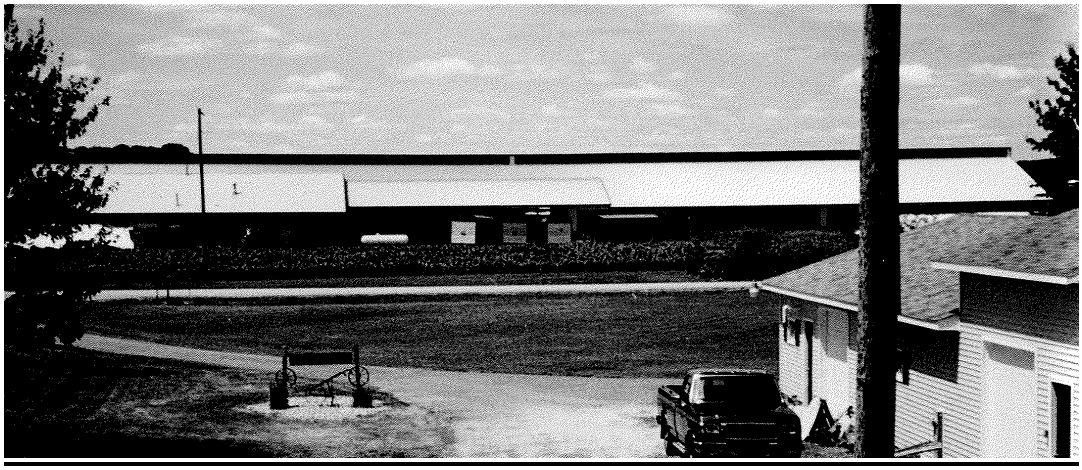
MODEL LIVESTOCK ZONING ORDINANCE:

THE BALANCE BETWEEN ENVIRONMENT, ECONOMY, AND AGRICULTURE

GUIDANCE AND INFORMATION FOR LOCAL GOVERNMENTS AND CITIZENS



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Midwest Environmental Advocates, Inc.

Midwest Environmental Advocates, Inc. is an environmental law center that provides legal and technical assistance to communities working for environmental justice. MEA's mission is to provide high quality legal services that support a multicultural, grassroots social movement; build local leadership; and develop innovative solutions to environmental problems.

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I. INTRODUCTION

Wisconsin has a proud tradition of sustainable and highly productive small family dairy and other livestock farms. In recent years, however, the state has seen an increase in the number of dairy operations that concentrate hundreds or even thousands of cows in confined buildings and collect the waste in large multi-million gallon storage pits. Many counties and small rural towns have been taken by surprise by the presence of these operations and the unexpected environmental and social impacts that have followed.

In light of this recent trend, Midwest Environmental Advocates (MEA) has drafted a Model Ordinance to help local governments implement a plan for sustainable animal agriculture in Wisconsin, and at the same time control the social and environmental impacts that existing industrial-sized animal feeding operations can have on a rural community.

Four Key Points

Before delving into the substance of the Model, four key points are worth mentioning. First, this document serves as guidance and information for local governments and citizens that are concerned about the impacts of concentrated animal feeding operations and the decline of family farms in their communities.

Second, the overall goal of the Model Ordinance and the information included below is to promote sustainable, low-impact, low-cost agricultural livestock operations in Wisconsin that protect the environment and public health. For example, the Model heavily promotes grazing as a low-cost market entry alternative to animal confinements.

Third, it is important to stress that the Model Ordinance is just that: *a model*. It does not attempt to be a "one size fits all" approach to livestock zoning and regulation. Such an approach would be both incomplete and ineffective. This Model should be used as a guide for local governments seeking to establish their needs and priorities for balancing agriculture, the economy and the environment.

Fourth, the Model Ordinance is not intended to be comprehensive. That is, the model consists primarily of regulatory tools for local governments to use in controlling the impacts of animal feeding operations while promoting sustainable agriculture in their communities.

II. NEW AND EXPANDING ANIMAL FEEDING OPERATIONS: WHY LOCAL GOVERNMENTS SHOULD CARE

The existence of factory farms in Wisconsin is a relatively recent phenomenon. Between 1992 and 1997, dairy farms with herd sizes from 20 to 99 milk cows decreased by 28%.[1] Conversely, since 1992 and 1997 the number of dairy farms with herd sizes of more than 1,000 milk cows increased by 87%.[2]

As of September, 2002, Wisconsin was home to 111 concentrated animal feeding operations as new companies moved into Wisconsin and existing farms expanded.[3] Figure 1 illustrates that most of these are dairy operations.

