 24.
\textsuperscript{191} \textit{Id.}
\textsuperscript{192} \textit{Id.}
\textsuperscript{193} \textit{Id.} at 37. The author explained:

[A]n Aral-like disaster in the Great Lakes is extremely unlikely. Central Asia’s desert climate contrasts sharply with that of the wet weather of the North American Great Lakes. In addition, they say it’s hard to imagine that an Aral-like, industrial-scale diversion of water would ever be tolerated in the United States or Canada, where water regulations, and an environmentally conscious electorate, would rise up in revulsion to any such action.
\textit{Id.}
\textsuperscript{194} ANNIN \textit{supra} note 2.
\textsuperscript{195} \textit{Id.} at 38.
Soviet water scientists warned their government about the dangers of diverting the supply to the Aral Sea; obviously, they were ignored.\textsuperscript{196} Professor emeritus of geography at Western Michigan University states the lesson of the Aral Sea tragedy:

The big lesson is simple. Don’t enter into activities that could have long-term damage unless you take a careful look at the potential consequences . . . . And the problem is that once you make a commitment to give somebody water, you can’t take it back, because they become dependent on it.\textsuperscript{197}

The Moore Court that implemented the log test did not see the long-term consequences of its decision—it merely catered to an economic trend.\textsuperscript{198} Today, the Michigan Supreme Court has no such excuse. By not placing Michigan’s water in the public trust, a harsher result—the depletion of a sacred resource—is a possibility.

2. Michigan and the Timber Industry: The depletion of a Non-Renewable Resource for a Short-Term Profit.\textsuperscript{199}

\textit{Nature’s abundance, once thought inexhaustible, profoundly shaped Michigan history. To the people who came here, it represented the possibility of wealth or at least of better lives . . . . Whether fur-bearing animals, or iron ore, or white pine forests, Michigan was a rich source of materials that men elsewhere wanted.}\textsuperscript{200}

Michigan has a history of allowing private interest to dictate public land use.\textsuperscript{201} This relationship has led to irresponsible public land policies. Michigan, along with the other states, was lured into the Union in 1837 by land grants and profit-sharing from the federal

\textsuperscript{196} Id.  
\textsuperscript{197} Id.  
\textsuperscript{198} See Shafer supra note 8, at 27.  
\textsuperscript{199} C\textsc{lean} W\textsc{ater} A\textsc{ction} supra note 139, at 6 (comparing the similarities between water and timber regarding the lack of long-term protection policies by stating that “lumber barons [thought] the timber of the Great Lakes would last 500 years—and then cut it down in less than 50.”).  
\textsuperscript{201} See generally id. at 202-13.
In other words, since becoming a state, Michigan has been in the real estate business with the goal of settlement and development. The sale of land rich in natural resources at cheap prices resulted in the land being cleared of timber for agriculture, the creation of the lumber industry, and the construction of major iron and copper mines.

The idea was that, as soon as the forests were cut, the state would be one big, bountiful breadbasket of productivity. The barren land would be turned into “gardens of roses.” However, this did not happen—“[t]he poor, sandy soil in northern Michigan would only support the growing of pine trees.” This led to an economic boom in the timber industry. Unfortunately, the boom busted: “Timber barons abandoned the state and their lands after all the forests were cut. Farms on sandy soil failed.” Thus, owners could not pay their property taxes, and vast forfeitures swept the state—the stump-infested land reverted back to the government. These events spurred the formation of the Department of Conservation’s Organic Act:

The Act empowered the Department to manage ninety-eight percent of state public lands for the purpose of protecting and conserving the natural resources of the state; developing facilities for outdoor recreation; preventing destruction of timber and other forest growth; promoting reforestation; preventing pollution of lakes and streams; and fostering the protection and propagation of game and fish.

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202 Id. at 202.
203 Id. at 203.
204 Id.
205 Id.
206 Ferguson supra note 200, at 203 (citing BRUCE CATTON, MICHIGAN, A HISTORY 156-57 (Gerald George et al. eds., 1984)).
207 Id. at 204.
208 Id. at 202.
209 Id. (citing Science and Tech. Div., Legislative Serv. Bureau, State and Federal Land Ownership in Michigan, in SENATE SELECT COMMITTEE ON PUBLIC LAND OWNERSHIP, PURCHASE AND MANAGEMENT 3 (1996)).
210 Id. (“Today, approximately seventy-five percent of all land currently managed by the Department of Natural Resources is tax reverted land.”).
211 Id. at 205.
By following the log test, Michigan’s non-renewable water resource is heading down the same barren path of the pine forests. The log test no longer applies; the timber industry (for which the test was created) is dead, along with the notion that groundwater is not connected to navigable surface water.\(^{212}\) All of Michigan’s water needs to be placed in the public trust so it does not receive the same fate as the pines.

C. Now Is Not the Time to Rely on a Clichéd, Knee-jerk Reaction to The Public Trust: The Takings Claim\(^ {213}\)

Whether rooted in the common-law principle of a *man’s home is his castle*\(^ {215}\) or in the property maxim of the *bundle of rights*,\(^ {216}\) the relationship between owner and property—especially a homeowner’s land and anything connected to it—incites emotional reactions. Some claim that placing Michigan’s water in the public trust would be “flat-out un-American.”\(^ {217}\) The majority in *Nestlé* echoed this sentiment in response to the argument that Michigan’s Constitution and statutes claimed ownership of water by the state; it explained that “this state has long recognized that private persons obtain property rights in water on the basis of their

\(^{212}\) See discussion *supra* part IV. A.1.
\(^{213}\) Cf. *Fresh Air* (National Public Radio broadcast of interview by Terry Gross with Uwe Reinhardt, James Madison Professor of Political Economy and a Professor of Economics and Public Affairs at Princeton University, Mar. 11, 2009), available at http://www.npr.org/templates/story/story.php?storyId=101706614 (explaining that now—in the present, dangerous state of the U.S. economy—is not the time to react to universal health care proposals with the clichéd response of socialism).
\(^{216}\) Saeger *supra* note 46, at 138.
\(^{217}\) Id. at 119 (quoting Ohio State Senator Tim Grendell).
ownership of land." However, this notion that the public trust will take property from its owners is misplaced:

   Indeed, traditional common law doctrines of absolute dominion and reasonable use are doctrinally inapposite to arguments asserting that ownership in groundwater is a stick in the bundle of rights granted by deed. These common law remedies often leave a landowner defenseless against a neighbor who sunk a deeper well or uses a larger pump to deplete an aquifer, even when the property owner loses access to water underneath his property. It is hard to assert that the government is unconstitutionally taking a valuable property right when one’s neighbor can lawfully take the same property with impunity.

The Court in *Lucas v. South Carolina Coastal Council* provided two categories of governmental takings that require compensation: the first occurs when there is a “permanent physical occupation” of land by the government, “no matter how weighty the asserted public interests involved;” the second occurs when the governmental regulation “denies all economically beneficial or productive use of land.” Placing Michigan’s water in the public trust does not qualify as a permanent physical occupation—public trust water does not involve actual physical governmental presence on the water. Moreover, the public trust would not deny all economic or productive use. The *Lucas* Court stated that “where the government has deprived a landowner of all economically beneficial uses” compensation would be owed unless the restriction “inherited in the title itself, in the restrictions that background principles of the State’s law of property and nuisance already place upon land ownership.” The public trust does not deprive the owner of all economic beneficial uses because “the land owner would retain full use

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218 *Id.*
219 Tuholske *supra* note 30, at 235 (citing A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES § 4.29 (2005)).
221 *Shafer supra* note 8, at 49 (explaining that *Lucas v. South Carolina Coastal Council* “summarized the current status of regulatory takings jurisprudence and refined a narrow categorical rule.”).
222 *Id.*
of his upland property, all his riparian rights of access, and reasonable use of the lake or stream.\textsuperscript{223} The only thing the land owner cannot do is divert the water.

If neither of the \textit{Lucas} categorical rules apply, courts evaluate the takings claim under the traditional balancing test of \textit{Penn Central}.\textsuperscript{224} This test weighs the public interest against “the economic impact of the regulation on the claimant and, particularly, the extent to which the regulation has interfered with distinct investment-backed expectations.”\textsuperscript{225} Here the public has an extremely heavy interest in keeping Michigan’s water in the public trust. The other side of the balance is light; water is different than land and other types of property; “water’s unique legal status militates against defining it as a product or commodity that can be bought and sold, largely because surface water rights are usufructuary—one can only use, but not own, water.”\textsuperscript{226}

A Fifth Amendment takings claim would fail; disgruntled landowners who still have the knee-jerk reaction that the public trust is \textit{un-American} can take refuge in the fact that they are merely “forfeit[ing] a small part of their autonomy for the common good. This is the price paid for enjoying the benefits of a civil society.”\textsuperscript{227}

