



Kewaunee County Groundwater Task Force Agenda Regular Monthly Meeting

Wednesday, April 6th 1:00PM

Kewaunee County Administration Building - Large Conference Room
810 Lincoln Street - Kewaunee, WI 54216

- 1) Call To Order – Chairman Luft
- 2) Roll Call – Secretary Swanson
- 3) Approval/Repair of April 6th, 2016 Agenda
- 4) Approval/Repair of March 9th, 2016 Meeting Minutes
- 5) Discuss recent ground and surface water related events or issues.
 - A) Any updates on NRCS Technical Advisory Group? Current effort is to ask the Technical Advisory Group (TAG) to indentify proposed limits of contamination for ground and surface waters.
Then decide to:
 - a) Accept existing conditions
 - b) Adjust quality criteria
 - c) Develop new criteria
 - d) Some combination of the above

All NRCS recommendations need to keep in step with State and Federal Rules.
Example: Most waterways have a designated use and associated water quality standards that are to be preserved or attained.

- B) DNR established five work groups to address Kewaunee County's ground and surface water problems at our August 5th meeting. Members discuss updates from the three active work groups since the February 10th, 2016 Groundwater Task Force meeting.
 - a. Short Term Solutions to obtain clean water for citizens living with unsafe wells. (Davina Bonness, Cindy Kinnard, John Pagel, Dick Swanson, and Ron Heuer are members of this workgroup).
Approved recommendations are shown on attached four pages entitled, "Short Term Solutions in Relation to Contaminated Well Water in Kewaunee County"
 - b. Best Management Practices for agriculture in dealing with Kewaunee County's vulnerable areas. (Davina Bonness is a member of this workgroup).
Update on meeting scheduled for March 9th
 - c. Compliance and enforcement issues. (Davina Boness and Lee Luft are members of this group).
Approved recommendations are shown on attached four pages entitled, "Recommendation Summary from Compliance Team January 2016"
 - d. Communication, getting accurate information to the public and information hub for all other group's recommendations.

Update from Davina.

- e. Alternative Technologies for waste treatment, disposal, and spreading.

Previous meeting: Russ Rasmussen indicated that this group would look at three major areas of agricultural technology:

1. Things being done successfully elsewhere.
2. New and promising technologies.
3. Asking the question; are we implementing new technologies in a timely and proper manner?

- C) Update of November 13th/14th and November 20th/21st Private Well Water Test results.
Any updates on the stratification analysis (well results by well depth)?
Update on planning for the spring 2016 testing?
Report/update on “auto testing” of Kewaunee County wells?
Report/update on virus testing of Kewaunee County wells?
- D) Update on clean water access project in Algoma headed by Algoma Public Schools.
Update on repair of earlier damage, usage update? - Nick Cochart
- E) Progress on Project Phoenix – Award of consulting contract to Roach and Associates and a partner company. Possible progress update? - Ron Heuer
- F) DNR plans for conducting more on-farm inspections (one per year) adding more inspectors and conducting more manure hauling audits.
Report/update from Davina?
- G) Groundwater Task Force Charter and Renewal Update from Ron Heuer.
- H) Other issues for discussion?

- 6) Discuss progress in achieving approved Groundwater Task Force goals.

- A. **Goal:** Groundwater Task Force will establish a website that will provide a “one stop” source for updates on Kewaunee County’s ground and surface waters. **Champions: Cindy Kinnard and Aericia Bjurstrom.**
- a) Update on web site development by Aericia Bjurstrom and Cindy Kinnard.
- B. **Goal:** Groundwater Task Force will publish no less than one press release per month to update Kewaunee County residents on the activities of the Task Force, County, State, and Federal entities working to improve groundwater and surface water in Kewaunee Co. **Champion: Lee Luft**

Proposed News Releases

- a) Well Test Results by soil depth
- b) Final Recommendations of the Short Term Solutions and Compliance Workgroups
- c) Map of Kewaunee County showing areas with most unsafe wells.
- d) Others?

