



Concentrated Animal Feeding Operation (CAFO) Toolkit



MCE's CAFO Toolkit

<https://moenvironment.org/cafo-toolkit/>

This Toolkit gives you the resources that you need to “Watchdog” Missouri CAFOs for regulatory violations, environmental concerns, and various other CAFO activities which impact human, animal, and economic well-being. As a Watchdog, you can use the resources in ‘Documenting and Reporting Concerns’ to gather information about CAFO activities and share this information with the agencies responsible for addressing these concerns. You may use the resources in ‘Requesting Public Records’ to access more information about CAFO facilities in your area – like size, manure production, owner/operator, violation history – by contacting state and federal agencies. Finally, ‘Writing Public Comments’ gives you resources to advocate against CAFO expansion by submitting your comments on proposed [permit applications](#) and proposed rules that regulate CAFO activities in Missouri.

MCE hopes to expand and improve this Toolkit over time. We welcome your feedback on how to make these resources more accessible and effective for our CAFO Watchdogs! Please contact our Food & Farm Policy Director Melissa Vatterott at mvatterott@moenviron.org with any questions and comments about the Toolkit.

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Part 1: What is a CAFO?

Defining CAFOs and their roles in our industrial food system

What is a CAFO?

Concentrated Animal Feeding Operations (CAFOs)--better known as factory farms--are a primary component of the wider industrial farming system. They pose many threats to the health, environment, and economy of the communities in which they reside, all of which will be discussed in the upcoming "[Impacts of CAFOs](#)" section. Before delving into the specific damage that can be caused by CAFOs, it is important to understand their role in the industrial farming system, as well as the system as a whole. This section will provide a brief overview of the differences between small and large-scale farming, as well as the wider implications of those systems.

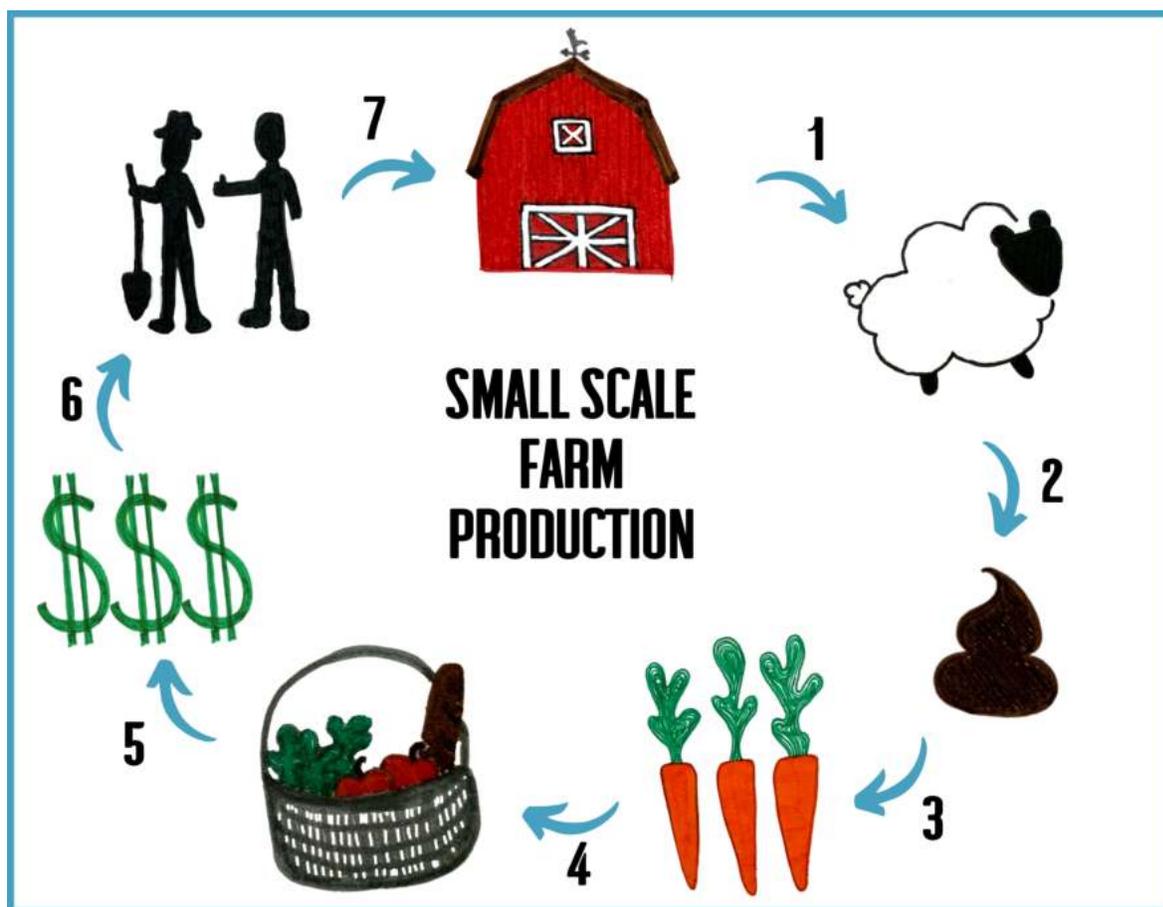


Figure 1. 1) animals roam and feed on plants, 2) animal waste promotes plant growth, 3) healthy produce grows from good soil, 4) consumers eat a balanced diet, 5) profits benefit local economy, 6) farmer/consumer relationships develop, 7) small farms continue to thrive
Illustrated by Louise Hauptert.

Figure 1 demonstrates the operations of a small-scale farm and its interactions with its surrounding community. In a small farm system, everything is interconnected. The relationship between the animals and the land affects the products that the farm is able to produce and sell, which in turn determines the relationships between growers and consumers. When a farm

grows a wide variety of vegetables, the produce can be sold to local consumers, who thus benefit from the balanced diet they have access to. Since the farm's produce is sold locally, it boosts the economy and encourages relationships between farmers and their communities, allowing the cycle to continue and the small farms to flourish. The environmental implications of this system are discussed in the "[Environmental Threats](#)" section.



Figure

2. 1) large-scale animal production in CAFOs causes more waste to be produced than can be absorbed by the land, thus contaminating surface and groundwater, 2) contaminated water, as well as air pollution from CAFOs, and pesticides and other industrial pollutants diminish local quality of life and harm the overall environment, 3) industrial crop production prioritizes commodity crops like corn, which are used both to create processed food for widespread consumer use as well as food for CAFO animals, 4) since the majority of farmland in the U.S. are growing commodity crops and not fruits and vegetables, most communities are not directly feeding themselves and instead rely on imported fruits and vegetables from faraway states and countries.

Illustrated by Louise Hauptert.

Figure 2 shows how the farming system becomes corrupted in the case of industrialized, large-scale farms. Industrial farming systems include CAFOs, which produce animals, and large crop production farms, which typically focus on one crop and can be processed and used for various purposes. In terms of animal production, CAFOs have many negative impacts on the

surrounding communities and environment, which are discussed in the [“Impacts of CAFOs”](#) section.

In terms of crop production, CAFOs rely on feed transported to the operation instead of pasture to feed their animals, which has in part created the demand for commodity crops such as corn and soybeans being grown on thousands of acres across the country. This focus on growing a few crops on large swaths of land degrades the soil, requiring more inputs (often animal waste or chemical fertilizer to be applied) to maintain desired yield levels. These products are then sold outside of the local community, to be processed.

Industrial crop farms, known as “monocultures,” contain fields with only one crop. This is dangerous for the environment. In sustainable, small-scale farms, various crops are grown at one time and the set of crops grown varies with each season. This crop variety affects the soil in different ways, each crop needing a different composition of nutrients to grow while also providing various amounts of nutrients back to the soil at the end of its life cycle. Learn more about this cycle [here](#). Growing several crops with complimentary benefits and needs keeps the soil balanced and healthy. Conversely, growing only one crop on a field exhausts the soil and eventually renders it a hostile growing environment if not supplemented with fertilizers. Monocultures also tend to require more use of chemical pesticides since there are fewer crops with varying qualities present to deter pests from wiping out a particular crop. As a result of growing only one crop, industrial farming systems do not turn out products that directly feed their local communities. Instead, the crops are used to create processed foods for widespread consumption. Some of the crops are turned into animal feed for CAFOs. Since fruits and vegetables are not being grown within local communities, there is a heavy reliance on imported produce, which stifles local economic opportunities in that area. Therefore, the industrial food system degrades our environment and relies on far away markets, as opposed to small-scale, sustainable food systems that can often keep more money in the local community from the sale of produce and pasture raised-meat products and keeps the soil healthy and consumers connected to the farmers who grow their food. Having an understanding of where one’s food is coming from and having direct connections to that source play an enormous role in the survival of small, sustainable farms, which overall plays a large role in environmental health.

Part 2: Impacts of CAFOs

Impacts of CAFOs

CAFOs pose various threats to the animals they house, the workers they employ, the communities they neighbor, and the environments they inhabit. These threats negatively impact the economy as well as the health of local ecosystems and individuals. Furthermore, they reinforce pre-existing racial and socioeconomic inequities. This section will outline the various threats that CAFOs pose and will provide an introduction to the issues through a lens of social and environmental justice.

The following topics will be discussed in this section:

- [Environmental Impacts](#)
- [Public Health Impacts](#)
- [Economic Impacts](#)
- [Racial and Socioeconomic Inequities](#)
- [Unregulated Concerns](#)

Environmental Impacts



LEFT: Pigs inside Puratone-affiliated CAFO in Manitoba. Publicly available from [Mercy For Animals Canada](#), 2012; RIGHT: Turkeys inside Butterball-affiliated CAFO. Publicly available from [Mercy For Animals MFA](#), 2011

By nature, animals have symbiotic relationships with their environments. They roam and graze on the land, which provides the animals with the nutrients they need to live. They then excrete waste containing nitrogen and healthy bacteria, which soil microbes use to fertilize the soil and promote natural plant growth when animals roam the pasture. This enriches and fertilizes the farm's soil, promoting healthy crop growth. This allows the farm to grow a wide variety of crops, which use and benefit the land in different ways, complementing each other and creating a sustainable soil profile. Each component of the ecosystem plays its part in contributing to the overall balance of the environment.

However, when CAFOs are established, the balance is disrupted and a previously healthy and co-beneficial relationship becomes toxic and harmful. Since the volume of animals is so much higher than is natural for the amount of land at the farm, the animals are not free to graze and roam. They are fed a non-natural diet meant to maximize their weight and are confined to small spaces, keeping them from moving freely. The animals do not go outside so their waste is collected from the CAFO barns and then applied to farmland either through spraying over the land or injection into the soil. The sheer volume of animals means that much more waste is excreted than on smaller farms. The soil microbes cannot use it all to facilitate plant growth, so much of it runs off into surface water and seeps into groundwater, causing foul odors, producing harmful algal blooms, and disturbing or killing off aquatic life. Water and air pollution from CAFOs harms the environment and diminishes the quality of life for the surrounding community. MCE's interactive [CAFO Story Map](#) illustrates these problems.

Below are details on these environmental threats and how to identify when they are occurring.

Algal Blooms



Massive algal bloom to the right of a hog CAFO in Kosciusko County, Indiana. Photo credit to [Environmental Law & Policy Center](#).

What is an algal bloom?

An algal bloom is a rapid increase in algae growth that can occur in freshwater and marine environments. Algal blooms can be green (see image above), blue, red, or brown and sometimes they are so bright that it looks like a layer of paint is covering the surface of the water. Many algal blooms release toxins, but some are non-toxic.

What causes an algal bloom?

Nutrients in animal manure like nitrogen and phosphorus stimulate algae growth, so if CAFO waste is overapplied to fields, leaks from lagoons, or otherwise enters waterways, it can produce massive algal blooms. Sunlight and slow-moving water also contribute to rapid algae growth. You are more likely to find algal blooms in still water than rivers or fast-moving streams.

How do algal blooms impact the environment?

Algal blooms often lead to fish kills. If small aquatic organisms consume toxic algae, the toxins can move through the food system to eventually kill larger fish and even aquatic birds. Non-toxic algal blooms may be just as lethal: clogging fish gills, blocking sunlight from going past the water's surface, and over-consuming oxygen that aquatic animals need to survive. Learn more about how nutrient pollution and algal blooms affect the environment [here](#) and [here](#).

Discolored and/or Foul-Smelling Water



Discolored and foul-smelling water documented in DNR Enforcement Action Request obtained via Sunshine request. View of location where the tributary observed in Photo #10 flows into Shady Creek. Reddish brown water from the tributary observed flowing into Shady Creek. A slight odor associated with hog waste was observed.

Photo #: 14, taken by Mike Smith at Fisher Hog Farms in Pike County, MO on July 1, 2015.

Permit: MOGS10044, Program: WPC Unit

What is discolored and/or foul-smelling water?

Water may be discolored for a variety of reasons, including [Algal Blooms](#). However, brown or reddish water indicates waste pollution – especially when accompanied by a foul, manure odor. When liquid animal waste is discharged to a water body, it is called effluent. Animal effluent may be reddish or pinkish in color because of the bacterial decomposition of the waste. Above you see a stream of brownish-red hog effluent entering Shady Creek.

