



**JOINT MEETING
PORTAGE COUNTY GROUNDWATER CITIZENS ADVISORY COMMITTEE
AND
PLANNING AND ZONING COMMITTEE
CONFERENCE ROOM 5, COUNTY ANNEX
THURSDAY, JANUARY 6, 2011 - 7:00 P.M.**

MEETING MINUTES

GROUNDWATER CITIZENS ADVISORY COMMITTEE (GCAC) MEMBERS LISTING:

MUNICIPALITY	MEMBERS NAME	Attendance	MUNICIPALITY	MEMBERS NAME	Attendance
TOWNS:		01/06/11	TOWNS:		01/06/11
Alban	Richard Mansheim	Present	Plover	Fritz Aschauer	Present
Almond	Edward Burns	Present	Sharon	Casey Jakubek	Present
Amherst	Mike Burress	Present	Stockton	Richard Filtz	Excused
Belmont	Rita Walkowicz	Present			
Buena Vista	John Ruzicka	Present	VILLAGES:		
Buena Vista Alt	Cathy Guth	Present	Almond	Gary Schultz	Absent
Buena Vista Alt	Lynn Isherwood	Present	Amherst	Mike Hinrichs	Present
Carson	Fred Copes	Excused	Amherst Jcnctn	VACANT	
Dewey	Dennis Meis	Present	Junction City	Peter Mallek	Present
Dewey Alt	Kathy Girolamo		Nelsonville	James Walker	Excused
Eau Pleine	VACANT		Park Ridge	Paul McGinley	Present
Grant	Mary Kiedrowski	Present	Park Ridge Alt	Christine Neidlein	Present
Grant Alt	Scott Provost		Plover	Dave Fritsch	Present
Hull	Tim Zimmerman	Absent	Rosholt	VACANT	
Lanark	Bill McKee	Present	Whiting	Sarah Gilbert	Present
Linwood	Richard Berndt	Excused			
New Hope	Laurie Stoltenberg	Present	CITY OF ST PNT	Joel Lemke	Absent
New Hope Alt	Cathy Derezinski				
Pine Grove	Wes Meddaugh	Absent			

PLANNING AND ZONING COMMITTEE MEMBERS PRESENT:

Barry Jacowski, Dave Medin, Jerry Piesik, Stan Potocki; Member excused: Olson

STAFF PRESENT: Jeff Schuler, Ray Schmidt, Patty Benedict, Planning and Zoning Department.

OTHERS PRESENT: Roger Turzinski, Elbert Stoltenberg, Maija Stumbris, and Patty Dreier, County Executive

1. CALL TO ORDER: The meeting was called to order at 7:00 p.m. by Chairman Burns.

BURNS READ THE PUBLIC NOTICE: Members of the public who wish to address the Committee on specific agenda items must register their requests at this time with such comments subject to the reasonable control of the Committee Chair as set forth in Robert's Rules of Order. No one registered to speak.

2. REVIEW/APPROVAL OF MINUTES OF NOVEMBER 4, 2010:

Motion by Guth, second by Hinrichs to approve minutes as presented. Motion carried by voice vote.

3. CORRESPONDENCE:

Christine Neidlein submitted a letter and read it to the committees. Neidlein has been a member of GCAC for over 10 years representing the Village of Park Ridge. She is troubled by the tone/mood during the past year's meetings, feeling that certain members have not been respectful of presenters. She acknowledges that all members do not agree on groundwater issues, but feels all want to preserve quality and safeguard quantity. She also feels the Committee should represent all County residents and their various opinions and strive to achieve

compromises. She encouraged and challenged the Committee to ask questions of future speakers respectfully and discuss groundwater issues with civility even though they may disagree. She concluded by saying she has been proud to serve on the Citizen Committee and hopes the volunteer citizen effort will continue to preserve the quality and quantity of the groundwater and educate ourselves and the general public about groundwater issues through written articles and educational forums held in municipalities.

4. INTRODUCTIONS: PLANNING AND ZONING (P&Z) COMMITTEE, GCAC, COUNTY EXECUTIVE DREIER

The committees, staff, and County Executive introduced themselves.

(Mary Kiedrowski arrived.)

5. PRESENTATION: HISTORY AND FUNCTIONS OF GCAC (SCHMIDT)

Schmidt stated a history of the Groundwater Citizens Advisory Committee (GCAC) and the Groundwater Council, formed in the early 1980's, was included in the meeting packets. The Groundwater Council was formed by the County Board in response to citizen complaints about groundwater issues. Citizens were concerned with aldicarb (a carcinogenic potato pesticide) and nitrate levels above 10 parts per million (ppm) in some wells, which, coupled with a poor economy, made selling homes difficult. Some homeowners approached their Towns, stating their home's values were declining and asked for their taxes to be reduced. Citizens complained to their County Board Supervisors about buried gasoline tanks, manure storage facilities, pesticides, and fertilizers leaking into wells. There were also issues with municipal wells. Modeling needed to be developed to determine where water was flowing from and what types of contaminants were present. By the early 1990's, municipal well recharge areas were identified. Laws were enacted within municipalities and in unincorporated areas under the County Board. The County's first Groundwater Management Plan (GMP) was adopted by the County Board in 1988 and responsibility for groundwater programming was given to the Planning and Zoning (P&Z) Committee. The Water Quality Specialist position was created to provide staff support to the P&Z Committee and the GCAC, and to implement the GMP. Schmidt said over the years, the P&Z Committee and GCAC have developed parallel paths, with the GCAC concentrating on groundwater issues, but not communicating much with the P&Z Committee. The P&Z Committee requested a joint meeting with the GCAC to find out how to make the relationship between the two committees work better.

6. DISCUSSION/POSSIBLE ACTION: GCAC AND ITS RELATIONSHIP TO THE P&Z COMMITTEE

Burns suggested appointing a liaison between the two committees. Piesik stated Schmidt has reported to the P&Z Committee regarding groundwater issues. He would like the P&Z Committee to be more informed of problems, solutions, and/or controversial issues coming from the GCAC. Piesik thanked the GCAC for the opportunity to attend their meeting. He also stated he is impressed by the participation on the GCAC.

Schmidt noted the P&Z Committee receives minutes of the GCAC meetings. Burns questioned how often groundwater issues come before the P&Z Committee. He feels it would be a good idea to have a GCAC member attend P&Z meetings when groundwater related questions arise. Jacowski offered to be a liaison for P&Z. Piesik said the P&Z Committee considers citizen feedback when making decisions, and feels the more feedback, the better. Schmidt said if a groundwater issue is of a technical nature, he could provide information to the P&Z Committee. If the issue is more citizen related, Burns or a designee should attend. Piesik stated he appreciates the citizens' perspectives as well as a professional viewpoint.

Potocki stated the GCAC is an advisory committee under the P&Z Committee. He said the P&Z Committee looks for GCAC's recommendations when groundwater related items come before them for action.

Schuler said the last GMP revision was passed in 2004. A recommendation was written into the 2004 GMP to review every five years. It has now been seven years. Schuler suggested the P&Z Committee could be a part of the process to review/update the GMP, looking at the strategies that have been accomplished and setting recommendations for the next five year period. He feels this would be a good way for the P&Z Committee and GCAC to be on the same page with regard to important issues. The original GMP resolution called for a semi-annual report, but Schuler felt a quarterly report by Schmidt to the P&Z Committee would keep them better informed. If the P&Z Committee has ideas or thoughts, Schmidt could relay them at the next GCAC meeting. Schmidt agreed, adding he can make the P&Z Committee aware of emerging issues.

Schmidt estimated about half the GCAC members are new within the last year. He said it is a large group and a good group, and feels it is a mark of success to have local municipalities willing to appoint citizen members.

Jacowski asked if the GCAC has a lot to do with revising the GMP. Schuler replied it is their plan. Jacowski questioned whether reviewing the GMP every five years is sufficient. Schuler said there is no magic number, but feels five years is adequate to review goals and strategies, and update or revise, if necessary.

Piesik asked what issues GCAC feels are most pressing at this time. Burns replied groundwater quantity has been one of the main topics lately. Subcommittees have been working on various other projects, such as nitrate surveys and cost of nitrate removal. Burns said he would like to have a future meeting dedicated to discussing GCAC members' opinions, priorities, and how they feel about the three main GMP goals: Pesticides, Nitrates, and Quantity.

Jacowski feels the quantity issue is symptom related. Lake and stream levels are down, but if last summer's rain and the amount of snow so far this winter repeat, quantity may not be the hot topic and other issues may rise to the top.

McGinley stated there are a lot of groundwater quality questions in the Village of Park Ridge. The Village Board would like the GCAC representatives to speak at a meeting. He feels quality is still an important issue.

Hinrichs stated an important issue GCAC has been talking about is the need for an efficient system of monitoring wells. There are a number of monitoring wells, but consistency in the location and depth is needed to make accurate comparisons over a period of time. There are five or six wells with long term depth and quality data, but there are areas where more are wanted to have the ability to trace movement of contaminants. Hinrichs would like to see testing similar to what is done for municipal water systems; however, there are costs involved.

Jacowski noted when George Kraft did his presentation at the November 2010 GCAC meeting, he was surprised at the small number of wells being tested. It was agreed there should be a larger base for information. Schmidt said there are four monitoring wells for water table depth.

Regarding groundwater quantity, Gilbert said the GCAC needs to have data in order to have an intelligent and effective conversation. What they have now is in bits and pieces.

Schmidt explained there are three GCAC subcommittees; Public Involvement & Education Subcommittee (PIES), Continual Assessment Subcommittee (CAS), and Groundwater Planning and Implementation Subcommittee (GPIS). The CAS, chaired by McGinley, looks at whether groundwater programs have had an impact. Schmidt said Hinrichs was referring earlier to the monitoring wells in place now, even though it is all they have to work with, may not be giving enough information on quality and elevation to groundwater.

Fritsch stated the Village of Plover also has concerns regarding needing more information. The information is based on a model, but there is no verification of the model.

Medin stated part of the P&Z Committee's job is to make sure the GCAC is enhanced. The GCAC is an investigative and deliberative body. He gave an example of a proposed project that came before the P&Z Committee in which the groundwater information provided allowed them to make a decision to require installation of a test well. Medin wanted the GCAC to be aware there is benefit in their efforts and thanked them. Schmidt said Portage County is the only county in the State that requires looking at groundwater for proposed lot splits.

Regarding needing more well data, Isherwood said there are many wells out there. She mentioned that Burns has past records of water levels on area wells. She suggested approaching others that have records and gather information. Burns said he only has water level information, but nothing regarding quality. Isherwood said to qualify for Good Agricultural Practices (GAP), a well water sample must be taken, but it is only tested for bacteria. McKee asked how prevalent the testing is in the grower community. Isherwood was unsure, but believes it is becoming more common.

McKee estimated there are a couple of thousand high capacity wells in the County. As an alternative to legislation, McKee said voluntary monitoring of half the wells in the county for precipitation, water level, and amount extracted, would give an incredible picture. Burns said even monitoring one well per township for five

years and calculating an average would be helpful. Schmidt said an annual report showing monthly gallons pumped must be provided to the DNR for every high capacity well. He said that information will be added to the County's Geographic Information System (GIS). McKee asked if knowing monthly volume is useful. Schmidt and Isherwood said it is when coupled with precipitation.

(Mallek arrived.)

Schmidt stated he, Burns, and George Kraft are working with the well records Burns has kept, and along with information from the 1950's and 1960's they hope to see groundwater fluctuations for the wells tracked, as well as comparisons to other wells.

Schmidt said the Town of Hull plans to look at private wells with a history of water quality data, primarily nitrates, to assess trends. Landowners can voluntarily allow use of their wells for future water quality testing.

