

MINUTES –

Hull WATER COMMITTEE

Tuesday, March 27, 2018 at 5:30 p.m.

TOWN OF HULL MUNICIPAL BUILDING

4550 Wojcik Memorial DR., Stevens Point, WI 54482



**HULL
WATER
COMMITTEE**

1) **Call to order:** The meeting of the **Hull Water Committee** was called to order on Tuesday, March 27, 2018 at 5:30 p.m. by Chairperson John Holdridge at the Hull Municipal Building, 4550 Wojcik Memorial Drive, Stevens Point, WI 54482.

Present: Chair: John Holdridge, Committee Members: Dave Pederson, Bill DeVita, Madge Bishop, Matt Johnson, and Water Committee Secretary: Patty Amman, Bill Omernick - advisor.

Excused: Karen Hannon, Mike Bohlman, Rick Stautz, Ken Ramage

Others: Tim Zimmerman – Portage County Groundwater Advisory Committee representative, Kevin Masarik, UW-Extension, Dave Wilz, Mike Splinter

2) **Approval of minutes of Hull Water Committee meeting of Nov. 28, 2017.** *A motion was made by Dave Pederson to approve the Nov. 28, 2017 Hull Water Committee minutes. Motion was seconded by Matt Johnson. Motion passed.*

3) **Citizens wishing to address the Water Committee on non-agenda items.** *None.*

4) **Input – Chairperson and Water Committee members.**

- John H. shared a letter received from the WI Dept. of Transportation regarding Hwy. 10 dated 3-7-18 stating the DOT is no longer pursuing a future location for US 10 between I-39 Stevens Point and Amherst Junction. The US 10 corridor study is officially closed.

- JH noted Point of Beginning, which was going to build just east of The Store off Hwy. 10 East, has decided not to build there.

- Tim Z. asked about what would be built at the former Urbanek property at the corner of Hwy. 10 E. near the U.S. Bank. John said he did not know but it is now in the City and zoned commercial. Some other members of the Water Committee had heard there might be a drug store (CVS) built there.

- John H. mentioned a flyer on an April 2nd presentation by George Kraft at the downtown Public Library regarding water issues. George officially retired from the UWSP in December 2017.

- John reviewed Portage County Gazette articles about nitrates in groundwater and another about Hull's reaction to issues pertaining to the Kluck proposed subdivision and comments from a public hearing on the matter.

- Some discussion about the public hearing for the Kluck property and the various issues which prompted citizens to oppose municipal sewer and water for that area which included issues of higher housing density, increased traffic, potential for future

annexation among others. John H. mentioned an agreement the Town of Plover had with the City and how that affected Plover. John is concerned about Hull's future, protecting the Town, looking at issues with nitrates in water and exploring different ways to address that. John said municipal water systems have their own problems with different contaminants in various parts of the country. John also said Hull listened to the citizens at that public hearing and we need to get back to listening to the citizens as part of our system of government. We need to help inform the citizens and provide educational opportunities regarding water issues.

- John said the Well #11 agreement between Hull and the City has now been signed by all parties. That has provisions in for dealing with future water issues without the threat of any annexation.

- The Hull Annual Meeting is April 17th. Elections are April 3rd.

5) Membership renewal for Hull Water Committee members.

- John said Bill DeVita and Ken Ramage will renew their 3-year membership on the Water Committee. Although John favors new people coming onto the committee, he said "we have really solid people on the committee including Bill DeVita who brings tremendous experience and information from his perspective".

6) Results of County-Wide Well Water Quality Sampling Project – Kevin Masarik.