What causes discolored and/or foul-smelling water?

Brown or reddish coloration may indicate waste pollution – especially when it is accompanied by a foul manure odor. If animal waste is not applied properly, it may run off into nearby waterways. There are multiple causes of manure runoff from CAFOs, including: 1) if animal waste is overapplied to land such that it can not be absorbed (especially to [Group D soils](#)), 2) if animal waste is applied to land while it is raining or shortly thereafter, 3) if waste storage and transport structures like lagoons, pipes, and trucks break or leak. All of these indicate improper manure management, and may be enforceable violations if DNR finds sufficient evidence of pollution to waters of the state. Facilities are expected to report manure spills and other incidents to the DNR whether or not they result in unplanned discharges.

How does discolored and/or foul-smelling water impact the environment?

Animal effluent (liquid waste discharged to a waterway) can ultimately lead to [Algal Blooms](#) and [Fish Kills](#) by introducing surplus nutrients and bacteria.

Fish Kills



Dead fish floating amidst algal bloom. *California Department of Fish and Wildlife.*

What is a fish kill?

When a lot of fish die in a localized area, it is often referred to as a fish kill or die-off. You will often see dead fish and other aquatic organisms floating on the water's surface when there is a fish kill. The water around the fish may be scummy, discolored, smell foul, or otherwise appear contaminated (see concerns about [Algal Blooms](#) and [Discolored and/or Foul-Smelling Water](#)).

What causes a fish kill?

There are many reasons why you may see a fish kill (see the Missouri Department of Conservation [page](#) on fish kills), but the most common cause is low oxygen concentration in water. Nutrient pollution from CAFOs can produce algal blooms which over-consume oxygen and produce “dead zones” in the water where you may observe these fish kills.

How do fish kills impact the environment?

Fish kills are generally indicative of other contamination concerns. Disease and other natural events can lead to a fish kill, but according to the Missouri Department of Conservation, “municipal and agricultural waste water have been the leading sources of fish kills in Missouri since the 1940s” ([MDC](#)). Therefore, if you see a fish kill it may be evidence of pollution concerns and a warning sign to test your water.

Groundwater Contamination

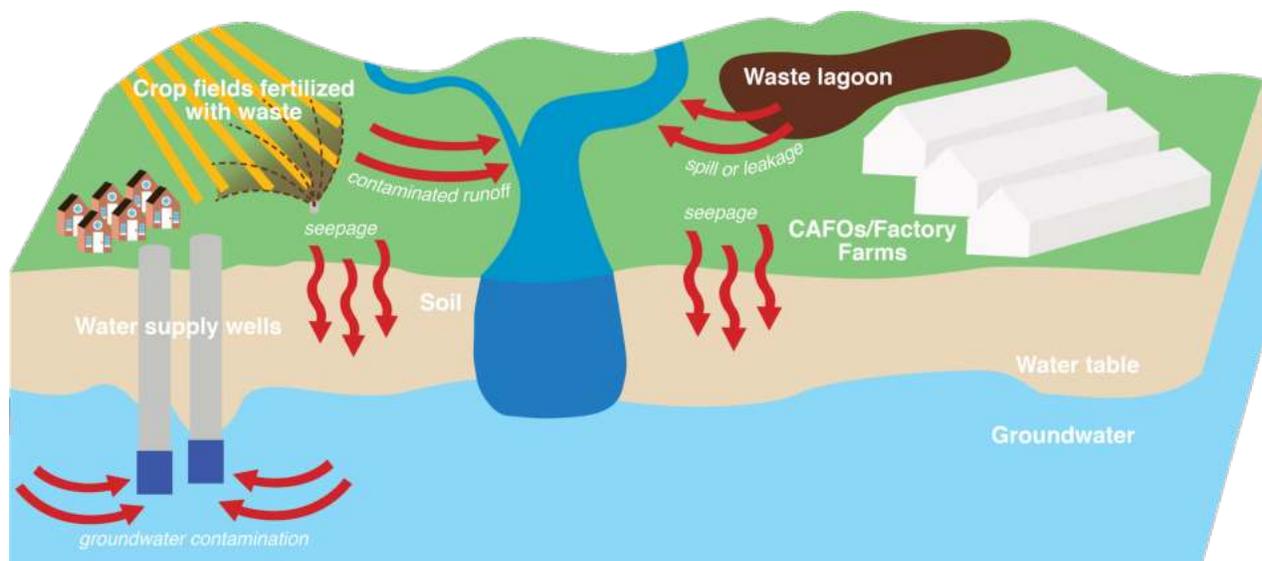


Figure 3. Diagram of the mechanisms of groundwater contamination

What is groundwater contamination?

When nutrients and bacteria from animal manure run off into surface waters, they can also seep into groundwater, causing nitrate contamination. This is a particular concern because nitrates are water-soluble and highly mobile in soil. Groundwater pollution is often observed in the form of well water contamination, but it also has serious impacts on the wider environment.

What causes groundwater contamination?

CAFOs contaminate groundwater supplies when animal waste leaches through the soil. Manure lagoons usually have a clay liner to prevent leaks, but these liners still permit a significant amount of seepage into groundwater. According to the [National Farmers Union](#), lagoon seepage may accumulate to over four million gallons of wastewater each year. Leaching can also occur when manure is overapplied to soil.

Certain soil types are more susceptible to groundwater contamination because of their ability to absorb liquids. Sandy and gravelly soil types (called [Group A soils](#)) produce greater groundwater contamination concerns because there is more space between soil particles to allow liquids to seep through. The [USDA's General Soil Map of Missouri](#) shows the distribution of soils across the state and how well they drain, which has implications for groundwater contamination, as mentioned above.

Furthermore, karst topography makes Missouri prone to groundwater pollution. “Karst topography” refers to underground features like caves and sinkholes which form where rock types are erodible. Groundwater may exist closer to the surface in these features, and therefore come in contact with pollutants before they have the chance to be filtered through layers of soil. According to the Missouri Department of Conservation ([MDC](#)), “much of Missouri is a karst landscape of porous limestone and dolomite, where caves, springs, sinkholes, and natural bridges form”. The following illustration from the [National Park Service](#) demonstrates how karst landscapes develop.

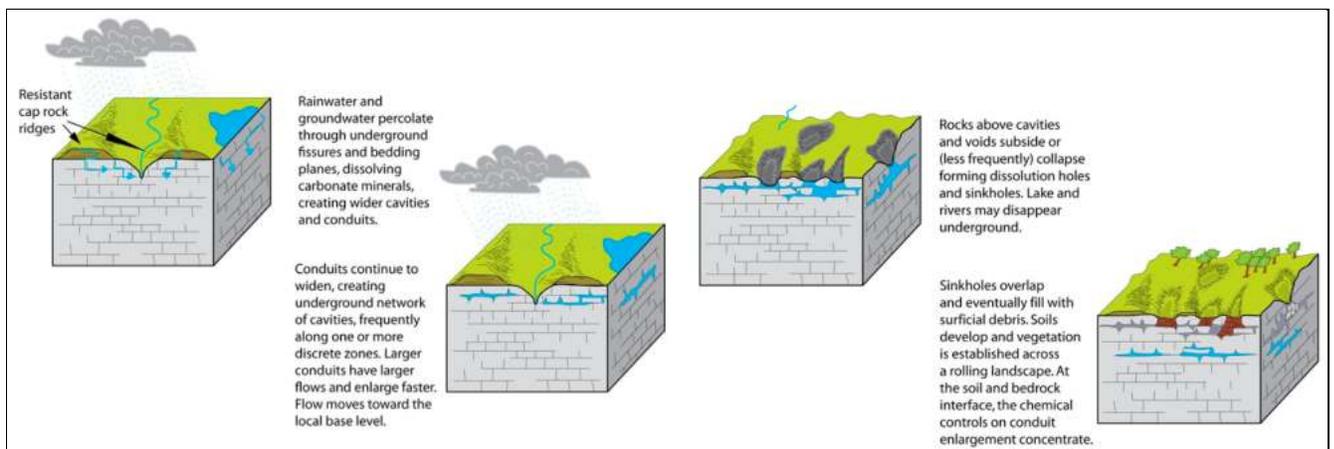


Figure 4. Illustration by Trista L. Thornberry-Ehrlich, obtained from [NPS](#), 2020.

How does groundwater contamination impact the environment?

Many freshwater lakes and streams are fed at least in part by groundwater sources. If groundwater is contaminated, the pollution is a dangerous threat to the entire ecosystem, as it will affect any living organisms that rely on the freshwater bodies fed by groundwater. Streams, lakes, and wetlands are affected by and connected with one another and with groundwater. It is

important to acknowledge that these systems are interconnected and not to fall into the ignorant assumption that pollution of any kind is self contained. Read more about wetlands in the Socially Responsible Agriculture Project's [\(SRAP\) CAFO guide](#), p. 17-18.

Air Pollution

What is air pollution?

Air pollution, in the form of harmful air emissions, is a problematic environmental threat posed by CAFOs. Healthy, clean air contains (in order of prominence) nitrogen, oxygen, carbon dioxide, neon, and hydrogen. This balance is essential, and the addition of harmful gases and emissions through pollution can have disastrous effects.

What causes air pollution?

Agricultural industries produce about 80% of nitrous oxide emissions and about 35% of methane emissions in the United States. The largest source of agricultural greenhouse gas emissions is the livestock industry: more specifically, the waste produced by livestock animals ([US EPA](#)). CAFOs also produce ammonia, hydrogen sulfide, methane, and particulate matter (PM) – all of which have well-documented environmental and human health consequences ([CDC](#)).

How do air pollutants from CAFOs impact the environment?

Ammonia and hydrogen sulfide emissions cause a pungent odor that lingers in the environment. Methane, which is produced in high volumes by the agricultural industry, is a potent and dangerous greenhouse gas, contributing to climate change and has overall negative consequences for environmental health. Particulate matter emissions cause reduced visibility in the surrounding areas and can also cause acid rain.

According to the [Environmental Protection Agency's report on Air Emissions from Animal Feeding Operations](#), Nitrous oxide and other volatile organic compounds (VOCs) produced by CAFOs impact the environment in various ways, depending on their location. VOCs that are transferred to the [stratosphere](#) can contribute to ozone depletion, which plays a significant role in our planet's warming and thus disrupts the habitats of species worldwide. This is demonstrated in the following illustration.

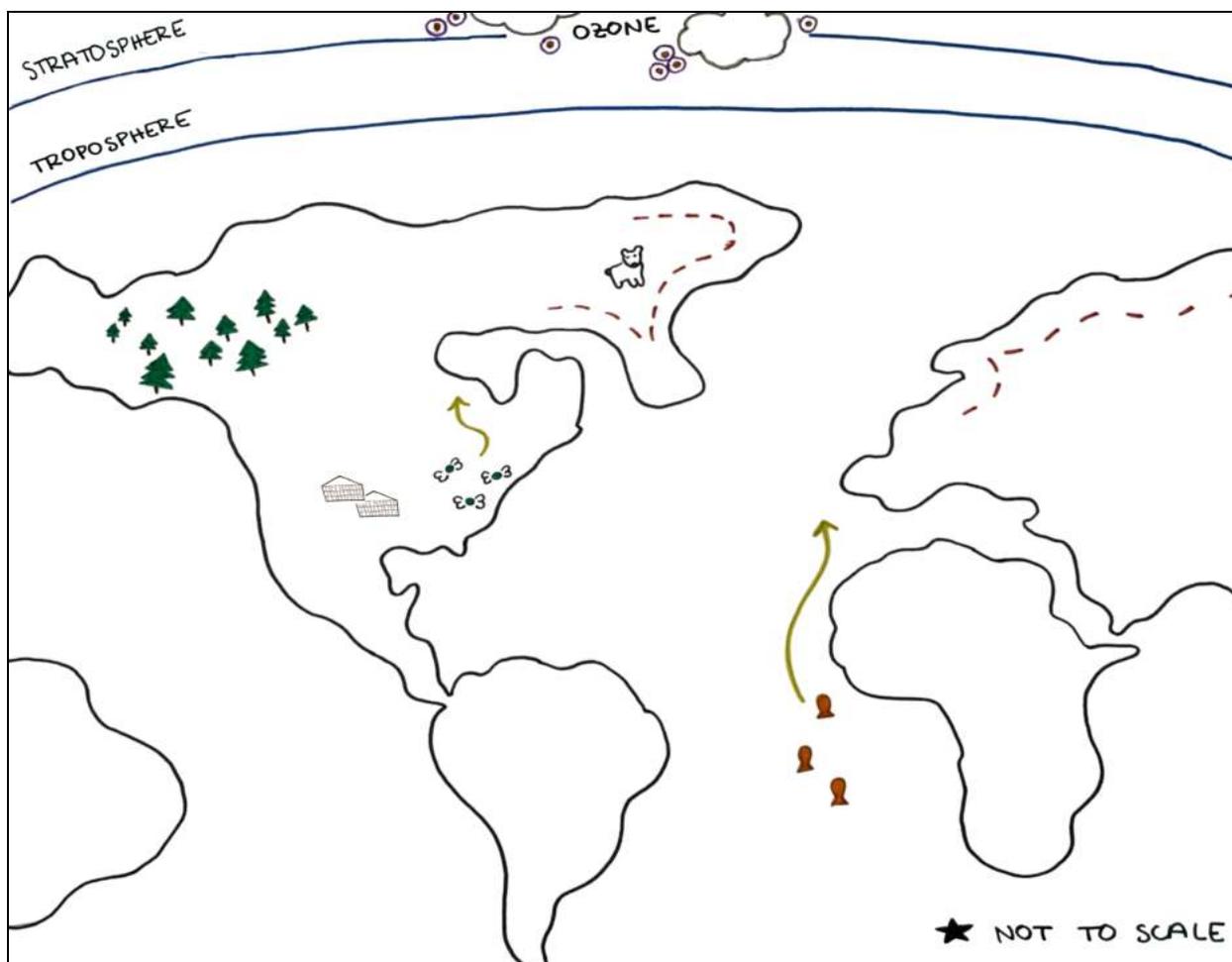


Figure 5. CAFOs (depicted as two barns) emit pollutants that can get trapped in the atmosphere. Ozone-depleting chemicals (represented by purple circles) attach to ice particles in the clouds, which then melt and release the chemicals, which break molecular bonds in the UV-radiation-absorbing ozone layer. This contributes to the warming of our planet. As warming progresses, habitats change, affecting where species live. The red dotted lines represent the diminishing polar ice, which disrupts the arctic and antarctic ecosystems and delicate food web. Also depicted on the map is the emerald ash borer, whose range has expanded northward, harming increasingly large amounts of trees. Many warm water fish species (also shown on the map) are moving into cooler waters, disturbing the balance of the ecosystems they move into. These are only a few examples of the many that are occurring globally. Learn more about ozone depletion and habitat destruction from the [EPA](#) and the [UCS](#). Illustrated by Louise Hauptert.

VOCs in the troposphere can lead to increased concentrations of trioxygen, which can result in decreased crop productivity. Additionally, human activity--like that of CAFOs--spurs the conversion of nitrogen in its original form to reactive nitrogen, which then cycles through and harms environmental systems. This is referred to as the "[nitrogen cascade](#)," and has widespread effects on the atmosphere, as well as terrestrial and aquatic ecosystems.

The Clean Air Act (CAA) regulates air emissions to protect human health and the environment. CAFOs should qualify for CAA regulation as a stationary source of greenhouse gases and other emissions; however, the CAA has been made virtually unenforceable. In 2005, the

Environmental Protection Agency (EPA) sought to gather more data on AFO emissions and offered participants in its voluntary emissions monitoring program temporary immunity from penalties for CAA violations through its [Air Compliance Agreement](#). Thousands of AFOs and CAFOs signed on to the Agreement, which has effectively undermined any CAFO oversight under CAA, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Emergency Planning and Community Right-to-Know Act (EPCRA) since 2005 (see [this EPA report](#)).

Before Missouri Senate Bill 391 passed in 2019, local governments could establish county health ordinances to regulate CAFO air emissions. However, SB 391 determined that county health ordinances may not impose standards on agricultural operations which are more stringent than state standards. Read more about SB 391 and local ordinances under 'Regulatory Changes'.

Animal Welfare



Cattle inside anonymous CAFO. Publicly available from [Pxhere](#), 2017.

CAFOs house anywhere from hundreds to tens of thousands of animals in crowded, poorly-ventilated buildings without space to move or access to sunlight, fresh air, and pasture. This environment produces extremely unsanitary living conditions, unwarranted stress, and suffering for animals. See the Socially Responsible Agriculture Project (SRAP)'s [web page](#) for more information about animal welfare concerns and a list of farm welfare groups which advocate for a more humane food system.

Public Health Impacts

The environmental threats discussed above also have enormous impacts on human health, primarily through air pollution and water contamination. Conditions such as asthma can be

developed and/or exacerbated by CAFO emissions, and can have long-term effects on the impacted individual. In addition to physical health threats, these conditions also impact the mental well being of independent farmers in the livestock industry and the CAFO workers.

Algal Blooms

Algae is not always harmful, but algal blooms often release toxins that are dangerous to humans and other animals. Drinking water affected by an algal bloom can cause illness in the stomach and liver, respiratory system issues, and even have neurological effects. Swimming in water affected by an algal bloom is also hazardous because water may accidentally be swallowed and external contact can produce a rash. Algal blooms may be caused by excessive nitrates in the water; nitrate contamination has its own set of human health risks, especially for infants. Furthermore, algal blooms dramatically increase the cost of water treatment for local municipality water treatment facilities (while polluting facilities are not accountable for remediation costs) and disinfectants used to treat water may have harmful side effects, as well. Learn more about how nutrient pollution and algal blooms impact human health from the EPA [here](#).

Water Contamination



Well water bucket. Publicly available from [Pxhere](#), 2017.

Not only does animal waste contain high levels of nitrates and phosphorus, it may also contain bacteria like *E. coli*, which can cause fever, diarrhea, vomiting and potentially fatal complications. Learn more about the symptoms from the CDC [here](#). Even the smallest backyard creeks feed into our recreational waterways and drinking water sources, therefore animal effluent compromises our ability to safely consume and enjoy Missouri water.

Groundwater contaminants pose serious human health concerns. Nitrate contamination can cause [blue baby syndrome](#) and is linked to higher rates of cancer and illness in adult populations. Bacteria can cause a variety of illnesses which may produce fever, vomiting, and diarrhea.

In some parts of the state, Missourians rely almost exclusively on groundwater sources of drinking water and groundwater contaminants like nitrates, *E. coli* and other bacterial pathogens may go undetected because they usually do not affect the color or odor of water. If your drinking water comes from a public source, you should not be concerned because public water is tested and treated for contamination under the Safe Drinking Water Act (SDWA). However, private water sources are not regulated under SDWA and an estimated 1.4 million Missourians pump drinking water from private wells ([MU Extension](#)). If your drinking water comes from a private well, you should have it tested today – especially if you live near a CAFO. Learn about water testing in '[Documenting Concerns](#).'

Air Emissions

As air emissions from CAFOs negatively impact the environment, so too do they affect the health of the surrounding communities. The following chart details the most prominent health impacts of these emissions.

CAFO Emissions	Source	Traits	Health Risks
Ammonia	Formed when microbes decompose undigested organic nitrogen compounds in manure	Colorless, sharp pungent odor	Respiratory irritant, chemical burns to the respiratory tract, skin, and eyes, severe cough, chronic lung disease
Hydrogen Sulfide	Anaerobic bacterial decomposition of protein and other sulfur containing organic matter	Odor of rotten eggs	Inflammation of the moist membranes of eye and respiratory tract, olfactory neuron loss, death
Methane	Microbial degradation of organic matter under anaerobic conditions	Colorless, odorless, highly flammable	No health risks. Is a greenhouse gas and contributes to climate change
Particulate Matter	Feed, bedding materials, dry manure, unpaved soil surfaces, animal dander, poultry feathers	Comprised of fecal matter, feed materials, pollen, bacteria, fungi, skin cells, silicates	Chronic bronchitis, chronic respiratory symptoms, declines in lung function, organic dust toxic syndrome

Figure 6. Data obtained and chart created by National Association of Local Boards of Health ([NALBH](#)), 2010

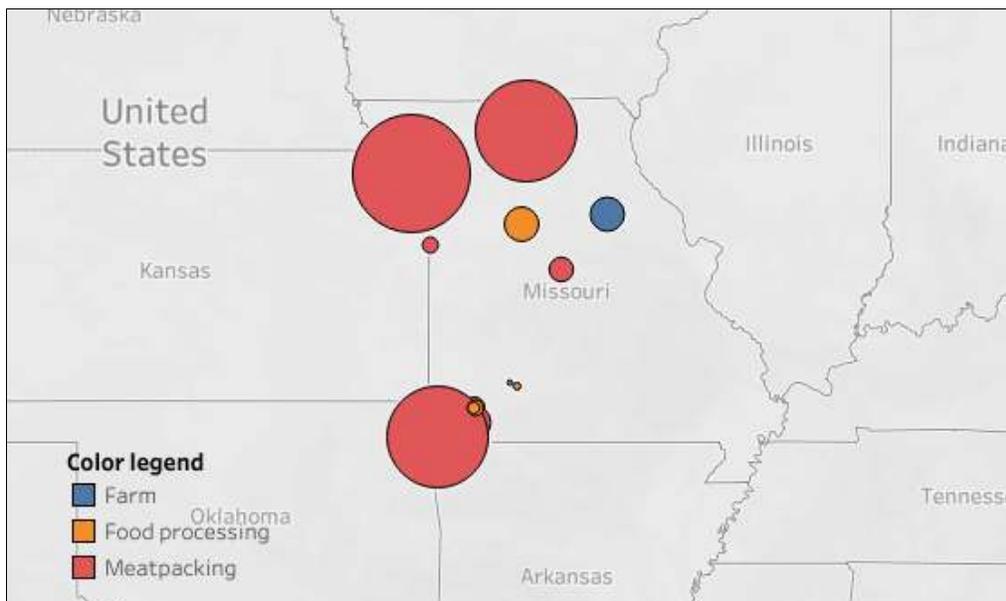
Worker Safety

CAFO work involves a number of human health risks. CAFO workers experience high rates of respiratory illnesses like bronchitis and asthma because of occupational exposure to air pollution, as well as frequent headaches, body aches, and nausea ([CDC](#)). Since CAFO employees operate heavy machinery and interact with animals, workplace injuries are common and sometimes fatal ([NIH](#)). Furthermore, livestock operations are breeding grounds for insects, pathogens, and viruses: workers with frequent exposure to animals and their waste may be the first to get infected.

Unfortunately, migrant workers in particular are hesitant to voice their concerns to employers and regulators or identify themselves to the media because they work on temporary visas which their employers may terminate. Find resources on how to advocate for food system workers' rights through the [Food Chain Workers Alliance](#).

The [Rural Community Workers Alliance \(RCWA\)](#) is a Missouri-based organization that strives to protect the rights of low-wage immigrant and refugee workers. Their action promotes community engagement and worker involvement in decisions. RCWA aims to improve health systems and workplace safety within the farming industry while addressing the root causes of those problems.

COVID-19 among CAFO workers



Snapshot of a map of COVID-19 cases by food system sector in Missouri, Food and Environment Reporting Network, <https://thefern.org/2020/04/mapping-covid-19-in-meat-and-food-processing-plants/>. Data collected and assembled by Leah Douglas of FERN.

Like workers in slaughterhouses and [meat processing plants](#), Missouri CAFO employees have reportedly been forced to work despite showing symptoms or receiving positive test results for COVID-19. The previously-cited living conditions for migrant CAFO workers like crowded, company-owned housing and transportation may increase exposure to the virus. Furthermore, personal protective equipment (PPE), social distancing measures, and testing may not be provided at work environments.

RCWA, mentioned above in the “[Worker Safety](#)” section, has taken action specifically related to the COVID-19 pandemic. RWCA joined a coalition of organizations to file a complaint against the U.S. Department of Agriculture (USDA), claiming that meat processing plants (Tyson and JBS) were illegally engaging in racial discrimination through their COVID-19 workplace policies. Learn more about the administrative civil rights complaint [here](#).

RWCA also filed a lawsuit in April 2020 against a Smithfield Foods pork plant in northern Missouri. The lawsuit raised concerns about Smithfield’s failure to protect workers during the COVID-19 pandemic. It made national headlines, but was unfortunately dismissed in May 2020. Learn more about the lawsuit [here](#).

Antibiotic and Hormone Use

CAFOs crowd a massive amount of animals, feed, and waste in close proximity, which creates a breeding ground for bacteria. It has become common practice for factory farm operators to administer low-dose antibiotics to all animals— sick or healthy— to prevent disease outbreaks. However, bacteria develop resistance to antibiotics over time, therefore administering antibiotics to healthy animals is ultimately harmful and may hinder our ability to treat bacterial illness in human populations, as well. Read more about how CAFOs have impacted antibiotic resistance from the [Western Organization of Resource Councils](#)

Beef cattle and dairy cows are sometimes given supplemental hormones to stimulate growth and weight gain (federal law prohibits the use of hormones for hogs and poultry). Humans may be exposed to these hormones by consuming beef and dairy products. The [Food and Drug Administration](#) (FDA) should regulate and label hormone use to ensure safe meat consumption, however, [labels can still be misleading](#) and consumers should proceed with caution. [Research](#) suggests consuming hormone residues in beef may disrupt the human endocrine system and contribute to hormone-related chronic diseases. These hormones may also have unregulated and harmful impacts on aquatic life when animal waste contaminates surface and groundwater. Read more about the fate and effects of hormones from CAFOs in the ‘Background’ section of this [EPA grant project](#).

