

**IN THE IOWA SUPREME COURT
No. 19-1644**

**Iowa Citizens for Community Improvement, and Food & Water
Watch,
Plaintiffs/Appellees,
v.
State of Iowa,
Defendants/Appellants**

**Appeal from the Iowa District Court for Polk County
The Honorable Robert B. Hanson**

**Brief of Amicus Curiae the Agricultural Legal Defense Fund
In Support of the State of Iowa**

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Identity and Interest of Amicus Curiae

The Agricultural Legal Defense Fund (the “Fund”) is an Iowa-based 501(c)(3) tax exempt organization organized in 2015 under the Revised Iowa Nonprofit Corporation Act. The Fund’s primary purpose is to protect and advance agricultural policy issues and interests through the legal system and to educate others about the legal system’s impact on agriculture.

This amicus curiae brief submitted by the Fund will discuss the State’s extensive history of water quality policies and legislation dating back more than a century. The Fund will argue that the complexity of the water quality challenges within the State, coupled with the necessity of a comprehensive approach, demands that this issue is outside the purview of this Court. Agriculture is deeply local and highly variable. There is no “one size fits all” solution. Even a single farm can contain many different attributes on different parts of the same land. The Fund believes it is vitally important for the Supreme Court to hear the voice of agriculture and to understand that there is an ongoing and very expensive effort by both private and public parties to gather the detailed watershed, drainage, crop, nutrient loads, and climate

information needed for legislative policymakers – not district court judges – to work with the existing framework that the legislature can address the complex nutrient issues examined in the present litigation.

Rule 6.906(4)(d) Statement of Authorship

The Fund is represented by the undersigned counsel, who authored this brief in whole. No party, party's counsel, or other person contributed money to fund the preparation or submission of this brief.

Argument

I. THE LIMITED SCOPE OF THE POLITICAL QUESTION DOCTRINE APPLIES TO—AND THUS PRECLUDES—JUDICIAL INTERVENTION ON THE WATER QUALITY ISSUES RAISED BY PLAINTIFFS.

For more than a century and one-half, the State of Iowa has addressed a variety of water-related challenges through legislation. Beginning in 1854, the Iowa General Assembly has responded to complex and transforming water quality challenges by pursuing solutions in what has become a substantial body of water law. In enacting such laws, the Iowa legislature has acted in response to public desire for major policy changes, federal action, and natural disasters. The Iowa legislature has frequently enacted regulatory programs after gathering data and after working with educational institutions and

other non-governmental groups. Non-governmental groups have even taken a leading role in helping to fund and develop new solutions. In many previous instances, the legislature has either ordered its own studies or relied on voluntary studies to provide guidance and data on what solutions will be effective.

Plaintiffs' goal of replacing both legislators and agricultural and environmental researchers and regulators with a district court judge is misplaced and contradictory to the proper role of the judiciary. For instance, Plaintiffs first request that the district court find that the State of Iowa has violated the Iowa Constitution and the public trust doctrine through certain "actions and inactions." Petition, Prayer for Relief, ¶ (a). However, such "actions" include enacting legislation that directly addresses the very wrongs that the Plaintiffs protest. The Plaintiffs then ask that the court enjoin the State of Iowa to adopt a "mandatory remedial plan" to implement nitrogen and phosphorus limitations in the Raccoon River watershed. *Id.*, ¶ (d). There is no way to interpret this request for injunctive relief other than to conclude that the judiciary is being asked, or would be asked, to find legislators in

contempt of court if they do not enact such laws that the district court unilaterally determines on its own to be sufficient.

In addition, the Plaintiffs ask that the district court enjoin the Defendants from authorizing the construction of medium and large animal feeding operations within an immense area of the State of Iowa. *Id.*, ¶ (e). On its face, this request is an unlawful and unconstitutional attempt to ask the judiciary to use its powers to bypass the legislative and executive branches of government.

“It is a well-established principle that the courts will not intervene or attempt to adjudicate a challenge to a legislative action involving a ‘political question.’ . . . The nonjusticiability of ‘political questions’ is primarily rooted in the separation of powers doctrine, ‘which requires we leave intact the respective roles and regions of independence of the coordinate branches of government.” *King v. State*, 818 N.W.2d 1, 16 (Iowa 2012) (quoting *Des Moines Register & Tribune Co. v. Dwyer*, 542 N.W.2d 491, 495 (Iowa 1996)). The purpose of the political question doctrine, fundamentally, is to restrain the judicial branch from interfering with matters which ought to be reserved to coordinate branches of government. *Dwyer*, 542 N.W.2d at 495. Evaluating

whether the political question doctrine impedes the judiciary's review requires an assessment of the following factors:

(1) a textually demonstrable constitutional commitment of the issue to a coordinate political department; (2) a lack of judicially discoverable and manageable standards for resolving the issue; (3) the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; (4) the impossibility of a court's undertaking independent resolution without expressing a lack of the respect due coordinate branches of government; (5) an unusual need for unquestioning adherence to a political decision already made; or (6) the potentiality of embarrassment from multifarious pronouncements by various departments on one question.