- Kevin Masarik gave an overview of the County-Wide study. It was a water sampling of Portage County with 2 mile square grids. The goal was to get one water sample from every grid cell in the County. They were successful in sampling about 88% of those grid cells. Some areas of the County have very few residents like Buena Vista marsh where they couldn't get samples. The data collected was a good representation County wide of groundwater quality but lessor so for an individual municipality where there were not very many samples per municipality. There were 11 samples taken within the Town of Hull. Kevin suggested future sampling might want to expand in other areas. The Town of Hull tends to have smaller lot sizes with private wells and septic systems. In the future, they may collect more samples from areas that have small lot sizes.
- In the conclusion of the study, they looked for certain aesthetic concerns like pH, alkalinity, hardness. Too much hardness causes scale, too little hardness causes corrosive issues. They found 2 distinct zones in Portage County related to water hardness. Harder water in eastern Portage County which is less corrosive, and in the western portion of the County closer to the Wisconsin River, it tends to be low in hardness which means more corrosive water. This is related to the types of soils the wells are driven into.
- Another aspect of the study was to look at the impact of different types of land use on the groundwater quality. Nitrate sources can be from both agricultural and lawn fertilizers, animal waste applications, septic systems. Chloride sources can come from fertilizers, potash use, septic system use and road salt use. The study

- found areas with greater agricultural activity also correlated with higher nitrate levels, particularly irrigated potato production and areas where a lot of corn is grown. Dairy showed a weak, but important correlation to nitrates. Soil drainage was important. Sandy soil are more likely to have higher nitrate than areas along the west of the Wisconsin River where there are clays and heavier soils.
- Chloride was found in looking at septic counts, potato/vegetable production and dairy production. Development density also affected this with higher density of roads and subsequent salt on roads in the winter.
 - Tim Z. noted Hull showed a high level of chloride in the tests. Others noted there are 3 major roads that go through Hull; the Interstate, Hwy. 10 and Hwy. 66 all of which get heavily salted during the winter months for road safety.
 - This study gives the County a way to develop statistical models that can highlight which parts of the County are likely to have high nitrate or elevated chloride.
 - Kevin passed out a sheet which shows other sources of data that are available such as the Wisconsin Well Water Viewer which is accessible on-line and summarizes 30 years of voluntarily submitted testing data to the UWSP Water Lab. The County study had 11 samples in Hull, but the WI Well Water Viewer data set has around 2,000 water samples from Hull although some are multiple samples over the years from the same location. This is a better representation of the well water quality being used in the Town of Hull. The average nitrate rate indicated in the Well Water Viewer is about 6.4 mg/l. The County sample set for the Town of Hull puts the nitrate at about 5.0 mg/l.
 - Kevin said the goal in future County tests is to sample as many of the same wells as possible from the first test to help them understand how the water quality in the County is changing over time. But not everyone who participated this time will participate next time so there will be replacement test owners and hopefully an expansion of tests/samples. Hull and Nelsonville were less effective in the grid sample type for data. In the future, the County will need to look at how to accommodate those areas that were under-represented.
 - Kevin felt about half the private wells in Hull have been tested at some time.
 - Mike Splinter said this first testing gives the baseline data which can be compared with future data in 4 or 5 years when another sampling test is done.
 - Kevin said in this first test situation, they will learn from their mistakes including the fact that there are parts of the County more populated and under-represented in this first testing sampling. So the sampling strategy needs to be improved next time. This system will hopefully tell if the groundwater is getting better or worse over time.
 - Tim Z. pointed out in the report it says the mean is the average but that is not correct in that the mean is the greatest occurring number. The difference between the mean and the average can be quite a bit. The average is all the numbers combined to create that average.
 - Kevin said County wide, about 24% of the wells tested were over the 10 ppm standard for nitrate. Kevin separated it out by decade and it looks like Hull is

right around 20% exceedance (about 20% of the wells exceed the nitrate standard). That hasn't changed much over the past 10 years. But there are more private wells in Hull now than there were 30 years ago. So the percentage of people drinking unsafe water (because of high nitrates) is probably much higher (than 20%). This County study is important in that it provides a standardized way of collecting this information.

