

Meeting Handout for October Meetings of the Board of Health, Executive Committee, Land and Water Conservation Committee, Planning and Zoning Committee, and Solid Waste Committee

On July 20, 2022, a joint meeting of the committees was held to explain the various state and county regulations for CAFOs and smaller farms as well as provide information on possible health concerns relating to CAFOs. Please refer to the July meeting [handouts](#) and supplemental [information](#) for more information.

Process

Each of the committees will meet in October and will be given this handout to aid in their discussions. The meetings are as follows:

- Land and Water Conservation Committee – October 19, 8:30 a.m.
- Board of Health – October 19, 1:00 p.m.
- Solid Waste and Air Committee – October 20, 8:30 a.m.
- Executive Committee – October 26, 8:30 a.m.
- Planning & Zoning Committee – October 31, 8:30 a.m.

Each committee should discuss the items that have been presented and should consider if they want to propose any future actions. In these considerations, it might help to ask what outcomes we want and how do we get there? Some potential actions include:

- Studies
- Policy changes
- Ordinances/regulatory requirements
- Inspections/Enforcement changes and challenges
- Budget changes, business model analysis (to determine staff time needed, additional personnel needs, required equipment)
- Resolutions to State agencies or legislators

Please note that some actions could require additional funding, personnel, or other resources or reallocation of existing resources and could require budget amendments. This could include looking at priorities or new needs for capital funding, potential outside consultants, outside legal opinions, ordinance changes or development of new ordinances, reallocation of resources, in some cases gaining access to private property (wells, manure storage, farm fields).

If there are proposals from any of the committees, it is recommended a joint meeting of all the committees will be scheduled to determine how to proceed. Ultimately, several of these proposals will likely need to be brought to the County Board for final consideration and action.

Topic Areas

The following items were brought forward either by the public or County Board members. Please note that the document that contained County questions and DNR answers with the heading "General CAFO Questions" provided at the July joint meeting are referenced to indicate the question number that may relate to the specific topic.

Kewaunee County

- Kewaunee County has been brought up in relation to some of the topics listed below.
- Kewaunee County does not implement the Livestock Siting law. Instead, 7 out of the 10 Towns within the County implement the law. These Towns implement the law starting at 500 animal units. Jefferson County implements the Livestock Siting Law throughout the entire county starting at 150 animal units. Jefferson County has one of the lowest animal unit thresholds of any government entity implementing the law.
- Kewaunee County has 17 CAFOs and Jefferson County has 9 CAFOs.
- Kewaunee County has approximately 154,267 acres of cropland, Jefferson County has approximately 216,327 acres of cropland.
- The unique geology and soils of Kewaunee County present extreme challenges in protecting groundwater. The upper layer of bedrock is a type of rock that is easily dissolved by water. Extensive networks of vertical and horizontal fractures (cracks) in the bedrock are continuously forming. Furthermore, many areas of Kewaunee County have very thin soils overlying the fractured bedrock. Thin soils mean very little filtering capacity for natural decomposition and neutralization processes that protect our groundwater. (Information provided from Kewaunee County website and a UW-Whitewater geology professor)

Jefferson County differs from Kewaunee County by having thick glacial deposits and overlying soils that in most cases can filter the water of pollutants and reduce their load into groundwater, especially the deep aquifers known for high quality groundwater. There are a few known areas where the soils are thin over fractured bedrock, but these areas are small and not widespread. Three types of glacial deposits generally underlie Jefferson County, and two of the three are effective at slowing rates of water recharge that could allow contaminants to enter our shallow aquifers. These deposits are dense glacial till and clay-rich lake sediment. Areas with thick sand deposits may pose a threat to groundwater quality of shallow aquifers since the filtering capacity is reduced in permeable sand deposits. Sand deposits are scattered throughout the county but are mostly concentrated in a band from near Rock Lake to Lake Koshkonong in the west, the Allen Creek basin in the south, and near the Kettle Moraine in the east. (Information provided by a UW-Whitewater geology professor)

Groundwater (CAFO Questions #11, 12, 13)

Well water sampling

- County staff are currently working with experts to devise a strategy to collect baseline data on the County's groundwater. This study will be based on proven models and best

practices and will cost approximately \$150,000 and can be paid with the American Recovery Plan Act (ARPA) funds. It is expected that the project will be implemented over 2 years (2023-2024).