Jacowski said looking at not only pumping data and groundwater depth, but precipitation falling in the general area of the well is important. Precipitation amounts can vary greatly in a small area. There are long term climatic wells in Hancock and Stevens Point, which have recorded precipitation data for 100 years. However, rainfall amounts can differ from one area to another just miles away, and bear no relationship to what falls in Hancock or Stevens Point. A more refined approach needs to be taken.

Stoltenberg asked if there are standard reporting forms to record data for monitoring wells. Schmidt replied the DNR has been working on developing a standard form, but still have separate forms for groundwater depth, one for general drinking water parameters, i.e., nitrates, pH, bacteria, and another for specific pollution areas. Stoltenberg suggested GCAC develop a form taking into consideration all the types of information they want collected. Schmidt agreed and said this can be discussed at a future meeting.

7. DISCUSSION: ROLE OF COUNTY EXECUTIVE IN FUTURE GROUNDWATER INITIATIVES

Dreier asked the GCAC what role they would like her to play. She noted she has a Master of Science degree and has taught about groundwater. She feels groundwater quantity is a top issue and will be for decades to come. McKee said funding is needed to finance monitoring efforts, collecting information, and data. It takes money to put instruments in place to monitor more wells in the County, whether irrigation wells, test wells, etc. Dreier proposed GCAC prioritize possible actions, clarify a vision, and come up with recommendations that can be worked into the budget process.

McKee said the Central Sands plain encompasses four counties. He would like to see more coordination between those counties. Schmidt stated Golden Sands Resource Conservation & Development (RC&D) area consists of nine counties, including the Central Sands area, and has the ability to oversee projects for an administrative fee.

Jacowski agreed funding is needed to test for quality. Quantity data has been collected, but needs to be pulled together. As a long term project, Burns suggested picking out a few wells, hire a summer intern to take measurements, and continue in future years.

Dreier noted the GCAC is interested in opportunities to engage in regional efforts, in collaboration with Golden Sands RC&D, to promote communication and research grants.

Schmidt said one of the roles the County has started to play is bringing various people together from different aspects of the groundwater community. A year ago, there were few grower representatives on the GCAC, and as a consequence, information was not received from them. The GCAC was perceived as being against agriculture. That perception is not as great now, and Schmidt feels it would be beneficial to have Dreier facilitate in further reducing the perception. McKee stated he has been on GCAC a couple of years, and feels the Committee has become more interesting and meaningful since growers have arrived. Dreier said she is hearing that the GCAC wishes to increase the diversity perspective. Schmidt said he appreciated that Dreier acknowledged the importance of groundwater when sharing her opinions at the League of Women Voters forum last fall, and saying she intends to spend money on groundwater.

Neidlein asked if staffing is adequate within the P&Z Department to gather and collate data. Schuler responded P&Z had the ability in the past to hire interns for special projects. Future budgets are uncertain, but once ideas

are fleshed out, an approach could be planned. Schmidt added that some undergraduate students at the University of Wisconsin Stevens Point (UWSP) have helped in the past by doing class projects at no cost, other than training time. Dreier noted GCAC is looking for ways to advance the science.

McKee said the CAS has been working on a report on the state of the groundwater in Portage County. It is nearly complete, through substantial efforts by McGinley. McKee feels the report will be a jumping off point for making policy decisions. McGinley said they have tried to put together available information in an easily accessible form, including a summary of United States Geographic Survey (USGS) information and the County database.

Jacowski said President Obama signed new food safety legislation. Part of the legislation affects the processing water used in food preparation. The County may have to look at how water quality affects the food processing industry.

Dreier said in her time as County Executive, she had environmentalists, farmers, growers, municipalities, and the science community contact her office regarding groundwater. They ask for ways to get closer to action that allows crossing all the sectors. They all see there are important perspectives and roles each play in the mix. Dreier said she will stand by to see what is next and keep communication going with Burns, Schmidt, Schuler, and Piesik.

8. UPDATE: LITTLE PLOVER RIVER (LPR) WORKGROUP

The LPR Workgroup has not met since the last GCAC meeting. Fritsch noted the Land Preservation Fund Committee is attempting to purchase and take land out of production for a park adjacent to the LPR. Among other uses proposed to attempt to decrease water taken from the recharge area, are residential development, and Department of Transportation (DOT) wetland restorations.

9. SUB-COMMITTEE UPDATES:

- a. **Public Involvement/Education Subcommittee (PIES):** Schmidt reported PIES has been sponsoring drinking water education programs in local municipalities with private wells. If requested by a town or village, Schmidt and PIES members will present a general groundwater education program, including the well abandonment topic and water quantity issues. The County purchased a nitrate test kit and is offering free nitrate testing. Citizens can bring a sample of their drinking water the evening of the program, have it tested, and receive results before leaving. Schmidt said four towns have requested presentations with tentative dates scheduled. The Village of Park Ridge had the presentation in June 2010, with tremendous attendance. Regarding well abandonment, Schmidt stated a Well Abandonment Ordinance has been adopted. The P&Z Committee directed Schmidt to look at the worst cases first. Nine wells, all potential health hazards, have been targeted in the last six months. Schmidt said as citizens' educational base is built, he believes there will be more voluntary compliance. Stoltenberg asked if letters have gone out to all towns and Schmidt replied yes. Stoltenberg asked if the Town of New Hope responded. Schmidt said no. Stoltenberg said she will remind the town.

Jacowski asked if the nitrate test data can be used to enhance the County database. Schmidt said the County does not keep the data because of two issues: 1) It is not known where the person got the sample; and 2) Some people do not want their information used.

- b. **Continuous Assessment Subcommittee (CAS):**

McGinley said the CAS has been working about a year on the state of the County's groundwater report, a compilation and summary of available information, which they feel will be a useful document. They have also been working on the pesticide analysis recommendation, including pesticide testing currently being done, and what isn't being tested, but perhaps should be. An evaluation and comparison is being done from a list of pesticide sales in the County and what are the most commonly used pesticides. McGinley feels they are close to having the state of the County's groundwater report ready to share with the GCAC soon. Hinrichs asked if the intent is to present the report to the GCAC to discuss, propose changes, and finalize. McGinley replied yes. McKee asked how the report relates to the P&Z Committee and what they will do with it. McKee further asked whether the GCAC should make policy recommendations based on the report. Schmidt replied yes. There will be an information base to work from, show where data gaps are, and where more information is needed.

c. Groundwater Management Plan and Implementation Subcommittee (GMPIS):

Schmidt said the subcommittee has not met. It appears the chair is not interested in being on GCAC. A new chair is needed to recruit subcommittee members from GCAC and/or others in the community. Isherwood suggested holding off until after the assessment report is reviewed and involve the entire GCAC in discussions regarding the GMP. Jacowski asked Schmidt to clarify whether he feels the entire GCAC should work on the GMP instead of a subcommittee. Schmidt said he thinks it functions better with a subcommittee to deal with topics as they develop and bring back to the full GCAC. McKee feels it would be very time consuming for the entire GCAC.

10. DISCUSSION: UNLIMITED TOPICS

Burns reiterated he would like to have a future meeting without a presentation for members to discuss opinions of past presentations, make a list of five or six groundwater topics and allow members to anonymously prioritize, general brainstorming, questions, and answers. Other members agreed.

Jacowski stated committees should be making sure presenters are relaying factual information and not opinion. Schmidt feels presenters GCAC had in the past have been reliable, but advised members to be skeptical listeners. If members have questions regarding information given during a presentation, McGinley suggested referring questions back to the presenter and ask for a written response.

Mansheim asked Fritsch, Village of Plover, what the mechanism is for checking monitoring well elevations. Fritsch explained the process. McKee asked how often municipal wells are monitored for depth to water and Fritsch replied three or four times a week. Pumping volume readings are taken about the same time daily. Fritsch said all municipalities monitor wells, but was unsure if code mandates monitoring or how often, but noted monitoring is a management tool used by the municipality.

11. GCAC MEMBER REPORTS:

Village of Amherst: Hinrichs reported a new church will be built across from the industrial park in the Village of Amherst. There are concerns with runoff staying within property lines.

Village of Park Ridge: McGinley reported he and Neidlein will be meeting with the Village Board to talk about groundwater.

Village of Whiting: Schmidt asked Gilbert if she is aware of the impact on water use when the Whiting Mill closes. Gilbert said she does not know the number of gallons; however, the financial impact is \$90,000 of income per year that will no longer be paid to the utility. Fritsch added the mill has three high capacity wells that will be shut down, significantly decreasing the amount of water pumped from the aquifer, which Schmidt said should benefit the Little Plover River. Fritsch said the Village of Whiting owns the three wells and leases them to the mill. If the wells will not be used, they must be properly abandoned. However, the Villages of Whiting and Plover have been looking for new well sites. Engineers are studying whether these existing Village owned wells can be used. Burns believes State Statutes require abandonment of high capacity wells that have not been used for three years. If the wells must be abandoned, Fritsch said the Villages prefer costs be covered by the mill. The three high capacity wells are used for mill production, with potable water coming from the Village of Whiting's two other wells.

Town of Almond: Burns said he measured the well he tracks just prior to the meeting. One foot was gained in two months. The measurement was 63 feet in the spring 2010, and is now at 60 feet, gaining three feet in nine months. Burns said the well is located about one mile north of Lake Huron in Waushara County. He started monitoring the well because the level of Lake Huron was going down and he wanted to know the difference between lake level and water table level. He said his water table level is about 14 feet higher than the lake level.

Jacowski asked whether the two committees should plan to have a joint meeting once a year. Burns feels meetings can be on an as needed basis when significant issues arise. Schmidt can provide updates when necessary. Burns said the GCAC is here to serve the P&Z Committee, and if they have questions, he encouraged them to bring them to GCAC.

Piesik said it was an interesting meeting and the P&Z Committee learned a lot. Hinrichs asked if the P&Z Committee would come to another GCAC meeting if asked, and they replied certainly.

12. NEXT MEETING DATE:

The next meeting is scheduled for Thursday, March 10, 2011 at 7:00 p.m. in Conference Room 5, County Annex.

13. ADJOURNMENT:

Motion by Ruzicka, second by Hinrichs to adjourn. Motion carried by voice vote. Meeting adjourned at 8:45 p.m.

Patty Benedict, Recording Secretary

Ed Burns, Chair

Date



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CONFERENCE ROOM 5, COUNTY ANNEX
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Eau Pleine	VACANT		Park Ridge	Paul McGinley	Present
Grant	Mary Kiedrowski	Present	Park Ridge Alt	Christine Neidlein	Excused
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Lanark	Bill McKee	Present	Whiting	Sarah Gilbert	Excused
Linwood	Richard Berndt	Excused			
New Hope	Laurie Stoltenberg	Excused	CITY OF ST PNT	Joel Lemke	Excused
New Hope Alt	Cathy Derezinski				
Pine Grove	Wes Meddaugh	Present			

STAFF PRESENT: Ray Schmidt and Jamie Phillis, Planning and Zoning Department.

OTHERS PRESENT: Pete Arntsen; Leo Kiedrowski; Barry Jacowski – County Board Supervisor District 19 & Planning & Zoning Committee member; Ken Schroeder – Ag Agent UWEX

- 1. CALL TO ORDER:** The meeting was called to order at 7:00 p.m. by Chairman Burns.
- 2. INTRODUCTION OF NEW MEMBERS:** Burns welcomed Nancy Lila from the Town of Plover; noting she was on the original Committee. Lila stated Zimmerman is the only other original member still on the Committee.
- 3. REVIEW/APPROVAL OF MINUTES OF JANUARY 6, 2011:** Motion by McKee, second by Burress to approve minutes as presented. Motion carried by voice vote
- 4. CORRESPONDENCE:** None.
- 5. BURNS READ THE PUBLIC NOTICE:** Members of the public who wish to address the Committee on specific agenda items must register their requests at this time with such comments subject to the reasonable control of the Committee Chair as set forth in Robert's Rules of Order. No one registered to speak.

