

# **GROUNDWATER PROTECTION ORDINANCE SUBCOMMITTEE**

---

Subcommittee of the Groundwater Citizens Advisory Committee

---

## **NOTICE OF MEETING**

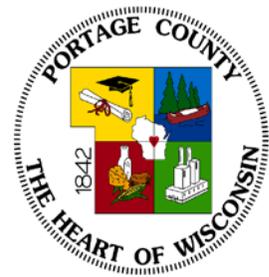
**THURSDAY, MARCH 30th, 2017 AT 5:00 P.M.**  
Multipurpose Room, Aging & Disability Resource Center  
1519 Water Street, Stevens Point, Wisconsin

### **AGENDA**

1. Call to Order
2. Review/Approval of Minutes from February 23, 2017
3. Discussion of "Checklist" for Consideration of Ordinance
4. Discussion on any Additional Information Pertaining to Nutrient Management Concerns/Questions
5. Discussion of Federal, State, and Local State Statutes Addressing Items in the Proposed Ordinance
6. Discussion of Potential Impacts of Ordinance on Groundwater Quality and Other Recommendations
7. Next Meeting Date
8. Adjournment

**Notice:** A quorum of the Portage County Board of Supervisors or any committee thereof may be present at this meeting.

\*\*\*\*\*  
Any person who has special needs, and plans on attending this meeting, should contact the Planning and Zoning Department as soon as possible to ensure that reasonable accommodations can be made.  
Telephone 715-346-1334  
\*\*\*\*\*



# PLANNING AND ZONING DEPARTMENT

---

1462 STRONGS AVENUE, STEVENS POINT, WI 54481 • PHONE: 715-346-1334 • FAX: 715-346-1677

To: Groundwater Protection Ordinance Subcommittee  
From: Jen McNelly, Water Resource Specialist  
Date: March 23, 2017  
Re.: March 30, 2017 Subcommittee Meeting

The Groundwater Protection Ordinance Subcommittee will hold a meeting on Thursday March 30, 2017 at 5 pm in the Multipurpose Room of the Aging and Disability Resource Center.

I want to remind the members of the subcommittee that you are coming together as a subcommittee, not to draft or write a groundwater protection ordinance but rather to review and learn about the ordinance that was brought before GCAC. The outcome of this process will be to provide recommendations to GCAC on what should happen with this ordinance as well as any other recommendations to address the identified issues.

The first item of business on the agenda will be to review the minutes from the last subcommittee meeting. We will also be quickly reviewing the highlights of the discussion at the last meeting. There will be a short amount of time to address any outstanding questions or concerns about those topics.

At the last meeting, the chair suggested that there should be a discussion on the Statutes and regulations at the federal, state, and local level that deal with the topics in the proposed ordinance. Ken Schroeder and Steven Bradley will be on hand to assist with this discussion.

Last, Kevin Masarik, Water Quality Specialist from the Center for Watershed Science and Education will be with us to discuss the water quality impacts of the items in the proposed ordinance as well as possible recommendations to address the concerns identified in the proposed ordinance.

We look forward to meeting with all of you at the meeting on the 30<sup>th</sup>. If you are unable to attend please notify Amy Heins, Administrative Associate in the Planning and Zoning Office, as soon as you are able to. Her contact information is: 715-346-1334 or [goffina@co.portage.wi.us](mailto:goffina@co.portage.wi.us). If you have any other questions or concerns you can contact Jen McNelly at 715-346-1334 or [mcnellyj@co.portage.wi.us](mailto:mcnellyj@co.portage.wi.us).

MINUTES  
GROUNDWATER PROTECTION ORDINANCE SUBCOMMITTEE  
FEBRUARY 23, 2017

**Roll Call**

Members present: McFarlane, Mangin, Burns, Garth, and Droske. Member Excused: Cirno  
Staff present: McNelly, Heins, Bradley, and Schuler, Planning & Zoning Department.

**Others Present**

Denise Brennecke, Joseph Koob, Roger Bacon, Alan Haney, Elbert & Laurie Stoltenberg, Pete Arntsen, Laurel Hoeth, Todd Knepfel, Dan Simkowski, Don Lutz, Pat Casey, Ron Hensler, Matt Hintz, Carol Romundson, Marlene Sannes, Janice Seybold, Mark Franke, Anne Abbott, Patti Orthwein, Cecile Stelzer-Johnson, Sue Tupper, Jim McKnight, John Eron, John Reser, Nancy Turyk, Bruce Dimick, Ray Cal, Brewster Johnson, Bob Gifford – Portage County District 10, and Patty Dreier – Portage County Executive.

