IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF IOWA WESTERN DIVISION

BOARD OF WATER WORKS TRUSTEES OF THE CITY OF DES MOINES, IOWA, Plaintiff vs.	NO.: 5:15-cv-04020
SAC COUNTY BOARD OF SUPERVISORS AS TRUSTEES OF DRAINAGE DISTRICTS 32, 42, 65, 79, 81, 83, 86, and CALHOUN COUNTY BOARD OF SUPERVISORS and SAC COUNTY BOARD OF SUPERVISORS AS JOINT TRUSTEES OF DRAINAGE DISTRICTS 2 AND 51 and BUENA VISTA COUNTY BOARD OF SUPERVISORS and SAC COUNTY BOARD OF SUPERVISORS AS JOINT TRUSTEES OF DRAINAGE DISTRICTS 19 and 26 and DRAINAGE DISTRICTS 64 and 105. Defendants.	COMPLAINT

Plaintiff, Board of Water Works Trustees of the City of Des Moines, Iowa submits its Complaint as follows:

NATURE OF ACTION

1. This is a citizen enforcement action under 33 U.S.C. § 1365 of the Federal Water Pollution Control Act (commonly known as the "Clean Water Act" or the "CWA") and Iowa Code § 455B.111 against Sac County Board of Supervisors as Trustees of Drainage Districts 32, 42, 65, 79, 81, 83, 86, and Calhoun County Board of Supervisors and Sac County Board of Supervisors as Joint Trustees of Drainage Districts 2 and 51 and Buena Vista County Board of Supervisors and Sac County Board of Supervisors and Sac County Board of Supervisors as Joint Trustees of Drainage Districts 19 and

26 and Drainage Districts 64 and 105 (collectively the "Drainage Districts") brought on behalf of the Board of Water Works Trustees of the City of Des Moines, Iowa ("Des Moines Water Works") for the discharge of nitrate pollution into the Raccoon River and the failure to obtain a National Pollution Discharge Elimination System ("NPDES") permit or other state permit in violation of the Clean Water Act, 33 U.S.C. §§ 1311(a) and 1342(a), Iowa Code § 455B.186, and state and federal regulations enacted thereunder.

- 2. This complaint seeks a declaratory judgment that the Drainage Districts have violated the Clean Water Act and the Iowa Code by failing to comply with the effluent limitations prescribed by the Clean Water Act's NPDES permit system and the state's NPDES program, injunctive relief, civil penalties, and the award of costs, including attorney and expert witness fees. This is also an action for civil claims for damages and other equitable and legal relief under the United States and Iowa Constitutions, federal statutes, and Iowa statutory and common law.
- 3. Des Moines Water Works is a regional water utility providing drinking water to approximately half a million Iowans, both by direct service and by wholesale service to other utilities and districts, that obtains its raw water supply primarily from the Raccoon and Des Moines Rivers.
- 4. This case concerns the detrimental impact of the activities of the Drainage

 Districts on the sources of raw water from the Raccoon River relied upon by Des Moines Water

 Works.
- 5. Under the Safe Drinking Water Act, 42 U.S.C. § 300f et seq. (1996), Des Moines Water Works is obligated to meet the maximum contaminant level ("MCL") standards set by the Environmental Protection Agency (the "EPA") in its finished water. The MCL for nitrate is 10

mg/L.

- 6. The health risks associated with nitrate contamination include blue baby syndrome and potential endocrine disruption impacts.
- 7. In addition to health risks to drinking water, nitrate pollution also causes eutrophication and the development of hypoxic conditions in public waters, including the Gulf of Mexico's "dead zone".
- 8. Over the last thirty years, Des Moines Water Works has invested millions of dollars in capital infrastructure and has developed strategies to manage periodic high nitrate levels in the Raccoon River.
- 9. Despite the investments and efforts of Des Moines Water Works, record nitrate peaks in the Raccoon River watershed in the summer of 2013, the fall of 2014, and the winter of 2015 have threatened and continue to threaten the security of the water supply and the ability of Des Moines Water Works to deliver safe water in reliable quantities at reasonable cost.
- 10. A major source of nitrate pollution in the Raccoon River watershed is the artificial subsurface drainage system infrastructure, such as those created, managed, maintained, owned and operated by the Drainage Districts, consisting of pipes, ditches, and other conduits that are point sources which transport high concentrations of nitrate contained in groundwater.
- 11. Although this problem has been scientifically studied and documented for decades there has been no adequate or effective response to nitrate pollution from drainage systems.
- 12. In order for Des Moines Water Works to continue to provide clean and safe water at reasonable cost, and to protect the State of Iowa and the United States from a further environmental and health crisis, the discharge of nitrate from drainage district infrastructure must be addressed.

- 13. As explained more fully below, the discharge of nitrate by the Drainage Districts is pollution by a point source in violation of the CWA and Iowa Code § 455B.186(1) and an NPDES permit or other permit is required for the ongoing discharges by the Drainage Districts.
- 14. Alternatively, in addition to relief under the CWA and Iowa Code Chapter 455B, the discharge of nitrate pollution into the Raccoon River by the Drainage Districts constitutes a nuisance, a trespass; negligence; an unconstitutional taking of rights secured to Des Moines Water Works by the constitution and laws of the United States and the State of Iowa, and a deprivation of rights under color of law.

JURISDICTION AND VENUE

- 15. This Court has jurisdiction in accordance with 33 U.S.C. § 1365(a) (action arises under the CWA's citizen suit provision), 28 U.S.C. § 1331 (action raises a federal question under the laws of the United States); and 28 U.S.C. §§ 2201, 2202 (action requests declaratory and injunctive relief in a case of actual controversy), 28 U.S.C. § 1343(a) (action for the vindication of civil rights); 28 U.S.C. § 1367 (supplemental jurisdiction over claims that are part of the same case or controversy under Article III of the United States Constitution), 28 U.S.C. § 1651 (authorizing the district court to issue all writs necessary in aid of its jurisdiction); and 42 U.S.C. §§ 1981, 1983 (action for the vindication of civil rights).
- 16. Venue is proper in the United States District Court for the Northern District of Iowa, Western Division, pursuant to 28 U.S.C. § 1391 because all of the defendants are residents of the state where the district is located, and a substantial part of the events giving rise to the claims occurred there.
- 17. Filing in the Western Division of the Northern District is proper under 28 U.S.C.§ 95 because Buena Vista and Sac counties are within the Western Division and a substantial

part of the events giving rise to the claims occurred there.

- 18. The unlawful discharge of pollutants by the Drainage Districts occurred in the United States District Court judicial district for the Northern District of Iowa and therefore venue is proper under the CWA, 33 U.S.C. §1365(c)(1).
- 19. Des Moines Water Works has provided the Drainage Districts with a Notice of the Intent to Sue (the "Notice") for the violations alleged in this Complaint as required under 33 U.S.C. § 1365(b)(1)(A) and by Iowa Code § 455B.111(2). A copy of the Notice is attached as **Exhibit 1.** This Notice was sent to each of the Chairs of the Boards of Supervisors in Sac County, Calhoun County, and Buena Vista County, Iowa on January 9, 2015. Copies of the Notice were also mailed to the Administrator and Regional Administrator of the EPA and to the Iowa Department of Natural Resources.
- 20. More than sixty days have passed since the Notice was postmarked and mailed and based on information and belief the violations outlined in the Notice and alleged in this Complaint continue unabated and the Drainage Districts remain in violation of the CWA and Iowa Code Chapter 455B.
- 21. Neither the United States nor the State of Iowa has commenced or is diligently prosecuting a civil or criminal enforcement action to redress the asserted violations of 33 U.S.C. § 1365(b)(1)(B) and Iowa Code § 455B.111.
- 22. Des Moines Water Works has standing to assert the claims made herein in that it has a direct and pecuniary interest in the quality and purity of its source waters and it is directly injured by source water polluted by high levels of nitrate.

PARTIES

23. Des Moines Water Works is a municipal water utility in Des Moines, Iowa

organized and acting under Iowa Code Chapter 388, which provides water service regionally in the Des Moines area. It is located at 2201 George Flagg Parkway, Des Moines, IA 50321.

- 24. Des Moines Water Works has the statutory power to be a party to a legal action under Iowa Code § 388.4.
- 25. Drainage Districts 32, 42, 65, 79, 81, 83, 86, and 2-51, 19-26, 64-105 are managed or jointly managed by the Sac County Board of Supervisors, Buena Vista County Board of Supervisors, and Calhoun County Board of Supervisors as trustees under Iowa Code Chapter 468. They are political subdivisions of the State of Iowa located as shown in the map attached as **Exhibit 2**.
- 26. The Drainage Districts are each a "person" within the meaning of 33 U.S.C. § 1362(5) and Iowa Code § 455B.171(18).
- 27. The Drainage Districts are organized and existing under authority of Article I, § 18 of the Iowa Constitution and Iowa Code Chapter 468.
- 28. The Drainage Districts have created, operated and maintained drainage facilities which collect and discharge groundwater directly into ditches and streams, including discharges that reach the Raccoon River.
- 29. The Boards of Supervisors named herein, as governing trustees of the Drainage Districts, have power and control over the drainage infrastructure within their boundaries under Iowa Code § 468.526, and as such are legally responsible for compliance with applicable state and federal law, including but not limited to the CWA, Chapter 455B, and other statutory and common law.
- 30. Under Iowa Code § 468.89 a board of supervisors and the drainage districts the board represents may be named as defendants in an action concerning the drainage districts.

31. The Iowa Supreme Court has held, most recently in Chicago Cent. & Pacific R.

Co. v. Calhoun County Bd. of Sup'rs, 816 N.W.2d 367 (Iowa 2012), that a drainage district is exempt from suit in tort and for money damages based on its "special and limited duties conferred by the Iowa Constitution," but as set forth herein such exemption either does not apply, or if otherwise applicable, would deprive Des Moines Water Works of due process of law, or the equal protection of law under the United States Constitution, the Constitution of the State of Iowa, or both.