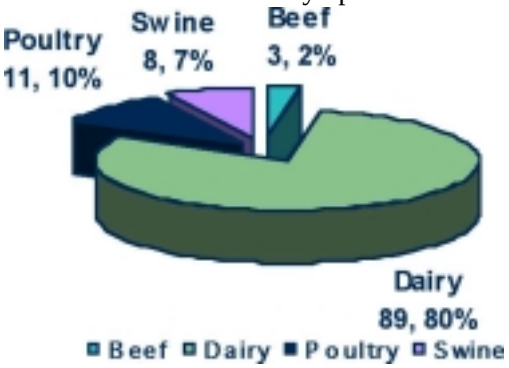

Figure 1. Number and type of animal feeding operations in Wisconsin.

[1] UNITED STATES DEPARTMENT OF AGRICULTURE, NATIONAL AGRICULTURAL STATISTICS SERVICE, 1997 CENSUS OF AGRICULTURE – STATE DATA, WISCONSIN, TABLE 24. In 1992, Wisconsin was home to 25,090 farms with 20-90 dairy cows. In 1997, that number dropped to 17, 995.

[2] *Id.* In 1992, Wisconsin had only two livestock operations with 1,000 or more milk cows. In 1997, that number rose to 15 operations. *Id.*

[3] DNR data indicates that one of the operations in the Northeast Region of the state has only 142 animal units, but was issued a permit apparently because it had failed to comply with its Notice of Discharge, issued by the DNR pursuant to NR 243.23 and 24 (2000). Likewise, one operation in the Southeast Region has only 75 animal units, but was issued a permit for the same reason. To receive a copy of the DNR's spreadsheet on the number of Concentrated Animal Feeding Operations in Wisconsin, contact Kristi Minihan of the DNR at (608) 266-7055.

Many of the livestock operations are evenly distributed in the state, with more large dairy operations found in the northeastern region. Many of the livestock operations in northern Wisconsin are turkey poultry operations.

While Wisconsin continues to lose small family farms, many argue that expansion of existing livestock operations and construction of new industrial scale operations is the answer to regaining Wisconsin's status as "America's Dairyland."

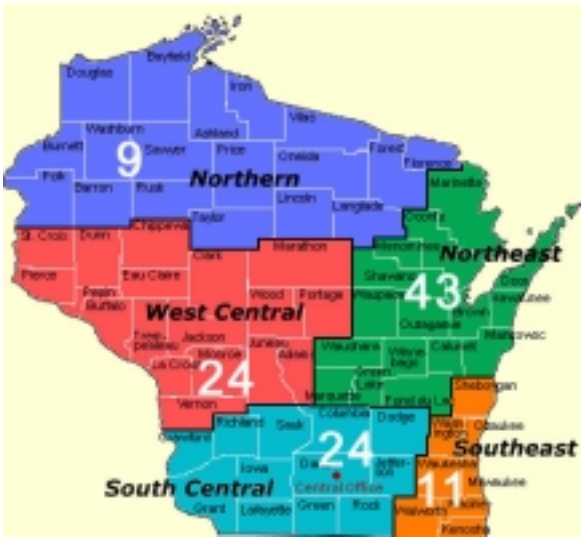

Figure 2. Distribution of concentrated animal feeding operations in Wisconsin, as of January 2002.

Whatever the merits of this contention, it is indisputable that local governments face a dilemma when conflicts arise between new and expanding livestock operations and rural people. MEA's Model Ordinance is intended to help minimize and prevent these land use conflicts by making local governments aware of tools to control the potential impacts of industrial scale operations.

Protecting Groundwater Supplies

Poorly operated or managed livestock operations of all sizes can pose a risk to public health and the environment. Industrial scale livestock operations may pose an even greater risk by concentrating large amounts of animal waste in one area, and then transporting it to fields for use as fertilizer. As discussed below, these large animal waste storage areas can pose a threat to drinking water and surface water supplies. Over-application of the waste on the land can lead to contamination of ground waters and surface waters with nitrates, bacteria, antibiotics and hormones. Local governments have the opportunity to ensure the protection of their drinking water supplies and their rural environments through livestock regulation.

