



MICHIGAN ENVIRONMENTAL LAW JOURNAL Vol. 32, No. 3, Spring 2014, Issue 95

MESSAGE FROM THE EDITOR



If you graduated from the University of Michigan Law School, you probably read in the school's recent electronic newsletter that Professor Joseph Sax, who taught environmental law and other courses at UM from 1966 to 1986, passed away on March 9, 2014. He was truly one of the founding fathers of environmental law. As one of his students who now both practices and teaches environmental law, in this issue I share some thoughts below about how environmental law has changed since

Professor Sax's first environmental law course in 1971, and some ways in which it has remained the same.

How to develop America's energy resources without damaging the natural environment was a critical issue back in the 1970s and remains so today. One energy controversy in the late 1970s was whether we should drill for oil in the Arctic National Wildlife Refuge; today, a key issue is whether hydraulic fracturing should be used to develop oil resources in the lower 48, and how it should be regulated. In this issue Assistant Attorney General Dan Bock writes about a recent decision by the Michigan Court of Appeals about the regulatory regime regulating "fracking."

Chen Sheng, now a third year student at the University of Illinois College of Law, won the third place prize in last year's law student writing competition with her essay on how the reasonable use doctrine has been applied in cases involving riparian rights, as compared with cases involving groundwater. You won't be surprised to see that she discusses many Michigan cases in her article.

Do you remember Justice Kennedy's "man-in-the-middle" opinion in the 4-1-4 [Rapanos](#) case? Michael Hasty of the University of Louisville School of Law tells us how the Army Corps of Engineers and lower courts have applied Justice Kennedy's "significant nexus" test in deciding what qualifies as a "water of the United States." Mr. Hasty also provides some early analysis of the Corps' and EPA's proposed rule defining "waters of the United States," published in the [Federal Register](#) on April 21, 2014, as a response to Chief Justice Roberts's invitation to do so.

If you'd like to tell me how my musings below about the Public Trust Doctrine and MEPA are all wrong, or if there's something else you'd like to write for the Journal, please contact me at cdunsky@comcast.net or at (313) 418-0913.

Christopher J. Dunsky
Editor, *Michigan Environmental Law Journal*

Section Mission & Membership

The Environmental Law Section provides education, information, and analysis about issues of concern through meetings, seminars, its website, public service programs, and publication of the *Michigan Environmental Law Journal*. Membership in the Section is open to all members of the State Bar of Michigan and to law students. Statements made on behalf of the Section do not necessarily reflect the views of the State Bar of Michigan.

Dues are \$30 per year for members of the Bar, subject to the following exceptions.

- Newly admitted Bar members: no charge
- Law students: no charge
- Public sector employees: no charge

To join, please complete a [section membership application](#) or attorneys can join online by logging into the Bar's [member area](#) and selecting Section Membership.

Upcoming Events

Wednesday, June 4, 2014

For Lawyers: What You Need to Know About Labs & Environmental Laboratory Reports

Webinar presenters Phil Simon, Peter Simon, and Sarah Stubblefield from Ann Arbor Technical Services will walk you through how to read the pages of a laboratory report, including what to pay close attention to, definitions of key terms, and how to identify potential laboratory problems. This webinar will be moderated by ELS Hazardous Substances and Brownfields Committee chair and vice-chair Jim Enright and Tammy Helminski.

Wednesday, June 11, 2014

The Great Lakes Legacy Program: A Partnership Approach for Remediating & Managing Contaminated Sediment Sites in the Great Lakes

This webinar, hosted by the ELS Environmental Litigation & Administrative Practice Committee will feature Susan W. Prout, associate regional counsel of the U.S. EPA, and Mark W. Tuchman, EPA's Great Lakes National Program Office team leader for both the Sediment Assessment & Remediation Team and the Invasive Species Team.

Friday, June 20, 2014

ELS Summer Program & Council Meeting

Time and location to be determined

Thursday, September 18, 2014

Annual Business Meeting, Elections, & Program

The ELS Annual Business Meeting & Program will be Thursday, September 18, at DeVos Place in Grand Rapids, in conjunction with the State Bar's Annual Meeting. Registration is requested for facilities planning. Visit the [Bar's Annual Meeting](#) pages and the ELS web page for updates.

Wednesday, October 28, 2014

Annual Joint ELS-AWMA Conference



Joint program with Air Committee and Air & Waste Management Ass'n, Lansing Community College, on topics of relevance to both groups, including policy and statutory updates

Environmental Law Writing Contest

Three prizes will be awarded: \$2,000 for first place, \$1,000 for second place, and \$500 for third place. Winning essays will be published in the Michigan Environmental Law Journal. Entries must be **postmarked by June 30, 2014**. [Complete Essay Contest Rules](#).

Recent ELS Events & Materials Recaps

Clearing the Air: An Overview of Federal, Regional, & State Air Quality Issues

Cosponsored with the Michigan Manufacturers Association

Originally presented April 23, 2014



[Legal Update on Significant Air Cases](#)

S. Lee Johnson, Honigman Miller Schwartz & Cohn



[The Continuing Evolution of the Statute of Limitations](#)

Nathan Dupes, Bodman LLP



[Environmental Advocacy](#)

Neil Gordon, Assistant Attorney General, State of Michigan



[Revisions to Michigan's Air Rules Regarding Air Toxics & Permit-to-Install Exemptions](#)

Paul Collins, Miller Canfield, and Steve Kohl, Warner Norcross & Judd

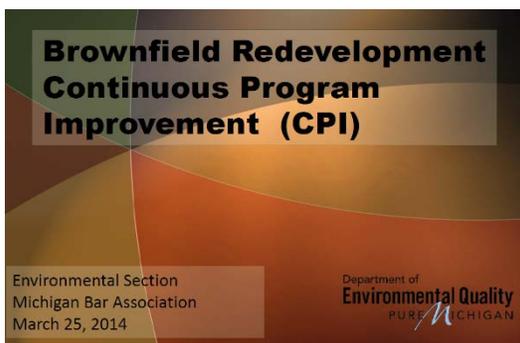


[Air Quality Division Update](#)

G. Vinson Hellwig, Chief, Air Quality Division, MDEQ

Update on Michigan's Brownfields Program

Originally presented March 25, 2014



[Written Materials](#) by Carrie Geyer, MDEQ
Brownfield Redevelopment Unit Chief
[Audio & PowerPoint Presentation](#)

Help Promote Section Events & Activity!

Watch the [Section's web page](#) for updates regarding these and other events currently in the planning stages!

Connect with the Section on [LinkedIn](#) to stay informed of environmental law seminars, forums, education, and networking.

How Much Has Environmental Law Changed During the Career of Professor Joseph Sax?

Christopher J. Dunsky, Editor, *Michigan Environmental Law Journal*[†]

Professor Joseph Sax, a giant in environmental law, passed away on March 9, 2014. Professor Sax taught environmental law and other subjects at the University of Colorado, the University of Michigan, and the University of California at Berkeley. More details of his life and career are presented in a March 10, 2014, article in the [N.Y. Times](#).

I was a student in the first environmental law course that Professor Sax taught at the University of Michigan Law School, in 1971. It was a modest two credit hour course. We focused on common law and covered little, if any, statutory law.

I remember only two specific concepts from the course, the first of which is the Public Trust Doctrine (PTD), an ancient part of the common law. Professor Sax had just published a major law review article about the PTD, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*,¹ so of course we spent hours discussing it.² The second thing I remember is the Michigan Environmental Protection Act, Act 127 of 1970 (MEPA),³ now Part 17 of the

[†] The author graduated from the University of Michigan Law School in 1972. He was an enforcement attorney with the Environmental Protection Agency in Washington, D.C., for thirteen years and has practiced environmental law in Michigan since 1988. He teaches the introduction to environmental law course as an adjunct professor at the Auburn Hills campus of Thomas M. Cooley Law School.

¹ Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, [68 Mich. L. Rev. 471](#) (1969) (hereinafter "Sax: PTD").

² In 1972, reviewing Professor Sax's book, *Defending the Environment: A Strategy for Citizen Action* (NY Albert A. Knopf, 1971), Professor Frank Grad of Columbia Law School, prophetically observed:

In the absence of available statutory grounds for environmental protection, the author urges the further advancement and development of the "public trust" theory, an interesting relic of Roman law, which he had previously exhumed in a well-supported and scholarly article. Perhaps the courts will seize upon this doctrine as a useful and flexible instrument for environmental protection. If they do, the credit will be entirely Professor Sax's, who has done everything possible to pour new wine into that aged receptacle.

Frank P. Grad, Book Review, [12 Natural Resources Journal 125](#) (1972), at 126, *citing* Sax, PTD, *supra* note 1.

³ Act 127 of 1970 Thomas J. Anderson, Gordon Rockwell Environmental Protection Act of 1970 [MCL 691.1201-691.1207] (Repealed. 1994, Act 451, Eff. Mar. 30, 1995).

Natural Resources and Environmental Protection Act,⁴ which Professor Sax had proudly drafted and the Michigan Legislature had enacted just a year before our course.

MEPA is based on common law principles in that it authorizes any person who is concerned with an environmental problem to seek relief from a popularly elected Michigan circuit judge sitting in equity, and ask that judge to use his or her own best judgment to select a suitable remedy.⁵

As I think back on that 1971 course, I'm struck by the great extent to which environmental law has evolved from its common law origins into the complex web of statutes and regulations that we contend with today.⁶ In its early statutes, Congress made clear that it didn't intend to supplant the common law of environmental protection. During the grand epoch of environmental legislation in the 1970s, Congress included savings provisions that respectfully preserved common law duties and remedies in many federal environmental statutes.⁷ But U.S. Supreme Court decisions slowly revealed the dominant role that the new statutes would play,

⁴ [MCL 324.1701 et seq.](#)

⁵ *Id.* See generally *Ray v. Mason County Drain Comm'r*, [393 Mich. 294](#), 305-306 (Mich. 1975). In *Ray*, the Michigan Supreme repeatedly refers to Professor Sax as the "author of the EPA's first draft." *Id.* at 305 n.5; *id.* at 306 n.8.

⁶ In *Ray*, for example, the Michigan Supreme Court stated:

The Legislature in establishing environmental rights set the parameters for the standard of environmental quality but did not attempt to set forth an elaborate scheme of detailed provisions designed to cover every conceivable type of environmental pollution or impairment. Rather the Legislature spoke as precisely as the subject matter permits⁹ and in its wisdom left to the courts the important task of giving substance to the standard by developing a common law of environmental quality.¹⁰ The act allows the courts to fashion standards in the context of actual problems as they arise in individual cases and to take into consideration changes in technology which the Legislature at the time of the act's passage could not hope to foresee.

Id. at 306-307. In the cited footnote, the Court continued:

Thomas J. Anderson, one of the legislative sponsors of the EPA underscored this purpose when he said that the EPA should: "permit courts to develop a common law of environmental quality, much as courts have developed a right to privacy." While the language of the statute paints the standard for environmental quality with a rather broad stroke of the brush, the language used is neither illusive nor vague. "Pollution", "impairment" and "destruction" are taken directly from the constitutional provision which sets forth this state's commitment to preserve the quality of our environment. In addition these and other terms used in establishing the standard have acquired meaning in Michigan jurisprudence. The development of a common law of environmental quality under the EPA is no different from the development of the common law in other areas such as nuisance or torts in general, and we see no valid reason to block the evolution of this new area of common law.

Id. at 306 n.10.

