

“Won’t You Be My Neighbor?” Living with Concentrated Animal Feeding Operations

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ABSTRACT: Concentrated animal feeding operations (“CAFOs”) are prevalent throughout the nation and represent a serious and increasing problem for the United States. Proponents of CAFOs argue that such operations are necessary to meet this country’s demand for low-cost, readily available meat. Opponents point to the ever-increasing risks that CAFOs pose to humans, animals, and the environment. CAFOs in Iowa have operated under the minimum level of federally required regulations for a number of years. The negative effects of this lack of regulation are starting to take a toll on Iowans. Emerging public health concerns such as air quality and antibiotic resistance, individual health problems, animal welfare concerns, and the basic right to enjoy one’s property are becoming controversial issues and demand increased attention from the state’s government, courts, and citizens. This Note argues that Iowans should look to a variety of mechanisms to address these issues, including judicial action, increased legislation, and grassroots organizing efforts to ensure that Iowa remains not only an agricultural force in the United States, but also a safe and healthy environment for its present and future citizens.

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I.	INTRODUCTION.....	417
II.	AN OVERVIEW OF CAFOS IN THE UNITED STATES.....	418
	A. <i>AGRICULTURE AS INDUSTRY AND THE ECONOMIC RATIONALE FOR CAFOS</i>	418
	B. <i>FEDERAL REGULATION OF CAFOS</i>	419
	C. <i>STATE-LEVEL REGULATION AND INTER-STATE IMPACTS</i>	421
	D. <i>SOCIAL COSTS ARISING FROM CAFOS</i>	422
	1. Living Inside CAFOs: The Problem of Animal Welfare.....	422
	2. Public Health Concerns.....	425
	a. <i>Increase in Antibiotic-Resistant Bacteria and CAFOs</i>	425
	b. <i>CAFO Workers' Health</i>	426
	c. <i>Health Effects on Nearby Residents</i>	427
	3. The Day-to-Day Effects of CAFOs on Neighbors.....	428
III.	CAFOS IN IOWA.....	429
	A. <i>BY THE NUMBERS</i>	430
	B. <i>THE IOWA DEPARTMENT OF NATURAL RESOURCES AND OVERSIGHT OF CAFOS</i>	431
	C. <i>THE IOWA SUPREME COURT AND CAFOS</i>	435
	1. Lack of Local Control.....	435
	2. Right to Farm: <i>Bormann and Gacke</i>	436
IV.	MOVING FORWARD.....	438
	A. <i>LOOKING TO OTHER STATES' REGULATIONS</i>	438
	B. <i>APPROVAL PROCESS AND CITIZEN INVOLVEMENT</i>	440
	C. <i>COMMUNITY ORGANIZING AND LOCAL CONTROL</i>	441
V.	CONCLUSION.....	442

I. INTRODUCTION

The presence of concentrated animal feeding operations (“CAFOs”)¹ throughout the United States has raised a number of complex issues encompassing environmental science, public health, agribusiness, and legislative agendas.² Iowa, a state intricately tied to agriculture, has experienced a dramatic shift in recent years as CAFOs have transformed the business of farming. The traditional notion of a “family farm” brings to mind an image of a small patch of land with animals grazing and a variety of crops surrounding the farmer and his family’s well-kept house where they all live. The reality is quite different.³ Agriculture today is represented by hundreds of acres of land growing corn and soybeans and rows of metal buildings containing thousands of animals.⁴ This type of farming is often referred to as factory farming, and it is the primary source of food in America.⁵

As the reality of America’s family farmer changes, so does the way people think about how agricultural practices affect their communities, states, and the country as a whole. CAFOs are becoming a battleground in

1. According to the Environmental Protection Agency, CAFOs are a subset of animal feeding operations. *What Is a CAFO?*, U.S. ENVTL. PROTECTION AGENCY, www.epa.gov/region07/water/cafo/index.htm (last visited Sept. 28, 2013). “Animal Feeding Operations (AFOs) are agricultural operations where animals are kept and raised in confined situations. AFOs congregate animals, feed, manure and urine, dead animals, and production operations on a small land area.” *Id.* The EPA uses the term “CAFO” only in reference to AFOs that meet certain criteria and designates them according to small, medium, and large CAFOs. *Id.* Small CAFOs contain less than 300 cattle, less than 750 swine weighing over 55 pounds, less than 3000 swine under 55 pounds, and less than 9000 laying hens. U.S. ENVTL. PROT. AGENCY, REGULATORY DEFINITIONS OF LARGE CAFOs, MEDIUM CAFO, AND SMALL CAFOs, *available at* http://www.epa.gov/npdes/pubs/sector_table.pdf (last visited Sept. 28, 2013) [hereinafter REGULATORY DEFINITIONS]. Small CAFOs are only designated as CAFOs for regulatory purposes if they are a “significant contributor of pollutants.” *Id.* Medium CAFOs contain 300–999 cattle, 750–2499 swine weighing over 55 pounds, 3000–9999 swine weighing less than 55 pounds each, and 9000–29,999 laying hens. *Id.* Medium CAFOs, in addition to the size stipulations, must either have “a manmade ditch or pipe that carries manure or wastewater to surface water; or the animals come into contact with surface water that passes through the area where they’re confined.” *Id.* (emphasis omitted). Large CAFOs are defined as having any greater number of animals than medium CAFOs and automatically require construction permits. *Id.*

2. See Warren A. Braunig, Note, *Reflexive Law Solutions for Factory Farm Pollution*, 80 N.Y.U. L. REV. 1505, 1507–08 (2005) (noting that the increase in CAFOs has resulted in issues involving legislation, environmental harms, and the possibility for new regulations).

3. Susan Poll-Klaessy, *Factory Farms Muck Up Rural America*, 13 PUB. INT. L. REP. 107, 107 (2008).

4. See Melanie J. Wender, Note, *Goodbye Family Farms and Hello Agribusiness: The Story of How Agricultural Policy Is Destroying the Family Farm and the Environment*, 22 VILL. ENVTL. L.J. 141, 141–42 (2011) (noting that “[m]ost Americans today purchase their meat from agricultural operations that raise animals in intensive confinement, such as ‘several thousand pigs or tens of thousands of chickens per barn’”).

5. R. Jason Richards & Erica L. Richards, *Cheap Meat: How Factory Farming Is Harming Our Health, the Environment, and the Economy*, 4 KY. J. EQUINE, AGRIC., & NAT. RESOURCES L. 31, 31 (2011–2012).

the war over food and the environment in the United States.⁶ Iowa, as a major agricultural center, is uniquely positioned as a state with inherent interests in ensuring that the agricultural industry remains strong; it also has, however, a rural population that is growing increasingly concerned about the effects of living near these massive operations.

This Note argues that Iowa is confronting complex problems associated with CAFOs. The state's agricultural laws aim to protect CAFOs regardless of growing concerns regarding the health and safety of people living near such operations, while the Iowa Department of Natural Resources ("IDNR")—the agency charged with enforcing environmental regulations—has been the subject of a recent investigation and reprimand by the Environmental Protection Agency ("EPA") for failing to adequately enforce federal environmental laws. This Note proposes that Iowa work to change its approach to CAFOs through legislative, judicial, and grassroots action. Part II provides a brief overview of CAFOs nationally, including how the federal government regulates them and the major issues affecting people throughout the country that have arisen as CAFOs expand. Part III addresses the existence of CAFOs specifically in Iowa, including legislation and judicial decisions regarding CAFOs. Part IV discusses the means that Iowans should use to ensure CAFOs are properly regulated and that all Iowans enjoy a high quality of life, regardless of where they live.

II. AN OVERVIEW OF CAFOs IN THE UNITED STATES

Before delving into the current state of CAFOs in Iowa, it is necessary to examine CAFOs on a national scale. This Part discusses public health issues that have been identified as particularly problematic, in addition to the economic arguments for industrialized farming and the federal regulatory framework governing CAFOs.

A. AGRICULTURE AS INDUSTRY AND THE ECONOMIC RATIONALE FOR CAFOs

The development of CAFOs as a presence in the agricultural industry has engendered controversy for decades.⁷ Proponents of CAFOs, however, have consistently maintained that there are numerous benefits associated with this type of livestock production that outweigh any negative consequences that may result.⁸ Viewed most positively, "CAFOs can provide

6. See Braunig, *supra* note 2, at 1505 (noting that CAFOs are beginning to be brought "into the regulatory fold").

7. See CARRIE HRIBAR, NAT'L ASS'N OF LOCAL BDS. OF HEALTH, UNDERSTANDING CONCENTRATED ANIMAL FEEDING OPERATIONS AND THEIR IMPACT ON COMMUNITIES 1-2 (2010), available at http://www.cdc.gov/nceh/ehs/Docs/Understanding_CAFOs_NALBOH.pdf (providing a brief overview of CAFO regulation and court action since the 1970s).

8. See WILLIAM J. WEIDA, CONSIDERING THE RATIONALES FOR FACTORY FARMING 1 (2004), available at <http://www.worc.org/userfiles/file/Weida-economicsofCAFOs.pdf> (noting that

[consumers with] a low-cost source of meat, milk, and eggs, due to efficient feeding and housing of animals, increased facility size, and animal specialization.”⁹ CAFOs are also credited with helping to improve local economies by utilizing local agricultural materials and feed, as well as providing the financial benefits of increased tax revenue.¹⁰

The primary argument CAFO operators raise in support of their industry is one of economic efficiency—producing more goods at a faster rate and lower cost. CAFO operators boasting large numbers of animals can afford to implement new forms of technology, such as manure storage facilities, that are too expensive for small-scale farmers to afford.¹¹ Additionally, massive amounts of government subsidies are provided to CAFOs because of their efficiency.¹² These subsidies make it difficult for states, including Iowa, to effectively regulate agriculture for fear of losing out on government funds.¹³

At its core, the argument in favor of CAFOs is simple: “[a]gricultural production should be organized to serve the greatest good for the greatest number, by producing key commodities in the most efficient way possible, all things considered.”¹⁴ In order for CAFOs to prevail over more sustainable agricultural practices in this economic equation, however, the “all things considered” caveat becomes crucial to the analysis, requiring a determination of whether the significant social costs imposed by CAFO operations outweigh their perceived benefits.¹⁵ This balancing act is performed by the government, which theoretically minimizes the social costs of CAFOs through regulations.¹⁶

B. FEDERAL REGULATION OF CAFOs

CAFOs are subject to baseline regulations by the Environmental Protection Agency. The EPA regulates CAFOs through its authority under

CAFO operators claim there are several benefits associated with CAFOs that do not exist under traditional farming methods).