FACTS

A. THE NATIONAL & STATE NITRATE PROBLEM

- 32. The pollution of the rivers and streams of Iowa by nutrients, including nitrate, is a problem of statewide and national significance.
- 33. Iowa's streams and rivers, including the Raccoon River, contribute significantly to hypoxia in the Gulf of Mexico.
- 34. The issue of Gulf hypoxia has been identified by federal law as a problem since at least 1998 by adoption of Title VI of the Coast Guard Authorization Act of 1998, Pub. L. No. 105–383, 112 Stat. 3411, as recently amended by the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014, Pub. L. No. 113-124, 128 Stat. 1379 (June 30, 2014), codified at 33 U.S.C, § 4001, et seq.
- 35. Although the above cited provisions by their terms neither expand nor contract any regulatory authority as provided in 33 U.S.C. §§ 4006-4007, such Acts identify the national significance of nutrient pollution and the degree of federal concern.
- 36. By May of 1999, the National Oceanic and Atmospheric Administration established that agricultural drainage is a significant contributor to hypoxia in the Gulf of Mexico

as follows:

Drainage of agricultural land by tile drains and other means contributes to the high nitrate concentration and flux in the Mississippi River. Tile drains short-circuit the flow of ground water by draining the top of the ground water system into tile lines and ditches and eventually to the Mississippi River. Tile drainage water can have very high nitrate concentrations.

Flux and Sources of Nutrients in the Mississippi-Atchafalaya River Basin, NOAA Coastal Ocean Program, Decision Analysis Series No 17 at xyi (May 1999), available at http://oceanservice.noaa.gov/products/hypox_t3final.pdf

37. Iowa has over 640 waters that are currently considered to be impaired, some by reason of nutrient pollution including nitrate.

http://www.iowadnr.gov/Environment/WaterQuality/WaterMonitoring/ImpairedWaters.aspx

- 38. Scientific research and technical studies show that high nitrate concentrations in the Raccoon River watershed are a direct result of nitrate discharged from agricultural drainage district facilities.
- 39. The Iowa Nutrient Reduction Strategy (the "Strategy"), is a 204 page report developed by the Iowa Department of Agriculture, Iowa Department of Natural Resources, and Iowa State University to assess the issues of nutrients in Iowa waters and the Gulf of Mexico.

 Almost 160 pages of the Strategy are devoted to agricultural sources, such as drainage tile. The Strategy is available online at

http://www.nutrientstrategy.iastate.edu/sites/default/files/documents/NRSfull-141001.pdf

- 40. According to the Strategy, sources not currently regulated as point sources create 92% of nitrate pollution entering Iowa's waterways. These sources include agricultural drainage, which is noted as a major contributor in the Strategy at page 9.
 - 41. Despite its factual findings, the Strategy addresses agricultural pollution only

through voluntary measures implemented by private parties.

- 42. The Strategy lacks: (i) a timeframe for when the nutrient reduction will be achieved; (ii) numeric nutrient criteria standards; (iii) guidance on water quality monitoring; and (iv) any required conservation practices.
- 43. In the face of both growing national pressure regarding hypoxia in the Gulf of Mexico and within the state of Iowa regarding waters listed as impaired, an entirely voluntary "strategy" with no benchmarks or timeline to measure success is an inadequate response to a problem with a well-documented cause.
- 44. To address nitrate pollution in Iowa, agricultural drainage infrastructure and drainage districts can be, should be, and are required by law to be regulated as "point sources" under the Clean Water Act, Iowa Code Chapter 455B, and state regulation.

B. THE RACCOON RIVER WATERSHED & NITRATE POLLUTION

45. The Raccoon River drains 3,625 square miles or 2.3 million acres in west-central Iowa. It is a tributary of the Mississippi River Basin draining into the Gulf of Mexico. *Raccoon River Watershed Water Quality Master Plan, Agren, Inc. 2011*.

http://www.iowadnr.gov/Portals/idnr/uploads/water/watershed/files/raccoonmasterwmp13.PDF

- 46. The Raccoon River receives water from portions of 17 Iowa counties including Buena Vista, Sac, and Calhoun. It flows approximately 186 miles from its origin in Buena Vista County to its mouth south of downtown Des Moines and its confluence with the Des Moines River. *Raccoon River Watershed Water Quality Master Plan, Agren, Inc. 2011.*
- 47. The main stem of the Raccoon River, also known as the North Raccoon, spans from its origin in northeastern Buena Vista County, flows into Sac County, then runs southeastward through Calhoun, Carroll, Green, and Dallas counties to the confluence with the

Des Moines River. Raccoon River Watershed Water Quality Master Plan, Agren, Inc. 2011.

- 48. The two main tributaries to the North Raccoon are the Middle and South. The Middle Raccoon River begins in northwestern Carroll County and flows southeastwardly for 74.5 miles through Guthrie and Dallas counties to join the South Raccoon near Redfield, Iowa. The South Raccoon rises in northeastern Audubon County and flows generally southeastwardly for 49.7 miles through Guthrie and Dallas Counties, past the town of Guthrie Center. *Raccoon River Watershed Water Quality Master Plan, Agren, Inc. 2011*.
- 49. The North Raccoon and South Raccoon forks join in Dallas County west of Van Meter and flow east into Polk County. *Raccoon River Watershed Water Quality Master Plan*, *Agren, Inc.* 2011.
- 50. The North, Middle, and South Raccoon Rivers are navigable bodies of water used by rafts, canoes, kayaks, and other recreational watercraft.
- 51. The watershed of the Raccoon River primarily includes drainage from two Iowa regions, the first defined by continental-scale glaciers in the eastern portion and the second defined by wind-blown loess in the western portion. *Raccoon River Watershed Water Quality Master Plan, Agren, Inc. 2011*.
- 52. The North and Middle Raccoon Rivers flow through the region of Iowa known as the Des Moines Lobe, an area covered by glaciers less than 14,000 years ago. The natural geology of the Des Moines Lobe consists of glacial drift composed of sand, silt, and clay. The low permeability of this geologic material coupled with a topography filled with closed depressions created very poor natural surface and subsurface drainage in the Des Moines Lobe. As a result, long-term water and nitrogen is stored on the landscape. *Raccoon River Watershed Water Quality Master Plan, Agren, Inc. 2011, at 19.*

- 53. Conversely the South Raccoon River drains a landscape characterized by uniform and finely grained soil, rolling hills, greater stream density, and well-developed drainage.

 Raccoon River Watershed Water Quality Master Plan, Agren, Inc. 2011, at 19.
- 54. In the North Raccoon, seven major tributary streams flow above its confluence with the Middle and South Raccoon rivers. One of the major tributary streams is Cedar Creek which drains just north of Sac City.
- 55. The United States Geological Survey (the "USGS") maintains a nationwide network of about 7,600 stream gages designed to "provide and interpret long-term, accurate, and unbiased streamflow information." *National Streamflow Information Program Implementation Status Report* http://pubs.usgs.gov/fs/2009/3020/.
- 56. In the Raccoon River watershed at least fifteen gages are maintained by the USGS including gauge 05482300, a monitoring station in the North Raccoon River near Sac City, Iowa. The drainage area for the Sac City gage is 700 square miles.
- 57. Daily data available from the Sac City gage includes temperature, discharge by cubic feet per second, and nitrate loads and concentrations. Some of the daily data available from the Sac City USGS site such as stream flow dates back to 1958; other information such as nitrate has only been maintained since 2008.

http://waterdata.usgs.gov/nwis/inventory/?site_no=05482300&agency_cd=USGS

http://maps.waterdata.usgs.gov/mapper/index.html?state=ia

58. Other USGS monitoring stations in the Raccoon River watershed south of Sac City include 05482500, North Raccoon near Jefferson, Iowa draining 1,619 square miles, 05483600 Middle Raccoon River at Panora, Iowa draining 440 square miles, and 05484500, Raccoon River near Van Meter, Iowa, draining 3,441 square miles.

- 59. Overall land use in the Raccoon River watershed is predominately agricultural consisting of corn and soybeans. Row crop land use comprises 85% of the land area in the North Raccoon River with 77% of row crop ground tile drained above Sac City while 61% of the area in the South Raccoon River is row cropped with 42% tile drained above Redfield. Water Quality Improvement Plan for Raccoon River, Iowa; Iowa Department of Natural Resources Watershed Improvement Section; K.E. Shilling and C.F. Wolter (2008), available at http://www.epa.gov/waters/tmdldocs/IARaccoonRiverBasinTMDL.pdf
- 60. The Raccoon River watershed is also characterized by intensive livestock production, with a total of 135 cattle feedlots and 424 confinement operations distributed across the watershed. Water Quality Improvement Plan for Raccoon River, Iowa; Iowa Department of Natural Resources Watershed Improvement Section; K.E. Shilling and C.F. Wolter, (2008).
- 61. Land applied manure generated by the livestock operations is a contributing source of nitrate and phosphorous in the watershed, minor nutrient inputs to the watershed occur from cattle grazing on pasture. Water Quality Improvement Plan for Raccoon River, Iowa; Iowa Department of Natural Resources Watershed Improvement Section; K.E. Shilling and C.F. Wolter (2008) (internal citations omitted).
- 62. In 2009, the Iowa Department of Natural Resources (the "IDNR") identified three segments of the Raccoon River as impaired by nitrate-nitrogen and established a Total Maximum Daily Load ("TMDL") target for nitrate in the Raccoon River at 9.5 mg/l to meet water quality standards.
- 63. The Raccoon River also appears on Iowa's 303(d), 33 U.S.C. § 1313(d), list of impaired waterways under the CWA.
 - 64. There are at least seventy-seven (77) entities in the Raccoon River watershed with

NPDES permits. These sources include municipal, industrial, semi-public, sanitary district stormwater, agricultural, and operational permits. *Water Quality Improvement Plan for Raccoon River, Iowa; Iowa Department of Natural Resources Watershed Improvement Section; K.E. Shilling and C.F. Wolter (2008).*