⁷ See, e.g., 33 U.S.C. 1370, 1365(e) (Clean Water Act or CWA); 42 U.S.C. 7416 (Clean Air Act or CAA, stationary sources); and 42 U.S.C. 9614(a), 9652(d) (Comprehensive Environmental Response, Compensation and Liability Act).

almost eclipsing the common law. In *City of Milwaukee v. Illinois*,⁸ the Court held that the CWA's comprehensive regulatory scheme for controlling point source discharges preempted the federal common law of nuisance for water pollution. In *International Paper Co. v. Ouellette*,⁹ the Court held that the CWA preempted some, but not all, state common law of water pollution, allowing only the state in which a source of water pollution is located to impose requirements based on state nuisance law.

One might expect the same analysis to apply to stationary source regulation under the CAA, especially after the 1990 Amendments added a permitting requirement somewhat like that in the CWA. But it took several decades for those cases to arrive. The Supreme Court answered the question for the *federal* common law of nuisance in *American Electric Power Co. v. Connecticut*,¹⁰ holding that EPA's authority to regulate greenhouse gases (GHG) under the CAA displaced the federal common law of nuisance, although not necessarily state common law of nuisance.¹¹ The critical point was that federal common law was displaced by the mere existence of the Environmental Protection Agency's (EPA) statutory authority to regulate GHG, regardless of whether EPA was in fact taking steps to exercise its authority.¹²

What about preemption of nuisance law involving sulfur dioxide, ozone, and other traditional kinds of air pollution? The Fourth Circuit gave a clear and sensible answer to that question in *North Carolina v. Tennessee Valley Authority*,¹³ in which it followed the logic of *Ouellette* and held that the CAA's comprehensive regulatory scheme for traditional air pollutants preempted state nuisance law, except possibly the law of the state in which the sources were located. This past August the Third Circuit followed the same logic, applying the rationale of *Ouellette* to permit a plaintiff class to rely on nuisance law of the state in which a coal-fired power plant was located as the legal basis to recover monetary damages.¹⁴

With so many federal environmental statutes on the books, the logic of *American Electric Power* suggests that there may not be much federal environmental common law left standing; but *Ouellette* and *North Carolina* indicate that there may still be a limited role for state common law.¹⁵

⁸ [451 U.S. 304](#) (1981).

⁹ [479 U.S. 481](#) (1987).

¹⁰ [131 S. Ct. 2527](#) (2011).

¹¹ *Id.* at 2540 ("In light of our holding that the Clean Air Act displaces federal common law, the availability *vel non* of a state lawsuit depends, *inter alia*, on the preemptive effect of the federal Act. [*Ouellette*], at 489, 491, 497, 107 S. Ct. 805, 93 L. Ed. 883 (holding that the Clean Water Act does not preclude aggrieved individuals from bringing a "nuisance claim pursuant to the law of the source State"). None of the parties have briefed preemption or otherwise addressed the availability of a claim under state nuisance law. We therefore leave the matter open for consideration on remand").

¹² *Id.* at 2538 ("The critical point is that Congress delegated to EPA the decision whether and how to regulate carbon-dioxide emissions from power plants; the delegation is what displaces federal common law.")

¹³ [615 F.3d 291](#) (4th Cir. 2010), *cert dismissed* 132 S. Ct. 46 (2011).

¹⁴ *Bell v. Cheswick Generating Station*, [734 F.3d 188](#) (3rd Cir. 2013).

¹⁵ See *In re Deepwater Horizon*, [745 F.3d 157](#), 171 (5th Cir. 2014), in which the Fifth Circuit went a step further, in February this year, in the *Deepwater Horizon* case ("In sum, *Ouellette* forms a controlling backdrop for resolving

There is now so much statutory material to cover in an introductory environmental law course that today's students may never hear of the PTD or MEPA. Have the PTD and MEPA become completely outmoded? Are they like the common law of nuisance, with little, but not much, relevance to how we practice environmental law today?

Let's consider MEPA first. Professor Sax would certainly be proud of the excellent chapter on MEPA in the Section's *Michigan Environmental Law Deskbook* (2d edition), written by our good friend and scholar Jeffrey K. Haynes.¹⁶ MEPA is based on what some might consider the quaint notion that any person who is concerned by a situation ought to be able to go to a popularly elected Michigan circuit judge sitting in equity, and ask that judge to make his or her own judgment about how the offensive situation should be remedied. A circuit judge is authorized to determine whether a standard set by an agency is "reasonable" or not; if the judge finds that such a standard is "deficient," he or she may "direct the adoption of a standard approved and specified by the court."¹⁷

When MEPA was enacted in 1970, Michigan administrative agencies did not have the depth of experienced staff and expertise they have today. More important, few agencies considered protection of the environment to be important parts of their function. In that set of circumstances, MEPA played a critical role in enabling Michigan citizens to force state agencies to pay attention to environmental issues. But is MEPA needed today? Our state agencies have vastly improved both the expertise of their staffs and their commitment to environmental protection. Is it still prudent to allow a popularly elected circuit court judge with limited staff and expertise to substitute his or her judgment for that of a qualified agency? I invite anyone to submit his or her views about whether MEPA is a good idea for the twenty-first century.

What about the PTD? Is it still relevant today? The PTD historically ensured public access to waterways for navigation, fishing, and other traditional uses. Just as in Professor Sax's early days, the PTD still provides grist for law review articles. A recent article by Section member James Olson argues that the PTD is an important means to address systemic threats to the earth's water, ecosystems, and natural communities.¹⁸ University of Utah law professor Robin

claims caused by the blowout. Federal law, the law of the point source, exclusively applies to the claims generated by the oil spill in any affected state or locality With *Ouellette* as the controlling law, there are no state remedies to 'save.' The OPA applies as the law of the OCSLA point source and, along with the CWA penalties, furnishes a comprehensive remedial regime for affected states' governmental and private claims. Just because the Parishes are located in the most closely adjacent state, they fare no better than the "down-current" states of Texas, Mississippi, Alabama, and Florida. The CWA and the OPA 'savings' clauses preserve but do not create state law claims."

¹⁶ *Michigan Env'tl. Law Deskbook* (2d ed., Ch 14) at § 14.78.

¹⁷ *Id.* § 1477, citing MCL [324.1701\(2\)](#).

¹⁸ James Olson, All Aboard: Navigating the Course for Universal Adoption of the Public Trust Doctrine, [15 Vermont Journal of Env'tl. Law](#) 135 (Spring 2014).

Kundis Craig recently published an article that explains how the PTD can provide a legal framework for adapting to the effects of climate change on water supplies.¹⁹

To us practitioners, recent efforts to use the PTD in litigation to compel government agencies to take action to combat climate change are more interesting than academic articles in scholarly journals. In 2011, against all odds, several fearless advocacy groups used the venerable PTD to combat climate change. Five children, and two organizations appealingly named Kids vs. Global Warming and Wildearth Guardians, sued the EPA Administrator and the heads of five other federal departments and agencies on grounds that they had failed to take adequate steps to address climate change.²⁰ The plaintiffs alleged that the atmosphere is a commonly shared public resource, and that EPA and the other federal agencies have a duty under the PTD to protect this resource. Plaintiffs asked the court to order the agencies to “take all necessary actions to enable carbon dioxide emissions to peak by 2012 and decline by at least six percent per year beginning in 2013.” The United States Department of Justice (DOJ) described the plaintiff’s theory as a “radical extension” of the PTD, and moved to dismiss on grounds that because there is no federal PTD, there was no basis for federal question jurisdiction. The district court agreed with DOJ. Relying on the U.S. Supreme Court decision in *PPL Montana, LLC v. Montana*,²¹ it held that the PTD is a matter of state, not federal, law. It further held that even if the PTD were a part of federal common law, such a claim would be displaced by the CAA, as in *American Electric Power Co., supra*.

Does that mean that efforts to attack climate change with the ancient PTD have been a failure? That was my initial reaction on reading about *Alec L. v. Jackson* and similar cases. But on second thought, the plaintiffs may have had other goals all along. Plaintiffs’ counsel may have legitimately hoped to win the case in 2011 because the Supreme Court had not ruled in either *PPL Montana, LLC* or *American Electric Power*. Beyond that, I wonder if the plaintiffs’ realistic expectation was not to prevail in a litigation sense, but rather to attract public attention and develop public support for efforts to fight climate change. If that was their purpose, they may have achieved it, notwithstanding DOJ’s technical victory in getting the cases dismissed. Even the district judge who dismissed the complaint in *Alec L.* closed his opinion by encouraging the parties to work together on practical solutions to address environmental issues:

While the issues presented in this case are not ones that this Court can resolve by way of this lawsuit, that circumstance does not mean that the parties involved in this litigation . . . have to stop talking to each other once this Order hits the docket. All of the parties seem to agree that protecting and preserving the environment is a more than laudable goal, and the Court urges everyone involved to seek (and

¹⁹ Robin Kundis Craig, Climate Change, State Public Trust Doctrines, and *PPL Montana*, University of Utah College of Law, [Legal Research Paper No. 57](#), *The Water Report* (Feb 2014).

²⁰ *Alec L. v. Jackson*, [863 F.Supp.2d 11](#) (D.D.C. 2012). See also *Alec L. v. Perciasepe*, [43 ELR 20117](#) (D.D.C. Unpublished Mem. Op. Denying Motion for Reconsideration, May 22, 2013). The case is now on appeal to the D.C. Circuit. Case No. 13-5192. Appellee’s Response Brief was filed on Dec 23, 2013. *Id.*, [Doc No. 1472059](#).

²¹ [132 S. Ct. 1215](#) (2012).

perhaps even seize) as much common ground as courage, goodwill and wisdom might allow to be discovered.²²

I hope to take a little time during my Introduction to Environmental Law course this summer to discuss the PTD and how creative advocacy groups are attempting to use it to address environmental problems that we never dreamed of back in 1971. These groups went to court to compel government agencies to take action, just as Professor Sax envisioned when he drafted MEPA. I can visualize Joe Sax looking down and feeling pleased that someone was paying attention during class.

²² 863 F. Supp. 2d at 17.

Still Searching for Kennedy's Significant Nexus

Michael Hasty, Louis D. Brandeis School of Law, University of Louisville

In an attempt to clarify federal wetland jurisdiction, the Supreme Court added more confusion in its *Rapanos* decision.¹ Indeed, Chief Justice Roberts foresaw the problems the Court's 4-1-4 decision would have, when he stated: "It is unfortunate that no opinion commands a majority of the Court on precisely how to read Congress' limits on the reach of the Clean Water Act. Lower courts and regulated entities will now have to feel their way on a case-by-case basis."²

Following Justice Robert's clairvoyant comments, there have been numerous appellate court rulings construing *Rapanos*, without a clear litmus test being established. Of note, the Circuits have struggled to identify which holding of *Rapanos* controls, what deference should be given to interpretations by executive agencies, and, once settling on a test, applying that test consistently to the facts. In the meantime, government regulators and the general public muddle their way through case-by-case determinations. This has resulted in significant delays in permitting decisions and added costs for land developers. Although they are not the only "waters" affected by *Rapanos*, wetlands often represent the outer extent of federal jurisdiction; thus, as in *Rapanos*; most of the lower court cases involve these ecosystems. An opinion of the Fourth Circuit provides a good illustration of these issues.³ However, before addressing that decision, some background of wetland regulation in this country is required.

