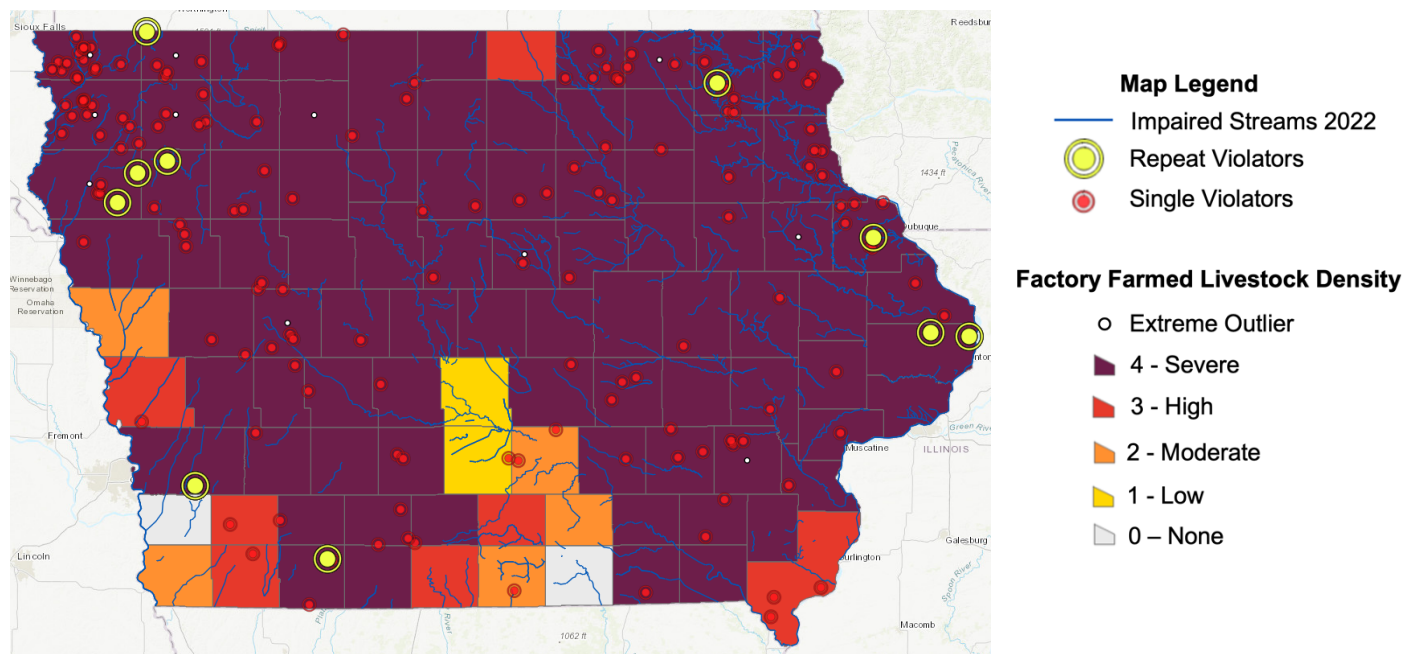


In Hot Water: Iowa's Animal Agriculture Has a Spill Problem

Iowa's waterways are severely polluted, held hostage by factory farming and industrial agricultural practices across the state. Food & Water Watch (FWW) reviewed a decade of the Iowa Department of Natural Resources' (DNR) discharge enforcement reports from animal agriculture operations and found a state in crisis. We mapped these recorded violations, revealing that no area of the state is safe from manure discharging into waterways.

Iowa Animal Operation Discharge Map



Source: Food & Water Watch Analysis of Iowa Department of Natural Resources and U.S. Department of Agriculture

FWW found that, between 2013 and 2023, the DNR recorded 179 instances of manure discharge into Iowa's waterways. Specifically:

- Ten farms recorded multiple violations over this period, and several had numerous prior violations. For example, Cyclone Cattle LLC had four separate violations from 2013 to 2023, and five previous violations.
- The majority of reports did not contain information on volume of manure spilled. Those that did reported spills ranging from 500 to 1 million gallons.
- These manure spills impacted waterways across the state, including numerous tributaries, drainage ditches, creeks, and rivers. One area of particular spill concentration is Northwest Iowa, which is also home to extreme factory farm concentration. Six northwest Iowa counties

