



TOWN OF HULL
**PLAN COMMISSION
MEETING**

June 26, 2012
TIME: 5:30 p.m.

- 1. CALL THE MEETING TO ORDER:** The Town of Hull Plan Commission Meeting was called to order on Tuesday, June 26, 2012 by Chairperson John Holdridge at 5:30 p.m. at the Town of Hull Municipal Building, 4550 Wojcik Memorial Dr., Stevens Point, WI 54482.

Present: John Holdridge, LaVerne Syens, Bob Bowen, Shelley Binder, Bob Enright, Al Stemen, Jocelyn Reid and Secretary Patty Amman.

Also present: Ray Schmidt, Amy Nitka, Paul McGinley, Bill DeVita, Dave Wilz, Tim Zimmerman, Gladys Laug, Jon Koehler

- 2. APPROVAL OF MINUTES OF the April 24, 2012 Hull Plan Commission meeting:**
Motion to approve the minutes of the meeting from April 24, 2012- made by LaVerne Syens second by Al Stemen. Motion carried by voice vote. Al Stemen commented about page 2 of the minutes where it referenced SPASH picking up garbage along the shoulders and ditches of North Point and Old Wausau roads. Comments included the SPASH kids pick up twice a year, in the fall and spring but Al mentioned some of the people living along Old Wausau Road are picking up trash almost every day. During the school year, a lot of the kids travel down Old Wausau during their lunch hour and trash is thrown out into the ditch area.

- 3. ANNOUNCEMENTS; CHAIRPERSON AND PLAN COMMISSION MEMBERS.**

Holdridge From the DOT in Wisconsin Rapids, Christine McHugh who is their Public Relations person for that district, they are asking for volunteers who want to help plan the celebration when Hwy. 10 West to Marshfield is completed. When that's done, that's going to help a lot of people that go from here to Marshfield.

- 4. CITIZENS WISHING TO ADDRESS THE COMMISSION ON NON-AGENDA ITEMS. AGENDA ITEMS ARE FOR DISCUSSION AND POSSIBLE ACTION (Wisconsin law requires that no government action can be taken until a topic is placed on the agenda and published 24 hours in advance of the meeting).**

- 5. ADMINISTRATION OF OATH OF OFFICE TO SHELLEY BINDER AND JOCELYN REID TO SERVE 3 YEAR TERM ON HULL PLAN COMMISSION. APPROVED BY HULL BOARD OF SUPERVISORS ON 5-12-12.**

Holdridge I spoke with Bob Konkol; we don't have anyone to notarize these but if you witness these, that will be fine.

Shelley Binder and Jocelyn Reid read the Oath of Office provided for Plan Commission members then signed the Oaths.

6. HULL PUBLIC HEARING POLICY.

Holdridge We had a meeting at SPASH and anticipating a large crowd, we held it in the North Commons. The public hearing was on the Rustic Roads issue. They had circulated a petition wanting to have Casimir Road with a loop around on Granite Ridge, making that a Rustic Road. Maybe 6 (six) families signed the petition. When we get these things, that's an important Constitutional right, to be able to present to your government, redress any grievances. So we called a public meeting. There are maybe 60 (sixty) households up there and this was submitted by 6 (six) households. They hadn't talked with the other people. We sent individual letters to each household regarding the impact of that. We pretty well filled up the North Commons. Well, what happened, she had gotten the wrong information. What she got was, she'd read a report in the Stevens Point Journal that the Town of Hull was going to ban bicycles on Hull roads. So they thought, "Boy, if they're going to do that, we're going to make it a Rustic Road." Well it was all misinformation, inaccurate reporting. So people stood up and talked and nobody that talked wanted a Rustic Road. If you name it a Rustic Road, you're going to get traffic. The ones that really have been encouraging Rustic Roads have been motorcycle groups. The Rustic Road group of Wisconsin actually gives them plaques and stuff. We would not have needed to put a sign on I-39 but it would have been on all the maps of Wisconsin that it would be a Rustic Road. I think there are 70 some Rustic Roads. We spent 2 or 3 years planning that area over there (*in northwest Hull*) to preserve it with low development and low road traffic. We heard all the discussion. We had an advisory vote and it was unanimous that they didn't want a Rustic Road. The Board voted and they voted to not have a Rustic Road.

In the meantime, we had people who came to the meeting who had an ax to grind on other topics, not even the topic we were talking about. They wanted to monopolize the meeting. One guy had a knife. We didn't know that until after the meeting adjourned. SPASH is like us, no guns or concealed weapons in this building. So that triggered something. As we talked about it, we decided we really need a policy that lays out what a public hearing is about. As you look at this, it goes back to the notion that citizens ought to be able to come to their government and address the concerns they have. Now if someone was here talking about a non-agenda item tonight, they could stand up and make their case, we probably would ask hardly any questions. If we deemed it important, we'd put it on next month's agenda because you need to have 24 hour notice and it's got to be on the meeting agenda to be able to make any decisions. We can listen, but we can't make any decisions based on the Wisconsin Open Meeting Law.

The first item there is: 1. "When a petition is submitted requesting action of the Town of Hull Board, a follow-up communication will be made with petitioners to ensure they understand the issue or ramification of the petition." Now if we had done that when this lady submitted that, we

probably wouldn't have had a public hearing. If she would have understood what Hull's position was on that, we're not interested in banning bikes despite what the Stevens Point Journal might write. Then we'd clarify what the issue is with the petitioners. Thanks important. Then we'd have mailings to all those people affected. This may be 60 people. Then we'd select the time for the public hearing. If we don't anticipate a big group, we could have it here. If we would anticipate a big group, then we'd probably have it over at SPASH.

On #5, right at the beginning we'd have that statement about non-agenda items. If people come there and want to gripe at us or comment, we'd let them do that but we wouldn't take any action. Then we'd go into the subject of the public hearing and we would make that very clear that what we want to hear is we want to have people comment on the topic of the public hearing. It's a civilized society and we want civil discussion.

If you look at #7 "Depending on the situation at the public hearing site, citizens may be required to come to a podium to speak." It's been sort of loose and we need to bring more discipline to the process.

#8 "Individuals attending the meeting will be required to sign a log...they will be advised in the beginning, there will be no concealed carry weapons in the building per the Town of Hull ordinance. Whenever it appears there may be a controversial topic, notification will be made to the Portage County Sheriff's Department with a possible request to periodically stop at the public hearing site. In some cases, there may be a need to place a Sheriff Deputy in the public hearing room." We had one case where he sat right back there. At the first meeting, we had a couple of guys who came up and tried to intimidate the Board and it was like a bar. The second meeting with the Sheriff Deputy it was like being in church. So we intend to do that. We've had other sessions up there where Deputies have just stopped in and looked. That has been really helpful. John Charewicz was out the other day and I shared this with him because he's been very helpful with this. At that meeting we had there, a guy stood up and went off the wall, I tried to control him. One of the Board members had a cell phone and if he didn't want to sit down and behave, we were going to call the sheriff. We need to have orderly meetings.

#9 "At the end of the public hearing, often we take an advisory vote." That's really simple when you've got 99 to 1. The tough part comes when you've got 51 to 49. What we did up there was follow the public hearing and the citizen vote and the Board vote and was unanimous to not have a Rustic Road. So this is our policy. If we have a public hearing by the Plan Commission, which we could have on some planning or zoning change, we'll distribute that. We'll widely distribute it. Any questions about that? Any additions, comments?

A motion was made by Bob Bowen to accept the new Public Hearing Policy. Motion was seconded by Bob Enright. Motion passed.

7. TOWN OF HULL WATER STUDY TASK FORCE REPORT, 6TH EDITION/DRAFT. UPDATE WITH SUMMARY AND RECOMMENDATIONS.

Holdridge I'll just make a couple of comments, and then we'll go back to the document.