In 1972, the Federal Water Pollution Control Act (FWPCA) was amended.⁴ Due to the amendments' focus on the problem of water pollution, the FWPCA became known as the Clean Water Act (CWA). The amendments' goals were to restore and maintain the chemical, physical and biological integrity of the waters of the United States and eliminate all pollutant discharges by 1985.⁵

Notably, the CWA does not mention the word "wetlands." Section 301 prohibits "the discharge of any pollutant by any person" without a permit.⁶ This includes "any addition of any pollutant to navigable waters from any point source."⁷ Of particular significance here is the term "navigable waters" which the statute defines as "the waters of the United States, including the territorial seas."⁸ The 1972 amendments to the CWA assigned responsibilities to both the U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) for regulating discharges of dredged and fill material into "waters of the United States."⁹

¹ *Rapanos v. United States*, [547 U.S. 715](#) (2006).

² *Id.* at 758 (Roberts, C.J., concurring).

³ *Precon Development Corp. v. United States Army Corps of Eng'rs*, [633 F.2d 278](#) (4th. Cir. 2011).

⁴ [33 U.S.C. § 1251](#) *et seq.*

⁵ [33 U.S.C. § 1251\(a\)](#).

⁶ [33 U.S.C. § 1311\(a\)](#).

⁷ [33 U.S.C. § 1362\(12\)](#).

⁸ [33 U.S.C. § 1362\(7\)](#).

⁹ See [33 U.S.C. § 1344](#). A Government Accountability Office (GAO) report described the agencies' roles as follows: "The Corps administers the permitting responsibilities of the section 404 program, while EPA in conjunction with the Corps establishes the substantive environmental protection standards that permit applicants must meet. EPA

These agencies subsequently interpreted “waters” to include: “Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.”¹⁰ The 1972 amendments also created the principal authority for federal regulation of wetlands: section 404 of the CWA, 33 U.S.C. §1344. While most of the CWA is administered by the EPA, section 404(a) granted the Corps the responsibility to issue permits for the discharge of two types of pollutants: dredged and fill material.¹¹ Largely because of the Corps’ prior experience administering section 10 of the Rivers and Harbors Act, it was given the authority to regulate dredge and fill activities.¹² There was legislative debate over which agency should be in charge of the 404 program. Senator Edmund Muskie (D-ME), a principal proponent of the 1972 amendments, was concerned that the Corps might not be as protective of the environment as the EPA. In the end, the House chose to give the Corps the authority for issuing permits, subject to oversight by the EPA.¹³

The Supreme Court has addressed federal regulation of wetlands in three cases. In 1985, the Court’s *Riverside Bayview Homes* opinion held that the Corps’ regulation of wetlands directly abutting Lake St. Clair in Michigan navigable waters was proper.¹⁴ This opinion validated the Corps’ and EPA’s interpretation of the CWA to include some wetlands as “waters of the U.S.” In 2001, the Court drew an outer boundary on jurisdiction when it held that an isolated pond with fringe wetlands was too far removed from the surface tributary system to be considered a “water of the U.S.” as Congress envisioned.¹⁵

Then in 2006, the Court attempted to identify the point, between *Riverside Bayview* and *SWANCC*, where federal wetland jurisdiction ended. The splintered opinions in the *Rapanos* case confirmed one thing: the Court wasn’t sure. The plurality opinion, written by Justice Scalia, stated that:

[O]nly those wetlands with a continuous surface connection to bodies that are “waters of the United States” in their own right, so that there is no clear demarcation between “waters” and wetlands, are “adjacent to” such waters and

also has final administrative responsibility for interpreting the term “waters of the United States,” a term that governs the scope of many other programs that EPA administers under the Clean Water Act. Day-to-day authority for administering the permitting program rests with the 38 Corps district offices, whereas Corps division and headquarters offices exercise policy oversight.” U.S. Gov’t Accountability Office, GAO-04-297, Report to the Chairman, Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs, Committee on Government Reform, House of Representatives: [Waters and Wetlands—Corps of Engineers Needs to Evaluate Its District Office Practices in Determining Jurisdiction](#), 5 (2004) (last visited Mar 18, 2014).

¹⁰ The Corps’ regulations are found at [33 C.F.R. § 328.3\(a\)\(1-7\)](#) (1993). The EPA’s identical regulations are found at [40 C.F.R. § 230.3\(s\)\(1-7\)](#) (1993).

¹¹ [33 U.S.C. § 1344](#).

¹² William L. Want, *Law of Wetlands Regulation*, (1st ed., Clark Boardman Callaghan, 1989).

¹³ Margaret “Peggy” Strand & Lowell M. Rothschild, *Wetlands Deskbook*, 3d ed., Environmental Law Institute (2009).

¹⁴ *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985).

¹⁵ *Solid Waste Agency of N. Cook County (SWANCC) v. U.S. Army Corps of Eng’rs*, [531 U.S. 159](#) (2001).

covered by the Act. Wetlands with only an intermittent, physically remote hydrologic connection to “waters of the United States” do not implicate the boundary-drawing problem of *Riverside Bayview*, and thus lack the necessary connection to covered waters that we described as a “significant nexus” in *SWANCC*.¹⁶

The dissent, written by Justice Stevens, affirmed the Corps’ jurisdiction over the waters in question, deferring to the Corps’ expertise. Finally, Justice Kennedy agreed with the plurality that the cases must be remanded. However, he disagreed with a strict physical connection test, instead proposing his own test: that wetlands must be demonstrated to have a “significant nexus” with the downstream surface tributary system in order to validate federal regulation.

With regard to what constitutes a “significant nexus,” Kennedy stated:

[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, physical, and biological integrity of other covered waters more readily understood as “navigable.” When, in contrast, wetlands’ effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term navigable waters.¹⁷

In establishing this nexus test, Kennedy acknowledged that wetlands, as well as temporal flowing streams and creeks, affect the chemical, physical and biological integrity of the nation’s waters. Kennedy referenced scientific literature as empirical support for the proposition that these waters perform important ecological functions. As summarized by Justice Kennedy:

Where wetlands perform these filtering and runoff-control functions, filling them may increase downstream pollution, much as a discharge of toxic pollutants would. Not only will dirty water no longer be stored and filtered but also the act of filling and draining itself may cause the release of nutrients, toxins, and pathogens that were trapped, neutralized, and perhaps amenable to filtering or detoxification in the wetlands.¹⁸

Kennedy stated that the “Corps must establish a significant nexus on a case-by-case basis when it seeks to regulate wetlands based on adjacency to non-navigable tributaries.”¹⁹ Finally, Justice Stevens made an important observation in concluding his dissent:

[W]hile both the plurality and Justice Kennedy agree that there must be a remand

¹⁶ *Rapanos*, [547 U.S. at 742](#).

¹⁷ *Id.* at 780 (Kennedy, J., concurring).

¹⁸ *Id.* at 775 (Kennedy, J., concurring).

¹⁹ *Id.* at 782 (Kennedy, J., concurring).

for further proceedings, their respective opinions define different tests to be applied on remand. Given that all four Justices who have joined this opinion would uphold the Corps' jurisdiction in both of these cases--and in all other cases in which either the plurality's or Justice Kennedy's test is satisfied--on remand each of the judgments should be re-instated if *either* of those tests is met.²⁰

Responding to *Rapanos*, the Corps and EPA issued jurisdictional guidance in June of 2007 (referred to as the "Rapanos Guidance").²¹ This guidance identifies relevant physical, chemical and biological functions needed to establish a significant nexus between a wetland and a downstream navigable water for federal jurisdiction. Despite the issuance of this guidance, "Rapanos jurisdiction" continues to be hotly debated within the regulatory community and has generated a great deal of litigation.

The Fourth Circuit's ruling in *Precon* provides a good illustration of the kind of issues that come up when applying the *Rapanos* tests.²² Precon Development Corporation applied for a Department of the Army (DA) permit in 2006 to fill 4.8 acres of wetlands for the purpose of residential development.²³ The application followed previous authorizations granted by the Corps' Norfolk District to fill 77 acres as part of Precon's 658 acre "Edinburgh Planned Unit Development (PUD)" in Chesapeake, Virginia.²⁴ Debate ensued between Precon and the Corps regarding the jurisdictional status of the 4.8 acres of wetlands. The Corps ultimately asserted jurisdiction over the wetlands in May of 2007 and then denied Precon's permit request.²⁵

Precon appealed this ruling following the Corps administrative appeals process found at 33 C.F.R. § 331.²⁶ Around this time, the Corps and EPA issued its "Rapanos Guidance."²⁷ The Corps appeals officer remanded the case to the Norfolk District for factual findings required by the guidance.²⁸ The Norfolk District then determined that the 4.8 acres were part of a total of 448 acres of "similarly situated" wetlands that affect the downstream surface tributary system.²⁹ Specifically, the Corps found that the 448 acres of wetlands contributed functions and flow to Saint Brides Ditch and to a 2,500 foot ditch. After making detailed factual findings regarding the functions performed by the wetlands and the Ditches, the Corps concluded that these waters:

[C]umulatively provide significant benefits to the river below, including retaining a significant amount of flood water/flows, removing large volumes of sediments and pollutants from the system, as well as delivering important food resources to fish

²⁰ *Id.* at 810 (Stevens, J., dissenting).

²¹ U.S. Army Corps of Eng'rs, [Jurisdictional Determination Form Instructional Guidebook](#) (May 30, 2007) (last visited Feb 19, 2013).

²² *Precon*, [633 F.3d at 281](#).

²³ *Id.* at 282.

²⁴ *Id.* at 281.

²⁵ *Id.* at 282.

²⁶ *Id.* at 282.

²⁷ See footnote 21.

²⁸ *Precon*, [633 F.3d at 283](#).

²⁹ *Id.* at 284.

and other species living and spawning in the Northwest River.³⁰

Precon then sued the Corps in the United States District Court for the Eastern District of Virginia.³¹ The district court held that the Corps properly included the 448 acres of wetlands as “similarly situated” and that the wetland’s significant nexus to the Northwest River “was supported by substantial factual findings.”³² Precon then appealed to the Fourth Circuit, contending that the Corps should not have aggregated the 448 acres of wetlands, and that regardless of the aggregation, the Corps failed to establish that the 4.8 acres of wetlands had the requisite significant nexus to the Northwest River.³³

Before analyzing Precon’s arguments on appeal, the Fourth Circuit noted that jurisdiction could be established, following *Rapanos*, “if either the plurality’s or Justice Kennedy’s test is met” (adopting Justice Stevens’ view). However, considering the nature of the wetlands in question, the court determined “that Justice Kennedy’s significant nexus test governs.”³⁴ The court first considered whether the Corps’ aggregation of the 448 acres of wetlands was proper in accordance with Justice Kennedy’s “similarly situated” comments. On this issue, the court approved the Corps’ aggregation, noting that “Justice Kennedy’s instruction that similarly situated land in a region can be evaluated together is a broad one, open for considerable interpretation and requiring some ecological expertise to administer.”³⁵ The court concluded that “the Site Wetlands continue to function as part of the entire 448 acres.”³⁶

Next, the court addressed whether the 4.8 acres of wetlands possessed a significant nexus to the Northwest River. On this question, the court again turned to Justice Kennedy’s guidance, noting that “the significant nexus test is a flexible ecological inquiry into the relationship between the wetlands at issue and traditional navigable waters.”³⁷ Then, observing that the Corps’ record did not contain enough evidence demonstrating the wetland’s influence on the Northwest River, the court held that without such evidence, the record was insufficient to support a significant nexus finding.³⁸

Although the court did state that the Corps had provided abundant evidence of the influence that the wetlands and the drainage ditches exerted on flow, water storage capacity, sediment and pollutant filtering functions, the court noted that the record was devoid of any direct demonstration that these functions extended to the Northwest River (the nearest navigable water).³⁹ The court then referenced decisions by the Ninth and Sixth Circuits as “good examples

³⁰ *Id.* at 285.