- Lyon, Osceola, Sioux, O'Brien, Plymouth, and Palo Alto — are “extreme outliers,” with livestock densities among the highest in the nation.¹
- Thirty reports documented fish kills associated with these illegal discharges to Iowa's water. Together, they amount to 1.9 million fish killed, with an estimated economic value of \$334,500.
 - One particularly egregious example occurred in 2014 in O'Brien County. The DNR report states that the kill extended 28 miles and killed over 865,000 fish.
 - Restitution from the reported fish kills (which includes the costs of fish killed and the investigations) amounted to \$313,500. This is lower than kill amounts because in at least one instance (2014 spill in O'Brien County), the DNR amended the restitution payment from \$160,497 to \$63,000.
 - At the time of review, Iowa DNR penalized 171 of the 179 discharges only \$636,808 cumulatively. Four additional discharges were referred to the EPA or the Iowa Attorney General's office, which collectively penalized those violators \$91,500. For comparison, in 2015 alone, Des Moines Water Works spent over \$1.4 million on its nitrate removal system's operating costs.²
 - The DNR's records are mismatched and incomplete, inhibiting the public's full understanding of the extent of Iowa's animal operations' damages. The DNR retains a spreadsheet of water violators spanning from late 2012 to present.³ FWW compared this with enforcement actions posted on DNR's spill database and found that the spreadsheet excludes at least 16 enforcement actions taken over the past 10 years. Conversely, 19 instances on the spreadsheet were absent from the online spill database. These may have been sent to the EPA or Attorney General for review or listed as pending. FWW's map includes all of these spills, though this is still likely an undercount (see Methodology).
 - In 2020, reported instances of violations plummeted, from a decade-high of 29 in 2019 to 8 in 2020. 2020 through 2022 had the lowest recorded violations in the study period, coinciding with the COVID-19 pandemic heights. In early 2020, the Iowa DNR moved to temporarily ease restrictions on a host of environmental protections.⁴ Additionally, the DNR relies on producers to self-report these discharges,⁵ and budget cuts have significantly reduced the department's inspection and enforcement capacity.⁶

Methodology

All data for this map are from the Iowa Department of Natural Resources' (DNR) enforcement actions for confined animal feeding operations, spanning from 2013 to 2023.⁷ FWW reviewed each enforcement action in June 2024 and compiled relevant information for analysis and mapping. Our map only includes violations where manure reached a waterway; there are additional violations where spills occurred on land and were not observed flowing into a waterway. This analysis does not account for potential leaching into groundwater.

This is NOT a comprehensive map of factory farm spills that occurred in Iowa over the study period (2013 to 2023). There is ample evidence of persistent discharges from large animal confinements;⁸ however, the vast majority of Iowa's 4,000+ factory farms operate without National Pollutant

Discharge Elimination System (NPDES) permits.⁹ In fact, Iowa has refused to issue a single permit and prohibits issuing permits more stringent than federal law.¹⁰ Spills from unpermitted facilities are unlikely to be reported because such facilities are not required to monitor for discharges. Even with regard to permitted facilities, the DNR's database relies on producers to self-report spills, creating a clear conflict of interest. For this reason, this map and accompanying report almost certainly undercount the true cost of factory farm spills into Iowa waterways.

Repeat violators refers to farms that had multiple spills recorded under their name or under a manure applicator's name over the time period examined; it does NOT include offenders who hold additional violations pre-2013 or post-2023. Penalty refers to fines issued for a water discharge violation. Restitution refers to fines issued for value attributed to fish killed and costs of investigative work.

For more information on the underlying factory farm density data, see FWW's report, "Factory Farm Nation: 2024 Edition."¹¹

Endnotes

- 1 See Food & Water Watch (FWW). *Factory Farm Nation: 2024 Edition*.
- 2 Vedachalam, S. et al. The Northeast-Midwest Institute. "Source Water Quality and the Cost of Nitrate Treatment in the Mississippi River Basin." 2018 at 6 and 28.
- 3 Iowa Department of Natural Resources (DNR). *Manure Discharge Chart*. Available at <https://www.iowadnr.gov/Portals/idnr/uploads/afo/manuredischargechart.pdf>. Accessed June 2024.
- 4 Beeman, Perry. "Iowa DNR eases environmental rules during COVID-19 outbreak." *Iowa Capital Dispatch*. March 27, 2020.
- 5 Iowa Administrative Code § 567—65.2(1).
- 6 Eller, Donnelle. "Cuts threaten Iowa DNR's ability to 'carry out its mission,' commission tells lawmakers." *Des Moines Register*. Updated January 22, 2018; Ta, Linh. "Iowa state parks need \$100 million in repairs." *Axios Des Moines*. March 26, 2024.
- 7 FWW analysis of DNR. Document Search. Available at <https://programs.iowadnr.gov/documentsearch/Home/Search>. Accessed June 2024.
- 8 FWW et al. "Petition to revise the Clean Water Act regulations for concentrated animal feeding operations." March 2017 at 6 to 14. Available at https://www.foodandwaterwatch.org/wp-content/uploads/2021/06/citizens_cafo_cwa_petition.pdf.
- 9 U.S. Environmental Protection Agency. "NPDES CAFO Permitting Status Report." Available at <https://www.epa.gov/system/files/documents/2023-05/CAFO-Status-Report-2022.pdf>. Updated May 16, 2023.
- 10 FWW et al. 2017 at 13, 18, and 56.
- 11 FWW. "Factory Farm Nation: 2024 Edition." September 2024 at methodology.