- Tim Z. asked if well depths were included in the data. Kevin said they did not have good well construction information on all the wells. Kevin had disagreed with the choice the County made to offer the test to anyone regardless of if they had well construction information or not. Kevin thought there would have been some value in selecting only wells with known well construction data which would have allowed additional data analysis. They could go back and do that on a subset of the wells but it may not be as useful since instead of dealing with 200 plus wells, there might only be 100. No high capacity wells were used in this study. Only private residential wells. In this area, most private wells are probably pulling water from the same sandy gravel aquifer.
- Tim Z. talked about the Plover municipal wells and their nitrate issues. Those are deeper wells but still have nitrate issues at times and what does that say about nitrates in water that is deeper in the aquifer.
- Mike Splinter said his original well was at 25' but the new wells is at 42' and he lives less than a mile away from the Hull building. His water didn't change much from 25' to 42' except for the fact that at 42' he had an increase in tannins and had to get a specialized water treatment system.
- John H. said there is a notion that if you go deeper for water, there are less nitrates. But not in the case of Karen Hannon's situation.
- Kevin said in the case of Karen, they can't go further than 60' since they hit a type of bedrock and there is no water after that bedrock. In other parts of the County, going deeper might get you water from an older flow path with lower nitrate. If you are on the groundwater divide, going deeper is probably unlikely to get you much better water quality just because of the way the groundwater flows.
- John H. said Hull has responded to issues related to Well #11 as well as the Somer's property north of 2 Hull subdivisions. In response to the potential threat to groundwater for those 2 subdivisions, 2 new monitoring wells were installed to monitor the current water quality and on-going quality if it should change. Household wells along that northern edge of those 2 subdivisions will also be monitored for water quality. John asks, where do we go from here. The County took the big picture, but Hull is taking little segments to monitor and collect water data on.
- Kevin tries to get across to all homeowners they are their own water utility company and they each, individually, have some responsibility to diagnose their own water and make determinations of whether or not it meets their expectations. If they don't want that responsibility, they should move to a city and get on city

- water. Kevin doesn't see a regulation requiring private well owners to test their water as a viable way to go as it would be difficult to enforce. Also, some people would not react positively to additional regulation. Then there would be, what would follow if water was found contaminated. People can't be forced to do something about that and state assistance for these issues is uncertain.
- John H. said Hull has very few farms left. Hull is basically an urban town.
 - Bill DeVita said our problem is housing density with 2,200 private wells and septic systems. People don't realize the problem since if their water looks and tastes okay, they don't see a problem. Because of his background, he knows there are issues that still need to be addressed in terms of water quality. There is a need to educate homeowners and the Town Board on the water risks we are dealing with. We need to live with our neighbors as well as the City of Stevens Point. We need to affect some changes with all the private septic systems located in sandy soil with fairly narrow plumes. The location of the septic system, its plume, can affect other wells. Some things are not easy to detect in private water via taste or by visual means.
 - John H. talked about education flyers from the UW-Madison Engineering Dept. which has training courses on various aspects of municipal water system. John has asked that department director to consider having educational opportunities on private well systems. He got a response back from them saying that was a good idea.
 - Kevin said the UW-Extension is involved in the education of private water systems to the public. Kevin gets those same flyers and the training courses run \$1,295 for each participant. Kevin agrees that there isn't enough education. There is only one position in the UW-Extension (his position) that works state-wide and there are almost a million private wells in Wisconsin. About 30 to 40% of the population in Wisconsin are on private well systems. State-wide, about 10% of those households test their water annually or semi-annually. About 50% of them have been tested for nitrate beyond when it's required.
 - Madge B. said she felt the nitrate issue seems to have raised the awareness of water testing for people in general. Although it's relatively easy to test for the standard items like nitrate, those added items Bill talked about that relate to population density and what may be dumped into our water is not so clear. She asked Kevin where the data they have obtained goes from here and what do they anticipate in terms of changes that should be made to look at other things in addition to nitrates.
 - Kevin said we have one of the premiere persons sitting on our Water Committee who could answer that. The lab Bill D. works for developed a nitrate source analysis system that helps determine if nitrates are coming from ag sources or homeowner sources. If it's from septic systems, there are a number of other tests that would be good to pursue to detect some of those emerging contaminants like viruses, by means of caffeine, artificial sweeteners or pharmaceutical tracers.

- The doses are so low and there is limited information of what effect that may have, but viruses don't need to be a high concentration to make people sick.
- Madge asked Kevin if he saw any political value to the information they have gathered. How to use that data to impact the Town of Hull. Beyond the research, how are we going to use it? Where does he see that going?
 - Kevin said from a science standpoint, he can tell you how to reduce nitrate. In those areas you have a lot of irrigated agriculture, if you put that into forest, that would result in lower nitrate. But that's not practical in the real world. He can suggest solutions but whether or not they are practical isn't up to scientists. It's a policy decision. Right now, if you have high nitrates in your water, the only way the state will compensate you for that is if the level of nitrate is above 40 mg/l and that well must also serve livestock. So a family with a newborn infant with high nitrates would not qualify. Hannon's who have 60 mg/l nitrate and higher do not qualify for well compensation. We need to allow for people to get water treatment, encourage communities to do more outreach. Even if we do make changes that affect the groundwater, it could take years or decades before there is a noticeable improvement in people's wells. There needs to be some short-term solutions if the goal is to make sure people can access safe water. There needs to be avenues for short-term solutions and fixes. What worries Kevin is the young family that moves out into a rural area of the County for the first time and doesn't know if their well has been tested or they have 20-30 mg/l nitrate. That should be the primary focus. Secondary should be how do we improve groundwater. That involves working with farmers to invest in better management practices. We know we'll never get it to zero but we should be able to reduce nitrates. There is no easy solution.
 - Matt J. said that was a good answer but as far as this Water Committee, we've done a lot over the past few years in collecting information from around the table on the Well 11 situation, collection of sampling data plus the County study. So we are still very much in the education phase for the community. After the education, he would like to see us build support in the community where a lot more weight will be put into committees like this. First priority will be to protect water for the people in our area, dealing with expansions, dealing with what are we going to do with subdivisions. This will come after we've done all we can to protect the water. We need to take the data we've accumulated, keep it going, and continue to push the education with the community and get their buy-in to it. If we're going to change the town at all, it's through careful measures like this. Making sure we're not going to do any more damage than what has already been done (to the groundwater).
 - Bill D. said he likes the term 'buy-in' and asked Kevin what prevents the Town from tacking on a \$10 charge to the property tax for each homeowner for use by the water resource team or for septic problems. City residents pay \$600 to \$700 a year for water and sewer. What if for the Town of Hull, we say every septic

