

# Wisconsin DNR-Kewaunee County Collaboration Workgroup Process

Addressing Groundwater Concerns in Karst Areas


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# History

- October 2014 -- Petition to EPA
- Spring 2015
  - Meeting with stakeholder groups – Government, Agriculture, Petitioners
- Summer 2015 – March 2016
  - Formation of work groups / meetings
    - 1. Short-term Solutions
    - 2. Compliance
    - 3. Sensitive Areas/BMPs
- November 2015:
  - Well Testing Research Project (ongoing)
- December 2015: Communication Work Group (ongoing)
- June 2016: Alternative Practices Work Group (ongoing)



# Short - Term Solutions Workgroup

# Short - Term Solutions

## SCOPE:

- Review and define issues faced by individuals who have wells contaminated by bacteria and/or nitrate.
- Find avenues to provide safe drinking water sources.
- Provide clear information to those with contaminated drinking water that helps them quickly and efficiently obtain a safe drinking water source.
- 14 Members / Met 5 times (August and December 2015)

# Short -Term: Recommendations

- 21 Recommendations
  - All consensus
- Grouped by theme
  - E.g., Funding/Communication
- Directed at specific stakeholder group
  - State of WI Legislature
  - WI Department of Natural Resources
  - Kewaunee County
  - Local Citizen / Farmer Groups
- Some already being put into practice

# Top 5 Recommendations

## Short-Term

1. WDNR begin investigation on all E. coli positive samples in Kewaunee Co. if offsite livestock contamination probable
2. Streamline the creation Special Areas of Well Compensation Eligibility (WDNR)
3. Increase funding for follow-up sampling of E. coli positive samples (WDNR)
4. Provide emergency drinking water to well owners impacted by offsite livestock contamination in Special Areas of Well Compensation Eligibility areas (WDNR)
5. WI DNR and/or Kewaunee Co. send letters to surrounding well owners when E. coli is detected nearby (already in place)



# Compliance Workgroup

# Compliance



## SCOPE:

- Review and evaluate the current compliance structure regarding currently regulated activities that may affect groundwater
- Provide information for stakeholders to better understand the regulatory structure and ability of regulatory entities to monitor compliance
- Discuss tools and outreach methods to promote compliance.
- 21 members / Met 5 times (September 2015- December 2016)



# Compliance Recommendations

- 33 Recommendations
  - 14 received consensus/majority vote
    - These were ranked in priority for the greatest potential for improving / protecting groundwater quality
  - 6 mutually decided to not carry forward for vote
  - 13 did not get consensus/majority vote

# Top 5 Consensus Recommendations




1. Conduct more land application hauling audits/oversight in sensitive areas.
2. Add additional compliance staff positions (WDNR Ag Runoff Program)
3. More stringent review of CAFO emergency land spreading variances.
4. Require all land applicators have, at minimum, one set of spreading restriction maps and instructions present for land application sites where manure or process wastewater is being applied.
5. Targeted focus on proper well abandonment of non-compliant wells or wells no longer in use.

# Consensus Recommendation Implementation Issues



1. Staffing & current workload issues
2. Voluntary cooperation necessary
3. Majority of the recommendations are to enhance and improve implementation of current rules in place; however, to do so, requires additional staff and training



# Sensitive Areas / Best Management Practice (BMP) Workgroup



# Sensitive Areas/BMP Workgroup

Scope:

To Identify:

1. Sensitive areas for groundwater contamination
  2. Best Management Practices to reduce risk for groundwater contamination
- 15 members / Met 9 times (August 2015 - March 2016)

# Recommendations (BMPs)

- 46 Recommendations
  - 27 were incorporated into consensus
  - 11 were discussed but no consensus was reached
  - 8 were not discussed, but will be forwarded to alternative practices group

Consensus recommendations ranked in priority for the greatest potential for improving / protecting groundwater quality

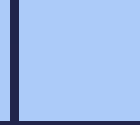
# Top 5 Consensus Recommendations

1. No mechanical applications of manure on soils with a soil depth less than 12 inches to bedrock.
2. Inspect fields before manure application for depth to bedrock, fracture traces, groundwater conduits and contributing channels or areas that drain to groundwater conduits. Update spreading maps.
3. No liquid manure applications on soils with less than 24" to bedrock.
4. Depth to Bedrock Recommendations
  - 0-1 feet
  - 1-2 feet
  - 2-3 feet
  - 3-5 feet
  - Standard practices for 2-20 feet
5. Direct Conduits to Groundwater Recommendations
  - Setbacks and other practices

# Consensus Recommendation Implementation Issues

1. Interim or intermediate steps are on a voluntary basis
2. Not final - should be evaluated over time
3. Focus on pathogen reduction and not directed towards reducing nitrate leaching to groundwater
4. Not meant to override meeting current performance standards or technical standards
5. Reconvene workgroup to review consensus and proposed recommendations after 2016 crop harvest





# Communications Workgroup

# Communication Workgroup



## Scope:

- To produce the Final Report
- To assist in providing communication tools
- Proposed to evolve into a group that keeps the communication lines open regarding progress on implementation of the recommendations
- 7 members (ongoing)

# Alternative Practices Workgroup

## Scope:

- Review emerging technology to provide practical options to waste stream management that lower environmental risk
- Continue discussion of Sensitive Areas / BMPs group
- Review other practices not common to the area that may have merit
- Provide a forum to discuss effectiveness of BMP recommendations as they are implemented
- Currently 8 members (1st meeting June 23, 2016)

Questions: