The Great De-Bait: America, Deer Hunting, and the Camouflage of Anti/Pro-Baiting Regulations
Cole DeBlaey ..........................................................................................1

Big-game baiting is hunting’s civil war of the soul, a battle of ideas like few the sport has ever seen. Most debates in the hunting community deal with the mechanics of the sport, nuts-and-bolts issues such as season dates, equipment and management strategies of wildlife agencies. This one is different. It questions the heart, soul, and motive of a hunter—and that inflames deep passions. The argument has been waged between brothers in the world’s oldest sport at hunting lodges, wildlife agencies, seats of government, and the ballot box.

This Comment canvases and attempts to demystify the camouflage of pro and anti-baiting regulations across the United States, arguing that these laws possibly need to be amended to return deer hunting to the ideals of sport and conservation that our forefathers intended. A brief history of deer hunting will begin this discussion, showing the pendulum swing of extreme highs and lows of not only the American deer population but also the sport and industry itself. Within this Comment will be an analysis of “the great de-bait” and the ethical, societal, and territorial divide amongst the nation, in an attempt to explain why states choose to permit baiting or prohibit baiting, or allow a combination of the two decisions. Following this analysis will be an introduction to possible alternative hunting methods, practices, and tactics that states could allow hunters to use instead of baiting, which may possibly limit the biological, ethical, fiscal, and societal concerns associated not only with baiting but the practice of hunting itself. This Comment will conclude with a discussion of the possible economic repercussions to the hunting industry and American economy as a whole if baiting laws were to be amended or if baiting was eliminated in entirety.

Muddy Waters: Why Polluted Groundwater Infiltrating Navigable Waters Should Not Be Excluded From National Pollutant Discharge Elimination System Permitting
Tad Juilfs..................................................................................................30

The debate over whether the Clean Water Act has jurisdiction over migratory groundwater in the same way that it does over navigable waters of the United States (regarding effluent standards) has left a wide split among courts attempting to interpret and apply the policy, goals, and language of the law. The problem lies in the difference between applying the law given its objectives and goals, or in a strict fashion using simply the language in the text of the Clean Water Act, while supplementing support from legislative and case law history. First in this Note, background information is provided regarding the history of the Clean Water Act, National Pollutant Discharge Elimination System (NPDES) permits and the U.S.
Environmental Protection Agency regulation, navigable waters of the United States, and the relation of migratory groundwater to this process. What follows is a discussion of methods, rules, and rationales courts and legal authorities have used and provided when holding and not holding that pollutants to migratory groundwater which reach navigable waters of the United States should be regulated through NPDES permitting. Finally, there is a review as to the reason why the Clean Water Act does have jurisdiction over pollutants to migratory groundwater which reach navigable waters and a recommendation that such regulation should occur via NPDES permits.
Special thanks to Therese Clarke Arado, Heidi Froestad Kuehl, Lisa Hoebing, Jacob Imm, Julie Mahoney-Krzyzek, Annie Mentkowski, Melody Mitchell, Karl Pettit, Sharon Nelson, Christina Raguse, Pamela Sampson, and Clanitra Stewart for administrative and support purposes.

Member, National Conference of Law Reviews
The Great De-Bait: America, Deer Hunting, and the Camouflage of Anti/Pro-Baiting Regulations

COLE DEBLAEY

Big-game baiting is hunting’s civil war of the soul, a battle of ideas like few the sport has ever seen. Most debates in the hunting community deal with the mechanics of the sport, nuts-and-bolts issues such as season dates, equipment and management strategies of wildlife agencies. This one is different. It questions the heart, soul, and motive of a hunter—and that inflames deep passions. The argument has been waged between brothers in the world’s oldest sport at hunting lodges, wildlife agencies, seats of government, and the ballot box.

This Comment canvases and attempts to demystify the camouflage of pro and anti-baiting regulations across the United States, arguing that these laws possibly need to be amended to return deer hunting to the ideals of sport and conservation that our forefathers intended. A brief history of deer hunting will begin this discussion, showing the pendulum swing of extreme highs and lows of not only the American deer population but also the sport and industry itself. Within this Comment will be an analysis of “the great de-bait” and the ethical, societal, and territorial divide amongst the nation, in an attempt to explain why states choose to permit baiting or prohibit baiting, or allow a combination of the two decisions. Following this analysis will be an introduction to possible alternative hunting methods, practices, and tactics that states could allow hunters to use instead of baiting, which may possibly limit the biological, ethical, fiscal, and societal concerns associated not only with baiting but the practice of hunting itself. This Comment will conclude with a discussion of the possible economic repercussions to the hunting industry and American economy as a whole if baiting laws were to be amended or if baiting was eliminated in entirety.

I. Introduction

A. The Shots Heard Round the Nation

I. Scenario One
INTRODUCTION

A. THE SHOTS HEARD ROUND THE NATION

“It is a curious thing that something as private, and at times solitary, as hunting attracts the attention of so many people with different points of view.”

The following scenarios depict three various strategies used by the modern day American white-tailed deer hunter. Each scenario may seem very similar to the others, but each carries its own set of legal implications as well as biological, ethical, fiscal, and societal challenges.

1. Scenario One: As the sun sets over a quiet Texas sendero and the opening evening of rifle season comes to a close, an alarm sound breaks the silence. “Beep! Beep! Beep!” Hearing the dinner bell, a trophy buck and his many mistresses emerge from the foliage to feast upon corn that has been scattered about by a mechanical feed dispenser. Moments later, a hammer strikes a firing pin, and a single shot rings out from a hundred yards away. The trophy buck has shared in his ‘last supper’ so to speak. The hunter

---


snaps a few photos with his buddies, telling them of his magnificent hunt and later sends the beautiful beast off to the taxidermist.

2. **Scenario Two:** In April, a farmer, who is an avid hunter, goes to his local outdoors supply company and purchases seeds that produce crops, also known as “food plots,” commonly used to attract deer. The next day, farmer tills the soil on his farm and plants the blend of non-naturally occurring crops. Months pass and the farmer watches his crops grow into a bountiful harvest. Several nights a week he sits and watches the local deer herd feast on the crop. Knowing the deer have taken kindly to the crop, and visit it frequently, he builds a deer stand that overlooks the food plot. As the opening evening of rifle season comes to a close, and the sun begins to set over a beautiful Wisconsin horizon, a trophy buck and his many mistresses loiter, feeding on what is left of the food plot. Moments later, a hammer strikes a firing pin, and a single shot rings out from a hundred yards away. The trophy buck has shared in his ‘last supper’ so to speak. Hunter snaps a few photos with his buddies, telling them of his magnificent hunt and later sends the beautiful beast off to the taxidermist.

3. **Scenario Three:** Farmer phones his friend hunter and tells him he will be harvesting his crops of corn and beans this week. Knowing this area will be a wildlife feeding haven post-harvest, hunter sits in a deer stand overlooking the recently harvested ground. As the opening evening of rifle season comes to a close, and the sun begins to set over a beautiful Virginia horizon, a trophy buck and his many mistresses loiter, feeding on the tailings left over from harvesting. Moments later, a hammer strikes a firing pin, and a single shot rings out from a hundred yards away. The trophy buck has shared in his ‘last supper’ so to speak. Hunter snaps a few photos with his buddies, telling them of his magnificent hunt and later sends the beautiful beast off to the taxidermist.

Scenario One is the common practice known today as baiting, in which the hunter uses a concentrated pile of food to attract a white-tailed deer to a particularized location. Scenario Two involves the practice of food plotting, in which a hunter plants a particular crop to attract a white-tailed deer to a particularized location. In Scenario Three, the hunter sits near an area in which food has recently become available to a white-tailed deer as a result of normal agricultural practices such as mowing or harvesting. From a bird’s eye view, one of these real-life scenarios seems different than the others and obscures the lines of what hunting really is in the eyes of both sportsmen and non-sportsmen alike. However, when viewed beneath the surface, hunting regulations, practices like those listed above, and tactics used within those enumerated practices across the United States are more alike than it may appear. The lines of what really is or is not hunting are more blurred than we as Americans would like to think.

This Comment canvases and attempts to demystify the camouflage of pro and anti-baiting regulations across the United States, arguing that these
laws possibly need to be amended to return deer hunting to the ideals of sport and conservation that our forefathers intended. A brief history of deer hunting will begin this discussion, showing the pendulum swing of extreme highs and lows of not only the American deer population, but also the sport and industry itself. Within this Comment will be an analysis of “the great de-bait” and the ethical, societal, and territorial divide amongst the nation, in an attempt to explain why states chose to permit baiting or prohibit baiting, or allow a combination of the two decisions. Following this analysis will be an introduction to possible alternative hunting methods, practices, and tactics that states could allow hunters to use instead of baiting, which may possibly limit the biological, ethical, fiscal, and societal concerns associated not only with baiting, but the practice of hunting itself. This Comment will conclude with a discussion of the possible economic repercussions to the hunting industry and American economy as a whole if baiting laws were to be amended or if baiting was eliminated in its entirety.

II. BACKGROUND

A. HISTORY: THE AMERICAN DEER HUNTER AND THE AMERICAN WHITE-TAILED DEER POPULATION

Historians cannot predict the exact date that human beings began hunting *Odocoileus virginianus*, also known as the white-tailed deer (hereinafter “deer”). However, “archaeologists have found remains of stone weapons and animal bones, including deer, in Germany, dating as far back as 350,000 years ago. Ancient cave paintings showing deer and hunters have been discovered across the world, with some of the oldest in Lascaux, France, dated 18,000 to 30,000 years ago.” What is known as the early history of deer hunting in the (now) United States is almost as dark as the

---

3. *Odocoileus virginianus* is the scientific name for the white-tailed deer. White-tailed deer, the smallest members of the North American deer family, are found from southern Canada to South America. . . . White-tailed deer are herbivores, leisurely grazing on most available plant foods. Their stomachs allow them to digest a varied diet, including leaves, twigs, fruits and nuts, grass, corn, alfalfa, and even lichens and other fungi. Occasionally venturing out in the daylight hours, white-tailed deer are primarily nocturnal or crepuscular, browsing mainly at dawn and dusk.


5. *Id.*
eyes of the beast itself. Deer were an integral part of Native Americans’ lives as they relied on the majestic animal as a staple of their diet, and used the entire animal for crafting items such as blankets, tools, and weapons. The American deer hunter was born when early American colonists were taught by Native Americans to hunt effectively and how to use every part of the deer efficiently for survival and trade. Deer hunting took its first pitfall with the introduction of deer hides into the fur trade. It is estimated that Native Americans and Americans were killing five million deer a year to supply the ever-growing fur trade, driving deer herds to staggeringly low figures. With the turn of the nineteenth century and a decline in the fur trade came increased deer populations and re-introduction of deer into areas they had not been seen in years. The rise to triumph of the population did not last long, however, as rampant market hunting took place in the late nineteenth century. It is estimated the deer population hit an all time low of 500,000. Deer began to completely disappear in areas all across the nation.

However, deer hunting received its saving grace in 1900 with enactment of “[t]he Lacy Act, the first federal wildlife law. Lacy prohibited the interstate trafficking of venison and other wild game, and the exploitation of whitetails began to slow.” Establishment of the Lacy Act and the coming of the twentieth century led to increased research on how to effectively manage and control deer populations. Regulation of hunting and deer hunting alike began to take form in 1908 when forty-one states established departments of conservation. Establishment of state conversation departments brought implementation of new ideas like “antlerless only” hunting seasons and setting deer hunting season lengths. Drastic shifts in the market economy like the Great Depression, resulted in an American desire to leave the urban sprawl, thus returning deer to their natural habitats.

---

7. Id.
8. Id.
9. Id.
10. Id.
12. Id.
13. Id.
14. Id.
15. Id.
17. Id.
18. Id.
19. Id.
populations continued to flourish throughout the late twentieth century leading to today’s over-rampant North American deer population that is estimated to total between twenty to twenty-five million animals.⁰²⁰ A prime example of the drastic shifts in the American deer population as well as the regulation of huntable days would be that of Missouri.⁰²¹ “[I]n 1937, Missouri had a three-day deer season where 108 deer were harvested.” In 2009, it was reported that hunters harvested over 295,000 deer.⁰²³ Further, “[a]s of 2011, sportsmen were capable of hunting Missouri deer for 123 days, a 4,000% increase from 1937.”⁰²⁴ Similarly, in Kansas, more than 100,000 deer are harvested annually, despite the fact that deer hunting was outlawed for nearly thirty years, in attempt to bring the population back from near extinction.⁰²⁵

As of 2011, it is estimated that nearly ten million out of the total 13.7 million American hunters are deer hunters,⁰²⁶ and that hunters contribute over 1.6 billion dollars annually to conservation.⁰²⁷ Survival of the tradition of hunting is not only essential to the management and protection of the American deer population, but is also vital to the success of the American economy at large.⁰²⁸ In contemporary times, conservation efforts of the past seem outshined as “[b]urgeoning numbers of deer ravage shrubs, fruit trees and crops, causing hundreds of millions of dollars in damages annually in the Midwest, Northeast and Southeast” and “[d]eer-auto collisions are on the rise in many states.”⁰²⁹

Modern hunting tactics and techniques are not the same ones that our forefathers, or legends such as Teddy Roosevelt⁰³⁰ and Fred Bear⁰³¹ used in

---

²⁰  Id.
²¹  Id.
²²  Id.
²³  Id.
²⁴  Id.
²⁵  Id.
²⁶  Id.
²⁷  Id.
²⁸  Id.
²⁹  Id.
³⁰  Id.
³¹  Id.

their respective time frames. Most hunters have dropped primitive hunting methods and now hunt deer over “bait,” “food plots,” and the result of “normal agricultural practices.” Just recently, beginning primarily in the 1980s, hunters and non-hunters have struggled to grasp the complex biological, economic, ethical, and societal concerns associated with these various controversial hunting techniques.32

B. WHAT IS BAITING?

The easiest way to discuss baiting is to begin by defining it. “Bait” or “baiting” are not defined in a legal dictionary, which is odd because legal repercussions follow from violations associated with these terms.33 However, the lack of a uniform definition makes sense, as each state is to define their own hunting terms and set its own regulations.34 As a general consensus, states agree that “bait” is any ingestible substance placed by a person used to attract, entice, or lure deer to a certain location.35 For example, in Illinois, bait “means any material, whether liquid or solid, including food, salt, minerals, and other products, except pure water, that can be ingested, placed, or scattered in such a manner as to attract or lure white-tailed
deer.”\footnote{520 ILL. COMP. STAT. 5/2.26 (2013).} States like Minnesota list specific items that are and are not bait and focus on whether the item is capable of ingestion: “[B]ait’ includes grains, fruits, vegetables, nuts, hay, or other food that is capable of attracting or enticing deer . . . . Liquid scents, salt, and minerals are not bait if they do not contain liquid or solid food ingredients.”\footnote{MINN. STAT. ANN. § 97B.328 (2012).} Other states such as Virginia are very vague in their definition of bait, possibly opening up the floodgates for hunter abuse and discretionary decision making by law enforcement officials: “[A]ny food, grain, or other consumable substance that could serve as a lure or attractant.”\footnote{Definitions, VA. DEP’T OF GAME AND INLAND FISHERIES, http://www.dgif.virginia.gov/hunting/regulations/definitions.asp (last visited Jan. 22, 2015).}

III. A NATION DIVIDED: THE HEART OF “THE GREAT DE-BAIT”

Big-game baiting is hunting’s civil war of the soul, a battle of ideas like few the sport has ever seen. Most debates in the hunting community deal with the mechanics of the sport, nuts-and-bolts issues such as season dates, equipment, and management strategies of wildlife agencies. This one is different. It questions the heart, soul, and motive of a hunter—and that inflames deep passions. The argument has been waged between brothers in the world’s oldest sport at hunting lodges, wildlife agencies, seats of government, and the ballot box.\footnote{Bob Marshall, Sowing Bitter Seed, FIELD & STREAM, July 1999, at 44.}

law does not have jurisdiction over the hunting of deer and the tactics employed statewide.44 No matter which way a state leans and their reasoning it must be recognized that, “[u]nder the Tenth Amendment to the Constitution, those powers not specifically reserved by the federal government are ‘reserved to the states,’ and under that authority, states have developed their particular wildlife laws and regulations.”45 State law and wildlife codes are ultimately the controlling authority on prohibited and permitted activities within that state, but the enforcement of these laws are left to the individual state’s conservation and wildlife departments.46

It is often difficult to determine the exact time when a state began prohibiting or permitting baiting because the definition of what is or is not baiting has shifted over time with the introduction of new hunting products and new hunting techniques, along with biological, economic, ethical, and societal concerns.47 According to a 2011 Alabama Committee Report, “[n]ationally, hunting white-tailed deer over bait is prohibited in 26 states or parts thereof [and] some form of hunting deer over bait is allowed in 22 states or parts thereof.”48 Within “the last ten years, several states have prohibited or strictly regulated the hunting of deer over bait.”49 States such as “Connecticut, Illinois, Michigan, New Hampshire, Vermont, Wisconsin, and Wyoming have all moved in this direction.”50 In the Western region of the United States, “Washington, Oregon, and Utah are the only Western states that allow bait to be used for hunting deer . . . .”51 That being said, baiting while hunting deer “is prohibited in Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico and Wyoming.”52 In the southeast, baiting is prohibited in Alabama, Georgia’s northern deer zone, Mississippi, the Upstate of South Carolina, Virginia, and Tennessee.”53 Since the 2011 report, the South Carolina General Assembly removed the ban from baiting downstate, therefore baiting is now legal on private lands

45. Roth & Boynton, supra note 34, at 73.
46. See 520 ILL. COMP. STAT. (2014).
47. ALA. DEP’T OF CONSERVATION AND NATURAL RES., supra note 32, at 3.
48. Id.
49. Id.
50. Id.
52. Id.
53. ALA. DEP’T OF CONSERVATION AND NATURAL RES., supra note 32, at 3.
anywhere within the state. However, the ban on baiting and hunting over bait is still instituted on all state Wildlife Management Areas (public land). Similar to New Hampshire House Bill 258-FN of the 2013 Session sought the “prohibiti[on] of taking deer from baited areas.” However, the bill was shutdown and heavily regulated baiting laws are still intact, such as requiring permits to bait specific areas, specific dates for when baiting is permitted, and requiring the baiter to produce descriptions of their bait sites and how they can be located by law enforcement officials. Ultimately, it is up to the state legislatures to determine how definitions and the practices surrounding baiting evolve.

The “great de-bait” leaves a hunter wondering why deer baiting is prohibited, permitted, or prohibited in part and permitted in part in his or her state, as opposed to other states in the nation. For most states, the decision reflects the traditions and previous generational practices of the state, or shifts with regards to growing notions of economic or ethical concerns, or the like. For example, both the baiting and feeding of deer was once legal statewide in Wisconsin. “Feeding deer was a strong tradition near many of the mom-and-pop Northwoods resorts and restaurants to delight customers who could watch deer out the windows as both patrons and whitetails dined.” In the mid to late 1980s, hunters saw the success that mom-and-pop restaurants had in drawing deer to their establishments by the use of feed, so they applied it to their hunting tactics, and the Wisconsin baiting craze broke loose. However, baiting and feeding laws shifted in 2002, when the Department of Natural Resources “implemented a statewide ban on baiting and feeding deer,” after the discovery of Chronic Wasting Disease (CWD). The next year,

[i]awmakers lifted the baiting ban in much of the state, but required that feeding and baiting bans continue in counties where a positive case of CWD

---

55. Id.
57. Id.
60. Id.
61. Id.
62. See id.
63. Id.
or bovine tuberculosis (TB) was found in a wild or captive animal, plus adjacent counties within a 10-mile radius of a confirmed positive case.64

Further, from 2004 to 2005, a law that had originally allowed hunters to use ten gallons of bait per hunting site was lowered to a two-gallon limit in counties where baiting for and feeding of deer was still permitted.65 Currently, the prohibition of baiting and feeding deer still stands in twenty-six counties in Wisconsin.66

Additionally, states that originally permitted baiting have put an outright ban on baiting due to the negative implications of the hunting practice.67 The problems commonly associated with baiting such as “littering, bad public perceptions, and competition and territorialism between hunters” heavily influenced the Minnesota State Legislature’s decision to put a statewide ban on baiting in 1991.68 Michigan’s current policy, reaffirmed in April of 2014, seeks to be a compromise between the interests of those who are for baiting and those who seek the prohibition of baiting, and interweaves the ever-important interests and concerns of the various state agricultural industries.69 Further, pressure by the non-hunting public and anti-hunting activists through the political process and lobbying have led to an outright ban on baiting or a warning to the legislature that citizens are unhappy with baiting practices in their states.70 “When given a chance, the nonhunting public has shown its opinion of baiting, voting the practice out in four of six states. Baiting was banned in California, Washington, Oregon and Colorado.”71 Although it was upheld in Idaho and Michigan, the tides are rising as public support of baiting in Idaho and Michigan decreases.72 And further, some states are just blatant about their reasoning for permitting baiting, like Texas, where it is noted that baiting allows for a more enjoyable and efficient hunting experience.73 Pro-baiting hunters and the Texas
legislature “argue baiting is a valid way for the average hunter to see more wildlife” so that “[p]eople who invest in wildlife get an enjoyable show.”\textsuperscript{74}

Another approach used to address the desire for and criticisms of baiting laws has been one like that of Pennsylvania, a sort of “trial and error” or “baptism by fire” so to speak.\textsuperscript{75} In 2006, the Pennsylvania Game Commission (PGC) permitted baiting in five special management counties throughout the State to fill the desire of pro-baiting activists, evaluate public perception, and to conduct research on hunter success and deer harvest rates.\textsuperscript{76} Research and surveys suggested that in the five special management counties, less than forty percent of hunters were hunting with bait.\textsuperscript{77} “After the folks at the PGC concluded that the success rates of hunters who used bait were essentially the same as those who didn’t, they recommended that baiting here be discontinued, which it was.”\textsuperscript{78} Despite the research, which concluded in 2010, as of 2015 the PGC is once again allowing hunters to use bait in the five enumerated special management counties.\textsuperscript{79} Baiting is once again being allowed to try to slow down the ever-growing rampant deer population in Pennsylvania which is killing motorists daily, and wreaking havoc on suburban neighborhoods and State ecological systems.\textsuperscript{80} However, liberal approaches to control the burgeoning deer population appears to be met with very conservative wildlife laws:

[B]ait is limited to shelled corn and protein pellet supplements; approved feeders shall be limited to sealed, waterproof, automatic, mechanical feeders that are set to distribute bait up to a maximum of three times per day, during legal hunting hours only; the feeder must be visibly tagged or labeled with the landowner’s permit number or full name and address; bait accumulations at any one bait site shall not exceed five gallons; no other game may be harvested over bait than deer; a report of any deer harvested at or near a bait station shall be submitted by the hunter.\textsuperscript{81}

\textsuperscript{74} Marshall, supra note 39, at 48.


\textsuperscript{76} Id.

\textsuperscript{77} Id.

\textsuperscript{78} Id.

\textsuperscript{79} Id.

\textsuperscript{80} See Tatum, supra note 75.

\textsuperscript{81} Tatum, supra note 75. This list is representative, not exhaustive, of the PGC’s attempt to both please those in favor and opposed to baiting in the Commonwealth. Id.
It will be interesting to see if the baiting practices will be repealed, like in 2010, due to lack of hunter interest in using bait, or will continue until the PGC feels the deer population is at a fiscally and biologically sustainable level.\textsuperscript{82}

Lines become even more blurred when each individual state defines what baiting is, and the prohibited and permitted parameters surrounding it. For example, in Texas, exemplified by Scenario One above, where baiting deer is legal, the only restriction placed on the practice of baiting is that it is only permitted on private property.\textsuperscript{83} This would give an appearance of an “anything goes” methodology and would allow the hunter to sit any distance from any type of attractant, liquid or solid, be it spread, piled up, or dropped from any type of feeding device.\textsuperscript{84} Any type of feeding device means the Texas Parks and Wildlife Department permits automated, mechanical feeding devices, which allow the hunter to set and maintain a strict feeding schedule, pinpointing the exact time he or she knows the deer will answer the “beep” of the dinner bell.\textsuperscript{85} Opponents of “Texas styled hunting” do not call it hunting, but rather “harvesting” or “target practice,” and liken these practices to shooting fish (deer) in a barrel.\textsuperscript{86} Non-baiting hunters and anti-hunting activists joke that “most whitetail hunters don't even bother to get to their stands until about 30 minutes before the feeder is set to go off. (Some say that in Texas, the deer themselves don't get out of bed until they hear the feeders go off!)”\textsuperscript{87} For generations of hunters who have hunted in this particular fashion, baiting and this style of hunting makes sense both logically and ethically.\textsuperscript{88} Here, one could say hunter opinions typically match the long traditions of the Lone Star State, where “baiting isn’t just accepted, it’s expected.”\textsuperscript{89}

Wisconsin does not take an “anything goes” approach, rather it is an example of a state where deer baiting is permitted in some counties, but is heavily regulated.\textsuperscript{90} Unlike Texas, a hunter in Wisconsin may not hunt over bait that “is contained in or deposited by a feeder that is designed to deposit

\textsuperscript{82} See id.
\textsuperscript{84} See id.
\textsuperscript{85} Id.
\textsuperscript{86} Marshall, supra note 39, at 48.
\textsuperscript{88} Marshall, supra note 39, at 48.
\textsuperscript{89} Id. at 44, 48.
\textsuperscript{90} See WIS. ADMIN. CODE NR § 10.07 (2014).
or replenish feed automatically, mechanically, or by gravity.” 91 Similarly, in Texas where there is not a limit to the quantity of bait permitted, the permitted amount of bait used is regulated in Wisconsin where no hunter “may place, use, or hunt over more than 2 gallons of bait or feed at any feeding site.” 92 Also, the Wisconsin Department of Natural Resources (DNR) regulates the permitted placement of bait where no hunter “may place, use, or hunt deer over . . . more than 2 gallons of bait on each contiguous area of land under the same ownership that is less than 40 acres in size, or for each full 40 acres that make up a contiguous area of land under the same ownership.” 93 Further regulation of placement notes, no hunter “may place, use, or hunt deer over . . . any feeding site that is located within 100 yards of any other feeding site located on the same contiguous area of land under the same ownership.” 94 It also appears that the Wisconsin DNR combines bait placement with citizen safety when no hunter “may place, use, or hunt deer over any feeding site that is located within 50 yards of any trail, road, or campsite used by the public, or within 100 yards of a roadway, having a posted speed limit of 45 miles per hour or more.” 95 Unlike Texas, where baiting may take place year round, Wisconsin regulates the timing of deer baiting where a hunter “may start to place bait for deer hunting 24 hours prior to the first deer hunting season, which is the archery [hunting] season.” 96

Another example of a state where baiting is permitted, but is strictly regulated is Wisconsin’s brother to the east, Michigan. 97 Michigan similarly regulates the timing, content, and placement of bait and its permitted parameters. 98 Like Wisconsin, Michigan prohibits baiting in specific counties, specifically “Alpena, Alcona, Clinton, Ingham, Montmorency, Oscoda, and Shiawassee counties.” 99 However, throughout the rest of the state of Michigan, a hunter may place bait between September 15th and January 1st, as long as the bait volume per hunting site does not exceed two gallons. 100 Unlike Wisconsin, Michigan has a provision regarding the size of bait-dispersed areas where “[b]ait dispersal must be over a minimum 10-foot by

91. Wisconsin Deer Baiting and Wildlife Feeding Regulations, supra note 43.
92. Id.
93. Id.
94. Id.
95. See id.
96. Wisconsin Deer Baiting and Wildlife Feeding Regulations, supra note 43.
98. Id.
99. Id. at 61.
100. Id.
10-foot area." In Wisconsin, automatic, mechanical, and gravity-based feeders are prohibited, but in Michigan, “[b]ait must be scattered directly on the ground. It can be scattered by any means, including mechanical spin-cast feeders, provided that the spin-cast feeder does not distribute more than the maximum volume allowed.”

It is not irrational to think that some hunters do not use bait for fear of violating baiting laws or do in fact violate baiting laws because they are unsure of the application of state baiting laws. For example, in Wisconsin, the history of baiting is not very well documented, and the low usage of baiting was most likely attributed to the fact that baiting was perceived as being illegal. For the hunters of Wisconsin, “[g]rowing awareness that baiting was legal in the late 1980s and early 1990s is believed to have resulted in a sudden increase in baiting.”

“A survey of Wisconsin deer hunters following the 1992 hunting season revealed that 75% of hunters who baited had been hunting with bait for less than 5 years ([it should be noted that] 84% had hunted deer for more than 6 years).” Also, in Idaho, where it is illegal to hunt over bait, if a hunter is walking in the woods and stumbles upon a salt block, the hunter is faced with the ethical dilemma of deciding whether the block was placed there as wildlife bait or for livestock. That being said, “[t]he intent of the law is to prohibit hunting if the salt was placed to attract wildlife and if that salt has influenced or enticed wildlife on a path that allows the hunter the advantage.” Since there is not a legal distance that a hunter must sit from this salt block, if a hunter believes it was placed for livestock purposes, the hunter may sit near the block, ultimately looking suspicious if an Idaho Fish and Game officer were to view this event.

Further, some laws just seem illogical like in a 2009 press release, where comments by a spokesperson for the Indiana Department of Natural Resources left hunters scratching their head: “‘Basically, if you place corn, apples, salt or mineral blocks or anything that isn’t grown in the area and hunt there, it’s illegal.’ ‘Hunting from an apple tree is legal, but placing apples under your tree stand would place you in conflict with current Indi-

101. Id.
102. Baiting and Feeding Prohibitions for Deer and Elk, supra note 97, at 61.
104. Id.
105. Id.
107. Id.
108. See id.
16  NORTHERN ILLINOIS UNIVERSITY LAW REVIEW  [Vol. 7

ana Law.**\textsuperscript{109}** It may have just been easier for the lieutenant to reaffirm the title of his press release, “Baiting deer is Still Illegal,” than attempt to explain the application of the anti-baiting law.\textsuperscript{110} Whether a hunter places apples under their stand, or hunts from a stand in an apple tree that drops apples, the moral of the story is that apples are still being hunted over and they are a tasty snack to the attracted deer. Similarly, hunters in Florida may also scratch their heads and feel left out when they read that taking game on baited lands is prohibited, but resident game may be hunted in proximity of year-round game-feeding stations on private lands, “provided the feeding station has been maintained with feed for at least six months prior to taking [resident] game.”\textsuperscript{111} That being said, Florida hunters who use bait most undoubtedly have their calendars marked and do their due diligence in making sure their feeders are continuously loaded for six months before the start of their first day of deer hunting that season.\textsuperscript{112}

IV. BIOLOGICAL, ECONOMIC, ETHICAL, AND SOCIETAL CONCERNS COMMONLY ASSOCIATED WITH BAITING

The heart of “the great de-bait” lies in the complex biological, economic, ethical, and societal concerns commonly associated with baiting. States vary to great extents on biological concerns associated with deer baiting, specifically regarding disease transmission, deer behavior patterns, and population management. One of the biggest arguments against permitting baiting for deer is that “[b]aiting alters the risk factors associated with disease transmission by increasing frequency of direct contact between deer.”\textsuperscript{113} In 1994, a disease called Bovine Tuberculosis (TB) was discovered in Michigan.\textsuperscript{114} Scientists in Michigan believe TB “is directly related

---

\textsuperscript{109} Press Release, Baiting Deer is Still Illegal, IND. DEP’T OF NAT. RESOURCES (Oct. 20, 2008).

\textsuperscript{110} Id.


\textsuperscript{112} Id.

\textsuperscript{113} ALA. DEP’T OF CONSERVATION AND NAT. RESOURCES, supra note 32, at 4.


Tuberculosis (TB) is a serious disease caused when bacteria attack the respiratory system. Bovine TB is spread primarily through the exchange of respiratory secretions between infected and uninfected animals. This transmission usually happens when animals are in close contact with each other. Thus, animal density plays a major factor in the transmission of \textit{M. Bovis}. Bacteria released into the air through coughing and sneez-
to supplemental feeding/baiting and the increased focal densities these practices create.” The effect of baiting deer has a spillover effect into other industries as well as dairy, and beef producers in Michigan estimate that TB has caused them a loss of over $121 million dollars between 1998-2008. It is estimated if nearby states like Wisconsin were to be inflicted with TB it would result in the dairy and beef industry losing their status as a “TB free state” and would cost near $1.9 million dollars in annual testing costs. Like Wisconsin, state wildlife agencies across the country are spending millions of dollars to monitor transmissions of diseases like TB that have been linked to feeding sites and baiting of deer.

A similar disease called Chronic Wasting Disease (CWD) has “emerged as the most significant disease threat that North America’s deer . . . populations have ever faced.” Although the exact mode of CWD transmission has not been proven, “evidence supports the possibility that the disease is spread through direct animal-to-animal contact or as a result of indirect exposure to prions in the environment (e.g., in contaminated feed and water sources).” States like Missouri, where baiting is illegal, fear the economic impact that would result from a deer population being wiped out by CWD:

---

Id.