³¹ *Id.* at 286.

³² *Id.* at 287.

³³ *Id.* at 287.

³⁴ *Id.* at 288.

³⁵ *Id.* at 292.

³⁶ *Id.* at 293.

³⁷ *Id.* at 294.

³⁸ *Id.* at 295.

³⁹ *Id.* at 295.

of the type of evidence, either quantitative or qualitative, that could suffice to establish significance.”⁴⁰ Specifically, the court referred to the effectiveness of the qualitative expert testimony used in *Cundiff* showing that “wetlands’ acid mine drainage storage and flood storage capabilities had a direct and significant impact” on the Green River in Kentucky.⁴¹ Further, the court noted that the Ninth Circuit found that quantitative evidence (scientific testing results) established a significant nexus when the Corps demonstrated that wetlands affected the chloride levels of a navigable water in California.⁴²

On remand, the Corps developed a new jurisdictional determination and administrative record. The new jurisdictional determination included additional measurements of physical, chemical and biological functions of the aquatic system, concluding that “the 4.8 acre wetland area . . . in combination with the approximately 443 acres of similarly situated wetlands and tributaries within the relevant reach, have a significant nexus to the downstream traditionally navigable water, the Northwest River.”⁴³ Specifically, the Corps identified flood flow functions (water storage, flood attenuation/desynchronization), providing measures of St. Brides Ditch’s storage capacity and flow rates, noting that its “slow pacing of water greatly moderates the effect of flood flows upon the Northwest River.”⁴⁴ The Corps used expert testimony to demonstrate the flood attenuation functions of the similarly situated wetlands.⁴⁵ Further, it provided data on the sediment storage and nutrient/pollutant removal functions of the wetlands, showing that they act as sinks, reducing sedimentation downstream. In addition, the Corps demonstrated that the Northwest River suffers from low levels of dissolved oxygen, the result of high input of nitrogen and phosphorus, pointing to the pollutant trapping capacity of the wetlands.⁴⁶ It used expert testimony and scientific literature to establish that the wetlands and tributaries cycle carbon and decompose organic matter, thus providing an important source of food for aquatic organisms and support for downstream food-chains.⁴⁷ Finally, it noted that “many of the larger fish and wildlife species, including several threatened or endangered species, that inhabit the Northwest River system, use the wetland and tributary system as a travel corridor and/or feeding, breeding or nursery areas.”⁴⁸

Once the Corps’ jurisdictional determination and administrative record were revised, the district court referred the matter to a Magistrate Judge to conduct hearings and make recommendations regarding motions for summary judgment that both Precon and the Corps had filed. On July 25, 2013, the Magistrate Judge issued his report and recommended that the

⁴⁰ *Id.* at 296.

⁴¹ *United States v. Cundiff*, [555 F.3d 200](#), 210-11 (6th Cir. 2009).

⁴² *Northern California River Watch v. City of Healdsburg*, [496 F.3d 993](#) (9th Cir. 2007).

⁴³ See Norfolk District Army Corps of Eng’rs, Regulatory Branch, *Addendum to Approved Jurisdictional Determination Form for the Edinburgh PUD*, 1, Jul 9, 2012.

⁴⁴ *Id.* at 19.

⁴⁵ *Id.* at 20.

⁴⁶ *Id.* at 22-25.

⁴⁷ *Id.* at 25-27.

⁴⁸ *Id.* at 27.

district court grant the Corps' motion for summary judgment.⁴⁹ On August 9, 2013, the district court denied Precon's motion for summary judgment and granted the Corps' motion for summary judgment.⁵⁰ Of note, the Magistrate Judge concluded:

The Court finds that this is more than enough evidence to support the Corps' finding that a significant nexus exists between the wetlands and the Northwest River. The Corps record is thorough and uses valid reasoning. In the Court's view, the agencies finding has the power to persuade . . . this administrative record and the evidence included is very similar to the evidence presented in *Cundiff*. As in *Cundiff*, there are a number of expert reports and photographic evidence to support the exercise of jurisdiction. In addition there is quantitative evidence on the issue of flow. To require more of the Corps goes beyond the parameters set by the Fourth Circuit. Based on the record presented, the undersigned recommends that the Court find the Corps presented sufficient physical evidence to support its jurisdiction.⁵¹

On November 18, 2013, the District Court for the Eastern District of Virginia issued a final order concurring with the Magistrate Judge's recommendations.⁵² The court stated: "Simply put, the question before this court on remand is: Does the administrative record support the Corps' determination that the relevant 448 acres of wetlands have a significant nexus to the Northwest River? The answer, simply put, is that the record does so support the nexus."⁵³ Precon has filed an appeal with the Fourth Circuit, challenging this result.⁵⁴

Precon illustrates the many faults and failings of *Rapanos*. The Fourth Circuit accepted the Corps' aggregation of 448 acres of wetlands as similarly situated, based in large measure on the demonstration of the functions these wetlands provide as a mosaic system and the beneficial impact they have on the overall health of the watershed. However, the court rejected the Corps' argument that these beneficial impacts extend seven-miles downstream to the Northwest River, despite the Corps observation that the wetlands in question provided valuable flood storage and attenuation functions, which "greatly moderates the effect of flood flows on the Northwest River."⁵⁵ The court then inexplicably concluded that the Corps made no showing that the Northwest River "is ever prone to flooding."⁵⁶ This conclusion came after the court acknowledged that demonstrating a significant nexus "does not require laboratory tests or any

⁴⁹ *Precon Development Corp. v. U.S. Army Corps of Eng'rs* 2013 U.S. Dist. LEXIS 113481 at *5; [Case 2:08-cv-00447-RBS-TEM Document 100](#) (E.D. Va. Jul 25, 2013).

⁵⁰ *Precon Development Corp. v. U.S. Army Corps of Eng'rs*, 2013 U.S. Dist. LEXIS 112834 at *2; [Case 2:08-cv-00447-RBS-TEM Document 101](#) (E.D. Va. Aug 9, 2013).

⁵¹ *Precon*, 2013 U.S. Dist. LEXIS 113481 at **53-54.

⁵² *Precon Development Corp. v. U.S. Army Corps of Eng'rs*, [Case 2:08-cv-00447-RBS-TEM](#) (E.D. Va. Nov 18, 2013).

⁵³ *Id.* slip op at 5.

⁵⁴ E-mail from Robert Berg, Norfolk District Corps of Engineers, Environmental Scientist, to author, Activity in Case 2:08-cv-00447-RBS-TEM (Mar 20, 2014, 11:19 a.m. EDT).

⁵⁵ *Precon*, [633 F.3d at 285](#).

⁵⁶ *Id.* at 295.

particular quantitative measurements.”⁵⁷

Essentially, the court agreed that the wetlands perform valuable flood control functions, but found the qualitative evidence showing that these functions extend to the Northwest River unconvincing. It then referred to the use of scientific evidence (akin to laboratory testing) and expert testimony as the type of evidence needed to demonstrate a significant nexus. Would the court have sided with the Corps if it had submitted qualitative expert testimony showing that the Northwest River floods and the wetlands in question attenuate that flooding? What if the Corps had submitted dye-testing results showing that a pollutant could reach the Northwest River from the wetlands? The court stated that “[W]e do not believe that recitation of the flow of an adjacent tributary alone, absent any additional information regarding its significance, would necessarily suffice to establish a significant nexus. The significant nexus inquiry emphasizes the comparative relationship between the wetlands at issue, their adjacent tributary, and traditional navigable waters.”⁵⁸

When discussing his “similarly situated” rationale, Justice Kennedy noted: “Where an adequate nexus is established for a particular wetland, it may be permissible, as a matter of administrative convenience or necessity, to presume covered status for other comparable wetlands in the region.”⁵⁹ This suggests that the aggregation analysis is interconnected with the nexus finding and that the demonstration of one wetland’s nexus to the navigable water would satisfy the nexus requirement for the entire group of “similarly situated” wetlands. In *Precon*, the Corps made jurisdictional findings for other wetlands in the 448 acre grouping. Should the Corps have focused its significant nexus finding on the wetlands most likely to demonstrate an influence on the Northwest River first, and then extend the findings to apply to the additional wetlands as the court approved through aggregation? The court’s rationale and findings may provide more questions than answers regarding the meaning of the elusive significant nexus.

This lack of clarity continues to bog down the regulators and add costs and uncertainties for land development. The *Precon* debate began in 2006, the Fourth Circuit ruled on the case on January 25, 2011, and the district court decided the case on remand in August 2013. One can only imagine the carrying costs and legal fees *Precon* absorbed over this five year period. Time is money in the land development world, and identifying timeframes through the due diligence process is essential to projecting costs. If a wetland lacks a direct physical connection to a nearby stream channel, but lies some distance from the stream, the significant nexus question arises. A pre-application meeting with the Corps may reveal the agency’s qualitative views on jurisdiction. But what if the developer disagrees with the Corps’ views? Is the developer willing to spend the money it takes to appeal or litigate a significant nexus issue? The reality is that most developers would rather agree on jurisdiction with the Corps up-front and follow the permit process, than litigate.⁶⁰

⁵⁷ *Id.* at 294.

⁵⁸ *Id.*

⁵⁹ *Rapanos*, [547 U.S. at 782](#) (Kennedy, J., concurring).

⁶⁰ Interview with Jim Townsend, Chief, Regulatory Branch, Louisville District Corps of Eng’rs (Mar 20, 2014) (Indicating that the majority of permit applicants in the Louisville District submit Preliminary Jurisdictional

What about the Corps? How does it prepare factual findings when making significant nexus determinations? In *Precon*, the Fourth Circuit found that the Norfolk District did a good job of following the “Rapanos Guidance,” and that the guidance addresses the kind of issues relevant to a significant nexus finding. However, the court found that this ecological evidence was insufficient to demonstrate the interconnectedness of the aquatic resources in question with the downstream navigable water. No doubt many a wetland scientist cringes when reading judicial opinions on the sufficiency of wetland functions and the connectedness of aquatic resources within something as dynamic as a watershed. Nevertheless, the Corps must make its factual findings, then hope that a court agrees.

The Corps and EPA did make a promising initiative when they announced a proposed rule (draft guidance) in 2011, which outlined broadened measures to more accurately address the holdings of *Rapanos*.⁶¹ However, this guidance was officially withdrawn in September 2013 after receipt of more than 230,000 public comments⁶² and extensive vetting between the agencies in Washington, D.C.⁶³ Concurrently, the EPA released a draft science report titled: *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence for public comment*.⁶⁴ According to a Corps memorandum, the announced document is intended to inform a “joint agency rulemaking initiative between EPA and the Corps on CWA jurisdiction.”⁶⁵ Further, the memo announced that “this process will culminate in a report to the EPA Administrator in 2014.”⁶⁶ This abrupt announcement by the agencies represents a significant change in strategy. Whereas the 2011 draft guidance focused primarily on broader legal arguments crafted from years of analyzing Justice Kennedy’s significant nexus test, the announced 2013 approach appears to be intended to establish a broad scientific basis for significant nexus findings.

Referencing over 1,000 peer reviewed publications from scientific literature, the study suggests that many wetlands may have a significant nexus though hydrologic connectivity and an alteration of materials transport. This *connectivity* can exist even when a wetland is not connected to a river network through a surface or shallow subsurface system or when it lies well outside a riparian zone or floodplain. In addition, it suggests that such wetlands, when viewed in aggregate with other similarly situated wetlands, may possess the requisite

Determinations (PJD), which waive jurisdictional water appeal rights and enable them to move ahead expeditiously to obtain a Corps permit authorization).