Animal waste contains nitrate, a chemical form of nitrogen valuable as fertilizer for crops.[4] The problem of nitrate contamination in Wisconsin has been well-documented. According to the Wisconsin Department of Natural Resources (DNR), 10% of the state's approximately 800,000 wells exceed the federal drinking water standard of 10 ppm of nitrates.[5]

Approximately 90% of Wisconsin's nitrate contamination can be traced to agricultural sources (fertilizer, manure, and legumes), while septic systems and other sources contribute only 10% of the contamination.[6] Specifically, animal waste contributes to 28% of all nitrate inputs to Wisconsin soils.[7]

Nitrate contamination in drinking water can cause methemoglobenemia or "blue baby syndrome" in infants under six months old.[8] Nitrate impairs the ability of hemoglobin in the infant's blood to use oxygen, causing suffocation.[9] There have been reports of non-fatal cases of blue baby syndrome in Wisconsin.[10] Nitrate exposure has also been linked to lymphoma, gastric cancer, hypertension, thyroid disorder, birth defects, and miscarriages.[11]

In addition to nitrate contamination, bacterial contamination of drinking water may also be a problem. Without adequate controls on manure spreading or manure pit construction, it is also possible for animal waste to runoff into surface

[4] WISCONSIN DEPARTMENT OF NATURAL RESOURCES, NITRATE IN GROUNDWATER – A CONTINUING ISSUE FOR WISCONSIN CITIZENS, 2 (The Nutrient Management Subcommittee of the Nonpoint Source Pollution Abatement Program Redesign, 1999) (*hereinafter* NITRATE IN GROUNDWATER) (on file with author).
[5] *Id*. at 1.
[6] *Id.*
[7] *Id.*
[8] *See* NITRATE IN GROUNDWATER, *supra* note 4 at 3.
[9] *Id.*
[10] *Id.*
[11] *Id.*

waters and drinking water sources.[12] The contaminated runoff may occur despite the fact that the manure was land applied without incorporation several days before.[13]

An additional risk that has only recently come to light is pollution of feed additives, growth stimulants, and antibiotics that have been traced to groundwater after manure is spread on the land.[14] Though it has been documented elsewhere, the problem has not yet been studied in Wisconsin.

Although poorly operated concentrated animal feeding operations are by no means the exclusive cause of contamination in drinking water, leaking manure pits,[15] manure spills, and overapplication of manure on cropland can contribute to the problem if not properly managed and operated.

By regulating manure storage and the location, frequency, and timing of spreading, local governments can address many of the groundwater concerns raised by concentrated animal feeding operations.

Picture 1. This is a photo taken by the DNR of the effects of a manure spreading event on frozen ground. Here, the manure ran off the field and onto a neighbor's wooded lot.

Protecting Streams, Rivers, and Lakes

Groundwater contamination is not the only area of concern. Surface waters are threatened by pathogens in animal waste that can deplete the oxygen in a waterbody and cause significant fish kills. One such fish kill occurred in the summer of 2001 in Black Earth Creek, a regionally significant trout stream in Wisconsin, where the manure spreading practices of an industrial-scale dairy and barnyard runoff were linked to a fish kill in that stream. Although findings were not conclusive, DNR officials speculate that animal waste, in combination with other sources, may have played a role in the fish kill.[16] Another fish kill occurred in the spring of 2002 in the Rush River after what DNR officials believe was a toxic runoff event that may have been linked to animal waste runoff.[17] Other fish kills in

[12] Jamal Abou-Shour and Hung Lee, *Transport of Bacteria on Sloping Soil Surfaces by Runoff*, ENVIRON. TOXICOL. 15:149-153 (2000).

[13] *Id.*

[14] For a discussion of the transport of antibiotics and hormones from beef cow manure to groundwater, *see* Janet Raloff, *Hormones: Here's the Beef: Environmental concerns reemerge over steroids given to livestock*, SCIENCE NEWS ONLINE, Vol. 161, No. 1, Jan. 5, 2002.

[15] *See* MINNESOTA POLLUTION CONTROL AGENCY, EFFECT OF MANURE STORAGE SYSTEMS ON GROUNDWATER QUALITY, SUMMARY REPORT (2001). This study found groundwater plumes of organic compounds, ammonia, organic nitrogen, and phosphorous downgradient of manure storage facilities. The study further found that the plumes were most limited where concrete storage was used, rather than earthen storage. <http:// www.pca.state.mn.us/water/groundwater/gwmap/rpt-liquidmanurestorage-summary.pdf>.