Des Moines Register and Tribune Co. v. Dwyer, 542 N.W.2d 491, 497 (Iowa 1996) (quoting *Baker v. Carr*, 369 U.S. 186, 217 (1962)).

This brief will demonstrate that the judiciary is uniquely ill-equipped to take over the policy-making and regulation of agriculture from the legislative and executive branches, and that it lacks manageable, accurate, and cost-effective standards for resolving the issues in the case at bar. Accordingly, under the *Dwyer* and *Baker* cases, it must refrain from attempting to do so.

First, there is nothing in the Iowa Constitution granting the judiciary the role of regulating water quality. In fact, in Article I, Section 18, the Iowa Constitution specifically states in the second

unnumbered paragraph (added by Amendment 13 in 1908) that “[t]he general assembly, however, may pass laws permitting the owners of lands to construct drains, ditches, and levees for agricultural, sanitary or mining purposes across the lands of others, and provide for the organization of drainage districts. . .” Iowa Constitution art. I § 18. The first provision of the *Baker v. Carr* factor cannot be met by Plaintiffs.

As will be demonstrated below, the Plaintiffs’ prayer would require the courts to create and manage a highly complex regulatory matter that is already the subject of hundreds of pages of regulations managed by hundreds of state and federal regulators. The courts are ill-equipped to tackle this inherently legislative and regulatory function. Water quality maintenance and improvement requires a long-term commitment, requiring a concerted effort from local, state, regional, private, and federal stakeholders. Creating solutions involves balancing complex economic, political, scientific, and practical interests and requirements. The collection of data over the history of water quality research in Iowa demonstrates that there is no cure-all remedy.

Therefore, the second and third *Baker v. Carr* factors are also not met by the Plaintiffs.

It goes without saying that the fourth *Baker v. Carr* factor cannot be met either: “the impossibility of a court's undertaking independent resolution without expressing a lack of the respect due coordinate branches of government.” What the Plaintiffs ask is a ruling from the district court directed against the General Assembly holding that it be enjoined and requiring that it allow the courts to substitute the court’s own policy decisions for that of the legislators. On its face, the fourth *Baker v. Carr* factor cannot be met by the Plaintiffs.

The immense and extremely complicated system of water quantity and quality within the State demands a multi-faceted solution: one which weighs the needs of watersheds with science-based cost effective solutions. These demands are better left to the State legislature for resolution.

II. THE IOWA NUTRIENT REDUCTION STRATEGY MELTS FEDERAL INITIATIVES, THE NEED FOR ANALYSIS AND EXPLORATION OF SOLUTIONS, AND THE COMBINATION OF MULTIPLE STATE AGENCIES AND PRIVATE EFFORTS.

1. Hypoxia Task Force.

In the fall of 1997, the EPA established the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force to begin the process of addressing the causes and effects of eutrophication in the Gulf of Mexico Dead Zone. *History of the Hypoxia Task Force*, U.S. Env'tl. Protection Agency (June 12, 2019), <https://www.epa.gov/ms-htf/history-hypoxia-task-force>. The Task Force released its 2008 Action Plan that called for states along the Mississippi River to develop and implement their own respective nutrient reduction strategies to assist in these efforts. Mississippi River/Gulf of Mexico Watershed Nutrient Task Force, *Gulf Hypoxia Action Plan 2008*, 32 (2008); *Iowa Nutrient Reduction Strategy*, Iowa St. U., www.nutrientstrategy.iastate.edu/ (last visited Jan 2, 2020). Iowa agreed to participate. Working in collaboration with the Iowa Department of Agriculture and Land Stewardship ("IDALS") and the Iowa State University College of Agriculture and Life Sciences, the Iowa Department of Natural

Resources (“DNR”) developed and adopted the Iowa Nutrient Reduction Strategy (the “NRS”) in 2013. *Nutrient Reduction Strategy*, Iowa Dept. Of Nat. Resources, <https://www.iowadnr.gov/Environmental-Protection/Water-Quality/Nutrient-Reduction-Strategy> (last visited Jan. 2, 2020). The NRS “is a science and technology-based approach to assess and reduce nutrients to Iowa waterways and the Gulf of Mexico.” *Id.* It outlines the efforts throughout the State to reduce nutrients such as nitrogen and phosphorus from both point sources (i.e. wastewater treatment plants, industrial facilities, etc.) and nonpoint sources (i.e. farm fields and urban areas) in a scientific, reasonable, and cost-effective manner. *Id.*; see also Petition ¶ 59.