⁶¹ [76 Fed. Reg. 24479](#) (May 2, 2011).

⁶² Donna Downing, EPA, Lecture, [Waters of the United States Under the Clean Water Act](#), D.C. Water Quality Standards Academy (Dec 2011).

⁶³ E-mail from Stacey Jensen, Headquarters U.S. Army Corps of Eng’rs, Regulatory Program Manager, to author, Status of Draft Guidance (Sep 27, 2013, 1:39 p.m. EDT).

⁶⁴ [Connectivity of Streams and Wetlands to Downstream Waters](#): A Review and Synthesis of the Scientific Evidence (last visited Apr 4, 2014).

⁶⁵ Memo. from Michael J. Walsh, Major General, U.S.A. Deputy Commanding General for Civil and Emergency Operations, Headquarters U.S. Army Corps of Eng’rs, to U.S. Army Corps of Eng’rs, “Waters of the United States” — Rulemaking Initiative (Oct 8, 2013) (copy on file with author).

⁶⁶ *Id.*

connectivity.

On April 21, 2014, the Corps and the EPA announced a new rulemaking initiative. This proposed rule rests largely on the assembled research/literature included in the *connectivity study*⁶⁷ (referred to as the “Report”). Specifically, the proposed rule states:

The data and conclusions in the Report concerning the strength of the relevant connections and effects of certain types of waters on downstream waters provide a foundation for the agencies’ determinations that certain waters have effects on the chemical, physical, and biological integrity of traditional navigable waters, interstate waters, or the territorial seas that are “significant” and thus constitute a significant nexus.⁶⁸

Building on this demonstrated connectivity, the proposed rule would categorically include all tributaries, defined as those channels “physically characterized by the presence of a bed and bank and an ordinary high water mark,”⁶⁹ and waters adjacent to them (including wetlands) as “waters of the United States” by rule.⁷⁰ With regard to non-adjacent waters, which are referred to as “other waters” (such as ponds and wetlands), it suggests that these waters may have a significant nexus, but that jurisdictional determinations for such waters would need to be made on a case-by-case basis. The rule does indicate that Justice Kennedy’s concept of aggregation of similarly situated waters would apply and that such waters may be considered jurisdictional if their “use, degradation or destruction . . . could affect interstate or foreign commerce.”⁷¹

The draft rule also indicates that per the *connectivity study*, gradient is a key factor for such “other water” determinations.⁷² For purposes of delineating adjacent from non-adjacent waters the draft rule defines “riparian area” and “floodplain.”⁷³ Further, the proposal solicits comments on approaches that could be used to minimize the need for case specific determinations (such as any known regional circumstances where non-adjacent waters may have demonstrated connectivity as a group).

The draft rule follows, logically, the prior agency actions. For example, it advances the use of aggregation principles for the purpose of analyzing similarly situated adjacent and non-adjacent waters (a concept first introduced in the now withdrawn 2011 draft rule).⁷⁴ Further, the

⁶⁷ *Supra* n. 64.

⁶⁸ [79 Fed. Reg. 22196](#) (Apr 21, 2014) (The draft rule notes that the *connectivity study* has not been finalized and that any final rule would be promulgated only after the study has been finalized).

⁶⁹ *Id.* at 22274.

⁷⁰ *Id.* at 22193.

⁷¹ *Id.* at 22197 (caveating this by noting that such commerce cannot be demonstrated by means of migratory bird use (i.e., prohibited by SWANCC)).

⁷² *Id.* at 22198.

⁷³ *Id.* at 22274.

⁷⁴ *Supra* n. 61.

purpose of the 2013 *connectivity study* clearly was to establish a foundation for the categorical identification of waters which could be labeled as jurisdictional by rule.

Should this rule be adopted, it would provide more clarity and efficiency in the jurisdictional process. Under existing guidance,⁷⁵ most ephemeral and intermittent streams require a significant nexus determination to confirm jurisdiction. By establishing these waters, and any waters adjacent to them, as jurisdictional by rule, alleviates the need of demonstrating that they can affect the physical, chemical and biological health of downstream navigable waters on a case-by-case basis. For example, under the proposal, the *Precon* wetlands may be considered adjacent to St. Brides Ditch, which likely would be considered a tributary. This fact alone would preclude the need for the cumbersome study the Norfolk District completed, demonstrating that these waters do indeed directly affect the health of the Northwest River.

Furthermore, should the Corps and EPA promulgate this rule, it would establish a much more legally defensible position for the agencies in any subsequent litigation. As Justice Roberts stated in *Rapanos*: “Agencies delegated rulemaking authority . . . are afforded generous leeway by the courts in interpreting the statute they are entrusted to administer.”⁷⁶ However, the proposed aggregation of similarly situated “other waters” potentially could result in the odd circumstance where a water (previously considered isolated and non-jurisdictional following *SWANCC*) may be shown to have a significant nexus following *Rapanos*. Clearly the agencies interpret the holding of *SWANCC* to mean simply that migratory bird use may not be used as a means of demonstrating a commerce clause connection. It appears that the agencies forward the proposition that aquatic health benefits resulting from connectivity, when considered in aggregate, would suffice to provide a viable commerce clause connection.

This hypothetical outcome could raise difficult constitutional issues. The *SWANCC* Court stated: “Where an administrative interpretation of a statute invokes the outer limits of Congress’ power, we expect a clear indication that Congress intended that result This concern is heightened where the administrative interpretation alters the federal-state framework by permitting federal encroachment upon a traditional state power.”⁷⁷ Moreover, Justice Scalia stated in *Rapanos* “just as we noted in *SWANCC*, the Corps’ interpretation (of the extent of “waters of the U.S.”) stretches the outer limits of Congress’s commerce power and raises difficult questions about the ultimate scope of that power.”⁷⁸ Thus any agency effort that may appear to circumvent the *SWANCC* Court’s holding, or is construed to stretch beyond the outer limit of Congress’s commerce clause power, would not be entitled to *Chevron* deference and thus runs the risk of being held unconstitutional. This issue will be worth watching should the agencies finalize the proposal as currently written.

⁷⁵ *Supra* n. 21.

⁷⁶ *Rapanos*, [547 U.S. at 758](#) (Roberts, J., concurring) (indicating that the agencies’ would be afforded *Chevron* deference for an interpretive rule which has gone through notice and comment rulemaking).

⁷⁷ *SWANCC*, [531 U.S. at 172-173](#).

⁷⁸ *Rapanos*, [547 U.S. at 738](#) (Scalia, J., plurality).

When is a Well That Receives Injections Not an Injection Well? Hughes v. Department of Environmental Quality

Daniel P. Bock, Assistant Attorney General, Environment, Natural Resources, & Agriculture Division, Michigan Department of Attorney General[‡]

On February 11, 2014, the Michigan Court of Appeals issued its unpublished opinion in *Deanna Hughes, Heather Schiele, and Ban Michigan Fracking v. Department of Env'tl. Quality*. This case concerned a declaratory ruling issued by the Michigan Department of Environmental Quality (DEQ) concerning how the DEQ processes permit applications for oil and gas wells that are proposed to be completed using hydraulic fracturing (aka “fracking”) in Michigan.

It is important to note, at the outset, that this lawsuit was not a policy referendum on the issue of fracking or whether it is a good idea. Rather, it was a dispute over whether the DEQ processes and reviews applications for oil and gas well permits properly under relevant Michigan law. The Court of Appeals affirmed that it does.

The statute that governs applications for oil and gas permits in Michigan is Part 615, Supervisor of Wells, of the Michigan Natural Resources and Environmental Protection Act, codified at MCL 324.61501 *et seq.* This law, commonly referred to as Part 615, creates the office of Supervisor of Wells within the DEQ, and grants the Supervisor broad authority to oversee and regulate oil and gas drilling in Michigan, as well as various issues associated with oil and gas drilling. Extensive administrative rules associated with Part 615 are codified at Mich Admin Code R 324.101 *et seq.*

Part 615 and the administrative rules regulate, among other things, two kinds of wells: oil and gas wells, and injection wells. Numerous provisions of Part 615 and the administrative rules draw a clear distinction between these two types of wells. MCL 324.61506(c), (i), and (o); Mich Admin Code R 324.102(x), 324.103(j), and 324.201(1)(a) and (b). The term “injection well” is defined as:

A well used to dispose of, into underground strata, waste fluids produced incidental to oil and gas operations or a well used to inject water, gas, air, brine, or other fluids for the purpose of increasing the ultimate recovery of hydrocarbons from a reservoir or for the storage of hydrocarbons.

Mich Admin Code R 324.102(x).

In other words, an injection well is a well into which fluid or other substances are injected for certain specific purposes: storage, waste disposal, and what is referred to in the rule as the “ultimate recovery of hydrocarbons.” The phrase “ultimate recovery of hydrocarbons” is

[‡] The views and information presented are those of the author and not necessarily the Attorney General. Nothing in this material is a formal or informal opinion of the Attorney General.

commonly understood within the regulatory community and the industry to refer to a process that is sometimes called “secondary recovery.”

Secondary recovery, in layman’s terms, occurs when a well has ceased to produce hydrocarbons (oil, gas, and associated materials), but the producer believes that there are still hydrocarbons present in the well, so fluid or energy is injected into the well to kickstart a second round of production. The term “secondary recovery” is defined in Michigan law as: “[t]he introduction or utilization of fluid or energy into or within a pool for the purpose of increasing the ultimate recovery of hydrocarbons from the pool.” Mich Admin Code R 324.103(j). In some situations, there can be multiple rounds of recovery (hence the use of the term “ultimate” rather than “secondary” in the definition of “injection well”).

In the *Hughes* case, the plaintiffs requested that the DEQ issue a declaratory ruling pursuant to Section 63 of the Administrative Procedures Act, declaring that wells that are completed using fracking (aka “frack wells”) are injection wells because they involve the injection of frack fluid.¹

The DEQ issued its declaratory ruling on June 28, 2012, declaring that frack wells are oil and gas wells, not injection wells. The basis for this declaration was that, as noted in the DEQ’s white paper on the issue of fracking, fracking is a onetime procedure that is part of the completion of some types of oil or natural gas wells in which water, mixed with other fluids, is pumped into the well at high pressure to create fractures in the reservoir rock that allow the oil or natural gas to flow more freely into the well bore. This means that fracking involves injecting fluid into a well as a well completion technique to increase the initial production of hydrocarbons from the well. The DEQ concluded that, because a frack well is not a well into which fluid is injected for the purpose of storage, waste disposal, or ultimate (aka “secondary”) recovery, it is not an injection well under Part 615 and the administrative rules.

Pursuant to the Administrative Procedures Act, the plaintiffs then appealed the DEQ’s declaratory ruling to the Ingham County Circuit Court. The appeal was heard by Judge William Collette. There were a number of issues before the court in the appeal, both legal and procedural. The most significant legal issue was whether any well that involves “injecting” fluid is by definition an “injection” well. The plaintiffs argued that it offends the English language for the DEQ to not consider a well an injection well if it involves the injection of fluid. The plaintiffs also argued that the court should not look to the context of the statute and rules as a whole when analyzing the definition of “injection well,” and that the court should apply the plain English definition of the word “injection,” and not consider whether it was, in this instance, a specialized term within the oil and gas industry.

¹ There was a fair amount of procedural wrangling concerning whether the plaintiffs were required to exhaust administrative remedies by obtaining a declaratory ruling from the DEQ before proceeding in circuit court, and then over whether the DEQ had issued its declaratory ruling properly. This article focuses on the legal merits of the case and does not delve too deeply into the procedure.