See also, Glannville, T.D. et al, *Measurement of Seepage from Earthen Waste Seepage Structures in Iowa*, 53 (1999). This study is part of a 1999 report to the Iowa State Legislature on Earthen Waste Storage Structures. That report can be found at <http://www.ag.iastate.edu/iaexp/reports>.

See also, *State of Wisconsin v. Maple Leaf Farms, Inc*. Case No. 02CV1330. In June of 2002, the Wisconsin Department of Justice filed a lawsuit against a large integrated duck processor, alleging groundwater contamination caused by a leaking manure pit. According to the complaint filed in that case, sampling wells indicated that groundwater was contaminated with ammonia nitrogen levels at tens the preventive action limit for that pollutant established under Wisconsin law.

[16] WISCONSIN DEPARTMENT OF NATURAL RESOURCES, REPORT ON THE BLACK EARTH CREEK FISH KILL (2001).

[17] Memorandum from Marty Engel, DNR, to Duane Popple, et al, DNR, March 21, 2002. Mr. Engel, a DNR fish biologist, stated that "a toxic event such as oxygen depletion occurred during a recent spring thaw runoff event" was the likely cause of the fish kill in the Rush River. *Id.*

Wisconsin have occurred as the result of animal waste runoff into streams.[18]

Additionally, animal waste contains high levels of phosphorus. Natural waters are very sensitive to even small additions of phosphorus.[19] One report in Wisconsin has shown that increased phosphorus to cropland contributes to cropland runoff of phosphorus to nearby waters.[20] As of 1998, there was an estimated 31 million pounds in excess phosphorus on Wisconsin cropland.[21] Further, this excess phosphorous is confirmed by increasing soil test phosphorus values over the last 25 years in Wisconsin.[22]

A University of Wisconsin report has identified concentrated livestock operations as a partial cause of the build-up of soil phosphorus in Wisconsin.[23] The report noted that larger livestock operations typically do not have enough land to absorb the phosphorus contained in the manure when it is spread.[24] Large amounts of manure applied on few acres results in the accumulation and eventual runoff of soil phosphorus.[25]

Picture 2. This is a photo taken by the DNR of manure runoff from a cropfield in mid-March of 2002. The DNR estimated that the runoff from the frozen, saturated field ultimately reached a trout fishery eight miles downstream.

[18] Izaak Walton League of America, *Feedlot Pollution in Wisconsin: Spills, Kills, and Other Horror Stories*. This fact sheet can be obtained by contacting the Izaak Walton League's Fish Kill Advisory Network at (651) 649-1446 or at fishkill@iwla.org.
[19] Larry G. Bundy, *A Phosphorous Budget for Wisconsin Cropland*, University of Wisconsin Department of Soil Science, 6 (1998).
[20] *Id.*
[21] *Id.*
[22] *Id.*
[23] University of Wisconsin-Extension, Understanding Soil Phosphorus: An Overview of Phosphorus, Water Quality, and Agricultural Management Practices, 7 (2002)
[24] *Id.*
[25] *Id.*

Phosphorus runoff contributes to fish kills by decreasing the available oxygen in a waterbody.[26] Visible green algae, odors, and poor swimming conditions are tell-tale sign that a waterbody is receiving too much phosphorus.[27]

Fortunately, the Natural Resource Conservation Service (NRCS) is revising NRCS 590 to require phosphorous-based application rates under certain circumstances.[28] Wisconsin plans to adopt the new NRCS 590 in its regulations controlling agricultural runoff from crop fields.[29] Local governments should be encouraged to begin preparing animal feeding operations for phosphorous spreading limits, particularly for manure spreading near exceptional resource waters or impaired waters.

Air Pollution and Odors

Other public health concerns raised by concentrated animal feeding operations are the odors and air pollution that they can produce. Too often, neighboring residents and smaller farms are made to feel as though they have no right to complain of air pollution from concentrated animal feeding operations, and are told that these are just the smells of "country living." These remarks wrongly equate the smell of a small barn with that of millions of gallons of manure stagnating in a pit, or thousands of cows standing in a freestall barn.