9. HRIBAR, *supra* note 7, at 2.

10. *Id.*

11. John C. Becker & John H. Howard, *A Historical View of the Solutions Offered to Regulate Concentrated Animal Feeding Operations Under the Clean Water Act: What Has Been Learned?*, 3 KY. J. EQUINE, AGRIC., & NAT. RESOURCES L. 71, 75 (2010–2011).

12. Richards & Richards, *supra* note 5, at 35 (“It is estimated that between 1997 and 2005, government subsidies to chicken, pork, beef, and corn producers were roughly \$26.5 billion.”).

13. *Id.* at 35–36.

14. Paul B. Thompson, *Getting Pragmatic About Farm Animal Welfare*, in ANIMAL PRAGMATISM: RETHINKING HUMAN–NONHUMAN RELATIONSHIPS 140, 151 (Erin McKenna & Andrew Light eds., 2004).

15. *See id.* (noting that “all things considered” includes factors such as pollution or unsafe production costs).

16. *See WEIDA, supra* note 8, at 4 (claiming that CAFOs rely on governmental subsidies to decrease operating costs and pressuring governments to relax environmental regulations that affect CAFOs).

the Clean Water Act (“CWA”).¹⁷ Because “CAFOs generate a staggering amount of animal waste (estimated at upward of 500 million tons per year, at least three times more than all the human waste generated in America),” the EPA treats large CAFOs as “point sources” for water pollution.¹⁸ A point source is defined under the CWA as “any discernible, confined, and discrete conveyance, including but not limited to, any . . . concentrated animal feeding operation . . . from which pollutants are or may be discharged.”¹⁹

CAFO waste product is typically stored in lagoons where it remains untreated until it is spread on fields as manure fertilizer.²⁰ This practice of manure spreading is known as “land application.”²¹ Land application can easily result in the pollution of nearby waterways.²² The EPA has determined that these large CAFO lagoons are point sources for water pollution because the lagoons are far from secure—floods and lagoon collapse are common sources of spillage into groundwater and surface waterways.²³ Additionally, manure over-applied as field fertilizer can seep into streams and groundwater.²⁴

A problematic aspect of the EPA’s regulatory scheme is that unlike pollution standards for other industries, most CAFOs (small- or medium-sized facilities) are considered “nonpoint sources” for pollution and are therefore not required to obtain National Pollutant Discharge Elimination System (“NPDES”) permits.²⁵ Large CAFOs that discharge waste into a water source, however, must obtain an NPDES permit.²⁶

A recent Fifth Circuit decision further weakened the EPA’s governance of CAFOs by determining that the EPA lacked the authority to require “CAFOs that propose to discharge [to] apply for an NPDES permit.”²⁷ The court held “there must be an actual discharge into navigable waters to

17. 40 C.F.R. § 122.23 (2012) (stating that CAFOs “are point sources, subject to NPDES permitting requirements as provided in this section”). The EPA distinguishes between large and medium CAFOs, as well as noting a separate category for “animal feeding operations.” *Id.* § 122.23(b). For example, large CAFOs confine more than “2,500 swine each weighing 55 pounds or more” or “30,000 laying hens or broilers, if the AFO uses a liquid manure handling system.” *Id.* § 122.23(b)(4)(iv), (ix). Medium CAFOs include “750 to 2,499 swine each weighing 55 pounds or more” or “9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system.” *Id.* § 122.23(b)(6)(i)(D), (I).

18. See Braunig, *supra* note 2, at 1509.

19. 40 C.F.R. § 122.2.

20. Braunig, *supra* note 2, at 1509.

21. Poll-Klaessy, *supra* note 3, at 109.

22. *Id.* (“Improper or excessive land application is the most common way these pollutants run off into nearby waterways or leach into the soil and ground water.”).

23. Braunig, *supra* note 2, at 1509–10.

24. *Id.* at 1510.

25. *Id.* at 1514.

26. 40 C.F.R. § 122.23 (2012) (defining CAFOs as “point sources, subject to NPDES permitting requirements”).

27. Nat’l Pork Producers Council v. EPA, 635 F.3d 738, 750 (5th Cir. 2011).

trigger the CWA’s requirements and the EPA’s authority. Accordingly, the EPA’s authority is limited to the regulation of CAFOs that discharge.”²⁸ This distinction further limits the EPA’s authority and reduces the number of CAFOs that must obtain NDPEs permits to those that have *already discharged* pollutants into water sources.²⁹ This means that at the point when the EPA can act, pollution has already occurred and the damage has begun. The federal regulation of CAFOs, therefore, is relatively minimal, leaving ample room for states to devise their own regulations.

C. STATE-LEVEL REGULATION AND INTER-STATE IMPACTS

In addition to federal regulation, states enact their own independent legislation limiting (or not limiting) factory farming.³⁰ These efforts vary from state to state, but very few states enact requirements that are significantly more stringent than the federal requirements.³¹ Iowa’s regulatory framework, addressed in this Note, leaves CAFOs virtually unregulated, aside from the mandated EPA guidelines.³² In fact, in the summer of 2012, the EPA issued a preliminary report finding that Iowa’s Department of Natural Resources had failed to adequately enforce federal CAFO regulations.³³ This report, along with Iowa’s response, is discussed in Part III.

Although the EPA’s baseline standards for CAFOs function as a starting point from which states can implement stricter regulations, the variety of state regulations and the agribusiness interests that often influence state legislative processes suggest the need for more stringent federal involvement.³⁴ In addition to the conflicts that arise in creating effective

28. *Id.* at 751.

29. *Id.*

30. See Braunig, *supra* note 2, at 1515 (“[W]hile state legislators have been active, it is not clear that their regulations are improving conditions.”).

31. See *id.* (discussing several states’ approaches and the mixed results of those efforts).

32. See *id.* (identifying Iowa as a state impacted by “powerful lobbying and protesting by agribusiness interests”).

33. REGION 7, U.S. ENVTL. PROT. AGENCY, PRELIMINARY RESULTS OF AN INFORMAL INVESTIGATION OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROGRAM FOR CONCENTRATED ANIMAL FEEDING OPERATIONS IN THE STATE OF IOWA 4 (2012), available at http://www.epa.gov/region07/water/pdf/ia_cafo_preliminary_report.pdf (finding that Iowa’s DNR failed to take the following actions: to issue “NDPEs permits to CAFOs when appropriate,” to “conduct[] comprehensive inspections to determine whether unpermitted CAFOs need NPDES permits,” “to act, or . . . follow its . . . policy when addressing CWA/NDPEs permit violations,” and to “assess[] adequate penalties against CAFOs,” and, additionally, finding that the department’s land application setbacks and distance requirements were “not equivalent to federal requirements”).

34. See Douglas R. Williams, *When Voluntary, Incentive-Based Controls Fail: Structuring a Regulatory Response to Agricultural Nonpoint Source Water Pollution*, 9 WASH. U. J.L. & POL’Y 21, 25 (2002) (noting that “[m]any states have been reluctant to impose direct controls on agricultural nonpoint source pollution for a variety of reasons, including the relative political power of agricultural interests at the local and state level”).

state legislation, stronger federal involvement may be necessary due to the interconnectedness of emerging environmental problems. A recent article in the *Des Moines Register* addressed the role that Iowa's (and other Midwestern states') agricultural practices play in the pollution of the Gulf of Mexico.³⁵ Excess nitrogen and phosphorous, "[t]he two primary pollutants from manure," have pooled into the Gulf and created an oxygen-starved "dead zone" where marine life cannot exist.³⁶ This development directly affects the industries that rely on the ecosystems in the Gulf—industries that have been severely harmed by the lack of environmental regulations hundreds of miles up the Mississippi River.³⁷ As CAFOs continue to expand, environmental harm is not the only threat that must be addressed. The health and living conditions of animals and people are also primary concerns.

D. SOCIAL COSTS ARISING FROM CAFOs

The social costs of CAFOs increase as the number and size of CAFOs continue to grow. This Part does not attempt to provide a comprehensive explanation of every issue, but rather outlines several of the more prominent dangers associated with CAFOs, all of which have been the focus of extensive academic and scientific research. These issues include: animal welfare; public health concerns such as antibiotic resistance, the health of CAFO workers, and the health effects residents suffer near CAFOs; the problems associated with trying to bring a nuisance action against a CAFO; and decreased property values for residences in close proximity to CAFOs.

1. Living Inside CAFOs: The Problem of Animal Welfare

Animals raised in CAFOs have become the subject of great debate in this country.³⁸ The federal Animal Welfare Act does not apply to farm

35. Perry Beeman, *Runoff from Iowa Farms Growing Concern in Gulf*, DES MOINES REG. (Oct. 28, 2012), http://www.desmoinesregister.com/apps/pbcs.dll/article?AID=/201210280405/NEWS/310280045&nclick_check=1.