Economic Impacts

Since CAFOs operate on such a large scale, they can turn out far more product with less financial expense than small, local farms. However, CAFO operators are not usually the beneficiaries of this model. For example, poultry CAFOs are typically part of [vertical integration](#) through “contract farming,” which means the operator owns the farmland and the equipment needed to raise the animals, but the corporation (such as Tyson) owns the animals. This results in a high profit turnout for the meat production company while not necessarily benefitting the operators themselves to the same extent.

In the “What is a CAFO?” section, industrial food systems--including both food and crop production--were discussed. Just as it was important to understand the relationship between crop and food systems to understand the implications of their operations, it is likewise important to recognize the economic threats and implications of both industrial crop and animal industries. The federal government incentivizes large scale production of particular crops - called commodity crops - through the federal crop insurance and commodity payment programs. As a result, farmers who grow commodity crops have greater financial support than their smaller-scale vegetable counterparts. Smaller farms then struggle to make enough money to support their own operations, not to mention the livelihoods of the families relying on them. Local economic growth is thus discarded for corporate gain. When looking at the economic implications of different crop and animal industries, it is essential to remember who is actually benefiting from the commercial operations and how farmers--both small-scale and CAFO operators-- are affected. Read chapters five and six of the [St. Louis Regional Food Study](#) for a more detailed discussion of crop production trends, the financial disparities between commodity producers and fruit and vegetable producers, and the connection between commodity production and CAFO livestock production.

Corporate Consolidation

"Eighty-five percent of the meat Americans consume is produced by four corporate giants – Tyson, Smithfield, Cargill, and JBS" ([Public Justice](#)). All of these corporations are known for using industrial methods to mass-produce inexpensive meat with little consideration for human, animal, or environmental welfare. Tyson, Smithfield, and Cargill all have operations in Missouri.

Over time, a smaller number of facilities (mostly owned by these corporations) have become responsible for producing a larger share of America’s meat. Corporate consolidation has simultaneously mapped the decline of the small farmer. Since larger farms realize higher profits and depress prices for farm commodities, they quickly outcompete smaller farms with higher costs ([USDA](#)). Read more about CAFO expansion and corporate consolidation in the Food & Water Watch’s recent issue brief [‘Factory Farm Nation’](#).

CAFO operators may claim to bring job opportunities to rural communities, but given the previously-cited occupational hazards of working at a CAFO (see ‘2. Worker Safety’), "local workers who are accustomed to making their own decisions and working in a humane environment typically do not work for CAFOs" ([John Ikerd](#)). Ultimately, corporate consolidation

upholds an industrial agricultural system which is socially, economically, and environmentally destructive.

Racial and Socioeconomic Inequities

CAFOs are often set up in areas adjacent to or directly within communities that are already racially or socioeconomically disadvantaged. The presence of a CAFO within a community further devalues property and diminishes the quality of life for residents, adding to the disparities already felt by low income and Black, Indigenous, and people of color (BIPOC) populations.

Discrimination and CAFOs

Discrimination is evident in both the placement of CAFOs and their employment practices. In Missouri, counties with the highest concentration of CAFOs also have above-average poverty rates. While those counties in Missouri are predominantly white, that is not the case in other states with many CAFOs. For instance, in North Carolina, CAFOs are not only seven times more common in high-poverty areas, but are also five times more likely to exist in non-white areas ([Wing, et al.](#)). These communities are then subjected to live with the effects of CAFOs in their neighborhoods, diminishing their quality of life and exposing them to the industry's many hazards.

In terms of employment, Missouri CAFOs--and CAFOs in general--rely heavily on Latinx immigrant labor, and have done so since the [1942 Mexican Farm Labor Agreement](#). Too often, immigrant workers are not given adequate information and training on job safety and associated health risks. When that information is presented, it is usually not in the workers' native language, making it inaccessible and unhelpful. Regardless of the adequacy of training, the CAFO industry is an unsafe place to work and poses many health threats inherent to the nature of the industry.

Learn more about discrimination related to CAFOs in [MCE's blog post](#) on injustice in industrial farming.

Workers' Rights

Occupational safety concerns are a racialized issue. "A large percentage of factory farm workers are people of color including migrant workers from Mexico and other parts of Latin America" ([Food Empowerment Project](#)). This is no coincidence: employers actively recruit undocumented workers on temporary labor contracts because "they are less likely to complain about low wages and hazardous working conditions" ([Food Empowerment Project](#)). CAFO operators reportedly house migrant workers in company-owned trailers which may lack plumbing and other utilities and transport workers to facilities on overcrowded buses. Furthermore, language and cultural barriers may prevent migrant workers from understanding

occupational safety risks and procedures, reporting concerns, and accessing healthcare and/or legal resources.

CAFO labor is not only dangerous, but racially-exploitative. Read more about environmental injustices caused by CAFOs [here](#) and about occupational safety concerns for food system workers from the [Food Chain Workers Alliance](#).

Unregulated Concerns

Missouri CAFOs are permitted and regulated under the Clean Water Act (CWA) and must meet regulatory requirements based on the conditions of this permit. Depending on the size of the facility – which is determined by the number and type of animals – CAFOs must maintain certain buffer and setback distances, provide neighbor notices, prepare Nutrient Management Plans (NMPs) and complete internal reports. If CAFO construction will disturb more than one acre of land, the operator must also obtain a land disturbance permit. See the DNR's fact sheet on CAFO regulations [here](#).

However, CAFOs generate many human health and environmental concerns that are not accounted for in their permit conditions. Therefore, many of the threats that were discussed in this section – such as air emissions, workers' safety, hormone and antibiotic use, and animal welfare – are virtually unregulated. You can learn more about these issues in MCE's multimedia [Story Map](#). See [Additional Reporting Resources](#) for ways that some of these unregulated concerns can be addressed.

Part 3: How to Keep CAFOs Out

Preventing New CAFOs

Given the numerous and diverse threats that CAFOs pose, it is important to be proactive and do as much as possible to keep CAFOs from entering your community in the first place. These preventative measures include keeping up to date with the policies surrounding CAFOs in your area. Watchdogging by checking in with the DNR frequently to stay informed on any proposed regulation changes or proposed new CAFO permits is a great way to stay one step ahead of the harmful operations. Recent and pending CAFO permits, as well as additional helpful resources related to CAFOs and their permitting processes can be found on the [DNR's website](#):

- Current New or Expanded Facility Applications [webpage](#) (CAFOs only)
- Water Public Notices [webpage](#) (CAFOs and other facilities permitted under the DNR Water Protection Program)

Writing Public Comments Overview

Commenting on Permits

One of the best ways to prevent CAFOs from entering your community is to review permits and express concerns about the facility's permit and its water quality impacts during a public comment period. In order to begin operations (or make significant changes to existing operations), CAFOs must submit permit applications, which are then evaluated by government agencies responsible for making CAFO regulations. In Missouri, the DNR is responsible for reviewing and approving permit applications for CAFOs.

As part of the evaluation process, government agencies often seek public input through holding "public comment periods." A public comment period is a length of time during which a government agency will accept feedback and input from the public about a proposed permit or regulation. During this time frame, the government agency will accept written comments from individuals or organizations about a proposed action. Other government agencies may set different lengths of time for the public comment period. For those who consider pursuing litigation, it is beneficial and sometimes necessary to submit a public comment to establish standing.

Public comments that are submitted before the deadline go into the administrative record. Comments may become irrelevant if submitted after the deadline passes. Furthermore, some courts have decided that if concerned residents do not raise a particular issue during the comment period, then the particular issue cannot be used to challenge the agency's final decision on the permit or the rule. **Therefore, preserve your issue by submitting a comment before the deadline.** For more details about how to ensure your comment is complete, on-time,

and appropriately considered, check out [Part 4, Section A: Comment Letters to Government Agencies](#) in [MCE's Advocacy Guide](#).

Missouri CAFOs must apply for permits under the Clean Water Act (CWA), whether or not they are authorized to discharge into waters of the state. The public comment period for a CWA permit is thirty (30) days; however, you may request an extension of the public comment period if you can demonstrate one or more of the following:

1. There is significant public interest in the permit (renewal) draft
2. There have been substantive changes to the permit that have not been adequately addressed or explained in the permit (renewal) draft
3. The permit (renewal) draft itself is lengthy or otherwise complex enough to warrant more time for review

See an example of a (successful!) extension request [here](#).

With regards to CWA permits, the Department can only consider comments about issues relating to the proposed permit and its effect on water quality based on the authority of the Clean Water Commission (CWC). Keep this in mind when preparing your comment as legitimate concerns like noise or smell may not be considered relevant when the Department is making its decision about a permit application. Again, be sure to include water quality concerns like potential discharges, possible groundwater contamination, and nearby waterways.

Comment letters regarding Clean Water Act permits should be directed to the Missouri Department of Natural Resources (DNR) Water Protection Program (WPP). Comment letters are accepted via e-mail or fax and may be submitted in writing to the appropriate regional DNR office. The applicable contact name and mailing address can be found on the cover page of each draft permit. Contact information for the DNR WPP is listed below. Use [the following template](#) for writing comments on CAFO permits and see a sample comment [here](#).

Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
573-751-1300
publicnoticenpdes@dnr.mo.gov

Comment Letter Template for CAFO Permits

The following template outlines a formal comment letter for a CAFO permit. **Bracketed sections should be personalized with information specific to your comment. Sections in parenthesis are optional but may be included if they are helpful and relevant. Sections in italics are meant to guide you and should not be included in the final comment letter.**

Please contact Melissa Vatterott at mvatterott@moenviron.org if you have specific questions about completing this template or commenting on a CAFO permit application.

If you belong to an organization or community group, you may include a header with your organization's logo and/or a footer with your organization's contact information (mailing address, email address, web address, fax and/or phone number).

[Date]

Department of Natural Resources
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102-0176
ATTN: NPDES Operating Permits/Permit Comments

Re: Notice of Intent to Issue Missouri State Operating Permit [Permit Number] for [Facility Name]

To whom it may concern,

[I am/'your organization name' is] grateful for the opportunity to comment on the Notice of Intent (NOI) to Issue Missouri State Operating Permit [Permit Number] for [Facility Name]. (Explanation of your personal interest in the draft permit or explanation of your organization and its interest in the draft permit).

[I urge/your organization name urges] the Missouri Department of Natural Resources (MDNR) and Clean Water Commission (CWC) to [deny/amend] the draft permit (renewal) for [facility name and/or permit number]. [Briefly summarize your concern(s)].

I. [First concern]

[Explanation of concern using specific evidence from the permit draft; be sure to explicitly mention or draw a connection to possible impacts on water quality].

II. [Second concern]

[Explanation of concern using specific evidence from the permit draft; be sure to explicitly mention or draw a connection to possible impacts on water quality].

III. [Third concern]

[Explanation of concern using specific evidence from the permit draft; be sure to explicitly mention or draw a connection to possible impacts on water quality].

IV. [Etc.]

[I urge/'your organization name' urges] DNR and CWC to protect Missouri's water quality and ensure that Concentrated Animal Feeding Operations (CAFOs) prepare complete and thorough permits. [I/we] ask that DNR and CWC [deny/amend] the draft permit for [facility name and/or permit number] regarding the concerns outlined in this comment.

Thank you for providing the opportunity to present these comments. If you have any questions or wish to discuss these comments further, please reach out to [me/'your organization name'] at the contact information below.

Sincerely,

[Your name]

[Your title]

[Your organization's or group's name (if applicable)]

[Phone number]

[Email address]

You may also choose to submit your comments more informally; you may even submit your comments as a bulleted list. Whatever format you choose, be sure to include the following information:

- Your name and address
- Name of group you are speaking on behalf of (if relevant)
 - Name, address and location of permit applicant, facility or activity (refer to the public notice)
 - A statement explaining why you are interested or concerned, and how the proposed action might affect your interests
- Any permit identification or reference number (refer to the public notice)
- Any other information required by the public notice
- A statement of what you want the agency to do regarding the proposed action
 - For example, deny the permit, prepare an environmental impact statement, hold a public hearing locally, change the rule, etc.
 - Note: you can have multiple requests
- A request that the agency notify you in writing of the permit decision
- Date and sign your comment

Commenting on Rules

Much like commenting on permits, commenting on rules can be a very effective way to stay engaged in the fight against CAFOs and take specific action to keep them from doing further harm. State and federal agencies have the power to make regulatory rules, but they must follow an open public process to do so. There are multiple stages of the rulemaking process and the public generally has an opportunity to comment during the 'Proposed Rule' period.

Federal agencies must submit proposed rules to the [Federal Register](#). They may engage the public in the preliminary stages of rulemaking by publishing an 'Advance Notice of Proposed Rulemaking' to the Federal Register. At this stage, the public may submit comments on the draft proposal. When an agency submits a 'Notice of Proposed Rulemaking' (NPRM) or 'proposed rule' then the formal public comment period begins. The agency will determine and specify the length of the comment period, which usually ranges from thirty to sixty (30-60) days. Agencies may consider late comments, but they are not required to. Members of the public may also submit an extension request on the comment period. You can learn more about the rulemaking process through the Federal Register [here](#).