Burns skipped to agenda item #7.

7. SUB-COMMITTEE UPDATES: CONTINUOUS ASSESSMENT SUBCOMMITTEE (CAS):
McGinley stated CAS has been discussing the State of the Groundwater report for about 1 ½ years. The Committee was supplied copies of the report. CAS assembled all available information and summarized it.

McKee feels it is a good starting point. There will not be an end to this report, as information continues to flow in, but this is an arbitrary stopping point.

Zimmerman asked if there was any information on trends, such as groundwater nitrate levels going up or down from a greater use of liquid nitrogen. McGinley replied not a lot. There are four monitoring wells in the County with long records and the report has graphs of those water levels.

McGinley went through the report with the Committee page by page. Zimmerman suggested adding an executive summary on the first page.

Burress asked about the radium issue. Schmidt replied radium, uranium, and strontium are all present in granite. A lot of wells north and northwest of Stevens Point are drilled into granite, so they are in contact with those radioactive materials in small quantities. Primarily, the wells east of Stevens Point have had to be abandoned because of radiation. One was at the Fleet Farm site. The State was very interested in radioactivity for a while, but found it was not easy to analyze. There is also some radon out gassing from those wells. Whenever somebody uses water and radon gas gets to atmospheric pressure, which is lower than groundwater pressure, it will out gas and inhalation is the major problem. Radon is not as much of a problem in the summer, but in the winter when the ground is frozen, it moves into people's basements.

McGinley stated there is nothing in the report about radon and asked if it should be. Schmidt replied in the Groundwater Management Plan it says that any well in granite bedrock will have some level of radiation, but testing is not readily available. It should be considered a factor in people's health. There is probably not enough data available to be put into the report.

McKee asked what the process would be for taking the report to County Board. Schmidt replied it would go to the Planning and Zoning Committee and then on to County Board. Also, it could go on the Portage County groundwater website for public access and copies sent to municipalities. McKee asked if it needs approval, or if it comes back to GCAC again. Schmidt replied he feels the report is substantially complete and if GCAC members have any suggestions, they should forward them to the CAS. The CAS would make reasonable changes and move it forward, but he did not feel the report needed any sort of approval. In order to get the report to the April Planning and Zoning Committee meeting, members should have any changes, suggestions, or comments to CAS by the end of March.

(Mallek arrived.)

6. DISCUSSION AND QUESTIONS/ANSWERS –UNLIMITED TOPICS SUBMITTED BY MEMBERS:

Zimmerman stated in the paper it said the Village of Plover is talking about buying some of the land around the Little Plover River (LPR) drainage from Worzella. There was also comment on whether or not it would help the LPR. He asked if GCAC was advising them in any way, or is it just between the LPR Workgroup and Plover. Schmidt replied the LPR Workgroup is its own entity advising on the LPR. The Village of Plover does not have the money to buy land from Worzella; they are trying to scare up grants or funds from the Department of Transportation (DOT) or the Department of Natural Resources (DNR) to make the purchase to put some of the formerly irrigated land in park land. If it does not have to be irrigated, then water is not taken from the ground.

Zimmerman asked if the Whiting mill closure and stopping the pumping will have any effect on the LPR. Schmidt replied it is projected the LPR will rebound somewhat because of water not coming out of groundwater and being left in the Whiting wellfield. The groundwater flow paths will change.

Zimmerman asked if phosphate has any connection to farming practices and if the DNR would continue to monitor the phosphate levels in the Wisconsin River. He wondered if liquid nitrate fertilizer works better and does not run-off as much as a solid fertilizer. Schmidt replied the phosphorous regulations were put on hold indefinitely by State government, but he anticipates they would continue to be studied. Regulations released last fall are in limbo. As far as liquid nitrogen versus solid fertilizer, an expert would have to answer that question. Burns replied most phosphates used are a solid. UW-Madison is working on recommendations for each crop based on expected yields. Ken Schroeder, Ag Agent, stated they are looking at nitrogen use on sweet corn and also slow release fertilizer on potatoes. There may be new recommendations coming out within a year. Phosphorous binds to soil particles. If there is high concentration in soil, it is from surface run-off or wind erosion.

Jacowski asked if the High Capacity Wells (HCW) paper mills are using are owned by the mill itself, or Whiting municipal wells. Schmidt replied the wells were owned by the mills, but now his understanding is they are owned by the Village of Whiting. The Village of Whiting was not sure if they should have the mill pay to abandon the HCW, or keep the HCW and potentially use them as part of a municipal water system in combination with the Village of Plover to help solve the LPR problem. He believes they are going to keep them and use them as a resource, rather than pay to abandon them and drill new ones in the future, if they were to put in a municipal water supply field there to serve multiple municipalities. Meddaugh asked how far those HCW are from the Plover River. Schmidt replied they are within a half mile, reasonably close.

Meddaugh asked if there would be any research done on damming the headwaters of the LPR. Schmidt replied that issue has come up at the LPR Workgroup, but they are not sure if State Statutes prohibit it. DNR will not allow any dams on a trout stream. They are actively encouraging removal of dams from trout streams because the fish spawn in the headwaters. Burns thought some type of wetland should be established at the headwaters, water could be released in dry times and collected in spring. Jacowski asked how big the recharge area is for the LPR. Schmidt replied it is pretty small, probably three to four miles in length and two miles wide.

Jacowski stated Del Monte deserves applause for their efforts on pushing water back toward the LPR, when it probably is not all their fault. Schmidt stated it is not all their fault; in fact, what they took out was much less than some of the other sources removing water from the groundwater and they are putting a lot more back in. Del Monte is taking water from the well west of the plant (where the black water tower is), treating it, and dumping it north of the plant closer to the LPR.

Burns went through some of the questions submitted by members. **Were we in a drought in Portage County in the last few years?** Mansheim replied the problem is how you define drought. Overall, it is on an annual basis. Burns stated he is talking cumulatively. Mansheim replied yes, precipitation has been below normal, but does it fit the definition. Jacowski stated when we talk about annual precipitation there is precipitation during months of frozen ground. When there is a thaw, a good portion of it runs off into the drainage system, lakes, and rivers. McGinley stated when he looked at annual precipitation records for the report, it did seem like in the 1950's it was drier than the last five years. Kiedrowski stated it is cyclical, the 50's were dry and now we have another set of dry years.

Jacowski asked what percentage of water is missing. Schmidt replied it is not a percentage thing; it is based on the depth that is projected versus what the depth actually is. Some areas are down one foot, and other areas are down four or five feet. Those hydrographs in the report show how deep the water table fluctuates at different places. The water level in the well in Bancroft is down about nine feet and the shallowest it gets is about four feet. The water level in the one in Plover is down about 12 feet and the shallowest it has gotten is about eight feet. Burns asked if extra water is attributed to geology. Mansheim replied yes. There is a different type of geology in the Town of Alban with less sand. If you look north of Amherst, between Amherst and Rosholt, some fields have many rocks.

Turzinski asked how low the Wisconsin River has been in the last 10 years because of drought. Schmidt replied it is down about 20 feet in some reservoirs. Jacowski stated if the river is lower, we have to drain faster. Schmidt stated the groundwater is reasonably level and drainage ditches are just leaks. Turzinski stated the water level in the well on his farm used to be three or four feet and now it is at least 13 feet. Schmidt stated there was a long-term decline, and with the precipitation last fall, it is coming up. Lila stated if the ground gets completely dry, it will never absorb water. With muck there is a layer of dust. Schmidt stated that is true with peat, if it has not broken down into muck yet.

Are we heading toward a sustainable system with some sort of guidelines for municipal, private, industrial, agricultural, and recreational uses for groundwater? Schmidt feels we are heading toward a sustainable system, as new ideas come forward. For instance, we are looking at precipitation closer, as well as cropping. Hinrichs stated if water is that precious to us, we should be doing everything we possibly can to replenish the groundwater. How much do you let go out before you say stop? Jacowski stated as a society we probably are not doing everything we can, but people are trying by going to low pressure shower heads, low flow toilets, and farmers have spent millions of dollars going to low pressure irrigation systems to cut down on evaporation. We are moving in the right direction, but there is more that can be done. Arntsen stated he feels one thing that has helped is the stormwater control standards. It used to be the practice for civil engineers to get the water out as fast as they can, but DNR has said you have to match discharge before and after development,

and install infiltration basins. Not only does it reduce the impact on rivers and surface water, but it infiltrates and allows groundwater recharge. It only applies in developed areas.

Turzinski stated this may be an issue we cannot do anything about, but approximately 40% of the food produced in the United States never gets eaten. This means 300 million barrels of oil and 25% of the nation's total water supply is being used to grow this wasted food.

Pipe Dreams. McKee stated about 50 years ago George Becker had a pipe dream, to pipe all of the effluent from the mills up north to get purified and put back in the river. **What we are all talking about is managing our resource, our groundwater.** He is not sure how many wells there are in the County, but they all are potential data collection points. He feels if there was more data, the resource could be managed in a much more precise way. It should all be public knowledge, how many gallons municipalities are pumping, as well as growers, and how much rain is falling. We keep talking about models, but we are not sure how accurate the models are. Do we really know what is going on based on five monitoring wells? Schroeder stated McKee makes a good point. The Vegetable Growers Association and the Irrigation Task Force are working on measuring depth to groundwater and setting up a system so many wells in the Central Sands area are measuring depth to groundwater. They are getting the data file set up to measure before pumping starts in the spring, mid-summer, and when pumping is complete. A large conservation innovation grant was just put forth, which is a multi-faceted grant that includes further monitoring and the potential to get more monitoring sites. The more information we can gather, the better we can understand what is happening. Schmidt asked if growers have already started monitoring depth to water in wells. Schroeder replied yes, they have some data collected.

Lila believes private businesses are monitoring. Any place where public is drinking the water, it has to be monitored. Schmidt stated yes, they are sampled for quality, but not for quantity. Lila stated we need our farmers and they need the water. It is in their best interest to know what is going on with the water. Mansheim stated when you are pumping in a field; it is getting reapplied directly to that field. A large part of that water is going back in, just like a septic system, as opposed to the City of Stevens Point where most of the water is going into the river. Meddaugh stated it comes down to the displacement of water and where you draw the line.

Burns stated there is a fee of \$125 charged to every HCW property in the State; those fees are used for the Great Lakes Water Basin compact administration. Jacowski asked if it should only be applied to HCW; people do water their lawns out of the same aquifer as the agricultural industry. McKee stated there should be self regulation. State Legislation should be directed at funding data collection so good local management decisions can be made. **He does not want to put the blame on homeowners, growers, or municipalities; it should be shared responsibility. We need to come up with a management system that involves everybody to protect what we have.**

Schmidt stated another issue brought up was the **possible link between pesticide exposure and the ability to learn.** UW-Madison Professor Warren Porter has been researching learning disabilities and pesticides for almost 20 years. One is an organophosphate called clorpyrophos. Schmidt was not sure how much of that pesticide was applied in the County. Burns thought it was not used anymore, but did not know if there were residuals around. Has anyone ever tested to see if it is in the groundwater in the Central Sands? Schroeder stated it is a common root worm insecticide, but is not being used in this area. Burns asked if Professor Porter should be invited to a future meeting. Schmidt thought it was a good idea.

Burns stated Schroeder and some associates have done a study on the economic impact that water has on Portage County, which may be a good agenda topic. Hinrichs had a guest he thought could possibly be on a future agenda as well. Arntsen stated his company is Sand Creek Consultants, an environmental consulting firm.

8. NEXT MEETING DATE:

The next meeting is scheduled for Thursday, May 5, 2011 at 7:00 p.m. in Conference Room 5, County Annex.

9. ADJOURNMENT:

Motion by McKee, second by Burress to adjourn. Motion carried by voice vote. Meeting adjourned at 9:15 p.m.