- system has a \$10 assessment fee that goes into a water resource fund. Often the problem we encounter in doing anything is the limitation of funds.
- John H. said, who knows what the Town Board can appropriate. A certain amount could be put in the budget. That would be a political act where you need 3 out of the 5 supervisors to vote in favor of it. John didn't know about the \$10 fee if that could be tacked onto a tax bill. Most towns are on private systems. There's only a handful that are on some kind of municipal system. John said the Town has an Annual Meeting which incorporates the vote of the citizens. The Town doesn't have a lot of committees like the City has. We have 3 committees and he'd like to see a 4th for safety/roads. Some things require the Annual Meeting to approve. Unless the law prohibits it, there are things that can be done.
 - Mike S. asked about the cost of a basic water test. The current cost at WEAL is \$52 for the basic homeowners package water test.
 - John H. agrees there needs to be more focus on the septic and private wells. He took exception with the County Planning & Zoning Dept. when they proposed only the two choices of either private septic and well or municipal sewer and water. There are additional alternatives that can be considered to improve private septic. Although improved septic systems are not required, Hull hasn't gotten into that discussion yet with Kyle Kluck and his proposed subdivision.
 - Dave Pederson said that would be something the Plan Commission could recommend to the Board.
 - Dave W. talked about the long range plan of this group and some of what they want to accomplish costs money. As a group, put the ideas and concepts together then present them along with the costs and then it's up to the Board to either handle it through the budget or through adding on services for which we can attach a fee for that new service. Although we've never done that, there is some of that out there.
 - John reminded Bill D. that Hull has an annual meeting coming up and maybe he should come and bring this up to the citizens. That is a vote of the citizens at that meeting. It's direct democracy, not representative democracy. John feels that citizens are pretty thoughtful, they know their life and their needs. John asked Kevin if he could tell us in one page how we can reduce nitrate.
 - Kevin can say from a science standpoint how to reduce nitrate, what you need to do. But what is realistically possible given human nature, he might not be able to do that in one page. It revolves around the buy-in idea. He has thought state-wide, a tax or surcharge on fertilizer for ag and lawn use, a tax on every new septic system based on the percentage of nitrate that comes from those sources.
 - John asked, if for instance, you get a lot of nitrate from fertilizer use on lawns, could the Town pass an ordinance on people fertilizing their lawn.
 - Kevin thought it would be hard to prohibit fertilizing. But it might be possible to require any new parcel or lot to only have so much of it in lawn. Tim Z. mentioned the County already has some regulation on that. Kevin said although

phosphorus fertilizer was prohibited, you can still go to any store and get it. The ability to do some of these things is pretty limited.

- Matt said something similar could be done with septic tanks, if being replaced, they need to meet certain standards. Like Bill D. was suggesting, if money is in the kitty, we could help subsidize replacement costs for homeowners in the Town of Hull. It's not everyone who is replacing a system every year. So if everyone of paying \$10 a year towards that fund, we could use that for anyone who is putting in a replacement system and make sure they can get the top of the line replacement system.
 - John said it's important to listen to ideas and who knows where ideas might come from.
 - Dave W. said ideas first, then money follows.
 - At a recent conference Bill D. attended, they discussed the problems with manure spreading in eastern WI and the cracks in the terrain where the contaminants can travel to someone's well a mile away in less than a day. The presenter said the homeowner should install a reverse osmosis system for around \$500. The homeowner replied they didn't have \$500. There are people out there who can't afford water treatment systems costs. So if we had a fund, we could help people who have a financial burden.
 - Matt J. talked about a place in Africa where they can get short-term loans to help pay for drilling a well and it's working great.
 - John H. talked about how we do land use planning but we need to plan for human uses. He talked about the aging population and the need for the elderly to get transportation. Just the day-to-day stuff a government should know about its population. He also talked about using this building as a community center instead of just using it for periodic town meetings. There are many things we could do to enhance the life of Hull citizens. Ideas are important and how we articulate them.
 - John H. introduced Bill Omernick, part of the Hull road crew, who is acting as an advisor to this committee as Bill is doing the routine water sampling from the 4 monitoring wells. The Board approved Bill Omernick in that capacity and Patty Amman in the capacity of record keeping of the internal data for the Town.
 - Kevin will put some of these ideas/thoughts down on paper for us.
 - Tim Z. asked Kevin about plastics in bottled water. Bill D. mentioned it's pretty well established/studied that there are plastic compounds found in bottled water. Tim said most people think if they've got high nitrates in their water, they'll drink bottled water. But then there are the plastics in the bottled water.
- 7) Emerald Forest and Stroik subdivision household water tests update.**
- A sample of the letter that was sent to the 4 homeowners was shared with the committee. Kranig's would have been the 5th homeowner but they are out of the area right now and will be back for the next testing round. There was a sign-off portion at the end of the letter indicating the homeowner allows the Town of Hull

to use the test information as part of the Town's data collection on groundwater information.