115. ALA. DEP’T OF CONSERVATION AND NAT. RESOURCES, supra note 32, at 4.

116. Bovine Tuberculosis, supra note 114.

117. Id.


119. Id.

Missouri offers some of the best deer hunting in the country, and deer hunting is an important part of many Missourians’ lives and family traditions. Infectious diseases such as CWD could reduce hunting and wildlife-watching opportunities for Missouri’s nearly 520,000 deer hunters and almost two million wildlife watchers. Deer hunting is also an important economic driver in Missouri and gives a $1 billion annual boost to state and local economies. Lower deer numbers from infectious diseases such as CWD could hurt 12,000 Missouri jobs and many businesses that rely on deer hunting as a significant source of revenue, such as meat processors, taxidermists, hotels, restaurants, sporting goods stores, and others. CWD also threatens the investments of thousands of private landowners who manage their land for deer and deer hunting, and who rely on deer and deer hunting to maintain property values.121

Missouri and similar states attempt to combat the spread of CWD nationally but also internally, by not only prohibiting baiting, but by limiting deer carcass importation and exportation.122 For example, in Virginia, where both deer feeding and baiting are prohibited, only seven cases of CWD have been reported in the state’s history. It is said that “[t]o prevent the spread of CWD into new areas, Virginia’s carcass transportation movement regulation prohibits the importation or possession of whole deer carcasses or specified high-risk part of carcasses originating from any enclosure intended to confine deer . . . from any area designated . . . as a carcass-restriction zone.”123 The link between baiting and deer disease seems even more evident as “[a] hair loss syndrome has been detected in artificially fed deer in West Virginia and other southeastern states” and a...
“[b]acterial infection of the muzzle has been detected among artificially fed deer populations in Alabama, Louisiana, and North Carolina. Neither of these deer health issues has been found in nearby unfed populations.”124

Experts and researchers implicate baiting and feeding of deer negatively impacts deer behavior patterns and surrounding ecosystems. The Virginia Department of Game and Inland Fisheries notes “[s]upplemental feeding significantly alters the natural home ranges and distribution of deer on the landscape” and “[f]eeding deer can artificially increase deer numbers above the habitat’s natural carrying capacity, which can lead to increased habitat damage, crop damage, and private property damage . . . .”125 Researchers are holding that artificially high deer populations supported by supplemental feeding and baiting are threatening long-term forest sustainability.126 Findings suggest the damage may be irreparable, even after reducing deer numbers in those affected areas.127 Specific forestry concerns include: “failure of regeneration, resulting in unsustainable forest management, increased regeneration costs, reduced tree growth rates and productivity, altered forest tree composition, altered composition of understory plant communities, [and] altered composition of animal communities . . . .”128

A large part of what puts the debate in “the great de-bait” is American deer hunters and the general public struggle to decide whether hunting over a baited area is ethical. Is sitting near a pile of food and blasting a deer as it enjoys a strategically placed tasty treat truly ethical? Given the nature of a nation divided, if a poll was taken between three people, no matter whether hunters or non-hunters or a combination of both, asking whether they believed hunting over bait is ethical, it would seem one individual would say “yes,” another would say “no,” and the remaining person would ultimately

124. ALA. DEP’T OF CONSERVATION AND NAT. RESOURCES, supra note 32.
125. Hunting and Trapping in Virginia, supra note 123.
127. See id. In 2005 Tremblay described both the current and future state of ecological impacts of an over-abundance of deer as result of feeding and baiting practices: By foraging selectively, deer affect the growth and survival of many herb, shrub, and tree species, modifying patterns of relative abundance and vegetation dynamics. Cascading effects on other species extend to insects, birds, and other mammals. In forests, sustained overbrowsing reduces plant cover and diversity, alters nutrient and carbon cycling, and redirects succession to shift future overstory composition. Many of these simplified alternative states appear to be stable and difficult to reverse. Id. at 7 (emphasis in original).
128. Id.
have a very tough time deciding and would say “maybe.”129 Within the nation divided, the hunting community also remains divided as shown in a recent poll by Outdoor Life Magazine taken in 2013 in which, sixty percent of voters stated “I hunt over bait, or I would if it was legal in my state” and thirty-nine percent chose “I do not hunt over bait, and I wouldn’t even if it was legal in my state.”130

Similarly, “[a] majority of hunters and nonhunters nationwide oppose hunting over bait because they think it is unfair and violates the principle of ‘fair chase’ hunting.”131 “Fair chase, as defined by the Boone and Crockett Club, is the ethical, sportsmanlike, and lawful pursuit and taking of any free-ranging wild, native North American big game animal in a manner that does not give the hunter an improper advantage over such animals.”132 From this definition, it would appear that baiting is not fair chase hunting because it gives the hunter an “improper” advantage over the white-tailed deer, allowing for greater deer concentrations, predictable behavior patterns, and closer range shots to name a few.133 However, improper in this definition would appear to be an analysis of both subjectivity and objectivity.134 Subjectively, if a hunter does not feel that baiting is improper, in their eyes, baiting is fair chasing hunting.135 In fact, in a 2012 poll, Field and Stream Magazine concluded that forty-eight percent of Americans feel that

130. Id.
133. Id.
134. Id.
135. Id.
hunting over bait is indeed fair chase hunting.\footnote{Dave Hurteau, \textit{Poll: Is Hunting Deer Over Bait Fair Chase?}, \textit{FIELD & STREAM}, http://www.fieldandstream.com/blogs/whitetail-365/2012/02/poll-baiting-deer-fair-chase (last visited Jan. 22, 2015).} One could infer that the results ended up this way as the United States is nearly even in the amount of states which prohibit or permit baiting practices.\footnote{See id.} This definition of fair chase hunting hypothetically allows for a slippery slope effect, as any ingestible item, hunting device, or product could be seen as an improper advantage.\footnote{See \textit{Fair Chase Statement}, supra note 132.} Under an analysis of objectivity, the question must be asked of whether a “reasonable person” in that hunter’s exact same situation would feel fair chase hunting is taking place and the hunter does not have an improper advantage of the animal.\footnote{Id.} Once again, unless the situation involves a radical baiting process, completely different from those used by American deer hunters, at least forty-eight percent of the American deer hunting population would most likely agree that the situation is deemed fair chase hunting.\footnote{Id.}

Although public support of legal hunting has remained near seventy-five percent since 1995, the ethical and biological issues surrounding baiting of deer and fair chase fuels the fires of ever-growing anti-hunting and animal welfare groups.\footnote{Ben Moyer, \textit{Hunting: Number of Hunters is Dropping, but not Public Support for Those who Hunt}, \textit{PITTSBURGH POST-GAZETTE} (June 30, 2007, 11:00 PM), http://www.post-gazette.com/sports/hunting-fishing/2007/06/30/Hunting-Number-of-hunters-is-dropping-but-not-public-support-for-those-who-hunt/stories/200706300154; John Hayes, \textit{National Survey Shows Continued Support for Hunting and Shooting Sports}, \textit{PITTSBURGH POST-GAZETTE} (Dec. 11, 2011, 3:00 PM), http://www.post-gazette.com/sports/hunting-fishing/2011/12/11/National-survey-shows-continued-support-for-hunting-and-shooting-sports/stories/201112110233.} Many non-hunters and anti-hunting groups attempting to persuade the American public in their favor, continue to outcry that “killing deer (or other wildlife) over bait demonstrates that hunting is all about killing and has nothing to do with fair chase, conservation, or wildlife management.”\footnote{A Retrospective on \textit{Hunting Deer Over Bait in South Carolina - Can Baiting Negatively Affect Hunter Success and Deer Harvest Rates?}, supra note 54.} However, a recent telephone survey, covering all fifty states, conducted by the National Shooting Sports Foundation showed these arguments fall short with the majority of Americans.\footnote{Moyer, \textit{supra} note 141; Hayes, \textit{supra} note 141.} When respondents were asked “specifically about hunting as a source of food or as a wildlife management tool, public support soared to more than 80 percent. ‘Support dropped off markedly, however, when . . . asked about hunting for
sport or trophy collection. The researchers hypothesize that public support for hunting for food or wildlife management will continue to rise steadily as “Americans seem to be acquiring a more realistic view of hunting and wildlife management, possibly due to increases in populations of deer . . . in urban areas.” That being said, research ratifies the ideals of many scientists, researchers, and hunters that the tradition of hunting will forever remain an important, if not the most important “tool with respect to deer management.

Ultimately, an outside analysis of the world of hunting and baiting practices leaves the hunter or non-hunter pondering questions such as these: “What difference could bait really make? What is really one more advantage over the deer? How far is too far?” As each day passes and new hunting products are introduced, the pushing of the proverbial “ethical envelope” continues. Anyone watching a hunting program on television or strolling through their local sporting goods store is bombarded with advertisements and promotions from the market’s latest products, which allow the hunter to dominate the deer in almost every aspect. In today’s ever-growing and evolving world of hunting technologies such as infrared rifle scopes, drones, scent eliminating clothing, and temperature controlled huts to withstand the elements Mother Nature pumps out, the deer do not stand a chance. It is arguable that the only defenses the deer have left are their natural instincts and poor aim by a hunter who has a marksmanship record like me. In sum, the decision as to what is or is not ethical lies within the eyes of the hunter viewing the animal through his scope, as he and he alone decides whether to pull the trigger. We as society viewing the situation as a whole can ask ourselves what really is one more advantage? What does a concentrated pile of corn really matter in the grand scheme of today’s advantages over the American whitetail?

Baiting was a necessity in the tactics of the early American hunter, where killing was essential to sustaining the hunter’s life and livelihood. In the mind of the early American provider, baiting would have been a no brainer, less work to achieve the ultimate purpose of survival. Today, in very rare circumstances and minute circles are humans hunting to sustain

144. Moyer, supra note 141.
145. Id.
146. A Retrospective on Hunting Deer Over Bait in South Carolina - Can Baiting Negatively Affect Hunter Success and Deer Harvest Rates?, supra note 54.
148. See id.
149. See id.
150. See id.
151. See id.
life; hunting is now sport and meat on the dinner table is the cherry on top of the cake filled with fond family memories and experiencing God’s creation first hand. It does not appear that “the great de-bait” will cease anytime soon. The decision on whether or not to bait is rooted deep in ethics, scientific research, and familial and geographic traditions. It is very odd that baiting deer in America is a highly punishable offense in one geographic location, and is a highly praised and even expected practice in another geographic location. As both hunting technologies and baiting practices evolve, so will the controversies and backlashes against it. With research hinting at baiting leading to explosive population growth, changing behavioral patterns, greater likelihood of disease transmission, and increased state fiscal responsibilities, it would appear that the best solution for each state would be to remove baiting from the grab bag of tactics of the American hunter and to search for greater alternatives.

V. BAITING PROHIBITED STATES AND THEIR TAKE ON THE “GREAT DE-BAIT”: IS THIS THE MORE APPROPRIATE STANDARD?

Although baiting may be prohibited in whole or in part in a certain state, the state most likely does not leave the hunter hanging without the ability to have an advantage over the deer on his property like his baiting brethren.152 States like Illinois and Minnestoa who prohibit the practice of baiting deer allow the hunter to hunt over “food plots” and hunt deer over ground that has feed on it as a result of regular agricultural planting and harvesting activities.153 A “food plot” as defined by the United States Department of Agriculture is “an annual or perennial planting of grain, cover crops, grass, forbs, legumes, or a mixture thereof, to provide food for a variety of wildlife on rural land.”154 Simply put, a food plot is a crop a hunter uses to attract, feed, and hold deer on his or her property, be it a naturally or non-naturally occurring crop.155 Good examples of a food plot crop used by hunters would be corn, beans, radishes, turnips, rapeseed, and alfalfa.156 Through the use of a food plot, a hunter can attempt to grow bigger, and most likely healthier deer and provide the nourishment deer need and crave

153. Id.
155. See id.
156. Id.
in certain time periods of the year. That being said, the hunter can use that crop to attract the animal to a general location on his or her farm, which sounds very similar to that of one who uses a bait pile to lure in animals.

Similar language by a state where baiting is prohibited would be that of Minnesota where “[a]gricultural crops from normal or accepted farming, forest management, wildlife food plantings, orchard management, or other similar land management activities” are excluded from its definition of bait and baiting. The Minnesota Department of Natural Resources (MDNR) states these exclusions do not apply to “agricultural crops that have been reintroduced and concentrated where a person is hunting.” Therefore, if a “person has an abundance of an agricultural crop and intends to use it as ‘green manure’ or fertilizer” they “may reintroduce the agricultural crop to the field by spreading it out over a previously planted field.” However, “[i]f the landowner piles or concentrates the agricultural crop where they hunt deer, it would be considered bait.” That being said, the MNDR has wised up to hunter misconduct and is aware that some hunters try to circumvent the system and “just so happen” to have grain concentrated in areas greater than others.

A good example of a state statute specifically prohibiting baiting but allowing for food plotting and hunting in areas as a result of normal agricultural processes is Illinois Administrative Code 635.40. The Code states “[i]t shall be illegal to make available food, salt, mineral blocks or other products for ingestion by wild deer or other wildlife in areas where wild deer are present.” However, exempted from this section of the Code are “standing crops planted and left standing as food plots for wildlife[] [and] grain or other feed scattered or distributed solely as a result of normal agricultural, gardening, or soil stabilization practices.” As a result, the hunter cannot concentrate piles of feed on his farm like his baiting brethren to attract the deer, but he can plant the same crop that the baiter would use in his bait pile to attract the deer.

Another interesting point about this Code is that the Illinois Legislature removed “pure water” from its definition of “bait.” This allows hunters to create artificial watering holes and allows the hunter to place his

157. See id.
158. See id.
159. 2014 Hunting and Trapping Regulations Handbook, supra note 152.
160. See id.
161. Id.
162. Id. at 73.
163. See id.
165. Id.
166. Id.
or her stand near said artificial watering hole, as long as the water is pure and free of supplementation or alteration by the hunter.¹⁶⁸ It is not too far of a stretch to liken this scenario to that of a bait pile placed by a hunter or to call it “baiting,” as here the hunter is using one of life’s essential elements to his advantage to draw deer to another pinpoint location on his farm.¹⁶⁹

From an aerial view the question becomes, whether there is really any difference between placing a bait pile and food plotting or hunting over areas where food has been dispersed as result of regular agricultural practices? Does it seem logical that because the item ingested is grown on the land as opposed to being placed by the hunter that it should be legal to hunt over it? Or because the grain is scattered over a large area as a result of harvesting as opposed to being concentrated in piles it should be legal rather than illegal? The answer may not make sense in the mind of a competent human being, but beneath the surface, a logical answer most likely lies within the topics previously discussed of biological, economic, ethical, and societal concerns of each state and its citizens.¹⁷⁰

As to biological concerns, research suggests that food plotting and scattering of feed due to normal agricultural processes does not concentrate deer to the extent that baiting does, thus reducing deer to deer contact and the likelihood of further spreading biologically and fiscally devastating diseases such as CWD and TB noted above.¹⁷¹ Since food plots are much larger than baited areas, there is “much less concern about disease transmission because deer are not forced to repeatedly feed, urinate, and defecate at the exact same spot as they do with a bait ‘pile.’”¹⁷²

Because food plotting allows for food to be spread over a larger geographical area and is only available for a more limited time, as opposed to bait piles that are continuously replaced, issues such as over-browsing, habitat destruction, and adverse affects on non-target species are less likely to occur.¹⁷³

Food plotting could also help to eliminate some issues within the hunting community. The gripe is that baiting privatizes deer herds and makes hunting no longer about the sport or making fond memories, but rather makes hunting about who is the master-baiter.¹⁷⁴ Baiting leaves many hunters feeling they must bait in order to compete with surrounding landowners

¹⁶⁸. See id.
¹⁶⁹. Id.
¹⁷⁰. See supra pages 17-24.
¹⁷¹. See Warnke & Jacques, supra note 103.
¹⁷³. Id.
¹⁷⁴. See Warnke & Jacques, supra note 103, at 7.
just to see a deer. In a survey in Wisconsin, where baiting is legal in some parts, many hunters told researchers that they would prefer not to bait, but if they did not, they would not be able to harvest a deer. It does not take a rocket scientist to figure out that the better the quality of bait, or the greater the quantity, the more likely one is to see or hold deer on their hunting property. Many think food plotting creates similar issues and causes issues in the hunting community just like that of baiting. Like baiting, a variety of plots and a greater number of plots could lead to an increase of deer on the property, maybe even rising to the level of privatization. If an adjoining landowner does not have the same quantity or quality of food throughout the year, it is likely the deer will remain on the property more suited to the deer’s appetite. However, because the food plot is there twenty-four-seven or until it is completely consumed, and not continuously replaced, the deer will come and go as they please and feed on it just as they would with any other normally planted natural food source. This allows for less negative impact on deer behavior as the animals feed at will, rather than when the dinner bell goes off or when the bait pile is replaced. That being said, it appears the master plotter is similar to the master baiter, but food plots seem to be more “fair” to the hunters “competing” over the deer herds.