**1. CALL TO ORDER**

The meeting was called to order at 5:03 p.m. by Schuler.

Schuler stated this ordinance was brought forth by concerned citizens during the Groundwater Management Plan process, and we felt it should be looked at further via a Subcommittee. McNelly stated the first thing we want to do is understand why and how this ordinance came about; discussions about specific items and recommendations within the ordinance will come throughout the process.

**2. SELECTION OF SUBCOMMITTEE CHAIR**

McNelly asked for nominations for Subcommittee Chair:

- McFarlane nominated Burns.

McNelly asked if there were any further nominations for Chair. Hearing no further nominations, McNelly called for a motion. McFarlane moved to elect Burns as Chair; seconded by Droske. Motion passed by voice vote, 4-0.

**3. REVIEW AND DISCUSSION OF DRAFT ORDINANCE**

McNelly gave an overview of the sections that make up the ordinance. Abbott stated the Town of New Hope learned of wells with high nitrates and also that Appleton was dumping their waste here in Portage County, and that started this discussion in the summer of 2016. We meet with the understanding that we need to address these issues at a local level. Abbott stated Kewaunee County has a lot of groundwater issues and drafted an ordinance and that caught their attention; even though they have different soil structure there. Portage County has a variety of soils, and the GIS Section in the Planning & Zoning Department can make maps that show the different types of soils around the County; GIS has maps for everything and it is available to the public. The Town of New Hope Citizens came up with a rendition of the Kewaunee County ordinance and brought it forth to GCAC and asked for assistance to improve it and to move it forward. Abbott stated we need to remember things change every day, and there is no one solution to fix all of this. Abbott stated the Town of New Hope is inviting farmers to sit with their neighbors and provide this information to them, and ask them what they are willing to do to help fix this. We have to stay on the same page, move things along, and put this at a local level. Abbott stated the problem with the local level is we do not have money and volunteers burn out, and that is a reason for an ordinance. At a local level we can put this ordinance through to referendum in each town, and they will have an option to adopt it.

McNelly asked Abbott what she felt the biggest issues were that this ordinance would address. Abbott replied nitrogen and e coli, and stated unless you test your water you will not know it is there. Arntsen stated he is a hydro geologist and his major concern is manure and bio solids applied to land contribute to high nitrates and bacteria.

McNelly asked why they felt the Kewaunee County ordinance was an appropriate ordinance to use as a model for Portage County. Arntsen stated they addressed it as a public health and groundwater protection ordinance, and it was mainly focused on manure spreading primarily from CAFO's. The Town of New Hope was seeing where this was being spread based on their geology which is shallow soils over limestone bedrock, "harsh terrain". This creates channels and pockets that allow these nitrates/bacteria to go directly into the well. Nitrates have long-term health effects, but bacteria is an immediate health effect and that gets people moving. Abbott stated the reason they felt Kewaunee County's ordinance was a good choice was because it is a model that had already been tested in court to some degree. The solutions have to come from studying other cases, using the best ones we can, and hopefully we do not end up in a battle. Burns asked Abbott if this ordinance is the best route to accomplish their goals. Arntsen replied yes, we are similar to Kewaunee County; it is a groundwater and health protection ordinance, and residents in the County do not have protection. Burns asked if there have been any wells that tested positive

for bacteria. McNelly replied she would have to go back and look. McKnight stated e coli has been found in the Town of New Hope. Abbott stated the State level for nitrates is 10 parts per million and for health benefits we need to get that level down; health field suggests 2 parts per million.

Mangin stated this ordinance is modeled after Kewaunee County, and asked if there are conditions here according to hydrogeology or land-use practices that might require us to study other things that need to be included in this ordinance that have not been included in Kewaunee County. Arntsen replied yes, this is a starting place. Arntsen stated a similarity is the high permeability low attenuation potential of a lot of our sands is analogous to the karst bedrock, but there are differences as well. We need to look at the land-use practices, and nutrient management plans. Nutrient Management Plans are designed to maximize profit for the crop that is grown and have no consideration for the effects on groundwater. Arntsen stated we can have rules, but without enforcement it does not do any good. If we change our ways, we can prevent it down the road.