- 7) Public Comments (3 minutes per person – 20 minutes total)
- 8) Other matters to discuss
- 9) Set next meeting date
- 10) Adjournment

Consensus/Near Consensus Recommendations

- 1) Staffing - Add compliance staff position(s) (DNR Agricultural Runoff/Nonpoint Specialists) to conduct improved compliance oversight (examples listed below) of existing regulations regarding agriculture in sensitive areas. Fill vacancies in a timelier manner. Additional EPA, DATCP, County, NRCS staff may also be relevant to fulfilling some of the duties below.
 - Voluntary training and outreach/education for farmers, citizens, haulers, crop consultants, landowners, etc.
 - Review new maps, rules and regulations, and best management practices
 - Summarize and discuss land application audit findings
 - Spill prevention and response planning
 - Joint-agency training (EPA, DNR, NRCS, DATCP, County) for consistency and efficiency
 - Review nutrient management plans (CAFO)
 - A minimum of 10 detailed reviews/audits per year
 - Confirm all land is under agreement
 - Ensure all direct conduits to groundwater are mapped
 - Confirm there are no overlapped fields in multiple CAFO NMPs
 - More frequent inspections of land application sites
 - Target before, during, after rains, first snows and night time spreading
 - Include medium farms
 - Use well testing research information to determine which areas to focus
 - Do audits in mapped shallow soils areas
 - Do both scheduled and unannounced inspections
 - More frequent production site inspections of CAFO farms (1/year) by DNR.
 - Verify permit conditions are being met.
 - Verify no changes have occurred since last inspection that are adversely affecting surface or groundwater.
 - More thorough review of permit-required record-keeping regarding CAFO production sites by DNR (annual reports, spill response plans, evaluations, etc.)
 - Inspection of medium sized livestock production sites not yet inspected by County LWCD.
 - This would be to identify potential surface or groundwater discharge issues at the production site.
 - May determine if any medium farms require a CAFO permit.
 - More timely complaint response and enforcement.
- 2) Fill currently vacant DNR conservation warden position in Kewaunee County.
- 3) Resources/Technology for agricultural compliance staff use and efficiency (internal/non-public) – database of information electronically accessible for multiple compliance agencies (EPA, DNR, County)
 - Nutrient management plan information
 - Pending compliance/complaint response status
- 4) Continue and improve communications and outreach to farmers/landowners from agencies (DATCP, NRCS, County LWCD) regarding:
 - Winter (frozen or snow-covered ground) spreading
 - Explain why winter spreading is a concern.
 - Explain best management practices if winter spreading is necessary.

- Provide resources for grant funding or technical assistance.
 - General cropland best management practices
 - Explain benefits of no till, cover crops, filter strips, etc.
 - Cost share funding
 - Technical assistance
 - Spreading on sensitive areas
- 5) Develop communication plan for public regarding compliance and enforcement activities being conducted by DNR (agricultural, industrial and septage).
- Discuss how to report/what to report (factsheets)
 - How to share complaint resolution / findings with public
 - Online accessible database
 - CAFO permits and application information
 - CAFO nutrient management plans
 - CAFO engineering information
 - Stepped enforcement actions
 - Enforcement letters (NON, NOV, etc.)
 - DOJ referral case summaries and outcomes once completed/settled
- 6) Conduct more land application hauling audits/oversight in sensitive areas (DNR and County). Additional info under #1.
- 7) Improve review and approval process of offsite waste distribution by non-agricultural waste generators into agricultural waste storages (DNR & County LWCD).
- Develop guidance / communication plan between DNR wastewater and DNR CAFO programs to ensure any approvals for acceptance meet all standards/conditions.
 - Develop guidance / communication plan between DNR wastewater and County LWCD to ensure storages proposed to accept offsite wastes are built to standards protective of groundwater.
 - Review by County and DNR should include whether nutrient management plans address how additional waste volumes taken will be land applied according to standards.
 - Development of additional resources for tracking compliance (funding dependent).
 - GIS tracking system
 - Template forms
- 8) Require that all land applicators have, at minimum, one set of spreading restriction maps and written instructions present for land application sites where manure is actively being applied (DNR & County).
- Inform haulers and farmers of requirement
 - Discuss any equivalent options in lieu of multiple maps (field markers, tillage, etc.)
- 9) During land application complaint response, DNR and County shall encourage having all associated parties present during complaint inspection (farmer, hauler, crop consultant, complainant).
- Promote understanding / communication
 - Copy all on follow-up letters and reports
 - Not required as not always practicable
- 10) Develop guidance that defines and explains “substantial compliance” requirement for CAFO permit reissuance. May include: inspection checklist updates; staff training, template reporting resources, and clearer permit conditions (DNR, EPA).