36. DOUG GURIAN-SHERMAN, UNION OF CONCERNED SCIENTISTS, *CAFOs UNCOVERED: THE UNTOLD COSTS OF CONFINED ANIMAL FEEDING OPERATIONS* 4 (2008), available at http://www.ucsusa.org/assets/documents/food_and_agriculture/cafos-uncovered.pdf. Animal sources, including CAFOs, are directly responsible for approximately fifteen percent of the manure run-off causing the Gulf's dead zone. *Id.* The other contributing pollutants, however, come from farmland that is often heavily fertilized with manure from CAFOs. See WEIDA, *supra* note 8, at 1 (noting that CAFOs claim there are significant benefits to using "liquid animal manure as a crop nutrient," although that presumes manure is applied only in "rates that adequately nourish the crops without providing more fertilizer than crops can use").

37. See Beeman, *supra* note 35 (noting that the shrimp, crab, and oyster industries are facing scarcity problems). Beeman also reports that Minnesota and Wisconsin have begun "limit[ing] how much nitrogen or phosphorous can enter waterways" while "political leaders, farm organizations and many individual farmers have opposed similar restrictions" in Iowa. *Id.*

38. Cheryl L. Leahy, *Large-Scale Farmed Animal Abuse and Neglect: Law and Its Enforcement*, 4 J. ANIMAL L. & ETHICS 63, 89–90 (2011).

animals, nor do most state animal welfare laws (including Iowa’s).³⁹ As a result of this lack of regulation, the conditions of factory farms, while shocking to most people,⁴⁰ are not in any way illegal. For example, laying hens (raised for egg production) are normally confined to cages smaller in dimension than a standard sheet of notebook paper.⁴¹ Due to the crowded conditions, the tips of chickens’ beaks are routinely sliced off with a hot blade to prevent them from pecking one another through their cages.⁴² Gestational crates confine pregnant sows to spaces that are only two-feet wide by seven-feet long—too small for the sow to even turn around—for nearly seventy percent of their lives.⁴³ The conditions are similar for all animals raised in confinement facilities.⁴⁴

The only regulatory structure in place for protecting CAFO-raised animals is the Humane Slaughter Act.⁴⁵ However, this legislation only governs how animals die;⁴⁶ it does not provide protection for animals during their lives.⁴⁷ Even the processing phase of livestock production includes practices such as “thumping” and “piping” that, because they do not technically constitute “slaughter,” are not regulated under the Humane Slaughter Act.⁴⁸ Furthermore, the Humane Slaughter Act includes an exception from its standards for poultry operations.⁴⁹ Making matters worse, the Act is routinely ignored, a fact which “the late Senator Robert Byrd (D-WV) lamented,”⁵⁰ stating that: “Federal law is being ignored. Animal cruelty

39. 9 C.F.R. § 1.1 (2013). Under the Animal Welfare Act, the term “animal” “excludes . . . farm animals, such as, but not limited to, livestock or poultry used or intended for use as food or fiber, or livestock or poultry used or intended for use for improving animal nutrition, breeding, management, or production efficiency, or for improving the quality of food or fiber.” *Id.*

40. Leahy, *supra* note 38, at 89–90 (noting public outrage at the uncovering of extreme animal cruelty at a dairy CAFO).

41. Susan Adams, *Legal Rights of Farm Animals*, MD. B.J., Sept.–Oct. 2007, at 18, 20.

42. *Id.*

43. *Id.*

44. *See id.* at 20–21 (noting that farm animals lack any legal protection and then outlining the various types of abuse that occur in CAFOs).

45. *See* 7 U.S.C. § 1901 (2012); James I. Pearce, *A Brave New Jungle: Factory Farming and Advocacy in the Twenty-First Century*, 21 DUKE ENVTL. L. & POL’YF. 433, 440 (2011).

46. *See* 7 U.S.C. § 1901 (employing language that explicitly refers to slaughter and failing to address the living conditions of animals).

47. *Id.*

48. Thumping is how CAFOs ensure uniform size in hogs. Piglets who do not grow fast enough are “[p]icked up by their hind legs . . . and then bashed headfirst onto the concrete floor”—removing them from the operation. Pearce, *supra* note 45, at 443 (quoting GAIL A. EISNITZ, *SLAUGHTERHOUSE: THE SHOCKING STORY OF GREED, NEGLECT, AND INHUMANE TREATMENT INSIDE THE U.S. MEAT INDUSTRY* 220 (1997)). Piping is what happens to hogs that are unable to move down the chute to slaughter. “To quickly dispose of a crippled hog, workers have been known to beat it to death with a lead pipe.” *Id.*

49. *See id.* at 459 n.135 (citing EISNITZ, *supra* note 48, at 310).

50. *Id.* at 440.

abounds. It is sickening. It is infuriating. Barbaric treatment of helpless, defenseless creatures must not be tolerated even if these animals are being raised for food.”⁵¹

Numerous advocacy groups have focused their efforts on improving the lives of animals raised in CAFOs, including the Humane Society, People for the Ethical Treatment of Animals, and the World Society for the Protection of Animals.⁵² Recently enacted statutes criminalizing the documentation of conditions inside CAFOs, however, aim to limit the ability of advocacy groups, and other concerned citizens, to spread awareness of this issue.⁵³ For example, in Iowa, it is a misdemeanor to attempt to gain employment at a CAFO and subsequently expose the working (and, for animals, living) conditions.⁵⁴ Nevertheless, continued efforts by various groups encourage the United States to recognize greater protection for farm animals.

The leading standard for animal rights activists proposing farm animal welfare reform is the Five Freedoms, a definition of animal welfare first proposed in Britain that has come to encapsulate activists’ efforts.⁵⁵ The Five Freedoms include (1) “[f]reedom from hunger and thirst,” (2) “[f]reedom from discomfort,” (3) “[f]reedom from pain, injury or disease,” (4) “[f]reedom from fear and distress,” and (5) “[f]reedom to express normal behaviour.”⁵⁶ The Five Freedoms, while prevalent in Europe, has yet to find a foothold in the regulation of American CAFOs.

Conversely, the proposed 2012 Farm Bill (which failed in the Senate) included an amendment specifically designed to prohibit states from requiring animal living condition standards—a move “aimed at stopping a California law banning the sale of eggs harvested from hens living in tiny cages where they cannot spread their wings. It also stops another law from banning the sale of foie gras made using forced feeding.”⁵⁷ The amendment’s sponsor, Iowa Representative Steve King, cited the federal government’s responsibility for regulating interstate commerce and asserted that the states cannot ban products from another state due to production

51. *Id.* (quoting 147 Cong. Rec. S7310 (daily ed. July 9, 2001) (statement of Sen. Byrd)) (internal quotation marks omitted).

52. *Resources*, CAFO, http://www.cafothebook.org/resources_3.htm (last visited Sept. 28, 2013).

53. Dan Flynn, *Five States Now Have ‘Ag-Gag’ Laws on the Books*, FOOD SAFETY NEWS (Mar. 26, 2012), <http://www.foodsafetynews.com/2012/03/five-states-now-have-ag-gag-laws-on-the-books/#.UGNVDMoQ8no>.

54. *Id.*

55. *Animal Welfare*, BRIT. SOC’Y ANIMAL SCI., http://web.archive.org/web/20120220030511/http://www.bsas.org.uk/about_the_bsas/issue_papers/animal_welfare/ (last visited Sept. 28, 2013).

56. *Id.*

57. Erik Wasson, *Midnight Egg Amendment in 2012 Farm Bill Escalates Animal Rights Fight*, HILL (July 15, 2012, 7:00 AM), <http://thehill.com/blogs/on-the-money/budget/237939-midnight-egg-amendment-in-2012-farm-bill-escalates-animal-rights-fight>.

methods.⁵⁸ The conflict in this "egg amendment" controversy, however, was not limited to politicians. The National Pork Producers Council and the American Farm Bureau were both vehemently opposed to stricter egg production standards in California, while the Humane Society decried King's amendment as a blow to reasonable animal welfare standards.⁵⁹

2. Public Health Concerns

While animal welfare represents perhaps the most viscerally disturbing aspect of CAFOs, CAFOs cause numerous threats to human health. These threats range from those on a national level to more localized dangers confronting people living and working in close proximity to CAFOs.

a. Increase in Antibiotic-Resistant Bacteria and CAFOs

The increase in antibiotic-resistant bacteria is a source of growing concern in the public health and medical communities.⁶⁰ The widespread use of antibiotics in CAFO-raised animals has led researchers to conclude that these practices may contribute to the problem of antibiotic resistance in humans.⁶¹ The use of antibiotics in CAFOs far exceeds the traditional use of antibiotics as treatments for diseases,⁶² in part because CAFOs utilize them for subtherapeutic purposes,⁶³ which involve adding antibiotics directly into animal food to encourage rapid growth and the prevention of possible disease outbreaks among animal populations.⁶⁴

Subtherapeutic uses of antibiotics have been widely criticized for contributing to the emergence of antibiotic-resistant bacteria.⁶⁵ There remains some dispute among researchers about the extent to which CAFOs

58. *Id.*

59. *Id.* Additionally, the amendment is cited as threatening a tentative agreement reached by the Humane Society and the United Egg Producers to slowly replace the standard cages for laying hens with a larger size. *Id.*

60. See *Antibiotic Resistance and the Threat to Public Health: Hearing Before the Subcomm. on Health of the H. Comm. on Energy and Commerce*, 111th Cong. (2010) (statement of Thomas Frieden, Director, Centers for Disease Control and Prevention), available at <http://www.cdc.gov/washington/testimony/2010/t20100428.htm> ("Without continuing to improve on our response to the public health problem of antibiotic resistance, we are potentially headed for a post-antibiotic world in which we will have few or no clinical interventions for some infections.").

61. Sudeshna Ghosh & Timothy M. LaPara, *The Effects of Subtherapeutic Antibiotic Use in Farm Animals on the Proliferation and Persistence of Antibiotic Resistance Among Soil Bacteria*, 1 ISME J. 191, 191 (2007), available at <http://www.nature.com/ismej/journal/v1/n3/pdf/ismej200731a.pdf> (noting that over half of all antibiotics produced in the United States are for agricultural use).