In fact, air pollution and odors can have a measurable effect on the health of employees at concentrated animal feeding operations and neighbors surrounding the facility.[30] For example, in hog operations workers have complained of chronic bronchitis, nose and throat irritation, headaches, muscle aches and pains, and asthma.[31] Neighbors have suffered from tension, depression, anger, reduced vigor, fatigue, and confusion.[32] More severe symptoms have included headache, runny nose, sore throat,

[26] Id. at 1.
[27] *Id.* at 2.
[28] NATURAL RESOURCES CONSERVATION SERVICE, NUTRIENT MANAGEMENT CODE 590, DRAFT (2002).
[29] Proposed ATCP 50 (2002).
[30] IOWA STATE UNIVERSITY AND THE UNIVERSITY OF IOWA STUDY GROUP, IOWA CONCENTRATED ANIMAL FEEDING OPERATIONS: AIR QUALITY STUDY, 5-6, (2002).
[31] *Id.*
[32] *Id.*

coughing, diarrhea, burning eyes, and a general decline in quality of life.[33]

Unfortunately, Wisconsin's Right to Farm law does not protect neighboring landowners who suffer the odors and air pollution from concentrated animal feeding operations.[34] The law effectively bars a lawsuit against the operation for causing a nuisance unless a neighbor can show that the odor and air pollution causes a substantial threat to public health or safety.[35] Discomfort, inconvenience, and a loss of property value, or any other substantial and unreasonable interference with the use and enjoyment of one's property, are likely not enough to allow recovery under the law. Moreover, if a neighbor tries to stop the air pollution by filing a lawsuit based on a "nuisance" claim and loses, the Right to Farm law requires the neighbor to pay the livestock operation's legal fees and costs, which can rise into the tens of thousands of dollars.[36]

Significantly, the preamble to the Right to Farm law in Section 823.08(1) of the Wisconsin Statutes calls on local governments to prevent land use conflicts between large agricultural operations and other land uses through zoning.[37] Specifically, the legislature stated "that local units of government, through the exercise of their zoning power, can best prevent such conflicts from arising in the future, and the legislature urges local governments to use their zoning power accordingly."[38]

Economic, Infrastructure, and Social Effects of Large Animal Feeding Operations

Many proponents of industrial-scale animal feeding operations have argued that these operations have produced economic benefits in the form of increased jobs and tax base. However, some studies have indicated that this is not the case and suggest that there is room for debate on the issue. One study conducted by Illinois State University concluded that large animal feeding operations actually hinder economic growth in rural towns.[39] This was because large animal operations caused job displacement, and consequently decreased spending on retail farm supplies.[40]

Other commentary has noted that concentrated animal feeding operations are capital intensive, not labor intensive, and therefore designed to minimize their impacts on regional economies.[41] Concentrated animal feeding operations seek to decrease their inputs, e.g. the number of paid employees, while they increase their outputs, e.g. milk, pork, poultry, etc., through mechanization.[42] So, despite the fact that large operations hire more employees than smaller operations, the displacement of smaller operations may mean that more jobs are more likely to be lost than created.

The tax benefit of larger operations may be dubious after a second glance. Although a large animal feeding operation may potentially add to the tax base of a community, smaller operations making up the same number of animals may produce the same or greater local tax benefit.[43]

Additionally, studies indicate that larger operations generally purchase their supplies from farther away.[44] A University of Minnesota Extension Service study found that local farm expenditures by animal feeding operations

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[33] *Id. See also State v. Quality Egg Farm*, 104 Wis.2d 506 (1981). In that case, the State of Wisconsin filed a public nuisance lawsuit against a mega-poultry operation for causing noxious odors that the Wisconsin Supreme Court observed "made one sick or ill or gave one a headache." *Id.* at 509.

See also, MINNESOTA POLLUTION CONTROL AGENCY, THE ORIGIN OF THE MINNESOTA STATE AMBIENT AIR QUALITY, 2, DRAFT (2001); Karen Hudson, Families Against Rural Messes, *Rural Residents' Perspectives on Factory Farms: A Patchwork of Rural Injustice* (1999) (presented at the Manure Management '99 Conference, Saskatoon, Canada);

[34] *See* WIS. STAT. §823.08.

[35] *Id*. at §82308(3)(a)2.

[36] WIS. STAT. §823.08(4).

[37] WIS. STAT. §823.08(1).

[38] WIS. STAT. §823.08(1).