Burns asked if the discussion about indicators for nitrates coming from human vs. animal was addressed in the Kewaunee County Ordinance as it was 50/50. Arntsen replied he is unsure, but stated we are looking at nitrates in water. It comes from human or animal manure, bio-solids, or agricultural practices; they are all sources of nitrates in the water. McKnight stated the USGS survey that was completed in 2016 states that 90% of the nitrates in the Little Plover River are from agriculture. Dimick stated they have done research on DNA to determine bacteria, but it is a case by case basis and very expensive.

Gifford stated he is interested in the intergovernmental aspect of this, and asked how we make this an enforceable ordinance. This is the first step of a long process to give the community rights to protect their water. Turyk stated we have a 2 acre lot minimum in rural areas do to the rate at which contaminants travel from septic's; it is in the subdivision ordinance.

McFarlane stated Portage County's Nutrient Management Plans are at 7% which is very low compared to neighboring counties, and asked why it is so low; Waupaca - 41%, Marathon - 55%, and Adams - 53%. Bradley replied 6% of Portage County's Nutrient Management Plans are required as they participate in the Farmland Preservation Program and those that have manure storage permits. Bradley stated he also works with 40 additional farms on their Manure Management Plans, and those are not recorded. Johnson-Stelzer asked what the compliance rate is for those farmers that have a Nutrient Management Plan. Bradley replied he is unsure as it is hard to know how much nitrogen is truly applied. Bradley stated 1-2% feel it is not adequate and apply more, but 25% are under the amount they are allowed to apply. McFarlane stated there is not enough staff to know, but the State does conclude random reviews. Burns asked how the nitrogen recommendation is created through the Nutrient Management Plan. Bradley replied it is based on the crop and by the yield response. McKnight stated the amount of commercial fertilizer is 163,000 tons in 2012 compared to manure at 27,000 tons; therefore, manure is not the only issue. McKnight suggested Manure Management Plans are profit plans, and groundwater is not in the equation at all. Burns asked Bradley if Nutrient Management Plans take into consideration the soil type, and also that is it for manure as well as any chemical derived fertilizer. Bradley replied that is correct; manure, commercial nitrogen as well as alfalfa plow down. Knepfel asked what percent of a crop is under the Nutrient Management Plan. Bradley showed a map of Portage County. McFarlane asked why Portage County does not request cost share funds for Nutrient Management Plans. Bradley replied they have in the past and they did not have enough interest; therefore, they had to return the funds. Bradley stated DATCAP's policy states you cannot apply unless you have a demonstrated need. Schroeder stated the majority of our farmers do a great job managing their nitrogen application and will not over apply as it is too expensive to do so.

Bradley read the university nutrient recommendation as follows:

*"University nitrogen recommendations are being widely used as the technical criteria for nutrient management regulatory policy. These policies often view university recommendations as a vehicle for achieving environmental objectives, while the basis for developing the recommendations is economic."*

Stoltenberg stated if the farmer is following those recommendations how do nitrates get into the groundwater. Bradley replied we have sandy soil, and if we get a heavy rain after nitrogen has been applied there is a lot of leaching. Burns stated that is why irrigation is the best option as you can space out your nitrogen applications throughout the season as the crop needs it as opposed to putting it all on upfront and hoping for no heavy rainfalls.

Audience member asked why we grow the crops we do. Bradley replied we help develop viable commodity markets for alternative crops/groundwater friendly crops such as soy beans. Soy beans do not require nitrogen, and if we can create a market for them it would be beneficial. Bradley stated we cannot tell farmers what to grow, but we can encourage them. Lutz stated there is different nitrogen available, and they could use environmental friendly nitrogen that has a slow release. Reser stated co-op's have Nutrient Management Plan writers, and they have no interest whatsoever in the income aspect of selling fertilizer, that is misleading. Arntsen stated the Nutrient

Management Plan is not the issue, it is best management practices, and how the plan is implemented. Irrigated agriculture can add nitrogen as the crops needs it, and in some other instances the fertilizer goes on in the spring and it can get lost before the plants even start to grow. Arntsen suggested leaving a corner of a field open instead of planting crops on every inch to allow for clean recharge.