- There were requests for free well water testing for either all residents of the county or properties near CAFOs. The County currently doesn't have the funding beyond the planned groundwater study to offer free testing to anyone who wants it. Homeowners can obtain information on a well test [here](#). The County Health Department does offer free testing bacteria, nitrates, and fluoride in homes with pregnant mothers and newborns in partnership with the Wisconsin Department of Health Services. Fee-exempt services are intended for situations where these susceptible residents are living and payment for private well testing is considered a hardship.
- There was a question on the County requiring CAFOs to install groundwater monitoring wells in addition to charging the farms for well testing. There was also a request to monitor wells at manure application sites.
- There was a request to monitoring high-capacity wells.
- The DNR is working to sample and analyze 450 private wells across the state for per- and polyfluoroalkyl substances (PFAS), pesticides, metals, nitrate, pharmaceuticals, and personal care products. The goal of this study is to better understand the prevalence of PFAS in Wisconsin's groundwater through tracing the sources of compounds derived from human waste and agriculture. PFAS analysis is being conducted at the Wisconsin State Lab of Hygiene (SLOH) and non-PFAS analysis is being conducted the Wisconsin University of Wisconsin - Stevens Point Water and Environmental Analysis Lab (WEAL)
- Municipal water systems interested in having their water systems sampled for PFAS have been able to reach out to DNR, and, through EPA funding and a partnership with the Wisconsin State Lab of Hygiene, are able to conduct sampling for PFAS in wells in their system. PFAS levels will be measured against the 18 PFAS in the [cycle 11 recommended groundwater standards](#), along with a [hazard index approach](#) to assess cumulative impact.

Protecting Groundwater Quality/Quantity

- There were requests to protect the quality and quantity of the groundwater via a variety of actions including a groundwater ordinance and performing analysis on impacts of high-capacity wells. Note: The DNR does regulate high-capacity wells.
- It is the opinion of staff that decisions on future actions to protect groundwater should be considered after we have the results of the baseline groundwater study.

Surface Water (General CAFO Questions #1, #3, and #10-#14)

- There was a request to test runoff water that leaves CAFOs.

Air Quality and Odor (General CAFO Questions #15-#37)

- It was requested that the County provide free air testing.
- It was requested that the County find ways to mitigate odor from CAFOs. Generally, local governments have limited authority to impose requirements on CAFOs.

Health Impacts of CAFOs (Please see handouts provided at joint meeting; General CAFO Question #1, #2, #4, #7)

- There was a request for the Health Department to investigate health and quality of life impacts of people within 2 miles of CAFOs and to update our Current Public Health Hazard and Public Nuisance Ordinance to clarify and include allowable noise levels and how they are enforced. This would require an update to our Current Public Health Hazard and Public Nuisance Ordinance No. [89-46](#) and would require research on best practice tools to measure noise and, additional personnel and funding to investigate health and quality of life impacts, and guidelines for enforcement of the ordinance.

Livestock Siting Law & Zoning Conditional Use Permit

- [State Livestock Siting law](#)
- Jefferson County Ordinance, please see section [11.05\(d\)](#)
- The Livestock Siting law does not allow the County to add additional standards or regulations that are more stringent than the State law unless: 1) The County is authorized to adopt standards under other applicable law. 2) The County enacts standards by local ordinance before a facility operator files an application for local approval. 3) The County enacts standards based on reasonable and scientifically defensible findings of fact adopted by the County Board. 4) The findings of fact clearly show that the standards are needed to protect public health or safety.
- A request was made to amend the notification area for Conditional Use Permits for Livestock Siting from 500 feet to ¼ mile.

Manure Storage (General CAFO Questions#16)

- Jefferson County Animal Waste and Manure Storage [Ordinance](#)
- There was a request to strengthen the LWCD's manure storage ordinance in relation to distance to water bodies, sensitive wildlife, or denser human populations. Note: The ordinance requires storage to meet state standards which includes setbacks from property lines, as well as distance to groundwater and surface water. Manure storages for CAFOs must be setback 250 feet from wells. Manure storages for non-CAFO farms must be setback 100 feet from wells.
- It was requested that the County monitor the content of the manure storages for a variety of constituents including copper (because of copper foot baths), barn cleaners, barn waste, and PFAS. Note: CAFOs are required to test the nutrient (nitrogen, phosphorus, potassium) content of the manure and follow a nutrient management plan on spreading that manure. The requirements are to take 2 samples of liquid manure every month they are land applying liquid manure and 2 samples per quarter for solid manure. In some cases, sampling of manure storage contents would put staff into situations where safety is a concern. Barn cleaners are mechanical devices that don't use chemicals. There is no known source of PFAS in manure storages.
- It was requested that the County take action to cover manure storages and mitigate Volatile Organic Compounds. Note: Storage covers could only be used for liquid manure storage and would require farms to also install solid separators. Storage covers and solid separators are expensive. They need to be designed by engineers to ensure

they are safe for farm workers, and that gas under the covers is safely burned off or converted to a usable form. LWCD knows of situations where these systems do not work because they are complicated and depend on the unique circumstances of each farm.