The DEQ argued in response that virtually every oil and gas well has fluid injected into it in some amount at some point, but that does not make every well an injection well. Rather, as set forth above, an injection well is one into which fluid is injected for the specific purposes listed in the administrative rule (storage, waste disposal, or secondary - aka ultimate - production). The DEQ also argued that Michigan law is clear that statutory provisions are to be read in the context of the statute and rules as a whole, and terms of art or terms of industry should be afforded their specialized meaning by courts.

A second argument raised by the plaintiffs was that they had submitted to the DEQ an affidavit signed by their counsel, in which he stated that he had spoken to a “leading industry expert” and asked him whether the purpose of fracking was to increase the “ultimate production of hydrocarbons,” and the expert said yes.

The DEQ responded that this argument failed for two reasons. First, it was hearsay. An affidavit stating that something is true because an expert told the affiant so in an out-of-court conversation is basically the example that evidence casebooks use to demonstrate what hearsay is. Second, this expert’s statement was clearly taken out of context, because the questions posed to him by plaintiffs’ counsel were not only out of court (in fact in the hallway at a conference unrelated to the lawsuit), but were also clearly designed to mislead him as to the point about which the plaintiff’s counsel was asking. Counsel for the plaintiffs responded in the plaintiffs’ brief that “understanding the ‘point’ is not critical to a witness giving a direct candid answer.”

The Ingham County Circuit Court upheld the DEQ’s declaration that frack wells are properly regulated as oil and gas wells, not injection wells. Plaintiffs appealed. Oral arguments were held in the Michigan Court of Appeals on February 4, 2014, and the Court of Appeals issued its unpublished *per curiam* opinion affirming the Circuit Court’s decision seven days later. The primary basis for the Court of Appeals’ decision was that fracking is a onetime process employed for the *initial* recovery of hydrocarbons, and not for any of the reasons set forth in the definition of “injection well.” The court held that the DEQ rule that defines “injection well” is unambiguous and does not include newly constructed frack wells. The court also held that the trial court properly refused to consider the affidavit of plaintiffs’ counsel about his conversation with an industry expert because it was inadmissible hearsay. The opinion is available on the Michigan Court of Appeals website, [docket number 312902](#), or via Westlaw at 2014 WL 547648.

Application of the Reasonable Use Doctrine in Riparian & Groundwater Cases

Chen Sheng, University of Illinois College of Law[‡]

I. Introduction

Even though Michigan and most states in the eastern United States are blessed with an abundance of water, an individual property owner's use of water underneath or contiguous to his property is not unlimited. The common law of most states provides that an individual property owner's use of either surface water or subsurface groundwater must be "reasonable." While common law riparian rights doctrines tend to be state-specific, there are five distinctive common law groundwater use doctrines.¹ This article focuses on the most modern and most comprehensive reasonable use doctrine as set forth in the Restatement of Torts ("the Restatement").²

The Restatement provides a list of factors for courts to consider when determining whether certain use of water is reasonable.³ Those factors include, among other things, the purpose of the use, the economic value of the use, the social value of the use, and the extent and amount of the harm the use causes to others.⁴ The list of factors is extensive, and the resolution of most disputes is very fact-specific.⁵ The Restatement proposes that the reasonable use test should be applied similarly in both riparian rights and groundwater use cases.⁶ However, only a few courts have adopted the approach proposed in the Restatement. In riparian rights cases, courts usually consider the effect of a specific water use on other riparian water users as well as the social and economic utility of competing uses.⁷ In contrast, in groundwater cases, courts tend to determine the reasonableness of a water use in the abstract by examining the efficiency of the challenged water use and by determining its reasonableness without comparing it to competing uses.⁸

For example, in *Michigan Citizens for Water Conservation v. Nestle Waters N. Am. Inc.*,⁹ a water conservation organization and some property owners sued a spring water bottling company that held groundwater rights, claiming that the company's water withdrawals unreasonably interfered with plaintiffs' water rights. The Michigan Court of Appeals discussed the different

[‡] The author would like to thank Brad Sysol and Pat Paruch for their editorial assistance.

¹ Dean Baxtresser, [Antiques Roadshow: The Common Law and the Coming Age of Groundwater Marketing](#), 108 *Mich. L. Rev.* 773, 777-85 (2010) (discussing the five distinctive common law groundwater use doctrines: the Doctrine of Capture, the Doctrine of American Reasonable Use, the Doctrine of Correlative Rights, the Doctrine of Prior Appropriation, and the Second Restatement of Torts' Doctrine of Reasonable Use).

² *See id.*; Eric T. Freyfogle & Bradley C. Karkkainen, *Property Law: Power, Governance, and the Common Good*, 151 (Thomson/West 2012).

³ Restatement (Second) of Torts § 850A (2012).

⁴ *Id.*

⁵ Freyfogle & Karkkainen, *supra* note 2, at 145.

⁶ *Maddocks v. Giles*, [728 A.2d 150](#) (Me. Sup. Jud. Ct. 1999); *Supra* note 1, at 151.

⁷ Freyfogle & Karkkainen, *supra* note 2, at 151.

⁸ *Id.*

⁹ *Michigan Citizens for Water Conservation v. Nestle Waters N. Am. Inc.*, [269 Mich. App. 25](#), 75-78 (2005).

approaches Michigan courts have taken to apply the reasonable use doctrine in riparian rights and groundwater cases.¹⁰ The Court of Appeals found that Michigan courts tend to resolve riparian water use disputes by applying a reasonable use test that compares competing water uses to determine whether the riparian use is unreasonable.¹¹ The court stated that “Whether and to what extent a given use shall be allowed under the reasonable use doctrine depends upon the weighing of factors on the would-be user’s side and balancing them against similar factors on the side of other riparian owners.”¹² This is compared to the application of the doctrine in groundwater cases, where even if a groundwater user’s depletion of the supply harms others, such use is generally deemed reasonable unless the purpose is malicious or the water is simply wasted.¹³

In the past decade, courts have considered multiple factors to determine whether a particular use is reasonable in both riparian and groundwater cases. Such factors include whether the use is on-site, whether the use interferes with other people’s water use, whether the use is domestic, and whether the manner and amount of water use is necessary.¹⁴ Nevertheless, there are also differences between the application of the reasonable use doctrine in riparian rights cases and the application of that doctrine in groundwater cases. For example, water use that involves a change of a water body’s natural course is usually considered as unreasonable in riparian rights cases, but not in groundwater cases. Also, it appears that reasonableness is subject to an objective standard in riparian rights cases, but not in groundwater cases. Further, there is an increasing emphasis on the impact of water withdrawals on natural resources in riparian rights cases, but groundwater cases continue to favor industrial and commercial use.

It also appears that in riparian rights cases, courts not only consider the effect of certain water use on other water users, but also consider the economic and social utility of competing uses. In contrast, courts tend to focus on reasonableness in the abstract in groundwater cases.¹⁵ Nevertheless, a survey of riparian rights and groundwater cases in the past decade shows that the reasonable use doctrine has been applied in a more consistent manner in groundwater cases than in riparian rights cases. Most notably, courts started to take into consideration whether a groundwater user’s use interferes with that of another. This comparison does not appear evident in riparian cases.

This article focuses on the change in the courts’ application of reasonable use doctrine in the areas of riparian rights and groundwater based on a survey of cases in the past decade. This

¹⁰ *Id.* at 55.

¹¹ *Id.*, at 57-58.

¹² *Id.*

¹³ *Id.* at 59.

¹⁴ See *Tunison v. Harper*, [286 Ga. 687](#), 688 (2010); *Citizens for Ground Water Protection v. Porter*, [275 S.W.3d 329](#), 351 (Mo. Ct. App. 2008); *Davis v. Agua Sierra Resources, LLC*, 217 Ariz. 386, 391-92; [174 P.3d 298](#) (Ct. App. 2008), *vacated and remanded* 220 Ariz. 108; [203 P.3d 506](#) (S. Ct. 2009) ; *Dowling v. Lerner*, No. [255882](#); 2006 WL 66462, *3 (Mich. Ct. App. Jan 12, 2006); *Brady v. Abbott Laboratories*, [433 F.3d 679](#), 683 (9th Cir. 2005); *Michigan Citizens*, [269 Mich. App. 25](#), 75-78 (2005); *Spear T Ranch, Inc. v. Knaub*, 269 Neb. 177, 192-93; [691 N.W.2d 116](#) (2005).

¹⁵ Freyfogle & Karkkainen, *supra* note 2.

article argues that such change is a positive development in water use law, and that courts should continue to balance the law of reasonable use and the alternative rule¹⁶ in both riparian and groundwater cases.

II. Analysis

A survey of riparian rights and groundwater cases over the last decade shows that courts have applied the reasonable use doctrine in a similar manner in both riparian rights and groundwater cases. Most notably, courts have started to consider whether a groundwater user's use interferes with that of another user. This section discusses the similarities and differences of applying the reasonable use doctrine in these cases.

Compared to older water use decisions, courts now seem to apply the reasonable use doctrine in groundwater cases in a more consistent manner than in riparian rights cases. Specific provisions for the reasonableness of water use depend on a particular state's case law, but many states rely on the Restatement for a framework.¹⁷ An analysis of court decisions indicates that most courts consider the following factors to determine whether the use of either surface water or groundwater is reasonable: whether the use is on-site; whether such use interferes with the use by another; whether the use is for domestic purposes; and whether the manner and amount of water use is necessary.¹⁸

However, courts also considered certain other factors in applying the reasonable use doctrine in some riparian rights and in groundwater cases depending upon the specific facts of the case. For example, some courts considered whether the use changed the natural course of the stream in riparian rights cases, but not in groundwater cases. Courts also seemed to apply an objective standard of reasonable use to a greater extent in riparian rights cases than they did in groundwater cases. And as a matter of public policy, courts increasingly are considering the effect of the water use on the area's natural resources in riparian rights cases, but still tend to favor industrial and commercial water use despite the use's impact on natural resources in groundwater cases.¹⁹

A. Factors Considered in Both Riparian Rights & Groundwater

In both riparian rights cases and groundwater cases, to determine whether certain water use is reasonable, courts consider whether the use is on-site, whether the use interferes with other

¹⁶ *Id.* (The alternative rule to reasonable use in riparian cases is the natural flow rule, which is the original riparian water rights rule; the alternative rule to the reasonableness rule governing groundwater use is absolute ownership.)

¹⁷ *Id.* at 144.

¹⁸ Freyfogle & Karkkainen, *supra* note 2.