11) Targeted focus on proper well abandonment of non-compliant wells or wells no longer used (DNR).

Recommendations with 2/3 Majority in agreement

12) Develop communication plan for all landowners who rent land for application of wastes (County/Local groups). The communication plan may include:

- Information on regulations regarding land application of wastes
- Example landowner agreements between farmers and landowners
- Any potential liabilities of landowner

13) More stringent review of CAFO emergency land spreading variances (DNR).

- Do they have adequate storage (or need to build more or reduce herd size)
- Store instead of land apply
- Only for emergencies, not poor weather conditions

14) Further evaluation and review of existing enforcement processes (DNR, County, EPA). Considerations:

- Second offense for same violation should move to Notice of Violation stage not another Notice of Noncompliance letter (DNR).
- Noncompliance with County regulated state programs (NR151, Farmland Preservation, etc.) results in County enforcement notice and potential loss of tax credits.

Recommendations considered, but below 2/3 majority in agreement

15) Septic Systems - Additional funding necessary to:

- Properly identify systems that may be marginally acceptable by performing onsite soils verification by the county and certified soil tester (would determine any necessary upgrades for protection of groundwater)
- Expedite inventory of those septic systems not yet verified/reviewed

16) Perform audits of soil and/or manure test analysis for farms in sensitive areas (DNR or County).

- DNR or County staff to observe sampling and obtain split samples from crop consultants to be analyzed for verification

17) EPA should review all Kewaunee County CAFO nutrient management plans (one-time); Assist DNR with future NMP reviews as necessary.

18) Consideration of cumulative effects of proposed farm expansions that result in increased waste being applied in areas determined to be susceptible for groundwater contamination.

- Additional requirements in permit and NMP for protection of groundwater

19) Revise code NR 243 (CAFO) to be more protective of groundwater (land application).

- Different regulations for land application of wastes in defined sensitive areas (may include special areas of well compensation eligibility)
- Require additional reporting by CAFO farms
 - Condensed and updated spreading plan (NMP) be submitted to DNR and County just prior to manure spreading.
 - More frequent “near-time” reporting of land application activities
- Groundwater monitoring at land application sites
- Clarify or increase emergency winter spreading approval requirements

- Clarify that multiple CAFOs cannot have the same field in their NMPs
- 20) Revise code NR 243 (CAFO) to be more protective of groundwater and surface waters (production site).
- Require in CAFO WPDES permits compliance monitoring provisions that evaluate conditions in receiving waters on a sampling schedule.
 - Groundwater monitoring at production sites
 - Surface water sampling to wetlands and surface waters.
 - Requirement/clarification that CAFOs shall not accept septage waste in storages. Staff may take samples to verify compliance with this requirement.
- 21) Require CAFOs using permanent manure irrigation systems monitor groundwater at land application sites per NR 214.
- 22) Penalty and forfeitures changes for violations (any regarding waste applications) - Ask legislature to propose increase of penalties /forfeitures for noncompliance. Examples:
- Discharge to waters of the state monetary forfeiture of \$250,000 with \$100,000 held in escrow for "safe water supply fund" to cover both short and long term solutions; \$50,000 to LWCD to cover costs of local enforcement, cleanup and clean water supplies
 - Spreading/spill violations should have monetary forfeitures after one warning
 - More than one permit violation per year prohibits reissuance of WPDES permit
 - Citation issuance for permit violations
 - Increase minimum / maximum permit violation forfeiture amount in Wis. Stat. § 283.91 to increase the deterrent effect.
- 23) Develop and enforce the penalties for crop consultants when nutrient management plans are incomplete or inaccurate.
- 24) Develop requirements and enforce penalties for manure haulers (third-party) when spreading regulations are not followed and/or land application results in runoff to surface waters or contamination of a private well. May include hauler audits scorecard/ranking system and required certification/training program.
- 25) Require third party inspections of land application. Qualified individual/company would inspect and report on land application activities to DNR.
- 26) Bond posting to allow the DNR to hire contractors to quickly address spills and runoff events. May result in more timely response actions in cases where the responsible party was not responding appropriately.
- 27) To better oversee compliance via inspections of land application sites, require pre-notification of planned land application activities by farms when spreading in areas deemed "extremely vulnerable" in the 2007 NE WI Karst Task Force report (< 5' to carbonate bedrock areas).
- Email or phone line notification with who, when, where, how much, etc.
 - Accessible by DNR and County LWCD
 - No obligation for fields to be inspected or additionally approved/reviewed (if already in approved NMP)