Burns referenced section 3, #2 on page 6, and asked Bradley for laws or recommendations currently on the books for Portage County on waste to soil on frozen land, time of year, and stock piling. Bradley replied currently in DNR Code NR151 there are restrictions on stock piling manure on soils that are susceptible to groundwater contamination; therefore, we know where they can and cannot store manure. Bradley stated if there was a problem in the past they make the farmer aware and they correct it right away. When the ground is frozen soils are not permeable, and there is no leaching that will occur; therefore, there is no threat to groundwater. Stelzer-Johnson replied yes there is, because the manure gets flushed into the ditch or stream/river. Bradley stated that is a surface water issue, and any time manure leaves the property it is a violation and the County should be notified. Dimick stated part of the Kewaunee County ordinance states they are not allowed to spread on frozen soils, and Juneau County is the same way. Bradley replied just because they are requiring it does not make it a good idea, and stated there will be no leaching in the winter when the ground is frozen.

Droske questioned the word "waste" that is found in the language on page 1 and 6 as it might be limiting, and suggested leaving it out for a more general management practice. Abbott replied "waste" would make it a broader topic. Abbott stated a western state requires well water tests to be conducted every year in January, which is no different than the County requiring us to pump our septic every 3 years. We need to look at all the different ways, examine the system, and that is why we expanded it to waste. Droske asked if the intent is to make it more general, could this possibly be making it more specific. Abbot replied they discussed it a lot, and this is what they decided as language is the ultimate barrier and we need to bridge that gap so everyone understands it.

Hensler stated he taught at UWSP, and he challenged his students to create a better fertilizer; the key is to have something growing all the time (cover crops). Schroeder stated local farmers are working on incorporating cover crops. One thing they are experimenting with around the State is interceding cover crops into a growing corn or soy bean crop so that we can get those crops established early on. Kal asked what they are interceding with. Schroeder replied they are using winter rye, clovers, and alfalfa; it varies from farm to farm, but they keep on experimenting to find out what the right crop is. Johnson thanked the Town of New Hope for their hard work, and stressed the importance of community involvement and educating peers.

Lutz referenced page 7, and asked what constitutes a forecast? Abbott replied forecast is on the DNR website with a map that is very specific down to the soil types, and will help farmers know when they should or should not spread. Abbott thanked everyone, and stated this plan is not set in stone, and requests constructive changes.

#### **4. IDENTIFICATION OF ITEMS TO BE DISCUSSED AT UPCOMING MEETING**

McNelly stated we would like to break this down into subcategories to talk about specific issues. One of the larger ones as discussed tonight was Nutrient Management Plans, and others being water quality and quantity. In each subcategory we can discuss what is in State or local statutes, what is being done currently using experts and technical people from within those fields to answer questions for you. Burns asked that Bradley bring in information on NR151, and anything that has to do with runoff. McFarlane stated section 3 needs to be looked at.

#### **5. IDENTIFICATION OF EXPERTS TO BE INVITED TO NEXT MEETING**

\*\*Did not address at this meeting.\*\*

#### **6. NEXT MEETING DATE**

The next meeting date is tentatively set for Thursday, March 30, 2017 at 5 p.m., location to be determined.

#### **7. ADJOURNMENT**

McFarlane moved to adjourn the meeting; seconded by Droske. Meeting adjourned at 6:47 p.m.

---

Amy Heins, Recording Secretary

---

Ed Burns, Chair

---

Date

# Checklist for Consideration of the DRAFT – Public Health and Groundwater Protection Ordinance

**What is the need for a groundwater Protection Ordinance?**

- ✓ Are we in a position to explore this ordinance?
  - Yes – The proposed groundwater management plan identified an action to “explore drafting a public health and groundwater protection ordinance” to address the need to protect groundwater quality.
- ✓ What are the groundwater issues identified in the ordinance?
  - Nitrates
  - Bacteria
  - Runoff
  - Groundwater Quantity
  - Public Health
- ✓ What are the groundwater issues identified in the groundwater management plan?
  - Groundwater Quality
    - Monitoring
    - Nitrates
    - Pesticides
  - Groundwater Quantity
  - Communication
  - Radioactivity
  - Pharmaceuticals and personal care products
  - Arsenic

**How are the identified issues/concerns currently being addressed in the County, at the state, and at the Federal Level?**

- Local Ordinances
- State Statutes
- Federal Regulations
- Are these regulations doing an adequate job?
- If not, what is recommended?

**Is an ordinance an appropriate actions to address the concerns?**

- Yes
- No
  - If no, recommendations for how to address them?

**If an ordinance is deemed appropriate, what is the adequacy of the ordinance that has been proposed?**

- Are there items in the ordinance that the GCAC sub-committee cannot support as concerns?
- What is identified in the Groundwater management plan that is not being addressed by the ordinance?
- Are the recommendations in the ordinance appropriate to address action?
- Are there additional items that need should be addressed through an ordinance?