The Problems from Industrial Animal Operations

While many family farmers and ranchers aspire to be stewards of the environment, much of the pollution in our waterways comes from facilities that do not resemble traditional farms or ranches. Many of these large industrial animal operations use harmful practices to manage billions of gallons of animal waste. A single large Concentrated Animal Feeding Operation (CAFO) – i.e. industrial animal facilities housing thousands of hogs or cattle, or hundreds of thousands of chickens – can generate more animal waste than the entire human population in a major city. These practices result in the release of nutrient- and bacteria-laden animal waste into our waterways and pollute the air for nearby residents. This pollution can cause sickness and sometimes death in surrounding communities. A disproportionate share of families in these communities are Black, Latino, Native American, or low-wealth. Adding insult to injury, many CAFOs send profits to foreign companies while American communities suffer.

- For example, untreated hog urine and feces seep into groundwater, contaminating drinking water wells in rural areas. Untreated hog waste also runs off farm fields into rivers and streams, leading to harmful algal blooms and fish kills and making waterways unsafe for swimming, boating, and fishing.
- Harmful ammonia is released from open pits storing untreated hog feces and urine. Ammonia is harmful to air quality and human health and is also a precursor to fine particulate matter pollution, which can cause serious respiratory problems and even premature death for families living nearby.
- Industrial animal operations are also significant contributors to climate change. According to the EPA, methane produced from livestock represents over 25% of the emissions from the agriculture sector and manure management accounts for approximately 12% of total greenhouse gas emissions from the sector. The comparative impact of methane in the atmosphere is 25 times greater than carbon dioxide over a 100-year period, making the contributions from animal agriculture especially important to curb.
- Many industrial animal operations are located in low-lying and flood-prone areas, making them vulnerable to climate impacts such as more intense storms. Open cesspits routinely fail or overflow, spilling millions of gallons of untreated animal waste into rivers and streams and risking communities downstream with bacteria-laden floodwaters.

The Clean Water for All Coalition brings together advocates with diverse backgrounds and interests at local, regional, and national levels, to promote and conserve clean water for everyone. This factsheet was produced by Clean Water for All to advance the principles of the coalition; however, unless endorsement by an organization is specifically stated, statements and positions in this document should not be interpreted as endorsement by all of our members.

Questions? Contact Bonnie Angermeier at bangermeier@selc.org
Excessive Public Spending on CAFOs through Farm Bill Programs

USDA’s Environmental Quality Incentives Program (EQIP) designates 50% of program funding for livestock, much of which goes to CAFOs. EQIP funds allocated to CAFOs are routinely used for practices that pollute our water, air, and soil—such as building open cesspits, also referred to as “lagoons,” for storing untreated animal waste—which only further entrench these industrial operations and exacerbate the harms to surrounding communities.

Further, spending on CAFO-related practices like lagoons and sprayfields that pollute air and water and lead to adverse public health outcomes can be expensive and often consume a disproportionate share of a state’s available EQIP funding. USDA data indicates that between 2010 and 2020, only 31% of farmers who applied for EQIP funding were awarded contracts. Alternatively, targeting public funding towards farmers seeking to implement regenerative and sustainable practices avoids entrenching harmful systems, reduces risks of pollution, and importantly, allows more farmers to take advantage of EQIP funding.

Solution: Limit CAFO Funding

- Congress should remove the 50% EQIP designation for livestock, as much of these funds subsidize practices that create pollution and harm communities adjacent to industrial animal operations.
- Congress should redirect federal funding toward a variety of regenerative, soil-, water-quality-, equity-, and climate- based agricultural best management practices that protect water, air, soil, and community health. Retargeting and prioritizing funding also allows more farmers seeking to implement conservation practices to access EQIP funds.

The effectiveness of particular practices will vary regionally and on a site-by-site basis depending on differences in topography, geology, ecology, and hydrology. Regional differences, like whether a watershed is impaired by nutrient runoff, should be considered as conservation practices are selected from those recommended below. These practices can be implemented independently and together to address pollution from industrial animal operations.
Examples of Regenerative Practices:

- **Buffer strips**: Riparian buffers are vegetated zones near streams that serve as habitat to many beneficial organisms, protect water quality, and mitigate flooding.
- **Management intensive rotational grazing**: This method of grazing moves livestock between pastures on a regular basis to improve soil fertility and allow pasture grasses to regrow.
- **Silvopasture**: A form of agroforestry, silvopasture integrates trees into pastures for grazing animals.
- **Manure composting systems**: A structure or device to contain and facilitate the decomposition of manure and other organic material into a final product for storage, on farm use and application to land as a soil amendment.
- **Fencing around water sources**: Fencing installed to keep livestock out of streams and other water sources, which is critical for water quality.
- **Animal integration**: Integrating animals with their crop systems, usually in carefully managed grazing rotation, rather than producing plants and animals separately.
- **Separating solids and liquids**: Removes solid waste so it can be sold as fertilizers or soil amendments and minimizes sludge accumulation.
- **Nitrification-denitrification systems**: Eliminate nitrogen and nitrate, and reduce ammonia air pollution from digester waste.
- **Alkaline treatment**: Addresses phosphorus and pathogens in digester waste.
- **Injection or hose drag irrigation systems**: Apply waste directly to the soil, reducing pollution runoff (these systems should not be used on tiled fields).

### Practices that Reduce Environmental and Community Harms:

- **Anaerobic Digesters Should Not be Funded with Public Dollars**

  - **Federal funding should not be used to lock in practices that harm communities, pollute our waterways, and dirty the air we breathe.**
  - Anaerobic digesters often rely on existing harmful waste management systems that pollute our air and water, and in many cases, adding a digester may actually make pollution even worse.
  - On hog operations in particular, anaerobic digesters are often paired with the harmful lagoon and sprayfield system and entrench the water and air pollution created by this system—while increasing pollution associated with CAFOs. Animal waste inside digesters undergoes chemical changes that result in higher ammonia emissions, threatening groundwater, rivers and streams, air quality, and the health of communities. The climate benefits of anaerobic digesters are at best uncertain, as there is a real risk of methane “leaks” that could eliminate any climate benefits.
  - This technology does not provide direct soil, water, or community benefits, rather it worsens existing CAFO-related environmental harms and associated health impacts on surrounding communities. Allocating USDA funding for digesters would effectively subsidize discriminatory impacts on communities.