2. Iowa Nutrient Research Center.

In 2013, the Iowa General Assembly enacted legislation ordering the Iowa Board of Regents to establish the Iowa Nutrient Research Center (“Research Center”). See Iowa Code § 466B.47. To further the efforts of the NRS, the Research Center utilizes a science-based approach to nutrient management that includes, but is not limited to, “evaluating the performance of current and emerging nutrient management practices, and using an adaptive management framework

for providing recommendations for the implementation of nutrient management practices and the development of new nutrient management practices.” *Id.* § 466B.47(2). The Research Center is headquartered at Iowa State University and operates in collaboration with the University of Iowa and the University of Northern Iowa. *About the Iowa Nutrient Research Center*, Iowa St. Univ., <https://www.cals.iastate.edu/inrc/about> (last visited January 2, 2020). The list of research projects undertaken by the Research Center is too long to reproduce in this brief, but the projects and publications can be found at this location: <https://www.cals.iastate.edu/inrc/projects> (last visited January 3, 2020). Summaries of just a handful of these projects demonstrates the futility of a centralized judicially imposed management of an extraordinarily complex issue. For instance:

- The Iowa NRS estimated potential reductions in nitrogen and phosphorous loads that could be achieved by a range of in-field and edge of field practices. However, those estimates were based on plot scale studies. Sites were identified in several areas, including the Raccoon River, and selected for close interval automated sampling and flow measurement.

Data was collected from farmers regarding nutrient management practices, crop yield, and soil phosphorus. Crumpton, W., et al., Iowa St. Univ., *Nonpoint Source Nitrogen and Phosphorous Loads at Implementation Scale: Direct Agricultural Nutrient Loads to Surface Waters in Relation to Land Use and Management*. (Feb. 2013) (last project update dated March 2016).

- The NRS includes approximately twenty individual nitrogen-loss reduction practices. This study looked at whether stacked practices have an additive or synergistic effect. Archontoulis, S., et al., Iowa St. Univ., *Assessing the Effectiveness of Individual verses multiple nutrient reduction practices on water quality and economic viability*. (Aug. 2019).
- Prior nutrient reduction research has been completed at the plot or watershed scale. That research shows that nutrient loads and reductions at plot or larger watershed scales can differ substantially due to the effects of in-stream processes, hindering model improvement and evaluation. This three-

year study looked at a Dynamic Land Ecosystem Model to estimate flow and loads, including a sub-daily scale based on hourly precipitation records. Lu, C., et al., Iowa St. Univ., *Delivery-Scale Evaluation and Modeling of Nutrient Reduction Practices*. (Sept. 2017). (Research still underway).

- Stream bank sources of phosphorus have not been quantified despite the fact that stream banks are estimated be a source of as much as 40-80% of annual sediment loads. The two-year project used LiDAR topographic data to quantify the Phosphorus loads in Iowa rivers. Schilling, K., et al., Iowa St. Univ., *Total Phosphorus Loads in Iowa Rivers and Estimation of Stream Bank Phosphorus Contribution*. (Sept. 2017). (Research still underway).
- Detection of nutrient load reductions is difficult, yet Iowans seek evidence of rapid water quality improvements. This project was aimed at improving the ability to model watershed-scale nitrogen budgets. The study determined that soybeans fixed less nitrogen from the atmosphere than is harvested in grain, meaning that nitrogen outputs exceed

inputs. Castellano, M., et al., Iowa St. Univ., *Improving the Capacity to Detect Load Reductions*. (Aug. 2018). (Final Report dated Oct. 2019).

- A high variability exists for nitrogen reduction practices, reflecting differences between soils, climate, and management practices. This project merged available tile-drainage databases to determine data relationships from modeling to assist the site-specific decision-making process. The study also found that management practices only accounted for 5-20% of nitrogen loads, with the rest due to environmental factors including seasonal precipitation, carry-over nitrate and water table effects. Archontoulis, S., et al., Iowa St. Univ., *Quantifying Temporal and Spatial Variability in NO₃-N Leaching Across Iowa*. (Dec. 2015) (Final Report dated June 2018).
- The NRS asked for research on direct measurement of nitrogen and phosphorus losses and modeling to help determine ways to reduce losses. The project studied the Cedar River watershed by conducting geo-hydrologic

mapping to find “hot spots” of soil runoff. Iqbal, M., Iowa St. Univ., *Distribution, Transport, and Biogeochemical Transformations of Agriculturally Derived Nitrogen and Phosphorus in Cedar River Watershed*. (Feb. 2013) (Final Report dated March 2016).

