I. Introduction

“Navigating.” It’s a great verb for describing how one needs to approach environmental law and regulation in agriculture. A successful navigator needs to know where he or she is, where he or she is going, and what obstacles and dangers will be encountered en route. I’ll add that he or she also needs to be aware of what weather or conditions are forecasted or developing along the journey.

Those same needs are present for anyone who sets sail upon the sea of environmental law and regulation. What laws and regulations currently control what you are doing? What laws and regulations will affect and limit (or support) what you want to be doing? What legal or regulatory obstacles will you encounter on the way? And what legal or regulatory storms are brewing on the horizon?

In sharing such observations, I don’t think I am telling anyone in the field of agriculture anything that they probably don’t already know. After all, history tells us that some of our earliest known laws spoke to agriculture. Consider, for example, that Hammurabi’s Code, which dates back to 1750 BC in ancient Babylon, set forth these laws for your Mesopotamian predecessors:

- If anyone open his ditches to water his crop, but is careless, and the water floods the field of his neighbor, then he shall pay his neighbor corn for his loss.

- If a shepherd, without the permission of the owner of the field, and without the knowledge of the owner of the sheep, lets the sheep into a field to graze, then the
owner of the field shall harvest his crop, and the shepherd, who had pastured his flock there without permission of the owner of the field, shall pay to the owner . . . corn [to compensate for the loss].

- If any man, without the knowledge of the owner of a garden, fells a tree in the garden he shall pay [compensation for the tree].

But, nevertheless, the subtitle of this presentation is “what you need to know,” and what you need to know in 2019 is not Hammurabi’s Code, and so let me work from that navigator’s metaphor in our title to give you something useful to take home with you.

II. Where You Are – Environmental Laws and Regulations Today

At my previous firm, the lawyers in the environmental section tended to divide themselves into categories as “dirt lawyers,” or “air lawyers,” or “water lawyers.” Sometimes we’d argue as to whether endangered species or historical resources fell within the realm of a dirt lawyer or a water lawyer, but, all in all, those categories seemed to cover everything we faced. But farmers don’t have the luxury of such subdivisions. Air, water, and dirt, and the creatures in it, are exactly what any farmer is about, right? The point of this observation is simple: for better or for worse, practically every environmental law can touch upon and impact agriculture. From the federal perspective alone, consider the following:

- The Clean Air Act
- The Federal Water Pollution Control Act (aka the Clean Water Act)
- The Solid Waste Disposal Act
- The Resource Conservation and Recovery Act
- The Comprehensive Environmental Response, Compensation, and Liability Act
- The Endangered Species Act
- The Migratory Bird Treaty Act
- The Federal Insecticide, Fungicide, and Rodenticide Act
- The Toxic Substances Control Act
- The National Environmental Policy Act
- The National Historic Preservation Act
The foregoing are simply the federal statutes; the individual states can, and usually do, enact and implement their own environmental statutes (as long as they are at least as strict as their federal counterparts). Furthermore, the foregoing are statutes – i.e., legislatively-enacted laws. Each statute is implemented by volumes of regulations, implemented by various federal agencies such as the U.S. Environmental Protection Agency or the U.S. Fish & Wildlife Service.

As you can imagine, this paper and this presentation present neither the time nor the place to explain these statutes in detail. Therefore, I am going to have to rely that, building upon my theme of “navigation,” you know where you are. All I can add in that regard is twofold.

First, if any of the laws recited above were previously unknown to you, I encourage you to avail yourselves of such resources as the following:

- The Environmental Protection Agency, at www.epa.gov.
- Alabama Department of Environmental Management, at www.adem.state.al.us.
- Arkansas Department of Environmental Quality, at www.adeq.state.ar.us.
- Mississippi Department of Environmental Quality, at www.mdeq.ms.gov.

Second, again, if any of the laws recited above were previously unknown to you, then keep reading anyway. As this paper proceeds to discuss potential obstacles and provides forecasts, you’ll develop a better sense of what those laws involve.

III. Where You are Going – Compliance with Today’s Environmental Laws and Regulations

Most modern federal statutes date to the late 1960s and early 1970s, which means that today’s farmer faces environmental regulation unknown to his or her grandparents or even parents. Compliance with such regulation can come with significant cost (and even frustration), whether in terms of operations, equipment, land use, and/or professional expenses. But consider the alternatives, as illustrated by just some of the proposed settlements currently out
on public notice by the U.S. Department of Justice’s Environment and Natural Resources Division:

- In a lawsuit brought pursuant to CERCLA, a company in California (the corporate successor to an early 20th century Florida landowner) agreed to pay the U.S. Air Force $725,000 to reimburse the Air Force for costs incurred when the Air Force had to remediate arsenic and DDT contamination at old cattle vats on one of its bases in central Florida.