Food plotting may be more accepted by American society and may eliminate many of the ethical and fair chase concerns of those attributed to baiting. As noted previously, in a Field and Stream Magazine survey, forty-eight percent of voters felt that baiting deer was fair chase hunting. In a follow-up survey, seventy-one percent of participants voted that hunting over even a small food plot, also known as a “hunting plot” or “kill plot,” was indeed fair chase hunting. That being said, it would appear that food plotting is more generally accepted than hunting over a bait pile. But once again, do results from a survey such as this one make sense logically? It is hard to fathom that there is an ethical difference between a concentrated pile of corn and a micro food plot consisting of standing corn, as the goal of each is to draw in the deer to a specific location in order to produce a lethal

\[\text{\textsuperscript{175}}\text{Id.}\]
\[\text{\textsuperscript{176}}\text{Id.}\]
\[\text{\textsuperscript{177}}\text{See id. at 4.}\]
\[\text{\textsuperscript{179}}\text{Id.}\]
\[\text{\textsuperscript{180}}\text{Id.}\]
\[\text{\textsuperscript{181}}\text{Id.}\]
\[\text{\textsuperscript{182}}\text{See id.}\]
\[\text{\textsuperscript{183}}\text{Hurteau, supra note 136.}\]
\[\text{\textsuperscript{184}}\text{Id.}\]
outcome. It is safe to assume the American public may think a planted food source is less unfair than an automated feeder, or a concentrated pile of food continuously replaced by a hunter. That being said, food plotting, as opposed to baiting, could continue to affirm American support for the sport of hunting, ensuring its existence for coming generations.

VI. CONSIDERATIONS WHEN REMOVING OR AMENDING BAITING LAWS: THE EFFECT ON THE HUNTING INDUSTRY, THE AMERICAN ECONOMY AS A WHOLE, AND INDIVIDUAL STATE ECONOMIES

Today, in the ever-growing, multi-billion dollar hunting industry, it is safe to assume that if a state’s baiting or food plotting laws were changed, radical economic shifts would likely occur. The vitality of the American hunter cannot be matched as it is estimated that hunting supports more than six hundred and eighty thousand jobs annually in the United States, and in 2011 “[h]unters spent a total of $38.3 billion . . . that had a total economic multiplier effect of $86.9 billion across the U.S. economy.” As deer hunters comprise nearly half of the American hunting population, the economic impact resulting from a ban on baiting could be catastrophic, not only to an individual state but also to the American economy as a whole.

It is safe to assume that a drop in license sales, land sales and leases, and public outcry would ensue in states like Texas, where hunting is not only highly practiced, but “expected.” Because each individual hunter nationwide spends nearly two thousand dollars a year in hunting expenses, imagine the wave of economic change if millions of deer hunters chose to stop hunting due to an outright ban on their ability to bait deer. In states like Michigan, it is estimated that deer season draws nearly three quarters of a million hunters statewide, nationally, and internationally, who contribute an estimated $2.3 billion dollars to the state economy. Further, in Michigan,

185. See id.
186. See id.
187. See id.
188. See Hunting in America: An Economic Force for Conservation, supra note 26, at 6.
189. Id.
190. Id.
193. See id.; Hunting in America: An Economic Force for Conservation, supra note 26, at 3.
where an outright ban on baiting is sought due to the outbreak of CWD and TB, economists estimate deer bait sales bring in nearly fifty million dollars in revenue annually within the state.\footnote{Stacey Henson, Farmers, Hunters Protest Deer-Baiting Ban, \textit{The Saginaw News} (Oct. 28, 2008, 9:12 AM), http://www.mlive.com/news/saginaw/index.ssf/2008/10/farmers_hunters_protest_deerba.html.} Because baits used are normally agricultural products, an outright ban jeopardizes the livelihood not only of the hunter seeking meat for his table, but also of the American producer.\footnote{Id.} Using Michigan as an example once again, the deer bait market may seem more attractive to the local farmer, as it allows for a greater dollar amount per bushel of corn than in the traditional market. Currently, corn is “selling at $5-$8 per 50-pound bag. This translates into $6-$9.60 per bushel, a range significantly exceeding the current market price.”\footnote{DeDecker, supra note 69.} There is a strong argument here that baiting jeopardizes a farmer’s livelihood, however all is lost, as farmers could go back to selling corn to traditional markets like he or she would have done before the baiting craze took place.\footnote{See id.} That being said, the removal of the ability to bait has potentially catastrophic results to the hunting industry as well the American economy.\footnote{See id.} The question becomes whether or not maintaining the status quo is worth the price of greater biological concerns, increased hunter disputes, lowered public opinion of hunting, and larger fiscal challenges.\footnote{See id.}

\section{VII. Conclusions and the Future of “The Great De-Bait”}

In summation, as a wise individual once said, “Opinions are like assholes, everybody’s got one and everyone thinks everyone else’s stinks.” Whether one describes hunting and its related activities as a “sacred ritual and one of the greatest goods known to modern man” or “a cruel blood sport,” the fact of the matter is that hunting is alive and well in modern day society.\footnote{Bradford J. Roegge, \textit{Survival of the Fittest: Hunters or Activists? First Amendment Challenges to Hunter Harassment Laws}, 72 U. DET. MERCY L. REV. 437, 445 (1995).} Although today’s hunting practices of baiting, food plotting, or hunting near areas where feed has been scattered due to normal agricultural processes may not be those of which our forefathers intended, it is important the tradition of deer hunting be passed on to further generations. Each new generation will decide what hunting practices will be permitted, based on longstanding state and familial traditions, scientific research, societal and economic impacts, and ethical concerns. As each hunting season
passes, and “the great de-bait” evolves, the issues, questions, comments, and concerns surrounding it will continue to be food for thought, both literally and figuratively.
Muddy Waters: Why Polluted Groundwater Infiltrating Navigable Waters Should Not Be Excluded From National Pollutant Discharge Elimination System Permitting

TAD JUILFS*

The debate over whether the Clean Water Act has jurisdiction over migratory groundwater in the same way that it does over navigable waters of the United States (regarding effluent standards) has left a wide split among courts attempting to interpret and apply the policy, goals, and language of the law. The problem lies in the difference between applying the law given its objectives and goals, or in a strict fashion using simply the language in the text of the Clean Water Act, while supplementing support from legislative and case law history. First in this Note, background information is provided regarding the history of the Clean Water Act, National Pollutant Discharge Elimination System (NPDES) permits and the U.S. Environmental Protection Agency regulation, navigable waters of the United States, and the relation of migratory groundwater to this process. What follows is a discussion of methods, rules, and rationales courts and legal authorities have used and provided when holding and not holding that pollutants to migratory groundwater which reach navigable waters of the United States should be regulated through NPDES permitting. Finally, there is a review as to the reason why the Clean Water Act does have jurisdiction over pollutants to migratory groundwater which reach navigable waters and a recommendation that such regulation should occur via NPDES permits.

I. INTRODUCTION……………………………………………….31
II. A REVIEW OF THE CLEAN WATER ACT…………………….32
   A. NAVIGABLE WATERS OF THE UNITED STATES………33
   B. WETLANDS JURISDICTION: THE PRECURSOR TO MIGRATORY GROUNDWATER……………….38
   C. CATEGORIES OF GROUNDWATER……………….48

* The author would like to thank Mark Alan Juilfs, Rebecca Jean Weldon Juilfs, and Danielle Kathleen Juilfs for their unending support and love. A special thank is due to Joanne Olson, the Illinois Governor’s Environmental Corps, and the law review members of Northern Illinois University College of Law for the development and review of this Note.
I. INTRODUCTION

Just off of Maui’s west shore lies Kahekili Beach, a favorite vacation destination of families and snorkeling enthusiasts alike. The ocean waters off this coast are pristine and well-known for the beautiful reef and colorful fish; so much so that it has been listed as one of the “best beaches for casual swimming & snorkeling in Maui.” In 2007, it was confirmed through a tracer dye study “conducted jointly by the [United States] EPA, the Hawaii Department of Health (DOH), the U.S. Army Engineer Research and Development Center, and researchers at the University of Hawaii” that there was a wastewater presence being detected as a result of groundwater seeping through submarine springs off the coast of Kahekili Beach. The water seeping into the ocean was confirmed to contain treated effluent particularly high in nitrogen, which was coming from a nearby wastewater reclamation facility whose treated effluent admittedly contained “suspended solids, dissolved oxygen, nitrogen, and phosphorous.” Although this wastewater has been treated for harmful pollutants, when it is discharged into other bodies of water containing living organisms it can severely damage an ecosystem if the effluent is not treated in a manner consistent with environmental conditions which life in the area can withstand. Furthermore, these discharged pollutants can make waters quite unsafe for humans “drinking, fishing, swimming, and [doing] other activities.” Pollutants which are directly placed into navigable waters of the United States, such as the ocean waters at Kahekili Beach, are regulated per the Clean Water Act’s National Pollutant Discharge Elimination System (CWA and NPDES, respectively),

---
3. Id.
which sets limits on the amount, type, and frequency of pollutants that can be placed into the waters necessary for human, animal, and plant life.\(^6\) However, there is a split in legal authority as to whether the Clean Water Act—as it is written—by means of its NPDES permitting, has jurisdiction over those pollutants which reach navigable waters of the United States by means of “migratory” groundwater.\(^7\)

The debate over whether the CWA has jurisdiction over migratory groundwater in the same way that it does over navigable waters of the United States (regarding effluent standards) has left a wide split among courts attempting to interpret and apply the policy, goals, and language of the law.\(^8\) The problem lies in the difference between applying the law given its objectives and goals, or in a strict fashion using simply the language in the text of the CWA, while supplementing support from legislative and case law history.\(^9\) First in this Note, background information will be provided regarding the history of the CWA, NPDES permits and EPA regulation, navigable waters of the United States, and the relation of migratory groundwater to this process. Next, there will be a discussion of methods, rules, and rationales courts and legal authorities have used and provided when holding and not holding that pollutants to migratory groundwater which reach navigable waters of the United States should be regulated through NPDES permitting. Finally, there will be a review as to the reason why the CWA has jurisdiction over pollutants to migratory groundwater which reach navigable waters and a recommendation that such regulation should occur via NPDES permits.

II. A REVIEW OF THE CLEAN WATER ACT

In 1972, Congress passed the Clean Water Act with a mission to “restore and maintain the chemical, physical, and biological integrity of the

---

7. Vill. of Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962, 965 (7th Cir. 1994).
8. Id. The split in jurisdictions has come as a result of statutory interpretations which extrapolate Supreme Court rulings regarding CWA language. However, such Supreme Court rulings have yet to give clear guidance or ruling on the definition of “navigable waters” as it pertains to NPDES permitting of migratory groundwater.
9. See Wash. Wilderness Coal. v. Hecla Min. Co., 870 F. Supp. 983, 990 (E.D. Wash. 1994) (“Since the goal of the CWA is to protect the quality of surface waters, any pollutant which enters such waters, whether directly or through groundwater, is subject to regulation by NPDES permit.”). But cf. Vill. of Oconomowoc Lake, 24 F.3d at 965 (“The omission of ground waters from the regulations is not an oversight. Members of Congress have proposed adding ground waters to the scope of the Clean Water Act, but these proposals have been defeated . . . .”).
Nation’s waters.”\textsuperscript{10} The legislation originally came as an amendment to the 1948 Federal Water Pollution Control Act,\textsuperscript{11} so as to “develop comprehensive programs for preventing, reducing, or eliminating the pollution of the navigable waters and ground waters and improving the sanitary condition of surface and underground waters.”\textsuperscript{12} At the time of the CWA enactment, there was “[g]rowing public awareness and concern for controlling water pollution”\textsuperscript{13} and the somewhat recent creation of the EPA provided a dominant agency to effectuate the water pollution regulations in a way that had not been done before.\textsuperscript{14}

A. NAVIGABLE WATERS OF THE UNITED STATES

The source of Congressional power is rooted in the Constitution’s Commerce Clause from which “[t]he Congress shall have the [p]ower . . . [t]o regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes.”\textsuperscript{15} Beginning with the precedent set by the United States Supreme Court in \textit{Gibbons v. Ogden}, the Commerce Clause has been read to extend Congressional power to regulate interstate water navigation.\textsuperscript{16} The Court would come to determine that navigation is not the only topic of regulation as it pertains to interstate water, but rather Congressional power has been upheld to extend to the activities on or within the navigable waters of the United States.\textsuperscript{17} Therefore, the key language that has been the subject of much debate is “navigable waters,” and how it should be defined

\textsuperscript{10} 33 U.S.C. § 1251(a) (2012).
\textsuperscript{12} 33 U.S.C. § 1252(a) (2012).
\textsuperscript{13} See supra note 11.
\textsuperscript{14} See Kenneth M. Murchison, Learning From More Than Five-And-A-Half Decades of Federal Water Pollution Control Legislation: Twenty Lessons For The Future, 32 B.C. ENVTL. AFF. L. REV. 527, 530-32 (2005). Prior to the creation of the EPA in 1970 and subsequent Congressional enactment of the CWA, a variety of federal legislation was passed to curb water pollution. However, most of this legislation did not have much teeth and expansions of the 1948 Federal Water Pollution Control Act mostly “encouraged states to enact uniform laws and interstate compacts . . .” as “water pollution control was primarily the responsibility of state and local governments.” Id. at 531. Furthermore, the federal government could proceed with nuisance actions when interstate pollution endangered people, but not without serious delays in procedure in many cases. Id. at 532. The Water Quality Act of 1965 “directed states to establish water quality standards for interstate waters” and “submit their standards to the newly created Federal Water Pollution Control Administration for approval,” but this Act did not allow an administrator to “impose and enforce a federal implementation plan.” Id.
\textsuperscript{15} U.S. CONST. art. 1, § 8, cl. 3.
\textsuperscript{16} Gibbons v. Ogden, 22 U.S. 1, 2 (1824) (“The power of regulating commerce extends to the regulation of navigation.”).
\textsuperscript{17} United States v. Appalachian Elec. Power Co., 311 U.S. 377, 426 (1940).
has become a struggle between regulatory entities and courts. The importance of this definition plays out when interpreting the CWA, which uses the term to extend limited authority to the administrator of a permit-granting entity, one which sets requirements for permitted discharges to the navigable waters.\(^{18}\)

The definition of navigable waters must be looked at in two parts: the statutory language provided by the CWA and the courts’ interpretations of what this definition entails. The interpretations by courts other than the Supreme Court will be discussed more thoroughly in Parts III, IV, and V. The interpretation of the CWA language by the Supreme Court in other realms not involving migratory groundwater have played into lower courts’ decisions and interpretations; thus, it must be discussed to supply a proper understanding of the lower courts’ rationales of whether to include or not to include migratory groundwater in NPDES permit jurisdiction per the CWA.

As could be expected from such a divisive piece of legislation, the CWA defines “navigable waters” as “waters of the United States, including the territorial seas.”\(^{19}\) As has been the case since *Gibbons*, wholly intrastate navigable waters which do not avail themselves to interstate commerce are not subject to federal control.\(^{20}\) Despite ruling out one type of navigable water located in the United States, this ambiguous definition still leaves open to interpretation what constitutes “navigable” and what is a “water of the United States.” Until litigation can provide some authority, uncertainty leaves regulatory agencies, watch-dog groups, and discharging industries with little guidance.