These projects generated many publications outlining the results of these studies. One takeaway that is obvious from a review of the projects’ scopes and results is that a great deal of scientific effort must be expended in order to determine which solutions will work best for a given climate, watershed, crop rotation, drainage system, water table, slope, application practices, natural nutrient load, soil type, cover crop, and management practice. It is only with such a comprehensive review that we will also be able to determine which solutions work in which particular environments. Real progress is being made in getting better data and a better understanding of what will work.

3. Iowa Nutrient Research and Education Council.

A crucial part of Iowa Code § 455B.177(3) is the completion of a baseline assessment in order to provide a historic point of comparison for both phosphorus and nitrogen. This is a statistical first step to

recognizing what water quality efforts have been effective and what efforts have been unsuccessful in our State thus far. It also provides guidance as to where Iowa is now in comparison to where it was during the baseline period of 1980-1996. Iowa Nutrient Research Education Council, *INREC Mission – Progress Measurement 1* (2018).

Although the state-created Research Center worked on a nutrient assessment in 2012, an additional assessment was needed to determine the official baseline for measurement. *Id.* The private non-profit Nutrient Research and Education Council (“INREC”) has played a critical role in funding and gathering baseline nutrient assessments. To bring this baseline to fruition, INREC funded the same Iowa State University science team that completed the 2012 nutrient assessment with the direction to use the same methodology when examining the baseline years of 1980-1996. *Id.* This period is consistent with the baseline utilized by the Gulf of Mexico Hypoxia Task Force. *Id.*

Plaintiffs may argue that the legislature should not seek private funding or scientific assistance to help with the nutrient issues in Iowa. However, the INREC’s assistance in the NRS process has already begun generating vital baseline information that will be used by both the

public and the legislature moving forward. That assessment shows “from the baseline period of 1980-1996 to the time of the establishment of the Iowa NRS that phosphorus losses have dropped 22 percent largely attributed to the widespread adoption of decreased tillage.” *Id.* The assessment also shows that although crop yields have increased, nitrogen losses have “remained mostly steady,” illustrating a significant increase in nitrogen use efficiency. *Id.*

An additional measurement project being funded by the INREC is the mapping of Best Management Practices. Using satellite images and LiDAR elevation, the INREC has the ability to pinpoint every Iowa watershed in the State, evaluate existing soil conservation practices in each respective watershed, and use this information to identify changes and best practices to implement in years to come. *Id.* This project will provide a statewide “basemap” of existing practices for the period from 2007-2010, as well as an assessment of the presence of these practices in the 1980s by using historical aerial imagery. *Id.*

The INREC has also been able to voluntarily obtain statistically representative samples of data from agricultural retailers in order to measure levels of farmer implementation of nutrient reduction practices

in Iowa. *See id.* INREC was selected by the Iowa State College of Agriculture and Life Sciences, IDALS, and the DNR in a competitive process to assist with this in-field data collection. See Iowa St. Univ. C. of Agric. & Life Sci., *Final Report on Data Collection of In-Field Agricultural Practices: A 3-Year Pilot Project* 1 (March 1, 2018). It is planned that Iowa State University will be able to assess the aggregated data collected by the INREC survey to scientifically calculate the tonnage of nutrient loss reductions. *INREC Mission – Progress Measurement* 1. It is important to note that because the agricultural retailer survey relies on the dealer’s verifiable data records, the assessment will capture practices not only from participants in government programs, but also from farmers who are not implementing nutrient reduction practices as part of a government program. When this sampling project is completed, the official measurement tool can be used on an annual basis. *Id.*

4. The Nutrient Reduction Strategy is Currently being Implemented with Half a Billion Dollars of Public and Private Funding.