As a CAFO Watchdog, you should keep an eye out for NPRM from the Environmental Protection Agency (EPA), United States Department of Agriculture (USDA), and Agricultural Marketing Service (AMS) – these are some of the federal agencies which may regulate CAFO activities. See an example of a proposed rule that was published in the Federal Register by the AMS [here](#) (note it does not pertain specifically to CAFO activities).

The rulemaking process is similar for state agencies. All rules that are proposed by Missouri state agencies should be available in the [Missouri Register](#). Some state agencies which make rules that may impact CAFOs include the [Missouri Fertilizer Control Board](#) (MoFCB), the [Missouri Department of Agriculture](#) (MDA) and the Department of Natural Resources. You can learn about proposed rulemaking by the DNR through its Regulatory Action Tracking System [here](#). You are most likely to find rules which affect CAFO regulation under the Water Protection Program; however, the Air Pollution Control Program and other programs have amended rules which impact CAFOs. DNR provides an easy way to submit comments on proposed rules through Regulatory Action Tracking System which looks like this:



Comments

Please provide as much information as possible in the boxes below when submitting a comment. Reference the portion of the Rule Action being commented on so DNR can better apply the comment during the Rule Making process. If uploading a document, please only upload PDFs.

If you get an invalid character error message when you try to submit, try removing special characters and resubmitting. For example, quotation marks will trigger an invalid error message.

Rule Number:	10 CSR 20-7.031	Rule Title:	Water Quality Standards
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Comment Type:	RIR
Name:	<input type="text"/>
Organization:	<input type="text"/>
Phone Number:	(<input type="text"/>) <input type="text"/> - <input type="text"/>
Email:	<input type="text"/>
Comments:	<input type="text"/>
Upload Document:	<input type="button" value="Choose File"/> No file chosen

When you look at a proposed rule document in the Federal Register, it should provide contact information for an agency official and an address for submitting comments by mail. You can submit comments on rules proposed by federal agencies online at <https://www.regulations.gov/> or through the [Federal Register](#).

You may also use the [following template](#) to submit a comment on proposed rules and see a sample comment that MCE submitted on a rule proposed by the USDA [here](#). Note this comment does not pertain specifically to CAFO activities.

Comment Letter Template for Proposed Rules

The following template outlines a formal comment letter for a proposed federal rule. **Bracketed sections should be personalized with information specific to your comment. Sections in parenthesis are optional but may be included if they are helpful and relevant. Sections in italics are meant to guide you and should not be included in the final comment.** Please contact Melissa Vatterott at mvatterott@moenviron.org if you have specific questions about completing this template or commenting on proposed rules.

If you belong to an organization or community group, you may include a header with your organization's logo and/or a footer with your organization's contact information (mailing address, email address, web address, fax and/or phone number).

[Date]

[Name of Agency Contact]

[Name of Department (if applicable)]

[Name of Agency]

[Agency Street Address]

[City, State ZIP Code]

Re: [Docket ID #, Document Title]

Dear [Name of Agency Contact],

Thank you for the opportunity to comment on [Document Title]. I am [introduce yourself and/or the organization on whose behalf you are commenting then briefly explain your mission, credentials, and/or interest in the proposed rule].

[I/'your organization name'] would like to [raise the following concerns/propose the following changes/provide evidence for the following sections] regarding [Document Title]:

1. [Statement or phrase describing first point]
2. [Statement or phrase describing second point]
3. [Statement or phrase describing third point]
4. [Etc.]

1. [Restate first point]

[Describe the first point using specific evidence from the proposed rule and referencing specific sections whenever possible; explain why your point is important to the rule/agency/your organization, etc.].

2. [Restate second point]

[Describe the second point using specific evidence from the proposed rule and referencing specific sections whenever possible; explain why your point is important to the rule/agency/your organization, etc.].

3. [Restate third point]

[Describe the third point using specific evidence from the proposed rule and referencing specific sections whenever possible; explain why your point is important to the rule/agency/your organization, etc.].

4. [Etc.]

([I urge/'your organization name' urges] [Name of Agency] to examine the impacts of this proposed rule on [CAFO operations, public drinking water, population of concern, etc.] and consider the points made in this comment.)

Thank you for providing the opportunity to present these comments on [Document Title]. If you have any questions or wish to discuss these comments further, please reach out to [me/'your organization name'] at the contact information below.

Sincerely,

[Your name]

[Your title]

[Your organization's or group's name (if applicable)]

[Phone number]

[Email address]

Public Records Requests

Law Requests Overview

As a member of the public, you have a right to review government documents under both state and federal law. At the state level, the law is referred to as the Sunshine Law (Mo. Rev. Stat. § 610.010 of the Missouri Revised Statutes). At the federal level, the Freedom of Information Act (FOIA) governs public access to documents. As an environmental advocate, reviewing public records can help you ensure that government agencies follow the law when making decisions that impact the environment.

Most reports, documents, correspondence, and permits filed with the government become public records and are available for review at agency offices. Environmental laws and regulations require that agencies and permit holders gather, produce, record, and report much of this information. For example, when companies violate their permits or accidentally release toxic chemicals, the law usually requires those companies to file prompt reports. Additionally, the law often requires permit holders to monitor and file reports about their discharges to show whether or not they are complying with permit limits. Companies submit these reports to agencies such as the Missouri Department of Natural Resources (DNR). Types of records you may request include:

- Research data used in decision-making or rule-making
- Inspection reports
- Internal reporting (e.g. daily records of water levels, manure application)
- Notices of violations (NOV)
- Letters of warning (LOW)
- Maps
- Industry reports (for example, reports of monitoring results or pollution incidents)
- Permits and permit applications
- Environmental Assessments (EA) and Environmental Screening Worksheets (ESW)
- Agency meeting minutes
- Concern investigations
- Correspondence between agencies and permitted entities (mail, electronic, etc.)

Generally, if you visit a government agency office, you can ask the person on duty for the record(s). Depending on the agency, however, you may need to provide a written request to review public records. You may also choose to request records instead of physically visiting the agency office. This section details why and how to request public records for CAFOs. For more information about requesting records and addressing any issues that may arise, see [Part 2: Accessing Public Records and Public Meetings](#) in MCE's Advocacy Guide.

Missouri Sunshine Law Requests

In the state of Missouri, citizens have the right to request and access public records from government agencies under the Sunshine Law. These public records requests are often referred to as “Sunshine requests”. The Missouri Sunshine Law promotes government transparency and accountability while providing citizens with resources to be better engaged and informed about how their state agencies function.

In most cases, documents that you may request for CAFO Watchdogging should be directed to the Department of Natural Resources (DNR). However, you may request documents from any public government agency under the Sunshine Law by contacting that agency’s Custodian of Record. The DNR has its own [webpage](#) with information on Sunshine Law requests and a link to its [online public records center](#). Requests can be made through this system or submitted directly to the Custodian of Record. To learn more about the Missouri Sunshine Law and how to write an effective public records request, see [Part 2: Accessing Public Records and Public Meetings](#) in MCE’s Advocacy Guide. You may also use [the following template](#) to help you write a Missouri Sunshine Law request.

Missouri Sunshine Law Request Template

Below you will see a DNR Sunshine request template that we often modify and use at MCE. This is a pretty formal request template and some sections apply specifically to nonprofit organizations and/or public interest groups. You may see a simpler Sunshine request template [here](#) and an example of a submitted Sunshine request [here](#).

Bracketed sections should be filled out with your personal information and/or information about the group or organization that you represent. Sections in parenthesis may be included in the Sunshine request if they are applicable to you/your group or organization. Sections in italics are meant to guide you and should not be included in the final Sunshine request. Please contact Melissa Vatterott at mvatterott@moenviron.org if you have specific questions about completing this template or submitting a public records request.

If you belong to an organization or community group, you may include a header with your organization’s logo and/or a footer with your organization’s contact information (mailing address, email address, web address, fax and/or phone number).

[Date]
Custodian of Record
custodianofrecord@dnr.mo.gov
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

Sunshine Request: [Brief Description of the Request]

To whom it may concern,

This request for information is submitted on behalf of [your organization or group name] pursuant to the "Missouri Sunshine Law." R.S.Mo. §§ 610.010-310.028. [I/we] request that the Missouri Department of Natural Resources (DNR) make the following documents available electronically:

[Body of request]

(Documents encompassed by this request may include but are not limited to letters, e-mails, memoranda, research, reports, notes of meetings and telephone conversations, and all other communications and records of communication.)

[Explanation of your organization, group, and/or personal reason for the request]. This request will significantly contribute to the public's understanding of [your topic of concern e.g. state water quality, concentrated animal feeding operations, etc.]

If requesting on behalf of a nonprofit organization and/or public interest group, you may include the following two paragraphs to request a fee waiver.

(Section 610.026(1) of the Missouri Sunshine Act authorizes the waiver of copying and research fees in Sunshine requests when the waiver is "in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the public governmental body." [I/your organization or group name have/has] no commercial interest in the information sought, and therefore [request/requests] a waiver for copying costs of the above requested documents.

If this request for a fee waiver is denied, please contact [your name] in advance if charges are expected to exceed [amount of money you/your group or organization is comfortable paying, e.g. \$100]. [I/we] reserve the right to appeal a denial of this request. Again, if an excessive amount of documents are responsive to this request, [your name/your organization or group name] is willing to review responsive files at DNR offices and specify documents for copying. If the DNR feels there are responsive records that are not informative on the matter [I/we] would be happy to discuss the possibility of narrowing [my/our] request to exclude such records. This will hopefully reduce the time and costs associated with copying documents responsive to this request.)

If DNR finds it proper to withhold all or part of a document or information under a claim of privilege or exemption from the Sunshine Law(, or deny the requested fee waiver,) please promptly notify [me/us] of the DNR's intended action and the reasons thereof, including the legal authority for the DNR's decision to withhold said document or information.

Should you have any questions regarding any of the foregoing or the scope of this request, please contact [your name/your organization or group name] at the corresponding phone number or email address below. Thank you for your assistance in this matter.

Sincerely,

[Your name]

[Your title]

[Your organization's or group's name (if applicable)]

[Phone number]

[Email address]

Freedom of Information Act

At the federal level, the statute that grants the right to review public records is the Freedom of Information Act (FOIA). FOIA provides that “any person” can request information from the government without requiring identification of the requestor or an explanation of why the requestor wants the information. Congress has established nine categories of information for which there are restrictions on public access; see a list of FOIA-exempt information on the Office of Information Policy's [FOIA FAQ Page](#).

If protected information can easily be separated or removed from the requested files, the agency should make the remainder publicly available. In this case, protected information will be removed or “redacted” from the document. Usually, portions of text will be grayed or blacked out with the exemption code over the information. For example, a FOIA request document with information redactions may look like this:

Environmental Assessment for Farm Loan Program Projects

Environmental Assessment for (b)(3) Section 1619
2008 Farm Bill (b) (6)

The letters and numbers in parentheses indicate the exemption this information falls under in the relevant federal law.

Once the agency receives a FOIA request, it has 20 business days to reply with its decision of whether it will comply with no automatic extensions. Due to the high volume of requests in some offices, though, agencies typically take more time to fulfill requests. To save time, you may want to make sure the information is not already available online, in a library, or in an agency reading room.

To compensate for the time and effort spent in reviewing and copying requested documents, federal agencies may charge for copying costs and some other costs. Each federal agency has its own regulations outlining its FOIA program, including procedures for the disclosure of records, confidentiality, fees and exemptions. You may want to check the agency's rules to be sure that your request meets its requirements. For example, see the Environmental Protection Agency (EPA) [webpage](#) of FOIA request resources.

There is also an [online FOIA request portal](#) which simplifies the process. The online form allows you to select the agency from which you are requesting information, describe the request, attach supporting files, and request a fee waiver. To learn more about how and where to submit an effective FOIA request, see Part 2: Accessing Public Records and Public Meetings in MCE's Advocacy Guide. You may also use the [following template](#) to help you write a FOIA request.

Requesting Environmental Assessments

For the most part, CAFOs are regulated at the state level. However, one important CAFO document that you might request from a federal agency under FOIA is an Environmental Assessment (EA). CAFOs often apply for loans from the USDA Farm Service Agency (FSA). When a CAFO applies for a loan, the FSA must conduct an environmental review of the facility to determine the possible environmental and human impacts of the proposed project.

Environmental reviews range from informal Environmental Screening Worksheets (ESW) to the highest level of review: an Environmental Impact Statement (EIS). Most CAFOs receive an EA, which is considered an intermediary level of review but should include detailed information about a facility's animal capacity; waste production, storage and application; compliance with environmental policies like the Endangered Species Act, Clean Air Act, and Clean Water Act; nearby natural and historic preservation sites; and a variety of other information. Note that some information may be redacted or removed from the requested documents to protect the operator's privacy. See an explanation of FOIA exemptions in Part 5 of the [FSA Handbook on FOIA requests](#).

The FSA has its own electronic FOIA request form [here](#). Note that a final EA can be more of a summary document; you will usually find site photos, agency consultation reports, and other important information in the appendices rather than the EA itself. When requesting an EA document from the FSA, you should specify that you would like to receive the EA document *and* any appendices. You can do this under 'Section 5: Additional comments' of the online request form.