The CWA has provided two relevant sections that are controlled by the “navigable waters” definition—sections 402 and 404.\(^{21}\) Section 402, which will be the primary focus of later discussion, provides for the regulation of pollutant or “effluent” discharges by requiring a permit when these discharges are submitted to navigable waters via point-sources.\(^{22}\) The permit that regulates these effluent discharges is the National Pollutant Discharge

---

20. *See generally* *Gibbons*, 22 U.S. at 2 (when talking about the extent of the commerce clause, “[b]ut it does not extend to a commerce which is completely internal.”).
Elimination System ("NPDES") permit.\textsuperscript{23} A variety of pollutants which have been shown to have a harmful effect on humans, animals, or plants are regulated by the EPA through NPDES permitting, such as toluene, polychlorinated biphenyls (PCBs), and heavy metals like arsenic and lead.\textsuperscript{24} A point-source is identified by the CWA as "discrete conveyances such as pipes or man-made ditches."\textsuperscript{25} While individual homes typically are not required to obtain an NPDES permit, other facilities such as industrial, municipal, and animal feed operations in some instances are required to obtain NPDES permits if their effluent discharges directly enter surface waters.\textsuperscript{26} The effect of requiring NPDES permits for these facilities is that they are held accountable for the types and amount of pollutants which they may or may not be allowed to introduce to protected waters. The permit requirements are set to be in agreement with the purposes of the CWA.\textsuperscript{27}

Section 404 covers dredged or fill material which is discharged into navigable waters, including wetlands in some instances.\textsuperscript{28} The section 404 NPDES permits are required so as to protect navigable waters when there are development projects which have discharges that could be particularly damaging to the waters of the United States, such as dam construction, highway construction, or mining projects.\textsuperscript{29} The U.S. Army Corps of Engineers administers section 404 permitting while the Corps and EPA enforce the section 404 permits.\textsuperscript{30} Some activities that typically involve dredged or fill material may be exempted from section 404 regulation, such as farming or silvicultural activities.\textsuperscript{31}

Two important government entities are traditionally tasked with providing NPDES permits to those facilities that are required to hold


\textsuperscript{24} 40 C.F.R. § 401.15 (2014). Title 40 of the Code of Federal Regulations governs the regulatory interpretations, processes, and effectuations which are carried out in protection of the environment. EPA regulations for NPDES permitting can be located here and NPDES specific regulations can be found starting at 40 C.F.R. § 122.1 (2014).

\textsuperscript{25} See supra note 23.

\textsuperscript{26} Id.

\textsuperscript{27} See 33 U.S.C. § 1251(a) (2012).


\textsuperscript{29} Section 404 Permit Program, EPA, http://water.epa.gov/lawsregs/guidance/cwa/dredgdis/ (last updated Jan. 20, 2016).

\textsuperscript{30} Id.

\textsuperscript{31} Id.
them—the EPA and the U.S. Army Corps of Engineers.\textsuperscript{32} Generally, states administer the section 402 NPDES permit program with the authorization of the EPA.\textsuperscript{33} The state programs can have more rigorous requirements for approval, such as more disqualified pollutants than are provided by the EPA, but state requirements and procedures cannot extend CWA federal jurisdiction of navigable waters.\textsuperscript{34} State waters not included through Commerce Clause federal jurisdiction would require separate regulation through state law.\textsuperscript{35} The entity authorized to grant permits will use different methods regarding procedure to determine the requirements of the permit. Application requirements are developed by the authorized entity and an administrator for CWA compliance establishes conditions for the permits on a case-by-case basis.\textsuperscript{36} Along with determining the conditions of a permit, the administrator must determine whether the body of water which the effluent is entering is actually under CWA jurisdiction.\textsuperscript{37} This step in the process has become the subject of much legislation in the hopes of determining a clearer definition of which recipient waters are under the jurisdiction of the CWA.

When determining the scope of jurisdiction for the CWA, authorities such as courts, EPA, and Army Corps of Engineers have looked to the language of the CWA for guidance with little help. As mentioned above, the term “navigable waters” is defined as “waters of the United States, including the territorial seas.”\textsuperscript{38} Congress provided along with the definition of

\begin{itemize}
\item \textsuperscript{34} 40 C.F.R. § 123.1(i)(1) (2014).
\item \textsuperscript{35} 40 C.F.R. § 123.1(i)(2) (2014).
\item \textsuperscript{36} See 40 C.F.R. § 122.21 (2014) (application requirements); 40 C.F.R. § 122.41 (2014) (conditions applicable to all permits); 40 C.F.R. § 122.43 (2014) (establishing permit conditions); 40 C.F.R. § 123.25 (2014) (state program requirements for EPA approval).
\item \textsuperscript{37} 40 C.F.R. § 122.21(f)(1) (2014) (application for new permits); 40 C.F.R. § 122.21(g)(1) (2014) (application for existing permits). Separate determinations of NPDES jurisdiction and conditions are made by the U.S. Army Corps of Engineers. 33 C.F.R. § 328.3 (2014). However, some jurisdictions have struck down parts of 33 C.F.R. § 328.3 as they can be too inclusive of isolated waters not subject to NPDES permitting per the decision in \textit{Rapanos}. See N. Cal. River Watch v. City of Healdsburg, 496 F.3d 993, 998 (9th Cir. 2007).
\item \textsuperscript{38} 33 U.S.C. § 1362(7) (2014).
\end{itemize}
navigable waters some definitions of aqueous environments which have not been the subject of great legislation in regards to CWA jurisdiction.  

Given their inclusion into the CWA with definitions and common understanding that these interstate waters fall within the purview of Congressional power, it is no surprise that not much jurisdictional debate has arisen. “Territorial seas” are defined to include sea waters at the ordinary low water line and extending into the sea for three miles.  

“Contiguous zone” is defined as “the entire zone established or to be established by the United States under [A]rticle 24 of the Convention of the Territorial Sea and the Contiguous Zone.” The term “ocean” is defined as “any portion of the high seas beyond the contiguous zone.” These definitions are included generally as part of the CWA, but are not the only contexts in which they all interact.  

For instance, when touching on “comprehensive programs for water pollution control,” Congress provided that “[t]he Administrator shall . . . prepare or develop comprehensive programs for preventing, reducing, or eliminating the pollution of the navigable waters and ground waters and improving the sanitary condition of surface and underground waters.”  

When touching on national programs and water quality surveillance, Congress provided that “[t]he Administrator shall establish national programs for the prevention, reduction, and elimination of pollution and as part of such programs shall . . . establish, equip, and maintain a water quality surveillance system for the purpose of monitoring the quality of the navigable waters and ground waters and the contiguous zone and the oceans . . . .”  

33 U.S.C. § 1342 provides jurisdiction for NPDES permits through 33
U.S.C. § 407 by only explicitly stipulating that the waters subject to the permit are “navigable waters.” The jurisdiction or authorization of NPDES permits under 33 U.S.C. § 1342 is supplemented by language from 33 U.S.C. § 1343 which limits effluent discharge to territorial seas, waters of the contiguous zone, or oceans as subject to the requirements of 33 U.S.C. § 1342. Therefore, groundwater, migratory or otherwise, is not explicitly mentioned in relation to the terms navigable waters, territorial sea, the waters of the contiguous zone, or oceans for 33 U.S.C. § 1342 purposes.

The limited terms provided by the CWA have not prevented the Supreme Court from adjudicating on the jurisdiction of the CWA as it relates to other possible non-explicit “waters of the United States,” namely wetlands. A string of Supreme Court precedent regarding wetlands has extended or refused to extend CWA jurisdiction depending on the connection or relation the wetland has with navigable-in-fact waters which are under the jurisdiction of the CWA. These cases provide some insight as to how the Supreme Court views polluted bodies of water which enter navigable waters albeit with ambiguous language. This language, along with the decades old language of the CWA, provides the back drop for EPA and Army Corps of Engineers’ policy for determining which waters can or will be regulated per the CWA NPDES permit program. Although wetlands will not be the main discussion here, some background regarding the current status of the law as wetlands relate to NPDES permitting is necessary and helpful in explaining the rationales lower courts have given to uphold or strike CWA jurisdiction over migrating groundwater.

B. Wetlands Jurisdiction: The Precursor to Migratory Groundwater

Since 1985, the Supreme Court of the United States has been attempting to clarify the jurisdictional scope of the CWA as it pertains to what are “navigable waters” and “waters of the United States.” For the purposes of migratory groundwater being under the jurisdiction of the CWA and section 402 permits, a very relevant and related battle over wetlands for CWA jurisdiction, particularly for section 404 permits, has already been adjudicated

50. Id.
51. Id. at 428.
by the Supreme Court. The wetlands cases established precedent for how the Supreme Court would review and adjudicate on regulatory definitions and policies regarding waters which are not explicitly mentioned as “navigable waters” or “waters of the United States.” Given that migratory groundwater is not mentioned in the relevant parts of the CWA, any direction from prior Supreme Court decisions would be tantamount in predicting how the Court would rule on the topic of migratory groundwater should a case make it before the Court.

A seminal case for wetland jurisdiction under the CWA comes from *U.S. v. Riverside Bayview Homes, Inc.*, where the Supreme Court initially framed some of the scope of what it means to be a “navigable water” or “water of the United States.” In *Riverside Bayview Homes*, a Michigan land developer began construction on its 80-acre property by placing fill materials on the marshy lands. The Army Corps of Engineers had determined per regulations in 33 C.F.R. § 323.2(c) (1978) that the property in question fell under the definition of a wetland and fill operations required a permit per section 404 of the CWA. The Court was called upon to determine the Corps’s definition of wetlands as “waters of the United States” was within the scope of authority under the CWA, but only those wetlands which are “adjacent to but not regularly flooded by rivers, streams, and other hydrographic features more conventionally identifiable as ‘waters.’” The Court ruled in favor of the Corps and deferred to the Corps’s judgment in determining that wetlands serve a purpose to the goals of the CWA, and

---

56. *Id.* at 124.
57. 33 C.F.R. 323.2(c) (1978) has since been replace by 33 C.F.R. 328.3(b) (2014). However, regulatory definitions of wetlands by the Army Corps of Engineers have come under judicial scrutiny and held invalid because they are not narrowly tailored enough to only cover wetlands which have significant nexus between the wetlands and navigable waters, as the definition could be read to include those wetlands which are isolated or in other words do not satisfy the significant nexus test. See N. Cal. River Watch v. City of Healdsburg, 496 F.3d 993, 998 (9th Cir. 2007). Other courts have upheld 33 C.F.R. 328.3(b) because they determined that the Army Corps of Engineers could determine whether or not the area is a wetland with the definition at hand through “wetland delineations” which would determine a significant nexus; thus, not requiring any mention of a significant nexus in the regulation. See United States v. Bailey, 571 F.3d 791, 800 (8th Cir. 2009).
58. Riverside Bayview Homes, Inc., 474 U.S. at 124.
59. *Id.* at 126.
60. *Id.* at 131.
61. *Id.* at 134.
that “all wetlands adjacent to other bodies of water over which the Corps has jurisdiction is a permissible interpretation of the Act.”

Particular language that the Corps provided in its regulations was that “[w]etlands, in turn, are defined as lands that are ‘inundated or saturated by surface or ground water . . . .’” Although the language of this regulation has since changed, it still stands to say that the Supreme Court upheld the language and the holding in *Riverside Bayview Homes* is still precedential law. This is important because it shows that the Supreme Court has recognized that groundwater, as well as surface water, is pertinent to the discussion of CWA jurisdiction, and that polluted surface water or groundwater, even through wetlands, could be contrary to the goals of the CWA.

The Supreme Court would decline to extend jurisdiction of the CWA as it pertained to section 404 permits and wholly intrastate waters. In *SWANCC*, the U.S. Army Corps of Engineers had determined that a section 404 permit would need to be obtained before the Solid Waste Agency could discharge dredge or fill material in abandoned sand and gravel pits in northern Illinois. The decades since abandonment had seen the sand and gravel pits turn into seasonal ponds which were frequented by migratory birds crossing state lines in migratory patterns. This “Migratory Bird Rule” which the Corps had adopted was not within the power granted by the Clean Water Act because it did not satisfy the *Riverside Bayview Homes* precedent that the waters in question be adjacent to navigable-in-fact waters, as the ponds themselves were wholly intrastate. Furthermore, the Court was not willing to decide the argument that the intrastate activities could be precisely evaluated to show that the activity “‘substantially affect[s]’ interstate commerce” and thus be under the purview of the Commerce Clause.

While the Court determined that wholly intrastate waters which are not in any way connected to navigable waters are not within the jurisdiction of the CWA, the Court had not determined with any more clarity a test for which waters in particular were covered under the CWA as “navigable wa-

---

62. *Id.* at 135.
63. *Riverside Bayview Homes, Inc.*, 474 U.S. at 129.
64. *Id.*
66. *Id.* at 162.
67. *Id.* at 164-65.
68. *Id.* at 172.
69. *Id.* at 174.
70. *See SWANCC*, 531 U.S. at 174.
ters” or “waters of the United States.” Likewise, the Court had hardly determined the required degree of relation which waters adjacent to or connected to navigable-in-fact waters must establish before qualifying for regulation under CWA permit programs beyond reaffirming the Court’s holding in *Riverside Bayview Homes* that “[i]t was the significant nexus between the wetlands and ‘navigable waters’ that informed our reading of the CWA . . . .” The Supreme Court would attempt to address these issues three years after *SWANCC* in *Rapanos*.

The Supreme Court decision in *Rapanos v. United States* set the benchmark test for determining which wetlands fall under regulatory authority per the CWA, and this would become an important reference point for many lower courts attempting to determine which groundwaters qualify as “waters of the United States” for CWA purposes. In *Rapanos*, the Army Corps of Engineers informed Mr. Rapanos that his “sometimes-saturated” soil was considered a wetland per regulatory authority of the CWA, and the previous backfilling and developing of the wetlands required a section 404 permit. The wetlands lay near ditches which “eventually empty into traditional navigable waters,” but it was “not clear whether the connections between these wetlands and the nearby drains and ditches . . . [were] continuous or intermittent, or whether the nearby drains and ditches contain continuous or merely occasional flows of water.”

The Court in *Rapanos* could not agree on a majority opinion and thus emerged two tests that lower courts have referenced for determining what is a water of the United States. Writing for the plurality, Justice Scalia expressed that “the waters of the United States’ includes only those relatively permanent, standing or continuously flowing bodies of water . . . .” The plurality opinion written by Justice Scalia in *Rapanos* provides two very different mindsets of how the Court would possibly approach the question of migratory groundwater regulation. At the beginning of the opinion, Justice Scalia expresses a tone that is seemingly very condescending and skeptical of broad CWA jurisdiction via the definitions of “navigable waters” and “waters of the United States,” particularly for the regulation costs which applicants incur. *Rapanos*, 547 U.S. at 720-22. Justice Scalia noted:

> On this view [Corps jurisdiction scheme], the federally regulated “waters of the United States” include storm drains, roadside ditches, ripples of sand in the desert that may contain water once a year, and lands that are covered by floodwaters once every 100 years. . . . [T]he entire land area of the United States lies in some drainage basin, and an endless network

---


74. *Id.* at 719-21.

75. *Id.* at 729.

76. *Id.*

77. *Id.* at 739. The plurality opinion written by Justice Scalia in *Rapanos* provides two very different mindsets of how the Court would possibly approach the question of migratory groundwater regulation. At the beginning of the opinion, Justice Scalia expresses a tone that is seemingly very condescending and skeptical of broad CWA jurisdiction via the definitions of “navigable waters” and “waters of the United States,” particularly for the regulation costs which applicants incur. *Rapanos*, 547 U.S. at 720-22. Justice Scalia noted:
plurality gave a two-part test to determine whether there was CWA jurisdiction over a wetland when that wetland lacks the “significant nexus” to traditional navigable waters to be considered a “water of the United States” in and of itself per the ruling in Riverside Bayview Homes. For CWA jurisdiction over the wetlands in Rapanos, there must first be an “adjacent channel [which] contains a ‘wate[rf]’ of the United States,” and second, that the wetland has a continuous surface connection with that water, making it difficult to determine where the ‘water’ ends and the ‘wetland’ begins.

Given the plurality test, the case was remanded to determine if the ditches, which had some connection to wetlands, were considered “waters of the United States,” as was the question of whether the wetlands were considered to have a continuous connection to the ditches even if they had been considered “waters of the United States.” In his concurrence, Justice Kennedy called for a different test that would allow wetlands to be covered under CWA jurisdiction so long as they possessed a significant nexus to traditional navigable waters. Without a specified test to apply to CWA jurisdiction, of visible channels furrows the entire surface . . . . Any plot of land containing such a channel may potentially be regulated as a “water of the United States.”

Id. at 722. However, some key discussions give insight that maybe not all future waters in question of CWA jurisdiction will be excluded, as Scalia points out that “[t]he discharge of ‘dredged or fill material’ – which, unlike traditional water pollutants, are solids that do not readily wash downstream – that we consider today,” and “[t]he pollutants normally covered by the permitting requirement of § 1342(a), ‘dredged or fill material,’ which is typically deposited for the sole purpose of staying put, does not normally wash downstream.” Id. at 723, 744. This could mean that a plurality of the Court would lean towards broader CWA jurisdiction for § 1342 purposes than it did for wetlands under § 1344. The other arguments the plurality addressed regarding the water in question being a water of the United States, waters connected to traditionally navigable waters being subject to regulation, and conduits subject to regulation under § 1342 are discussed infra.

78. Rapanos, 547 U.S. at 742. The Court is trying to distinguish those wetlands which are abutting or adjacent to traditional navigable waters as in Riverside Bayview Homes, Inc. and those wetlands which have a limited connection to traditional navigable waters but nonetheless are located near or “adjacent” to the navigable waters. Id. The wetland type pictured in Riverside Bayview Homes, Inc. is the more traditional notion of a wetland where a river blends in or consistently floods a plain, such as the Everglades; whereas, the wetland in Rapanos is a sometimes-saturated land which is separated from a possible water of the United States (ditch waters) by a berm with “occasional overflow to the ditch.” Id. at 730. The wetlands in Rapanos and Riverside Bayview Homes, Inc. really are distinguishable as the Court attempts to draw the land of “where water ends and abutting (“adjacent”) wetlands begin . . . .” Id. at 742 (clarifying Riverside Bayview Homes, Inc., 531 U.S. at 132).

79. Rapanos, 547 U.S. at 742.
80. Id. at 757.
81. Id. at 780 (Kennedy, J., concurring) (“[W]etlands possess the requisite nexus, and thus come within the statutory phrase ‘navigable waters,’ if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical,
jurisdictional debate cases, lower courts are divided regarding which test to apply in wetlands cases\(^ {82}\) as well as in migratory groundwater cases.

The importance of *Rapanos* for courts trying to determine the test to use for CWA migratory groundwater cases cannot be overstated. This particular case discusses five different ways in which courts could find that migratory groundwater is covered under the authority of the CWA, with only one plausible rebuttal that migratory groundwater is not covered.\(^ {83}\) The first situation involves migratory groundwater being considered a water of the United States in and of itself, as is the case for traditionally navigable waters.\(^ {84}\) Under this approach, the Court really only wants to extend CWA jurisdiction to “include only relatively permanent, standing or flowing bodies of water,”\(^ {85}\) with the caveat that the Court noted “we repeatedly described the ‘navigable waters’ covered by the Act as ‘open water’ and ‘open waters.’”\(^ {86}\) The second and third situations involve the type of waters which were the subject of *Riverside Bayview Homes* and the test which was clarified in the *Rapanos* plurality opinion.\(^ {87}\) The plurality test requires “that the adjacent channel contains a ‘water of the United States’” through its connection with a traditional navigable water and that the water in question has physical, and biological integrity of other covered waters more readily understood as ‘navigable.’”).

Justice Kennedy’s concurrence seems to take a more policy driven approach to the goals of the CWA when applying a rule to identify “waters of the United States”, particularly when clearly stating “[t]he required nexus must be assessed in terms of the statute’s goals and purposes.” *Id.* at 779.

\(^{82}\) Anna Makowski, Comment, *Beneath the Surface of the Clean Water Act: Exploring the Depth of the Act’s Jurisdictional Scope of Groundwater Pollution*, 91 Ore. L. Rev. 495, 503 (2012) (noting which courts have used one test or both).

\(^{83}\) See generally *Rapanos*, 547 U.S. 715 (2006). For other examples of ways which groundwater could be regulated at the federal, state, and private level – in addition to the examples given here of groundwater as a navigable water in-and-of-itself, the *Riverside Bayview Homes* connection, the *Rapanos* plurality connection, the significant nexus relationship, groundwater as a point source, and the conduit theory – please visit the Comment by Allison Kvien. Allison L. Kvien, Comment, *Is Groundwater That Is Hydrologically Connected To Navigable Waters Covered Under the CWA?: Three Theories of Coverage & Alternative Remedies for Groundwater Pollution*, 16 Minn. J.L. Sci. & Tech. 957 (2015).

\(^{84}\) *Id.* at 730-35. The Court noted that although the “qualifier ‘navigable’ is not devoid of significance, . . .” the “Act’s term ‘navigable waters’ includes something more than traditional navigable waters,” *Id.* at 731 (discussing traditional navigable waters in the sense that they are navigable-in-fact). Furthermore, the Court stated “[w]e have twice stated the meaning of ‘navigable waters’ in the Act is broader than the traditional understand of that term . . . .” *Id.*

\(^{85}\) *Id.* at 732.

\(^{86}\) *Id.* at 735. However, the context of the *Rapanos* opinion when discussing “open waters” as “navigable waters” was to note that “[u]nder no rational interpretation are typically dry channels described as ‘open waters,’” which speaks more to the amount of water in question rather than its relation to being at surface level. *Id.* (referring to the ditches in *Rapanos* which contained intermittent flows of water).

\(^{87}\) See *Rapanos*, 547 U.S. at 742; *Riverside Bayview Homes, Inc.*, 474 U.S. 121.
a continuous surface connection to the water in the adjacent channel.\textsuperscript{88} Since \textit{Riverside Bayview Homes} was not overturned, its holding reflects the second situation where those relatively permanent waters which are connected to traditional navigable waters, such as those in part one of the \textit{Rapanos} plurality test.\textsuperscript{89} Migratory groundwater, which could be thought of as a relatively permanent water and is connected to a traditional navigable water, could be covered under the CWA per \textit{Riverside Bayview Homes}.\textsuperscript{90} The third situation courts rely on in determining that migratory groundwater is covered under the CWA comes where migratory groundwater simply satisfies the plurality test in \textit{Rapanos}.\textsuperscript{91} The fourth situation involves Justice Kennedy’s significant nexus test, where migratory groundwater would merely have to have a significant nexus to traditional navigable waters with the goals and purposes of the CWA in mind.\textsuperscript{92} The fifth situation involves the difference between point-source waters and non-discrete waters as referenced in \textit{Rapanos}.\textsuperscript{93} The migratory groundwater itself would not be considered a water of the United States, but rather as a point source given the separate classification in the CWA as pointed out by the Court.\textsuperscript{94} In holding that certain bodies of water would not be covered for section 404 purposes as “waters of the United States,”\textsuperscript{95} the Court left open that these waters which convey materials covered under the CWA could be considered point sources in the alternative.\textsuperscript{96} Furthermore, the Court stated “the discharge

\textsuperscript{88} \textit{Rapanos}, 547 U.S. at 742.
\textsuperscript{89} \textit{Id.} The Court noted that:

Though we upheld in that case [\textit{Riverside Bayview Homes, Inc.}] the inclusion of wetlands abutting such a “hydrographic feature[s]”— principally due to the difficulty of drawing any clear boundary between the two . . . nowhere did we suggest that “the waters of the United States” should be expanded to include, in their own right, entities other than “hydrographic features more conventionally identifiable as ‘waters.’”

\textit{Id.} at 735 (internal citations omitted).
\textsuperscript{90} \textit{See generally Riverside Bayview Homes, Inc.}, 474 U.S. 121.
\textsuperscript{91} \textit{Rapanos}, 547 U.S. at 742. A case could be made that the plurality opinion test only applies only to those waters with a continuous \textit{surface} connection per part two of the plurality test, which would exclude migratory groundwater as by definition it is not located on the surface. \textit{Id.}
\textsuperscript{92} \textit{Id.} at 779-80 (Kennedy, J., concurring).
\textsuperscript{93} \textit{Id.} at 735-37, 743-45.
\textsuperscript{94} \textit{Id.} at 736.
\textsuperscript{95} \textit{Rapanos}, 547 U.S. at 745 (noting that “[t]he Act recognizes this distinction by providing a separate permitting program for such discharges in § 1344(a)”).
\textsuperscript{96} \textit{Id.} at 735-36. The Court seems to express that “‘ditch[es], channel[s], and conduit[s]’” can be man-made or natural so long as they are “discernable, confined and discrete.” \textit{Rapanos}, 547 U.S. at 135-36, n.7. Also, the Court noted “many courts have held that such upstream, intermittently flowing channels themselves constitute ‘point sources’ under the Act.” \textit{Id.} at 743. This is important in the way the CWA covers waters which are not
into intermittent channels of any pollutant that naturally washed down-
stream likely violates § 1311(a) [effluent limitations for § 1342], even if the
pollutants discharged from a point source do not emit ‘directly into’ cov-
ered waters, but pass ‘through conveyances’ in between. Therefore, if
migratory groundwater could be established as a point source, it would be
covered under the CWA for § 1342 purposes. This fifth situation is the
crux of the decision in Hawai’i Wildlife Fund and will be discussed later.
All this dicta from the Supreme Court could be referenced by courts when
trying to determine the applicability of migratory groundwater for regulato-
ry authority per the CWA.

Despite all the tests a court may use to determine whether migratory
groundwater is covered by the CWA, there still lies the argument that there
is a lack of statutory language proving the intent of Congress to include
certain waters under the CWA. However, in Rapanos the Court noted there
are differences between simply reading the plain text, “deliberate acquies-
cence,” and a “failure to express any opinion.” Simply reading the plain
text and its lack of detail in explaining what “waters of the United States”
are, or that wetlands or other waters like migratory groundwater are covered
under the CWA, would lead one to believe that Congress did not intend to
include these extraneous waters under the CWA regulatory authority. The
Court in Rapanos did not take this approach, but rather identified the lack
of legislation or Congressional action as a “failure to express any opin-
on.” This neutral approach is clearly different from a plain text ap-
proach and noticeably different from “deliberate acquiescence,” where
deference would be given to the regulatory agency when it has decided to
assert authority over a water per the CWA and Congress has done nothing
to address the authoritative reach. Although there is significance in a

waters of the United States themselves, but still have an effect on waters of the United
States.

97. Id. at 743.
98. Id. at 745 (“It does not appear, therefore, that the interpretation we adopt today
significantly reduces the scope of § 1342.”).
Haw. 2014).
100. Rapanos, 547 U.S. at 750.
101. Id.
102. Id. at 731. Since the plain text gave a definition of “navigable waters” as “wa-
ters of the United States,” the Court noted that “[v]hatever the scope of these qualifiers
[“navigable”], the CWA authorizes federal jurisdiction only over ‘waters.’” Id. The Court
determined the term would not receive the broad construction the Corps had given it, partic-
ularly without an ordinary presence of water, but not read so narrowly so as to limit the term
only to traditional navigable waters. Id. at 731, 734.
103. Rapanos, 547 U.S. at 750 (quoting SWANCC, “[a]bsent such overwhelming
evidence of acquiescence, we are loath to replace the plain text and original understanding of
a statute with an amended agency interpretation.”).
plain text meaning, this approach is not a definitive answer in determining whether unlisted waters, such as migratory groundwater, are covered under CWA jurisdiction. 104

The extension of CWA jurisdiction over wetlands is imperative to the discussion of migratory groundwater because it shows that the Supreme Court has recognized that not all “waters of the United States” for CWA purposes are explicit in the Act. Courts and authors alike have noted the lack of explicit language concerning groundwater in relevant parts of the CWA for NPDES permitting. 105 This contention is the overwhelming reason many courts have taken to refusing to extend CWA jurisdiction to migratory groundwater. However, this is clearly an erroneous notion, or at the very least inaccurate, as the Supreme Court has upheld that wetlands are under the jurisdiction of the CWA even though they are not explicitly mentioned as “waters of the United States” in the same context as oceans, territorial seas, the contiguous zone, or other navigable-in-fact waters. 106 Although it is possible Congress did not understand the full breadth and authority of the language in the CWA for “waters of the United States,” the Supreme Court has noted that “Congress chose to define the waters covered by the Act broadly” and that:

In adopting this definition of “navigable waters,” Congress evidently intended to repudiate limits that had been placed on federal regulation by earlier water pollution control statutes and to exercise its powers under the Commerce Clause to regulate at least some waters that would not be deemed “navigable” under the classical understanding of that

104. Id.

105. Makowski, supra note 82, at 509-10 (noting that “[g]roundwater appears to be excluded specifically from section 402 NPDES permit regulation . . .” and given the “CWA’s categories of water, it seems that section 402 only applies to pollutants from three of the four categories of water.”).

106. See generally 33 U.S.C. § 1251 et seq. (2014). The term “wetlands” does show up in sections of the CWA, most notably in 33 U.S.C. § 1344(g)(1), which allows states to administer individual permitting for dredge and fill material discharges navigable waters, including wetlands according to the Supreme Court. Rapanos, 547 U.S. at 731. The term wetlands also shows up in CWA language regarding funding and recovery efforts in oil and hazardous substance liability. 33 U.S.C. § 1321 (2014). Furthermore, the most obvious place any authority over wetlands appears comes from 40 C.F.R. § 122.2 (2014). However, this appearance of the term “wetlands” comes in EPA regulation rather than Congressional language which specifically authorizes authority over such waters, which is the case the wetlands cases the Supreme Court has reviewed and are discussed infra at Part II-B. Id.
term.\textsuperscript{107}

By the same token that Congress did not intend for CWA jurisdiction to extend to migratory groundwater because it was not explicitly written in the law, this would mean that Congress did not intend for wetlands to be included under CWA jurisdiction either. Although it is debatable that Congress did have the intent to make the CWA language broad enough to include such waters as wetlands or migratory groundwater as evidenced by the Supreme Court’s findings in \textit{Riverside Bayview Homes} above, the Supreme Court has, at a minimum, found that the CWA does have jurisdiction over waters not listed in the current text and regulatory agencies like the Army Corps of Engineers and EPA have the authority to regulate these waters.\textsuperscript{108}

It has even been noted that legislative history does not support the notion that Congress meant for the CWA to have jurisdiction over migratory groundwater.\textsuperscript{109} Critics of CWA jurisdiction over migratory groundwater have pointed out that bills have been introduced to Congress which would extend jurisdiction to groundwater, but they have not been passed; thus, showing that Congress does not have the intent to extend CWA jurisdiction.\textsuperscript{110} This notion ignores the fact that the language in these proposed bills wanted to extend jurisdiction over groundwater, not simply migratory groundwater;\textsuperscript{111} which is important as the Supreme Court has noted that not all waters are considered “navigable” waters or “waters of the United States” but could still be covered by the CWA if they are point sources, particularly for section 402 permitting.\textsuperscript{112} Furthermore, there are the difficulties the law would face given that non-migratory groundwater, which is not interstate, would not be subject to Congressional authority under the Commerce Clause in and of itself given its isolation.\textsuperscript{113} Perhaps more importantly than the linguistic differences, the Supreme Court has stated that “a refusal by Congress to overrule an agency’s construction of legislation is at least some evidence of the reasonableness of that construction, particular-

\begin{itemize}
\item \textsuperscript{107} \textit{Riverside Bayview Homes, Inc.}, 474 U.S. at 133.
\item \textsuperscript{108} See \textit{Rapanos}, 547 U.S. 715; \textit{SWANCC}, 531 U.S. 159; \textit{Riverside Bayview Homes, Inc.}, 474 U.S. 121.
\item \textsuperscript{109} Makowski, \textit{supra} note 82, at 512.
\item \textsuperscript{110} \textit{Id.} at 512-14.
\item \textsuperscript{111} Thomas L. Casey III, Comment, \textit{Reevaluating “Isolated Waters”: Is Hydrologically Connected Groundwater “Navigable Water” Under the Clean Water Act}, 54 \textit{Ala. L. Rev.} 159, 170 (2002) (when speaking to a U.S. Senate Public Works Committee Report, “by choosing not to extend federal authority to all groundwater, including isolated groundwater, it does not necessarily follow that Congress did not intend to regulate hydrologically connected groundwater”).
\item \textsuperscript{112} See \textit{Rapanos}, 547 U.S. at 745.
\item \textsuperscript{113} \textit{SWANCC}, 531 U.S. at 174.
\end{itemize}
ly where the administrative construction has been brought to Congress’ attention through legislation specifically designed to supplant it.\(^{114}\) The Supreme Court recognized that when Congress tried to limit the definition of “waters of the United States,” particularly over wetlands which were not yet included in the text of the CWA, and failed to do so when it was brought to Congress’s attention, it could not be said the language already in place did not authorize regulation of unspecified waters through CWA jurisdiction.\(^{115}\) Although subsequent legislation has been proposed to add some definition of groundwater for CWA jurisdiction and Congress has failed to act on it,\(^{116}\) this means the status quo language of the CWA is still in place, which grants regulation of unspecified waters through CWA jurisdiction as was the case in \textit{Riverside Bayview Homes}, rather than the proposition that failure to pass clarifying legislation completely eliminates the ability to define and regulate unspecified waters under the current text of the CWA.\(^{117}\)

C. \textbf{Categories of Groundwater}

The distinction or definition between types of groundwater and those waters which are navigable-in-fact could make all the difference in the ability to characterize the groundwater as a type of water which is regulated under the CWA. As noted above, when migratory groundwater cannot be characterized as a navigable-in-fact water in and of itself for CWA purposes, the migratory groundwater must have some relation to a more traditionally regulated water under the CWA.\(^{118}\) The categories of groundwater can be identified so that they are clearly distinguishable from the non-migratory groundwater.