- 65. These permitted point sources "do not contribute substantially to the nitrate impairment at Des Moines Water Works." Water Quality Improvement Plan for Raccoon River, Iowa; Iowa Department of Natural Resources Watershed Improvement Section; K.E. Shilling and C.F. Wolter, at p. 45 (2008).
- 66. The IDNR estimates that during periods when nitrate levels in the Raccoon River exceed 9.5 mg/L sources that are currently unpermitted contribute 89.7% nitrate while permitted entities contribute only 10.3%. Water Quality Improvement Plan for Raccoon River, Iowa; Iowa Department of Natural Resources Watershed Improvement Section; K.E. Shilling and C.F. Wolter, at p. 45 (2008).
- 67. Despite Iowa occupying less than 5% of the Mississippi River drainage basin, average annual export of nitrate from surface water in Iowa is estimated to range from approximately 204,000 to 222,000 Mg. or 25% of the nitrate that the Mississippi River delivers to the Gulf of Mexico. *K. E. Schilling & R.D. Libra. The relationship of nitrate concentrations in streams to row crop land use in Iowa. J.Environ. Qual.* 29, 1846-1851 (2000).
- 68. Nitrate-nitrogen export from the Raccoon River Watershed is among the highest in the United States with annual yields at 26.1 kg/ha/year which ranked as the highest loss of nitrate out of 42 Mississippi subwatersheds evaluated for a Gulf of Mexico hypoxia report and contributes to impairment of downstream water quality. *D.A. Goolsby, W.A. Battaglin, B.T. Aulenbach, and R.P. Hooper.* "Nitrogen input to the Gulf of Mexico," J. Environ.Qual. 30,

329-336 (2001); D.A. Goolsby, W.A. Battaglin, G.B. Lawrence, R.S. Artz, B.T. Aulenbach, R.P. Hooper, D.R. Kenney, G.J. Stensland. Flux and sources of nutrients in the Mississippi Atchalfalalya River Basin, White House Office of Science and Technology Policy Committee on Environmental and Natural Resources Hypoxia Work Group (1999).

C. DES MOINES WATER WORKS & NITRATE POLLUTION

- 69. Des Moines Water Works is an independently operated, municipal water utility providing drinking water to approximately 500,000 Iowans. It is the largest water utility in Iowa.
- 70. Des Moines Water Works began operating as a municipal water utility serving the Des Moines metro area in 1871 and since that time has obtained water from the Raccoon River for use as a public water supply.
- 71. Des Moines Water Works seeks to operate with fiscal discipline while delivering superior quality water in reliable quantities.
- 72. Des Moines Water Works primarily obtains its raw water supply from the Raccoon and Des Moines Rivers by means of direct river intake and by access to shallow alluvial aquifers and surface waters recharged by the rivers.
- 73. Des Moines Water Works takes water from the Raccoon River and sources influenced by the Raccoon River pursuant to a permit issued by IDNR pursuant to Iowa Code § 455B.261 et seq.
- 74. Des Moines Water Works' treatment plants and real estate are located in central Iowa approximately 100 miles from the Drainage Districts.
- 75. Des Moines Water Works maintains and utilizes three treatment plants: Fleur Drive Treatment Plant (the "Fleur Plant"), LD McMullen Treatment Plant at Maffitt Reservoir (the "McMullen Plant"), and its newest plant is at Saylorville Reservoir (the "Saylorville Plant").

- 76. The Fleur Plant has the capacity to pump 75 million gallons of water per day, the McMullen Plant 25 million gallons per day, and the Saylorville Plant 10 million gallons per day.
- 77. The main source of water at the McMullen and Saylorville Plants is shallow groundwater collected from the Raccoon River by wells located along the river. Course sand and gravel filter the groundwater and naturally remove river sediment prior to treatment.
- 78. In addition to shallow groundwater, the McMullen plant also relies on a river—influenced surface water source originally created as quarry pit, and known within Des Moines Water Works as "Crystal Lake." Crystal Lake is managed to provide reduced nitrogen water through natural biologic processes.
- 79. The Dale Maffitt Reservoir is a 200 acre man-made lake located at the intersection of Polk, Warren, Dallas, and Madison Counties, used as an emergency backup water source with a potential to provide 1.3 billion gallons to the McMullen Plant.
- 80. The main sources of water at the Fleur Plant are the Raccoon River and Des Moines River through direct intake and an infiltration gallery laid underground along the banks of the Raccoon River.
- 81. The infiltration gallery is an underground collection system that has been in use since the late 1880s. The gallery system consists of a long series of pipes that run parallel to the Raccoon River roughly 32 feet below surface grade. Water from the Raccoon River collects in the pipes and the water benefits from the bankside filtration which removes much of the solid and suspended matter present. Water from the Raccoon River is also diverted to a series of constructed ponds that lie above the gallery which saturates the soil structure and increases water yield.
 - 82. Permanent direct intakes on the Raccoon and Des Moines River supplement the

infiltration galleries' supply of source water to the Fleur Plant.

- 83. Except for an initial pretreatment step the water treatment process at the Fleur and the McMullen Plant is similar.
- 84. At the Fleur Plant and at the McMullen plant when surface water is used, powdered activated carbon is applied to the river or surface water to reduce dissolved organic matter resulting from decayed leaves and vegetation in addition to agricultural and municipal wastewater discharges.
- 85. The next step in the water treatment process is lime softening which ameliorates the water's hardness and kills viruses. Next the water is filtered through sand and gravel to remove all particles.
- 86. When nitrate levels are unusually high, a fraction of water at the Fleur Plant undergoes an ion exchange process and is blended with post-filtered water to stay safely below the nitrate health standard. Water at the McMullen Plant can be blended with nitrate-free water from Maffitt Reservoir to remain below the MCL standard when needed.
- 87. The final step in the water treatment process at the Fleur and McMullen Plants is the addition of fluoride to help prevent dental cavities and chlorine to disinfect the water.
- 88. The water treatment process at the Saylorville Plant relies on different technologies than the McMullen Plant or Fleur Plant.
- 89. At the Saylorville Plant, water pumped from collector wells undergoes a pretreatment step to oxidize and remove iron and manganese. After pre-treatment, the water is passed through ultra-filtration which removes any non-dissolved particles and then through reverse osmosis filtration. The final step in the process is the addition of fluoride, chlorine to disinfect the water, and sodium hydroxide to adjust the pH. Unlike the other plants the

Saylorville Plant does remove nitrate but has far more limited treatment capacity.

- 90. Throughout the treatment process at each of the three facilities, Des Moines Water Works' state certified laboratory staff performs fifty to one hundred tests each day to ensure the highest quality water is produced. An additional series of tests on the untreated water sources allows Des Moines Water Works plant operators and laboratory staff to select the river source that has the highest quality water before it enters the plants.
- 91. The mix of raw water sources and treatment plant options available to Des Moines Water Works allow Des Moines Water Works to manage its sources of water to create the highest quality water and to meet water quality standards under many conditions that it encounters.
- 92. Despite constant monitoring and advanced treatment technologies the nutrient levels in Des Moines Water Works source water have necessitated greater protections, particularly when water demand is high or nitrate concentrations are high, or both.
- 93. In 1991, faced with increasing levels of nitrate in its source water, Des Moines Water Works constructed the world's largest ion exchange facility to remove nitrate from its finished water.
 - 94. The nitrate removal facility became operational in 1992.
- 95. At a cost of \$4.1 million, the nitrate removal facility was designed to operate on an as needed basis with a maximum capacity of 10 million gallons per day and a cost of up to \$7,000 per day to operate.
 - 96. From 1995 to 2005, the nitrate removal facility operated over 500 days.
- 97. In June of 2005, the utility again nearly violated the nitrate standard when the level of nitrate in the Raccoon River exceeded 10 mg/L for over 94 days concurrent with high

water demand. This near violation precipitated an extensive review of long-term flow and nitrate data for the Raccoon River. USGS flow data dating back to 1919 along with nitrate data generated from Des Moines Water Works testing laboratory dating to 1931 provided a data source to evaluate the relationship between water discharge and flow and nitrate levels. *Nitrate-nitrogen patterns in the Raccoon River Basin related to agricultural practices.*" *J.L. Hatfield, L.D. McMullen, & C.S. Jones, J. of Soil and Water Conservation vol. 64, no. 3, 190-199 (2009).*

- 98. Since the 1970s, the concentration of nitrate in the Raccoon River at Des Moines Water Works intake points has steadily increased as depicted in **Exhibit 3**.
- 99. From 1995 to 2014, nitrate concentrations in the Raccoon River at the Des Moines Water Works intake points exceeded the 10 mg/L standard for drinking water at least 1,636 days or 24% of the time. From 1995 to 2014, the nitrate removal facility has operated a total of 673 days with protracted use in 1995, 1998, 1999, 2001, 2002, 2003, 2005, 2006, and most recently 2013, 2014, and 2015.
- 100. In 2013 and 2014, persistent peaks in nitrate levels reached record highs with the Raccoon River reaching 24 mg/L and the Des Moines River reaching 18.6 mg/L.
- 101. In the summer of 2013, the nitrate load in Des Moines Water Works' raw water supply in one week was greater than the *entire* nitrate load in 2012. In order to comply with the Safe Drinking Water Act, Des Moines Water Works was forced to rely on its nitrate removal facility for 74 days during peak demand in the summer, when customer demands average 80 million gallons daily.
- 102. A voluntary conservation request was issued in the summer of 2013 in order to control demand, and Des Moines Water Works expended over \$500,000 to treat the source water burdened by excessive nitrate levels.

- 103. In 2014, despite a difference in both average temperature and precipitation from 2013, the nitrate load in Des Moines Water Works' water supply was again record setting.
- 104. In July 2014 the average nitrate concentration in Des Moines in the Raccoon River was 11.98 mg/L, the 3rd highest average in the last forty years. Similarly, in September, October, November, and December 2014, the average nitrate concentration was 11.89 mg/L, 13.23 mg/L, 13.43 mg/L and 12.56 mg/L respectively.
- 105. On December 4, 2014, Des Moines Water Works had to again rely on its nitrate removal facility and continuous use of the facility was required as nitrate concentrations continued to exceed safety standards until March 10, 2015. The continuous operation for a total of 96 days is the longest in the history of the facility's operation during the winter season.
- 106. Due to its age and the limited capacity of the existing nitrate removal facility, Des Moines Water Works anticipates that it will need to design and construct a new nitrate removal facility with a 50 million gallon per day capacity at a capital cost of between \$76 million and \$183.5 million before 2020. Operation and maintenance costs will be in addition to the initial estimated capital cost.
- 107. Nitrate discharged into the Raccoon River watershed is a permanent, physical invasion of and impairment to Des Moines Water Works' real estate and its right to withdraw water from the Raccoon River.