Freedom of Information Act Request Template

Below you will see a FOIA request template that we often modify and use at MCE. This is a pretty formal request template: you may choose to utilize an electronic FOIA request form or use a simpler template like the one provided in Part 2: Accessing Public Records and Public Meetings of MCE's Advocacy Guide. You may also view an example of a submitted FOIA request [here](#).

Bracketed sections should be filled out with your personal information and/or information about the group or organization that you represent. Sections in parenthesis may be included in the FOIA request if they are applicable to you/your group or organization. Sections in italics are meant to guide you and should not be included in the final FOIA request. Please contact Melissa Vatterott at mvatterott@moenviron.org if you have specific questions about completing this template or submitting a public records request.

If you belong to an organization or community group, you may include a header with your organization's logo and/or a footer with your organization's contact information (mailing address, email address, web address, fax and/or phone number).

[Date]

[Name of Agency Contact]

[Name of Department (if applicable)]

[Name of Agency]

[Agency Street Address]

[City, State ZIP Code]

Re: Freedom of Information Act Request for [Documents *e.g. Environmental Assessments for Missouri Recipients of Farm Service Agency Loans*]

Dear [Name of Agency Contact],

[I request/'your organization name' requests] copies of the documents described below (or documents containing the information described below) pursuant to the Freedom of Information Act (FOIA), 5 U.S.C. § 552.

Requested Records

[Identify the documents or information as specifically as possible].

Fee Waiver Request

[I request/'your organization name' requests] that the [Agency Name] waive all fees for this request. Under FOIA, information should be furnished free of charge if "disclosure of the information is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in the commercial interest of the requester." 5 U.S.C. § 552(a)(4)(A)(iii).

[Briefly introduce yourself/your organization, describe the purpose of your request, how and why it will serve the public interest]. This information is not being sought for commercial purposes.

If you determine not to accept this fee waiver, [I request/'your organization name' requests] that the [Agency Name] contact [me/'your organization name'] if you estimate that the fee for fulfilling this request will exceed [maximum dollar amount you/your organization is willing to pay].

This entire section is optional, but may help you obtain documents even if there are redactions and ensure that you receive as much information as possible:

(Exempt Records

FOIA provides that if portions of a document are exempt from release, the remainder of the document must be segregated and disclosed. 5 U.S.C. § 552(b). We ask that you provide all non-exempt portions of the requested documents, and that you justify any redactions or omissions by reference to specific exemptions allowed under FOIA.)

This request is being sent with the understanding that it will be forwarded to any other offices that may also have in their custody any requested records. We look forward to your reply within 20 working days. 5 U.S.C. § 552(a)(6)(A)(i).

Thank you for your assistance in fulfilling this request. If you have any questions regarding the scope or fulfillment of this request, please contact [your name] at the phone number or email address below.

Sincerely,

[Your name]

[Your title]

[Your organization's or group's name (if applicable)]

[Phone number]

[Email address]

Part 4: How to Respond to Existing CAFOs

DNR Warnings and Notices

In the event that a CAFO has already made its way into your community, it is important to be vigilant and to watch its actions carefully. A great way to keep tabs on an existing CAFO is to visit the DNR's [Letters of Warning and Notices of Violation page](#). Here, you can look up particular operations, allowing you to see specifically where the CAFO in your community has already had issues and pay even more attention to those problem areas through your watchdogging. You can also check the Water Protection Program's [Compliance and Enforcement webpage](#) for reports on when formal enforcement action is taken. Note these reports include many permitted facilities other than CAFOs.

Documenting and Reporting Concerns

Missouri CAFOs are permitted under the Clean Water Act (CWA). Therefore, water contamination is very closely related to the operation of CAFOs. Water pollution from animal manure is one of the major ways that CAFOs damage human health and the environment. Animals on CAFOs produce as much waste as humans in major cities, but unlike human sewage, there are no treatment plants for animal waste and it can be applied directly to land. Through poor application practices, leaks, spills, and other incidents, massive amounts of animal waste can leach into our groundwater and runoff into surface waters – with disastrous impacts on surrounding communities. We need Watchdogs documenting and reporting these concerns to protect Missouri water.

In this section of the Toolkit, you will find out how to document CAFO concerns and where to report them in order to protect yourself and your community from the destructive effects.

Documenting Concerns

Enforcement action can be taken against CAFOs if they pollute waters of the state since they are permitted under the CWA. **Figure 8** simplifies the process of documenting and reporting water quality concerns. You can use the documents linked in the 'What You Observe' column to learn more about how to document and where to report these concerns.

Water Quality

Possible Cause	What You Observe	How to Document	Where to Report
Surface water manure pollution from overapplication, spills, and/or leaks	Algal bloom	Take pictures Test water* Submit an environmental concern report	Department of Natural Resources emergency hotline 573-634-2436 Department of Health and Senior Services public health emergency hotline 800-392-0272
Surface water manure pollution from overapplication, spills, and/or leaks	Discolored and/or foul-smelling water	Take pictures Test water* Submit an environmental concern report	Department of Natural Resources
Surface water manure pollution from overapplication, spills, and/or leaks	Fish kill	Take pictures Test water* Submit an environmental concern report	Department of Natural Resources emergency hotline 573-634-2436 Department of Conservation
Groundwater manure pollution from overapplication, spills, and/or leaks	Groundwater contamination	Test water*	Department of Health and Senior Services

Figure 8. Documenting and reporting water quality concerns.

*water test results showing elevated nitrates, phosphorous, E. coli and/or fecal coliforms may indicate CAFO manure pollution

There are numerous other ways that CAFOs damage human and environmental health which our government fails to address. In fact, our state government has continuously rolled back

regulatory requirements for CAFOs. In the [Unregulated Concerns](#) section, you can read about shortcomings and changes in regulation, as well as how to stay engaged with Watchdogging and reporting additional public health and environmental concerns.

Algal Blooms

What can you do?

1. **Call the Missouri Department of Natural Resources Environmental Emergency Response (EER) Section at 573-634-2436.** Algal blooms can be called in to DNR's 24-hour spill emergency hotline. You may also report algal blooms to DNR as an environmental concern; see [Reporting Concerns](#) for details.
2. **Call the Missouri Department of Health and Senior Services (DHSS) Public Health Emergency Hotline at 800-392-0272.** Note DHSS primarily manages concerns for private water bodies. However, it is still important to report algal blooms as a public health concern.
3. **Submit a Suspected Harmful Algal Bloom (HAB) notification form to the Department of Natural Resources [here](#).** "The [D]epartment urges people to notify staff of blooms" since they are a serious public health, environmental, and economic issue. Fill out the form to the best of your abilities, attach photos, email it to moHABreport@dnr.mo.gov and include your contact information so the Department can follow up with any questions about your report.
4. **Take pictures.** Photos provide clear evidence of the environmental concern as you witnessed it and can help confirm its location. In the case of an algal bloom, a well-taken photo will show the approximate extent of the algal growth, characteristics of the surrounding water like color and/or possible pollutants, and perhaps capture some of the surrounding area to identify the location.

Unfortunately, the DNR Environmental Concern Report form does not provide a section to upload images. However, you may email photos to the DNR along with your concern report to provide supporting evidence. Photos are also a way to demonstrate evidence of harm, which helps establish legal standing for an individual or organization to pursue environmental litigation.

5. **Test the water.** You can collect your own water samples and [purchase test strips](#) to perform low-cost water analysis for nitrates, phosphorus and a variety of other water quality criteria. You may compare your results against [Missouri's Water Quality Standards](#), however note that human and environmental health concerns may still exist at levels below the standard. To perform higher-accuracy tests, you may consider sending water samples to a DNR-certified lab for [chemical](#) or [microbiological analysis](#).

Some labs are only approved to perform certain water tests, so make sure to choose a lab that can test for the criteria you are interested in (nitrate, phosphorus, *E. coli*, etc.) and use the contact information provided to get a time frame and cost estimate for testing.

The Missouri Stream Team Volunteer Water Quality Monitoring Program ([VWQPM](#)) is a partnership of the Department of Natural Resources, Department of Conservation, Conservation Federation of Missouri and citizens of Missouri. VWQPM conducts advanced monitoring projects, which have included [nitrate measurements for streams](#), however VWQPM is not set up to receive and test samples from the public.

The Missouri Department of Health & Senior Services (DHSS) tests public drinking water supplies for *E. coli* and coliform bacteria every month. You may also submit your own water samples to the Missouri State Public Health Laboratory (MSPHL) at any time. Use [this form](#) to request a water sampling kit or call the MSPHL at 573-751-4830 and contact your [local public health agency](#) to find the appropriate sample drop-off location. Note that the MSPHL only performs tests for total coliforms and *E. coli* in drinking water sources; not all water bodies are public drinking water sources and you may want to test your samples for other criteria like nitrates and phosphorus.

Discolored and/or Foul-Smelling Water

What can you do?

1. **Submit an Environmental Concern Report to the Department of Natural Resources** by filling out this online form or calling your regional office. See [Reporting Concerns](#) for details. Note:
2. **Take pictures.** Photos provide clear evidence of the environmental concern as you witnessed it and can help confirm its location. In the case of discolored and/or foul-smelling water, a well-taken photo will show discoloration in comparison with surrounding water, the possible source of the discoloration (e.g. if there is an outfall or stream of runoff), and perhaps capture some of the surrounding area to identify the location. Note that if foul-smelling water is not accompanied by any visual indicators of pollution then taking pictures will not be an effective way to document evidence of your concern.

Unfortunately, the DNR Environmental Concern Report form does not provide a section to upload images. However, you may email photos to the DNR along with your concern report to provide supporting evidence. Photos are also a way to demonstrate evidence of harm, which helps establish legal standing for an individual or organization to pursue environmental litigation.

3. **Test the water.** You can collect your own water samples and [purchase test strips](#) to perform low-cost water analysis for nitrates, phosphorus and a variety of other water quality criteria. You may compare your results against [Missouri's Water Quality Standards](#), however note that human and environmental health concerns may still exist at levels below the standard. To perform higher-accuracy tests, you may consider sending water samples to a DNR-certified lab for [chemical](#) or [microbiological analysis](#). Some labs are only approved to perform certain water tests, so make sure to choose a lab that can test for the criteria you are interested in (nitrate, phosphorus, *E. coli*) and use the contact information provided to get a time frame and cost estimate for testing.

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DHSS tests public drinking water supplies for *E. coli* and coliform bacteria every month. You may also submit your own water samples to the Missouri State Public Health Laboratory (MSPHL) at any time. Use [this form](#) to request a water sampling kit or call the MSPHL at 573-751-4830 and contact your [local public health agency](#) to find the appropriate sample drop-off location. Note that the MSPHL only performs tests for total coliforms and *E. coli* in *drinking* water sources; not all water bodies are public drinking water sources and you may want to test your samples for other criteria like nitrates and phosphorus.

Fish Kills

What can you do?

1. **Call the Missouri Department of Natural Resources Environmental Emergency Response (EER) Section at 573-634-2436.** The DNR considers fish kills an environmental emergency: an event which “poses an immediate threat to the public health or the well-being of the environment”. Therefore, you should report fish kills to this 24-hour hotline number. See [Reporting Concerns](#).
2. **Report a fish kill to the Missouri Department of Conservation (MDC) [here](#).** MDC relies on citizen reporting to monitor fish kills and other water quality concerns, so they want to hear from you. MDC has a spreadsheet of 2019 fish kills in public Missouri waters and their causes which is available on the web page linked above.
3. **Take pictures.** Photos provide clear evidence of the environmental concern as you witnessed it and can help confirm its location. In the case of a fish kill, a well-taken photo will show the approximate number of fish involved in the kill, characteristics of the

surrounding water like color, presence of algae and/or possible pollutants, and perhaps capture some of the surrounding area to identify the location.

Unfortunately, neither the MDC fish kill reporting form nor the DNR Environmental Concern Report provides a section to upload images. However, you may email photos to the respective department along with your concern report to provide supporting evidence. Photos are also a good way to demonstrate evidence of harm, which helps establish legal standing for an individual or organization to pursue environmental litigation.

4. **Test the water.** You can collect your own water samples and [purchase test strips](#) to perform low-cost water analysis for nitrates, phosphorus and a variety of other water quality criteria. You may compare your results against [Missouri's Water Quality Standards](#), however note that human and environmental health concerns may still exist at levels below the standard. To perform higher-accuracy tests, you may consider sending water samples to a DNR-certified lab for [chemical](#) or [microbiological analysis](#). Some labs are only approved to perform certain water tests, so make sure to choose a lab that can test for the criteria you are interested in (nitrate, phosphorus, *E. coli*) and use the contact information provided to get a time frame and cost estimate for testing.

The Missouri Stream Team Volunteer Water Quality Monitoring Program ([VWQPM](#)) is a partnership of the Department of Natural Resources, Department of Conservation, Conservation Federation of Missouri and citizens of Missouri. VWQPM conducts advanced monitoring projects, which have included [nitrate measurements for streams](#), however VWQPM is not set up to receive and test samples from the public.