It has been established from courts that non-migratory groundwater is not a water of the United States for purposes of the CWA.\(^{119}\) Non-migratory groundwater is wholly intrastate and does not reach other waters regulated under the CWA and the Commerce Clause. However, migratory groundwater that moves or reaches interstate waters is the topic of debate for courts. Polluted water discharges can reach migratory groundwater in a number of

\(^{114}\) \textit{Riverside Bayview Homes, Inc.}, 474 U.S. at 137.

\(^{115}\) \textit{Id}.

\(^{116}\) Makowski, \textit{supra} note 82, at 512-14.

\(^{117}\) \textit{See Riverside Bayview Homes, Inc.}, 474 U.S. at 137. \textit{See also Makowski, supra} note 82, at 514 (“A more accurate assessment of legislative history of the CWA is that the exclusion of groundwater is inconclusive and can be used to support either side of the argument.”).

\(^{118}\) \textit{See infra} notes 85-93 (discussing tests for determining which waters may be subject to CWA regulation as a “water of the United States.”).

ways, including discharge to dry land which then seeps through the ground into the migratory groundwater,\textsuperscript{120} discharge to surface water which is non-navigable but has a subsurface connection to migratory groundwater,\textsuperscript{121} or even direct discharge to migratory groundwater.\textsuperscript{122} When the polluted discharges reach the migratory groundwater, the polluted migratory groundwater must reach the traditionally regulated waters. The way the groundwater migrates represents the category in which the groundwater can be placed. The first type of migration involves groundwater that “flows in ‘underground’ streams.”\textsuperscript{123} A second type involves percolating groundwater that trickles or seeps through earth.\textsuperscript{124} A third type involves “subflow” from surface streams, which includes the water in the bed underneath or around a stream.\textsuperscript{125} Another important category, which can also be effectuated through the means or types listed above, is referred to as “tributary groundwater,” where the groundwater feeds surface streams.\textsuperscript{126} These categories of migratory groundwater are important to lower courts’ discussions of CWA jurisdiction over migratory groundwater because the relationship and magnitude of the relationship of the migratory groundwater to more traditionally regulated waters is relevant, as there seems to be more of a connection between an underground stream and an ocean rather than percolating groundwater and a tributary creek.

III. JURISDICTIONS IN FAVOR OF NPDES REGULATION

Despite the approaches the Supreme Court has taken in Bayview, SWANCC, and Rapanos to develop a working test to determine which non-traditionally regulated waters are regulated under the CWA,\textsuperscript{127} many lower courts have taken to a “direct hydrological connection” test\textsuperscript{128} or a conduit theory\textsuperscript{129} to determine if migratory groundwater would be subject to CWA

\begin{itemize}
  \item[120.] Makowski, supra note 82, at 508.
  \item[121.] Id.
  \item[122.] See Hawai‘i Wildlife Fund, 24 F. Supp. 3d at 984 (injection wells at a water treatment facility were connected to an aquifer of migratory groundwater).
  \item[123.] Makowski, supra note 82, at 506.
  \item[124.] Id.
  \item[125.] Id.
  \item[126.] Id.
  \item[127.] See infra notes 85-93.
  \item[128.] James W. Hayman, Comment, Regulating Point-Source Discharges to Groundwater Hydrologically Connected to Navigable Waters: An Unresolved Question of Environmental Protection Agency Authority Under the Clean Water Act, 5 BARRY L. REV. 95, 111-12 (2005) (“The district courts and courts of appeals decisions . . . when taken as a whole, express with a convincing majority that, if discharges to groundwater are regulated under the CWA, the groundwater must have a demonstrated direct hydrologic connection to surface waters which are waters of the United States.”).
  \item[129.] See generally Hawai‘i Wildlife Fund, 24 F. Supp. 3d 980.
\end{itemize}
jurisdiction given its relation to more traditionally regulated waters. The courts using a test for determining jurisdictional adequacy are doing so without clear guidance from statutory language or common law precedent, namely the Supreme Court. Recognizing that a test could even be used by a court is in stark contrast to those jurisdictions which do not recognize any CWA jurisdiction over migratory groundwater and thus do not effectuate any test. The jurisdictions which have not yet recognized CWA jurisdiction over migratory groundwater will be discussed later.

A. THE DIRECT HYDROLOGICAL CONNECTION

In the relatively short existence of the CWA, American jurisprudence has developed the “direct hydrological connection” test to determine whether there is a sufficient connection between migratory groundwater and traditionally regulated (i.e. navigable) waters of the United States so as to establish CWA jurisdiction over migratory groundwater which may be polluted. The contemporary understanding of the “direct hydrological connection” test can be found when broken down into its parts – direct and hydrological connection.

There are some discrepancies in the case law that would indicate a requirement of some “directness” of the hydrological connection. In a contemporary case which came after the Rapanos decision, the United States District Court for the Middle District of Tennessee determined that the test is indeed that the migratory groundwater must display a “direct hydrological connection to surface waters that are waters of the United States.”

The “directness” refers to the immediacy or magnitude of the relationship between the traditionally regulated waters of the United States and the migratory groundwater. This is most controversial when there are many “pass throughs” or with the percolating groundwater category, as these instances involve groundwater migrating to traditionally regulated waters in a manner that is not straightforward or as explicit as underground streams.
might be. However, most jurisprudence prior to the aforementioned Tennessee case did not clearly include a requirement of directness. The directness requirement seems to be implied or included without specification, or at least founded in other forms of authoritative persuasion as provided by the EPA. In the case law on this topic, the term “direct” was reserved for surface waters or tributaries not considered waters of the United States in and of themselves. Most of the case law executing a test for CWA jurisdiction over migratory groundwater indicates a test that only requires a “hydrological connection.” The “hydrological connection” requires that a relationship exists that the depth and expanse of the aquifer which held the polluted groundwater did not matter to the test used for CWA jurisdiction, regardless of any diminishing effect the parameters of the groundwater had on the resulting pollution to ocean waters. Hawai’i Wildlife Fund, 24 F. Supp. 3d at 999 (“Neither logic nor case law supports distinguishing between ‘shallow’ and ‘deep’ groundwater. The key factor is not the depth of the groundwater, but the existence of a pollutant that eventually reaches the ocean. . . . There is no support, therefore, for creating a categorical exclusion for ‘deep’ groundwater.”).

Hayman, supra note 128, at 105.

Id. (“Without identifying it as such, the courts in this and the MESS decisions have required a ‘directness’ test to the ‘hydrological connection’ between discharges to groundwater and the affected surface waters.”). In Hecla Mining, the court found that there needs to be more than “a general hydrological connection between all waters.” Washington Wilderness Coalition v. Hecla Min. Co., 870 F. Supp. 983, 990 (E.D. Wash. 1994). In breaking this statement down which Tennessee Aluminum and Hayman have relied upon to establish that a level of “directness” is inferred as a requirement, it can be seen that the statement is not clear as to whether a general hydrological connection to the specific (rather than general) traditionally regulated water would suffice, nor is there any clear guidance as to whether the test asks for a more strict burden of proof such as a direct hydrological connection between all waters. See Tenn. Aluminum Processors, Inc., No. 1:10-00084, 2011 WL 1357690 at *17. See also Hayman, supra note 128, at 105.

Hayman, supra note 128, at 96, 113-15. Hayman notes EPA regulation proposals and rulemakings which resulted in the EPA asserting that “discharges of pollutants to groundwater that has a ‘direct hydrologic connection’ to surface water . . . are subject to regulation and require an NPDES permit.” Id. at 96 (citing 66 Fed. Reg. 2960, 3015-18 (Jan. 12, 2001)).


Compare Sierra Club v. El Paso Gold Mines, Inc., 421 F.3d 1133, 1144 (10th Cir. 2005) (upholding the notion that “addition of any pollutant” is defined as . . . discharges through pipes, sewers, or other conveyances owned by a . . . person which do not lead to a treatment works,” and the hydrological connection can be established through underground mine water, if not groundwater on its own which carries the mine water to navigable waters); United States v. Banks, 115 F.3d 916, 920-21 (11th Cir. 1997) (wetlands can be hydrologically connected through groundwater water and be a sufficient connection for CWA purposes); Quivira Mining Co. v. EPA, 765 F.2d 126, 130 (10th Cir. 1985) (“[I]t was the clear intent of Congress to regulate waters of the United States to the fullest extent possible under the commerce clause.”); Hernandez v. Esso Standard Oil Co., 599 F. Supp. 2d 175, 181 (D. Puerto Rico 2009); N. Cal. Riverwatch v. Mercer Fraser Co., No. C-04-4620 SC, 2005 WL
ists between the groundwater and the traditionally regulated waters of the United States. Simply put, “hydrologically connected” is synonymous with “migratory” insofar as they are referring to the relationship between groundwater and its relationship with traditionally regulated waters of the United States.

Although the CWA jurisdiction over a particular migratory groundwater is determined on a case-by-case basis using the “direct hydrologic connection” test, the test was developed and has been implemented so as to conform with the goals and purposes of the CWA. It has been stated that “since the goal of the CWA is to protect the quality of surface waters, any pollutant which enters such waters, whether directly or through groundwater, is subject to regulation by NPDES permit.” Despite clear evidence in the final text of the intent of Congress regarding its attempt to grant regulatory jurisdiction, there is legislative history which supports the extension of CWA authority to migratory groundwater. Referencing the goals of the

141 See, e.g., Bosma, 143 F. Supp. 2d at 1179-80; Hecla Min. Co., 870 F. Supp. 983, 990 (E.D. Wash. 1994). See also Williams Pipe Line, 964 F. Supp. 1300, 1319-20 (“Because the CWA’s goal is to protect the quality of surface waters, the NPDES permit system regulates any pollutants that enter such waters either directly or through groundwater.”).

142 See also the legislative history, the court in Hecla determined that “[g]uided by the legislative history, courts that have considered the issue agree that ‘waters of the United States’ do not include ‘isolated/nontributary groundwater.’ They are split, however, on the present question of whether tributary groundwater, which is naturally connected to
CWA as a reason for extending jurisdiction is not completely unrelated to the codified text of the CWA which states the CWA purpose as a mission to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” Courts have rationalized that given the goals of the CWA, the intent to grant regulatory authority can be inferred because:

It would, of course, make a mockery of [the Clean Water Act’s regulatory scheme] if [the] authority to control pollution was limited to the bed of the navigable stream itself. The tributaries which join to form the river could then be used as open sewers as far as federal regulation was concerned. . . No less can be said for groundwater flowing directly into the ocean.

This interpretation of CWA jurisdictional boundaries is much broader than the scope based off of a narrow and strict interpretation of codified language of the CWA, which is the rationale given for limited CWA jurisdiction over migratory groundwater which will be discussed later.

B. THE CONDUIT THEORY

The “direct hydrologic connection” test is not the only way in which migratory groundwater could be regulated per CWA authority. In a recent United States District Court case from Hawaii, the court stated that migratory groundwater did not have to satisfy the “direct hydrologic connection” surface water, is subject to CWA regulation.” While referring to Hecla, the court in Bosma found that:

Congress’s decision not to comprehensively regulate groundwater as part of the CWA, does not require the conclusion that Congress intended to exempt ground water from all regulation—particularly under circumstances where the introduction of pollutants into the groundwater adversely affects the adjoining surface waters. In short, the interpretive history of the CWA only supports the unremarkable proposition with which all courts agree—that the CWA does not regulate “isolated/nontributary groundwater” which has no affect on surface water. . . It does not suggest that Congress intended to exclude from regulation discharges into hydrologically connected groundwater which adversely affect surface water.

Bosma, 143 F. Supp. 2d at 1180 (internal citations omitted). Furthermore, “[i]t would not be inconsistent with the Clean Water Act’s legislative scheme for this court to decide the question of whether the County requires an NPDES permit for its discharge . . .” to migratory groundwater. Hawai‘i Wildlife Fund, 24 F. Supp. 3d at 990.

145. 33 U.S.C § 1251(a) (2012).
146. Hawai‘i Wildlife Fund, 24 F. Supp. 3d at 995 (internal citations omitted).
test so long as the migratory groundwater could be established as a conduit.\textsuperscript{147} In Hawai’i Wildlife Fund, a wastewater treatment facility was releasing treated sewage effluent into injection wells, after which the treated effluent traveled some “200 feet underground into a shallow groundwater aquifer beneath the facility.”\textsuperscript{148} The groundwater containing the effluent was connected or migrating to the Pacific Ocean, the emergence of which came through “submarine springs.”\textsuperscript{149}

The court referred to the decision in Rapanos,\textsuperscript{150} as well as a precedential Ninth Circuit decision which expanded upon Justice Kennedy’s “significant nexus” test which seemed to require a plaintiff’s showing that both a “‘hydrological connection exists between the . . . groundwater discharges and coastal waters’ and that ‘there are significant physical, chemical and biological impacts as a result of the connection to warrant issuance of an NPDES permit.”’\textsuperscript{151} However, the court recognized that the Healdsburg test would be to identify the water in question (migratory groundwater, here) as a “navigable water” in and of itself,\textsuperscript{152} and that the plurality in Rapanos noted that “[i]t[hus], . . . lower courts have held that the discharge into intermittent channels of any pollutant that naturally washes downstream likely violates § 1311(a), even if the pollutants discharged from a point source do not emit directly into covered waters, but pass through conveyances in between”\textsuperscript{153} as well as “many courts have held that . . . upstream, intermittently flowing channels themselves constitute ‘point sources’ under the Act.”\textsuperscript{154} Given the definition of “point sources” under the CWA,\textsuperscript{155} the court

\begin{itemize}
\item\textsuperscript{147} Id. at 994 (“However, this court concludes that such a showing [hydrologic connection] is not necessarily the only way in which Plaintiffs may prevail.”).
\item\textsuperscript{148} Id. at 984.
\item\textsuperscript{149} Id. The connection and prevalence of harmful effluent substances were confirmed through a tracer dye study performed by researchers of the EPA, Hawaii Department of Health, U.S. Army Engineer Research and Development Center, and University of Hawai’i. Id.
\item\textsuperscript{150} Hawai’i Wildlife Fund, 24 F. Supp. 3d at 993-95.
\item\textsuperscript{151} Id. at 994 (citing the Ninth Circuit decision in Healdsburg, 496 F.3d 993, 999-1000 (9th Cir. 2007). In Healdsburg, the court held that unpermitted pollutant discharges to a surface pond and river violated the CWA as “‘water from the Pond seeps into the river through both the surface wetlands and the underground aquifer.’” Hawai’i Wildlife Fund, 24 F. Supp. 3d at 994 (citing Healdsburg, 496 F.3d at 1000).
\item\textsuperscript{152} Hawai’i Wildlife Fund, 24 F. Supp. 3d at 994-95 (defendants were arguing that plaintiff’s must show both prongs of the Healdsburg test to prove the migratory groundwater as a “navigable water” in and of itself). The court in Hawai’i Wildlife Fund indicates that despite defendant’s assertion to require the Healdsburg test for migratory groundwater, the test is limited to situations of protecting wetlands which could be considered “navigable waters” in and of themselves if they pass the test. Id. at 995. Migratory groundwater could still be regulated under the Healdsburg test, but it is not the only way a plaintiff could prevail. Id. at 995.
\item\textsuperscript{153} Id. (citing Rapanos, 547 U.S. at 743).
\item\textsuperscript{154} Id. at 995.
\item\textsuperscript{155}
determined that “[i]t may be inferred from this narrow list of exclusions that Congress sought to include sufficiently ‘confined and discrete’ groundwater conduits as ‘point sources’ under the Act.”\textsuperscript{156} Although \textit{Rapanos} particularly focused on surface water conduits for indirect pollution through conveyances,\textsuperscript{157} the court in \textit{Hawai’i Wildlife Fund} determined “[t]here is nothing inherent about groundwater conveyances and surface water conveyances that requires distinguishing between these conduits under the Clean Water Act” as both types can ultimately lead to the addition of pollution to traditionally regulated waters of the United States.\textsuperscript{158} The characterization of the migratory groundwater as a conduit or point source, rather than a navigable water in and of itself, is the conduit theory which is satisfactory for CWA jurisdiction.\textsuperscript{159}

The conduit theory means that the groundwater is simply a conveyance of the pollution between the point source and the traditionally regulated waters of the United States.\textsuperscript{160} While migratory groundwater in and of itself might not satisfy the requirements to be a navigable water, the conduit theory “applies only when pollutants find their way to navigable-in-fact waters.”\textsuperscript{161} Rather than viewing the groundwater as an extension of the tra-

\begin{flushright}
155. 33 U.S.C. § 1362(14) (2012). The court in \textit{Hawai’i Wildlife Fund} particularly focused on “‘any discernible, confined and discrete conveyance, including . . . but not limited to any conduit . . . from which pollutants are or may be discharged.’” 24 F. Supp. 3d at 995 (citing 33 U.S.C. § 1362(14) (2012)).

