The Urgent Case for a Factory Farm Moratorium in Iowa

Large-scale factory farms continue to expand in rapid numbers, dominating the Iowa landscape and posing increasing risks to human health and the environment. Iowa was once home to tens of thousands more mid-sized family livestock operations, but over the past few decades they have given way to huge operations with thousands of hogs, cattle or chickens. These factory farms create colossal volumes of waste, pollute the air and water, exploit workers, harm animal welfare, fuel antibiotic resistance and climate change, and undermine the economic vitality of our rural communities.

What is a factory farm?
A factory farm is a facility that raises large numbers of food animals in a confined situation, concentrating the animals and their manure in a small area. Instead of allowing animals to forage for their feed in pastures or other open areas, factory farms confine the animals and bring food to them.

The U.S. Environmental Protection Agency (EPA) uses the terms animal feeding operation (AFO) and concentrated animal feeding operation (CAFO) to describe these operations. We are calling for a moratorium on the construction and expansion of medium and large AFOs and CAFOs in Iowa, which are the focus of this fact sheet. According to the EPA, medium-sized AFOs confine between 750 and 2,499 hogs weighing over 55 pounds, while large AFOs confine 2,500 or more hogs weighing over 55 pounds.¹

Large-scale factory farms explode in Iowa
Mega-mergers in the pork packing industry have fueled the rise of factory farms. Between 1982 and 2007, the number of hog farms in Iowa plunged by 82 percent, while the average number of hogs per farm rose from just under 500 to just over 5,000 — a 10-fold increase.² In 2018, an Iowa State economics professor predicted that hog production would expand faster in Iowa than in the rest of the country.³ Despite already straining the capacity of the environment and communities right now, one expert claimed that the state’s CAFO operations could expand, capable of adding up to 45,700 additional facilities; that’s four times the number of operations that currently exist in the state⁴, even though manure spills and overapplication of manure are already routine.

This swift increase in CAFO operations in Iowa can be linked to an ever-growing demand overseas. Pork is the second most exported commodity in the state of Iowa. In 2015, Japan was Iowa’s leading export market for pork.⁵ According to the Iowa Department of Natural Resources (DNR), there were over 14 million factory farmed animals on Iowa farms in 2018, 72 percent of which were hogs.⁶ But it’s not just hogs. Iowa houses cattle, chicken (broilers and egg production) and other livestock in concentrated operations.

¹ Source: Iowa Department of Natural Resources
² Source: Iowa State Economics Professor
³ Source: Iowa State Economics Professor
⁴ Source: Iowa State Economics Professor
⁵ Source: Iowa Department of Natural Resources
⁶ Source: Iowa Department of Natural Resources

foodandwaterwatch.org
In 2018, the DNR reported nearly 10,000 medium-to-large factory farm livestock operations in the state. But this leaves out another 5,000 facilities that had completely slipped under the DNR’s radar — discovered only recently through satellite photos when the EPA required the DNR to search the state for operations not in the inventory. The fact that the DNR completely failed to track this many facilities for years (and still has not identified them all) shows how ineffective the DNR has been in regulating factory farms across the state.

Iowa’s toothless CAFO regulations
The lack of regulation of Iowa’s CAFOs only heightens the environmental and health risks associated with factory farming. In 2007, a coalition of environmental groups filed a petition with the EPA to take away Iowa’s authority to regulate factory farm water pollution. The EPA later found that the DNR was not issuing pollution permits when required, had “failed to act or did not follow its enforcement policy” in cases of permit violations and failed to enforce adequate penalties against CAFOs for violations.

Factory farm water pollution
Agriculture is the leading polluter of U.S. rivers and streams and the second largest source of wetlands contamination. The EPA’s weak rules and lack of oversight allow most factory farms to avoid regulation. In Iowa, agricultural pollution has damaged more than 1,000 miles of rivers and streams and over 59,000 acres of lakes, ponds and wetlands — much of which stems from factory farms and the vast amount of manure and other pollutants generated by them. In 2017, Iowa had a record 37 “swimming not recommended” advisories at state park beaches due to high levels of disease-causing toxins produced by blue-green algae blooms that are fed by fertilizer and other pollutants washing into lakes from nearby farms. A small sample reveals the impact that recurring accidents and spills at Iowa factory farms have on the state’s environment:

- In 2009, 25,000 gallons of manure released over a farm field at a Mitchell County hog operation killed 150,000 fish over four miles of a local stream.
- In 2014, manure discharges from Summit Dairy in O’Brien County polluted a 28-mile length of a stream that killed more than 860,000 fish estimated at nearly $160,000.
- In 2015, Sunrise Farms illegally dumped egg processing wastewater, causing a large spill that resulted in 163,000 fish being killed.