Jamie Phillis, Recording Secretary

Ed Burns, Chair

Date

**PORTAGE COUNTY GROUNDWATER CITIZENS ADVISORY COMMITTEE
CONFERENCE ROOM 5, COUNTY ANNEX
THURSDAY, MAY 5, 2011 - 7:00 P.M.**

MEETING MINUTES

GROUNDWATER CITIZENS ADVISORY COMMITTEE (GCAC) MEMBERS LISTING:

MUNICIPALITY	MEMBERS NAME	Attendance	MUNICIPALITY	MEMBERS NAME	Attendance
TOWNS:		05/05/11	TOWNS:		05/05/11
Alban	Richard Mansheim	Excused	Plover	Nancy Lila	Present
Almond	Edward Burns	Excused	Sharon	Casey Jakubek	Present
Amherst	Mike Burress	Present	Stockton	Richard Filtz	Excused
Belmont	Rita Walkowicz	Present			
Buena Vista	John Ruzicka	Present	VILLAGES:		
Buena Vista Alt	Roger Turzinski	Present	Almond	Gary Schultz	Absent
Buena Vista Alt	Lynn Isherwood	Present	Amherst	Mike Hinrichs	Present
Carson	Fred Copes	Present	Amherst Jcnctn	VACANT	
Dewey	Dennis Meis	Absent	Junction City	Peter Mallek	Excused
Dewey Alt	Kathy Girolamo		Nelsonville	James Walker	Excused
Eau Pleine	VACANT		Park Ridge	Paul McGinley	Present
Grant	Mary Kiedrowski	Absent	Park Ridge Alt	Christine Neidlein	Excused
Grant Alt	Scott Provost		Plover	Dave Fritsch	Absent
Hull	Tim Zimmerman	Present	Rosholt	VACANT	
Lanark	Bill McKee	Present	Whiting	VACANT	
Linwood	Garth Frost	Present			
New Hope	Laurie Stoltenberg	Present	CITY:		
New Hope Alt	Cathy Derezinski		Stevens Point	Joel Lemke	Excused
Pine Grove	Wes Meddaugh	Present			

STAFF PRESENT: Ray Schmidt and Jamie Phillis, Planning and Zoning Department.

OTHERS PRESENT: Pete Arntsen, Matt Saloun, Jim Gifford, Cathy Dugan, Barry Jacowski – County Board Supervisor District 19 & Planning & Zoning Committee member, and Ken Schroeder – Ag Agent UWEX

1. CALL TO ORDER: The meeting was called to order at 7:00 p.m. by Vice-Chair McKee.

2. INTRODUCTION OF NEW MEMBERS: McKee welcomed Garth Frost from the Town of Linwood. Frost stated he is a farmer. He runs a 3-generation farm and sawmill operation.

3. REVIEW/APPROVAL OF MINUTES OF MARCH 10, 2011: Motion by Zimmerman, second by Turzinski to approve minutes as presented. Motion carried by voice vote

4. CORRESPONDENCE: None.

5. MCKEE READ THE PUBLIC NOTICE: Members of the public who wish to address the Committee on specific agenda items must register their requests at this time with such comments subject to the reasonable control of the Committee Chair as set forth in Robert's Rules of Order. No one registered to speak.

6. WATER RELATED IMPACTS ON PORTAGE COUNTY ECONOMY (SCHROEDER):

Schroeder introduced himself as the Portage County University of Wisconsin – Extension (UWEX) Agriculture Agent. He provided GCAC with handouts and went through a PowerPoint presentation titled "The Role of Water in the Economy of Central Wisconsin."

The entire economic study is available through the University of Wisconsin – Madison Agricultural and Applied Economics website: <http://www.aae.wisc.edu/pubs/sps/pdf/stpap555.pdf>.

Zimmerman asked if there is a comparison with other counties that have a similar percentage of water use. Schroeder replied no, the study has not been expanded to that point. It was presented at the UWEX Conference held in Stevens Point hoping to find other counties interested in going through the same process.

Gifford stated if someone buys gasoline and fertilizer, much of that money does not stay in Portage County. He asked if the study took that fact into account. Schroeder replied yes, but he does not know the formulas. The study does take into account the fact that the product is exchanging hands, but there is mark-up so the local cooperative is making some money. It is not the entire value of the fuel itself, but basically the mark-up that is considered as part of the County economy.

Hinrichs would like to see how the structure of government jobs as a water use compares to the agricultural use. It seems people look at agricultural businesses and not municipalities, which do have high water use. McKee stated the title of the study is the economics of water dependent industries. Hinrichs stated he is saying the City is a water dependent industry. Schroeder stated the City uses water and it is something that could be looked at. The group involved in the study decided water for human consumption was not going to be taken into account because it would be difficult to generate numbers and to figure what would be included; each of us use water in our homes. Jacowski stated municipalities, as high capacity pumpers, are the only ones directly selling water. Schroeder stated if you think about water leaving the system, look at the processing plants, there is a certain amount of water in cans. With the paper industry, any water they use from municipal wells would end up down the river.

Schroeder thanked the Committee for inviting him to share this information and the Committee thanked Schroeder for his time.

7. MITIGATION OF NUTRIENT IMPACTS FROM AGRICULTURAL CHEMICAL FACILITIES (ARNTSEN):

Pete Arntsen introduced himself as an Environmental Scientist doing environmental consulting with Sand Creek Consultants in Amherst. They use environmental processes to fix environmental concerns. He provided the Committee with handouts and proceeded with a PowerPoint presentation titled 'Phytotechnologies: Theory, Design, and Application.' Phytotechnologies is the use of plants to remove or stabilize contaminants in soils, wastewater streams, or groundwater.

Schmidt asked how deep the water table is where the trees are planted. Arntsen replied they generally do not go into the water table, but can go down to water and draw it up. They can go down to 30 feet.

Stoltenberg stated she owns a building in the Village of Nelsonville and the water has nitrate problems. How do they find the source of the problem? Arntsen replied soil sampling is one of the first things to do. It is easier to come up with a solution, once the issue is identified.

Jacowski asked if boring through the natural hard pan that protects the groundwater would make the problem worse. Arntsen stated often times they will bore through the hard pan, but feel the trees will remove more nitrate then would migrate down through. Jacowski asked why they would deliberately drill holes in the natural hard pan. Arntsen replied to get underneath it, depending on where the contamination is. If there is no reason to go underneath the hard pan, then they would not. If they are just worried about shallow contamination, they would plant trees 10 inches and let the roots spread laterally. They try to avoid spreading contamination. Lila stated if contaminants are below the hard pan, someone has already disturbed it so the contaminants could get underneath. The roots of the plant should plug the hole rather quickly. Arntsen stated they do site investigations and evaluations when designing, and understand how things are going to move in nature. If they see things that may be a potential concern, they will address them. He is not aware of an instance where going through hard pan and spreading contamination has been an issue.

Turzinski asked if systems can be designed to protect municipal water supplies from contaminants. Arntsen replied it would have to be a big system. Turzinski asked about protecting the Village of Plover's water supply from nitrates. Arntsen replied the nitrates would already be so distributed throughout the aquifer that trees would only remove contaminants from the top. Permeable reactive barriers are being used to treat groundwater nitrate. Essentially, they are woodchip filled trenches installed below the water table, perpendicular to flow, so groundwater flows in with high nitrate, undergoes denitrification through soil microbes, and discharges from the other side low in nitrate.

Isherwood asked if they are looking first at groundwater flow direction when designing the systems. Arntsen replied groundwater flow is a key component, but they first do an investigation by testing the soil and water to see what contaminants are there.

Schmidt stated Nelsonville has shallow wells and septic systems and is surrounded by agriculture. He thought there could be more desirable landscaping species that would reach down deeper with the roots and clean up their own groundwater. Arntsen stated if there is shallow groundwater and a point source that is discharging nutrients, there is no reason why some type of phytosystem could not be installed.

Jacowski asked if biomass, taken from sites contaminated with heavy metals, has been tested for higher concentration of lead or zinc. Arntsen replied no. There have been studies done on the subject and various species are better at taking up different metals.

Lila asked if trees have ever been used after they have treated groundwater. Arntsen replied they could be used for woodchips, mulch, or firewood.

The Committee thanked Arntsen for his time and information.

8. ATRAZINE USE PROHIBITION AREAS AND NEWLY DISCOVERED ATRAZINE HOT SPOTS (SCHMIDT)

Schmidt stated some think atrazine is an old problem and wonder why testing is still being conducted. He presented a map to the Committee from the County Geographical Information System (GIS). There are spots where atrazine has been found above the health standard within the last six months. Groundwater moves and takes the dissolved contaminants with it, which means it will move the atrazine to other areas. It was originally thought that atrazine would be diminishing with the newer use regulations. Labels used to recommend 15 pounds per acre of atrazine, which did a great job at wiping out all the weeds. Then the amount was cut back to 10 pounds, but some were under the impression that if 15 pounds worked well, then 25 pounds would work even better. Now the label rates are 1.5 pounds per acre, and on sandy soils $\frac{3}{4}$ of a pound per acre. Even though low levels of atrazine are being used, it is still showing up in groundwater at levels above the health standard, which is three parts per billion (ppb). There are over 1,500 wells Countywide that have been sampled.

Jacowski stated it is important to point out that in moratorium areas no one is allowed to use atrazine at all. Schmidt stated correct. If farmers are obeying the law, which he believes they are, then atrazine is not being used within the moratorium areas and it should be declining in concentration. One consideration is that there is still farming and something is being used to control weeds whether it is cultivation or another herbicide. No one is actively looking for other chemicals that replaced atrazine within those areas.

Turzinski stated atrazine was one of the first things used. Most of the newer chemicals are more degradable. Schmidt stated they do break down more than atrazine, but their breakdown products are soluble and do go to the groundwater. Atrazine would be taken up by plants because it is so soluble.

Schmidt referred to the map by pointing out moratorium areas. If a well is found above the health standards (3.0 ppb), the Department of Agriculture, Trade, and Consumer Protection (DATCP) will send a specialist to investigate the area to see if there was a spill of atrazine. If there was a spill, then the spiller has the responsibility of clean up. If there was no spill, it is assumed to be from field use.

McKee asked if the plumes can be dated. Schmidt replied atrazine itself really cannot be dated. McKee asked if an atrazine area is near a lake or stream, is there atrazine in the surface water. Schmidt replied probably, there has been atrazine discovered in Sunset Lake in the Town of New Hope. McKee asked if it is carcinogenic for fish. Schmidt was unsure. Arntsen stated fish do not live long enough to die from cancer.

Jacowski asked if triazine is still listed as a carcinogenic; he thought it was removed from the list. Schmidt was unsure. He thinks it is still listed as a carcinogenic, but there are different levels. Atrazine and its three major metabolites are still on the Wisconsin list, but he is not sure about the Environmental Protection Agency (EPA) list.

Isherwood asked how wide spread atrazine testing was in 1993 and 1994 when they did the sampling. Schmidt replied there was at least one sample in every square mile of the County that was not in a marsh or wildlife area.

Walkowicz asked where the second site (with atrazine above the health standard) was located. Schmidt replied west of Boelter Lake. Isherwood asked where someone who lives near these sites would get their water tested. Schmidt replied on option would be the University of Wisconsin – Stevens Point (UWSP) lab. They do a diaminochlorotriazine test, or DACT, which is \$27. It is an indicator test that is fairly good at giving background levels of triazine. It will document atrazine and the three major metabolites, but is not conclusive, so a moratorium area could not be established based upon this test. If this indicator test comes in high enough, DATCP will sample and make recommendations to the Legislature.