D. DRAINAGE DISTRICTS GENERALLY

- 108. There are approximately 3,000 drainage districts, including the ten named Drainage Districts, which are primarily concentrated in the Des Moines Lobe, generally paralleling the Raccoon and Des Moines River watersheds.
 - 109. Drainage in Iowa began in the 1800s when early settlers found the region to be

nearly uninhabitable due to the swampy landscape resulting from glaciers previously covering the state which melted to form a prairie pothole region in the Des Moines Lobe.

- 110. The settlers realized that with the help of artificial drainage the soil found under the wetlands was ideal for cultivation. Under the Swamp Land Acts enacted in the middle of the 19th century to encourage drainage and development of wetlands for agricultural purposes, widespread agricultural drainage projects were facilitated. Thereafter, networks of agricultural tile were installed to turn native wetlands into a terrain suitable for farmland.
- 111. The original purpose for drainage was limited to improving the natural waterlogged conditions of the land, but by the end of the 19th century the practice of drainage expanded to water management, raising crop yields, broadening the range of land use, and lowering production costs.
- 112. Today, subsurface drainage has the effect of lowering the water table and removing water from the root zone of corn and soybean plants.
- 113. By lowering the water table or the level at which soil is entirely saturated with water, subsurface drainage tile permits groundwater to drain. This drainage creates less interference with root growth and development of field crops which require both water and air for production.
- 114. At the turn of the 19th century, the installation of drainage was costly, labor intensive, and required cooperation so legislation was enacted in Iowa to facilitate the formation and financing necessary to install drainage district infrastructure across multiple parcels of land.
- 115. The State of Iowa enacted drainage legislation in 1873 authorizing the creation of drainage districts and in 1908 the Iowa Constitution was amended to provide drainage districts with the authority necessary to carry out the purposes of the drainage districts as provided by

statute. Iowa Constitution, Article I, § 18.

- 116. By 1930, 22% of all farmland in the state of Iowa was drained and 18% of farmland was included in a drainage district. C.D. Ikenberry, M.L. Soupir, K.E. Schilling, C.S. Jones, A. Seeman, Nitrate-Nitrogen Export: Magnitude and Patterns from Drainage Districts to Downstream River Basins, J. of Environ. Qual. 43:2024-2033 (2014) (citing McCorvie and Lant, 1993).
- 117. Drainage of the prairie pothole ecosystem enabled the central part of the state to become one of the most agriculturally productive areas in the world.
- 118. Under the Iowa Code there are nearly seventy-five pages of law and 500 sections detailing the purpose and creation of drainage districts and the construction, administration, and maintenance of levees, drains, drainage tiles, and drainage ditches within each district.
- 119. Under the Iowa Code any county board of supervisors is authorized to establish a drainage district for public utility or for public health, convenience, and welfare. Iowa Code § 468.1.
- 120. Included in this power is the authority to construct levees, ditches, drains, water courses and settling basins as well as straightening, widening, deepening, or changing of a natural water course. Iowa Code § 468.1.
- 121. Costs associated with installation, maintenance, or repair of drainage tile, drains, or ditches are defrayed by levying assessments on property owners within the district in proportion to the benefit that accrues to each property owner. *See* Iowa Code §§ 468.1, 468.50.
- 122. The Drainage Districts are empowered to issue bonds and levy to cover costs and expenses necessary to discharge its duties pursuant to the Iowa Code. Iowa Code §§ 468.74, 468.527.

- 123. To establish a drainage district within a watershed area, two or more landowners file a petition with the county auditor's office and the board of supervisors in the county where the district is located. Iowa Code § 468.6.
- 124. When a drainage district is established the board of supervisors serves as trustees unless the landowners in a district petition the county auditor to call for a special election to elects trustees from the membership of the landowners in the district. Iowa Code §§ 468.1, 468.500, 486.501.
- 125. When the boundaries of a drainage district fall in two or more counties, control of the district is exercised jointly by the board of supervisors or boards of trustees in each county.

 E.g., Iowa Code § 468.281.
- 126. The authority and responsibility to construct, improve, and make repairs is the same for joint or inter-county drainage districts as it is for intra-county drainage districts. *E.g.*, Iowa Code §§ 468.277, 486.281.

E. POINT SOURCE NITRATE POLLUTION BY THE DEFENDANT DRAINAGE DISTRICTS

- 127. The Drainage Districts named in this Complaint have been established as provided by law and are managed or jointly managed by the Boards of Supervisors in Calhoun, Buena Vista, and Sac Counties.
- 128. The Drainage District have created and operate and maintain infrastructure consisting of tiles, pipes, drains, collector mains, surface ditches, culverts and other conveyances of water.
- 129. The locations of the Drainage Districts are described more particularly below and depicted in maps obtained from the Sac County Auditor's Office in exhibits C-1, C-2, C-3 to the Notice. **Exhibit 1** hereto.

- 130. The primary purpose of the Drainage District infrastructure is to remove water from agricultural lands, including groundwater containing a high concentration of nitrate, but under the Iowa Code such infrastructure may also drain non-agricultural land.
- 131. Subsurface tile and pipe and surface ditches and channels created and maintained by the Drainage Districts are connected to private subsurface tiles to convey groundwater within each of the Drainage Districts to streams and rivers, and ultimately to the Raccoon River.
- 132. Privately owned subsurface tiles consist primarily of perforated pipes installed in a parallel configuration at intervals four to six feet beneath the surface of a field.
- 133. These privately owned pipes drain to a system of larger sub-collector tiles and to collector mains made of clay, concrete, steel or plastic owned and operated by the Drainage District.
- 134. Sub-collector tiles and collector mains outlet to open ditches and streams also maintained by the Drainage Districts, which discharge into the Cedar Creek and the Raccoon River.
- 135. The infrastructure of the Drainage Districts transports both groundwater and stormwater, but little or no irrigation return flow.
 - 136. The location of the Drainage Districts are as follows:
 - a. Drainage District 86 lies in Sac County in Iowa. The watershed of the district is located in Sections including 13, 14, 23, and 24 of Cedar Township (T-88-N, R-35-W).
 - b. Joint Drainage Districts 2 and 51 lie over the boundary of Calhoun and Sac Counties in Iowa. The watershed of the joint districts is located in Sections including 10, 11, 12, 13, 14, 15, 23, 24 of Cedar Township (T-88-N, R-35-W) in Sac County and

Sections including 7, 8, 18 of Garfield Township (T-88N, R-34W) in Calhoun County.

- c. Drainage District 81 lies in Sac County in Iowa. The watershed of the district is located in Sections including 3, 4, 5, 6, 9 of Cedar Township (T-88-N, R-35-W), Section 1 of Jackson Township (T-88-N, R-36-W), and Sections including 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, 36 of Douglas Township (T-89-N, R-35-W) in Sac County.
- d. Drainage District 42 lies in Sac County in Iowa. The watershed of the district is located in Sections including 23, 25, 26 in Douglas Township (T-89-N, R-35-W).
- e. Drainage District 65 lies in Sac County in Iowa. The watershed of the district is located in Sections including 20, 21, 28, 29, 32, and 33 of Douglas Township (T-89-N, R-35-W).
- f. Drainage District 79 lies in Sac County in Iowa. The watershed of the district is located in Sections including 26, 27, 28, 33, 34, 35 of Douglas Township (T-89-N, R-35-W).
- g. Drainage District 83 lies in Sac County in Iowa. The watershed district is located in Sections including 7, 8, 17, 18, 20, 21 in Douglas Township (T-89-N, R-35-W).
- h. Joint Drainage Districts 19 and 26 lie over the boundary of Sac and Buena Vista Counties in Iowa. The watershed of the joint districts is located in Sections including 28, 29, 30, 31, 32, 33 of Newell Township (T-90-N, R-35-W) in Buena Vista County and Sections including 4, 5, 6, 7, 8, 9, 16, 17, 18, 20, 21, 22, 27, 28 of Douglas Township (T-89-N, R-35-W) in Sac County.
 - i. Joint Drainage Districts 64 and 105 lie over the boundary of Sac and

Buena Vista Counties in Iowa. The watershed of the joint districts is located in Sections including 1, 2, and 3 of Delaware Township (T-89-N, R-36-W) in Sac County and Sections including 34, 35, 36 in Providence Township (T-90-N, R-36-W) in Buena Vista County.

- j. Drainage District 32 lies in Sac County, Iowa. The watershed of the joint districts is located in Sections including 7 and 18 in Douglas Township (T-89-N, R-35-W).
- 137. From March 28, 2014, until December 30, 2014, Des Moines Water Works staff drew water samples on 40 separate occasions from 72 sample site locations in drainage districts in Sac, Calhoun, and Buena Vista counties.
- 138. The samples from each site visit were processed by Des Moines Water Works laboratory staff and blind tested by the Iowa Soybean Association.
- 139. The following data from nine sample sites reflects that groundwater containing nitrate in excess of 10 mg/L was discharged from a pipe or ditch from the following Drainage Districts on at least the following dates:

Date	Location	Drainage District/s	Nitrate (Mg/L)
7/15/14	Drainage Ditch at 240 th St and Xavier	86 & 2 (Sac County)	37.67
	(SC15)	and 51 (Calhoun	
		County)	
7/15/14	Drainage Ditch – Wadsley Ave 0.4	81, 79, 83 and 19-26	18.77
	miles North of 220 th St (SC19)		
7/15/14	Drainage Ditch – Wadsley Ave 200 feet	42	17.31
	North of 210 th St (SC20)		
7/15/14	Drainage Ditch – Union Ave 0.2 miles	83 and 19-26	21.49
	North of 200 th St (SC32)		
7/15/14	Tile Discharge – 200 th St. 0.9 miles	79	22.09
	West of Voss (SC34)		
7/15/14	Drainage Discharge – 220 th St. 0.6 miles	65	21.16
	West of Sierra Ave. (SC36)		
7/15/14	Tile at North end of Ditch – Sierra Ave.	19 (Sac County) and 26	28.8
	0.3 miles North of 170 th St. (SC43)	(Buena Vista County)	