- In a lawsuit brought pursuant to the CWA, a lumber mill in Washington agreed to pay a $320,000 civil penalty, undertake a $435,000 Supplemental Environmental Project, and undertake other compliance actions due to unpermitted stormwater discharges from its facility and related violations.

- In a lawsuit brought pursuant to the CAA, a meat-packing plant in Massachusetts agreed to pay a $138,000 civil penalty due to its inadequate risk management plan (a plan intended to address the risk of a release of anhydrous ammonia from the facility).


In light of the foregoing, the logical conclusion becomes self-evident. If ethical or environmental imperatives do not drive compliance, then the expenses associated with non-compliance certainly should.

Consider one final thought – and an important one. As discussed above, one can (and should) identify what compliance is required and then meet that requirement. At the same time, however, I think it is a wise approach for the regulated community to take steps to try to ensure that the laws and, in particular, their relevant regulations are indeed capable of being complied with. How does one do that? In part, by tracking, considering, and commenting upon regulations as they are developed and promulgated. As a matter of administrative law, each new state and federal environmental regulation is submitted to the public for a period of public comment and review. In the case of proposed federal regulations (and not just those of an environmental nature), they can be tracked at www.federalregister.gov.

IV. Shoals, Storms, and Changing Currents – Sailing the Environmental Seas

The following are, to the agricultural community, just a few of the more potentially relevant pending or recent developments and actions in environmental law.

A. Endangered and Threatened Species

Today, there are approximately 1,623 species of plants and animals listed as endangered or threatened pursuant to the Endangered Species Act – and, as you might
imagine, the sheer volume of such protected species warrants awareness and consideration of any associated developments by the agricultural community. Consider the following:

- At the present time, the U.S. Fish & Wildlife Service is proposing downlisting the American burying beetle from endangered to threatened; it is also considering implementation of a 4(d) rule associated with the same. FWS is also considering removing the gray wolf from protected status.

- Currently, the public comment period is open on FWS’s 5-year status review for the threatened gray bat (found in Alabama, Arkansas, Florida, Georgia, Missouri) and Tennessee, among other states) and the Ozark hellbender (found in Arkansas and Missouri). The public comment period closes on June 24, 2019. This is in addition to a separate 5-year status review for 36 other species found in the Southeastern United States; that comment period closes on June 10, 2019.

- Today, there are 14 species or distinct population segments of species in the United States which the FWS has proposed for listing as threatened or endangered. These include Alabama’s slenderclaw crayfish, Missouri’s eastern hellbender, and Tennessee’s Barrens topminnow. Another 22 species or distinct population segments of species are candidates for listing. Several hundred species, on the other hand, are the subject of petitions for listing, filed by such organizations as Center for Biological Diversity and Defenders of Wildlife.

- On May 23, 2019, the Center for Biological Diversity and the San Francisco Baykeeper filed a lawsuit against the U.S. Department of the Interior and FWS in the U.S. District Court for the Northern District of California, alleging that FWS had violated the ESA by failing to timely list eight species of plant and animal as threatened or endangered. The subject list included the eastern population of gopher tortoise, found in Alabama, Georgia, and Florida, and the Berry Cave salamander, found in Tennessee.

- Approximately eight months ago, the public comment period closed on FWS’s proposed changes to certain ESA regulations. Several proposed changes relate to section 4 of the ESA, which deals with procedures for listing species, recovery, and designating critical habitat. Insofar as the ESA defines a threatened species as one that is likely to become in danger of extinction within the “foreseeable future,” the proposed regulations offered an interpretation of “foreseeable future” intended to make it clear that it extends only as far as they can reasonably determine that both the future threats and the species’ responses to those threats are probable. At the present time, no further action has been taken on this proposed change.