Manure Spreading & Nutrient Management Plan (General CAFO Questions #3)

- There was a request for more stringent manure handling rules including injection vs. aerial spreading, regular monitoring of manure spreading activities, more review of nutrient management activities, a weather alert guidance, additional training on manure spreading, better buffering from application areas.
- Nutrient management plan standards are required to be followed. In addition, please see the section above on the Livestock Siting law that limits additional requirements/conditions imposed by the County.
- There was a suggestion to consider an ordinance prohibiting outdoor headland stacking of poultry manure because of avian influenza. CAFOs who do headland stack manure must meet defined criteria in a state standard that includes requirements for waste consistency (solid), size and stacking period, hydrologic soil group, subsurface separation distance (saturation and bedrock), and surface separation distance (wells, surface water, wetlands, sinkholes or other karst features, concentrated flow, land slope down gradient of stack, and floodplain).
- If “aerial spreading” is referencing the use of spray irrigation, then staff are not aware of this practice being used in the County. If it is being used, it is not widely being used.
- The LWCD does respond to every manure spreading complaint. There was a request for a report on complaints to the LWCC and the LWCD can do this.
- DATCP has a weather alert [website](#). The Manure Management Advisory System is a resource to help farmers and others who apply nutrients to identify suitable cropland areas for spreading. The maps are in two categories: short-term runoff risk assessment for daily application planning, and WI 590 nutrient management for long-term application planning.

Administrative Code Chapter NR 151 – Runoff Management (General CAFO Questions #2)

- There was a request for the County to adopt and enforce provisions in [NR 151](#).
- Every farm that receives a permit through the County’s Livestock Siting process is required to comply with NR 151. In addition, the manure management provisions of NR 151 are contained in the County’s Animal Waste Storage and Nutrient Management Ordinance.
- Enforcement on farms that have gone through the Livestock Siting law process is handled by Zoning through their Conditional Use Permit. Other NR 151 enforcement is led by the DNR with cooperation by the LWCD. The DNR has its own internal policies as to what violations are enforced.
- If the County adopts NR 151 for every farm, the ability of the county to enforce all the issues that come up is related to the amount of staff time (LWCD, Corporation Counsel, Zoning) available.

Stormwater

- There was a question as to whether the County should adopt a stormwater ordinance including provisions to buffer areas between land use activities and waterbodies, require stormwater plans for certain kinds of development/activities, and require permits for construction disturbances exceeding a certain size. Currently, the County does not have a stormwater ordinance or regulations. The County does have the ability to require stormwater plans through different types of developments (conditional use permits, subdivision plats, shoreland projects).
- Town Building Inspectors may enforce stormwater or erosion control ordinances at the local level as part of the Town Building Permit

Avian Influenza/Composting

- There were comments about the composting of birds impacted by avian influenza at the July joint meeting. In addition, there was a request to create a Composting and Animal Mortality Management Ordinance because of avian influenza. The response to avian influenza instances is led by federal and state agencies. Though the County plays a role, decisions on disposal of infected birds are not under the County's control. To the best of our knowledge there is no other animal composting occurring regularly throughout the county.
- The County worked with the Department of Health Services to provide well water testing for those who had concerns near the composting site. Follow up testing is in the process of being coordinated and free kits will be provided again to those residents.
- Citizens raised concerns about the site where birds were composted. Their concerns included flies, chicken remains, and scavengers. County staff conducted a site visit and observed bones in the piles, but no other chicken remains. There was no evidence of scavengers (digging or tracks). There was an organic smell similar to composting yard waste. The operation brought in yard waste as a composting medium and in that medium were some white plastics. Flies at the composting site at the time of the visit were determined to be negligible.
- There was a suggestion for the County to conduct a public education and outreach/awareness campaign on avian influenza. This could include the need to register all backyard birds (and other specified livestock) with the Wisconsin Livestock Identification Consortium, and signs and what to do if wildlife exhibits symptoms.