SHORT TERM SOLUTIONS IN RELATION TO CONTAMINATED WELL WATER IN KEWAUNEE COUNTY WORKGROUP

DRAFT FINAL REPORT DATE: 12-7-15

Recommendations

During the course of the workgroup's meetings many recommendations and strategies for addressing the issues faced by individuals with contaminated wells were discussed. Several of these recommendations have already begun to be put into place, while many will need to be considered by one or more of the stakeholder groups listed in the scope document. Below is listed a compilation of the workgroup's final recommendations. These recommendations are first grouped by theme (Funding, Communication, Specific Solutions, Regulatory, and Prevention/Other) and then by particular stakeholder or stakeholders (Wisconsin State Legislature, Wisconsin Department of Natural Resources, Kewaunee County, local citizen/farmer groups, or a combination of groups) that may consider addressing them. Note, individual stakeholder participation in this group does not equate to full implementation of any specific recommendation, or complete agreement by the entire stakeholder group.

Funding

The funding of emergency water supplies and contamination remediation for individuals in Kewaunee County was an important topic often discussed by the workgroup. In principle the workgroup agrees that the Wisconsin Department of Natural Resources, Kewaunee County, and potentially local farmers should consider funding initiatives that would include providing emergency supplies, remediation, and/or replacement to households whose wells are impacted by offsite livestock contamination. Specific funding related recommendations made by individual workgroup members are as follows:

State of WI Legislature

1. Consider increasing funding to the state Well Compensation program if changes in policy or statute cause a funding deficit.
2. State legislators appropriate for \$300,000 in, onetime, special funds to provide reparations, including, providing emergency safe water supplies, treatment systems, and new well construction, to households with wells impacted by offsite livestock contamination.

WI Department of Natural Resources (WDNR)

1. Consider increase funding for follow-up sampling and investigation in relation to E coli positive samples in which offsite livestock contamination is the probable cause.

Kewaunee County

1. Consider annually making \$10,000 and staff available to provide emergency water supplies free of charge to those households with wells impacted by offsite livestock contamination.

2. County actively seek and obtain grants and other programs whose funds would be appropriated to paying for a semi-annual well testing program, emergency water supplies, and potential remediation of contaminated wells.

Local Groups

1. Area farmers or other local citizen groups consider forming a group to create a fund to provide emergency water supplies free of charge to those households with wells impacted by offsite contamination.
2. Local Non-Profit groups consider contacting United States of Agricultural (USDA) in regards to the USDA "Household Water Well System" Grants

Communication

Another much discussed topic during the workgroup meetings and agreed upon overall recommendation is, improved communication by regulatory agencies to the public on all aspects of the groundwater contamination issues facing residents of Kewaunee County. Group members have discussed many ways to better inform the public, and several of the suggestions have already been put into progress. The specific recommendations from individual group members are below, those in progress are noted.