Amman For those of you that came in late, the one sheet you have in front of you, page 26/27, it was missing in the packet I sent you so if you'd just insert that in the report. The color sheet packet we'll go over separately and then we'll have some additional handouts that John will talk about.

Holdridge First of all, this is a draft report. Is anybody here from the press? *(There wasn't.)* It's a draft report, not the final report. The narrative is largely done by Amy Nitka. She did a terrific job of pulling a lot of things together. How do we go forward with this? If the Plan Commission acts on this tonight, then we will bring it to the full Town Board. I think I would schedule a special Town Board meeting for this. I think it's an important topic and ought to be the only thing on the agenda. Maybe what we'd do is have a public hearing, then have the Board review it and modify it, adopt it, reject it, whatever would happen. Once we get through this and get down to a fairly final draft, I will send copies to the Water Study Task Force and ask them to respond, or they could come to the public hearing. I'll get you a complete, revised copy. Then we'll take it before the Board. Our approach is to be transparent. We think what is in here is public knowledge and it should be shared because people have a right to know it. That's the process. Maybe the Board would meet in late July or something like that.

There's always a question about terms. What are terms? I was one of the guys that started the Community Foundation. The biggest decision we had was what to call it. When we started it, we called it the Stevens Point Community Foundation. Then somebody said, what will Plover think? So then it became Stevens Point / Plover Community Foundation. I was at our meeting the other night on this and now it's called the Community Foundation of Central Wisconsin. So terminology becomes a challenge. One of our terms which the group has talked about is we divided the Town into 4 sections. What do you call those sections? I had initially called them "quadrants". We talked about them last time as "areas". When I thought about "area", that doesn't tell you much. So then Janet did some research and one of the things I came up with was "sector". Because we'll be talking a lot about those 4 sectors or quadrants. We thought about calling it zones but that might be confused with zoning and we don't want that. So I'm comfortable with sector or quadrant. Paul, do you have any thoughts on this?

McGinley I was initially against quadrant but whatever you want. I think they're all equally descriptive.

Holdridge Quadrant means there are 4.

Bowen Generally.

Holdridge Well that's what we've got.

Schmidt I like the term "sector".

Bowen Is it equally divided in sections?

Holdridge No. The way they were selected was (*those 4*) sections have more data.

Bowen Then quadrant probably wouldn't be a good term because that means there's equal numbers in them.

Holdridge So what if we call it sector? Anybody have a problem with that? Amy, do you have any problem with that?

Nitka That sounds good.

Holdridge So we'll call it sector. We've got a Southeast sector, a Northeast, a Central and a Northwest sector. That's a major decision. When we first started thinking about this, it was pretty simple; we said, "What is the quality and quantity of Hull's water?" That's a very simple thing. But some of you remember when we decided we wanted to preserve the I-39 West area. Then somebody said, "What does that mean?" The same thing could be applied here. What goes into determining quality and what determines quantity? As you read this, we've really gone beyond that. We talk about causation. I've tried to not get too much into septic systems. That may be one of the primary causes of the water problems depending upon lot size. I didn't know much about this so I've learned a lot. My assumption is that there are all kinds of citizens in Hull that probably have less knowledge than I do and some may have far more knowledge. So this is educational as you read through it. It talks about septic systems, groundwater and how it works then it has the data. That's how it came about.

I briefly want to point out some things. The first page is the table of contents and we'll put page numbers there eventually. Then there are some acknowledgements on the second page. From the Town of Hull standpoint, I was trying to put this into some kind of context. I'll read this first part: "The Hull Board of Supervisor's adopted village powers in July of 1967. With village powers, the Hull Town Board may act for "the health, safety, welfare and convenience of the public." Like clean air, uncontaminated drinking water is a major public health goal."

That village powers gives the Town Board, if they choose to use it, the power to promote the public health. This is, at the bottom, a public health issue. So I need to add a reference in there. Towns could choose to not do anything because the statute says "may". Our Town Board said we really ought to look at this. So that's why that paragraph is important.

"In May 2011, the Hull Board of Supervisors created the Water Study Task Force to examine the quality and quantity of groundwater in the Town of Hull. Recent events sparked Hull official's interest in water issues. Over recent months, Hull officials were contacted by citizens about the quantity of Hull's water. That contact usually occurred when rainfall diminished creating the appearance of a drought. Another factor which engaged Hull citizen interest in water issues was Stevens Point's installation of Municipal Well #11 which created concerns among Hull residents nearby that their wells would be drawn down by the pumping acting of the new City well."

Those were the 2 factors. It didn't have anything to do with quality. This got involved because of quantity. Once we started thinking about it, we felt we didn't know the quantity issue and we certainly didn't know the quality issue. So essentially that's how this got started.

“But Hull officials have limited knowledge of Hull's overall water situation. Residents of Hull rely on private wells for their household water. While there has been some recorded individual testing of homeowner's wells over the years and a recent study by Stevens Point of water levels during the installation of Well #11, there has never been a systematic, comprehensive and ongoing evaluation of drinking water resources in the Town.” That's certainly true of us but I think it's true of every other town in Wisconsin.

“There has grown a public awareness of the value of water resources in Wisconsin and the United States. Public awareness in Wisconsin has been heightened by the efforts of the City of Waukesha to obtain Lake Michigan water because of contaminated municipal wells. There has also been the struggle among some suburban towns near Green Bay to obtain Lake Michigan water because of contaminated municipal wells. The Town of Ledgeview has two water systems – a sanitary public district and private household wells. The sanitary district wells became contaminated with arsenic and radon. They now get water via Manitowoc from Lake Michigan 35 miles away. Closer to home in Central Wisconsin, the City of Abbotsford explored the piping of water from Wausau 30 miles away because of increased demand for water. Eventually they drilled 12 new wells which, despite federal/state aid, resulted in a water rate increase for each household of 55%. Previously, conversations about water availability occurred in the Western United States particularly regarding the distribution of Colorado River water to agricultural lands and communities.”

That situation in Waukesha is a tough one because the Great Lakes governors have a Great Lakes compact which says if you are out of the Great Lakes Basin, you cannot tap into Great Lakes water. So Waukesha with seriously contaminated municipal wells is trying to get Great Lakes water. If you read the Milwaukee Journal Sentinel, you'll see articles about once a week on Waukesha. They're getting an environmental statement. They're trying to get the Department of Natural Resources in support of them. As I understand it, all these governors have to approve it. So the governors of the Great Lakes states are very conscious of the value of their water resources.

I want to talk a little about the acknowledgement because this thing wouldn't have been possible. It was possible because it's in Portage County and close to the University. “This report would not have been possible without the assistance of Dr. Paul McGinley, Associate Professor at the College of Natural Resources U.W. Stevens Point; Ray Schmidt, Water Quality Specialist with Portage County Planning and Zoning Department; and Bill DeVita, Laboratory Manager at the University of Wisconsin Stevens Point Water and Environmental Analysis Lab. Their scientific and technical knowledge and the water data they provided are the underpinning of this report. Their expertise was crucial to understanding the water situation in the Town of Hull. The writing of this report was largely done by Amy Nitka, a graduate student at the UWSP College of Natural Resources. Without Amy taking the data and putting it into narrative form, this report could not have been possible. Thanks also to Patty Amman, clerical assistant at the Town of Hull, for her research and organizing the information, following up with the various contacts

(persons and institutions) not only in the Stevens Point area but elsewhere in Wisconsin. Finally, a thank you to the Hull citizens comprising the Water Study Task Force for attending the meetings and asking important questions about the quality and quantity of Hull water. Seven meetings were held by the Task force. They are all to be commended for their invaluable assistance.”

In terms of Special Considerations, we need to know up front there are limits to what we did. “This investigation was not a scientific, academic study based on control groups but rather an empirical study based on data collected over time. It gives us a general impression of the water quality and quantity in the Town of Hull.” So what we did was to historically look at the data we had, organized it so it ended up in 4 different areas of the Town and then that was what we made some decisions about. There was one person who resigned from the committee who probably thought it should be much more scientific. But it was never set up to be scientific. The data wasn’t collected to be scientific.