Farm-Related Vehicles on Roads

- There were concerns raised about the speed and hours of operation for farm-related vehicles. Law enforcement should be contacted if speed limits are not being followed. The County does not regulate when businesses can conduct their business-related activities.
- There were concerns about manure on roads. When citizens see manure on a road, they should contact law enforcement as it could be a safety issue.

Revise Zoning Ordinance

- There was a request to review and revise Section [11.14 Performance Standards](#). This section includes standards for sound, vibration, odor, glare, dust, etc.
- There was a request to review and revise the mailing notification section of the zoning ordinance (I.e., changing the notification for Conditional Use Permits relating to livestock siting from 500 feet to ¼ mile).

Notes/highlights from July 20, 2022 Joint Committee meeting on CAFOs and other concerns

Summary from the public comment period:

A total of 10 people spoke during the public comment period.

Five residents of Palmyra spoke about the ongoing situation at the HPAI avian influenza mortality composting site. They reported flies, odors, and an increased presence of coyotes, imploring us to take action to remedy these problems.

One nearby landowner pointed out flies are potential vectors for 65 diseases in people. She voiced concern over the bird flu and composting's impact on animals, children, and the elderly, and called upon us as County representatives to set up some standards and establish better communication with the neighbors. This person's spouse, who also spoke during the public comment period, said he can't even eat outside due to the issues with the mortality composting site.

Another resident, who lives on County CI and has a horse farm, reported the odors and flies are impacting her business and her animals. Clients have said they don't want to come there "because the smell is so horrific," she stated.

One individual (on Zoom) recalls that residents in Palmyra, when they questioned whether there would be rodents or flies at the compost site, were told, "If done properly, no." She expressed concern over it taking 16 days to depopulate the infected site, when the DNR, USDA, and WHO all recommend within 48 hours, preferably within 24 hours of confirmation. She asked for an assessment of what went wrong, creating the delay which she said was dangerous to workers at the site and nearby residents.

The Town of Palmyra Board Chair read aloud the federal policy for composting which is supposed to be followed, stressing the government policy is not being adhered to at the composting location.

Other comments from attendees during public comment includes:

"When we approve one CAFO (1,000 animal units), we are basically creating two times the city of Jefferson in in waste equivalent." And, "If we are requiring municipal waste water treatment, industrial wastewater treatment, commercial wastewater treatment, why not for animal waste?" (Speaker said he's retired after operating wastewater treatment facilities for more 40 years.)

<CAFOs are> ..."an experiment that's gone terribly wrong in our country, in our state, and specifically, in our County." (Speaker called for free water testing for residents living within 3 miles of land application and free air testing.)

"Manure storage facilities should be tested for toxins." (Speaker stated, "...The Rock River is already designated as impaired.")

Presentations by staff and guest speakers:

Patricia Cicero indicated County staff is doing research on designing a groundwater quality study funded through ARPA money. Implementation is expected 2023-2024.

Land and Water office has a dissolved oxygen meter which is a little different from what stream volunteers have.

Dr. Curtis Hedman, toxicologist with Wisconsin DHS, discussed the fact that wells that have cracked casings can result in water contamination.

Comments and questions by committee members:

Supervisor Walt Christensen suggested it might be helpful to get a report when complaints come in, how many, how severe, perhaps through the Land and Water Committee, noting the greater Board could benefit from this information as well. He also pointed out that people with existing health issues would be affected by lower concentrations of the chemicals associated with the large livestock operations.

Supervisor Meg Turville-Heitz raised questions regarding notification of nearby residents, and indicated we could consider amending the ordinance for notification for neighbors from 500 feet to one-quarter mile. She also asked about how amendments to existing conditional use permits are handled, and what constitutes significant modifications to livestock operations.

Supervisor Anita Martin shared information received from a WCA meeting on groundwater held in Steven's Point two days prior, which highlighted Kewaunee County's efforts and activities. Kewaunee County's Board has taken a number of measures to protect groundwater, including passing a Waste Irrigation Ordinance (involving manure spraying) and a Public Health and Groundwater Ordinance. They also locally adopted all NR 151 agriculture reference standards so they could monitor and enforce them locally. These are things successfully done elsewhere (from a legal standpoint) which we here in Jefferson County could consider doing. She also mentioned \$10,000 environmental grants available through Wisconsin DHS, which could be considered. A number of counties have implemented well water testing programs, including Rock County and Portage County. Examples of Taking Action with Data projects which have been funded: <https://www.dhs.wisconsin.gov/epht/resources.htm#success-stories>

Supervisor Cassie Richardson asked about what progress has been made in communities like Town of Ixonia to address CAFO-related issues.