Downstream drinking water at risk
Untreated manure from Iowa CAFOs typically gets flushed into underground pits or large cesspools called lagoons where it is stored until it is applied as fertilizer on fields. But the sheer amount of manure being produced on these operations cannot readily be absorbed by nearby fields, often resulting in over-application and runoff into local waterways, and even impacts to municipal water systems. Nitrogen, which converts into nitrate in water, threatens both aquatic species and the health of those who drink from the tap. Des Moines Water Works, the largest water utility in Iowa, consistently struggles to provide safe drinking water to its residents due to excessive amounts of nitrates from factory farms upstream.

In 2015, nitrate pollution, which has been linked to certain cancers, birth defects and other diseases, exceeded federal limits in 11 of the state’s public water supplies. Iowa is also the second-largest contributor of nitrates in the Mississippi River Basin, and more than 200 of Iowa’s community water systems struggle with high nitrate levels. Periodically, local Iowa communities have to issue “do not drink” orders due to their water quality problems.

Air quality and climate at risk
Beyond affecting just water systems, the large quantities of manure produced on these farms harm people in nearby communities. Manure from factory farms emits substantial amounts of toxic air pollutants — including ammonia,
hydrogen sulfide and particulate matter — causing respiratory harm to neighboring communities and workers.\textsuperscript{25} Additionally, close proximity to factory farms increases childhood asthma rates and treatment.\textsuperscript{26}

Residents living near factory farms are more likely to suffer medical ailments ranging from burning eyes to sore throats, nausea and diarrhea.\textsuperscript{27} Iowa residents have raised concerns that construction of the additional factory farms will cause more health problems.\textsuperscript{28}

These air pollution threats are not only local. Between 1990 and 2016, U.S. greenhouse gas emissions from agriculture have increased by about 17 percent.\textsuperscript{29} Producing and processing animal feed contributes an estimated 45 percent of greenhouse gas emissions from the livestock sector, while methane emissions from the digestive process in ruminants like cows and sheep contribute an estimated 39 percent.\textsuperscript{30} These toxic processes are exacerbated on farms that house thousands of animals.

**Mountains of manure**

The millions of factory-farmed animals in Iowa produce close to 380 billion pounds of manure annually.\textsuperscript{31} This volume of manure — about 14.6 million cubic feet — would fill Iowa’s tallest building, the Principal Building in Des Moines, 2.3 times every day.\textsuperscript{32} This extreme volume of manure is not used beneficially to raise crops — instead, it is disposed of on fields where it continues to pollute nearby air and waterways.

**It’s time to stop the spread of factory farms in Iowa**

Iowa’s rural communities, environment and drinking water cannot endure any more factory farm pollution. Communities across the state have already expressed their concerns with these farms, citing the drastic health and environmental impacts that factory farms pose to their communities and families. It’s time for a moratorium on factory farms in Iowa.

**Endnotes**

3 Eller, Donnelle. “Iowa could support 45,750 livestock confinements, but should it?” Des Moines Register. March 12, 2018.
4 Ibid.
7 Iowa Department of Natural Resources (DNR). “Basic AFO Data (With Animal Units) (This report includes only Active Operations).” Available at https://programs.iowadnr.gov/animalfeedingoperations/Reports.aspx. Accessed August 2018.
8 Ibid.
9 Ibid.
17 DNR. “DNR determines fish kill counts, source of Clayton County fish kill.” September 11, 2014.
24 Ibid. at 6.
31 FWW analysis of EPA “Risk Assessment Evaluation for Concentrated Animal Feeding Operations.” EPA 600/R-04/042. May 2004 at 9; DNR. “Basic AFO Data (With Animal Units) (This report includes only Active Operations).”
32 FWW analysis of Iowa CAFO manure production. USDA. Natural Resources Conservation Service. “Chapter 4: Agricultural Waste Characteristics.” 210-VI-AWMFH. March 2008 at 4-13 through 4-20; “The flood of the century.” Des Moines Register. July 17, 1993; DNR. “Basic AFO Data (With Animal Units) (This report includes only Active Operations).”