McKee asked the process for establishing a moratorium area. Schmidt replied when he finds a hot spot, he notifies DATCP and they send out an inspector to find a reason why it is there. If they determine there was no spill, they assume it is from field use and do follow-up testing within a mile of the original well. Other wells may be found high in atrazine, but in the case of several four square mile moratorium areas, they could not find any other contaminated wells and still established a moratorium area.

Jacowski stated there was an issue with people tainting samples, so DATCP was taking a much closer look at situations where there was one hot spot and no other cause or wells. Schmidt stated he has never heard of that.

Arntsen stated the question would be how many samples it takes to be of concern. You cannot put too much faith in just one sample. Schmidt agreed. The initial process for establishing a moratorium area is DATCP sampling the area to document it above the health standard with atrazine plus the major breakdown product. Once that is done, DATCP and the Department of Natural Resources (DNR) would do annual testing on wells above the health standard. In about 2002, the State drastically cut their sampling money, and now there is no money for field workers to drive to sites. Arntsen asked how long a moratorium area stays in effect. Schmidt replied DATCP struggled with that issue knowing that groundwater microorganisms will breakdown some chemicals. DATCP set up some studies within moratorium areas around the State. One site, east of Bancroft, had monitoring wells installed upgradient and downgradient from the field. They let the farmer use normal farming methods and DATCP checked those wells monthly over a five-year period to see if they could allow atrazine use. In about 2/3 of those areas they found renewed contamination above the health standard. It was determined those moratorium areas would stay in place until they could figure a way to safely remove them. Where they did not find recontamination above the health standard, there still was contamination from the atrazine previously used on those fields.

Stoltenberg asked if there was periodic testing done in all moratorium areas. Schmidt replied no. DATCP's investigator is aware of areas and has access to land to see what is being used.

Schmidt will keep the Committee updated on atrazine. There may be publicity that atrazine is still found in moratorium areas years after the problem was first documented.

9. DISCUSSION: SPATIAL VARIABILITY OF PRECIPITATION IN IRRIGATED AREAS OF PORTAGE COUNTY

Schmidt stated one thing in question about research on high capacity wells (HCW) and groundwater pumping, is how we know the rainfall data is accurate. The primary rainfall stations are in Stevens Point, Hancock, and Waupaca. There are not many sampling points to document what precipitation has been more locally. Burns has provided some data from rain gauges on his farm. Before irrigating, they will look at how much rain they received to know how much water to put on that crop. Burns has seen some variability in rainfall across his fields. His data is from 2002-2009 and in some years there was as much as a two and a half inch difference in precipitation during the growing season where they would have to put more water on some fields than others. In just a mile there was a difference in precipitation of about an inch and a half during the same storm.

McKee asked if the precipitation data provided by Burns was an average over all the years or yearly. Schmidt replied it is pretty consistent across those years. There is no explanation for why this is the case. Knowing there is that much variability in a short distance shows we may need to look at things differently than taking wells 25 miles apart and using the average in between. McKee asked if there is a requirement to have a rain gauge on every irrigation rig. Schmidt replied no. Jacowski stated farmers have one on almost every field.

Schmidt stated this localized precipitation phenomenon will be documented over the next few years. Meddaugh stated he will supply his data with about 80 sites. Schmidt stated the Wisconsin Potato and Vegetable Growers

Association (WPVGA) has a similar project going, but on a Statewide basis. It is called the Irrigation Task Force.

McKee stated there are already two farms offering their data and asked if there was a way to get more farms to offer their information. Schmidt replied they would have to feel comfortable that any information they share will not be used against them. About 15 years ago there were many people who did not want to test their wells for nitrate because some banks would not give loans to buyers with high nitrate wells. They have to feel comfortable before they will voluntarily share their data.

10. SUB-COMMITTEE UPDATES

McGinley stated the Continual Assessment Subcommittee (CAS) has not met since the last meeting. They are still interested in receiving comments on the draft report they handed out at the last meeting.

Schmidt stated there are no other active subcommittees at this time. The Public Involvement/Education (PIE) does not have any members or a chair. He would like to see PIE start with a chair, which must be a member of GCAC, and then non-members can be added. One reason PIE should be reformed is to help work on the groundwater website. Schmidt has had a few articles in the local newspapers and on the Channel 9 News, and has had some people upset that it seems he is pointing fingers. PIE can help to educate the public so they have a better understanding. Contact Schmidt if interested in PIE.

Isherwood suggested GCAC have a presentation on the Portage County Drainage District and how it impacts agriculture.

Jacowski asked if Schmidt had any flow rates on the Little Plover River (LPR). Schmidt replied yes. The flow rates in the LPR are around 6-7 cubic feet per second (cfs). From the late 1950's through the late 1980's, the average flow rate was 10cfs. The normal flow is several cfs below the 30 year average. Gifford asked where the flow rate was taken. Schmidt replied County Road R. Gifford stated it is usually higher at Hoover Road, but for most of last summer, even at Hoover Road, it was running below 4cfs.

11. NEXT MEETING DATE:

The next meeting is scheduled for Thursday, July 7, 2011 at 7:00 p.m. in Conference Room 5, County Annex.

12. ADJOURNMENT:

Motion by Copes, second by McGinley to adjourn. Motion carried by voice vote. Meeting adjourned at 9:20 p.m.

Jamie Phillis, Recording Secretary

Ed Burns, Chair

Date

**PORTAGE COUNTY GROUNDWATER CITIZENS ADVISORY COMMITTEE
CONFERENCE ROOM 5, COUNTY ANNEX
THURSDAY, JULY 7, 2011 - 7:00 P.M.**

MEETING MINUTES

GROUNDWATER CITIZENS ADVISORY COMMITTEE (GCAC) MEMBERS LISTING:

MUNICIPALITY	MEMBERS NAME	Attendance	MUNICIPALITY	MEMBERS NAME	Attendance
TOWNS:		07/07/11	TOWNS:		07/07/11
Alban	Richard Mansheim	Absent	Plover	Nancy Lila	Present
Almond	Edward Burns	Present	Sharon	Casey Jakubek	Excused
Amherst	Mike Burress	Present	Stockton	Richard Filtz	Present
Belmont	Rita Walkowicz	Present			
Buena Vista	John Ruzicka	Excused	VILLAGES:		
Buena Vista Alt	Roger Turzinski	Present	Almond	Gary Schultz	Present
Buena Vista Alt	Lynn Isherwood	Present	Amherst	Mike Hinrichs	Present
Carson	Fred Copes	Present	Amherst Jcnct	VACANT	
Dewey	Dennis Meis	Absent	Junction City	Peter Mallek	Present
Dewey Alt	Kathy Girolamo		Nelsonville	James Walker	Present
Eau Pleine	VACANT		Park Ridge	Paul McGinley	Present
Grant	Mary Kiedrowski	Present	Park Ridge Alt	Christine Neidlein	
Grant Alt	Scott Provost		Plover	Dave Fritsch	Present
Hull	Tim Zimmerman	Present	Rosholt	VACANT	
Lanark	Bill McKee	Present	Whiting	Matt Saloun	Present
Linwood	Garth Frost	Present			
New Hope	Laurie Stoltenberg	Absent	CITY:		
New Hope Alt	Cathy Derezinski		Stevens Point	Joel Lemke	Excused
Pine Grove	Wes Meddaugh	Absent			

STAFF PRESENT: Ray Schmidt and Jamie Phillis, Planning and Zoning Department.

OTHERS PRESENT: Ken Schroeder – Ag Agent UWEX

1. CALL TO ORDER: The meeting was called to order at 7:05 p.m. by Chair Burns.

2. INTRODUCTION OF NEW MEMBERS: Matt Saloun represents the Village of Whiting and has worked for Whiting utilities for approximately 10 years.

3. REVIEW/APPROVAL OF MINUTES OF MAY 5, 2011: Motion by Walker, second by McKee to approve minutes as presented. Motion carried by voice vote

4. CORRESPONDENCE: Schmidt supplied the Committee with an article regarding the Wisconsin Supreme Court decision to protect State waters. He summarized the article stating a few years ago the Village of East Troy drilled a well, which was approved by the Department of Natural Resources (DNR), and the Lake Beulah Lake Association challenged the DNR's approval of the well. The Association thought the well would negatively affect Lake Beulah and sued. The case went through court and a few days ago the Wisconsin Supreme Court decided Lake Beulah does have an interest in the water pumped from the East Troy well, and the DNR has the responsibility to adequately review the well and its impact on surrounding groundwater and surfacewater.

Zimmerman stated what he understood was Lake Beulah Association can only challenge the DNR's right to permit. In other words, after the DNR gives a permit for a well there is no right to challenge the use of the well. Schmidt stated if that is the case, he misread the article. Burns stated he thought the Lake District could not make any regulations stricter than the DNR's regulations.

5. BURNS READ THE PUBLIC NOTICE: Members of the public who wish to address the Committee on specific agenda items must register their requests at this time with such comments subject to the reasonable control of the Committee Chair as set forth in Robert's Rules of Order. No one registered to speak.

6. PRESENTATION: UNDERSTANDING GROUNDWATER QUALITY REVIEW PROCEDURES FOR COUNTY SUBDIVISION ORDINANCE:

Schmidt went through a list regarding evaluation of potential groundwater quality for rural lot subdivisions in Portage County. There have been some suggestions that the County was overstepping its' bounds in looking at groundwater quality as an issue when there is a rural subdivision. In the 1980's, water quality was not considered. People would build a house in the country and put in a well, then be upset when the well was polluted and wonder who would pay for the problem. At the time, the cost burden fell on the owner. The County Board decided to pass an ordinance (in 1990) to review the lots before they are created in rural areas.

Schmidt referred to a map from the County's Geographical Information System (GIS), showing accurate locations of some wells that are drilled into bedrock. When a rural subdivision proposal is received, part of the process is to look at the water quality in the area to see if the water quality can be determined to put a well on the lot. The subdivision review is part of the reason why the County has assembled GIS information with well information, such as depth, construction, and water quality. At the Planning and Zoning (P&Z) Committee meeting on June 28, 2011 Schmidt was directed to see if more water quality information can be received from commercial labs.

Mallek arrived at 7:20 pm.

Schmidt referred to a few lots on the GIS that have already been reviewed. When looking at available water quality data, he also looks for a record of pesticides, such as aldicarb, in the area. Aldicarb was a potato pesticide used in the early 1980's and withdrawn from the market in Wisconsin in 1986. He also looks at atrazine and whether or not the property is in an atrazine moratorium area. Another issue to pursue is high nitrates. Nitrate can be an indicator of other contaminants that could be in the area. The higher the nitrate level, the more likely other contaminants are in the area. If there is recent enough information showing the area being subdivided is acceptable, as far as water quality, and there is enough data, Schmidt will inform the Zoning Section and they will approve the Certified Survey Map (CSM). Schmidt is very careful with the review process. We are reacting to what has previously been done to the groundwater. If the water quality is not good, then Schmidt will look at the type of land use in the area of the proposed lot.

Schmidt has the authority to approve a subdivision lot if the water quality is acceptable, if not acceptable, then the request will go before the P&Z Committee for consideration. In one instance, the P&Z Committee allowed the property owner to continue with the building process, but they would not approve the lot until a well was put in and the water sampled to prove the groundwater was acceptable beneath the property. The owner had the well driller go to a different elevation in the groundwater and found water of a higher quality than other wells in the area. The entire process took several months before the owner could get the CSM recorded and apply for permits. While going through the process, Schmidt got the Department of Agriculture, Trade, and Consumer Protection (DATCP) involved to look at contaminants in the area. The nearby church is a public building, which is subject to DNR oversight. Neighbors are concerned about the water quality, so DATCP is funding some sampling to find how widespread the atrazine contamination is.