Date	Location	Drainage District/s	Nitrate (Mg/L)
7/15/14	Drainage Discharge – 170 th St. 400 feet East of Quincy Ave. (SC47)	32	24.53
7/15/14	Stream – 170 th St. 0.8 miles West of Quincy Ave. (SC52)	64 (Sac County) and 105 (Buena Vista County)	21.44
9/9/14	Drainage Ditch at 240 th St and Xavier (SC15)	86 & 2 (Sac County) and 51 (Calhoun County)	31.8
9/9/14	Drainage Ditch – Wadsley Ave 0.4 miles North of 220 th St (SC19)	81, 79, 83 and 19-26	20.07
9/9/14	Drainage Ditch – Wadsley Ave 200 feet North of 210 th St (SC20)	42	17.58
9/9/14	Drainage Ditch – Union Ave 0.2 miles North of 200 th St (SC32)	83 and 19-26	20.39
9/9/14	Tile Discharge – 200 th St. 0.9 miles West of Voss (SC34)	79	27.61
9/9/14	Drainage Discharge – 220 th St. 0.6 miles West of Sierra Ave. (SC36)	65	20.68
9/9/14	Tile at North end of Ditch – Sierra Ave. 0.3 miles North of 170 th St. (SC43)	19 (Sac County) and 26 (Buena Vista County)	20.46
9/9/14	Drainage Discharge – 170 th St. 400 feet East of Quincy Ave. (SC47)	32	20.6
9/9/14	Stream – 170 th St. 0.8 miles West of Quincy Ave. (SC52)	64 (Sac County) and 105 (Buena Vista County)	16.36
10/15/14	Drainage Ditch at 240 th St and Xavier (SC15)	86 & 2 (Sac County) and 51 (Calhoun County)	32.17
10/15/14	Drainage Ditch – Wadsley Ave 0.4 miles North of 220 th St (SC19)	81, 79, 83 and 19-26	19.12
10/15/14	Drainage Ditch – Wadsley Ave 200 feet North of 210 th St (SC20)	42	19.58
10/15/14	Drainage Ditch – Union Ave 0.2 miles North of 200 th St (SC32)	83 and 19-26	21.31
10/15/14	Tile Discharge – 200 th St. 0.9 miles West of Voss (SC34)	79	28.66
10/15/14	Drainage Discharge – 220 th St. 0.6 miles West of Sierra Ave. (SC36)	65	19.82
10/15/14	Tile at North end of Ditch – Sierra Ave. 0.3 miles North of 170 th St. (SC43)	19 (Sac County) and 26 (Buena Vista County)	22.36
10/15/14	Drainage Discharge – 170 th St. 400 feet East of Quincy Ave. (SC47)	32	19.69

Date	Location	Drainage District/s	Nitrate (Mg/L)
10/15/14	Stream – 170 th St. 0.8 miles West of	64 (Sac County) and	16.76
	Quincy Ave. (SC52)	105 (Buena Vista	
		County)	
12/17/14	Drainage Ditch at 240 th St and Xavier	86 & 2 (Sac County)	28.15
	(SC15)	and 51 (Calhoun	
		County)	
12/17/14	Drainage Ditch – Wadsley Ave 0.4	81, 79, 83 and 19-26	14.76
	miles North of 220 th St (SC19)		
12/17/14	Drainage Ditch – Wadsley Ave 200 feet	42	12.97
	North of 210 th St (SC20)		
12/17/14	Drainage Ditch – Union Ave 0.2 miles	83 and 19-26	16.13
	North of 200 th St (SC32)		
12/17/14	Tile Discharge – 200 th St. 0.9 miles	79	22.42
	West of Voss (SC34)		
12/17/14	Drainage Discharge – 220 th St. 0.6 miles	65	14.43
	West of Sierra Ave. (SC36)		
12/17/14	Tile at North end of Ditch – Sierra Ave.	19 (Sac County) and 26	15.44
	0.3 miles North of 170 th St. (SC43)	(Buena Vista County)	
12/17/14	Drainage Discharge – 170 th St. 400 feet	32	16.92
	East of Quincy Ave. (SC47)		
12/17/14	Stream – 170 th St. 0.8 miles West of	64 (Sac County) and	13.71
	Quincy Ave. (SC52)	105 (Buena Vista	
		County)	

- 140. The location of the nine sample sites are detailed in exhibit B to the Notice, **Exhibit 1** hereto.
- 141. Photographs of the areas from which samples were taken are attached as **Exhibit** 4-A, 4-B, 4-C, 4-D, 4-E, 4-F, 4-G, 4-H, 4-I.
- 142. Other similar discharges are detailed in exhibit A-1, A-2, A-3 to the Notice, **Exhibit 1** hereto.
- 143. After taking into account transport times and weather events the above data also correlates with excessive nitrate concentrations observed at Des Moines Water Works Raccoon River intake points.
- 144. Nitrate is a soluble ion of Nitrogen (N) found in the soil that moves only with water. This allows it to be both readily available for plant consumption but also easily leached

through groundwater.

- 145. Nitrate primarily occurs in groundwater and streams receive this pollutant because streams receive the majority of their yearly discharge from groundwater in moist temperate climates such as Iowa.
- 146. Under natural hydrologic conditions very little nitrate is discharged from groundwater to streams, but artificial subsurface drainage short-circuits the natural conditions that otherwise keep nitrate from entering streams and rivers.
- 147. Subsurface drainage tile artificially lowers the water table by removing water from the saturated zone and expanding the volume of soil in which mineralization of organic matter, including plant residues and manure can generate nitrate in the unsaturated zone.
- 148. Rapid mineralization in the unsaturated zone in the absence of perennial vegetation to consume it provides a large source of nitrate and continuous drainage allows little opportunity for natural attenuation or de-nitrification.
- 149. Seasonally large concentrations of nitrate occur in the Raccoon River watershed because mineralization rates increase as temperatures rise in spring and remain high late into autumn.
- 150. The presence of subsurface tiles provides a continuous mechanism for transporting nitrate to streams only reduced during the relatively short (60-70 days) annual-crop growing season when mineralization rates may be in balance with crop uptake demands.
- 151. After a rainfall event nitrate concentration in ditches, streams, and rivers is diluted when stormwater increases flow; subsequently nitrate concentrations rise as tile carrying groundwater diverts nitrate from the water table into surface waters.
 - 152. Because stormwater flowing across a field or into a surface intake of a drainage

district has little opportunity to dissolve nitrate produced by soil microorganisms or to interact with soil containing dissolved nitrate, only a very small concentration of nitrate can be found in agricultural stormwater runoff.

- 153. Elimination of natural subsurface storage and acceleration of groundwater removal from soils by the Drainage Districts' infrastructure short-circuits deep groundwater recharge and substantially increases discharge to streams and open ditches having the additional hydraulic effect of increasing stream velocity.
- 154. Although infrastructure of the Drainage Districts transports both stormwater and groundwater into streams and rivers, the conveyance of nitrate is almost entirely by groundwater transport.
- 155. The discharges by the Drainage Districts observed to contain high nitrate concentrations are almost entirely groundwater.
- 156. To the extent stormwater was included in the water sampled it would have diluted and thus reduced the observed concentration of nitrate.

F. INJURY AND DAMAGES TO DES MOINES WATER WORKS

- 157. There is no foreseeable likelihood that the Drainage Districts will voluntarily alter or reduce the discharge of nitrate into the Raccoon River watershed and the discharge of nitrate is a permanent invasion of Des Moines Water Works' use of property.
- 158. The existence and persistence of high concentrations of nitrate in the Raccoon River caused by the operation of the Drainage Districts have caused injury to Des Moines Water Works in the following respects and particulars:
 - a. By requiring the design, construction and operation of a nitrate removal facility that costs \$4.5 million to construct and approximately \$4,000- \$7,000 per day to

operate;

- b. By requiring Des Moines Water Works to design and maintain operational modifications to remain in compliance with safe drinking water requirements, including source water collection improvements, and utilization of technically complex and high cost treatment systems at the Saylorville Plant;
- c. By creating a waste stream from the operation of its nitrate removal facility that requires a disposal or discharge permit, the continuing availability and cost of which are uncertain;
- d. By reducing the availability of safe drinking water for delivery to customers during periods of high demand;
- e. By diminishing the reputation of Des Moines Water Works as a provider of safe, abundant and affordable water, resulting in the direct loss of revenue and potential revenue and the indirect loss of revenue to the extent economic growth is adversely impacted by concerns respecting availability of water; and
- f. By imposing on Des Moines Water Works a need to replace and augment its ability and capacity to remove nitrate in the future at expected capital costs currently estimated to range between \$76 million and \$183 million.

COUNT I: CLEAN WATER ACT

- 159. Des Moines Water Works repleads all prior paragraphs as if fully set forth herein.
- 160. The Clean Water Act was created by Congress to protect sources of drinking water and the quality of the waters of the United States. To achieve its objectives the CWA relies upon the NPDES permit program that controls water pollution by regulating "point sources" that discharge pollutants.

- 161. As alleged more particularly herein, the facilities of the Drainage District are point sources, as "discrete conveyances" of nitrate pollution under the CWA that are not exempt from regulation and are required to have an NPDES permit.
- 162. The stated objective of the CWA is to "restore and maintain the chemical, physical and biological integrity of the Nation's waters" by, among other things, achieving the goal of "eliminat[ing]" "the discharge of pollutants into the navigable waters." 33 U.S.C. § 1251(a).
- 163. Under the CWA and implementing regulations, the discharge of a pollutant by any person is prohibited, except in compliance with other sections of the CWA, including 33 U.S.C. § 1342 which governs activities subject to the issuance of NPDES permits.
- 164. A "pollutant" is defined to include, "among other things ... industrial, municipal, and agricultural waste." 33 U.S.C. § 1362(6).
- 165. The "discharge of a pollutant" is defined as "any addition of any pollutant to navigable waters from any point source." 33 U.S.C. § 1362(12).
- 166. Under the CWA, "navigable waters" is defined as "the waters of the United States." 33 U.S.C. § 1362(7).
- 167. A "point source" is generally defined to include "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, [or] channel . . . from which pollutants are or may be discharged." However, the term "does not include agricultural stormwater discharges and return flows from irrigated agriculture." 33 U.S.C. § 1362(14).
- 168. Under 33 U.S.C. § 1342 the Administrator of the EPA may issue NDPES permits that authorize the discharge of pollutants from a point source into navigable waters of the United States, subject to the conditions and limitations set forth in such permits.