B. Evaluation of Pesticides’ Impacts on Threatened and Endangered Species

The Endangered Species Act (“ESA”), codified at 16 U.S.C. §§ 1531 et seq., requires, among other things, federal agencies, such as the U.S. Environmental Protection Agency
("EPA"), to ensure that their actions are not likely to jeopardize the continued existence of species listed as threatened or endangered under the ESA or destroy or adversely modify the designated critical habitat of such species. The registration of a pesticide (which includes herbicides, fungicides, and rodenticides) under the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"), codified at 7 U.S.C. §§ 136 et seq., constitutes an EPA “action” under the ESA. If EPA determines a pesticide may affect a listed species or its designated critical habitat, EPA must initiate consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (collectively, the “services”), as appropriate. EPA initiates formal consultation with the Services through the conduct and transmittal of a biological evaluation ("BE") with its findings. The result of such consultation can impact what use restrictions are imposed on a particular pesticide.

On January 18, 2017, in the final 48 hours of President Obama’s administration, EPA released its first nationwide BEs for pesticides conducted using a pilot interagency method developed by EPA and the services, with collaboration from the U.S. Department of Agriculture. The pilot method was developed following the recommendations of the April 2013 National Academy of Sciences’ ("NAS") report, Assessing Risks to Endangered and Threatened Species from Pesticides. When developing the pilot process, EPA and the services intended to revisit and refine the method to address limitations identified through evaluation of the pilot chemicals (i.e., chlorpyrifos, diazinon, and malathion).

Upon further reflection of the utilization of the pilot method, EPA now believes that the pilot method had the following major limitations: (1) the method did not meaningfully distinguish species that are likely to be exposed to and affected by the assessed pesticides from those that are not likely; (2) the level of effort was too high for EPA to sustain for all pesticides; and (3) the amount of documentation produced was too great for the public to review and comment upon in a reasonable timeframe.

Consistent with the pilot process, EPA has now developed and is proposing a revised method for the nationwide evaluation of pesticide risks to listed species that is based on the experience gained through the pilot BEs and on information received in public comments on the draft pilot BEs and through several stakeholder meetings. The following is a summary of the major aspects for which the EPA is seeking comment on the draft revised method for assessing risk to listed species.

First, to more accurately represent where and to what extent a pesticide is likely to be applied, EPA is proposing an approach for incorporating pesticide-specific usage data into the listed species consultation process. The pilot BEs relied on use assumptions from pesticide product labels to represent where the pilot chemicals were likely to be applied (e.g., applied to all labelled crops at maximum application rates simultaneously). The revised method proposes to incorporate usage data (e.g., survey data, including actual application rates) in the determination of where a pesticide is likely to be applied.
Second, based on the accuracy of the spatial data utilized and the conservative assumptions related to the action area and potential drift, EPA is interpreting a <1% overlap of listed species’ ranges with potential use sites as unreliable and not representative of real exposure potential.

Third, EPA’s revised method proposes the use of probabilistic methods to determine the likelihood of a species to be adversely affected by a pesticide. The goal of the probabilistic analysis is to more fully capture and characterize the variability in the range of potential exposures and toxicological effects to listed species and to better inform the biological opinion.

Finally, EPA proposes to apply a weight-of-evidence framework to distinguish those listed species that are likely to be adversely affected from those that are not likely to be adversely affected, based on criteria (e.g., dietary preferences, migration patterns, and extent of range potentially exposed) associated with the likelihood that an individual will be exposed and affected.


C. District Decisions, National Impacts

As can be discerned from the foregoing, one of the more challenging aspects of federal environmental law is the fact that a single federal district court, sitting in a state far afield from where a farmer or industry may be located, can render a decision that, in the end, has national impact on the way that a regulatory agency (i.e., the U.S. Environmental Protection Agency or the U.S. Fish & Wildlife Service) conducts business – and thus impact a regulated farmer or industry. In many cases, that farmer or industry might not have even been aware that such litigation was pending.

In order to partially address such concerns, the Trump administration reportedly intends to challenge the legality of nationwide injunctions before the U.S. Supreme Court in the near future. And, in the more immediate term, on May 21, 2019, the U.S. Environmental Protection Agency launched a new internet-based system “to enhance transparency of the agency’s defensive litigation activities.” The system, part of an EPA initiative intended, in part, to address concerns that the agency had, in the past, participated in “sue and settle” arrangements with environmental groups to the detriment of the regulated community without necessarily enabling the input or participation of such stakeholders. The new system is intended to provide information to the public about new litigation and promoting transparency and public participation in settlement of those lawsuits.

Members of the public who sign up using the new system will be able to select categories of litigation notices to receive, manage their personal preferences, and unsubscribe
at any time. The system can be accessed at https://www.epa.gov/ogc/email-subscriptions-new-litigation-notifications.