62. *Id.*

63. Antibiotics are typically used to treat diseases in both humans and animals. HRIBAR, *supra* note 7, at 10–11. The practice of administering antibiotics in lower level doses to livestock is referred to as "subtherapeutic use." *Id.* at 10. The administration of subtherapeutic antibiotics in CAFOs causes "animals [to] grow faster, produce more meat and avoid illnesses." *Id.*

64. Ghosh & LaPara, *supra* note 61, at 191.

65. *Id.* at 191–92.

contribute to that threat and whether the risk to human health is significant enough to warrant discontinuing the subtherapeutic administration of antibiotics in CAFOs.⁶⁶ Existing evidence about the threat, however, was enough to prompt the Pew Charitable Trusts and Johns Hopkins University to recommend that the “subtherapeutic use of antibiotics in animal agriculture . . . be phased out in the US, as has recently occurred in the [European Union].”⁶⁷ As the threat of antibiotic-resistant bacteria increases, it seems likely that CAFOs will remain a source of concern for scientists, the public, and, possibly, regulators.

b. CAFO Workers' Health

Health threats from CAFOs exist on a smaller scale as well, impacting those who work in the actual facilities. Agricultural workers are engaged in one of the most hazardous occupations in the country.⁶⁸ As of 2008, there were 21.3 fatalities per 100,000 workers in the agricultural industry, making agriculture the second-most deadly industry, following only mining.⁶⁹ CAFOs tend to employ people from populations that lack access to healthcare, exacerbating the negative effects of the working conditions.⁷⁰ Additionally, CAFOs are continually growing in size and number while the number of workers in these facilities has decreased, leading to possibly dangerous ratios of workers to animals.⁷¹

The main hazards of working in agriculture come from injuries incurred through direct encounters with animals (a threat particularly high in CAFOs) and machinery-related injuries.⁷² Air pollution is the other major source of problems, with up to forty percent of CAFO workers experiencing serious respiratory illnesses, including chronic bronchitis, organic dust toxin

66. *See id.* (noting that although “it is agreed that subtherapeutic antibiotic use leads to an increase in antibiotic-resistant fecal bacteria in the animals, the role of subtherapeutic antibiotic use in the global spread of antibiotic resistance remains ambiguous” (citations omitted)).

67. Amy Pruden, *Antibiotic Resistance Associated with CAFOs*, in HORMONES AND PHARMACEUTICALS GENERATED BY CONCENTRATED ANIMAL FEEDING OPERATIONS 71, 71 (Laurence S. Shore & Amy Pruden eds., 2009).

68. F.M. Mitloehner & M.S. Calvo, *Worker Health and Safety in Concentrated Animal Feeding Operations*, 14 J. AGRIC. SAFETY & HEALTH 163, 163 (2008).

69. *Id.* at 167.

70. *See id.* (noting that CAFO workers face similar problems as other worker populations comprised mainly of immigrants: lack of access to healthcare, low income, low education levels, and high injury rates).

71. *Id.* at 166 (“Between 2000 and 2005, there was a 12% decrease in the number of workers employed on U.S. livestock farms During the same period, national livestock animal inventories increased by 3% An increase in animal units per worker may lead to greater work and exposure risks.”).

72. *Id.* at 164.

syndrome, and sinusitis.⁷³ The toxins to which CAFO workers are exposed vary, but they include hydrogen sulfide, ammonia, and particulate matter.⁷⁴ CAFO workers also have an increased risk of musculoskeletal disorders and loss of hearing from heightened noise levels.⁷⁵ These health effects, however, are not limited solely to CAFO workers, but may spread to surrounding residents.

c. Health Effects on Nearby Residents

It is perhaps unsurprising that people living near CAFOs tend to experience unpleasant side effects from the facilities, including intense odors and flies.⁷⁶ While those irritants are a serious issue for residents, an emerging and potentially grave concern is the threat posed by CAFOs to residents' health as a result of their proximity to these facilities.⁷⁷ In an Iowa study of the effects of CAFOs, researchers noted that "[a]ir quality data for CAFOs are quite limited. There are relatively few monitoring programs for large-scale livestock production compared to other industries that are regulated."⁷⁸ Although scientists have yet to fully explore this area of public health, research suggests that people who live near CAFOs, particularly children and the elderly, suffer from increased respiratory problems similar to those experienced by CAFO workers.⁷⁹

Although the data are still incomplete, a number of scientists hypothesize that CAFOs are a likely source of health problems for nearby residents.⁸⁰ For instance, the American Public Health Association issued a recommendation urging "federal, state and local governments and public health agencies to impose a moratorium on new Concentrated Animal Feed

73. Carol J. Hodne, *Rural Environmental Health and Industrial Agriculture: A Case Example of Concentrated Animal Feeding Operations*, in CRITICAL ISSUES IN RURAL HEALTH 61, 64 (Nina Glasgow et al. eds., 2004).

74. Mitloehner & Calvo, *supra* note 68, at 171-72.

75. *Id.* at 164, 169-70.

76. HRIBAR, *supra* note 7, at 7-8 (describing the effect that such nuisances can have on residents near CAFOs).

77. Dick Heederik et al., *Health Effects of Airborne Exposures from Concentrated Animal Feeding Operations*, 115 ENVTL. HEALTH PERSP. 298, 298, 300 (2007) (noting that although "[t]he issue of which specific community health effects may result from CAFO emissions is open and controversial," there needs to be further study, specifically of particulate matter exposure and other pulmonary irritants (emphasis added)).

78. Peter S. Thorne, *Air Quality Issues*, in IOWA CONCENTRATED ANIMAL FEEDING OPERATIONS AIR QUALITY STUDY 35, 35 (2002), available at http://www.ehsrc.uiowa.edu/CAFO_study/CAFO_final2-14.pdf.

79. James A. Merchant et al., *Human Health Effects*, in IOWA CONCENTRATED ANIMAL FEEDING OPERATIONS AIR QUALITY STUDY, *supra* note 78, at 121, 122.

80. See generally Michael Greger & Gowri Koneswaran, *The Public Health Impacts of Concentrated Animal Feeding Operations on Local Communities*, 33 FAM. & COMMUNITY HEALTH 373 (2010) (noting that, although the science is not yet settled, there are numerous studies indicating that CAFOs cause a variety of health issues for those living near such operations).

Operations until additional scientific data on the attendant risks to public health have been collected and uncertainties resolved.”⁸¹ However, federal and state governments have not responded in any meaningful way.⁸²

3. The Day-to-Day Effects of CAFOs on Neighbors

For a rural property owner, there is probably nothing so disheartening as the news that a CAFO is moving in next door. In addition to the possible risk of the negative health effects discussed above, strong odors, flies, and the sound of thousands of animals living together in one building accompany the operation of a CAFO. Despite the infringement on residents’ enjoyment of their property, neighbors of CAFOs have traditionally had limited remedies against the construction and operation of these facilities due to right-to-farm laws.⁸³

Every state has a version of a right-to-farm statute on its books, which protects CAFO owners from nuisance actions related to odors, flies, or other infringements due to the proximity of CAFOs to other property.⁸⁴ Economically speaking, these types of prohibitions serve to protect the investment of CAFO operators by preventing others from filing of a nuisance suit and adversely affecting the operation.⁸⁵ These statutes take different forms and vary in strength. In almost all states, anyone who “come[s] to the nuisance” cannot bring a legal action against a CAFO.⁸⁶ Some states adopt a statute of limitations against nuisance suits, preventing residents from seeking legal action against a CAFO after a specific time period expires.⁸⁷ A more flexible protection for CAFOs is to allow them to receive nuisance protection even as the operation expands or changes over time.⁸⁸

81. AM. PUB. HEALTH ASS’N, POLICY NO. 20037, PRECAUTIONARY MORATORIUM ON NEW CONCENTRATED ANIMAL FEED OPERATIONS (2003), available at <http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1243>.

82. North Carolina put a moratorium in place due to a series of manure lagoon breaks, but the ban eventually ended and the results of the ban were decidedly mixed. David Osterberg & Stewart W. Melvin, *Relevant Laws, Regulations and Decisions, in IOWA CONCENTRATED ANIMAL FEEDING OPERATIONS AIR QUALITY STUDY*, *supra* note 78, at 184, 193; *see infra* notes 169–70 and accompanying text.

83. Terence J. Centner, *Governments and Unconstitutional Takings: When Do Right-to-Farm Laws Go Too Far?*, 33 B.C. ENVTL. AFF. L. REV. 87, 88 (2006) (noting a growing concern that some right-to-farm laws “provide too much protection for agricultural pursuits and other activities at the expense of neighboring property owners”).

84. *See id.* at 94–95 (noting that there are “five significant approaches to anti-nuisance protection” that states often utilize in protection of farmland); *see also* HRIBAR, *supra* note 7, at 11–12.

85. Centner, *supra* note 83, at 95–96.

86. *Id.* at 95.

87. *Id.* at 98.

88. *See id.* at 95 (“A third approach [to right-to-farm statutes] allows operations to expand and adopt production changes.”).

A more controversial approach to right-to-farm legislation is for states to enact “expansive immunity.”⁸⁹ Several state courts have determined that these expansive right-to-farm laws go too far in protecting agricultural interests and have found such laws unconstitutional.⁹⁰ The Iowa Supreme Court ruled Iowa’s right-to-farm law unconstitutional in two cases: *Bormann v. Board of Supervisors* and *Gacke v. Pork Xtra, L.L.C.*⁹¹ This Note addresses these cases and the outlook for future nuisance actions in Iowa in greater depth in Part III.C.