McKee asked how atrazine moratorium areas are defined. Schmidt replied those are determined by DATCP through a public hearing process, and approved by the Legislature. DATCP considers a prohibition area for any place within a mile of a well producing water that is above the health standard for atrazine. In the case of the wells around Amherst Junction, there were about five wells above the health standard on the north and west sides. There were some further east along Lake Meyer Road found with multiple pesticides, some of which are believed to have come from the old co-op in Amherst Junction. A large moratorium area resulted from the entire process.

Schmidt stated if the process is going to change for subdivision reviews, then it would come through GCAC. If GCAC members feel something should change with the process, they should inform Schmidt.

Hinrichs asked why wells are drilled into bedrock. Schmidt replied if a well installer encounters bedrock within 25 feet of the surface, they are required to drill to 40 feet, seal the casing into the bedrock, and drill down from there.

In some cases, they will drill down into bedrock simply because of a water quality problem higher in the aquifer. Hinrichs stated atrazine has been around a long time and this is the second time it has been found recently above the health standard outside of the moratorium area. Schmidt replied some people thought it was fine to test 1,200 wells County-wide, but in the case of two wells a few hundred feet apart, one can have atrazine and one not, depending on how deep they are installed. Hinrichs asked if continued use, even at the 1 ½ pounds per acre, is possibly a threat. Schmidt feels it is most likely from a historical contamination problem that has not been fully characterized.

Filtz asked what people living in moratorium areas do for water. Schmidt replied some have their wells replaced to get to a different level in the aquifer and some just do not drink it. His approach is to let people know what the risks are and help them get their water sampled. Once they have information they can make their own decisions.

Lila asked if atrazine is absorbed through the skin. Schmidt does not believe so, just through ingestion.

7. DISCUSSION: SPATIAL VARIABILITY OF PRECIPITATION IN IRRIGATED AREAS OF PORTAGE COUNTY

Schmidt provided GCAC maps and a handout. He stated Burns shared information from his farm on the levels in different wells over the period 2002-2009. Schmidt referred to the map showing Pickerel Lake in relation to the Burns farm. Wolf Lake is northwest of Pickerel Lake. People in the area thought the water level dropping in those lakes was due to pumping out of high capacity wells (HCW). There were two long-term precipitation (precip) monitoring stations used for the whole area, one in Stevens Point and the other in Hancock at the research station. Burns has volunteered his precip measurement information to see what the precip was like by his fields. There are widely varied precip numbers for fields only a few miles apart over the years. Precip is such an important factor with irrigated agriculture because irrigation water is put on to replace what is not coming naturally. Irrigated agriculture cannot be understood completely without looking at a few rainfall stations.

Burns stated it is too bad there is no data for 2010. His numbers are just for the growing season from April until the rain gauge would freeze.

McKee asked for an example of different situations. Burns replied wells C and D are 1 ¼ mile apart on County Road A, in 2009 the overall precip was almost four inches different. This is why Burns has a concern with George Kraft's model.

McKee stated it is apparent it can rain on one side of the street and not the other, but does it answer any questions about lake levels. Burns replied no, but to find the ultimate answer all of the pieces must be looked at. His data does not account for winter snowfall.

Fritsch stated Plover is a station for reporting snow depth and precip. They were just accepted in the spring. Burns stated it would be interesting to compare Stevens Point data with Plover.

Isherwood asked how snowfall is calculated. Fritsch replied snow is captured, brought in to be melted down, and measured. What happens in the spring is unknown because it could melt differently. Schmidt stated in the sandy areas it moves around a little before it soaks in, but with the heavier soils it will move a long way before it soaks in.

McKee asked why levels are up in lakes this year. Schmidt stated probably from excessive precip received last year.

Hinrichs stated the problem he has is with more water being used in drier times. There has to be some sort of self regulation. He would like to see Plover's data compared to Hancock's. Schmidt stated those comparisons will be made, it is an ongoing process.

Lila stated every one of these lakes has an association, and asked if they would be a good source of information. Schmidt replied they could be added to the model. McKee asked about the Wisconsin Potato and Vegetable Growers Association (WPVGA), most farmers have a rain gauge on their fields. If we are just talking about the amount of rain, what would it take to get WPVGA to have its members submit information? Burns stated he has asked Wysocki's if they had a record like this and they just check on a day-to-day basis. There is a grower north of him that started keeping record in 1945 and now his granddaughter checks the rain gauge and snowfall also.

Schroeder stated he has attended several WPVGA meetings and it is quite the process to get everyone to submit their data. They are working on well depth, which varies from grower to grower, and trying to get a broad representation of the area. It is a process that takes a lot of organization and commitment. Turzinski stated farmers are afraid any information they submit will be used against them, especially since the groundwater Legislation last year.

Hinrichs asked what are we looking to do long-term by collecting data. Burns intention was to show that Kraft's model was pretty broad, and that there was more to look at. Schmidt stated if better data is put into the system, then it may be more acceptable and understandable to everyone.

8. CONTINUAL ASSESSMENT SUB-COMMITTEE UPDATE: SUGGESTED GROUNDWATER SAMPLING AND MONITORING GUIDELINES

Schmidt provided GCAC with a memo he gave to the P&Z Committee after GCAC's May meeting. The P&Z Committee is very interested in what GCAC is doing. They would like GCAC to present the State of the Groundwater report at their July meeting.

Burns asked if any member had anything to report from their municipality.

Saloun would like any information on the wind turbine going up on Taft Road in Plover. Burns stated there are quite a few wind turbines near Fond du Lac and there have been issues with the amount of noise they make. Aerial applicators are upset with the number of cell towers going up, which is a considerable hazard to them.

Burns stated the DNR has been working to update their HCW data. Saloun stated the Village of Whiting has seven HCW and some well identification numbers are wrong. McKee asked what is happening with wells from the Whiting mill. Saloun replied at the moment they are shut down.

9. NEXT MEETING DATE:

The next meeting is scheduled for Thursday, September 8, 2011 at 7:00 p.m. in Conference Room 5, County Annex.

10. ADJOURNMENT:

Motion by Kiedrowski, second by Hinrichs to adjourn. Motion carried by voice vote. Meeting adjourned at 8:50 p.m.

Jamie Phillis, Recording Secretary

Ed Burns, Chair

Date

**PORTAGE COUNTY GROUNDWATER CITIZENS ADVISORY COMMITTEE
CONFERENCE ROOM 5, COUNTY ANNEX
WEDNESDAY, SEPTEMBER 7, 2011 - 7:00 P.M.**

MEETING MINUTES

GROUNDWATER CITIZENS ADVISORY COMMITTEE (GCAC) MEMBERS LISTING:

MUNICIPALITY	MEMBERS NAME	Attendance	MUNICIPALITY	MEMBERS NAME	Attendance
TOWNS:		09/07/11	TOWNS:		09/07/11
Alban	Richard Mansheim	Absent	Plover	Nancy Lila	Absent
Almond	Edward Burns	Present	Sharon	Casey Jakubek	Present
Amherst	Mike Burress	Present	Stockton	Richard Filtz	Excused
Belmont	Rita Walkowicz	Absent			
Buena Vista	John Ruzicka	Present	VILLAGES:		
Buena Vista Alt	Roger Turzinski	Present	Almond	Gary Schultz	Absent
Buena Vista Alt	Lynn Isherwood		Amherst	Mike Hinrichs	Excused
Carson	Fred Copes	Absent	Amherst Jcnctn	VACANT	
Dewey	Dennis Meis	Excused	Junction City	Peter Mallek	Excused
Dewey Alt	Kathy Girolamo		Nelsonville	James Walker	Absent
Eau Pleine	VACANT		Park Ridge	Paul McGinley	Present
Grant	Mary Kiedrowski	Excused	Park Ridge Alt	Christine Neidlein	
Grant Alt	Scott Provost		Plover	Dave Fritsch	Present
Hull	Tim Zimmerman	Absent	Rosholt	VACANT	
Lanark	Bill McKee	Present	Whiting	Matt Saloun	Excused
Linwood	Garth Frost	Excused			
New Hope	VACANT		CITY:		
New Hope Alt	Cathy Derezenski		Stevens Point	Joel Lemke	Excused
Pine Grove	Wes Meddaugh	Absent			

STAFF PRESENT: Ray Schmidt and Jamie Phillis, Planning and Zoning Department.

OTHERS PRESENT: Ken Schroeder – Ag Agent University of Wisconsin Extension (UWEX)

1. CALL TO ORDER: The meeting was called to order at 7:05 p.m. by Chair Burns.

2. INTRODUCTION OF NEW MEMBERS: None

3. REVIEW/APPROVAL OF MINUTES OF JULY 7, 2011: Motion by McKee, second by Ruzicka to approve minutes as presented. Motion carried by voice vote.

4. CORRESPONDENCE: None.

5. BURNS READ THE PUBLIC NOTICE: Members of the public who wish to address the Committee on specific agenda items must register their requests at this time with such comments subject to the reasonable control of the Committee Chair as set forth in Robert's Rules of Order. No one registered to speak.

Chair Burns moved to item number 7.

7. DISCUSSION: CENTRAL SANDS GROUNDWATER QUANTITY RESEARCH PROJECTS

Schroeder reported on a grant that was acquired by AJ Busin, UWEX Vegetable Specialist. He put together a \$700,000 grant from the United States Department of Agriculture (USDA) and Natural Resources Conservation Service (NRCS). It is a conservation innovative grant focusing on preserving the water resources in Central Wisconsin. One objective includes implementing an improved irrigation scheduling program, which is basically a checkbook method of inputs and outputs of irrigation and groundwater management. The goal is to make it user friendly to get it used by more growers. Another objective is coordinating the monitoring of depth to groundwater. There is a group of growers that had been recording groundwater levels on their wells. There will be monitoring wells put in (as a result of this funding) in addition to those irrigation wells. They will be monitored to see what is happening as far as fluctuations in groundwater levels.

McKee asked the scope of the grant. Schroeder replied the focus is going to be somewhat strongly on the Little Plover River (LPR), Long Lake, and one lake that is not stressed. McKee asked who the author is. Schroeder replied the grant was written by AJ Busin and Matt Brewar, a soil scientist from UW-Madison. They are looking at a limited term person with hydrologic and vegetable experience to do monitoring and data collection.

Schmidt asked what percentage of growers use irrigation scheduling. Schroeder replied a survey was done, but results are not in yet. Burns stated the only experience he has is with the wisdom program, which is the irrigation scheduling program that was number one about 10 years ago. He thought it was inconsistent and he did not always agree when it told him to water. Schroeder stated there are some growers still using some form of the wisdom program, which has evolved. The hope is to also incorporate field moisture sensors.

McKee asked if it is an automated system. Schroeder replied it will be adaptable to where you can put moisture sensors out in the field and set those up to be read with a cell phone or downloaded to a computer. There are always added costs when putting moisture sensors in. Some are reasonable, but you have to understand the soils variation and pick the right spots, then adjust accordingly. Burns stated the software to access with a cell phone can be a few thousand dollars per machine.

Schroeder stated Kansas State University has an irrigation scheduling program that this one will be based on and they have been irrigating for many years. A few objectives include looking at nitrogen management strategies and incorporating manure into the vegetable cropping systems; looking at slow release fertilizers to reduce the influx of nitrate into the groundwater; and looking at perennial legume cover crops in vegetable cropping systems. There has been some small plot research done in Hancock, which showed some positive effects. The idea is to recycle nutrients rather than to have them end up where they are not wanted. The focus will be to implement it in grower fields and have demonstrations set up.

Schroeder stated Discovery Farms will be involved in helping with testing. It started at UW-Platteville, their agriculture farm is considered to be a Discovery Farm. What they do is groundwater monitoring underneath some fields, look at tile drainage and run-off on fields, and measure infiltration of chemicals. McGinley stated some run-off samples are tested at the UW-Stevens Point (UWSP) lab through the United States Geological Survey (USGS) who set up field instrumentation.