- 169. Effluent limitations, as defined in 33 U.S.C. § 1362(11), are established on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters.
- 170. Effluent limitations, monitoring, and reporting discharges are among the conditions and limitations prescribed in an NPDES permit under 33 U.S.C. § 1342(a) and under state NPDES programs.
- 171. The CWA provides that a state may establish its own permit program, and after receiving EPA's approval, may administer its own NPDES permits. 33 U.S.C. § 1342(b).
- 172. In 1978, under the authority of CWA, 33. U.S.C. § 1342(b), the EPA approved the State of Iowa's permit program and today the IDNR administers its own NDPES permits. Iowa Code § 455B.197.
- 173. Under the Code of Federal Regulations, a "facility or activity" is defined as any "NPDES point source or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program." 40 C.F.R. § 122.2.
- 174. Under the Code of Federal Regulations the "owner or operator" of any "facility or activity" is subject to regulation under the NPDES program. 40 C.F.R. § 122.2.
- 175. The Raccoon River is a navigable water as defined in the CWA. 33 U.S.C. § 1362(7).
- 176. The Cedar Creek is a navigable water as defined in the CWA. 33 U.S.C. § 1362(7).
- 177. Nitrate is an agricultural waste and a pollutant under the CWA. 33 U.S.C. § 1362(6).
 - 178. The Drainage Districts are point sources of nitrate pollution as defined by, and

under, the CWA, 33 U.S.C. § 1362(14), because they are discernible, confined and discrete conveyances and the discharge of nitrate pollutants is neither agricultural stormwater discharge nor return flow from irrigated agricultural.

- 179. The Drainage Districts are managed or jointly managed by the Sac County Board of Supervisors, Buena Vista County Board of Supervisors, and Calhoun County Board of Supervisors. 40 C.F.R. § 122.2.
- 180. The Drainage Districts are the "owners" and "operator[s]" of the drainage facilities and infrastructure as defined by 40 C.F.R. 122.2.
- 181. Discharges from the Drainage Districts' facilities constitute "discharge of pollutants" within the meaning of the CWA, 33 U.S.C. § 1362(12).
- 182. The Drainage Districts have discharged, and are discharging on a regular basis, nitrate into ditches and streams which lead directly to the Cedar Creek and the Raccoon River without an NPDES permit issued under 33 U.S.C. § 1342(a) and Iowa's NPDES programs in violation of the CWA. 33 U.S.C. § 1311(a).
- 183. Upon information and belief, these discharges will continue after the date of filing of this Complaint. 33 U.S.C. § 1362(6), (12).
- 184. Under the CWA citizen suit provision a civil action may be maintained against the Drainage Districts. 33 U.S.C. § 1365.
- 185. By committing these acts and omissions alleged above, the Drainage Districts are subject to an assessment of civil penalties pursuant to 33 U.S.C. § 1319(d) and 40 C.F.R. § 19.4, Table 1.
- 186. The Drainage Districts are subject to the Clean Water Act pursuant to Article VI of the United States Constitution.

WHEREFORE, the Plaintiff, Des Moines Water Works, respectfully prays that the Court grant the following relief under this Count I:

- A. Declare the Drainage Districts to have violated and continue to be in violation of the Clean Water Act;
- B. Enjoin the Drainage Districts from any and all ongoing and future violations of the CWA by ordering compliance with the CWA and the NPDES permit program limitations under 33 U.S.C. § 1342(a) and under Iowa's NPDES program;
- C. Assess civil penalties under 33 U.S.C. § 1319(d) and 40 C.F.R. § 19.4, Table 1 payable to the U.S. Treasury for each continuing day of violation;
- D. Award litigation costs and reasonable attorneys' fees to Des Moines Water Works as authorized by the CWA; and
 - E. Grant such other relief as is deemed just, equitable, and proper by the Court.

COUNT II: CHAPTER 455B

- 187. Des Moines Water Works repleads all prior paragraphs as if fully set forth herein.
- 188. Chapter 455B is the principal Iowa statute enacted to protect the quality of the waters of the State of Iowa, including navigable waters of the United States within Iowa, both by enforcement of delegated authority under the CWA and by establishment of standards under the state's sovereign authority over the waters of the state.
- 189. As alleged more particularly herein, the Drainage Districts are point sources of nitrate pollution under Chapter 455B, not exempt from regulation and required to have a permit under Iowa state law and regulation.
- 190. Under Iowa law, IDNR maintains jurisdiction over the surface and groundwater of the state to "prevent, abate, and control water pollution by establishing standards for water

quality... and by regulating potential sources of water pollution through a system of general rules or specific permits... the discharge of any pollutant to a water of the state requires a specific permit from the department unless exempted by the department." Iowa Admin. Code r. 567-60.1(455B); see also Iowa Code § 455B.172(2), (5).

- 191. Under Chapter 455B water pollution is "the contamination or alteration of the physical, chemical, biological, or radiological integrity of any water of the state by a source resulting in whole or in part from the activities of humans, which are harmful, detrimental, or injurious to public, health, safety, or welfare..." Iowa Code 455B.171(40).
- 192. Under the Iowa Code "a pollutant shall not be disposed of by dumping, depositing, or discharging such pollutant into any water of the state" without a permit issued by the director of the IDNR. Iowa Code § 455B.186(1).
- 193. Under the Iowa Code, a pollutant is defined as "sewage, industrial waste, or other waste." Iowa Code § 455B.171(20). "Other waste" is defined as "heat, garbage, municipal refuse, lime, sand, ashes, offal, oil, tar, chemicals, and all other wastes which are not sewage or industrial waste." Iowa Code § 455B.171(17).
- 194. Although the term is not defined by Code Chapter 455B, under IDNR Rules 60.2, "discharge of a pollutant" is defined as "an addition of any pollutant or combination of pollutants to navigable waters or waters of the state from any point source" including "discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person which do not lead to a treatment works." Iowa Admin. Code r. 567-60.2(455B).
- 195. As defined by Iowa Code § 455B.171(19), "Point source" means "any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or

vessel or other floating craft, from which pollutants are or may be discharged."

- 196. Under IDNR Rule 60.2, the definition of "point source" mirrors the definition under Iowa Code Chapter 455B but specifically excludes from the definition "return flows from irrigated agriculture or agricultural stormwater runoff." Iowa Admin. Code r. 567-60.2(455B).
- 197. The Iowa Code defines "water of the state" as any stream, lake, pond, marsh, watercourse, waterway, well, spring, reservoir, aquifer, irrigation system, drainage system, and any other body or accumulation of water, surface or underground, natural or artificial, public or private, which are contained within, flow through or border upon the state or any portion thereof." Iowa Code § 455B.171(39).
- 198. Under the rules issued pursuant to Iowa Code Chapter 455B, an "NPDES permit" is defined as an "operation permit, issued after the department has obtained approval of its National Pollutant Discharge Elimination System (NDPES) program from the administrator that authorizes the discharge of any pollutant into a navigable water." Iowa Admin. Code r. 567-60.2(455B).
- 199. Under IDNR Rule 62.1(1) "the discharge of any pollutant from a point source into a navigable water is prohibited unless authorized by an NPDES permit." Iowa Admin. Code r. 567-62.1(1)(455B).
- 200. Under IDNR Rule 64.4(1), "[a]n individual NPDES permit is required when there is a discharge of a pollutant from any point source into navigable waters" except a discharge of a pollutant is exempt from permitting when it introduces "pollutants from non-point source agricultural and silvicultural activities, including stormwater runoff from orchards, cultivated crops, pastures, range lands, and forest lands…." Iowa Admin. Code r. 567-64.4(1)(e)(455B).
 - 201. Under IDNR Rule 60.2, a "nonpoint source" is defined as "a source of pollutants

that is not a point source." Iowa Admin. Code r. 567-60.2(455B).

- 202. Under the rules issued pursuant to Iowa Code Chapter 455, an "operation permit" is a "written permit . . . authorizing the operation of a wastewater disposal system or part thereof or discharge source and, if applicable, the discharge of wastes from the disposal system or part thereof or discharge source to waters of the state. An NPDES permit will constitute the operation permit in cases where there is a discharge to a water of the United States and an NPDES permit is required by the Act [Federal Water Pollution Control Act]." Iowa Admin. Code r. 567-60.2(455B).
- 203. Under IDNR Rule 60.2, a "disposal system" is defined as "a system for disposing of sewage, industrial waste, or other wastes, or for the use or disposal of sewage sludge. 'Disposal system' includes sewer systems, treatment works, point sources, dispersal systems, and any systems designed for the usage or disposal of sewage sludge." Iowa Admin. Code r. 567-60.2(455B).
- 204. Under IDNR Rule 64.3, an operation permit is required for any person who shall "operate a wastewater disposal system or part thereof without, or contrary to the condition of, an operation permit" subject to enumerated exclusions including discharges from geothermal heat pump discharge, water well construction, and the application of biological and chemical pesticides, none of which apply here. Iowa Admin. Code r. 567-64.3(1)(d), (e),(f)(455B).
- 205. Under Iowa law, a citizen shall have standing to commence an action if the person is adversely affected by the alleged violation of Iowa Code Chapter 455B or rule adopted pursuant to Iowa Code Chapter 455B. Iowa Code § 455B.111(3).
- 206. Under Iowa law, Des Moines Water Works is a person adversely affected by a violation of Iowa Code Chapter 455B or rule adopted pursuant to, with standing to commence an

action against the Drainage Districts. Iowa Code § 455B.171(18).