The Missouri Department of Health & Senior Services (MDHSS) tests public drinking water supplies for *E. coli* and coliform bacteria every month (see [here](#)). You may also submit your own water samples to the Missouri State Public Health Laboratory (MSPHL) at any time. Use [this form](#) from the MSPHL to request a water sampling kit or call MSPHL at 573-751-4830 and contact your [local public health agency](#) to find the appropriate sample drop-off location. Note that MSPHL only performs tests for total coliforms and *E. coli* in drinking water sources; not all water bodies are public drinking water sources and you may want to test your samples for other criteria like nitrates and phosphorus.

What can you do for your domestic well water?

1. **Get your private well water tested through the Missouri State Public Health Laboratory (MSPHL).** The MSPHL will test private water supplies for *E. coli*, coliforms, and iron bacteria by request. You may also request a 'mineral nutrients and metals test' which includes nitrates among about 30 other criteria. You can contact your local public

health agency or the Bureau of Environmental Epidemiology through the Missouri Department of Health and Senior Services (DHSS) to receive a test request form, water sample collection kit and instructions. There is a \$10 handling fee to send in your samples for testing. See the [DHSS' webpage](#) on private drinking water testing for contact information and details.

- 2. Get your private well water tested through the Springfield-Greene County Health Department (SGCHD).** The [SGCHD](#) tests private well water samples for standard bacteria and chemical parameters with [step-by-step instructions](#) for proper collection. You can drop off your sample at 227 E. Chestnut Expwy Springfield, MO 65802 between 8:00 AM and 5:00 PM Monday through Wednesday or between 8:00 AM and 3:00 PM on Thursday. Call the Department at 417-864-1672 to request a testing kit and ask any additional questions.

Reporting Concerns

Environmental Concerns and Environmental Emergencies

The Missouri Department of Natural Resources's (DNR) Division of Environmental Quality is responsible for "preventing pollution, protecting the public from harmful emissions, discharges and waste disposal practices." Part of its mission is to respond to environmental concerns and environmental emergencies. See how DNR distinguishes these situations below:

"An **environmental concern** is a situation that you believe threatens the environment, such as a trash dump or discarded waste tires in a stream."

"An **environmental emergency** poses an immediate threat to the public health or the well-being of the environment."

Environmental emergencies that may result from CAFO activities include fish kills and "accidents causing releases of pollutants" like manure spills or lagoon leakage (see more examples from DNR [here](#)). If you are involved in or witness an environmental emergency, you should report it immediately to the Department of Natural Resources at 573-634-2436.

If your environmental concern doesn't match this definition of an emergency, you can still call it into the DNR through your [regional office](#) or the general office number 800-361-4827 on weekdays between 8:00 AM CST and 5:00 PM CST. Environmental concerns can also be reported online through the DNR's [Environmental Concern Form](#).

Reporting Environmental Concerns to the Department of Natural Resources

1. Reporting Online

When you reach DNR's Environmental Concern Form webpage, you should select 'Report an Environmental Concern' from the dropdown menu under 'Type of Inquiry' (note there are also options to submit general inquiries and comments through this form). Once you select 'Report an Environmental Concern', you will see spaces to fill out your county, the nearest city, date of the incident, a description of your concern, and driving directions to the location of your concern. All of this information is required. Especially in rural areas, it may be hard to rely on street addresses or landmarks to identify your concern location and the DNR is more likely to conduct a thorough investigation of your concern if they can visit the site in question.

Tips for Describing Your Environmental Concern

- Include the date and time that you witnessed the environmental concern incident
 - If the incident (e.g. an algal bloom) occurred before you witnessed it, include any details that may indicate when it occurred (e.g. "I didn't observe any algae in the creek last week")
 - If the concern is ongoing (e.g. increased animal/manure odor), describe the duration of the concern (e.g. "We've noticed increasingly strong manure odors when the wind blows East for the past two weeks")
- Explain in detail what you are experiencing/experienced
 - Include sights, sounds, and smells associated with the incident or concern
 - Provide comparison with what is "normal" (e.g. "I often observe fish swimming in this creek when I walk by in the morning, but today I saw about eight dead fish along the bank and none swimming in the water.")
- Provide as much contextual information as you can
 - If you suspect pollution of a water body, provide its name (e.g. Missouri Creek)
 - If the environmental concern took place on a specific property, provide its name (e.g. Missouri Swine Farm)
 - If the environmental concern was observed along a roadway, name the roadway (e.g. off to the left about six miles East down County Road 123)
- Mention any recent or unusual events that may have an environmental impact
 - Weather events like heavy rainfalls, storms, and flooding
 - New property owners, land development, farms and other facilities in the area
 - Other pollution events

There is also optional information that you may also include in your environmental concern. As a general rule of thumb, the DNR will do a more thorough investigation of your concern if you provide more information. You have the option to include the name and contact information for the 'Responsible Party of Property Owner'. This is the person or facility you think is responsible for your environmental concern. You do not have to be certain that this party is responsible to provide their contact information; the DNR will investigate the party before taking any enforcement action. Even if this party is not responsible, the conversation may give the DNR more information about the concern and lead to a more thorough investigation.

Your contact information is also optional. The DNR can only inform you of the outcome of the concern investigation and/or ask for additional information regarding your concern if you share your contact information. However, environmental concern forms may be disclosed to the public under the Missouri Sunshine Law. Therefore, you should not provide any personal information that you wish to keep private. Note that even if you choose to provide personal contact information on the Environmental Concern Form, your address is optional.

Reporting Environmental Concerns	
Required Information	Optional Information
<ul style="list-style-type: none"> ● County ● Nearest city ● Date of incident ● Description of concern ● Driving directions to the location of your concern 	<ul style="list-style-type: none"> ● Responsible party or property owner <ul style="list-style-type: none"> ○ Contact information ● Your personal contact information ● Photos and/or videos of the environmental concern

2. Reporting By Phone

If you call in your environmental concern, you should include all of the same information that you would in the online form. Again, some information is optional but may help the DNR conduct a thorough investigation and help you hold them accountable for following up on your concern. See the sample phone script below for an idea of how to report an environmental concern over the phone. You may also use this script to guide you when reporting an environmental emergency.

Phone Script for Reporting an Environmental Concern

Note that your call may need to be redirected to the appropriate office and staff member. Make sure to write down the full name of the staff member to whom you report your environmental concern in case you need to follow up with the DNR. The staff member taking your call may respond throughout and/or prompt you to provide information with their own questions –

especially if you forget to include required information. It is ok if you do not follow this script exactly, but it should guide you through the conversation and help you remember what information is important.

“Hi, I’m trying to reach the [name of your regional DNR office] to report an environmental concern in [name of your county]. (Optional: My name is [your name].) May I ask who I am speaking with?”

Once you have confirmed the name of the staff member, you will describe your concern. Note that you may report an environmental concern that you observed outside your county of work/residence. If so, you will want to modify the first sentence below. For example:

“Yes, I live/work in [name of county] near [name of closest city]. On [date], I observed/started to observe [description of concern] at [description of concern location]. You can reach this location by [to the best of your ability, provide driving directions from the nearest town or major intersection to the concern location]. I believe [name of responsible party] owns this property and may be responsible for the concern. [Provide any contact information for the responsible party (name, phone number, email address, street address, facility name, permit number) that you may have].”

The DNR must follow up on your environmental concern with an investigation. They may not be obligated to do so, but you may request that the investigator takes site photos, tests water quality, and/or contacts the responsible party regarding your environmental concern. If you want the DNR to follow up with you regarding your concern report, be sure to provide your contact information.

“(Optional: I would like to request that you [take site photos, test the creek for E. coli, etc.] regarding my environmental concern. Please contact me at [phone number and/or email address] with the outcome of your investigation or if you need any additional information to complete your investigation.)”

Otherwise, you may end the conversation by saying something like:

“I would prefer to report this environmental concern anonymously. (Optional: [your reason for remaining anonymous].) Thank you for your time and diligence in investigating my concern.”

Department of Natural Resources Environmental Concern Investigations

The regional office of the Department of Natural Resources that receives your environmental concern report will follow up with a [concern investigation](#). To conduct an investigation, DNR staff visit the concern location to assess: 1) the validity of the concern, and 2) the cause and impact of the concern (if the concern is determined to be valid). While there is a standard procedure for investigating environmental concerns, the extent of the investigation relies in part on the

information that you provide in your report and in part on whether DNR staff sees evidence of a concern. If they do not see evidence of your concern, DNR staff will not conduct extensive water quality tests, take site photos, or determine a responsible party/property owner.

When the environmental concern report pertains to a water pollution concern, DNR staff use visual and olfactory observations like [Discolored and/or Foul-Smelling Water](#), [Fish Kills](#), and odors to determine if there may be possible contamination. They may take photos if there is visual evidence of a pollution concern (e.g. discolored water or discharge). Then, they will use a test kit to sample water upstream and downstream of the concern location for pH, dissolved oxygen (DO) and other baselines water quality indicators. If their observations and water quality tests support the content of the concern, then the staff may conduct additional tests based on the suspected concern (e.g. if the concern is CAFO waste, they may test for nitrates, phosphorus, *E. coli*).

If the DNR site investigation supports a pollution concern, DNR staff will attempt to locate its source. If you identify a responsible party/property owner and their contact information in your environmental concern report, this gives the DNR a place to start. Once the DNR locates the source of the concern, they will determine the appropriate [enforcement action](#) for the responsible party/property owner. Typically, the DNR takes a “compliance assistance” approach to help violators understand environmental regulations and avoid future violations. Unfortunately, this means that the Department rarely issues fines or revokes permits – even for repeat violators.

The results of the investigation (including any enforcement action) will be recorded and kept at the appropriate regional office. If you provide your contact information, the DNR should follow up with you directly to share the findings of their concern investigation and any enforcement actions they may have taken. You may try calling the regional office and ask to follow up on an environmental concern report if you do not hear back within a week or two.

Even if you have not submitted an environmental concern report, you can request access to these documents under the Missouri Sunshine Law or request to review them at a regional office. Letters of Warning (LOW) and Notices of Violation (NOV) – two enforcement actions taken by the DNR – are searchable in [this database](#); however, the documents themselves must also be requested via Sunshine. To search for water violations, choose ‘Water Pollution Control – WPP’ from the dropdown menu for ‘Program’.

Additional Reporting Resources

- **For algal blooms: Submit a Suspected Harmful Algal Bloom (HAB) notification form to the Department of Natural Resources [here](#).** “The [D]epartment urges people to notify staff of blooms” since they are a serious public health, environmental, and economic issue. Fill out the form to the best of your abilities, attach photos, email it to

moHABreport@dnr.mo.gov and include your contact information so the Department can follow up with any questions about your report.

- **For worker safety concerns: Report violations of workplace health and safety standards to the Occupational Safety and Health Administration using [this online form](#).** Workplace safety hazards may include lack of drinking water, exposure to agricultural chemicals and sick animals, and lack of personal safety equipment. See more agricultural hazards [here](#). When filling out the form, you should describe each workplace hazard in as much detail as possible.

The form requires that you provide your name and contact information, however you are protected from retaliation from an employer under the [Whistleblower Protection Program](#) and if you believe an employer takes retaliatory action in response to your workplace hazard report, you may file a [Whistleblower complaint](#). Both employees and representatives of employees may report workplace concerns to OSHA.

- **For animal welfare concerns: Report animal abuse or neglect to the Humane Society of Missouri (HSMO) by calling the Animal Cruelty Hotline at 314-647-4400 or filling out [this online form](#).** The HSMO Animal Cruelty Task Force handles abuse cases for farm animals in addition to domestic animals by working with owners and law enforcement. While legal enforcement may get involved, [federal and state laws](#) provide little protection for farm animals.

Note: [Missouri law](#) mandates that any photo or video evidence of farm animal abuse or neglect must be submitted unedited and unmanipulated to law enforcement within 24 hours of the recording. Any unintentional violation of these provisions classifies as a misdemeanor.

For improper dead animal disposal concerns: Report improper dead livestock disposal to the Missouri Department of Agriculture (MDA) Animal Health Division at (573)-751-3377 or e-mail animal.health@mda.mo.gov. Visit the Animal Health Division's [webpage](#) for details about the information you should include in your report and proper animal disposal under 'Dead Animal Reporting'.

Appealing Permit Decisions

Once the Department of Natural Resources (DNR) has issued a permit, citizens may still challenge the permit decision by filing a complaint with the [State of Missouri Administrative Hearing Commission](#) (AHC). The process for appealing any permit decision is included in the permit document. It can be found either in the cover letter for a permit or at the end of the permit document itself. It should read something like this [emphasis added]:

“If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to Sections 644.051.6 and 621.250, RSMo. To appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC...”