156. \textit{Hawai’i Wildlife Fund}, 24 F. Supp. 3d at 995 (emphasis added). The court particularly noted that “agricultural stormwater discharges” are exempt from being considered “point sources” under the CWA and that the limited inclusion of exemptions allows for inference that migratory groundwater would be included as a “point source.” \textit{Id.} (citing Tang v. Reno, 77 F.3d 1194, 1197 (9th Cir. 1996) as holding “[a]n item which is omitted from a list of exclusions is presumed not to be excluded.”) The court in \textit{San Francisco Herring Association} noted that buried manufactured gas plant sites which were causing leaks into groundwater that migrated to San Francisco bay could be viewed as a point source. San Francisco Herring Ass’n v. Pac. Gas and Elec. Co., 81 F. Supp. 3d 847, 862 (N.D. Cal. 2015). The court in that case refused to grant a motion to dismiss for defendants given that “[t]he statutory definition of a point source is meant to be ‘extremely broad.’ . . . A ‘source’ may be ‘[a]ny building, structure, facility, or installation from which there is or may be the discharge of pollutants.’” \textit{Id.} This precedent argues that a confined or discrete conveyance which is necessary for a point source could be something as large as a factory, and therefore groundwater should not be ruled out as a possible point source. \textit{Id.}


159. \textit{Id.}

160. \textit{Id.}

ditionally regulated waters which might become polluted as in wetlands cases, or as a navigable water in and of itself, the conduit theory looks at the groundwater as a means for polluting traditionally regulated waters. That is to say, plaintiffs do not have to argue that “the groundwater requires protection for its own independent ecological value. Instead, the concern is that the County [polluter] should not be allowed to pollute the ocean [traditionally regulated water] through that groundwater.”

The conduit theory used in Hawai‘i Wildlife Fund finds support from jurisprudence, administrative actions, and legislative goals. The jurisprudence support of the conduit theory comes from the language used in Rapanos, as discussed above. Administrative actions by the EPA support the regulation of discharges to groundwater that reach surface waters subject to the CWA. Congressional goals are evidenced by the text of the CWA, other court holdings on the topic of migratory groundwater regulation, and the strict liability scheme of the CWA. As noted above in Part III-A, the court believed it would make a “mockery” of the CWA to allow unpermitted polluted groundwater to migrate to the ocean, and “the goal of the CWA is to protect surface waters” so the addition of pollutants to such waters through migratory groundwater is subject to CWA NPDES permitting. The strict liability scheme of the CWA shows that Congress did not intend different proof requirements (i.e. the Healdsburg test) based on the way pollutants reach traditionally regulated waters, as this would lead to less protection of waters of the United States, even though Congress intended to categorically bar all unpermitted discharges to such waters.

162. See infra Part II-B.
163. Hawai‘i Wildlife Fund, 24 F. Supp. 3d at 997. See also San Francisco Herring Ass’n, 81 F. Supp. 3d at 863 (“[D]efendants’ argument is unpersuasive” that pollution of San Francisco Bay should be allowed through groundwater.).
164. See infra notes 153-57.
165. Hawai‘i Wildlife Fund, 24 F. Supp. 3d at 995-96. The court referredenced a proposed EPA rule from 2001 for concentrated animal feeding operations (CAFOs) regarding pollutants conveyed to surface waters through groundwater could be an unpermitted discharge under the CWA. Id. Furthermore, a final rule by the EPA for water quality standards on Indian reservations stated “discharges to them [groundwaters] are regulated because such discharges are effectively discharges to the directly connected surface waters.” Id. (citing Amendments to the Water Quality Standards Regulation That Pertain to Standards on Indian Reservations, 56 Fed. Reg. 64876, 64892 (Dec. 12, 1991) (codified at 40 C.F.R. pt. 131)).
166. Hawai‘i Wildlife Fund, 24 F. Supp. 3d at 995.
168. Id. at 997-98.
Despite the support for the conduit theory, the court could not “point to controlling appellate law or statutory text expressly allowing this theory in the present context.”\textsuperscript{169} This is because the Supreme Court in \textit{Rapanos} and the Ninth Circuit in \textit{Healdsburg} did not apply the conduit theory as it relates to wetlands or other surface waters, respectively.\textsuperscript{170} Likewise, there is no language in the CWA which clearly articulates that migratory groundwater can be characterized as a conduit.\textsuperscript{171} Regardless, the court in \textit{Hawai'i Wildlife Fund} found the evidence for support of CWA jurisdiction over migratory groundwater more compelling than the lack of concrete authority of which to point.

\textbf{IV. JURISDICTIONS NOT IN FAVOR OF NPDES REGULATION}

Although there are a majority of courts in agreement that migratory groundwater is subject to CWA jurisdiction, albeit through different methods, there are a number of jurisdictions which do not recognize any CWA jurisdiction over migratory groundwater.\textsuperscript{172} The rationales for not interpreting CWA jurisdiction are similar to the reasons expressed in \textit{Hawai'i Wildlife Fund},\textsuperscript{173} the statutory text, legislative history, jurisprudence, and agency interpretation are not clear and persuasive enough to extend CWA jurisdiction.\textsuperscript{174}

The limitations in the statutory language and legislative history are the common footholds many courts express as the reason for not finding CWA authority over migratory groundwater. As mentioned above, some waters are more readily identifiable as “navigable waters” or “waters of the United States” given their obvious characteristics and location in the text of the CWA.\textsuperscript{175} These limited waters can be thought of as navigable-in-fact. This list would be exhaustive but for the ambiguity of the CWA term “navigable waters” and the tests by the Supreme Court in the wetlands cases which have allowed other waters to be characterized as navigable waters in and of themselves for CWA purposes.\textsuperscript{176} Likewise, the lack of legislative action to

\textsuperscript{169}. \textit{Hawai'i Wildlife Fund}, 24 F. Supp. 3d at 996.
\textsuperscript{170}. \textit{Id.} at n.2.
\textsuperscript{171}. \textit{Id.} at 996-97 (discussing EPA guidance that groundwater, particularly non-migratory groundwater, in and of itself has never been considered a “water of the United States”).
\textsuperscript{172}. See Makowski, \textit{supra} note 82, at 508-9; Hayman, \textit{supra} note 128, at 109-11. For a “scorecard” of decisions on migratory groundwater and CWA authority prior to 2005, see Hayman, \textit{supra} note 128, at 110.
\textsuperscript{173}. \textit{Hawai'i Wildlife Fund}, 24 F. Supp. 3d at 996-97.
\textsuperscript{174}. Makowski, \textit{supra} note 82, at 509.
\textsuperscript{175}. \textit{See infra} Part II-A (discussing oceans, territorial seas, and waters of the contiguous zone).
\textsuperscript{176}. \textit{See infra} Part II-B.
include migratory groundwater, or any groundwater, has been viewed as an outcome which Congress intended, given subsequent proposals to change CWA language.\textsuperscript{177}

The limitations in jurisprudence are less pronounced in the case law that does not recognize CWA authority over migratory groundwater. While most courts reference other jurisdictions which have or have not recognized CWA authority over migratory groundwater, the courts have not spent much time discussing Supreme Court precedent on the scope of the CWA term navigable waters, namely the wetlands cases discussed in Part II-B.\textsuperscript{178} As such, most discussion involving jurisdictional differences turn on the compelling notions surrounding statutory language, legislative history, administrative actions, and sometimes the goals of the CWA.

The limitations in administrative rulemaking and interpretation revolve around EPA willingness to change rules. Given the broad and ambiguous language of the CWA, the Supreme Court has upheld the authority of the EPA to regulate waters that might not be specifically or clearly covered by the CWA definition of navigable waters.\textsuperscript{179} As such, the inability of the EPA to pass new rules and regulations for including migratory groundwater under its authority has been given some respect to mean that the EPA has no desire to regulate migratory groundwater, and more importantly Congress did not intend to grant regulatory authority over migratory groundwater via the CWA.\textsuperscript{180}

One influential case which held that there was no CWA jurisdiction over migratory groundwater was \textit{Village of Oconomowoc Lake v. Dayton Hudson Corp.}\textsuperscript{181} In \textit{Village of Oconomowoc Lake}, a village was trying to

\textsuperscript{177} See, e.g., Vill. of Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962, 965 (7th Cir. 1994).

\textsuperscript{178} The jurisdictions which have referenced Supreme Court precedent on inexplicit waters under the authority of the CWA have done so only inasmuch as identifying that the Supreme Court has expanded the CWA language to include a broad number of non-navigable-in-fact waters (\textit{Riverside Bayview Homes, Inc.}) and limited the expansion so as not to include waters with a very attenuated connection to traditionally regulated waters (\textit{SWANCC}). See generally \textit{Rice v. Harken Exploration Co.}, 250 F.3d 264 (5th Cir. 2001); \textit{Vill. of Oconomowoc Lake}, 24 F.3d 962.

\textsuperscript{179} See generally \textit{Riverside Bayview Homes, Inc.}, 474 U.S. 121.

\textsuperscript{180} \textit{Rice}, 250 F.3d at 272 (EPA did not have authority to regulate discharges to migratory groundwater because Congress had not granted that authority); \textit{Umatilla}, 962 F. Supp. at 1319 (“EPA has offered no formal or consistent interpretation of the CWA that would subject discharges to groundwater to the NPDES permitting requirement.”); \textit{Vill. of Oconomowoc Lake}, 24 F.3d at 965 (EPA not asserting any authority over migratory groundwater). See also \textit{Makowski}, supra note 82, at 515-16.

\textsuperscript{181} Vill. of Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962 (7th Cir. 1994).
prevent the construction of a warehouse which had a retention pond. The resulting uses of the warehouse caused pollutants to enter the retention pond, which in turn seeped into groundwater, although there was no evidence in the decision that there was a clear link between the groundwater and underground aquifers which feed traditionally regulated waters. Rather, the court looked straight to the lack of language for which to include groundwater, migratory or otherwise, and the legislative history surrounding the CWA.

The Seventh Circuit in *Village of Oconomowoc Lake* determined that “[a]s the statute and regulations stand . . .” the federal government has not claimed jurisdiction over groundwater, migratory or otherwise, via the CWA. The court noted that “[n]either the Clean Water Act nor the EPA’s definition asserts authority over ground waters, just because these may be hydrologically connected with surface waters.” Given the definitions in the CWA, the court found the lack of groundwater, migratory or otherwise, to be important to statutory text limitations. Furthermore, “[t]he omission of ground waters from the regulations is not an oversight. Members of Congress have proposed adding ground waters to the scope of the Clean Water Act, but these proposals have been defeated . . . .” The court believed Congress intended to exclude at least some waters, and “ground waters are a logical candidate” given the inability of Congress to change the CWA text. In addition to statutory and legislative history support, the court identified the inability to pass administrative changes by the EPA was telling, noting that “[o]n several occasions the EPA has noted the potential connection between ground waters and surface waters, but it has left the regulatory definition alone.” Despite the apparent lack of detail to the important distinction between migratory and non-migratory groundwater and their relation to the text of the CWA and EPA rules, the court in *Village of Oconomowoc Lake* took the minority approach in determining that the limited statutory text, legislative history, and administrative unwillingness

182. *Vill. of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962 (7th Cir. 1994).
183. *Id.*
184. *Id.* at 965.
185. *Id.*
186. *Id.* at 966.
188. *Id.*
189. *Id.*
190. *Id.*
191. *Id.* ("[N]either the statute nor the regulations makes such a possibility a sufficient ground of regulation.").
to change rules was most persuasive, particularly without any discussion of the goals of the CWA. 192

Most jurisdictions which do not recognize CWA authority over migratory groundwater do so in a similar fashion to Village of Oconomowoc Lake. These cases focus primarily on the lack of explicit statutory text and legislative history of extending jurisdiction over groundwater. 193 While it may be difficult sometimes to find the articulation of the courts as to whether their holding only applies to all groundwater, non-migratory groundwater, or migratory groundwater, it seems that they all do indeed take the position that no groundwater is subject to CWA authority and regulation, including migratory groundwater which may reach traditionally regulated waters. 194

Although the courts which refuse to extend CWA jurisdiction over migratory groundwater may be ruling against all groundwater regulation under the CWA by default, there is a lack of clarity as to whether such limits pertain to migratory groundwater which acts as a conduit. 195 The court in Hawai‘i Wildlife Fund noted that the split in authority over migratory groundwater may flow from the inability of the court to distinguish whether or not it is ruling on the migratory groundwater’s characterization in and of itself (i.e. as a navigable water) or whether it may be regulated when “it serves as a conduit to water that is indeed regulated.” 196 As was pointed out in Hawai‘i Wildlife Fund, “[a]lmost every court that has allowed unpermitted discharges into groundwater has done so under the theory that the groundwater is not itself ‘water of the United States.’ That is, those courts were not determining whether discharging pollutants into groundwa-

192. See generally Vill. of Oconomowoc Lake, 24 F.3d at 962.
193. As discussed in Part II-B, the lack of any laws being passed to amend the scope of “navigable waters” under the CWA is misleading as the bills which have been presented have attempted to authorize regulation over all groundwater and not simply make migratory groundwater explicit.
196. Id.
ter conduits required a permit.”

This distinction is important to the juri
diction of the CWA because it is unknown whether prior cases determined if the CWA categorically allows unpermitted discharges to migratory groundwater or if those jurisdictions may have overlooked the ability of groundwater to be characterized as a conduit or “point source” subject to CWA NPDES regulatory authority.

The court in *Umatilla* did reference this sort of idea where unconventional collections of water could be considered a “point source” and subject to regulation under the CWA. However, the court in *Umatilla* found that no groundwater, migratory or otherwise, is subject to CWA jurisdiction. In the event that the Ninth Circuit found that migratory groundwater which was hydrologically connected was subject to CWA authority, the issue of an existing point source would be settled. Thus, the *Umatilla* decision was stating that if migratory groundwater was subject to the CWA, it would have to be a navigable water in and of itself, and could constitute as a point source in the same situation. This case shows that at least one court has looked at migratory groundwater in and of itself for jurisdiction, rather than as a conduit to a separate navigable water.

V. CONCLUSION

The Clean Water Act’s National Pollution Discharge Elimination System has a jurisdictional split, with the majority of jurisdictions agreeing that the Clean Water Act grants regulatory authority over migratory groundwater. The jurisdictional split comes as a result of the ambiguity as to the intent of Congress in regulating interstate waters. In order to ensure that regulatory authority is carried out through NPDES section 402 permitting, a plaintiff must show that the migratory groundwater is a “water of the United States” (i.e. navigable water) or that the migratory groundwater is a conduit to convey and discharge polluted effluent to a traditionally recognized “water of the United States.” The tests which can establish a groundwater as subject to regulation, be it in and of itself (i.e. navigable water), or because of its relationship in conveying pollutants to a navigable water, can

197. *Id.*

198. *Id.*

199. *Umatilla*, 962 F. Supp. at 1320-21 (“The unlined brine pond is a confined and discrete conveyance within the CWA’s definition of ‘point source,’ readily identifiable to a single source. The fact that those pollutants now migrate through dirt with the help of water sources such as rain water and gravity . . . does not change the old brine pit’s status.”).

200. *Id.*

201. *Id.*

202. *Id.*

203. *Id.*
be found in Supreme Court jurisprudence (Rapanos)\textsuperscript{204} or in other federal jurisprudence—like courts using the direct hydrologic connection test\textsuperscript{205} or the conduit theory.\textsuperscript{206} Given the evidence above, migratory groundwater does fall within CWA NPDES jurisdiction, despite any notion of ambiguous statutory language currently in the CWA.

\textsuperscript{204} See infra Part II-B.
\textsuperscript{205} See infra Part III-A.
\textsuperscript{206} See infra Part III-B.