The NRS is a dynamic plan, undergoing revisions from 2014 to 2017 when new knowledge, understanding, and challenges arose. Petition ¶ 59. By 2018, shortly after the five-year anniversary of its initial adoption, the Iowa legislature formally declared the NRS to be the State’s official nutrient reduction policy, finding that “it is in the interest of the people of Iowa to assess and reduce nutrients in surface waters over time” by implementing its framework. Iowa Code § 455B.177(3). In the same year, the legislature passed and signed Senate File 512 (2018), which dedicated an additional \$270 million to agricultural conservation practices and wastewater treatment improvements over the next twelve years. Iowa Dept. of Agric. and Land Stewardship, Iowa Dept. of Nat. Resources & Iowa St. Univ. C. of Agric. and Life Sci., *Iowa Nutrient Reduction Strategy, 2017-18 Annual Progress Report* 3 (2019). This raises the total funding to more than a half a billion dollars. *Id.* at 9. Particularly, this funding will support programs seeking to bolster NRS implementation by focusing on “edge-

of-field” practices – such as wetlands and saturated buffers – where eutrophication may be exceptionally prevalent. *Id.* at 3.

As the NRS and its corresponding programs continue to evolve, we simultaneously continue to refine how we as a State accurately measure the strategy’s progress. The very first Annual Progress Report, published in 2014, was a 17-page document summarizing notable updates regarding point source permits, the Research Center, the first Iowa Water Quality Initiative watershed projects, and other similar successes during the first year of NRS implementation. *Id.* at 4. As of the most recent Annual Progress Report released on March 7, 2019, data availability has grown at an exorbitant rate, allowing stakeholders and advocates across the State to track a variety of funding, educational outreach, and water monitoring indicators. *See id.* at 3. For instance, point source entities such as wastewater treatment facilities and related organizations continue to demonstrate cooperation with NRS objectives, convening for a 5-year review of efforts in April 2018. *Id.* Of the 154 wastewater treatment facilities listed in the NRS, 125 have received new permits requiring the facilities to actively monitor their nutrient discharge. *Id.* Community and agricultural outreach remain

steady throughout the state, with field days and educational opportunities taking place in 92 of Iowa's 99 counties within the past year. *Id.* In 2018, 14 cities and 10 industries met the NRS point source reduction targets for nitrogen removal (66% removal), while 8 cities and 3 industries met reduction targets for phosphorous removal (75% removal). *Id.* at 5. Today, at least 88% of Iowa's land drains to a location with water quality sensors maintained by State agencies and universities. Furthermore, samples of surface water are collected regularly by the Iowa Soybean Association and Agriculture's Clean Water Alliance at 302 locations and 582 edge-of-field sites. *Id.* at 6. This data is expected to contribute to Iowa's understanding of long-term nutrient discharge. *Id.* Funding is an additional positive indicator. In 2018, \$512 million in public and private funds were dedicated to NRS-related efforts. *Id.* at 5. Through its competitive grants program, the Research Center has funded over 30 projects with a principal focus on "evaluating the performance of conservation practices in reducing nutrient loss from agricultural landscapes." *Id.*

The ongoing fight against nutrient pollution in Iowa waters and the Gulf of Mexico continues. However, the significant progression and

advancement of NRS efforts cannot be ignored. Most importantly, a historical review of the NRS illustrates that the success of these efforts are directly dependent on the coordination of countless local, state, and federal parties. *Id.* at 3. As new information, data, and science is discovered and adopted, the Iowa legislature will continue to refine the strategy's framework to meet the needs of the people of Iowa.

III. THE STATE OF IOWA HAS AN EXTENSIVE HISTORY OF RESPONDING TO WATER QUALITY CHALLENGES BY PURSUING PRODUCTIVE SOLUTIONS.

A. The Interaction between the U.S. Government and the State of Iowa on Water Issues.

The history of the Iowa legislature's approach to surface and groundwater is the story of several complimentary forces: cooperative federalism, shifting public policy goals, and the discovery of new solutions through careful study. As discussed above, many of the laws governing the quality and quantity of water in Iowa have their genesis in federal action. Iowa has generally responded to federal initiatives by enacting analogous laws at the state level. The actions by the Congress, at the federal level, and the General Assembly, at the State level, also reflect the different public policy motivations active at the time.

1. Drainage Law.

As an early example, in 1850, just four years after Iowa became a state, the U.S. Congress enacted the Swamp Land Act of 1850, ch. 84, 9 Stat. 519 (codified at 43 U.S.C. §§ 982-984). This federal action was followed by the Iowa General Assembly’s “Act in Relation to Swamp Lands Within the State.” Third Session, Chapter 69, page 169. (codified at Iowa Code § 918 *et seq.* (Rev of 1860)). In passing Iowa’s first law dealing with water, the General Assembly noted that the federal Swamp Land Act’s intent was to enable certain states to “reclaim the swamp lands within their limits.” *Id.* Iowa’s own swamp lands law was quickly expanded until—after more than a century of legislation—it became one of the longest chapters in the Iowa Code. *See* Iowa Code Chapter 468 (2019). This court outlined additional history in *Board of Water Works Trustees of City of Des Moines v. SAC County Board of Supervisors*. 890 N.W.2d 50, 54 (2017).