Burress asked if Schroeder works with Gary Zimmer from Midwest BioAg. They have a lot of success with minimizing herbicides and pesticides. Schroeder replied no, but should talk with him. Zimmer is out of Spring Green.

Schmidt stated it was mentioned the perennial clover, for instance, snap beans, sweet corn, and then potatoes, and he asked if this is a standard rotation for growers around Portage County. Schroeder replied it varies. Burns stated the season generally rotates around potatoes every five years on particular fields that are conducive to potatoes. It can be every five years to put potatoes on fields in rotation, then the other four years crops can vary. He is trying not to put so much white sweet corn in front of the potatoes. He prefers to have beans or cucumbers. Field corn is impossible because there is so much fodder. You need a clean seed bed for potatoes. Schroeder asked if they grow snap beans. Burns replied yes. Schroeder asked what follows the snap beans. Burns replied whatever fits the schedule, sweet corn, field corn, depends on how many acres or who is looking for what. A canning company can call and tell you how many acres they want of something and then you have to juggle the fields around to get the right outcome.

Schroeder stated in 2009 there were some yield trials done on a field that had grown multiple strips of snap beans and then followed it with sweet corn in 2010. The yields on clover strips where they used 50 pounds less nitrogen per acre were equal to or slightly better than strips where they had used a full rate of nitrogen. Burns asked if there was any benefit in the second year of clover. Schroeder replied the research had limited trials. There is some flexibility coming off of snap beans; you can go to sweet or field corn. If you can carry clover through, not have to till it up in the fall but in the spring, you will get nitrogen credits of 50-80 pounds per acre. If it were a second year red clover, then you can get more credits of up to 110 pounds per acre.

McKee asked the relation of the cover crop to water the land requires. Schroeder replied it is going to need water to grow. When being established, snap beans will be irrigated and if they have a good enough start, then additional water will not need to be applied unless it gets incredibly dry. The challenge with starting seeds at the hot time of the year is they need water.

Schmidt stated in addition to irrigation wells, the growers are monitoring for depth to water, the project was going to put in some additional monitoring wells. He asked if the wells were going in areas growers cannot determine the water table adequately. Schroeder replied the next few months will tell how it will be laid out.

Turzinski thought it would be interesting to put a test well in between wells a few miles apart to see different fluctuations. Burns thought drawdown tests had been done. Schmidt stated around the LPR there were some done. McKee stated there are one thousand potential data points in Portage County. Each should have a sensor that gives depth to water. The more information we have, the better able we are to manage our groundwater. Schroeder stated the technology is out there. It is possible to put on sensors that will measure every 15 minutes or however it is programmed. The Wisconsin Potato and Vegetable Growers Association (WPVGA) and some individual growers have purchased those units. McKee stated the potential is there to have some kind of world class groundwater management. He is not pushing for Legislation, but for information. Schmidt asked Schroeder to keep GCAC up-to-date on the research projects. The Committee thanked Schroeder for his time and information.

6. DISCUSSION: PROPOSED UPDATE OF THE GROUNDWATER MANAGEMENT PLAN IN 2012

Schmidt stated GCAC was provided with the Groundwater Management Plan (GWMP) Section 6.0 Recommendations, which are from the 2004 GWMP version. It has some goals and strategies envisioned to be in place by the time of the GWMP revision. Schmidt thought if the revision was going to happen in 2012, GCAC should be familiar with Section 6.0. Schmidt went through the document point-by-point.

One that has not been completed is an analysis of the economic cost of groundwater contamination to the residents of Portage County. Schmidt believes this should be done because there should be a handle on what people are spending on water treatment devices, alternative water supplies, and potential illnesses from drinking contaminated water. An Agricultural Economist would be needed to help with and potentially write a grant for that project. There was no success in finding grant funds a few years ago when Patty Dreier was the County Grant Writer. Grant funds now are even harder to find, but that does not mean we should stop looking for them.

Section 6.1 focuses on goals. The first goal is to determine what pesticides are used and where. Schmidt stated there is an idea of where pesticides are being used, but it is not good enough to target specific areas or wells. The second goal is for pesticides with established groundwater standards. It was thought to maintain pesticide concentrations in the groundwater below the Preventative Action Limit (PAL). The PAL is a groundwater, drinking water standard the State says is okay to pollute up to that level and it will not be harmful. In areas where pesticide concentrations are already over the PAL, action should be taken to lower those levels down to the PAL. We know multiple pesticides work together in different ways. The goal is to have pesticides below the PAL. Schmidt stated the third goal is for pesticides without groundwater standards. There are pesticides being used with no risk-based groundwater standards set for them. It is unknown what the standard should be if those pesticides are found in groundwater. Levels should be maintained or lowered to levels below the PAL that has been established for pesticides of similar toxicity and mode of action.

Schmidt referred to nitrate goals. Areas where groundwater nitrate is below the health standard of 10 parts per million (ppm), it should be maintained at that level or lowered. In places where nitrate is at or over 10 ppm, nitrate concentrations should be reduced to below 10 ppm. In areas where nitrate is below the health standard, but are causing negative environmental impacts, measures should be taken to reduce nitrate levels so there are no negative impacts. Negative impacts may be with trout populations and frogs.

Schmidt referred to quantity goals. Avoid significant human influenced depletion of the County's lakes, streams, wetlands, and groundwater reserves, and identify areas within the County that may have groundwater shortages now or in the future. In a general way, we have been working on both of those issues through research done at UWSP and the efforts of the WPVGA at UWEX.

Some strategies include continuing current County programs that affect or improve groundwater. Some programs are administered by the Planning and Zoning Department and some by the Health and Human Services Department. One program that has been put in place is the Well Abandonment Program that was included in the 2004 GWMP version.

McKee asked if the County requires public wells to be tested annually. Schmidt replied the State does. If a well is above the health standard for nitrate, it has to be tested quarterly. Health Department staff takes samples when they do the annual inspection.

Schmidt stated one on-going public education facet is the website development. We are slowly integrating more information onto the groundwater website, and even the Planning and Zoning Department website. Another educational facet is to develop a Portage County agricultural pesticide reporting database. All of the pesticide applicators in the County have to maintain records of what they apply, the rates at which it is applied, and where. The idea behind the reporting database is to determine what pesticides are being used and where to potentially sample the groundwater to find out if they are showing up. The label rates for pesticides are presumed not to have an adverse environmental impact. There will be some incidental contamination of the groundwater with some of the chemicals being used. More of the newer chemicals are less likely to leach into groundwater. Without knowing where they are applied and at what levels, we do not have a good handle on where to test.

McKee asked if we can get any information from the Department of Agriculture, Trade, and Consumer Protection (DATCP). McGinley replied the information received from DATCP was the quantities of pesticides sold by dealers. There was no application data. Turzinski stated farmers or applicators have to keep records for two years, unless atrazine is used then records must be kept for three years. The record has to be on hand in case DATCP personnel would stop and request it.

Schmidt stated if there was a pesticide reporting database where information could be entered in the Geographical Information System (GIS) and used for analysis, there may be a layer showing atrazine in areas where atrazine is not banned. When first discussing the development of an agricultural pesticide reporting database, there was a concern about confidentiality and liability to the landowner upgradient. The County is trying to help people understand what is in their drinking water. McKee asked if developing this database will even be possible. Schmidt replied it was not possible back in 1988, but each strategy should come back for consideration after details are developed and go before the Planning and Zoning Committee and County Board for action. The only strategy that has come back and been acted upon is the Well Abandonment Program.

McGinley asked if application of chemicals would vary much within a square mile. Turzinski replied there are several chemicals that do the same job; it is just the farmer's preference. They may be similar, but not exactly the same. Burns stated to have a database showing all the acreage in Portage County and listing the products used would be quite an undertaking. McKee asked how hard it is to keep a list of what gets applied to a farm field within a year. Turzinski replied not hard at all, they have to keep a list. McGinley stated it would be nice to place those chemicals so we are able to inform people of what chemicals are applied upstream of their well. Schmidt feels the pesticide reporting database is needed because it is the only way to know what to test for without wasting sampling and analysis money and to not give people a false sense of security. Another strategy is to negotiate conservation easements and buy land. Some of those have been accomplished in the LPR area and other places within the County's Plover River basin.

Schmidt stated revising the GWMP will be a step-by-step process and he would like GCAC members to start thinking about the revision. McKee asked if the old GWMP should be referenced. Schmidt replied yes, we should analyze and report on what has happened as a part of the original plan.

8. CONTINUAL ASSESSMENT SUB-COMMITTEE UPDATE: SUGGESTED GROUNDWATER SAMPLING AND MONITORING GUIDELINES FOR PESTICIDES

McGinley stated Continual Assessment Sub-Committee (CAS) met in August to discuss a list of pesticide ingredients sold in the County in order to come up with sampling recommendations. They are going to meet again to refine the list and bring it to GCAC.

9. NEXT MEETING DATE:

The next meeting is scheduled for Thursday, November 3, 2011 at 7:00 p.m. Conference Room 5, County Annex.

10. ADJOURNMENT:

Motion by Ruzicka, second by McKee to adjourn. Motion carried by voice vote. Meeting adjourned at 8:55 p.m.

Jamie Phillis, Recording Secretary

Ed Burns, Chair

Date

**PORTAGE COUNTY GROUNDWATER CITIZENS ADVISORY COMMITTEE
CONFERENCE ROOM 5, COUNTY ANNEX
THURSDAY, NOVEMBER 3, 2011 - 7:00 P.M.**

MEETING MINUTES

GROUNDWATER CITIZENS ADVISORY COMMITTEE (GCAC) MEMBERS LISTING:

MUNICIPALITY	MEMBERS NAME	Attendance	MUNICIPALITY	MEMBERS NAME	Attendance
TOWNS:		11/03/11	TOWNS:		11/03/11
Alban	Richard Mansheim	Absent	Plover	Nancy Lila	Excused
Almond	Edward Burns	Present	Sharon	Casey Jakubek	Present
Amherst	Mike Burress	Present	Stockton	Richard Filtz	Present
Belmont	Rita Walkowicz	Present			
Buena Vista	John Ruzicka	Excused	VILLAGES:		
Buena Vista Alt	Roger Turzinski	Present	Almond	Gary Schultz	Absent
Buena Vista Alt	Lynn Isherwood	Present	Amherst	Mike Hinrichs	Present
Carson	Fred Copes	Excused	Amherst Jcnctn	VACANT	
Dewey	Dennis Meis	Absent	Junction City	Peter Mallek	Excused
Dewey Alt	Kathy Girolamo		Nelsonville	James Walker	Present
Eau Pleine	VACANT		Park Ridge	Paul McGinley	Excused
Grant	Mary Kiedrowski	Present	Park Ridge Alt	Christine Neidlein	
Grant Alt	Scott Provost		Plover	Dave Fritsch	Present
Hull	Tim Zimmerman	Present	Rosholt	VACANT	
Lanark	Bill McKee	Excused	Whiting	Matt Saloun	Present
Linwood	Garth Frost	Present			
New Hope	VACANT		CITY:		
New Hope Alt	Cathy Derezenski		Stevens Point	Joel Lemke	Present
Pine Grove	Wes Meddaugh	Absent			

STAFF PRESENT: Ray Schmidt and Jamie Phillis, Planning and Zoning Department.

OTHERS PRESENT: Barry Jacowski – Portage County Board of Supervisors District 19; and Andrew Jacowski.

1. CALL TO ORDER: The meeting was called to order at 7:00 p.m. by Chair Burns.

2. INTRODUCTION OF NEW MEMBERS: None.

3. REVIEW/APPROVAL OF MINUTES OF SEPTEMBER 7, 2011: Motion by Walker, second by Hinrichs to approve minutes as presented. Motion carried by voice vote.

4. CORRESPONDENCE: None.

5. BURNS READ THE PUBLIC NOTICE: Members of the public who wish to address the Committee on specific agenda items must register their requests at this time with such comments subject to the reasonable control of the Committee Chair as set forth in Robert's Rules of Order. No one registered to speak.