¹⁹ See *Anglers of the AuSable, Inc. v. Department of Env'tl. Quality*, 488 Mich. 69, 83-84(2010); *Porter*, [275 S.W.3d 329](#), 351; *Freeman v. Blue Ridge Paper Products, Inc.*, [229 S.W.3d 694](#), 705-06 (Tenn. Ct. App. 2007); *Edmondson v. Edwards*, [111 S.W.3d 906](#) (Mo. Ct. App. 2003).

people's water use, whether the use is domestic, and whether the manner and amount of water use is necessary.²⁰

1. On-site or Off-Site Use.

Court decisions in the past decade show that whether the water use is on-site is still an important factor of the reasonable use doctrine in both riparian and groundwater cases. Courts tend to favor on-site use of surface water and groundwater, and usually find such use reasonable. The Restatement authorizes off-tract use as long as the use is reasonable,²¹ but indicates that reasonableness for off-tract use is more restrictive than for on-tract use.²² Similarly, the facts of a case showing the specific location where the groundwater will ultimately be used usually determine the reasonableness of the use.²³ In *Stanley v. Ring*, the defendant's deed was silent on whether he owned the lake that he frequently used for fishing.²⁴ The *Stanley* court held that the defendant's use was reasonable, arguing that the reasonableness of defendant's use of the lake depends "not on ownership of the land beneath the water, but on contact of the landowner's land with the water."²⁵ The court stated: We noted that the inherent value of riparian land is derived from the accessibility and proximity of the water. . . . [T]here is a presumption that the right to use and enjoyment of the water is part of the grant. These riparian interests are presumed unless the terms of the grant, conveyance or deed expressly exclude them, or unless the description of the property in the deed clearly indicates that such rights are not attached to the property.²⁶ Although the court did not expressly discuss on-site use in riparian cases, its holding implied the importance of on-site use in determining whether the use is reasonable.

Two recent groundwater cases show that on-site use is also an important factor in assessing reasonableness of groundwater use. In the *Michigan Citizens* case discussed above, the court expressly stated that one of the reasons why the court disfavored the bottling company's water use was because the company's use was not directly related to the use and enjoyment of its riparian land (construction of wells, well houses, and pipeline), while the plaintiffs' uses (recreational and aesthetic use of the lakes and streams fed by the underground aquifer) were directly related to their use and enjoyment.²⁷ The court stated that "both uses are for artificial purposes and neither is entitled to a preference. However, plaintiffs' uses are directly related to the use and enjoyment of their riparian land, whereas defendant's use is not directly related to the land from which the water is withdrawn. Hence, plaintiffs are entitled to some measure of preference as local water users."²⁸

²⁰ Freyfogle & Karkkainen, *supra* note 2.

²¹ Restatement (Second) of Torts § 855, (2012).

²² "On the other hand, it may be unreasonable for a riparian to take a quantity of water that is disproportionate to the size of the riparian tract and carry it away from the stream, especially if other riparian demands on the stream are high and other riparians are likely to be harmed." Restatement of Torts, section 855.

²³ Freyfogle & Karkkainen, *supra* note 2, at 151.

²⁴ *Stanley v. Ring*, No. [W200100950COAR3CV](#), 2002 WL 1751409 (Tenn. Ct. App. Mar 20, 2002), *4.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Michigan Citizens*, [269 Mich. App. 25](#), 75-78.

²⁸ *Id.*

The Ninth Circuit reached a similar conclusion in *Brady v. Abbott Laboratories*, where orchard owners sued a manufacturing facility, alleging that the facility's illegal removal of groundwater resulted in the destruction of their pecan orchards.²⁹ The *Brady* court found that the defendant's withdrawal of water "for the purpose of expanding its manufacturing facilities" was a determinative factor.³⁰ The court argued that the defendant's water withdrawal and subsequent use on-site resulted in a significant improvement to the land from which the water was withdrawn.³¹

In conclusion, whether the water use is on-site is an important factor in determining reasonable use in both riparian and groundwater cases over the past decade. Courts favor on-site use and tend to find such use reasonable.

2. Interference With Use by Another

Historically, while courts have always considered competing uses in riparian cases, they rarely considered competing uses in groundwater cases.³² However, water use cases in the past decade show that courts have started to consider whether a particular use of groundwater interferes with that of another. This shift has resulted in a more consistent application of the reasonable use doctrine to both riparian cases and groundwater cases.

In *Stanley*, the riparian rights case discussed above, the court found for the defendant fisherman not only because of the use-in-place doctrine, but also because the defendant's use of the lake for fishing did not interfere with any reasonable water use by others.³³

In two groundwater cases involving water use conflicts between users, the courts took the position that groundwater use would be considered unreasonable if the use is injurious to others. In *Spear T Ranch, Inc. v. Knaub*, a surface water user sued groundwater users to recover for interference with rights to creek water.³⁴ The *Spear T Ranch* court held that if groundwater use is injurious to others who have rights to the water, especially in situations where the groundwater is not sufficient for all owners, such groundwater use is unreasonable.³⁵ In *Davis v. Agua Sierra Res., LLC*, a property owner sued his predecessor in title, asserting that the grantor's conveyance of property in which it reserved commercial water rights was invalid.³⁶ The *Davis* court favored a more lenient rule of reasonable use in groundwater cases to encourage "reasonable and beneficial use of this great natural resource [water]";³⁷ but implied

²⁹ *Brady*, [433 F.3d 679](#), 683.

³⁰ *Id.*

³¹ *Id.*

³² Freyfogle & Karkkainen, *supra* note 2, at 151.

³³ *Stanley*, 2002 WL 1751409, at *4.

³⁴ *Spear T Ranch*, 269 Neb. 177, 192-93; [691 N.W.2d 116](#).

³⁵ *Id.* at 192-93.

³⁶ *Davis*, 217 Ariz. 386, 391-92; [174 P.3d 298](#) (Ct. App. 2008), *vacated and remanded* 220 Ariz. 108; [203 P.3d 506](#) (S. Ct. 2009).

³⁷ *Id.*

that whether one's groundwater use interferes with that of another is dispositive in determining if the groundwater use is reasonable.³⁸

These cases indicate that a number of courts are now applying the reasonable use doctrine in a manner that is more consistent with the application in riparian cases. Notably, however, this does not mean that the reasonable use doctrine is applied identically in both areas. With respect to groundwater use, even in groundwater cases that consider whether the water use in discussion interferes with others' water use, a court might determine what constitutes "interference" using different factors than in riparian cases. In riparian cases, a particular use might be deemed unreasonable if the court finds that the competing use is more reasonable.³⁹ However, as illustrated by the *Spear T Ranch* and *Davis* cases, some courts have found that the particular groundwater use is unreasonable if it is injurious to other water users.

3. Domestic Use

Courts frequently consider domestic water use favorably in determining reasonableness in both riparian and groundwater cases. In *Tunison v. Harper*, a landowner sued his neighbor to protect his rights in a pond located on both properties.⁴⁰ The *Tunison* court weighed one's agricultural use against the other's recreational use of the pond.⁴¹ The court concluded that those two uses should be treated equally because "the right to use water for strictly domestic purposes is the only use superior to other lawful uses of water and that other lawful uses of water should be treated equally."⁴²

In the *Michigan Citizens* groundwater case discussed above, the court ruled against the bottling company because the plaintiffs' evidence demonstrated that the defendant's use of the groundwater would harm plaintiffs' recreational and aesthetic use of the lakes and streams fed by the underground aquifer.⁴³ The court concluded that in order to demonstrate that the amount of water that the bottling company was planning on withdrawing was unreasonable, plaintiffs had to show that the company's water use interfered with their domestic water supplies.⁴⁴ As this case indicates, courts tend to favor domestic use in measuring reasonable use in groundwater cases.

4. Necessity of Manner & Amount of Water Use

In both riparian rights and groundwater cases, courts consider whether the manner and amount of water use is necessary. In *Dowling v. Lerner*, the defendants extended their dock from sixty feet to one hundred and fifteen feet out into the lake, while the plaintiffs' dock was

³⁸ *Id.*

³⁹ Freyfogle & Karkkainen, *supra* note 2, at 151.

⁴⁰ *Tunison*, [286 Ga. 687](#), 688.

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Michigan Citizens*, [269 Mich. App. 25](#), 75-78.

⁴⁴ *Id.*

only seventy-six feet long.⁴⁵ The plaintiff argued that if the defendants continued to expand the dock, the dock would encroach on other people's use of the lake.⁴⁶ The court stated: The evidence shows that there was nothing special about defendants' boat that required defendants to extend the length of their dock from sixty to 115 feet to reach deeper water. In fact, it is undisputed that the entire lake is shallow and that the water does not get any deeper at 115 feet. Also, the evidence shows that defendants had the same boat when they used the fifty or sixty-foot dock in 1996. The trial court properly considered this evidence and found that defendants unnecessarily doubled the length of their dock.⁴⁷

The court ordered the defendants to restore their docks to the original length because defendants failed to show that the extension was necessary.⁴⁸

In the *Michigan Citizens* case, the court also discussed the necessity of the manner and amount of the bottling company's water use. The company argued that its extraction of groundwater was necessary because it planned to market the extracted water as "spring water."⁴⁹ The court agreed with the defendant on the facts, but rejected the defendant's legal conclusion. The court stated:

In examining the necessity of the manner and amount of defendant's water use, it must be noted that defendant chose the Sanctuary Springs location in order to facilitate its marketing of the extracted water as 'spring water.' Hence, defendant's options for locating its wells are limited by the nature of the required water source. However, while testimony established that any reduction in the withdrawal rate below 400 gpm will result in the loss of production and jobs, testimony also established that defendant has augmented the supply of water at other plants by shipping it in as needed. In addition, by the time of the trial, defendant had already begun to explore opportunities for obtaining suitable water from other sources.⁵⁰

The court held that the company's water use was not necessary because the company had expanded its supply of water at other plants by shipping in other water when needed, and the company was already exploring other suitable water sources for this location.⁵¹

As these cases demonstrate, courts require evidence that a particular water use is necessary to be considered reasonable in both riparian and groundwater cases, especially if such use adversely affects other people's use of the water. However, based on the two cases discussed above, courts assess necessity differently in riparian cases than in groundwater cases. Courts

⁴⁵ *Dowling*, No. [255882](#); 2006 WL 66462, at *2.

⁴⁶ *Id.* at *3.

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Michigan Citizens*, [269 Mich. App. 25](#), 78.

⁵⁰ *Id.*

⁵¹ *Id.*

tend to compare a particular use against competing uses in riparian cases. However, in groundwater cases, courts tend to focus on the alternatives to the use in discussion to determine whether the manner and amount of water use is necessary.

B. Differences Between Reasonable Use in Riparian & Groundwater Cases

Traditionally, courts have applied the reasonable use doctrine in riparian cases quite differently than in groundwater cases. In riparian cases, courts have considered both the effect of a particular use on other water users as well as the economic impact and social utility of competing uses. However, courts in groundwater cases tend to focus on reasonableness in the abstract.⁵² Water use decisions in the past decade, however, indicate that courts are now applying the reasonable use doctrine more consistently in both riparian and ground water cases. As discussed above, courts consider whether the use is on-site, whether the use interferes with other people's water use, whether the use is domestic, and whether the manner and amount of water use is necessary to determine the reasonableness of water use in both riparian and groundwater cases.⁵³

Despite the fact that courts have applied the reasonable use doctrine in riparian and groundwater cases in a manner that has become more similar, the applications still have the following differences: water use that involves change of natural course is usually considered as unreasonable in riparian rights cases, but not in groundwater cases; reasonableness is subject to an objective standard in riparian rights cases, but not in groundwater cases; and there is an increasing emphasis on the impact of the use on natural resources in riparian cases, but decisions in groundwater cases continue to favor industrial and commercial use.

1. Change of Natural Course in Riparian Rights

Change of natural course is addressed only in riparian cases. An example of a case illustrating that changing natural watercourse to get exclusive use is unreasonable is *Edmondson v. Edwards*, where defendants constructed a dam and ponds that changed the water course and affected plaintiff's livestock.⁵⁴ The court held that the defendants' water use was unreasonable because the defendants diverted the natural course on their own property and excluded the plaintiff's use.⁵⁵ The court stated: "The use to which defendants sought to put the stream was not reasonable in that it diverted the natural watercourse on defendants' property to the exclusion of its long-standing use on plaintiff's property. Plaintiff was damaged by defendants' denying plaintiff his riparian right to the flow of water on his land. Defendants' exclusive use of the water that flowed in the stream was unreasonable."⁵⁶ Based on *Edmondson* alone, it is unclear whether it would still be considered unreasonable if someone changes the natural watercourse but such change does not exclude others from using the water. However, it is clear that change of the natural flow is a factor that courts consider in riparian cases involving rivers and streams.