\textbf{D. A Step in the Right Direction for The Public Trust Doctrine: Mono Lake}

The facts of the California Supreme Court Case \textit{National Audubon Society v. Superior Court of Alpine County}\textsuperscript{228} are similar to the facts of \textit{Nestle}: both cases involve diversions of non-navigable water that affect the surface area of a navigable body of water. Mono Lake is the second largest lake in California; it is fed by run-off streams from the Sierra Nevada

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{223} \textit{Id.}
\item \textsuperscript{225} Shafer \textit{supra} note 8, at 49.
\item \textsuperscript{226} Scanlan \textit{supra} note 6, at 1336-1337 (quoting Joseph L. Sax, \textit{Rights that “Inhere in the Title Itself”: The Impact of the Lucas Case on Western Water Law}, 26 LOY. L.A. L. REV. 943, 944 (1993)).
\item \textsuperscript{227} \textit{Id.}
\item \textsuperscript{228} Nat’l Audubon Soc’y v. Superior Court of Alpine County, 658 P.2d 709, 718 (Cal. 1983).
\end{enumerate}
\end{footnotesize}
Mountains.\textsuperscript{229} The Division of Water Resources granted the Los Angeles Department of Water and Power a permit to divert the streams to bring water into the city.\textsuperscript{230} Consequently, this diversion has stopped virtually all the flow of the streams, which has lowered the surface area of the lake.\textsuperscript{231}

The California Supreme Court found that the public trust doctrine “protects navigable waters from harm caused by diversion of nonnavigable tributaries.”\textsuperscript{232} Thus, the court brought non-navigable water into the penumbra of the public trust by extending it to non-navigable tributaries that feed a body of surface water.\textsuperscript{233} These non-navigable tributaries are equivalent to connected groundwater because “groundwater is inherently non-navigable and supplies surface bodies of water.”\textsuperscript{234} Michigan should follow California’s lead to protect the Great Lakes from diversions of its freshwater supply. Applying \textit{Audubon’s} reasoning to the \textit{Nestlé} facts, the Dead Stream and the connected groundwater would be protected by the public trust because both affect the Great Lakes.

\textbf{V. CONCLUSION}

In \textit{Brown v. Board of Education},\textsuperscript{235} the United States Supreme Court overruled antiquated precedent by applying a moral approach that confronted \textit{facts that have so far changed or come to be seen so differently as to have robbed the old rule of significant application or justification.}\textsuperscript{236} The \textit{Nestlé} court had a chance to break from antiquated precedent by expanding the public trust doctrine to cover non-navigable water. However, it erred by using the outdated

\begin{itemize}
\item \textsuperscript{229} \textit{Id.} at 711.
\item \textsuperscript{230} \textit{Id.}
\item \textsuperscript{231} \textit{Id.}
\item \textsuperscript{232} \textit{Id.} at 720.
\item \textsuperscript{233} Bednarz \textit{supra} note 17, at 740.
\item \textsuperscript{234} \textit{Id.} at 743.
\item \textsuperscript{235} \textit{Brown}, 347 U.S. 483.
\item \textsuperscript{236} \textit{Planned Parenthood}, 505 U.S. at 855.
\end{itemize}
log-floatation test to determine navigability—and hence—public trust eligibility. A moral approach that includes all of Michigan’s water in the public trust must be embraced to accommodate *vital* social and scientific facts that did not exist during the adoption of the log test. The interconnectivity of water, the non-renewability of the Great Lakes, the non-possessory aspect of water, the increasing demand, climate change, population strains, water scarcity, and the virtual water trade are vital social and scientific facts that did not exist when the log test was implemented. These facts represent the need for a moral responsibility to place Michigan’s waters in the public trust to conserve the precious resource. By acknowledging these changes, future Michigan courts have the opportunity to view the Great Lakes as a “heritage of humankind” to be protected and conserved rather than a mere product or commodity to be exploited and spent.

ROBERT J. WEBB*

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237 *Nestlé*, 269 Mich. at 222 (stating that the trial court properly determined that the correct navigability test in Michigan is the log-floatation test).

238 *See Moore* (implementing the log-floatation test and not considering the social and scientific studies that were discussed in this Casenote—the interconnectivity of water, the non-renewability of the Great Lakes, climate change, population strains, water scarcity, virtual water, etcetera).