- John H. wants to do some additional checking on the privacy issue related to this collected data from the homeowners.
- This first round of sampling from the 4 homeowners happened around March 15th. Test samples will be taken each quarter, March, June, Sept. and Dec. Hull will set up a schedule and make sure the homeowners are aware of it.
- The homeowners picked up the sampling bottles at the Hull Municipal building (Bill D. dropped the empty bottles off at the Hull building the week prior to sampling).
- Bill D. said it takes around 2-3 weeks to get the test results on average from the lab.
- Bill D. thought he was sending the test results just to the Town of Hull but John said also send the results to each of the 4 homeowners (their individual ones). John will keep the information private until it is determined how to use it.
- Dave P. said we are monitoring a shared resource so we should have a pretty good standing. John H. agreed but wanted to be sure we are protecting the homeowners' interests too.

8) New and continuing Hull monitoring wells (4) update.

- A preliminary well test data spreadsheet format was shared with the group that was modified from a format Pete Arntsen had shared with Hull. This sheet currently shows the test results on the 4 monitoring wells (which includes the 2 new monitoring wells plus the 2 existing ones) for Hull in addition to the 4 homeowner's private wells. The first test for the monitoring wells was in January 2018. The monitoring wells are tested for both quality of water and quantity (depth) of water. Bill Omernick is doing the monitoring well sampling which will be done 4 times per year.
- The 4 homeowner wells also shows the well construction depth for each on the data sheet.
- The data spreadsheet can be modified further as needed. Dave P. offered his assistance.
- Bill D. suggested putting addresses instead of the homeowner's names on the data sheet. Discussion on how to code those 4 or 5 private wells so as to be useful for data analysis but still maintain some anonymity for the homeowners. Possibly use a lot number or create a code like EF 1, EF 2, Stroik 1, Stroik 2. Dave W. agreed that setting up an internal code would be wise.
- John H. suggested the 4 homeowner's data be put on a separate data spreadsheet form. Discussion about how you create tabbed Excel tables so they are part of the same document but can be printed out as separate sheets. A graph can be created from the data. Dave P. said that can be set up in-house.

9) Groundwater data collection and storage at Hull. (see above, #8)

10) Field blank water sample to double check against other water samples.

- Bill D. explained how this is done to do a quality control check of the sampling process. Doing quality control can prevent criticism of the process down the road. The WEAL lab can provide a jug of reverse osmosis water to Bill O. to run through the pump bailer and tubing. It's important to protect against cross contamination. Making sure the pump and tubing is clean before going on to the next sampling. Let it run a few minutes then fill the sample bottles with the monitoring well water. The other aspect of quality control is the field duplicate. Once a year or more often if we want, do a field duplicate sample. This involves taking a second sample from one of the wells. Sampling it twice. This could be rotated over time sampling a different one of the 4 monitoring wells twice in a given sampling session. So there would be 4 samples and one field replicate. You only select one of the 4 wells for the replicate (extra sample).
- Matt J. suggested we do the field blank samples starting with the next sampling run. John agreed on one quarter to have a 5th test on one of the monitoring wells. Then the next quarter, have a 5th test on a different one of the monitoring wells.
- Bill D. said the WEAL lab is audited every 3 years by the DNR for quality control, bookkeeping, etc.
- Matt J. asked about the annual costs for the water monitoring system, what that might be. John H. said we will keep track of that. Depending upon the costs, it could be incorporated into the Hull budget process.
- Bill D. suggested we ask Pete Arntsen about the frequency and when we should be doing the field blank tests for the monitoring wells and the private 4 or 5 wells. Maybe every 10th sampling do a replicate. Pete A. could advise us on what system to use (how often). We're not going to write a scientific paper. We just want to get it done, get it collected and get it interpreted.
- Dave W. reminded the group this is in reaction to a farmer that wanted to develop the land north of these subdivisions and we want to collect data so that if development happens in the future, we have baseline data to go back to.

11) Transient Non-Community Wells in Hull.