[39] Miguel I. Gomez, Assistant Professor, Illinois State University, Impacts of Concentration in Hog Production on Economic Growth in Rural Illinois: An Econometric Analysis, 15 (2000).

[40] *Id. See also,* Nancy L. Thompson and Dr. Loren Haskins, *Searching for Sound Science: A Critique of Three University Studies on the Economic Impacts of Large-Scale Hog Operations,* Center for Rural Affairs, Box 406 Walthill, Nebraska 68067.

[41] Dr. William J. Weida, Professor, Colorado College, A Summary of the Regional Economic Effects of CAFOs, *2 (2001) <http://www.factoryfarm.org/docs/RegionalEcon72101.htm>.

[42] *Id.*

[43] *See* Thompson and Haskins, *supra* note 40 at 1.

[44] *Id.*

decreased as the size of the operation increased.[45] Further, operations with a gross income of $100,000 made about 95% of their expenditures locally. In contrast, farms with gross incomes of more than $900,000 made only 20% of their expenditures in the local area.[46] The economic impacts are site-specific, and depend on local factors such as the local job market, existing animal feeding operations and local agricultural spending patterns. Unfortunately, there have been no studies in Wisconsin on the economic impacts of new or expanding livestock operations on small, rural communities. Local governments should carefully analyze claims by expansion proponents that large animal feeding operations will help the local economy.

Picture 3. A freestall barn where cows are never let out to pasture.

In addition to economic and public health impacts, industrial scale livestock operations may also affect other infrastructure by causing road damage and erosion by increased heavy truck traffic associated with concentrated animal feeding operations. Although brought on by a private entity, road damage becomes a public expense that taxpayers in the community inevitably bear.

Finally, and perhaps most importantly, local governments can use their zoning authority to prepare for the unfortunate situation where a manure pit is abandoned by an owner who does not have the financial ability to abandon it properly. As a practical matter, towns and counties are left as responsible parties.

What Local Governments Can Regulate

Many of the problems caused by industrial scale livestock operations can be addressed through local regulation. Below are some examples:

- **Water Quality** – Wisconsin law authorizes local governments to enact zoning regulations, within the parameters of state regulation, to control manure storage and spreading to prevent water pollution.[47]

- **Odors and Air Pollution–** Local governments have the authority to use their zoning powers to protect public health, safety, and welfare of the community.[48] This would include any measures necessary to protect neighboring property owners from noxious odors or declines in property value due to the odors.

- **Roads** - A local government may properly regulate the timing and use of the roads to control dust and erosion, require payment for road maintenance and repair in the event of damage, or require implementation of additional traffic safety devices.[49]

- **Manure Pit Abandonment** - A livestock zoning ordinance can impose financial assurance requirements on new manure pits to prevent scarce public funds from being spent to clean up a private mess.[50]

Recent Changes in the Law: Limits on Local Water Quality Regulation

Local governments should care about livestock zoning because recent changes in the law have limited local authority over livestock regulation. First, many local governments are already aware of section 92.15, Wis. Stats. That law requires that local regulations of livestock operations not exceed "performance standards, prohibitions, conservation practices and technical standards under [Wis Stat.] §281.16(3) [regulating water quality]."[51]

[45] Chism, J. and R. Levins. 1994. "Farms spending and local selling: How much do they match up?" Minn Agric Econ 676:1–4.
[46] *See* Weida, *supra* note 41 at *2.

[47] WIS. STATS. §§92.15, 92.16.
[48] WIS. STAT. §59.69(1).
[49] Wis. Stat. §349.16 (authorizing weight limits); §349.17 (authorizing control of heavy traffic on highways other than County Trunk Highways).
[50] WIS. STAT. §59.69(1).
[51] WIS. STAT. §92.15(2).

Both the DNR and DATCP have finalized regulations under section 281.16(3) to control nonpoint source pollution, and the DNR has identified performance standards applicable to agricultural operations.[52] Except in limited circumstances, section 92.15 of the Wisconsin Statutes prohibits local governments from imposing more stringent regulations than those performance standards.[53] If a local government has chosen to establish a regulation that is more stringent than those new performance standards, the local government must make detailed findings that such measures are necessary to achieve water quality standards.[54] Moreover, these ordinances must be submitted to DATCP and DNR for approval prior to their implementation by the local government.[55]

It is important to note that section 92.15 only applies to "livestock operations" as they are defined under §92.15(1)(a). This definition is limited to "a feedlot or other facility or a pasture where animals are fed, confined, maintained, or stabled."[56] As a result, an ordinance which limits or restricts offsite manure spreading by a crop farmer would arguably not be subject to review under section 92.15 because it is not a regulation of the "feedlot."[57] These local ordinances would not be subject to DATCP or DNR review.

It is also important to note that section 92.15 applies only to state water quality regulation under section 281.16(3), not air pollution or nuisance odors or other problems created by large livestock operations. For example, a manure storage ordinance limiting the size of manure pits, the timing and frequency of manure spreading, or requiring the installation of best management practices to control nuisance odors would arguably not fall within the reach of section 92.15 because these practices are not subject to standards under section 281.16.

An additional change in the law is that DATCP has placed minimum requirements on manure storage ordinances enacted under section 92.16,[58] allowing local governments to enact ordinances governing manure storage facilities.[59] Additionally, DATCP has prescribed the content of manure storage ordinances in order to comply with state regulations.[60] For example, all manure storage ordinances must include construction, abandonment, monitoring, enforcement, and administrative provisions, among others.[61]

III. OVERVIEW OF MEA'S MODEL LIVESTOCK ZONING ORDINANCE

This Model Ordinance is divided into four separate parts. Each part plays a distinct role and is designed to be severable from the other parts. However, when taken as a whole the Model intends to provide comprehensive protections for public health, the environment, and sustainable animal agriculture. Local governments should feel free to choose some sample provisions and discard others, depending on their needs and priorities.

Section One of the Model establishes definitions that are consistent with state and federal regulation of animal feeding operations. Where state and federal law are silent, definitions have been derived from other existing livestock zoning ordinances in Wisconsin.

A key aspect of the definitions involves the term "livestock pasturing operation." A livestock pasturing operation is one that uses pasture as the primary source of feed for the animals. Although not required to obtain an animal feeding operation permit under the ordinance, they are required to comply with setback requirements and runoff controls. These operations would also still be subject to minimum performance standards developed by the DNR and DATCP to control water pollution. The intent of exempting these facilities from the permit requirement is to encourage grazing as a form of low-cost, low-input sustainable agriculture in Wisconsin, particularly for the dairy and beef industry.

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[52] WIS. ADMIN. CODE NR §151.01 – 151.097 (effective Oct. 1, 2002).
[53] *Id;* WIS. STAT. §92.15.
[54] WIS. ADMIN. CODE NR §151.096; WIS. ADMIN. CODE ATCP 50.60 (effective Oct. 1, 2002); WIS. STAT. §92.15.
[55] WIS. ADMIN. CODE ATCP 50.60(1)(a) (effective Oct. 1, 2002)
[56] WIS. STAT. §92.15(1)(a).
[57] WIS. ADMIN. CODE ATCP 50.60(1)(b) (effective Oct. 1, 2002).
[58] WIS. ADMIN. CODE ATCP 50.56 (effective Oct. 1, 2002).
[59] WIS. STAT. §92.16 (2000).
[60] WIS. ADMIN CODE ATCP 50.56 (effective Oct. 1, 2002).
[61] WIS. ADMIN. CODE ATCP 50.56 (effective Oct. 1, 2002)

Another key definition is the term "small animal feeding operation," defined to include animal feeding operations that include fewer than 150 animal units. Small animal feeding operations are exempted from having to obtain a permit from the local government, but are required to comply with general setbacks, control runoff, and properly maintain and abandon their manure storage facilities.

Section Two of the Model provides sample language recommending what uses should be permitted in a local government's agricultural zone, and what uses should be conditional. For example, livestock pasturing operations, small animal feeding operations (1-149 animal units), and animal feeding operations (150-499 animal units) could be permitted uses. However, concentrated animal feeding operations (500 or more animal units) and residential uses would be conditional uses in the agricultural zone.

The ordinance does not discuss the establishment of a zoning district for animal agriculture within the local government's boundaries. Designating land within the local government's boundaries for this district involves planning and fact finding by the local government as part of the comprehensive planning process under Wisconsin's Smart Growth law. The local government should identify land with geological and hydrological characteristics most suitable for this type of land use. The agricultural district is intended to limit residential uses and thereby control land use conflicts that can arise between larger animal feeding operations and homeowners. In addition, the agricultural zone where concentrated animal feeding operations are allowed as conditional uses and residential zones should be nonadjacent to further limit those conflicts.[62] Local governments should consider contacting a land use planning consultant for assistance in properly siting an agricultural zone.