Why is this history of drainage law important in this case? It demonstrates the starting point of the Iowa legislature’s central role in determining public policy in light of public needs and then exercising its legislative power to address that public need. This history is also

important because it demonstrates the interplay between federal action and state response.

2. Early Efforts at Federal and State Water Quality Initiatives.

In 1948, the U.S. Congress enacted the Federal Water Pollution Control Act (“FWPCA”) and laid the basic foundation for the present-day Clean Water Act. P.L. 80-845 (Act of June 30, 1948). In its nascent form, the FWPCA’s significance was twofold: first, it served to identify the nation’s interest in clean water, and, second, it directed “technical assistance funds” to state and local governments, recognizing such jurisdictions as the gatekeepers of water quality solutions. Claudia Copeland, Cong. Research Serv., RL30030, *Clean Water Act: A Summary of the Law 2* (2016). For two decades following its enactment, the FWPCA was amended to focus on municipal discharges and water quality standards. *Id.*

In response to these efforts at the federal level, the Iowa legislature created the Iowa Water Pollution Control Commission. Upper Mississippi River Comprehensive Basin Study Coordinating Committee, *Upper Miss. River Comprehensive Basin Study, Volumes 6-7*, O-300 (1970). Consistent with the purpose of the FWPCA, the

Commission was granted with the power and duty to “prevent, control and abate the pollution of the waters of the State” by adopting and enforcing various water quality standards and criteria. *Id.*

In 1949, just one year after Congress passed the FWPCA, the Iowa General Assembly also established the Iowa Natural Resources Council (“Resources Council”) and granted it jurisdiction over “the public and private waters in the state and the lands adjacent thereto necessary for the purposes of carrying out the provisions of this chapter.” Iowa Code § 455A.18 (1950); *see also* H.F. 2, 53 Gen. Assemb., Reg. Sess. (Iowa 1949) In addition, the Resources Council was instructed by the legislature to “make a comprehensive study and investigation of all pertinent conditions of the areas in the state affected by floods; . . .” Iowa Code § 455A.18. Although much of the Resources Council’s legislative direction dealt with excessive flooding, it was also given authority to approve orders issued by the State Department of Health over complaints regarding water pollution. Iowa Code § 135.19(4) (1950). Over the course of the following decade, the Resources Council published reports on water resources in the State, and its authority expanded when, in 1957, the Iowa legislature endowed the Council with

the ability to “regulate water withdrawal, use, and floodplain development based on a comprehensive plan.” Katie Rock, *Flowing Forward: Planning Iowa’s Water Quality Future* 25, (Mar. 2019). This “push and pull” relationship between federal action and state implementation has continued through to the present.

3. Creation of the Clean Water Act – Impact on Federal and State Water Quality Initiatives.

Frustration over the FWPCA’s ineffectiveness led to passage in 1972 of extensive amendments that rewrote the law (P.L. 92-500). That rewrite, which is now known as the Clean Water Act, created the National Pollution Discharge Elimination System (“NPDES”) program. 33 U.S.C. § 1342 (2019). Forty-six states are authorized under the CWA to administer the NPDES program, while the remaining states are overseen by the Environmental Protection Agency (“EPA”). Copeland, *Clean Water Act: A Summary of the Law* at 4.

In 1978, “the Administrator of the EPA approved the State of Iowa’s NPDES program pursuant to the authority of Section 402(b) of the CWA.” Memorandum of Agreement, Iowa Dep’t of Natural Resources and the U.S. EPA (2015). The DNR’s power to regulate was

memorialized in a Memorandum of Agreement (“MOA”), which has been reaffirmed in subsequent MOAs to date. *Id.* at 1.

4. Iowa Response to the Clean Water Act.

In addition to requesting approval of the State’s NPDES program, the INRC developed the Iowa Water Plan ‘78. *See generally* Akin, Wallace, editor, *Iowa Water Plan ‘78 The Framework Study – Summary Report, Iowa’s State Water Plan Phase I* (July 1978). This plan was the culmination of a three-year cooperative effort between the Resources Council, the Department of Environmental Quality, the Iowa Conservation Commission, the Department of Soil Conservation, and the Iowa Geological Survey, which was directly funded by the legislature. *Id.* at 1. In addition to the foregoing state departments and commissions, eight federal agencies, and four named private entities, including the Iowa Association of Rural Water Districts, Mid-America Power Pool, the Iowa Utility Association, and the Izaak Walton League of America were participants in the framework’s planning process. *Id.* at 2.