⁵² Freyfogle & Karkkainen, *supra* note 2, at 151.

⁵³ *Supra* note 3.

⁵⁴ *Edmondson*, [111 S.W.3d 906](#), 909-10.

⁵⁵ *Id.*

⁵⁶ *Id.*

2. Objective Standard of Reasonable Use

In riparian cases, courts specifically apply the reasonable use doctrine according to an objective standard. Although not explicitly mentioned in groundwater cases, the objective standard is probably not an essential component of a court's analysis in determining whether a particular groundwater use is reasonable, based on groundwater cases from the past decade.

In *Freeman v. Blue Ridge Paper Products Inc.*, the owner of property abutting a river sued the owner of a pulp and paper mill, alleging that defendant had discharged pollutants into the river.⁵⁷ The *Freeman* court concluded that to apply the reasonable use doctrine in riparian cases, "[T]he question is not whether a reasonable person in the plaintiff's or the defendant's position would regard the invasion as unreasonable, but whether reasonable persons generally, looking at the whole situation impartially and objectively, would consider it unreasonable."⁵⁸ The court in *Freeman* made it clear that the reasonable use doctrine is applied in riparian rights cases according to an objective standard.

None of the groundwater cases in the past decade discusses the objective standard directly. Nevertheless, in *Central & Western Basin Water Replenishment District v. Southern California Water Co.*, a groundwater case where water pumpers claimed entitlement to full use of available storage space in the basin, the court discusses the efficiency of water use in assessing reasonable use of groundwater.⁵⁹ The court stated that "[I]n developing public resources for the greatest public benefit, efficiency is one relevant factor. Efficiency is not, however, synonymous with reasonable or beneficial use; the most efficient use of water [resources] is not necessarily its most beneficial or reasonable use."⁶⁰ According to the court, efficiency is not a sufficient condition for reasonable use. Even if a use is efficient, it may not be reasonable given the totality of circumstances.⁶¹ Although efficiency is not a determinative factor, it is normally a relevant factor depending upon the particular parties in the case.⁶² Based upon these opinions, it appears that using an objective standard is probably not essential in assessing whether a particular use of groundwater is reasonable.

3. Natural Resources vs. Commercial Use

A major difference between the application of the reasonable use doctrine in riparian and groundwater cases is how courts balance the impact of a particular use on natural resources against the commercial value of the water use. A review of the cases in the past decade indicates that courts tend to find surface water use unreasonable if the use has a significant negative impact on natural resources. In contrast, courts in groundwater cases usually favor industrial and commercial use of water despite its impact on natural resources.

⁵⁷ *Freeman*, [229 S.W.3d 694](#), 705-06.

⁵⁸ *Id.*

⁵⁹ *Central & Western Basin Water Replenishment Dist. v. Southern California Water Co.*, [109 Cal. App. 4th 891](#), 913-14 (2003).

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.*

In *Anglers of the AuSable, Inc. v. Department of Env'tl. Quality*, landowners sued an energy company and the state regulatory agency, alleging the agency's grant of a permit to discharge contaminated water from a clean-up site into a previously uncontaminated site violated Michigan's version of the Clean Water Act, riparian law, and the Michigan Environmental Protection Act.⁶³ The Michigan Supreme Court held that diversion of contaminated water from one source to an uncontaminated watershed is unreasonable.⁶⁴ The court stated that "It would be incongruous to hold that it is reasonable to decontaminate water by contaminating different water."⁶⁵ The court stated that "[T]he necessarily resulting harm would be spread not only to immediate downstream users but, in the end, to anyone in Michigan who relies, directly or indirectly, on our state's water remaining clean."⁶⁶ The holding in this case indicates that courts consider the effects of water use on natural resources and may find such use unreasonable if it adversely affects the environment and the public.

The impact of a particular use of groundwater has not been a major consideration in groundwater cases in the past decade. In *Citizens for Ground Water Protection v. Porter*, plaintiffs alleged that defendants' proposed use of groundwater to manufacture ethanol was unreasonable.⁶⁷ The *Porter* court held that even if manufactured product leaves the land containing some amount of groundwater, such use is not *per se* unreasonable.⁶⁸ In its holding, the court cited the legal standard in a prior case, stating: "[A]s previously discussed, the reasonable use rule in *Higday* specifically provides for and allows the reasonable taking of groundwater from the land for manufacturing that takes place on that land. Nothing in *Higday* suggests that because the manufactured product leaves the land with some amount of groundwater bound in it that such use is *per se* unreasonable."⁶⁹ Also, in the *Michigan Citizens* case, the court held that growth of industry and commercial use of water is favored, though its reasonableness is further measured by the necessity of the use and the adverse effect on other water users.⁷⁰ The court stated:

In examining the degree of harm to the Dead Stream . . . [t]he trial court determined that this reduction in flow would raise the stream's temperature and cause the stream to become choked with plant life. The trial court further found that the loss of flow would cause a narrowing of the channel by at least four feet over a period of time. The trial court determined that these effects would impair the Dead Stream's aesthetic value and its usefulness as a fishery, and would impair recreational navigation of the stream On the other hand, defendant's bottling enterprise does have significant commercial benefits. The plant directly

⁶³ *Anglers of the AuSable, Inc.*, [488 Mich. 69](#), 83-84 (2010), *vacated and dismissed as moot*, [Nos. 138863-66](#) (Apr 25, 2011) .

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Porter*, [275 S.W.3d 329](#), 351.

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Michigan Citizens*, [269 Mich. App. 25](#), 78.

employs 140 workers and indirectly benefits other workers who provide the plant with necessary goods and services. In addition, the plant provides increased tax revenues to the state and the local community through payroll and property taxes. Overall, under the facts of this case, the harms inflicted on the riparian plaintiffs and the community in general are significantly offset by the economic benefits to society and the local community. Hence, this factor does not favor any party.⁷¹

The holdings of these two cases are examples of decisions in which courts have favored industrial and commercial groundwater use when weighed against the impact of such use on natural resources.

III. Discussion of the Change of the Application of the Reasonable Use Doctrine

This author contends that the change in the application of the reasonable use doctrine in riparian rights cases and groundwater cases in the past decade has had a positive effect on existing water use law, and that courts should continue this trend in order to balance the law of reasonable use and the alternative rule for both riparian and groundwater use.

A. Riparian Rights: Reasonable Use vs. Natural Flow

The alternative rule to reasonable use in riparian cases is the natural flow rule, which is the original riparian rights rule.⁷² Under the rule of natural flow, riparian water users can only use water for domestic purposes, which are limited to household drinking and watering barnyard animals.⁷³ Any other use is artificial and subject to strict limitations. Any artificial use is reasonable only if such use does not alter the quantity or quality of the water's natural flow.⁷⁴

The natural flow rule and its application illustrate the common law theory that "the key element of private property was the right to halt any interferences with what one was doing; it was not any right to engage in intensive uses of the thing owned."⁷⁵ Indeed, the goal of the rule of natural flow is to protect family homesteads, other agrarian uses, fish and other aquatic life, and people whose livelihoods depended on natural resources.⁷⁶ This purpose of the natural flow rule and its underlying policy dictate that the natural flow rule is more restrictive of riparian uses than the reasonable use doctrine.

Despite the advantages of the natural flow rule, many courts began to adopt the reasonable use doctrine in riparian cases because the natural flow rule became an obstacle to industrial development.⁷⁷ The shift from natural flow rule to the reasonable use doctrine resulted in more

⁷¹ *Id.*

⁷² Freyfogle & Karkkainen, *supra* note 2, at 142.

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.* at 143.

⁷⁷ *Id.*

intensive use of water, and it further restructured riparian rights by expanding the right to intense water use at the expense of protection against interference.⁷⁸

In applying the reasonable use doctrine in riparian cases in the past decade, the courts have: 1) considered whether the use changed the natural flow of the watercourse, 2) imposed a strict objective standard for determining whether a use is reasonable, and 3) considered whether the use impacted natural resources. Those three elements established a more restrictive application of the reasonable use doctrine in riparian cases. This change led to a more sensible interpretation of reasonableness because it incorporates the public policy of considering the impact of the use on natural resources and the public underlying the natural flow rule.

B. Groundwater: Reasonable Use v. Absolute Ownership

The alternative rule to the reasonableness rule governing groundwater use is absolute ownership. Under the absolute ownership rule, which is the rule in many areas in the western United States, volumes of groundwater are “owned” by various parties (individuals, businesses, local governments) and no restrictions are placed on an individual owner’s use of the groundwater it owns.⁷⁹

The rule of absolute ownership expands an individual’s right to use water intensively, but at the expense of protection against interference by other users.⁸⁰ Therefore, although a particular landowner’s property rights are seemingly expanded under the absolute ownership rule because he can use all the water he wants, he forfeits the right to protection from uses by other owners which may harm his property and which may restrict his rights to use it in the manner he desires or needs.⁸¹

Compared to the rule of absolute ownership, the reasonable use doctrine balances the right to use groundwater and the right to protection against interference from uses by other owners. The decisions by courts in groundwater cases in the past decade reflect such a balance. Although most courts favor industrial and commercial use of groundwater, they also have started to consider whether a particular use injures others instead of considering only whether the use is reasonable in the abstract as in prior decades.⁸²

Although in the past decade courts have applied the reasonable use doctrine in riparian and groundwater cases in a more consistent approach, they did not apply the reasonable use doctrine in the same way. This change in the application of the reasonable use doctrine is a sensible adjustment. Groundwater is different from surface water in its nature. Therefore, the reasonable use doctrine should be applied in a less restrictive way in groundwater cases than in riparian cases to allow more versatile use of groundwater, especially for landowners without riparian water rights.

⁷⁸ *Id.*

⁷⁹ *Id.* at 150.

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.* at 151.

IV. Conclusion

Traditionally, the reasonable use doctrine has been applied in riparian cases quite differently than in groundwater cases. Courts have considered both the effect on other water users and the economic as well as social utility of competing uses in riparian rights cases; however, courts tend to focus on reasonableness in its abstract in groundwater cases.⁸³ However, a survey of riparian and groundwater decisions shows that reasonable use in groundwater has been applied in a more consistent manner than in riparian cases in the past decade. Most notably, courts have begun to consider whether a groundwater user's use interferes with that of another. Further, in both riparian and groundwater cases, courts consider whether the use is on-site, whether the use interferes with other people's water use, whether the use is domestic, and whether the manner and amount of water use is necessary.⁸⁴

Nevertheless, there are also differences between the application of the reasonable use doctrine in riparian cases and groundwater cases. Water use that involves change of natural course is usually considered unreasonable in riparian rights cases, but not in groundwater cases. Reasonableness is subject to an objective standard in riparian rights cases, but not in groundwater cases; and there is an increasing emphasis on the impact of a particular water use on natural resources in riparian cases. Cases involving groundwater, on the other hand, tend to favor industrial and commercial use at the expense of natural resources.

The change in the application of the reasonable use doctrine is a sensible adjustment. Because groundwater is different from surface water in its nature, the reasonable use doctrine should be applied in a less restrictive way in groundwater cases than in riparian cases to allow more versatile use of groundwater.

⁸³ *Id.*

⁸⁴ *Id.*