- 207. The Raccoon River, its tributary streams including Cedar Creek, and all waters flowing into such waters are part of the waters of the state under Iowa Code Chapter 455B and state regulations.
- 208. The "drainage system" in the Drainage Districts is part of the waters of the state under Iowa Code Chapter 455B and state regulations.
 - 209. Nitrate is a "pollutant" under Iowa Code Chapter 455B and state regulation.
- 210. The Drainage District facilities are point sources of nitrate pollution under Iowa
 Code Chapter 455B and state regulations.
- 211. The Drainage Districts have discharged and are discharging nitrate pollutants into ditches and streams which lead directly to Cedar Creek and the Raccoon River on a regular basis.
- 212. The discharge of nitrate by the Drainage Districts is neither return flows from irrigated agriculture nor agricultural stormwater runoff.
- 213. The discharge of nitrate by the Drainage Districts is not a non-point source from agricultural and silvicultural activities or stormwater runoff from orchards, cultivated crops, pastures, range lands, and forest lands.
- 214. The Drainage Districts have discharged and continue to discharge nitrate into ditches and streams without an NPDES or state operating permit in violation of Chapter 455B and state regulations.
- 215. Upon information and belief, these discharges will continue after the date of filing of this Complaint.
- 216. Unless the Drainage Districts desist in violations of Chapter 455B Des Moines
 Water Works will suffer irreparable harm.

WHEREFORE, the Plaintiff, Des Moines Water Works, respectfully prays that the Court grant the following relief under this Count II:

- A. Declare the Drainage Districts to have violated and continue to be in violation of Chapter 455B;
- B. Enjoin the Drainage Districts from any and all ongoing and future violations of Iowa Code Chapter 455B and state regulation by ordering compliance with state law including ceasing all discharges of nitrate that are not authorized by an NPDES or state operating permit;
 - C. Assess civil penalties for each continuing day of violation;
- D. Award litigation costs and reasonable attorney fees to Des Moines Water Works as authorized by citizen suit provision pursuant to Iowa Code Chapter 455B; and
 - E. Grant such other relief as is deemed just, equitable, and proper by the Court.

COUNT III: PUBLIC NUISANCE

- 217. Des Moines Water Works repleads all prior paragraphs as if fully set forth herein.
- 218. Nitrate discharged by the Drainage Districts has caused public harm by contributing to eutrophication and the development of hypoxic conditions in waters, including the Gulf of Mexico's "dead zone," rendering water in the Raccoon River unsafe for human consumption, and costing the City of Des Moines economic development opportunities.
- 219. The Drainage Districts are created for the purpose of modifying the existing flow of water and for effecting drainage of water. *See* Iowa Code 468.1 et seq.
- 220. The Drainage Districts normal and intended operation results in nitrate discharge in excess of 10mg/L to be conveyed to Raccoon River.
- 221. The Boards of Supervisors for Buena Vista, Calhoun, and Sac Counties, as trustees of the Drainage Districts have acted for the purpose of conveying water to the Raccoon

River.

- 222. The Boards of Supervisors for Buena Vista, Calhoun, and Sac Counties know that by maintaining and operating the Drainage Districts they convey water to the Raccoon River, and are substantially certain that the Drainage Districts convey groundwater to the Raccoon River and that affects downstream users such as Des Moines Water Works.
- 223. The Boards of Supervisors for Buena Vista, Calhoun, and Sac Counties know that that conveyance of groundwater by the Drainage Districts causes unsafe concentrations of nitrate to enter the Raccoon River, and continue to operate the Drainage Districts so that they discharge unsafe concentrations of nitrate to the Raccoon River.
- 224. The harm caused by the discharge of nitrate by the Drainage Districts into the Raccoon River watershed is not outweighed by the public benefit from the Drainage Districts' drainage of land in the Raccoon River watershed.
 - 225. Nitrate discharged by the Drainage Districts presents a threat to human health.
- 226. Iowa Code § 455B.262(2) provides that the water resources of the State of Iowa are for the beneficial use of the public.
- 227. Iowa Code §455E.3(1) recognizes that the water resources of the State of Iowa are a precious and vulnerable resource and that its protection is essential to the health, welfare, and economic prosperity of the public. Iowa Code § 455E.5(3) grants all persons in the State of Iowa the right to lawful use of groundwater unimpaired by the activities of any other person that render the water unsafe or unpotable.
- 228. Iowa Code §§ 468.1, .2, .11, .21, .22, .24, and .64 require drainage districts to be operated in the interests of public health and welfare.
 - 229. The present operation of the Drainage Districts is unlawful and antisocial because

it is contrary to the public health and welfare.

- 230. The discharge of nitrate by the Drainage Districts into the Raccoon River watershed creates a foreseeable and unreasonable risk of harm to public health, safety, comfort, and convenience because the discharge contains nitrate concentrations that pose a danger to the public's health and welfare.
- 231. The discharge of nitrate by the Drainage Districts affects a substantial number of persons because Des Moines Water Works distributes water from the Raccoon River to over 500,000 people in central Iowa.
- 232. Des Moines Water Works and the public have been injured by the Drainage Districts' public nuisance.
- 233. The conduct of the Drainage Districts together with the conduct of similarly situated drainage districts contributes to a single, indivisible harm making the Drainage Districts jointly and severally liable for the damage caused to Des Moines Water Works.

WHEREFORE, the Plaintiff, Des Moines Water Works, respectfully prays that the Court grant the following relief under this Count III:

- A. Declare that the Drainage Districts have created and continue to maintain and operate a public nuisance;
- B. Order the Drainage Districts to take all actions necessary to abate the public nuisance;
- C. Award damages to Des Moines Water works in an amount required to compensate

 Des Moines Water Works for the unlawful discharge of nitrate by all drainage districts in the

 Raccoon River watershed together with interest as provided by law;
 - D. Award the costs of this action to Des Moines Water Works; and

E. Grant such other relief as is deemed just, equitable, and proper by the Court.

COUNT IV: STATUTORY NUISANCE

- 234. Des Moines Water Works repleads all prior paragraphs as if fully set forth herein.
- 235. The Drainage Districts normal and intended operation results in nitrate discharge in excess of 10 mg/L to be conveyed to Raccoon River.
- 236. The Drainage Districts exist within real estate legally described in the fact sections above.
- 237. Concentrations of nitrate in the Raccoon River watershed exceed levels that are safe for human consumption and, without treatment, the levels of nitrate in the Raccoon River are dangerous to human health.
- 238. Such concentrations of nitrate render water in rivers and streams flowing to the Raccoon River corrupt, unwholesome, and impure in violation of Iowa Code Chapter 657.
- 239. The discharge of nitrate by the Drainage Districts into the Raccoon River is an obstruction that unreasonably interferes with Des Moines Water Works' statutory right to withdraw water from the Raccoon River, and is an obstruction that unreasonably interferes with Des Moines Water Works' use of its real estate and treatment plants by requiring Des Moines Water Works to undertake costly and elaborate treatment processes to remove the excess nitrate from water drawn from the Raccoon River.
- 240. Des Moines Water Works has been injured and suffered damages by the Drainage Districts' statutory nuisance.
- 241. The conduct of the Drainage Districts together with the conduct of similarly situated drainage districts contributes to a single, indivisible harm making the Drainage Districts jointly and severally liable for the damage caused to Des Moines Water Works.

WHEREFORE, the Plaintiff, Des Moines Water Works, respectfully prays that the Court grant the following relief under this Count IV:

- A. Declare that the Drainage Districts have created and continue to maintain and operate a statutory nuisance;
- B. Order the Drainage Districts to take all actions necessary to abate the public nuisance;
- C. Award damages to Des Moines Water works in an amount required to compensate

 Des Moines Water Works for the unlawful discharge of nitrate by all drainage districts in the

 Raccoon River watershed together with interest as provided by law;
 - D. Award the costs of this action to Des Moines Water Works; and
 - E. Grant such other relief as is deemed just, equitable, and proper by the Court.

COUNT V: PRIVATE NUISANCE

- 242. Des Moines Water Works repleads all prior paragraphs as if fully set forth herein.
- 243. Addition of high concentrations of nitrate by operation of the Drainage Districts to the Raccoon River is a substantial and unreasonable interference with Des Moines Water Works' property right to withdraw high quality water from the Raccoon River and with Des Moines Water Works' real estate and treatment plants because Des Moines Water Works must implement elaborate, costly, and burdensome treatment processes to remove the excess nitrate.
- 244. Des Moines Water Works has been injured and suffered damages by the Drainage Districts' private nuisance.
- 245. The conduct of the Drainage Districts together with the conduct of similarly situated drainage districts contributes to a single, indivisible harm making the Drainage Districts jointly and severally liable for the damage caused to Des Moines Water Works.

WHEREFORE, the Plaintiff, Des Moines Water Works, respectfully prays that the Court grant the following relief under this Count V:

- A. Declare that the Drainage Districts have created and continue to maintain and operate a private nuisance;
- B. Order the Drainage Districts to take all actions necessary to abate nitrate pollution;
- C. Award damages to Des Moines Water works in an amount required to compensate

 Des Moines Water Works for the unlawful discharge of nitrate by all drainage districts in the

 Raccoon River watershed together with interest as provided by law;
 - D. Award the costs of this action to Des Moines Water Works; and
 - E. Grant such other relief as is deemed just, equitable, and proper by the Court.

COUNT VI: TRESPASS

- 246. Des Moines Water Works repleads all prior paragraphs as if fully set forth herein.
- 247. Nitrate conveyed into the Raccoon River by the Drainage Districts is a substantial physical invasion of Des Moines Water Works' exclusive use and enjoyment of its real estate and personal property.
- 248. The discharge of nitrate to the Raccoon River by operation of the Drainage Districts is an intentional physical invasion of Des Moines Water Works' property right to withdraw water from the Raccoon River and an intentional physical invasion to the real estate and treatment plants operated by Des Moines Water Works.
- 249. The physical invasion is ongoing so long as the Drainage Districts continue to discharge nitrate unabated.
 - 250. The Drainage Districts' physical invasion of Des Moines Water Works' property

is a reasonably foreseeable consequence of the operation of the Drainage Districts.