Four years later, in 1982, the legislature established the Department of Water, Air and Waste Management (“DWAWM”), and

mandated “the assessment of water needs for all users at five intervals from 1985 through 2004 and the preparation of a general plan of water allocation considering the quantity and quality of water resources available to meet the needs of water users” Jack Riessen, P.E., *Comprehensive Water Planning in Iowa: Past Efforts* 3, (Feb. 2009).

In 1985, the State Water Plan envisioned by DWAWM was published. *See generally* Dept. of Water, Air and Waste Management, *The State Water Plan* (Jan. 1985). Building on prior reports issued by the DWAWM – such as *A Primer on Iowa’s Water; Water Availability in Iowa; Water Use in Iowa; and Water Resources in Iowa* (commonly referred to as the *Draft Water Plan*) – the comprehensive State Water Plan outlined several precise proposals addressing water conservation, development of a priority allocation scheme, amendment to the definition of beneficial use, and development of a groundwater protection strategy. *Id.* at 8. Perhaps, most importantly, the Plan called for a statutory amendment to Iowa Code Chapter 455B.263(1) to provide for a legislative mandate for the preparation of a State groundwater protection strategy.

Thereafter, in the spring of 1987, the Seventy-Second General Assembly of Iowa passed House File 631, better known as the Groundwater Protection Act. Iowa Code § 455E.1, *et seq.* (2020). The bill, signed by then-Governor Terry Branstad, was largely uncontroversial, passing the house by a vote of 81-16 and the Senate by a vote of 40-5. H.F. 631, 72nd Gen. Assemb., Reg. Sess. (Iowa 1987). This legislation was a major step towards regulating and protecting Iowa's groundwater resources. The impetus behind the legislation was a proposal sent by a group of environmental scientists to the State Board of Regents, expressing deep concern regarding contaminated drinking water. *Groundwater Protection Act*, C. for Health Effects of Env. Contamination, <https://cheec.uiowa.edu/about/groundwater-protection-act> (last visited Jan. 3, 2020). The proposal, along with substantial public concern surrounding water quality in the State, led to its successful enactment. *See id.* Importantly, the Act created the Center for Health Effects of Environmental Contamination at the University of Iowa, the Leopold Center for Sustainable Agriculture at Iowa State University, and the Iowa Waste Reduction Center at the University of Northern Iowa. *Id.*

B. Early Iowa-Based Citizen-Government Voluntary Studies

It is the Fund's argument that far from being a threat, the utilization of voluntary efforts to study and combat water challenges is a benefit to the citizens of Iowa and clearly in the State's best interest. The 1930s saw a reversal of the problem tackled by the State of Iowa in the 1800s. Severe drought conditions gripped the Midwest. Instead of too much water, there was not enough water. Iowa Water Resources Data System, *Drought in Iowa: Pattern, Frequency, Intensity* 3 (Dec. 1979). In 1934, Iowa Governor Clyde L. Herring appointed the State Planning Board. See generally *A Report of Progress I, Iowa State Planning Board* (Sept. 1934). The Board was comprised of "a non-partisan group of citizens . . . working to bring about planned progress in the conservation and development of our land, water, human and industrial resources through local, state, and federal cooperation." Iowa St. Planning Board, *Abstract of the Iowa Conference on Planning* 1 (Apr. 16, 1936). In 1935, the Board published *Water Resources of Iowa: 1873-1932*. See generally Iowa State Planning Board, *Water Resources of Iowa: 1873-1932* (1935). The report was prepared in cooperation with the Water Resources Branch of the United States Geological Survey and

the Iowa Institute of Hydraulic Research. *Id.* at 3. In its more than 500-pages, the report detailed the importance of long-term data related to stream flow. *Id.* at 2. In a prescient observation directly applicable to this case, the State Planning Board noted that stream flow information was also important to determine how much treatment the streams needed to remove pollution: ***“In fact, without a record of the discharge in the stream it is impossible to give an intelligent opinion as to the definite need for sewage treatment, since the degree of treatment necessary must be predicated upon the amount of dilution water available.”*** *Id.* If the Plaintiffs were around in the 1930s they would probably have sued to stop the collection of this stream flow data by the State of Iowa since it included volunteers.