- A matrix was shared with the committee showing the 5 or 6 transient non-community wells in the Hull area. This information is taken from the DNR website (online). Churches, taverns, restaurants and similar locations are required to have their water tested at least once a year. From that public data, nitrate levels can be tracked. The matrix shows the locations and their water nitrate levels over the past 5 years (2013-2017). This is an additional data source to monitor nitrate levels in various parts of Hull.
- Bill D. mentioned this information is also available through the County Health department.
- John H. said Ken Ramage had suggested including local yearly rainfall amounts (from the airport) which can be an additional source of data.

12) Kyle Kluck proposed subdivision development update.

- John H. said there was strong local (Town) opposition to the installation of municipal sewer/water. Tonight the County P&Z was meeting and including the changing of the zoning of this property from Ag. to R2 Residential per the request of Kyle Kluck. This made sense as the property is contiguous to other residential areas.
- The County does not want a cul-de-sac on Larry's Drive and Sunny Crest into the new development but prefers through streets. Hull prefers a cul-de-sac. Discussion on those items will probably be at the May County Planning & Zoning meeting.
- John said Hull wants to protect our neighborhoods from through traffic. John wants to talk with the Hull fire department about the safety factor of street layouts.
- Mike Splinter said with the possible municipal sewer and water, the lots in the subdivision could/would be a 4th of the size they are currently planned for. He said this could potentially increase the traffic amount by 4 times, instead of 100 cars you might have 400 cars. With 400 cars, you would need additional avenues to get out of the subdivision but with the larger 2 acre lots, that should not be so much of a problem to access Torun Road with one main road through the subdivision. Mike felt there would be a lot of opposition from the existing neighborhoods to through streets. Those residents currently live on the dead end streets because they prefer that.
- John H. mentioned a recent meeting with Patty Dreier and Jeff Schuler regarding this topic. Patty D. had said the Town should be permitted to have the cul-de-sacs, that is wasn't a big deal and it's what the Town wanted.
- John said the affected Hull citizens should receive a letter (either from the Town or from the County) to attend these County meetings that discuss this proposed sub-development and express their opinions as residents of that area.
- Bill D. asked did the County want a road cutting through the development all the way up to Jordan Road cutting through Gary Stoltz's property? John said that was the idea the County had but the County aren't the citizens living out in that area.
- Dave P. said this same issue came up when the Firkus Road went in that other development. The County wanted a loop road instead of a cul-de-sac.
- John H. said this kind of discussion came up very early on in the Hwy. 10 East / Parkdale Development. Hull did not want through roads going through Hull neighborhoods in that area and so the City dropped that idea. John reiterated Hull is interested in protecting Hull neighborhoods and have done that consistently over time.
- John is interested in what can be done in the Kluck proposed subdivision that can deal the best with the nitrate issue. Things like considering the distance between the septic and the well and their placement in relationship to each other.

- Bill D. has mentioned using phytoremediation (growth of certain types of plants over septic fields to uptake nitrates).
- John said the size of the lots can make a difference.
- Bill D. talked about the importance of determining groundwater flow direction in these new subdevelopments. Because of the monitoring well on Ann Marie Court and monitoring wells to the south of this proposed development, we have a good idea of the flow direction. Lots should be set up with orienting the septic systems and wells so they don't line up with one another. Keeping the septic flow plume away from contaminating a neighbor's well downgradient. Bill said a Town water resource fund, or whatever we want to call it could help a developer pay for installing groundwater monitoring wells to insure that people putting homes in there are not drinking their neighbor's effluent water. Bill asked if Kyle knows what the groundwater is like in that development since the upper portion of the land has been in corn for several years. Bill is guessing it could be loaded with nitrogen.
- John mentioned the lower portion of the land is forested. Don Butkowski at the public hearing had made the case that the if the land goes into a sub-development instead of corn production, that would lower the nitrate load considerably in terms of pounds of nitrogen per acre.
- Mike Splinter agreed that putting a sub-division in alone would increase the quality of the water (from the ag field use) in terms of nitrate levels. That would be the case even without the upgraded septic system.
- Bill D. discussed nitrate as being one issue and that would be reduced over the next 10 – 20 years by taking the land out of corn production. He mentioned other risks from septic systems such pharmaceuticals and viruses which are new issues.
- John prefers to focus on nitrates for right now.
- Dave P. asked if we have a pretty good idea of the groundwater flow in that area now. It's from the northwest flowing to the southeast.
- Madge asked about provisions for water quality testing for subdivisions within the County.
- Dave P. said it's mostly up to the buyer of a home or lot to have the well tested.
- Bill D. said new wells are required to have a water test for bacteria, nitrate and arsenic. Kluck has this development and he may be selling off lots to builders. The builders may turn to realtors to market the new homes. Dave W. said the well / water inspection is done by the driller at the time the well is installed. They are required to send the water sample to a certified water lab.
- Dave P. said we need to weigh in before a development takes off in terms of well and septic placements. John H. said he thinks that is crucial and with the knowledge we have, there should be a proper relationship between those two.
- Dave W. said Rettler and Kyle should agree to work with the Town in trying to obtain some goals in this area. Kyle puts in a lot of septic systems.