“Uniqueness of Study Investigation: As far as Hull officials know from discussion with town officials in other communities, the Hull effort is the first of its kind to evaluate, understand and plan to preserve its private, household water supply.”

“Legal Responsibility, the Town, the Homeowner: Public municipal wells like Stevens Points are required to meet water quality standards set by the Wisconsin Dept. of Natural Resources.” Those are probably also set by the EPA, Environmental Protection Agency.

McGinley Wisconsin has “primacy” as they call it, reinforcement of regulations.

Holdridge “Private household wells, on the other hand, like those in the Town of Hull are unregulated. Each household is responsible for determining the quality of their water using health standards set by the Federal Environmental Protection Agency and/or the state Department of Natural Resources.” Those are voluntary standards. Al, you can drink whatever water you want from your pump. There’s no requirement for it to meet certain standards. That’s up to you. If you want it to meet a standard, then you would have it tested and through remediation. That’s true of any of the 2,000+ households in Hull.

The next one is: “Selling a House – Clean Water Requirements. When householders sell their house, there is typically an Offer to Purchase written, usually by a Wisconsin licensed realtor. Realtors use a provision of the Offer to Purchase to require drinking water to be tested for quality. Also, financial institutions will require a water test prior to extending a loan particularly if it is federal or state funded or insured. Finally, buyers often require water testing before purchase.” So the reality is, anybody in Hull who wants to sell their house, there probably will be a requirement by the buyer or the financial institution that their water be drinkable.

Laug What if it’s not?

Holdridge Then you negotiate.

Laug I think you’re just opening up a can of worms for everybody in the Town of Hull.

Holdridge What do you mean?

DeVita It's a requirement isn't it? To have it tested for bacteria at least.

Holdridge I talked with 2 realtors who are some of the most established, a couple of banks and they all said that if somebody comes in, if a realtor has a customer and they want to buy a house, there will be a provision in there as part of the Offer to Purchase that requires a water test. There may be something on septic systems too.

Schmidt Generally there is.

Holdridge So then, if somebody goes to get a loan, the loaning agency will require a water test. Finally, if somebody is going to buy a house they will very often require a water test. That's just the reality. If somebody sells their house without a realtor to somebody who has their own financing, there's not a problem. Also, banks normally do not require a water test for refinancing. That's the climate. That's just reality. Any other questions about that?

Laug Are you inviting Stevens Point to annex the Town of Hull?

Holdridge No. I'm just trying to be transparent and let people know there are potential water issues that are starting to creep into Central Wisconsin. Ten years ago, who would have ever thought of Abbotsford or that Waukesha would have contaminated wells or the situation over by Green Bay with that one. So I think we need to be prepared and know about our water supply. This is not a mandate that says that you, as a homeowner in the Town of Hull, have to get your water tested. That's going to be left up to the householder/citizen. But what I am saying is that when you go to sell a house, it would be a requirement for somebody to get financing to get a water test. Say the water test is high in nitrate or whatever it might be, that would be a subject of negotiation between the buyer and the seller. That's the only point I'm making.

Laug When you see 4 or 5 houses in a subdivision that aren't selling, it might be a problem, right?

Holdridge I think if you went outside of Hull in any place in Portage County you would have very similar challenges in regard to the groundwater. It's just the reality. I don't know why houses don't sell. These municipal wells, they've got their own problems. Waukesha is a good example. I took a tour of the new Well #11 and they have all kinds of stuff in there to make sure the water isn't contaminated.

Binder Plover put a new system in to take something out of their water and I know friends that live in Plover, their water rates went up considerably. That's municipal. I had bought my house over 25 years ago. I had my water tested in the Town of Hull. It was part of the process of buying a house. That's not anything new.

Enright A limiting factor is that the bank won't lend you money to buy a house if the water is not safe or the septic system is condemned.

Holdridge I haven't talked about septic systems. I've lived in my house for 30 years and I'm sure when we go to sell it, somebody is going to want to have that septic system evaluated and they might say they aren't going to buy it unless we replace the septic system. We haven't had

our water checked and we live right in the well field off Hofmeister. You want to comment on the septic system Ray?

Schmidt A lot of people check on existing septic system records that we are required at the County to keep permanently. We inspect every septic system when it's installed and we keep those records and we also keep records on maintenance. They have to pump the septic tank at least once every 3 years.

Holdridge You send out a notice.

Schmidt That track record is available for anybody to see. Yes, a lot of buyers and realtors check on those.

Holdridge I hadn't thought about this but then what if somebody wants to buy or sell a house? I checked on it and this is what I got.

Laug I'm not doubting it, what you found out. I'm just asking when we're doing all this testing, what is the Town of Hull willing to do to help with what we find out?

Holdridge Good question. We're going to get to that. Then the Purpose and Introduction to Water Resources in the Town of Hull. On page 7 is Water Quantity in the Town of Hull. My thought on looking at that graph and the discussion above it, probably should be under water quantity because as I look at this graph, this is the only evidence I could see of the issue of the question of are we running out of groundwater. This is from 1988 to 2005 and this has monitoring wells but it shows it pretty stable in terms of the quantity. You agree?

Nitka We can put it in either part. I think that was just part of the introduction explaining water resources.

Holdridge On page 11 it's got the standards. Drinking water and groundwater quality health standard advisory levels. I think these standards have to be met by municipal wells. Am I accurate on that? If the Stevens Point municipal well tests 20 ppm in nitrate, and the standard is 10 ppm, they've got to do something. Right?

DeVita Right.

Holdridge Because that's a mandated state/federal law.

Schmidt Those are for public wells.

Holdridge These are also guidelines for private wells.

Schmidt Correct.

Holdridge On the next page, there is a map showing the old landfills. If we get into it and if there are any problems near those landfills, this might be causation. We have nothing that says we are having any problems with those old landfills. It's in there (*the map*) but it's not particularly relevant to what we're talking about. On page 15, this shows the acceleration or the

deceleration of testing. You'll see in the 1980's there was an awful lot of testing done. That was the high period of pesticides and great concern about water. On page 17 there are 2 public wells that are not municipal wells but they serve particular functions. One serves mobile homes and those are monitored by the DNR and that is public information. If you have a tavern or a church, those are also monitored because the public uses them. As I look at those on page 17, those are potentially great sources of any monitoring program we might have. I don't know how often the DNR tests them but it's on a website and it's all public information so it might be useful.

Schmidt All of those wells are tested at least once a year and some of them more often depending upon their levels of contaminants.

Holdridge Then you have the sections broken down. Right towards the end there are some great colorful maps highlighting tests that were taken.

Stemen Ray, on page 18, St. Casimir Church is really, really high and then there's the Church of Christ which in 2010 was very high then went back to normal readings. How can that vary so much?

Schmidt It can. It depends on a lot of factors one of which is precipitation. One is what is up-gradient. With Church of Christ, up there there's quite a bit of irrigated ag a couple of miles to the east. Depending upon the input of fertilizers and the irrigation and the precipitation, you will get spikes like that. Also with Church of Christ, that whole area just east of there was recently developed and a lot of new lawns going in, new landscaping. Generally when you get that kind of situation You've got more fertilizers going in and more flushing to the groundwater. It's flowing from Fleet Farm towards the Plover River and past that Church of Christ area. That's right behind Frank's Hardware.

Holdridge Then we broke it down into the 4 sections. The maps show the land/lot sizes and gets into the nitrate problem. When you go to page 32, it takes each one of the 6 contaminants we're talking about and identifies those in terms of average and median based on those 4 sections of Hull. Then there's a conclusion. At the end there's a reference sheet and a glossary that Amy did as there are a lot of terms that may be unfamiliar to people. So that is basically the report.

I want to focus on a few things. Handout A is a colored page showing the quantity question. If somebody comes in and asks me about their water going down, it hasn't rained, etc., I start looking for evidence and the only evidence I know of is this graph right here but it only goes to 2005. If you ask, here's what we've got and here's what we show. We don't know from 2006 on but we know what's happened on selected wells. Sometimes this is their sprinkler (*well*). They'll say, "John, it hasn't rained and I'm concerned." I'll say, "I can't give you any perspective." I could show them this. This is old data but it's empirical data that's been collected and that's what we've got. We don't have any other way to measure that.

DeVita These are City wells, City of Stevens Point monitoring wells. They probably have information up to 2012 I would think.

McGinley That's true, that could be another 5 years worth.

Holdridge They're in the Northeast portion of Hull. It may be City but they're in the Town of Hull. These monitoring wells. But this is all I've got.

McGinley I think what Bill is saying is if you want another 4-5 years on there, that is part of the spreadsheet. But you're right; I suspect it would be the same pattern. You'll find it goes up and down but not dramatically.

Holdridge In the absence of this, Hull officials don't have anything. People really expect us to know something about this as they do on any number of issues. If we can get more of this, that would be helpful.

Enright Is this typical? Isn't that pretty shallow?

McGinley Isn't that supposed to be "feet", Amy?

Nitka It says "inches to groundwater".

Enright Inches?

McGinley Inches? Or is it feet?

Nitka Oh, you know what, it's probably feet.

Schmidt It's feet. Good eyes Bob!

Enright But is that typical? Would you expect Hull water to be that?

Schmidt There's real shallow groundwater in some areas where they've got mound systems. It would be in that 5-10 feet depth. In the Southeast part of the Town, 25-30 feet.

Holdridge This first one would probably require a mound system.

Schmidt Most likely. The water table is fluctuating in that 5-10 foot range. From what I've seen in monitoring wells in other parts of the County since 2005 they have been rising back to more the higher part of the cycle. Especially with 2 years of above average rainfall.

Bowen Does the City of Stevens Point have any intention of upping their pumping gallons per day? I see that was influenced by the wastewater treatment facility that they have. If they put in any more fountains, maybe they'll pump more water.

DeVita They're in the business of selling water.

Bowen Is that right then; they've got a surplus of water?

DeVita Well, they've got a good source of water in the Town of Hull.

Bowen I noticed in Well #11, what it was...

DeVita The new well is rated at 13 million gallons per day and they're going to pump it at about 5 million gallons per day.

Bowen If they pumped it at 13 mgd, it still wouldn't have a negative effect on....that's why I asked. Is there any intention of going from 5 to 13?

DeVita I imagine so, absolutely. I mean they're planning to grow. That well is going to supply water for the City of Stevens Point for the next generation and that single well could supply the City's current needs. They could shut down everything else and one well could supply everything. But that's not their intent. They're just going to stay with the treatment plant as they need it. The treatment plant will only handle 5 million gallons per day.

Bowen What is the projected affect on the private wells in the vicinity of Well #11.

DeVita According to the models that are in the report of S.E.H. (*engineering firm*), very minimal drawdown, but that was a 72-hour pump test.

McGinley I think the figure is in here for that.

Holdridge One of the recommendations though is to cooperate mutually and monitor the impact of Well #11 and the Hull citizens around there.

Bowen It's just a verbal...

Holdridge Of course it's verbal; we don't have a signed agreement with them.

Bowen I'm thinking long-range if they did move to 13 mgd and it started to affect those private wells, maybe you should make a contract with the City of Stevens Point to buy water for all those people in the vicinity of Well #11.

Holdridge You've communicated with Halvorson as much as I have. We really want to share data with them. So we're going to try to make that effort. One of the recommendations is clearly to have more intergovernmental approaches. We both need good water. This Abbotsford situation, when I talked with the water manager there, I said, "Why didn't you run water 30 miles from Wausau?" He said, "We were going to do it and the communities along there wanted us to do it but they weren't going to pay for it until they needed the water." And so that is what killed it. So "who pays" is a good question.

McGinley It's a question that's probably not going to go away. Looking at that figure 7 on page 9, the color one that is attached, Bill is referring to those monitoring wells, monitoring well #4, MW3 and MW7. I suppose one way for you to track that would be if you were getting their measurements from those monitoring wells over time. I presume those are the regular wells that are in their network. So to answer your question, what is the impact. They got a pretty long track record on those wells from historical data.

Holdridge I don't know what the Board wants to do, but we need to identify these monitoring wells. A basic need assessment. Where are the monitoring wells? Particularly in Hull. We did get some maps from Kim Halvorson which I think Melvin has. Melvin Bembenek

knows a lot about this because he used to work for the Water Department. So we need to have them tell us where the wells are and if they're in the Town of Hull. A lot of them are in the Town of Hull. Some are not. Those are potential great information sources for us.

Stemen John, how is it that the City has monitoring wells in the Town of Hull to begin with?

Holdridge I don't know. They've got them in the Plover River valley. They've got them in all sorts of places.

Bowen It's a water quality thing.

Holdridge Some of them have been there for quite awhile.

Schmidt It's part of an early warning network. They were put in the Town back in the 1980's under a verbal agreement between the Town and the City.

Holdridge They've got 8 wells. Ray, do you know if any of those wells were shut down because of contamination?

Schmidt I don't know but I don't believe so. I know one of the wells behind the Hilltop was in danger of being shut down and in fact nitrate was increasing but they starting pumping that one at a slower rate and it stabilized below 10 parts per million and so they didn't have to shut it down.

Holdridge How deep are their wells?

Schmidt Probably between 80 and 110 feet deep.

Holdridge Would those be called shallow wells?

Schmidt I don't think of them as shallow wells. They're almost all down near *(but above)* the bedrock.

Stemen What is the diameter of a well like that?

Schmidt It depends. Some of their wells are 8, 12, 16. Well #11, what is that one Paul?

McGinley You guys toured it. The big caisson with laterals that go out 100 some feet on that.

DeVita 18'

Schmidt I think Well #10 is a 10 foot diameter caisson.

Holdridge Well #11 has got those prongs coming out horizontally. That's a different sort of structure.

McGinley Maybe that's because of the depth of sand above the rock. If you go to Waukesha, they have the 2,000' deep wells. Here they want to stay in that sand and gravel.

Holdridge Handout B is on "transient, non-community water systems" and "other than municipal" water systems. Those are required by the DNR and as Ray said, they may have to test those once a year. But the part of it from our standpoint is that it's public knowledge and we want to use that as some kind of assessment. Then handout C...

Enright Can I ask about the City wells, if they are high in nitrates, do they have to shut down that well or can they treat that? Do they pull those nitrates out?

Schmidt They could treat it if they had a treatment system built into it but the City doesn't have any treatment for nitrate. What they would do more likely is blend that high nitrate water with lower nitrate water from a different well to come up with a compromise-water.

McGinley But Plover does treat for nitrate, right?

Schmidt Plover treats for nitrate as well as Whiting. So does Amherst.

Enright Do they just go down to this standard listed here or do they...

Schmidt Generally they go down to about 7.

Enright So what would a homeowner do if their well was high in nitrates?

Schmidt Many homeowners will install a reverse osmosis system on a single drinking water tap because the water is fine for other uses.

Holdridge As long as you don't drink it.

Schmidt Drinking or cooking.

Holdridge That's a good question. If Stevens Point goes higher in nitrates, bacteria or any of those 5 or 6 items, what are they required to do as a municipal government?

Schmidt Initially they would have to notify the public and that has happened with other municipal systems where they had bacteria problems. Junction City and Plover most recently that I'm aware of, and they notify the people involved and they chlorinate the lines and then after they have a couple of safe samples, then they let people know they don't have to boil their water anymore. But if they had another contaminate, maybe watching the trend and watching that rise. I mean it's not something that's going to go from 1 ppm nitrate to 12 ppm nitrate and not see a rise. They'd be watching it and have contingency plans if that happens.

Holdridge I know this Town of Ledgeview of about 6,700 people, not directly connected to Green Bay but the next town from Green Bay, they had half of their wells on a sanitary district – a sort of municipal system, half were private wells. The ones on the sanitary district had arsenic and radon so they had to shut those down. They tried to get it from Green Bay and were turned down. I think this happened in 2008 before the compact was signed; they got the water piped

from Manitowoc – Lake Michigan water, for the part that was in the sanitary district. We have 2,020 households and if we had 1,000 wells that were just terrible, what in the world would we do? We have about 52 subdivisions that are spread all over Hull and we have a lot of gentleman farmers, lots of 2-8 acres. This would be an enormous public health issue. My view is that we need to start looking at this; I think Hull's Town Board is the same way. It's happening; water is becoming very important. When I grew up in Baraboo, almost every corner down in the square had a water fountain and it was just taken for granted. We can't do that anymore so we need to be conscious of what it is, track it and do what we can. It's a responsibility for those who have a problem with their wells; it's going to be the householder. This government, we'll provide the information but we have no authority to tell you what to do with the water. Now the City is a different situation. They are mandated to report it and mandated to have clean, safe, uncontaminated water. That's the way it is structured. We need to find what's out there. When we go through the recommendations, you'll see what I'm talking about.

On handout C, this is important because it breaks down those 4 areas. Northwest Hull which is recognized as the I-39 West area, from the Interstate to over to the Wisconsin River, during this period of 2000 to 2010, there were 22 wells sampled. The range was 0.1 to 5.2 in nitrates with the average being 1.4. Somebody want to explain what the median is?

Nitka That is the half way point. Half of the samples are above that and half are below.

Holdridge So in the Northwest area from the limited testing of only 22 tests, none of those wells tested were above 5.2, is that right, that's the range?

Nitka Not of the ones tested, yes.

Holdridge Then the Central area it goes up slightly. The average is 4.6. The median is 2.8 and the range is 0.1 to 13.8. So that is higher than the nitrate level that is recommended. Then you go to the Northeast area and that goes up a little bit further. The average is 4.0 and the median is 3.3. You have much more testing there with 128 tests during that period. Finally you get to the Southeast and that has 121 test samples. The range goes from 0.1 to 38.5 with the median being 7.0 and the average being 9.4. That is an area that would probably require further investigation.

Binder John, don't you think the Northeast and the Southeast, those are the most densely populated areas with smaller lots and that's why, every time somebody sold a house..... they've got smaller lots over there. That's why more testing was done. I'm in the Southeast, Nick's Drive, the worry area.

Holdridge I think that's right.

Binder We had the Blue Top farms around there and the Shavey farms and a lot of agriculture surrounding us for a number of years.

Holdridge We've got data on maps but this is from Bill's operation over at the University and primarily this is the evidence we've got with the test data. Again, remember this is based on what evidence we've accumulated and this is what we've got.

Enright What direction does the water flow in that area? Doesn't it flow southwest?

Schmidt Which area is that?

Enright The Southeast area.

Schmidt The groundwater generally flows parallel to Highway 10 almost straight west.

Nitka It's on those maps. I'm not sure if you can see them in the black and white on page 21/22. You can see the groundwater contours and elevations. The Northwest is on page 20 and the Southeast is page 23. It's a little hard to see in the black and white but you can see the contour lines and elevations.

Binder I have a question for Bill. On table 7 it goes from 2000 to 2010 so that is a long period of time. Do you have it broken down in years at all as far as has it gotten better with less agriculture going on in the Southeast?

DeVita I don't know as we've broken it down into groups of years. I can't say.

Schmidt A ten-year span is not very long in terms of groundwater time. It takes 30 years to notice a difference in an area. That's testing wells throughout that whole area. Groundwater travels 2 feet a day so in 10 years, how far away is it?

Stemen Does it take 30 years for any contaminant to go away?

Schmidt They all travel at different speeds so something as soluble as nitrate will travel about the same rate as the groundwater.

Bowen What do you charge for a private water analysis?

DeVita The basic test is called the homeowner's package and that is \$49. That's for all the analytes that are listed.

Bowen How's business?

DeVita It's been pretty good but not necessarily from homeowner testing. We do quite a bit of work for USGS.

Stemen What's the wait after to take a sample in? About a week?

DeVita Two weeks usually. We have different levels of testing though. We have the homeowner's package that identifies bacteria, nitrate, chloride, alkalinity, hardness, pH, conductivity, corrosivity. That's \$49. Then we have a suite of metals we can do. We have some pesticides we can test for. So we have different levels. For the Township of Hull, the homeowner's package is probably sufficient although we are expanding some. We have consistently done arsenic and some of the other metals but we're developing tests for uranium which would be a big concern in the township.

Stemen That's not in the homeowner's package?

DeVita No.

Stemen What's the extra cost on that?

McGinley It was \$30 to get tested for uranium, lead, arsenic and a couple of other metals, chromium.

Schmidt That's a bargain.

McGinley It's doesn't get into a lot of detail but it's a little bit of a screening test for uranium. The uranium chemical is a little tricky as there are 3 forms of uranium. Most of the uranium is in one form. If you send a sample to the state lab, they will analyze all 3 forms. Our test really just looks for that one part that has about 98% of the uranium is in. We matched up perfectly with the test we did for here. So we can be a little bit cheaper.

Holdridge We tested the water here (*at the municipal building*); the standard is 30 and it was up over 75.

McGinley We should point out that the standard is based on long-term kidney affects, not on the radioactivity of the water.

Schmidt Bob, when you were asking about the different tests, we recommend that the homeowner package be done as the primary test. If the corrosivity index shows the water is very corrosive, then we recommend that they follow up with the metals because normally the metals are being leached out of the pipes and fixtures and if the nitrate is high, then we know there's a correlation between high nitrates and many other chemicals that were applied with that fertilizer. Most of the nitrate is in the fertilizer. Some comes from septic systems in certain areas but...so if the nitrate is high, then we'd recommend the pesticide screen or if in the future we might be recommending the screen for pharmaceuticals and other personal care products that you find coming out of septic systems. That homeowner's package is really the first test that we recommend then we can use that information to guide people in what else to test for.

Holdridge Is that just one bottle of water, to test for all of them?

Schmidt Yes.

Stemen So you shouldn't ask for a metals test, Ray, when you go in for a homeowners?

Schmidt You could, but I wouldn't if your water is not corrosive.

Stemen What would you call corrosive? Number 05 or so?

Schmidt It's based on the pH but it's also some other factors like hardness so it can be a lower pH like 5 and still not be considered corrosive. We really don't have very much arsenic in the County. Just a little up in the northeastern part of the County. If we were in the Brown

County area or Outagamie County, that eastern sector there, we would recommend the metals package every day, but we don't see that very often.

Enright On the basis of what we know, does it look like any of this, especially those high nitrate levels in that region, is any of that something that citizens of Hull could do anything about? Is some of it coming from fertilizing the lawn and maybe we should just have a public education program saying maybe we shouldn't put so much or is that not really founded on the basis...

Schmidt Definitely some of it is coming from lawn fertilizers in some of the subdivision areas.

Stemen Ray, how does that affect shallow or deep wells?

Schmidt At a deeper well, your water is probably coming from a little further away in order to get down there. But not a lot of difference. If your shallow well is only penetrating a few feet down into the groundwater, then you're going to be sucking up pretty contaminated water at the surface of the water table almost immediately. That's why the DNR code requires that any new wells that are put in need to be at least 10' down into the groundwater plus the screen to avoid sucking up that shallower water. With a lot of the older driven well points, they put them in until they hit water and went another 5 feet and said that was enough.

Holdridge That's the regulation for the well driller.

Schmidt That's the regulation for anybody. The code is the same regardless of who puts a well in.

Holdridge Even if you put a point down?

Schmidt Yes. You meet the same code. It has to be at least 10 feet into the water table plus the screen.

Stemen We don't have any idea if more of our wells are drilled or more are shallow point, do we?

Holdridge Ray's got a pretty good handle on that I think.

Schmidt We don't have that data here but we can certainly develop that for you.

Stemen Just curious.

Schmidt Yes, we could come up with a count.

Reid Do you guys do any reporting of...say someone's test comes up high on something? Are you required to report that to, say, the public health department or any of those agencies?

DeVita It goes directly to the homeowner, unless it is part of the municipal water supply or one of the public water supplies. That goes to the DNR.

Schmidt Like the churches or the taverns or the mobile home park up there, or the parks, Jordan Park.

Zimmerman The state passed a law that they didn't have to chlorinate their water. I think it's chlorinate. Because they suddenly found viruses now in the water in some of the towns that refused to chlorinate their system. Were there any around the Town of Hull that had virus problems?

Schmidt I'm not aware of any but I'm not aware of any virus testing that's been done. Paul?

McGinley I wouldn't know of any around here.

Holdridge The new Stevens Point well, that has chlorination doesn't it?

Schmidt Yes.

DeVita Chlorination and UV.

Schmidt Will the UV attenuate the viruses?

DeVita I believe so.

Holdridge That water works association, the state group, they had a whole session on viruses. These were all municipal wells and viruses are becoming an issue in municipal wells.

Schmidt Viruses will be an issue in private wells too but whether folks will be able to afford to test for them or not will be something else.

McGinley That is still a research area. They are very small and very mobile so there is reason to believe they will travel. But I think we're still learning a quite a bit about it.

Holdridge Yes, that was kind of a new topic.

Schmidt Anyplace that we have septic systems, human beings shed viruses as well as bacteria.

Stemen Do viruses come and go, Ray, or are they constant?

Schmidt No, they come and go.

Stemen You could take the test one day and it could be fine and later...

Schmidt Unfortunately yes.

Holdridge Let's go to handout D. The first one reiterates about municipalities, cities and villages and water quality standards that are mandated. The Town of Hull does not have that. So the last statement, "Citizens in the Town of Hull have to take responsibility for determining the quality of their drinking water." This is up to the individual households. #2 goes back to the information that is provided when a house is up for sale, there's probably going to be a requirement to have a water test. #3 came out of my list, "Understanding water quality requires an understanding of both what is in the water and the health effects. Water appearances may not necessarily reflect water quality. Treatment of contaminated groundwater is specific to the type of contaminant." #4 "Groundwater is always moving and the direction of groundwater flow influences the type of contamination found in a well. That often requires follow-up testing of a household well." That is why I surmise that if you test it once and you've got real problems, then you probably should at some point go back and test it again. Does that make sense Paul?

McGinley Yes.

Holdridge That's why there is often a second testing. Because the groundwater is moving and as Ray says, it's not moving very fast. #5, "Septic systems return most of the water to the aquifer but septic systems may be a primary source of nitrate contamination, the major contaminant found in Hull's water." Is that accurate that the major contaminate found in Hull water is nitrate?

McGinley Yes.

Holdridge Then on #6, "Primary drinking water standards are health based. Public water systems are required to meet the primary drinking water standards." #7 "Secondary drinking water standards are public welfare standards established as a guideline to water users. Private wells in the Town of Hull do not have mandatory standards. Drinking water standards serve as guidelines for private wells." #8 "From the data in this report, there is little evidence that Hull has a water quantity shortage. Though the water level may fluctuate over time, it has remained remarkably consistent." I'm just trying to get a thesis out of all this data we've looked at and that's my impression of the question of water quantity. We don't seem to have a water quantity issue based on the data we looked at. #9 "From the data, it appears water quality in the Town of Hull generally has been safe but evidence also suggests further investigation is needed. Particularly in the Southeast area of Hull, nitrate levels in some households are higher than the recommended level for health standards. That area of Hull should be monitored and evaluated over time. Sometimes the evidence from the past is contradictory. All sections of Hull need to be comprehensively and systematically monitored." Any disagreement with that?

Schmidt I would say in the Southeast area for the nitrate levels, rather than saying "some households", say "nitrate levels in many households are higher than the recommended level" because down there the average was 9.4 ppm and that's almost at the 10 ppm standard.

Holdridge Instead of looking at these numbers, the thing that strikes me, if it's excellent then it's probably 0 in terms of nitrates or maybe 2. If it's very good, maybe it's 2 to 6. If it's good, it is probably less than 10 parts per million. We've got to go through the public health standard.

We can say that 5 ppm is too much nitrate but that isn't what the public health standard is as I understand it. You can say it ought to be 5 or ought to be 3 or ought to be nothing.

Schmidt There are actually 2 public health standards for nitrate. The one set at 10 parts per million is the enforcement standard. At that level, a public system is required to take some action. There is also the preventative action limit which is set at 2 parts per million. Once you get to 2 ppm, it's recommended that you take some preventative action and keep it from going higher to get to that 10 ppm. So 2 ppm is actually a level of concern as well.

Holdridge We need that (*information source*) then Ray, because this is the first that I've heard of that.

Schmidt All of the standards have a preventative action limit.

Holdridge So in other words, when it hits 2 ppm, you better be monitoring and watching it.

Bowen Particularly for the more at-risk population.

Schmidt Right. Good point Bob.

Bowen At risk at 10 ppm for sure. I wouldn't call that "good".

Holdridge No, but the risk at 10 ppm is if you're drinking it, particular young people, infants. Now haven't they raised that? They say that elderly and others should not be drinking water over 10 ppm? Isn't that another new public health standard?

Schmidt The state public health advisory says no one should be drinking water that is 10 ppm (*in nitrates*) over an extended period of time.

Holdridge For an extended period, okay.

Schmidt Even normal healthy children and adults. We used to advise that it was okay for normal healthy children and adults to drink water above the 10 ppm.

Holdridge So if you would get me that secondary standard information, that should be in there.

Schmidt Okay.

McGinley I'd like to make a comment on #5, "Septic systems return most of the water to the aquifer but septic systems may be a primary source of nitrate contamination..." I don't disagree with that comment but I guess could that be interpreted to say that septic systems are THE primary source? I guess to me that is probably a septic system and fertilizer kind of combination. While that's not inaccurate to say "a primary source"...

Holdridge Maybe "one of the primary sources". That would be better, okay.

Enright Maybe you want to add there “fertilizer”.

Schmidt It looks to me like it’s an all-purpose statement; “Septic systems return most of the water to the aquifer...” That’s quantity based.

McGinley That’s true.

Schmidt Then it’s also trying to do something with nitrate and I think that’s two separate ideas.

Enright Maybe separate those two. Is that what you’re thinking?

Schmidt I think septic systems are only a primary source of contamination or the primary source of contamination in small lot subdivisions.

Holdridge We need to be careful how far out we get in this.

Schmidt I know, you need to be sensitive.

Holdridge I’m thinking we know we have a lot of qualifications. Hopefully as we get more in-depth, we can identify those qualifications. I think the question about fertilizer being another source, that should be in there. What brought this issue up about septic systems is Dave Wilz and I went to a presentation at Sentry run by the League of Women Voters and they were talking about these municipal wells in Stevens Point and Plover. You take this water and treat it and then send it out to the Wisconsin River and it goes down the river. They were talking about quantity and so forth and it seemed to us that septic systems do not send water down the river. An ideal septic system in sandy soil is supposed to return water back into the aquifer.

Schmidt That’s exactly right.

Holdridge You were there Ray, at that presentation, weren’t you?

Schmidt I was at one of them.