C. Previous Legislative Public-Private Efforts.

In 1998, the Iowa Environmental Council—with the input of statewide stakeholders—developed the Water Quality Action plan. Jack Riessen, P.E., *Comprehensive Water Planning in Iowa: Past Efforts 3* (Feb. 2009). This publication led to the Legislature’s 1999 establishment of the Watershed Protection Program. Katie Rock,

Flowing Forward: Planning Iowa's Water Quality Future 25 (Mar. 2019). The Program also established the Iowa Watershed Task Force, which devoted roughly \$4 million to watershed protection grants in local communities. *Id.* at 3. The Task Force published its first report in 2001, with five stated goals and recommendations, including, that the State: (1) develop a framework for enhanced cooperation and coordination; (2) increase state support for watershed protection; (3) build local capacity for watershed initiatives; (4) emphasize the role of watershed efforts in flood mitigation; and (5) encourage citizen involvement. Iowa Watershed Task Force, *2001 Report* 1-3 (2001).

By 2006, the Iowa Legislature called for the creation of a Watershed Quality Planning Task force to focus primarily on voluntary statewide water quality programs and needs. S.F. 2363, 81st Gen. Assemb., Reg Sess. (Iowa 2006). The legislature called on the Task Force to draft a report by June 30, 2008, containing recommendations focusing primarily on the creation of performance-driven watershed management tracking indicators, as well as economic incentives for voluntary nonpoint source load reductions. *Final Report, Watershed Quality Planning Task Force* 3 (Nov. 2007). Voting membership of the

Task Force included: The Iowa Association of Municipal Utilities; the Iowa League of Cities; the Iowa Association of Business and Industry; the Iowa Water Pollution Control Association; the Iowa Rural Water Association; Growing Green Communities; the Iowa Environmental Council; the Iowa Farm Bureau Federation; the Iowa Corn Growers Association; the Iowa Soybean Association; the Iowa Pork Producers Association; Conservation Districts of Iowa; the Iowa Department of Agriculture and Land Stewardship; the Iowa Department of Natural Resources; and the Iowa Conservation Alliance. *Id.* In just over a year, the Task Force met 23 times, and gained input from “54 professional experts, academics and citizens.” *Id.* The final version of the report included six recommendations: (1) creation of a water resources coordinating council; (2) development of a water quality research and marketing campaign; (3) larger (regional) watershed assessment, planning and prioritization; (4) smaller (community-based) watershed assessment, planning, prioritization and implementation, (5) support for smaller (community-based) watershed monitoring and measurement; and (6) a revamp of wastewater and stormwater treatment infrastructure. *Id.* at 5–6. These recommendations were then

integrated into legislation passed in 2008, which coincided with record flooding throughout the State. H.F. 2400, 82nd Gen. Assemb., Reg. Sess. (Iowa 2008).

Conclusion

Iowa has been blessed with the most nutrient rich soil in the world. While the ability of this land to produce food products is unmatched, there is a challenge to keeping the nutrients from entering the waterways. Iowa has not shirked that duty and the Nutrient Reduction Strategy is rapidly developing the answers and methods needed to protect Iowa's water. Water quality maintenance and improvement is a long-term commitment, requiring a concerted effort from local, state, regional, and federal stakeholders. The collection of data over the history of water quality research in Iowa demonstrates that there is no cure-all remedy. Every farm, acreage, watershed, and river system is unique and offers a different challenge to maintain and reduce nutrient runoff. The research that has already begun, at a cost that exceeds by several times the entire budget of Iowa's judiciary, should be allowed to continue. Otherwise, there is an immediate risk that judicial involvement will cause even greater harm to Iowa despite

the intention to find a quick fix. Although Plaintiffs are obviously looking for instant solutions, junking nearly a decade of science by surrendering to judicial management a very complex system would be a step backwards. This brief has opened a very tiny 7,000-word window into a huge and heavily funded research effort that is finding, developing, and implementing solutions.

The Iowa legislature has changed its public policy position on water as need and awareness has changed over time. In responding to these public policy changes, the legislature has consistently chosen a deliberative path forward. On occasion, the legislature has implemented new laws, borrowed from federal legislative initiatives, approved and funded studies, and has sometimes revisited old laws when the legislative determination has been made that past efforts needed to be revised. However, at no time have these actions been dictated by the judicial branch. Plaintiffs have provided no examples where the judicial branch of government has taken upon itself to develop legislative remedies to order those legislative remedies.

The Fund respectfully requests that this Court reverse the ruling by the Polk County District Court.

Respectfully submitted,

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/s/ James L. Pray
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CERTIFICATE OF FILING AND SERVICE

I hereby certify that on January 3, 2020, I electronically filed the foregoing document with the Clerk of the Iowa Supreme Court by using the Iowa Judicial Branch electronic filing system, which will send notification of such filing to the following:

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