In addition to limitations on nuisance suits, neighbors of CAFOs are often unable to escape the situation by moving. Areas populated with CAFOs face decreased property values.⁹² CAFOs act as an “impairment” on the property, leaving owners with the option to sell their properties—often at a significant loss—or to remain on their property and suffer the ill effects of living next to a CAFO.⁹³ A report found that Iowa’s residents suffered a decrease in property value of “forty [percent] within a half-mile; thirty [percent] within one mile; twenty [percent] within one and a half miles; and ten [percent] within two miles.”⁹⁴ These options can leave property owners feeling helpless and contribute further to the stress CAFOs impose on residents.

Quality-of-life markers, such as being able to go outside (a natural part of life for most people who live in rural areas), also decline for people living near CAFOs.⁹⁵ CAFOs may additionally have an overall negative effect on the economic well-being of communities.⁹⁶ These effects are serious consequences of CAFOs, and this Note examines how such factors influence residents of Iowa and considers potential solutions.

III. CAFOs IN IOWA

Iowa is synonymous with agriculture, producing more corn and soybeans than any other state and ranking second in overall agricultural

89. *Id.* at 114.

90. HRIBAR, *supra* note 7, at 11–12 (noting that courts in four states—Iowa, Michigan, Minnesota, and Kansas—have held “right-to-farm” laws unconstitutional and that other states have rewritten these laws to ensure their constitutionality).

91. *Gacke v. Pork Xtra, L.L.C.*, 684 N.W.2d 168 (Iowa 2004); *Bormann v. Bd. of Supervisors*, 584 N.W.2d 309 (Iowa 1998).

92. John A. Kilpatrick, *Concentrated Animal Feeding Operations and Proximate Property Values*, 69 APPRAISAL J. 301, 305–06 (2001).

93. *Id.* at 303–04.

94. Richards & Richards, *supra* note 5, at 38–39.

95. See Jan L. Flora et al., *Social and Community Impacts, in IOWA CONCENTRATED ANIMAL FEEDING OPERATIONS AIR QUALITY STUDY*, *supra* note 78, at 147, 149–50 (“Thirty percent of respondents from around the hog CAFO as compared to a maximum of three percent from the other two communities indicated that . . . these problems had occurred 12 or more times during the past six months.”).

96. *Id.* at 148.

export value.⁹⁷ This emphasis on agriculture creates an environment where CAFOs are encouraged as a means to sustain Iowa's position in the country as a national leader for the production of agricultural goods.

A. BY THE NUMBERS

Iowa is home to more than 7500 animal feeding operations.⁹⁸ More than 2900 of these house more than 1000 animal units, qualifying them as large CAFOs under the EPA's guidelines.⁹⁹ In comparison, the other three states comprising the EPA's Region 7—Kansas, Missouri, and Nebraska—have 446, 554, and 862 CAFOs respectively.¹⁰⁰ Strikingly, Kansas has granted NPDES permits to 100% of the state's NPDES-eligible CAFOs, and 43% of Nebraska's CAFOs are permitted.¹⁰¹ Iowa has granted NPDES permits to only 4.3% of the CAFOs in the state, evidence of the prevailing lenience in the state toward CAFOs.¹⁰²

Iowa's CAFOs are home to approximately 18 million hogs, 52 million laying hens, and 1 million beef cattle and broiler chickens.¹⁰³ The chicken population in Iowa outnumbers humans by a ratio of 18 to 1 and there are 6 times as many hogs as people. These animals "produce as much untreated manure as the sewage from 471 million people—more than the entire U.S. population."¹⁰⁴ The environmental impact of having such a concentrated

97. IOWA ECON. DEV. AUTH., 2012 TRADE STATISTICS, available at <http://www.iowaeconomicdevelopment.com/userdocs/documents/ieda/IntTradeStats.pdf> (last visited Sept. 28, 2013).

98. IOWA DEP'T NATURAL RES., BASIC AFO DATA (WITH ANIMAL UNITS), available at <https://programs.iowadnr.gov/animalfeedingoperations/Reports.aspx> (click on "Reports"; then select "Basic AFO Data"; then click "Print/Export" button) (last visited Sept. 28, 2013).

99. *Id.*; REGULATORY DEFINITIONS, *supra* note 1. There appears to be a discrepancy between the number of CAFOs in Iowa listed by the EPA compared to the number of large CAFOs (with 1000 animal units or more) listed in the IDNR's report. The EPA Region 7 website states that Iowa has 3055 CAFOs, while the IDNR lists around 2900. *Compare Are There CAFOs in Region 7?*, U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/region07/water/cafo/are_cafos_in_r7.htm (last visited Sept. 28, 2013), with IOWA DEP'T NATURAL RES., *supra* note 98. However, in the EPA's report to the IDNR, *see infra* text accompanying notes 111–24, the EPA uses the IDNR's stated CAFO numbers, REGION 7, *supra* note 33, at 6.

100. *See Are There CAFOs in Region 7?*, *supra* note 99.

101. *Id.* As a reminder, NPDES permits are National Pollutant Discharge Elimination System permits, required by the EPA for certain CAFOs.

102. *Id.*

103. *Iowa Facts*, FACTORY FARM MAP, <http://www.factoryfarmmap.org/states/ia/#animal:all;location:IA;year:2007> (last visited Aug. 15, 2013). Laying hens are used solely for producing eggs and are therefore kept in much closer quarters than broiler chickens, which are raised for human consumption. Ken Midkiff, *CAFOs*, NEB. ENVTL. ACTION COALITION, <http://web.archive.org/web/20130429193419/http://www.neac.us/index.php?page=cafes> (last visited Sept. 28, 2013) (accessed by searching in Internet Archive) (claiming that "[t]he essence of human cruelty to sentient beings reaches its peak in buildings that house laying hens").

104. *Iowa Facts*, *supra* note 103.

population of animals is enormous.¹⁰⁵ Regulations and enforcement agencies must combat potential environmental disasters and adequately protect the people and animals that CAFOs affect.

B. THE IOWA DEPARTMENT OF NATURAL RESOURCES AND OVERSIGHT OF CAFOs

Every state has its own regulatory framework governing CAFOs, separate from federal regulations. These regulations vary, but “generally regulate one or more of the following: (1) size or structure of the operation; (2) location of the facility; or (3) management practices for storage and disposal of animal waste.”¹⁰⁶ States can implement significant legislation under the EPA’s federal guidelines, so long as the regulations do not fall below EPA standards.¹⁰⁷ Iowa law, as amended in 2010, provides that state agencies may not regulate CAFOs more strictly than federal guidelines require.¹⁰⁸

The Iowa Department of Natural Resources is responsible for regulating Iowa’s CAFOs.¹⁰⁹ The IDNR faced national scrutiny subsequent to an EPA investigation and published report, released in July 2012, which found that the IDNR has failed to satisfactorily enforce CAFO regulations.¹¹⁰ The findings published in the report include the following:

- IDNR has adequate procedures in place to identify large open feedlots and requires permits for large open feedlots that discharge.
- IDNR is not issuing NPDES permits to CAFOs when appropriate.
- IDNR has not conducted comprehensive inspections to determine whether unpermitted CAFOs need NPDES permits.
- In a number of cases reviewed (49%), IDNR failed to act, or did not follow its enforcement response policy when addressing CWA/NPDES permit violations.
- IDNR is not assessing adequate penalties against CAFOs.

105. See *id.* (noting multiple instances of environmental damage as a result of CAFO practices, including instances where thousands of gallons of manure were applied to land near waterways and a manure release that killed more than 150,000 fish in a single incident).

106. Thomas R. Head, III, *Local Regulation of Animal Feeding Operations: Concerns, Limits, and Options for Southeastern States*, 6 ENVTL. LAW. 503, 529–30 (2000).

107. See 40 C.F.R. § 122.1 (2012) (stating that “[n]othing in this part . . . precludes more stringent State regulation”).

108. IOWA CODE § 459.311(2) (2013) (“Any rules adopted pursuant to this subsection shall be no more stringent than requirements under the federal Water Pollution Control Act, 33 U.S.C. ch. 26, as amended, and 40 C.F.R. pts. 122 and 412.”).

109. See *Animal Feeding Operations*, IOWA DEP’T NAT. RESOURCES, <http://www.iowadnr.gov/Environment/LandStewardship/AnimalFeedingOperations.aspx> (last visited Sept. 28, 2013).

110. REGION 7, *supra* note 33, at 4.

- Land application setbacks are not equivalent to federal requirements and are not included in IDNR-approved nutrient management plans.¹¹¹

The EPA recommended that the IDNR take several actions to address the report's findings, including revising the procedures for inspection and enforcement of CAFOs in Iowa, determining which CAFOs are required to obtain NPDES permits through inspections, and determining whether CAFOs have actually discharged into waterways.¹¹²

The EPA's report vindicated the beliefs of groups working to restrict CAFOs in Iowa, while supporters of CAFOs defended the IDNR.¹¹³ The IDNR released its response to the EPA's report in September 2012.¹¹⁴ The response outlined measures the IDNR would take to improve upon the problem areas the EPA identified, but it also challenged several of the EPA's findings. The IDNR attempted to justify its actions as legally sufficient and practical due to financial constraints.¹¹⁵

In response to the EPA's finding that the IDNR had failed to assess adequate penalties, the IDNR noted that it collected \$1.3 million in penalties in a total of 267 cases between 2006 and 2011.¹¹⁶ The IDNR also pointed out that since 2007, it has experienced a decrease in staff that works with animal feeding operations.¹¹⁷ The IDNR cites this staffing shortage as an explanation for what the EPA views as lax monitoring of CAFOs.¹¹⁸ According to the report, the IDNR plans to request funding for thirteen additional full-time staff members.¹¹⁹ Currently, the IDNR website lists seventeen employees in animal feeding operations.¹²⁰ Only four of the employees appear to be involved in the NPDES permitting process.¹²¹ Considering the growing number of CAFOs in Iowa, it seems nearly

111. *Id.*

112. *Id.*

113. See David Pitt, *EPA: Iowa Must Fix Regulation of Livestock Farms*, REAL CLEAR POL. (July 13, 2012), http://www.realclearpolitics.com/news/ap/politics/2012/Jul/13/epa_iowa_must_fix_regulation_of_livestock_farms.html. The article cited a spokesperson from the Iowa Cattlemen's Association as saying that the IDNR "has done an exceptional job of enforcing the Clean Water Act and other federal regulations," and an attorney for the Environmental Integrity Project as noting that the "EPA's findings are a critical first step, but the real work of fixing Iowa's broken factory farm program and restoring water quality is just beginning." *Id.* (internal quotation marks omitted in second quotation).