6. DISCUSSION/SCHEDULE: PROPOSED UPDATE OF THE GROUNDWATER MANAGEMENT PLAN (GWMP) IN 2012

Schmidt provided the Committee with a proposed process and schedule of the GWMP 2012 update. Members from GCAC will need to be involved in additional meetings to consider some items. Section 6, Recommendations, from the current GWMP was provided to the Committee with their agenda packets and was briefly discussed at the September meeting. The first steps in the revision process are to consider what has already been accomplished to assess where we are in regards to groundwater planning, and to look at what the County Board adopted in 2004 as goals, and the strategies to move those goals forward. The schedule will require dedication.

Both GCAC and the Planning and Zoning Committee (P&Z) will be involved in the process. January 2012 will begin with members of GCAC brainstorming possibilities for future work and what the needs are. An Americorp

volunteer will be helping to collect data (starting in December or January) and will work through September 2012. The goal is to have the revised GWMP to the County Board December 2012.

The process will include the villages and townships, public informational sessions, and reaching out to the agricultural and lake landowners. Input will be sought from local and State agencies that are related to groundwater. Once a draft of the plan is ready, it will be sent to those agencies for comments.

Zimmerman asked about the budget needs for groundwater programming. Schmidt replied the County has to be able to put money where the intentions lie. In the current GWMP, there was more work specified in the plan than has been funded and completed. Schmidt anticipates the same with the revised GWMP, but that does not mean needs will be left out of the plan because there may not be funds for them. Schmidt and others will be seeking grants and any other funding available for those items GCAC feels are important and that are recommended to the County Board for adoption.

7. REPORT: TOWN OF HULL GROUNDWATER TASK FORCE (SCHMIDT) and 9. PRELIMINARY REPORT: DRINKING WATER CONTAMINANT ADVISORY AREAS (SCHMIDT)

Schmidt stated the Town of Hull decided to look at groundwater issues within the Town. There are approximately 2,000 residences and a few businesses. All have private water supplies and septic systems. The Town had never taken a good look at their groundwater quality or quantity. The Town's initial thought was most of the Town would eventually be annexed to the City of Stevens Point and septic systems and wells would be temporary. The County was never planning for that to happen. Schmidt has been meeting with some of the Town's residents and looked at different water quality aspects. Schmidt referred to the map provided to the Committee. The Town of Hull surrounds the City and has a lot of wells with nitrate above the health standard. There is a correlation between high nitrate and other chemicals in the groundwater because they travel together. The Town is looking at doing additional sampling, recommending items other than nitrate nitrogen to sample for, and looking at the several hundred wells drilled into bedrock. It may be beneficial for other townships to do similar assessments and look at what their groundwater is like.

Isherwood asked if there was funding for the testing. Schmidt replied the Town of Hull is planning to put money into sampling for information they want. They will use private wells primarily for the effort. A graduate student at the University of Wisconsin – Stevens Point (UWSP) is helping them with a project testing for uranium and other radioactive compounds.

Filtz asked about the participation of citizens, how many are actually getting their water tested. Schmidt replied less than 10% of private well owners County-wide are sampling their water on a regular basis. Filtz stated when he does speak with people he feels they are uneducated in regards to groundwater. Schmidt stated at one point there was an educated populous, but people have other priorities on their minds. We are going to work on educating people to make testing their water a higher priority. Schmidt referred to the map regarding drinking water advisory areas. If GCAC and P&Z agree, the plan will be to use the high nitrate areas and the atrazine moratorium areas as areas of concern. We will recommend to people within those areas that they not use their water unless they test it and find it to be acceptable. If the message is not delivered very seriously, then people will not catch on to the severity of the issue of drinking contaminated water.

Walker asked if there has been any input from the medical community on the effects of drinking contaminated water. Schmidt replied yes. In the past, the best science suggested only infants up to six months of age and pregnant and nursing women had to be careful drinking water above the nitrate standard of 10 parts per million (ppm). But last year the State epidemiologist, with some additional research, came out with a recommendation that no one should drink water with nitrate above the health standard for an extended period of time. This is part of the reason why the drinking water advisory approach is being considered. People will be made aware of the advice from the State epidemiologist, the top health official for the State.

Jacowski asked what health concerns there may be. Schmidt replied there could be birth defects, developmental delays, attention deficit disorder and hyperactivity. These can come from combinations of nitrate with other chemicals, not from nitrate itself.

Fritsch asked if they will go back to retest. Schmidt replied less than 100 wells have been resampled on a regular basis. He has seen the nitrates go up and down. Fritsch stated if there is a heavy rainfall, the nitrate level will rise; if there is an extended dry period, they will drop. Schmidt stated in 1993 there was a lot of

sampling because of rainfall and high groundwater. We were concerned with septic systems bacteria affecting wells. A high percentage of the nitrate samples taken that year were above 10 ppm and a lot higher than when they were sampled a few years earlier. With the rainfall the last few years being so intense, it may happen again.

Walker asked if the red dots on the map only indicate wells that were sampled and have high nitrate. Schmidt replied yes. There are more wells sampled that were under the health standard.

Jacowski asked if since the Well Abandonment Program was adopted, have some of these contaminated wells been abandoned or capped. Schmidt replied some have been abandoned. It is more of a concern from a bacteria standpoint because the wells draw water out of the aquifer. It is not a matter of things entering from the top, so although Well Abandonment is an important issue, it does not address this sort of contamination. Jacowski asked if there was a way to track those wells that have been abandoned. Schmidt replied that information has recently been made available by the Department of Natural Resources (DNR). Jacowski stated showing an abandoned well on the map indicates a problem that may no longer be a problem. Schmidt stated it may no longer be an individual well problem, but it is still a problem that the groundwater is contaminated and moving toward other wells.

Burress asked if there was some correlation between the sources. Schmidt replied in order to correlate the sources, we would have to overlay the photobase with the map to see where the high concentration of residences are, where the septic systems would be, and where the irrigated agricultural fields are so we know where the contamination is coming from.

Fritsch stated the Village of Plover had a private well operation permit program and a handful of customers still using private wells. When they receive the permit, they are required to get a nitrate sample from a State certified laboratory. The Village of Plover could share that information with the County. Schmidt stated if the samples are taken to the UWSP lab, then the County already has those results.

Filtz asked if a dairy operation has a water sample result come back over 40 ppm, do they need to replace their wells in order to sell their milk. Schmidt was unsure, but could look into the issue.

Lemke asked how notice would be given to people about understanding what is in their water. Schmidt replied it will happen if GCAC makes a recommendation to move it forward to P&Z. Lemke asked if it could be an agenda item for the next meeting. Schmidt replied it can be forwarded to P&Z as a concept. GCAC is strictly advisory, so it can move things forward without a specific agenda item. The intention is to take the concept to P&Z, and make the information available through the town and media. Maybe others who are not in these areas will feel they need to sample their water too.

Jacowski asked if Schmidt has been referring to voluntary sampling. Schmidt replied yes. The County has never mandated anyone to sample their water. Jacowski stated he is worried about the County being held liable. Schmidt stated he has always presented the issue as certain wells in the area have high nitrate and some do not. Each well is drilled at a certain level in the aquifer, and every well is different.

Walker asked if there was a map that shows the counter to what is represented on the map provided to the Committee, such as a map showing wells tested below 10 ppm. Schmidt replied it could be mapped and it would show that the majority of wells are at an acceptable level. Jacowski stated a map showing those details would give an idea of where the problems lie. Schmidt stated that type of mapping has been done, but there is so much information to put on those maps, they get too full to see anything clearly.

Burns stated if a well is going to be drilled, and there was a map to look at showing bad versus good wells in the area, then you could compare how deep the wells are drilled. Filtz stated he has drilled at several different levels on his property, the deepest at 176 feet, and no matter how deep they go the nitrate levels are raising. Burns stated that is the point he is trying to make. Schmidt stated the information in the County database will be on the County website, so someone could click on a well and get all the construction information. He feels the easiest way to develop a map showing the wells at acceptable levels would be to show it on screen with the Geographical Information System (GIS). That way we can look at what we want.

8. CONTINUAL ASSESSMENT SUB-COMMITTEE UPDATE: SUGGESTED GROUNDWATER SAMPLING AND MONITORING GUIDELINES FOR PESTICIDES

Schmidt stated this sub-committee is looking at a list of all the pesticides being used, or sold, in the County. Those are the pesticides to be looking at when making recommendations on what people should be sampling for in the areas they are being used. Hopefully the full report will be ready by the next meeting.

Jacowski asked if the chemistry for the legacy chemicals breaks down as a crop is watered. Schmidt replied yes. Jacowski stated every time a crop is irrigated those are brought back to the surface, as the aquifer is being pumped. Schmidt stated any contact with oxygen, especially topsoil, will start the breakdown cycle again.

10. DISCUSSION/POSSIBLE ACTION: 2012 MEETING DATES

Schmidt stated currently the meetings are held the first Thursday of every other month and asked if the Committee wishes to leave it that way. Phillis stated the dates would be January 5th, March 1st, May 3rd, July 5th, (which would probably be rescheduled), September 6th, and November 2nd. Schmidt stated when GCAC moved to the first Thursday of the month, P&Z was on a different schedule. P&Z meets the fourth Tuesday of the month. Burns suggested keeping the meetings on the first Thursday of every other month and moving the one in July to one week later, July 12th. Phillis asked if GCAC wants another joint meeting with P&Z. Schmidt replied that is up to P&Z, they are invited to every GCAC meeting.

Schmidt asked which GCAC members would be interested in helping with the GWMP revision. Burns asked how many meetings will be held. Schmidt replied two or three meetings, every couple weeks. They will be reviewing the progress of the current GWMP recommendations and goals. Kiedrowski asked if the meetings would be prior to the next GCAC meeting in January. Schmidt replied yes. Lemke volunteered, but prefers meetings that are immediately before or after the work day. Burns volunteered, but contact him a day or two ahead of time to check his schedule.

Schmidt stated Isherwood had an idea for a future agenda item. Isherwood stated the book is called 'Walking on Water.' It is a collection of essays on what various people believe should be done regarding groundwater issues. Burns has read the book and stated it is interesting to see the different perspectives.

Jacowski asked how the County fares, in comparison of water quality, with other counties. Schmidt replied the State-wide average is about 10% of wells exceeding the nitrate standards. Counties to the north are slightly less. Portage County is the second highest in the State. The area near Spring Green has the most contaminated groundwater in the State and Portage County is in second place. Jacowski asked if Schmidt feels the County rates second because we have taken an active approach and had more testing. Schmidt replied there is no question we have done more testing than other parts of the State, but he believes they would not have the levels of contamination as Portage County because of the land uses in other areas. Portage County has more porous soils and intense land use.

Walker asked if there was a good variance on the type of contamination. Schmidt replied yes. Walker asked if contamination in Portage County is mostly human influence. Schmidt replied yes, most of the contaminants of a health concern are caused by humans in Portage County. There are other concerns such as iron or corrosivity, but are not health issues unless the water runs through metal pipes. They are aesthetic issues.

Filtz asked where GCAC stands on what are acceptable levels and to let the public know. We do not want to minimize the problem. Schmidt replied that goes along with the review of current goals and strategies of the GWMP. Jacowski stated he was not trying to minimize anything, but to see where we stood as a County, in a State-wide comparison.

11. NEXT MEETING DATE:

The next meeting is scheduled for Thursday, January 5, 2012 at 7:00 p.m. Conference Room 5, County Annex.

12. ADJOURNMENT:

Motion by Walker, second by Lemke to adjourn. Motion carried by voice vote. Meeting adjourned at 8:20 p.m.

Jamie Phillis, Recording Secretary

Ed Burns, Chair

Date