D. Definition of “Waters of the United States”

The CWA and its implementing regulations restrict and regulate discharges to so-called “Waters of the United States” (“WOTUS”) and the question of just what is, or is not, WOTUS has bedeviled regulators, land owners, industries, farmers, and environmental groups ever since the last major rulemaking on the topic in the 1980s – particularly since the term is not defined by the CWA itself! Although EPA and the U.S. Army Corps of Engineers have worked to provide more clarity to the question, the practical result has only been more litigation. The U.S. Supreme Court last considered the issue in the case Rapanos v. United States, 547 U.S. 715 (2008), in an endeavor that only managed to generate a 5-4 plurality decision which hinged upon a concurrence by Justice Anthony Kennedy.

In truth, the Rapanos decision did little to provide clarity to those in the field (indeed, Chief Justice John Roberts warned that “[i]t 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”), and so, during the Obama Administration in 2015, EPA and the U.S. Army Corps of Engineers promulgated a new regulatory definition of WOTUS intended to offer a workable definition of the term in congruence with the Rapanos decision. The result, however, was even more litigation focused on the rulemaking itself, followed by further rulemakings following President Trump’s inauguration that, in turn, sparked more litigation in various jurisdictions (that have, for their part, generated contradictory rulings).

Accordingly, at the present time, certain jurisdictions (to include Tennessee) define WOTUS as per the 2015 rule, whereas the rest of the nation relies upon the pre-rule definition. Furthermore, on February 14, 2019, EPA and the Corps promulgated a revised definition of WOTUS that, on April 15, 2019, completed its public notice period – and which, when finalized, will face its own challenges in court. See “Revised Definition of ‘Waters of the United States’; Proposed Rule,” 84 Fed. Reg. 4154 (Feb. 14, 2019).

Suffice it to say, therefore, that the situation surrounding the definition of WOTUS remains . . . dare I say . . . fluid. The best advice to be offered at the present time is for care to be taken and consultation to be sought before any activities (to include the placement of fill) in WOTUS are undertaken.

E. Clean Water Act’s Jurisdiction Over Groundwater

Pursuant to the CWA’s National Pollutant Discharge Elimination System (“NPDES”), one must obtain appropriate permits from federal or state officials before one can lawfully discharge pollutants into surface waters. On February 19, 2019, the U.S. Supreme Court agreed to resolve a split between the U.S. Courts of Appeal for the Fourth, Sixth, and Ninth Circuits as to how the CWA applies to groundwater and, in particular, whether that same requirement

At issue are a recent series of contradictory circuit court rulings. In February 2018, the Ninth Circuit upheld a Hawaii federal district court’s ruling that Maui County violated the CWA by allowing pollutants from four sewage wastewater injection wells to seep into the Pacific Ocean. *Hawaii Wildlife Fund v. Cty. of Maui*, 886 F.3d 737, 752 (9th Cir. 2018). The court held that the releases constituted "point source" discharges subject to NPDES permitting requirements, even though there was no direct discharge of pollutants into the ocean. *Id.* at 749. Shortly thereafter, the Fourth Circuit also held that indirect discharges to navigable waters via groundwater can also violate the CWA. *Upstate Forever v. Kinder Morgan Energy Partners, L.P.*, 887 F.3d 637, 651 (4th Cir. 2018). That fall, however, the Sixth Circuit ruled otherwise, holding that environmental groups could not pursue their CWA claims that pollutants from coal ash ponds in Kentucky had traveled through groundwater and harmed navigable waters. *Kentucky Waterways Alliance v. Kentucky Utils. Co.*, 905 F.3d 925, 932-33 (6th Cir. 2018).

As the U.S. Solicitor General has noted, the question of whether discharges to groundwater are regulated by the CWA is not a merely an academic matter; rather, the issue has "significant" implications for industry given the potential for civil penalties and even criminal punishment. See Brief for the United States as Amicus Curiae, *Cty. of Maui v. Hawaii Wildlife Fund* and *Kinder Morgan Energy Partners, L.P. v. Upstate Forever*, 2019 WL 102492 (Jan. 3. 2019) (Nos. 18-260, 18-268).

V. Conclusion

As with so many aspects of a modern economy, the modern regulatory regime brings its own peculiar challenges. Today’s farmer or fellow participant in America’s agricultural economy, therefore, has little choice but to educate himself or herself accordingly, take the steps necessary to ensure compliance, and, if possible, look for opportunities to participate in the regulatory and rulemaking process with the hope of ensuring that the burden of future regulations can be borne fairly and, for that matter, achieve the goals intended.