114. IOWA DEP'T NATURAL RES., RESPONSE TO U.S. EPA REGION 7 (2012), available at <http://www.iowadnr.gov/Portals/idnr/uploads/afo/files/dnrresponsecafo0912.pdf>.

115. *Id.*

116. *Id.* at 2.

117. *Id.*

118. *Id.* at 2-3.

119. *Id.* at 3.

120. *DNR Animal Feeding Operations Contacts*, IOWA DEP'T NAT. RESOURCES, <http://www.iowadnr.gov/Portals/idnr/uploads/afo/AFO%20Contacts.pdf> (last visited Sept. 28, 2013).

121. *Id.*

impossible for these employees to effectively inspect all of the CAFOs in Iowa and determine whether or not they require NDPEs permits.¹²² Due to fiscal planning and limited resources, the IDNR estimated that it would not be able to hire additional staff until July 2013 at the earliest.¹²³

The IDNR’s response to the EPA recognizes some of its shortcomings, but points out that addressing the issues and making changes will require adjusting its current priorities: “Changing priorities will also mean that some current [I]DNR efforts will become lower priority or dropped. The [I]DNR will involve stakeholders in determining some of the changes in priorities. The overall economic impact of increasing inspections will be very high for Iowa.”¹²⁴ This language suggested that the IDNR was perhaps not as concerned with regulating CAFOs as it was with other, unidentified issues.

The IDNR went on to note that the Iowa Administrative Code requires it to offset the economic benefit obtained by the offender–CAFO when considering penalties, and that in many cases that amount was quite small.¹²⁵ However, this explanation fails to address the fact that although the IDNR *is* required to consider the economic benefit obtained, it is also required to consider the “[g]ravity of the violation.”¹²⁶ The factors included in that analysis are “actual or threatened harm to the environment or the public health and safety,” whether toxins were involved or the potential for future effects due to the violation, any relevant federal priorities, whether the offender is a repeat offender, “[w]hether the type of violation threatens the integrity of a regulatory program,” and “[e]xpenses or efforts by the government” as a result of the violation.¹²⁷ These factors give the IDNR much more discretion to consider the non-economic impact of offender–CAFOs than it admitted to possessing in its response to the EPA.¹²⁸

The EPA also reprimanded the IDNR for failing to inspect large CAFOs to identify whether the operations needed NPDES permits, an allegation that the IDNR readily conceded.¹²⁹ The reason that the IDNR does not inspect these CAFOs, regardless of the EPA’s directive, is due to the fact that Iowa operates under a “no discharge” assumption.¹³⁰ This assumption appears to hold CAFOs to high operating standards on its face, but is problematic because inspections do not take place and there is no one to

122. See IOWA DEP’T NATURAL RES., *supra* note 114, at 2.

123. *Id.* at 3.

124. *Id.* at 4.

125. *Id.* at 5 (citing IOWA ADMIN. CODE r. 567-10.2(1) (2013)).

126. IOWA ADMIN. CODE r. 567-10.2(2).

127. *Id.*

128. See IOWA DEP’T NATURAL RES., *supra* note 114, at 5.

129. *Id.* at 2 (noting that CAFOs in Iowa were not normally inspected for NPDES permits because Iowa law requires that all CAFOs operate as “no discharge” facilities).

130. *Id.*

hold CAFOs accountable if, and often when, discharges occur.¹³¹ The Iowa Environmental Council has criticized the zero-discharge policy because the premise of the policy rests entirely on the design and construction of the facility and not whether discharges are, in fact, occurring.¹³² The Iowa Environmental Council stresses that inspections are necessary to determine whether discharge is occurring, as evidenced by the fact that in documented manure spills involving CAFOs, all of the facilities were designed to be and approved as zero-discharge facilities.¹³³

In the wake of the EPA's report, the IDNR and the EPA signed a "work plan agreement" to improve and strengthen Iowa's oversight of CAFOs and implementation of NPDES permits.¹³⁴ This plan will be implemented over a five-year period and includes a wide range of areas on which IDNR must focus its improvement efforts.¹³⁵ The agreement states that IDNR will work to bring Iowa's regulation of CAFOs into compliance with federal standards, including adjusting land application setback requirements, training IDNR staff on the NPDES permitting process, and revising IDNR forms and applications to comply with "the minimal federal standards."¹³⁶ Furthermore, the IDNR agreed to increase its inspection of both medium and large CAFOs to ensure the facilities claiming to be "no-discharge" operations are not, in fact, discharging pollutants into waterways.¹³⁷ The plan also strengthens the enforcement efforts of the IDNR, mandating that IDNR "carry out enforcement against CAFOs with illegal discharges to waters of the U.S. . . . in accordance with its Enforcement Management System."¹³⁸ The plan does not alter the IDNR's enforcement standards, but it requires that the IDNR actually take action against CAFOs in violation of the standards.¹³⁹

131. The Iowa Environmental Council found that "between 2001 and 2011, 262 manure spills were documented to have reached a river, stream or lake. Of these 262 spills, 45% involved a confinement facility, and about 30% took place at the confinement site itself." *Iowa Environmental Council Urges Stronger Protection of Iowa's Waters from Livestock Manure Spills*, IOWA ENVTL. COUNCIL (Oct. 10, 2012), <http://iaenvironment.wordpress.com/2012/10/10/iowa-environmental-council-urges-stronger-protection-of-iowas-waters-from-livestock-manure-spills/>.

132. *Id.*

133. *Id.*

134. Work Plan Agreement Between the Iowa Department of Natural Resources and the Environmental Protection Agency Region 7 (Sept. 11, 2013), available at <http://www.epa.gov/region7/water/pdf/ia-workplan-cafo.pdf>.

135. *Id.*

136. *Id.* at 2-3.

137. *Id.* at 5-6. In order to comply with the agreement, the IDNR has added seven full-time staff members, who will conduct inspections and evaluations of CAFOs. *Id.* at 5.

138. *Id.* at 6.

139. *Id.* (noting that "[i]n specific cases where [IDNR] does not seek or recover full economic benefit, [IDNR] will document the case-specific rationale and/or mitigating factors supporting [IDNR's] decision").

Although the IDNR's efforts to inspect and evaluate CAFOs will, hopefully, be much improved following the implementation of the work plan agreement, there is still ample room for improving Iowa's CAFO regulations. The work plan agreement focuses almost exclusively on the NPDES permitting process under the Clean Water Act; it is not a mechanism for changing the culture of CAFOs in Iowa.¹⁴⁰ Regardless of the IDNR's environmental oversight in this area, residents will still feel the impact of CAFOs and the following two court cases suggest that Iowa's judiciary may be viewing the plight of CAFO neighbors with increasing sympathy.

C. THE IOWA SUPREME COURT AND CAFOs

The Iowa Supreme Court has been involved in several notable CAFO actions. The consequences of these cases are mixed, but the decisions reflect the court's growing awareness that CAFOs are not an issue that will simply fade over time.¹⁴¹ The court has addressed two main issues with respect to CAFOs: the primacy of state control and the constitutionality of right-to-farm statutes.

1. Lack of Local Control

The Iowa Supreme Court upheld the state's authority to regulate CAFOs as greater than the power of local governments in *Goodell v. Humboldt County*, where the court ruled that local governments could not regulate CAFOs more stringently than state-implemented restrictions.¹⁴² This negation of local control is a hotly contested issue in the world of CAFOs.¹⁴³

In *Goodell*, the court struck down four of Humboldt County's ordinances, all of which addressed different aspects of CAFO management: "(1) ordinance 22 imposes a permit requirement prior to construction or operation of a regulated facility; (2) ordinance 23 establishes financial security requirements; (3) ordinance 24 implements groundwater protection policies; and (4) ordinance 25 governs toxic air emissions from regulated facilities."¹⁴⁴ The county asserted its right to implement these ordinances under the Iowa Constitution's "[c]ounties home rule"

140. More information on the specifics of the work plan agreement and supporting documentation can be found on the Environmental Protection Agency, Region 7 website. *Iowa CAFO Water Program Improvements—Questions & Answers*, U.S. ENVTL. PROTECTION AGENCY, <http://www.epa.gov/region7/water/ia-workplan-cafo-q-and-a.htm> (last visited Sept. 28, 2013).

141. In a 2008 anticipatory nuisance case, *Simpson v. Kollasch*, the Iowa Supreme Court noted that "[i]n recent years, hog confinement operations have become more controversial as they grow in number and size." *Simpson v. Kollasch*, 749 N.W.2d 671, 677 (Iowa 2008).

142. *Goodell v. Humboldt Cnty.*, 575 N.W.2d 486, 501–02 (Iowa 1998).

143. Head, *supra* note 106, at 538 (noting that "[s]tate preemption of local regulations is probably the most controversial and debated issue facing local governments as they attempt to control [C]AFOs").