Section Three of the Model suggests a permit requirement for all animal feeding operations, including concentrated animal feeding operations that seek to operate within the local government's boundaries. The permit application requirements are intended to strike a balance between the informational value of the applications as they relate to environmental and public health protection, and the cost to the applicant of obtaining that information. Section Three also suggests the requirement that concentrated animal feeding operations with more than a designated number of animal units (e.g. 500) obtain a conditional use permit in addition to obtaining a general animal feeding operation permit. The number of animal units at which point a conditional use permit is required is a matter of local judgment and discretion. Many local governments in Wisconsin have selected between 300 and 1,000 animal units as the threshold for obtaining a conditional use permit.

MEA has selected 500 animal units or more because it represents the current trends in livestock expansion in Wisconsin and is common among several county livestock regulations in Wisconsin and Minnesota. At the same time, we recommend additional application submissions and performance standards to ensure that impacts to the environment can be minimized.

Significantly, the concept of conditional use permits for animal feeding operations has been criticized by both the dairy industry in Wisconsin and the Department of Agriculture, Trade, and Consumer Protection (DATCP), who claim that conditional use permits are too political and that local governments have made arbitrary and emotional decisions in denying those permits.[63]

On the contrary, DATCP's 2001 survey of towns and counties found that very few local governments have used their discretion to deny conditional use permits to concentrated animal feeding operations.[64] Regardless, conditional

[62] DEPARTMENT OF AGRICULTURE, TRADE, AND CONSUMER PROTECTION, LOCAL PLANNING AND REGULATION OF LIVESTOCK OPERATIONS, FINAL DRAFT, 11 (2002).

[63] DEPARTMENT OF AGRICULTURE, TRADE, AND CONSUMER PROTECTION, LOCAL PLANNING AND REGULATION OF LIVESTOCK OPERATIONS, THIRD DRAFT, 14-16 (2002) (*hereinafter* DATCP Model Ordinance Guidelines Third Draft, at 14-16).

[64] DATCP Model Ordinance Guidelines, Second Draft, County and Town Surveys of Livestock Regulation (2001). According to the survey, none of the 24 counties reporting had ever denied a conditional use permit. Eleven counties granted a total of 94 conditional use permits, and two of those counties granted 20 permits each. Also, according to the survey, 14 counties stated that they imposed no conditions at all on livestock operations. Only eight of the reporting counties imposed more than one condition. Those counties that did impose conditions

use permits play an instrumental role in maintaining local control over land uses. Further, the conditional use permit process provides a public forum to discuss the site-specific impacts of a given land use. Finally, Wisconsin courts have recognized that the purpose of conditional use permits is to confer much needed flexibility on otherwise rigid land use regulations.[65] As a result, MEA recommends that local governments retain their authority and discretion to issue conditional use permits for concentrated animal feeding operations.

Section Four of this Model suggests performance standards that should apply to all animal feeding operations, including concentrated animal feeding operations, as defined under the Model. These performance standards and other requirements can be broken down into seven discrete categories: 1) General Setbacks; 2) Runoff Control; 3) Animal Waste Storage Facilities; 4) Discontinuance of Use (Animal Waste Storage Facility Abandonment); 5) Nutrient Management; 6) Air Quality Best Management Practices; and 7) Financial Assurances.

IV. CONCLUSION

Local governments have an exciting opportunity to promote sustainable agriculture in their communities and build relationships between farmers and consumers through land use planning. The challenge lies in finding ways to prevent land use conflicts before they arise while creating an environment where small family farms, as opposed to the increasing scale and concentration of agriculture, can thrive in Wisconsin. It is hoped that the Model Ordinance provisions will help local governments make informed decisions about the agriculture, economy, and environment in their communities.

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limited them to setback requirements, odor control measures, and monitoring requirements. *Id.*

Of the 558 towns responding to the survey, only 10% stated that they had authority to regulate livestock operations. Twelve towns have granted 17 conditional use permits for animal feeding operations, and only one town has denied a conditional use permit. According to the survey, 91 of the nearly 500 towns reporting do not operate under either county or town zoning. *Id.*

[65] *Weber v. Town of Saukville*, 209 Wis.2d 214, 226 (Ct. App. 1999).