Holdridge That’s what struck me about septic systems, we’re not taking water out of the area as municipal systems do. They treat it and put it in the Wisconsin River and it flows down to New Orleans, right? Our septic systems put the water back into the aquifer. Now it may be high in nitrates and that is an issue.

Stemen Is there a distance problem in these small congested areas, Ray, from the well to the septic system?

Schmidt We make sure that all of those septic systems and wells meet the 50 foot required set back that the code specifies. But plumes from septic systems don’t universally disburse the contaminants. Contaminants travel in plumes down-gradient. They follow the groundwater. If

you happen to have a well in that plume, you're going to get some level of contamination in that well.

Stemen Fifty feet is normally acceptable in sand, would you say?

Schmidt No, 50' is the code required minimum and I doubt that even 100' is adequate.

Holdridge So you're talking about the septic system distance from the well.

Schmidt Yes.

Binder How did we determine the 50'?

Schmidt It goes back to the early 1970's.

Bowen Can soil types be differentiating for their filtering capacity?

McGinley For nitrates? It's tough to remove nitrate in a conventional system because that water is going into the drain field and you want air in there. That's why you can't be too close to the water table. In that situation, the nitrate isn't going to change. It's going to have nitrate go into the drain field and then it's going to move into the groundwater. So normally a conventional septic system really doesn't remove nitrate. So you're going to have 40-50 milligrams per liter nitrate coming out of a conventional septic system.

Bowen But once into the soil on its way to the aquifer, is the soil type related at all to...

McGinley People have looked at that. It's just hard to get rid of nitrate. There are some biological reactions that change it but there doesn't seem to be a lot of evidence that you see a lot of that occurring.

Bowen Is the oxygen level higher in sandy soils as opposed to heavier soils?

McGinley Yes. So you'd have a greater chance of getting rid of it in a heavier soil, I suppose. If you want to keep oxygen in there, it's going to stay nitrate. You really need to have no oxygen. That's usually a case when you have no water movement and that's just not the situation for water. So it's a little tricky to get rid of nitrate. There are fancier systems that do that. You could take that water out of the drain field and put it back into the septic tank and use a type of recirculation system to get rid of it. That's not conventional though.

Bowen Are there any microorganisms that are better at...

McGinley They're great at getting rid of it but they don't want any oxygen so it's usually not in the flow path. There isn't an easy way to do it. It becomes more of a sophisticated, tricky way to do it.

Schmidt We did a research project with Byron Shaw back in the 1990's and we had a couple of recirculation samples installed here in the Town of Hull. One on a mound system and one on a conventional system and they worked very well. They did bring the nitrate level down on those particular systems. But each of those systems cost an extra \$2,000 to \$5,000 to install at that time. So for an extra \$10,000 I think you can get the nitrates out of the septic system.

McGinley In fact I think that report is available on our website. There was a student that did a master thesis on it.

Stemen Where does the oxygen come from? From the soil itself or through the vent in the tank?

Schmidt Through the soil.

Stemen So sand has more oxygen than heavy soil.

McGinley You want that. You see the vents in the drain field, that helps the biological breakdown as there is also organic matter you want to get rid of it. If that oxygen/air wasn't going in there, it wouldn't smell very good. So like Ray said, you're getting rid of the bacteria and the organic matter and the nitrate is kind of a pass through.

Holdridge Finally on #9, "From the data it appears water quality in the Town of Hull generally has been safe, but evidence also suggest further investigation is needed. Particularly in the Southeast area of Hull, nitrate levels in some....". What was that Ray, should it be many?

Schmidt I would say "many".

Holdridge "... 'many' households are higher than the recommended level for health standards." There is where I think we need that qualification about the 2 ppm. One of the reactions we'll get from the public is, "Well, we're under the 10 ppm." As is the health standard is often stated. We stated that as one of the health standards.

Schmidt I think in order to be consistent in what the public understands, if we use 10 ppm and call that the health standard, maybe we could take the preventative action standard of 2 ppm and call that a "level of concern".

Holdridge That's where you've got to be watching it.

Binder Then you have every area of Hull except the Northwest that has concerns. The areas are above the 2 ppm.

Holdridge So how would you change #9?

Binder Unless you want to put the chart in there. I'm sure they have a chart where you could break it down into different levels. Put that in as a table somewhere. People have their

own way of what they want to do about it. So if you told them that they need to monitor and keep an eye on their well....

Holdridge Yes, they are responsible.

Bowen Are you making the entire report available? Or just your findings and recommendations?

Holdridge It's public knowledge. If somebody wants to read the whole report....

Bowen My thought is you may have to amplify some of the parts like this table so that...

Holdridge One of the biggest contaminants we have is nitrates.

Bowen Right.

Holdridge Ray has suggested 2 ppm as the "level of concern". Once this gets adopted by the Town Board, it becomes public knowledge. It's probably public knowledge now. It's at a public meeting.

Schmidt I think when we start looking at what we're going to recommend to people when they have, for instance, the 2 ppm or above the level of concern, they're going to test every year. If they're above the 10 ppm, they're not going to want to use that water for drinking or cooking on a long-term basis. Those are the kinds of things we're going to be looking at. Like John said, it's up to the homeowner to monitor their own health and water.

Enright I think those things are important to include in the report because when I read reports like this, especially the first draft, they are just numbers. I didn't know where I was. That same thing happens when I look at my water test results.

Schmidt Right Bob.

Enright What does it mean, you know. So I think it's really helpful for the readers of this report to know this is something we should be paying really close attention to.

Holdridge There is that box that has the various....I think it has the homeowner's package and what the standard is, I think that is included. But I think we need to have something about this level of nitrate.

Bowen Are these recommendations superseding the ones in the draft.

Holdridge The one on Findings but the Recommendations are sort of incorporated in those. Handout E, "Recommendations to the Hull Board - #1 Contaminants exist in Hull's drinking water. The Wisconsin Department of Public Health recommends that people of all ages avoid long-term consumption of water that has a nitrate level greater than 10 parts per million. Uranium in some parts of Hull may pose a health concern in drinking water, particularly for wells drilled deep into bedrock. Unsafe levels of uranium exist in drinking water at the Hull

municipal building.” That needs to be corrected and this would be a recommendation to the Town Board. “Groundwater changes over time and it is recommended that homeowners have their water tested every 15 months.” I think that probably is the recommendation, right? Every 15 months.

#2 “Public education efforts should be initiated to identify threats to groundwater. Information should be shared through newsletter, website, newspaper and other media with Hull residents about contaminants. Information should also be provided on the health effect of contaminants including safety levels and corrective measures that can be taken to remediate unsafe levels. Recommendations should be provided from authoritative sources or experts that residents can go to for advice on dealing with specific water contamination issues. Residents should also be made aware of what they put on their lawns and in their septic systems that affects groundwater quality. That education should include proper disposal of pharmaceuticals.” Some of that was right out of what Amy had said.

#3 “A monitoring program should be established. Contacts should be made with residents in Hull’s Southeast area soliciting interest in testing their private wells. Costs to be subsidized partly by the Town of Hull in exchange for the test results being available to Hull officials. Questions of confidentiality and legal use of data will be explored and explained to residents before implementation. Hull’s attorney will be consulted.” We may have some real issues with confidentiality and if we’re going to subsidize that \$49 package, whether it’s half or whatever, we want to make sure that the citizen understand that information may well become public information in terms of data collection.

#4 “In the other 3 areas, Northwest, Central and Northeast, volunteers will be solicited for longer-term testing of private wells, perhaps every 2 or 3 years, with results to be shared with Hull officials. Questions of confidentiality will be clarified. When possible, public information available from “transient, non-community” and “other than municipal community” water system data will be used in the monitoring process.” Now, that information is public knowledge. Anybody can go to their website and pull that up.