- Madge B. said this development has the potential to become a project that could be used as a model for other developments with this idea of pre-planning the septic/well layout.
- John mentioned prior to the Kluck development, the City/County didn't seem to raise questions with previous developments. This is a big development with over 50 acres and potentially 24 lots as currently proposed. John did not think the City's extraterritorial issue has ever been used previously.
- Dave P. said we could use this as an opportunity to set some protocols.
- Dave W. said if we could work with this idea and get Kyle behind it, it could be a great test site.
- Mike Splinter asked if where the roads needs to be, if that wouldn't limit where the septic and wells are located.
- Bill O. asked about changing the layout of the roads to facilitate the proper placement of the wells and septic systems.
- John said that is possible but typically the builder/developers try to lay it out to get the most lots to maximize their profits and we need to understand it's his property but we need to have him understand the Town is very interested in the environmental aspects of the development and we hope we can cooperate with each other.
- Bill D. reminded the group that here in the Central Sands region, we are on the front lines of water quality issues since the time Byron Shaw was working for the college back in the 1970's and 1980's. He realized issues that were out there and we live on top of a sand box. We are setting some precedence here. The data collected by Kevin provides a benchmark for future study.
- Discussion about what to do after the 'study' and how to actually implement changes in a positive way in laying out the grid for developments. It would be a great selling point to emphasize the public health aspects and environmental aspects of trying to preserve water quality. Madge B. said people will want to know if the water is good quality before buying a home. She thinks Kyle would be interested in ideas that would help in the sales and marketing of the lots.
- John said it's important to study the information for purposes of implementation, not to just keep studying it.
- Madge said it will never be done with testing. It will continue to be tested, tweaked, adjusted and re-tested and new things learned.
- Matt J. talked about realtors, contracting associations and their role in the economy. People in a few years will be walking into a new home asking which way the groundwater flows, what are the nitrate levels on the last water test. The more the public can be educated, the better.
- Madge asked if this group, in the future can ask realtors and contractors to a water education session.
- Matt J. said Kevin had made a good point that people moving newly to our area ought to be made aware of water quality, what the nitrate levels are and how they affect people, how to have the water tested at the University and pay attention to

where their property is in relationship to cattle farms, ag uses, etc. Hull should do their part in that but the County and other governmental entities should assist in this.

- John feels there is a need for more education on water, even with the County Board of Supervisors. We need to move along and get the word out.

13) Next Water Committee meeting date: Tuesday, May 22, 2018, 5:30 p.m. (*note: the May meeting got transferred to June 19th*)

14) Adjournment. *A motion was made by Dave Pederson to adjourn the Water Committee meeting. Motion seconded by Matt Johnson. Motion passed. Meeting adjourned at 7:30 p.m.*

Respectfully submitted,

Patty Amman
Water Committee Secretary
Town of Hull, Portage County