144. *Goodell*, 575 N.W.2d at 489.

amendment, which grants counties the power “to determine their local affairs and government.”¹⁴⁵

The Iowa Code further provides that “[a] county shall not set standards and requirements which are lower or less stringent than those imposed by state law, but may set standards and requirements which are higher or more stringent than those imposed by state law, unless a state law provides otherwise.”¹⁴⁶ Additionally, the Code states that a county’s power is “subject only to limitations expressly imposed by a state law,”¹⁴⁷ and “[a]n exercise of a county power is not inconsistent with a state law unless it is irreconcilable with the state law.”¹⁴⁸

These provisions seemed to indicate that counties had broad discretion to implement regulations over a variety of issues, including CAFOs. However, the court ruled against Humboldt County, finding the ordinances were irreconcilable with existing state law and therefore preempted by the state.¹⁴⁹ Under preemption, state laws trump local government regulations when conflicts arise.¹⁵⁰ The *Goodell* court explained that the existing state laws already limited liability for toxic air emissions, delegated exclusive jurisdiction over animal waste to the IDNR, and established permitting requirements that were incompatible with the county’s permitting requirements.¹⁵¹ This decision leaves local communities with very little power to regulate CAFOs, transferring that authority almost exclusively to state legislators and the IDNR.

2. Right to Farm: *Bormann* and *Gacke*

The court’s decision in *Goodell* supported the rights of the state over local county governments. However, in two cases, *Bormann v. Board of Supervisors* and *Gacke v. Pork Xtra, L.L.C.*, the court ruled that Iowa’s right-to-

145. IOWA CONST. art. III, § 39A.

146. IOWA CODE § 331.301(6)(a) (2013).

147. *Id.* § 331.301(3).

148. *Id.* § 331.301(4).

149. *Goodell*, 575 N.W.2d at 508.

150. Head, *supra* note 106, at 541.

151. *Goodell*, 575 N.W.2d at 508. The court expanded on its reasons for striking down the ordinances regarding permits, noting that under the county’s regulations, CAFOs could follow all proper state laws but ultimately be prohibited from operation due to county ordinances—a result the court determined to be inconsistent with the legislature’s intent. *Id.* at 502–04.

farm statute¹⁵² was unconstitutional, opening up the possibility for future judicial actions against CAFOs.¹⁵³

In the *Bormann* decision, the court found that by granting a CAFO’s construction application, the county created an easement¹⁵⁴ for the CAFO, thereby shielding it from liability from nuisance suits.¹⁵⁵ The court held this action constituted a taking without the required compensation:

[The county] has exceeded its authority by authorizing the use of property in such a way as to infringe on the rights of others by allowing the creation of a nuisance without the payment of just compensation. The authorization is in violation of the Fifth Amendment to the Federal Constitution and article I, section 18 of the Iowa Constitution.¹⁵⁶

The court’s admonishment to the legislature in *Bormann* was particularly harsh: “When all the varnish is removed, the challenged statutory scheme amounts to a commandeering of valuable property rights without compensating the owners, and sacrificing those rights for the economic advantage of a few.”¹⁵⁷

In *Gacke*, the court upheld *Bormann*, reaffirming that nuisance immunity from an agricultural operation was unconstitutional so long as it violated the Takings Clause.¹⁵⁸ The court also ruled, however, that the state could provide immunity from nuisance in instances when compensation had been provided for the loss in property value.¹⁵⁹ The court went on to consider whether the statute violated the Gackes’ inalienable rights under the Iowa Constitution.¹⁶⁰ It determined that, although immunity from nuisance may be authorized in some instances, the statute as applied to the

152. The right-to-farm statute at issue in *Gacke* stated: “A farm or farm operation located in an agricultural area shall not be found to be a nuisance regardless of the established date of operation or expansion of the agricultural activities of the farm or farm operation.” *Gacke v. Pork Xtra, L.L.C.*, 684 N.W.2d 168, 172 (Iowa 2004) (quoting IOWA CODE § 352.11(1)(a) (1993)).

153. *Gacke*, 684 N.W.2d at 173–74; *Bormann v. Bd. of Supervisors*, 584 N.W.2d 309, 321 (Iowa 1998).

154. An easement is defined as “an interest in land which entitles the owner of the easement to *use* or enjoy land in the possession of another.” *Bormann*, 584 N.W.2d at 316 (quoting RESTATEMENT (FIRST) OF PROP. § 451 cmt. a (1944)).

155. *Id.* at 321.

156. *Id.*

157. *Id.* at 322.

158. *Gacke*, 684 N.W.2d at 175.

159. *Id.* (noting that “[t]he Takings Clause does not prohibit limitations on other damages recoverable under a nuisance theory”).

160. *Id.* at 175–76. The Iowa Constitution provides: “All men and women are, by nature, free and equal, and have certain inalienable rights—among which are those of enjoying and defending life and liberty, acquiring, possessing and protecting property, and pursuing and obtaining safety and happiness.” IOWA CONST. art. I, § 1.

Gackes was “unduly oppressive and, therefore, not a reasonable exercise of the state’s police power.”¹⁶¹

The *Gacke* and *Bormann* decisions seemed promising for neighbors of CAFOs. It does not appear, however, that people have relied on these rulings to bring actions in any significant number, and it therefore remains unclear whether Iowa courts will continue to uphold the principles outlined in *Gacke* and *Bormann* in future cases.¹⁶²

IV. MOVING FORWARD

The proliferation of CAFOs in Iowa does not appear to be slowing down.¹⁶³ Since January 1, 2011, more than 580 hog confinement construction proposals have been filed with the IDNR.¹⁶⁴ Of those, 374 have been large enough that they require a permit to proceed before construction can begin.¹⁶⁵ More and more people will soon find themselves living next to CAFOs, a fact that has individuals throughout the state looking for ways to change this pattern.¹⁶⁶

A. LOOKING TO OTHER STATES’ REGULATIONS

As concerns grow about the negative effects of CAFOs on the environment, human health, and animal welfare, several state legislatures have moved to restrict the growth of CAFOs.¹⁶⁷ In Indiana and Ohio, the legislatures proposed moratoriums on new CAFO construction. Indiana’s bill, however, never made it out of committee and Ohio’s is “currently stalled [in] the Senate Agriculture Committee.”¹⁶⁸ Following a series of disastrous manure spills, North Carolina implemented a moratorium on CAFO construction in 1997, a ban that was renewed periodically until the legislature allowed it to expire in 2007.¹⁶⁹ The ban was not entirely effective,

161. *Gacke*, 684 N.W.2d at 179. The court noted that the Gackes had lived on the property since before the CAFO was constructed and were not obtaining any benefit from the operation. *Id.* at 178–79.

162. Jesse J. Richardson, Jr. & Theodore A. Feitshans, *Nuisance Revisited After Buchanan and Bormann*, 5 DRAKE J. AGRIC. L. 121, 136 (2000).

163. See IOWA DEP’T NATURAL RES., CONSTRUCTION REVIEW NUMBERS, available at <https://programs.iowadnr.gov/animalfeedingoperations/Default.aspx> (click “Reports”; then select “Construction Review Numbers”; then enter “01/01/2011–09/28/2013” as “Date Range”; then click “Print/Export” button) (last visited Sept. 28, 2013).

164. *Id.*

165. *Id.*

166. Local groups have arisen throughout Iowa in counties facing CAFO expansion. See *infra* Part IV.C.

167. *Legislation and Regulation Regarding Factory Farming*, NAT’L TR. FOR HISTORIC PRESERVATION, <http://www.preservationnation.org/information-center/saving-a-place/rural-heritage/factory-farms/legislation-and-regulation.html> (last visited Sept. 28, 2013).

168. *Id.*

169. Emily Abraham, *Will a Moratorium on Confined Animal Feeding Operations Ever Get Through the Indiana General Assembly?*, NAT’L L. REV. (Mar. 13, 2012), <http://www.natlawreview.com/>

however, as it contained several loopholes that resulted in some additional CAFOs being constructed.¹⁷⁰ Based on the fact that these bills often seem to simply disappear in the legislature,¹⁷¹ placing moratoria on CAFO construction does not appear to be a method of managing the effects of CAFOs that legislators are willing to embrace—at least not yet.¹⁷²

Other states have taken more limited measures to effectively regulate CAFOs.¹⁷³ For example, Missouri has enacted slightly more stringent permit thresholds for poultry operations in an effort to protect water quality.¹⁷⁴ New York offers voluntary programs that purport to “help farm operations meet their business objectives while also protecting the purity and availability of the water supplies.”¹⁷⁵ Michigan created a similar voluntary program where CAFO owners agreed to follow “Generally Accepted Agricultural Management Practices.”¹⁷⁶ The benefits to CAFO owners participating in voluntary programs are more than improving their environmental stewardship and receiving corresponding goodwill—compliance with these types of programs may shield CAFOs from potential nuisance actions.¹⁷⁷

South Carolina, until recently, had one of the strictest regulatory frameworks for CAFOs in the country.¹⁷⁸ “All owners and operators of [animal feeding operations] must apply for and receive a permit from the South Carolina Department of Health and Environmental Control.”¹⁷⁹ This permit application requirement was slightly unusual because the size of the operation was irrelevant—every CAFO had to obtain a permit.¹⁸⁰ South Carolina also required “a minimum 100-foot vegetative buffer” around manure lagoons or ponds that were located near surface water and imposed distance requirements for such facilities of “500 feet from drinking water wells and one quarter of a mile from surface waters.”¹⁸¹ The state also required that anyone planning to “construct or expand an [animal feeding

article/will-moratorium-confined-animal-feeding-operations-ever-get-through-indiana-general-Regulations, Enforcement & Legislation, SOCIALLY RESPONSIBLE AGRIC. PROJECT, <http://www.sra-project.org/factoryfarms/issues/regulations/> (last visited Sept. 28, 2013).

170. See Osterberg & Melvin, *supra* note 82, at 193–94.

171. See *supra* note 168 and accompanying text.

172. Osterberg & Melvin, *supra* note 82, at 193 (explaining how most of the bills, except in North Carolina, have not actually resulted in moratoria being implemented in the states).

173. See Thomas P. Redick & Sam J. Alton, *State Environmental Management Initiatives for CAFOs*, AGRIC. MGMT. COMMITTEE NEWSL., Sept. 2005, at 28 (providing a brief overview of Missouri, New York, and Michigan actions).