State of WI

1. WDNR create a brochure / fact sheet detailing bacteria contamination with information on potential sources, contamination definition, remediation, and funding assistance. This document should be shared with all stakeholders including laboratories in Wisconsin certified for bacteria analysis. (In progress)
2. Develop a communication plan for distributing to the public the recommendations discussed and findings of the Short Term Solutions workgroup. This may include consideration of coordinating and holding a public meeting or series of meetings and participation by all workgroup members. (In progress)
3. If E. coli contamination is detected and evidence suggests livestock contamination or a contamination event occurs, letters are sent to nearby households that are determined to be potentially impacted. (Partially in progress)
4. Develop clear guidance at the county and WDNR level regarding respective processes for responding to a contamination event. (In progress)

Kewaunee County

1. The Kewaunee County Health Department work with WDNR to create and distribute a letter to all county well owners detailing the importance of private well sampling. This letter should include information about obtaining sample kits, contaminants to sample for, follow up to results, and specific contact information for WDNR and Kewaunee Co. (In progress)
2. Provide informational materials to county well owners that include easy to use contact information lists (i.e. refrigerator magnets) and up to date well safety and maintenance checklists.

3. Develop clear guidance at the county and WDNR level regarding respective processes for responding to a contamination event. (In progress)

Specific Short Term Solutions

“Short term solutions” have been defined by the workgroup as actions taken in the time period beginning after well contamination is confirmed and until a long term solution is decided upon or put in place. The specific recommendations below are intended to lessen the burden on the owners of wells impacted by offsite livestock contamination and remove as many barriers as possible to efficient and low cost (or no cost) emergency water supplies.

State of Wisconsin

1. WDNR consider beginning an investigation on all E.coli positive samples reported to them from well owners in Kewaunee County. If offsite livestock contamination seems plausible investigation will include Microbial Source Tracking (MST) sampling at no cost to the well owner. (In progress)

Kewaunee County

1. Develop a protocol to immediately provide an emergency supply of drinking water for owners of wells impacted by offsite contamination until another source of safe drinking water can be provided or a long term solution is in place.

Kewaunee County Citizens

1. Community groups are working with local municipal drinking water systems to set up a method for owners of wells impacted by livestock contamination to attain a safe emergency water supply from them as a temporary solution until other recommendations are implemented. (In progress)
2. Agricultural producers consider making emergency water supplies available for owners of wells impacted by livestock contamination.

Regulatory

Throughout the course of the meetings the group was briefed on and discussed specific authorities granted WDNR through various State Statutes and Administrative Codes. The following recommendations are intended to affect direct statute or code changes or involve WDNR altering its current implementation policies.

WDNR

1. Prioritize investigating the possibility of streamlining the creation of Special Areas of Eligibility for Well Compensation in Kewaunee County based on the potential for groundwater contamination by livestock due to vulnerable geologies and common land use practices.

2. Use its authority under Chapter NR738 of Wisconsin Administrative code to provide emergency water supplies to well owners whose wells are impacted by offsite livestock bacterial or nitrate contamination that are located within an area of Special Eligibility for Well Compensation.
 - a. If DNR does not allow for nitrate contamination to trigger compensation in Areas of Special Eligibility for Well Compensation then it should consider modifying the definition of hazardous substance in NR738 to include nitrate contamination from livestock.

WI Legislature

1. Consider taking action to make revisions to Wisconsin State Statute 281 which includes the provision for the Well Compensation program. Specific revisions to include:
 - a. Raising or removing income limitations
 - b. Clarify potential payment procedures
 - c. Raise or eliminate any total payment limitations.
 - d. Alter specific sampling requirements to foster a more efficient process for well owners that may be in a pre-determined Area of Special Well Compensation Eligibility.
 - e. Include other agricultural contaminants as eligible indicators of livestock contamination. (i.e. nitrate, viruses, and other detectable pathogens)

Recommendations beyond Scope

Throughout the course of the workgroup meetings many topics were discussed that stretched outside the formal scope of the groups focus. Many of these topics involved some kind of contamination prevention methods in reference to manure storage and spreading, which will be specifically covered by the Sensitive Area and Best Management Practices group. Other recommendations outside the scope of this workgroup revolved around providing funds for county well owners to regularly sample their wells, and educating the public about low cost sampling tools that may help them determine if their wells are being impacted. It was the opinion of the majority of the participating members that the work of this workgroup be continued and expanded into a "Long Term Solutions in Relation to Groundwater Contamination in Kewaunee County" workgroup.

DRAFT documents in preparation via workgroup recommendations



Info Sheet-When to Treat Bacti-Contam P Well Owner Letter_KI



Kewaunee County