You do not have to be an attorney to file an appeal. The appeal process is an “administrative challenge” of an agency’s decision – *not* a lawsuit. To support your challenge, you must demonstrate that the decision has adversely affected or will adversely affect your interests. You may mention some of the following concerns:

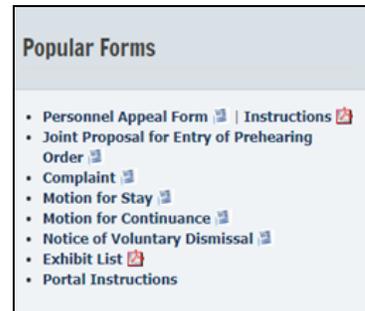
- Odors will inhibit enjoyment of your property
- Facility will disrupt your farm/other local farms
- Facility will diminish your property value
- Water pollution will inhibit your aesthetic or recreational use of nearby waterways
- Water pollution will contaminate your drinking water source (e.g. private well)

Note that you must file your appeal within 30 days of the decision: in this case, the decision is when the permit was issued by DNR. You will usually see the date stamped on the first page of the permit document before the text (see below).



Filing a Complaint with the Administrative Hearing Commission

You will make your appeal by submitting a complaint to the State of Missouri Administrative Hearing Commission (AHC) within 30 days of the permit decision. AHC provides a [complaint form](#) for making an appeal, which you may download and fill out electronically or print and fill out by hand. If you have trouble accessing the form linked above, you can also download it from [AHC's home page](#) under 'Popular Forms' (see screenshot to the right).



You also have the option to attach supporting documents like photos, videos, and maps. Some examples may include:

- **Photos/videos:** The following are examples of some features that you can capture with photo/video which may be adversely affected because of their proximity to the proposed CAFO site:
 - Wildlife habitat, endangered species and/or migratory birds, on/near the proposed site
 - Waterbodies (rivers, lakes, streams) on/near the proposed site
 - Wetlands on/near the proposed site
 - Conservation areas, state historic preservation areas and/or recreational areas on/near the proposed site
 - Proposed site's proximity to your property/home and/or public buildings
 - Other CAFOs in your county, including:
 - Any water quality impacts (see image of pollution in a stream, bottom left)
 - Any property impacts on your property (see image of manure spray, bottom right)



LEFT: image publicly available from [Wikimedia](#), 2009; RIGHT: image publicly available from [Wikipedia](#), 2007

- **Maps:** The permit document should provide the address and legal description of the CAFO site. You may use this location to create your own map of the surrounding area showing important features like conservation areas, homes and public buildings,

rivers and lakes, wells, and/or other CAFOs. You can also using the online mapping resources to identify and illustrate features that may be adversely affected because of their proximity to the proposed CAFO site:

- US Fish and Wildlife Service [IPaC map](#) of endangered species, critical habitats, migratory birds and/or wetlands on/near the proposed site

- USDA Natural Resources Conservation Service [Web Soil Survey map](#) of soil types on/near the proposed site
 - Clay soil types ([Group D](#)) are most susceptible to runoff
 - Sandy soil types ([Group A](#)) have the highest infiltration rates and may be more susceptible to groundwater contamination concerns
- FEMA [Flood Map](#) of floodplains and flood hazard zones
- Map of other CAFOs near the proposed site
 - You may use a screenshot from MCE's [Interactive CAFO Map](#) or DNR's [AFO Map](#)

Note that if your complaint and supporting documentation exceed 50 pages, AHC requests that you electronically file (e-file) your complaint through [their system](#) (see e-filing instructions [here](#)). Otherwise, you may submit your complaint via fax, certified mail, or by delivering it directly to the office (*not* via email). See AHC contact information below:

Mailing Address:

Administrative Hearing Commission
United States Post Office Building, Third Floor
131 West High Street, P.O. Box 1557
Jefferson City, MO 65102

Fax: 573-751-5018

Phone: 573-751-2422

Website: <https://ahc.mo.gov/>

Please contact Melissa Vatterott at mvatterott@moenviron.org if you have any questions about writing your complaint, demonstrating adverse effects, and/or using the mapping resources.

Part 5: Join the Fight

Resisting CAFOs: CAFO Advocacy Network

Join MCE, our statewide partners, and partners in local communities in the fight against CAFOs in the Missouri CAFO Advocacy Network (CAN)! The fight against CAFOs is complex and ongoing, and we need the work and contributions of countless individuals, organizations, and groups to succeed. CAN members will receive information about time sensitive actions - such as submitting comments on CAFO permits and proposed DNR rules, calling your state elected officials, and more! Learn more about these such actions in the [How to Keep CAFOs Out](#) and [How to Respond to Existing CAFOs](#) sections. [Click](#) the graphic below to join.

INTERESTED IN MCE'S CAFO ADVOCACY NETWORK?
JOIN NOW!
TO STOP THE PROLIFERATION OF CAFOS THROUGHOUT MISSOURI



Local Organizations and Grassroots Groups



1. **[Friends of Poosey Conservation Area](#)**
Friends of Poosey is a group of Livingston County residents campaigning to protect the Poosey Conservation Area from the planned establishment of a United Hog Systems' CAFO. Learn more about their efforts [here](#).
2. **[Friends of Responsible Agriculture](#)**
Friends of Responsible Agriculture is a group of concerned citizens in Boone and Callaway counties organizing against the actions and operations of CAFOs.
3. **Hickory Neighbors United**
Hickory Neighbors United is a group of concerned citizens in Grundy County created to oppose the establishment of a Trenton Farms LLC swine operation.
4. **[Lone Jack Neighbors for Responsible Agriculture](#)**
Lone Jack Neighbors for Responsible Agriculture represent a community of citizens in Jackson County who strive to promote family farming instead of factory farming.
5. **[Opponents of Cooper County CAFOs](#)**
Opponents of Cooper County CAFOs, LLC represent a group of concerned Cooper County residents campaigning against a proposed hog CAFO in their community.

6. [Schoolcraft Chapter of The Ozark Society](#)

The Schoolcraft Chapter of The Ozark Society, based in Greene County, aims to preserve the Mark Twain National Forest as a wilderness area.

7. [Rural Community Workers Alliance](#)

RCWA seeks to improve the lives of the communities they serve through empowering workers and their families through education, resources, and community action.

Statewide Organizations and Grassroots Groups

Below is a list of organizations that work to promote water quality or sustainable agriculture, but the listing of these organizations does not imply endorsement of the contents of the Toolkit.



[Missouri Coalition for the Environment](#)

MCE is an environmental advocacy organization that delivers vital information to Missourians on issues affecting water, air, health, food, and the environment.



[Missouri Farmers Union](#)

MFU seeks to promote the social and economic well-being of small-scale farmers.



[Missouri Riverkeeper](#)

Missouri Confluence Waterkeeper is a grassroots organization committed to clean and safe water for all Missourians. Missouri Riverkeeper is a member of the global organization, [Waterkeeper Alliance](#).



[Missouri Rural Crisis Center](#)

MRCC seeks social justice through preserving family farms and promoting environmental stewardship in Missouri.



[Stream Teams United](#)

Stream Teams United strives to protect and enhance Missouri's waterways.

Federal Organizations and Grassroots Groups



Sierra Club

The Sierra Club is a federal environmental organization that aims to influence environmental policy and encourages public engagement in the outdoors.



Socially Responsible Agricultural Project

SRAP helps communities throughout the U.S. embrace socially responsible and equitable farming instead of industrial farming.

Part 6: Heroes of the Fight

Axel Fuentes, Executive Director of Rural Community Workers Alliance and a member of the Food Chain Workers Alliance Board of Directors, has worked tirelessly to advocate for the rights of refugee and immigrant workers, their families, and their communities. In the Spring of 2020, Fuentes and RCWA took part in a [lawsuit](#) against a Smithfield Foods pork plant in Milan, Missouri on the grounds that it was failing to adequately

protect its workers during the initial COVID-19 outbreak. The lawsuit made national headlines, and according to the [New York Times's account](#) of the legal action, workers had spoken out about feeling as if they could not so much as cover their mouths to cough for fear that they would risk disciplinary action if they missed a piece of meat going past as they covered their face. Anonymous workers came to Fuentes complaining of the unsafe and hostile working conditions. Workers

reported that Smithfield was offering bonuses to anyone who didn't take any time off, regardless of whether or not they were exhibiting symptoms. Unfortunately, the lawsuit was ultimately dismissed. However, Fuentes continues to raise awareness and advocate for workers through RCWA. In 2020, Fuentes launched a [GoFundMe fundraiser](#) to benefit RCWA and its constituents, which is still open for donations as of January 2021.

“I’m excited to work with Axel and RCWA to raise awareness of the safety and legal concerns facing CAFO workers and to bring environmental and public health advocates as well as other concerned citizens together to seek policy reform to address this environmental injustice plaguing food system workers nationwide.”

-Melissa Vatterott, Missouri Coalition for the Environment

“It’s up to Missouriians to safekeep our access to the past and our natural landscape.”

**-Doug Doughty,
Friends of Poosey
Conservation Area**

Poosey Conservation Area is a 5,863 acre area in Livingston County, MO that is beloved by its community. Referred to affectionately as the “Kingdom of Poosey,” the natural area offers hiking and biking trails, pristine waterways, horseback riding, camping, and more. When the many beneficiaries of this wilderness area learned of a potential CAFO construction, they rallied together to protect it. Citizens raised their concerns, which were numerous--from health threats to business loss to historical preservation--in

an attempt to make their voices heard. The result has not been decided, and the movement continues to gain momentum as the proposed United Hog Systems operation moves through the application process. Currently, the group is working to encourage residents to take advantage of the 30-day comment period of the permit application process to halt progress on the establishment of this Class 1B CAFO. Learn more from their [Facebook Page](#) and [informational video](#).



Aerial snapshot of Poosey Conservation Area. Photo obtained with permission from Friends of Poosey from their informational video on [YouTube](#).

CAFOs pose enormous threats in Southwest Missouri. Industrial farming there has expanded quickly, and over the past few years, residents in the Springfield area have come to understand the dangers CAFOs bring. The Schoolcraft Chapter of the Ozark Society is relatively new, but they are excited to scale up their efforts and take action to protect Southwest Missouri. In December 2019, leading members of the chapter voiced their support for a Springfield local resolution that would express opposition to Senate Bill 391, which became law in

August 2019. SB 391 eliminated local control of health ordinances over CAFOs and corporate agricultural pursuits. Since Cedar County contains Stockton Lake, which is a key source of Springfield's drinking water, Schoolcraft's leaders felt that protecting it was essential. However, instead of being met with understanding, they were ridiculed by the mayor and the resolution was defeated in a 5-4 vote. According to Schoolcraft's leaders, corporate agriculture controls the statehouse, DNR, and even the Missouri Clean Water Commission and must be stopped.

“Dumbing down local protections to the state’s lowest common denominator presents a grave risk to the Ozarks.”

**-Todd Parnell,
Ozark Society**



Buffalo National River. Image publicly available through [Wikimedia](#), 2017.

“Putting our land up for sale is what they want but it’s the last thing we’ll ever do.”

**-Carolyn Wilkinson,
Lone Jack Neighbors**

The Wilkinson family has owned and farmed on their land in Lone Jack, MO for many years, and are one of multiple pasture-fed beef farms who will be negatively affected by the establishment of a CAFO on bordering land. Jack and Carolyn Wilkinson’s daughter, Karen Lux, states that small-scale Missouri beef cattle farmers are in danger of being pushed out by the vastly expanding CAFO industry in the state. The Wilkinson family, together with their group, “The Lone Jack Neighbors,” fought

the establishment of the proposed Valley Oaks CAFO from the start. They were successful in winning the stay against Valley Oaks, were able to revoke their permit from the DNR, and won the appeal on the revoked permit from the Clean Water Commission to uphold the decision. Although the group has had many encouraging victories, the battle is far from over, and Lux says, “We must continue to fight and stand up for what is right!” Learn more about their efforts from this [article](#) by Karen Dillon.



The Wilkinson Family on their land. Photo by Zach Bauman, available at thepitch.com.

Tabletop Farms is a small, family-operated farm in Trenton, MO. Two families work together to farm the land, create local products, and run their CSA program. They are passionate about the importance of local farming, and they are concerned about the possibility of CAFOs encroaching on their rights and their health. Livingston County, where Tabletop Farms is located, has special ordinances against CAFOs that are stricter than those of Missouri as a state. However, with the passing of Senate Bill 391, counties are no longer allowed to establish health ordinances that are stricter than those of the state as a whole. This bill has the potential to seriously harm

communities where future CAFOs could be established. Small farmers would be especially affected by the presence of CAFOs in their area. Andrew Geiser, a fourth-generation farmer and one of the primary farmers at Tabletop says that CAFOs drive down prices and make it impossible for small-scale farms to make a living, as they are not able to compete with the low prices of industrial farming. Small farmers like Tabletop Farms are working together to spread awareness and keep CAFOs from being established in their community. Learn more about Tabletop from this [video](#) by the Socially Responsible Agriculture Project.

“CAFOs, whether they be close to us or not, really are (in my opinion) the demise of the family farm.”

**-Andrew Geiser,
Tabletop Farms**



A child holds freshly harvested radishes at Tabletop Farms. Photo by Ashlen Busick.