- 251. Des Moines Water Works has suffered substantial damage from the Drainage Districts' trespass.
- 252. The conduct of the Drainage Districts together with the conduct of similarly situated drainage districts contributes to a single, indivisible harm making the Drainage Districts jointly and severally liable for the damage caused to Des Moines Water Works.

WHEREFORE, the Plaintiff, Des Moines Water Works, respectfully prays that the Court grant the following relief under this Count VI:

- A. Declare that the Drainage Districts have created and continue to maintain and operate a trespass;
- B. Order the Drainage Districts to take all actions necessary to abate nitrate pollution;
- C. Award damages to Des Moines Water works in an amount required to compensate

 Des Moines Water Works for the unlawful discharge of nitrate by all drainage districts in the

 Raccoon River watershed together with interest as provided by law;
 - D. Award the costs of this action to Des Moines Water Works; and
 - E. Grant such other relief as is deemed just, equitable, and proper by the Court.

COUNT VII: NEGLIGENCE

- 253. Des Moines Water Works repleads all prior paragraphs as if fully set forth herein.
- 254. The Drainage Districts have a duty under Iowa and federal law not to discharge nitrate pollution into Raccoon River watershed that represents a threat to public health and welfare, and impairs downstream users such as Des Moines Water Works.
 - 255. The Drainage Districts have breached their duty to Des Moines Water Works by

failing to exercise ordinary care in the construction and operation of the network of drainage facilities which now collect and discharge harmful concentrations of nitrate into the Raccoon River watershed.

- 256. The Drainage Districts provide a direct and artificial means of transport for nitrate to the Raccoon River watershed.
 - 257. The Drainage Districts' conduct causes harm to Des Moines Water Works.
- 258. The Drainage Districts know their operation conveys unsafe levels of nitrate to the Raccoon River watershed and those levels will affect downstream users such as Des Moines Water Works.
- 259. The harm to Des Moines Water Works is a reasonably foreseeable consequence of the Drainage Districts' normal and intended operation.
- 260. Des Moines Water Works has been damaged by the Drainage Districts' breach of their duty.
- 261. The conduct of the Drainage Districts together with the conduct of similarly situated drainage districts contributes to a single, indivisible harm making them jointly and severally liable for the damage caused to Des Moines Water Works.

WHEREFORE, the Plaintiff, Des Moines Water Works, respectfully prays that the Court grant the following relief under this Count VII:

- A. Declare that the Drainage Districts have acted negligently and caused harm to Des Moines Water Works;
- B. Order the Drainage Districts to take all actions necessary to abate nitrate pollution;
 - C. Award damages to Des Moines Water works in an amount required to compensate

Des Moines Water Works for the unlawful discharge of nitrate by all drainage districts in the Raccoon River watershed together with interest as provided by law;

- D. Award the costs of this action to Des Moines Water Works; and
- E. Grant such other relief as is deemed just, equitable, and proper by the Court.

COUNT VIII: TAKING WITHOUT JUST COMPENSATION

- 262. Des Moines Water Works repleads all prior paragraphs as if fully set forth herein.
- 263. The Drainage Districts are persons within the meaning of 42 U.S.C. § 1983 as interpreted by Monell v. Dep't of Soc. Servs. of City of New York, 436 U.S. 658, 690 (1978), because, pursuant to Iowa Code Chapter 468, they are political subdivisions of the State of Iowa.
- 264. The Drainage Districts at all times relevant to this case acted under color of state law within the meaning of 42 U.S.C. § 1983 because they are operated pursuant to Iowa Code Chapter 468.
- 265. The Drainage Districts are operated independently of the State of Iowa by trustees who are the respective county boards of supervisors.
- 266. The Drainage Districts' policy and practice of discharging unregulated quantities of nitrate in high concentrations into the Raccoon River watershed causes harm to Des Moines Water Works and the general public.
- 267. The State of Iowa is not obligated to pay the indebtedness of the Drainage Districts; the Drainage Districts are self-funding and their finances are separate and independent from the finances of the State of Iowa.
- 268. The discharge of nitrate by the Drainage Districts into the Raccoon River watershed is permanent, physical invasion of and impairment to Des Moines Water Works' real estate and its right to withdraw water from the Raccoon River, and restricts Des Moines Water

Works' use of its real estate and property.

- 269. The discharge of nitrate by the Drainage Districts into the Raccoon River watershed has a substantial negative economic impact on Des Moines Water Works.
- 270. The discharge of nitrate by the Drainage Districts into the Raccoon River watershed interferes with Des Moines Water Works' expectation that it will have source water free of excess pollutants and unnaturally high concentrations of nitrate.
- 271. The character of the Drainage Districts' conduct is a physical invasion of Des Moines Water Works' property because nitrate discharged by the Drainage Districts interferes with the ownership interests of Des Moines Water Works.
- 272. The Drainage Districts' benefits to public health and welfare from draining the land do not justify the substantial harm to public health and welfare caused by nitrate discharge into the Raccoon River watershed.
- 273. The Drainage Districts have not compensated Des Moines Water Works for the taking of Des Moines Water Works' property.
- 274. The conduct of the Drainage Districts together with the conduct of similarly situated drainage districts contributes to a single, indivisible harm making them jointly and severally liable for the damage caused to Des Moines Water Works.
- 275. The discharge of nitrate by the Drainage Districts into the Raccoon River watershed is a regulatory and physical taking within the meaning of the Fifth Amendment to the United States Constitution as made applicable to the states by the Fourteenth Amendment to the United States Constitution and Article I, § 18 of the Constitution of the State of Iowa, and therefore Des Moines Water Works is entitled to just compensation for the permanent invasion of its property.

WHEREFORE, the Plaintiff, Des Moines Water Works, respectfully prays that the Court grant the following relief under this Count VIII:

- A. Declare that the Drainage Districts have taken property and continue to take property of Des Moines Water Works without just compensation in violation of the United States and Iowa Constitutions;
- B. Award just compensation to Des Moines Water works in an amount required to compensate Des Moines Water Works for the unlawful discharge of nitrate by all drainage districts in the Raccoon River watershed together with interest as provided by law;
 - C. Award the costs of this action to Des Moines Water Works;
 - D. Award reasonable attorneys' fees; and
 - E. Grant such other relief as is deemed just, equitable, and proper by the Court.

COUNT IX: DUE PROCESS & EQUAL PROTECTION

- 276. Des Moines Water Works repleads all prior paragraphs as if fully set forth herein.
- 277. The Drainage Districts are person within the meaning of 42 U.S.C. § 1983, and at all times relevant to this case have acted pursuant to a policy and practice under color of state law that deprives Des Moines Water Works of its rights guaranteed by the United States Constitution.
- 278. The Iowa Code and decisions of the Iowa Supreme Court have developed a constitutionally defective immunity for drainage districts that violates Des Moines Water Works' due process and equal protection rights.
- 279. To the extent the Drainage Districts have and enjoy any immunity from suit for claims herein, such immunity violates the Due Process and Equal Protection Clauses of the Fourteenth Amendment to the United States Constitution, the Due Process and Equal Protection

Clauses of the Iowa Constitution. U.S. Const., amend XIV; Iowa Const., art. I, §§ 6, 9.

- 280. Des Moines Water Works is being deprived of its substantive right to just compensation for governmental takings under the Iowa and United States Constitutions.
- 281. Granting the Drainage Districts immunity from suit in tort and for damages is not necessary to aid any compelling governmental interest because the discharge of nitrate creates a demonstrated hazard to the public health and welfare.
- 282. The benefits derived from providing Des Moines Water Works redress against the Drainage Districts outweighs any harm to the Drainage Districts because they are already subject to injunctive and other forms of equitable relief based on their failure to discharge their duties, and because they are already permitted to institute litigation as a plaintiff by Iowa Code § 468.90.

WHEREFORE, the Plaintiff, Des Moines Water Works, respectfully prays that the Court grant the following relief under this Count IX:

- A. A declaration from the Court that the Drainage Districts are subject to suit at law and equity for damages in tort and other relief resulting from their tortious conduct;
- B. Award damages to Des Moines Water works in an amount required to compensate

 Des Moines Water Works for the unlawful discharge of nitrate by all drainage districts in the

 Raccoon River watershed together with interest as provided by law;
- C. Award the costs of this action, including reasonable attorneys' fees, to Des
 Moines Water Works; and
 - D. Grant such other relief as is deemed just, equitable, and proper by the Court.

COUNT X: INJUNCTIVE RELIEF

283. Des Moines Water Works repleads all prior paragraphs as if fully set forth herein.

- 284. The discharge of nitrate by the Drainage Districts into the Raccoon River watershed is a breach of the duties of the Drainage Districts and an invasion of the public interest and the rights of Des Moines Water Works in all of the respects and particulars set forth in Counts I through IX.
- 285. Des Moines Water Works has suffered, and will continue to suffer, substantial damage.
- 286. In the alternative to the remedies requested in the prior Counts and to the extent no other adequate remedy is provided herein, remedies at law are inadequate to redress the ongoing and perpetual nature of the harm the Drainage Districts will cause Des Moines Water Works.
- 287. The Drainage Districts will not suffer unreasonable hardship if they are required to mitigate the discharge of nitrate into the Raccoon River or to obtain a permit, or both.
- 288. The public interest in reducing nitrate pollution is substantial given the dangerous health effects of nitrate and the number of people Des Moines Water Works serves.
- 289. Des Moines Water Works will succeed on the merits of its claims as set forth in the prior Counts.
- 290. The Court may frame an injunction that permits sufficient flexibility for the Drainage Districts to comply with the injunction without undertaking an unreasonable burden.

WHEREFORE the Plaintiff, Des Moines Water Works, respectfully prays that the Court grant the following relief under this Count X:

A. A permanent, prospective injunction enjoining the Drainage Districts to take all steps reasonably necessary within a reasonable period of time to reduce the discharge of nitrate to the Raccoon River to concentrations that do not exceed 10 mg/L;

- B. Award the costs of this action to Des Moines Water Works; and
- C. Grant such other relief as is deemed just, equitable, and proper by the Court.

Dated: March 16, 2015

By: /s/ Richard A. Malm

Richard A. Malm, AT004930 John E. Lande, AT0010976 OF

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