174. *Id.* at 28–29.

175. *Id.* at 29.

176. *Id.* (internal quotation marks omitted).

177. See *id.* at 29–30 (noting that “the potential for [nuisance] challenges . . . could be considerably reduced”).

178. Head, *supra* note 106, at 535.

179. *Id.*

180. See *id.*

181. *Id.* at 535–36.

operation] in South Carolina must publish a notice of intent to do so in a local newspaper and notify adjoining landowners and relevant county and water supply district managers.”¹⁸² Following notice, the South Carolina Department of Health and Environmental Control would hold a public hearing when it received twenty or more requests.¹⁸³ Additionally, and perhaps most importantly, South Carolina’s CAFOs were inspected annually, and the owners were responsible for monitoring groundwater.¹⁸⁴ This past year, however, the South Carolina legislature repealed the act governing CAFO regulations, replacing it with a statute that appears to give more control over regulations to the legislature than to the South Carolina Department of Health and Environmental Control.¹⁸⁵ The strong history of regulating CAFOs in South Carolina, however, imports valuable information for those in other states looking for possible solutions.

The above state actions are all in addition to the EPA’s required regulations.¹⁸⁶ Iowans can look to these types of controls to examine how CAFOs could be more efficiently regulated in this state. However, the issue with these state approaches to CAFO regulation and enforcement is that it requires the cooperation of state legislators and the ability of the IDNR to enforce the measures, which is lacking at this time.¹⁸⁷

B. APPROVAL PROCESS AND CITIZEN INVOLVEMENT

Currently, the most effective tool that citizens of Iowa have to combat the expansion of CAFOs is their local Board of Supervisors’ authority to approve or deny construction permits for new CAFOs.¹⁸⁸ Construction permits and manure management plans are required for CAFOs that will house more than 1000 animals.¹⁸⁹ In eighty-eight of Iowa’s ninety-nine counties, CAFOs must submit a satisfactory “master matrix” before they can

182. *Id.* at 536.

183. *Id.*

184. *Id.*

185. See S.C. CODE ANN. § 47-20-165 (2012) (repealing sections 47-20-10 through 47-20-160, noting that the Department of Health and Environmental Control “shall promulgate regulations regarding confined swine feeding operations which are separate and distinct from the regulations promulgated pursuant to this chapter”). It is unclear what the impact of this new legislation will be on South Carolina’s relationship with CAFOs.

186. Head, *supra* note 106, at 529–30.

187. See IOWA DEP’T NATURAL RES., *supra* note 114, at 2–3 (noting the inadequacy of staffing to effectively inspect and monitor CAFOs to the level desired by the EPA); see also *supra* notes 117–23 and accompanying text.

188. See *Pre-Construction Requirements for Permitted Operations*, IOWA DEP’T NAT. RESOURCES, <http://www.iowadnr.gov/Environment/LandStewardship/AnimalFeedingOperations/Confinements/ConstructionRequirements/Permitted.aspx> (last visited Sept. 28, 2013).

189. *Id.*

receive a construction permit.¹⁹⁰ The master matrix must include numerous details regarding the proposed CAFO, and “[t]he proposed site must obtain a minimum overall score of 440 and a score of 53.38 in the ‘air’ subcategory, a score of 67.75 in the ‘water’ subcategory and a score of 101.13 in the ‘community impacts’ subcategory.”¹⁹¹ Any CAFO that fails to meet the matrix’s minimum requirements is—technically—supposed to be denied a construction permit.

One potential problem with the master matrix strategy is that the CAFO owner is the party responsible for filling out the matrix and the regulatory board merely approves or rejects the plan.¹⁹² Presently, the IDNR is not equipped to inspect these plans carefully, nor has it indicated a willingness to do so.¹⁹³ However, the master matrices for CAFOs that are required to obtain a construction permit represent an opportunity for community groups and private citizens to get involved in the process and ensure that their voices are heard.¹⁹⁴ Because the correctness of the matrix is a crucial factor in whether a CAFO receives approval or not, examining the plans and ensuring that CAFOs are held accountable for the information provided is a concrete way to moderate the expansion of CAFOs, ensuring regulations are followed at the outset.¹⁹⁵

C. COMMUNITY ORGANIZING AND LOCAL CONTROL

As CAFOs grow in number and size, the negative effects associated with these operations are magnified, resulting in increased awareness among concerned citizens. Community organizing groups in Iowa, such as Iowa Citizens for Community Improvement, have seen this increase in awareness

190. See *Master Matrix*, IOWA DEP’T NAT. RESOURCES, <http://www.iowadnr.gov/Environment/LandStewardship/AnimalFeedingOperations/Confinements/ConstructionRequirements/MasterMatrix.aspx> (last visited Sept. 28, 2013).

191. IOWA DEP’T NATURAL RES., APPENDIX C MASTER MATRIX, *available at* <http://www.iowadnr.gov/Portals/idnr/uploads/forms/5428043.pdf> (last visited Sept. 28, 2013).

192. See *generally id.* (instructing CAFO owners how to fill out the matrix and noting additional materials required prior to approval).

193. See IOWA DEP’T NATURAL RES., *supra* note 114, at 2–3 (noting that Iowa has a “no-discharge” presumption for CAFOs, while simultaneously acknowledging that it needs to perform inspections to ascertain whether permits are required). This conflict is not sufficiently addressed in the report, as the IDNR moves on to address staffing shortfalls, which it must remedy before it has the capability to perform inspections. *Id.*; see *supra* notes 117–23 and accompanying text.

194. See *Public Meeting: May 23, 2012*, POWESHIEK CARES, <http://poweshiek-cares.org/news/2013/1/12/public-meeting-may-23-2012> (last visited Aug. 15, 2013) (informing citizens about the public meeting with the IDNR where citizens brought forth their concerns regarding a CAFO owner’s submitted matrix and the deficiencies therein).

195. See *Board of Supervisors Meeting: October 15, 2012*, POWESHIEK CARES, <http://poweshiek-cares.org/news/2013/1/13/board-of-supervisors-meeting-october-15-2012> (last visited Sept. 28, 2013) (providing information regarding the Board of Supervisor’s resolution to deny construction for a proposed CAFO, although the ultimate authority for approval rests with the IDNR).

correlate to increased membership numbers.¹⁹⁶ Local groups have formed in communities to combat additional CAFO construction.¹⁹⁷ These groups, such as Poweshiek CARES (Community Action to Restore Environmental Stewardship) and Jefferson County Farmers & Neighbors, are trying to organize efforts within small communities to forestall the construction of CAFOs.¹⁹⁸

As discussed above, utilizing the approval process for proposed master matrices is currently the best approach for those opposing CAFO construction. However, these local groups have another powerful tool at their disposal: publicity and public pressure.¹⁹⁹ This is an area where citizens can be highly effective, particularly in small communities where residents know each other and their families.²⁰⁰ This type of grassroots action is often slow-moving, but it appears to be gaining momentum and it might be the push that Iowans need to ensure that existing CAFOs are, at a minimum, in compliance with federal guidelines and, on a broader scale, that citizens are not harmed further by having to live in close proximity to CAFOs.

V. CONCLUSION

CAFOs present a complex range of issues, and the problems that arise from ineffective oversight and regulation of these operations can have long-lasting and serious effects. Iowa is approaching a point where the proliferation of CAFOs could cause permanent damage to the state. This damage could not only result in negative environmental and health effects, but could also impact the state's economic future if CAFOs saturate the state to the point where the landscape becomes unappealing to Iowa's best and brightest. Iowa is at a crossroads.

196. IOWA CITIZENS FOR CMTY. IMPROVEMENT, 2011 WAS A YEAR OF HEADLINES 1–3 (2012), available at <http://iowacci.org/wp-content/uploads/2012/07/annual-report.pdf>. From 2010 to 2011, Iowa Citizens for Community Improvement's membership increased to 2195 people, a 23% increase from its 2010 membership. *Id.* at 1. The group regularly works with smaller, local organizations to assist in efforts to combat the expansion of factory farms. *Id.* at 1–3.

197. Groups such as Jefferson County Farmers & Neighbors, Inc. and Poweshiek CARES are working to engage citizens in grassroots efforts to prevent CAFO construction in those counties. For more information, see JEFFERSON COUNTY FARMERS & NEIGHBORS, INC., www.jfaniowa.org/about-jfan (last visited Sept. 28, 2013) and POWESHIEK CARES, <http://poweshiek-cares.org/> (last visited Sept. 28, 2013).

198. See JEFFERSON COUNTY FARMERS & NEIGHBORS, INC., *supra* note 197 (noting action steps that people can take to get involved); POWESHIEK CARES, *supra* note 197 (informing citizens of Poweshiek County about upcoming meetings, editorials, and state and judicial actions regarding CAFOs in the surrounding area).

199. Ryan Teel, Note, *Not in My Neighborhood: The Fight Against Large-Scale Animal Feeding Operations in Rural Iowa, Preemptive Tactics, and the Doctrine of Anticipatory Nuisance*, 55 DRAKE L. REV. 497, 521–23 (2007).

200. See POWESHIEK CARES, *supra* note 197 (discussing the effect that CAFOs have on families in various pieces on the website). The primary strength of Poweshiek CARES appears to be its network and ability to communicate with residents of the county, efforts which it promotes through word of mouth, editorials, and its website.

The increasing awareness of CAFOs among the Iowa electorate may result in legislative action at some point. However, until that happens, Iowa's citizens should look to the judicial branch for remedies where appropriate and rely on grassroots activism to try and effect change on local levels whenever possible. The sooner that Iowa is able to develop effective policies, regulations, and judicial enforcement for citizens struggling to cope with the presence of CAFOs, the better off the state will be in the future—preserving Iowa's reputation as not only a strong agricultural state, but also a place that values the people and animals that comprise its farming communities.