#5 “Intergovernmental cooperation should be established or continued with the City of Stevens Point and Portage County....” When I say “continued”, that’s because Portage County has been enormously cooperative in this whole effort. “...to obtain information on their monitoring wells and their results from regular testing. A cooperative relationship should be established with the City of Stevens Point to share water quality data since both the City of Stevens Point and Town of Hull depend upon essentially the same water. In particular, communication should be established with Stevens Point officials and Hull citizens in the area of the new Stevens Point Well #11 to share information and obtain feedback on the status of household wells as to the quantity of their water supply.” Now that’s important. I forget how many wells are over there. Household wells in Hull were subsidized by Stevens Point to have water tests made on them. I know some of the individuals but hopefully they will communicate with the Town of Hull because I tell you, if they have a problem, they will come to the Town of Hull to be assisted because one of the things we’ve got is (*access to*) attorneys and civil engineers. When people have a problem in the Town of Hull, they come to the Town of Hull government. As they should. If it’s a public issue, then we get involved in it.

Schmidt I think there were 49 wells in that (*test area the City did*).

Holdridge Do you have the names of those people, Ray?

Schmidt No.

Holdridge I don't think we do either.

Stemen John, a question on the sharing of information: if we as private well owners, if we get our well tested, do we give you that information or do you get it from Bill?

Holdridge No, if you get your well tested and you don't want to share it, you don't share it.

Stemen I want to but I mean are you going to get it from....

Holdridge No, I think you'd need to give it to us.

Stemen We'd get a copy of the report.

Holdridge That is addressed down here when we start talking about #6. "A management plan should be established at the Town Board level for data collection and ongoing determination of the quality and quantity of Hull's water. That responsibility should be assigned to a Hull staff member. In addition, at the annual meeting in April, a special report should be given on Hull's water quality and quantity. Any plan adopted should continue in operation for at least a minimum of 5 years with annual updates and revisions as needed." This is the important one because we've have fits and starts where they've collected data on water, back in the 1980's, then nothing happened with it.

Bowen Is this an additional staff member? Or an additional responsibility to an existing staff member?

Holdridge The later.

Bowen Would that be Patty because she's become somewhat of an expert on the uranium.....

Holdridge Let's say she would be a strong candidate.

Bowen Have you had any feedback?

Holdridge No.

Schmidt This is just preliminary. She hasn't been told.

Holdridge We've got a full-time Town secretary and a full-time clerk, Barb Brilowski and Janet Wolle. We've got 2 part-time clerical. We've got a part-time assessor/building inspector one day a week and a part-time treasurer. So there are two possibilities and those would be the part-time clerical, it would seem to me, because this is sort of an administrative/clerical function. And Patty is enormously talented as anybody that works with her has seen. It's up to the individual. But you've got to do that. You can't just say, somebody will collect it. You've got to have a system in place, a management system to get this information. Get it to the people. Start communicating with the good citizens of Hull and be very open about it. If people who have their wells tested don't want it to be public, that's up to them.

DeVita I'll put Ray on the spot here; what kind of assistance can you offer the Town of Hull within the confines of your position with Hull being the most populated Town in Portage County?

Holdridge It's the third most populated municipality and it's the first most populated town. It's double the next one in size which is Stockton.

DeVita With that in mind, can you offer some of your expertise to help the Town develop this report and management plan? Or does that go beyond the expectation level of your position? You're kind of the overseer or expert over all of Portage County, I realize that.

Schmidt I'd have to talk with Jeff Schuler about that but I think it would be within the scope of my position to at least be an advisor on it. Whether I could actually write a plan for the Town, that is a question I don't know the answer to.

DeVita But to serve as a resource?

Schmidt Yes, definitely a resource.

Holdridge Ray has been really cooperative. Anything I've asked, he's just first rate in sharing and that's pretty true of the County.

Bowen Are there other municipalities? I'm sure there are, that have been through this. Maybe they already have something in place that would be similar.

Schmidt Actually, the Town of Hull is kind of pioneering this.

Holdridge Not just in the County but in Wisconsin. Think of it; the City's problem is relatively easy in terms of collecting data. They have 8 wells. We have 2,000 wells. We're trying to come up with some sort of good notion of the quality and quantity of Hull water. I've talked with Stadelman and the Technical Director and I've talked with others and this isn't being done anywhere. Paul, I forget what the proportion of households in Wisconsin have private wells, maybe 20% or something.

McGinley It could be. It's somewhere around 750,000.

Holdridge This is a system, if we're really serious about determining what our water is, this would be an excellent location to start looking at that stuff. The real problem you're going to have is how do you...where do you put the monitors, how do you determine what's a good site, how often should you collect it, that sort of thing. It would be nice to have a cookie cutter and put it down on Hull, a town somewhere in the south or somewhere around LaCrosse or Eau Claire, a town of our size, 4,700 people, rural and urban, an urban town as they call it that has already done it. But I don't know of anywhere that has done it. Now maybe it's been done elsewhere in the country. The question has been raised, "Well if people know my water supply is contaminated in my area, they're not going to buy my house." Well I tried to answer that by saying, "Look, if anybody buys your house and they want to get a bank loan or the buyer says I want the water tested. It's not a question that you can slide this thing because sooner or later the chickens are going to come home to roost." I would be happy for anybody that wants to participate and support us. We're committed. This is important. I think we're going to do it and it may not be near as costly as we assume but I think setting up a system so you can get accurate data. Are we in agreement that it should be every 5 years or at least every 5 years?

Schmidt I think 5 years is an excellent time period. For a minimum.

Holdridge Then you review it annually. The annual meetings are a big deal in towns. It is very historic. We don't get a lot of people at the annual meeting but it's very important. It's direct democracy. We report on our weight limit ordinance which is a very important ordinance and we can report on this. Here's what we know about the quality and quantity of Hull water.

Enright I know you haven't looked at all the methods yet, but when you said contacts would be made to solicit interest in this, are you looking at a budget of how many you can do?

Holdridge No but I think that is one of the questions. If we look at the Southeast area of Hull, we can determine roughly the number of households. I would see us sending a letter to them asking them if they want to participate with us sharing maybe \$25 of the \$49 cost and here's what we want in return. They'd have to agree to it before we could do anything. We'd see what we'd get. You may have a system, I don't know....we have about 2,020 households in Hull and that area is pretty dense so that may be 600 households we're looking at. Then we'd see what we'd get back. That again is a question of sampling. Do we do 10%? Where do we sample? I don't know that.

Syens I don't know you're feelings on that Ray. Assuming that 600 number is correct in the Southeast sector, what percentage of that would you recommend be tested?

Schmidt That's a tough one. I would recommend that every 15 months, 25% of the households be tested. That way you can test all of them over a 5 year period and ideally they would adopt that 15 month testing cycle so that they would have their well tested every 15 months and at the end of 5 years, they would know what their nitrate levels are like at all different seasons of the year. Because we do see fluctuations on a seasonal basis as well as multi-year basis.

Bowen Ray, with that, would you be establishing a threshold of nitrates at which they would repeat the tests? Because I'm sure there are some people in the Southeast sector that have very low levels.

Schmidt That's a good point Bob.

Bowen I was going to suggest that to John that they establish a threshold for subsidizing this otherwise they would subsidize everybody.

Laug Would you do the 15 month testing on the same well or household after 15 months to keep it consistent?

Schmidt I would think it would have to be based on the results that Bob was saying. If it's below that preventative action level, below that level of concern for nitrate, I would leave it up to the property owner to test it, yes. Whereas, if it's above 10 ppm, then there's a real health concern there. But even so, if you test that after 15 months, the groundwater that was there when you tested it before isn't there anymore. It's X number of feet away at somebody else's well. Maybe we should be tracking it that way; testing it at the down-gradient well.

Holdridge These are fascinating questions. The trend question is important. We had some discussion in our Task Force and one guy really thought we should be far more academic or scientific on this thing to see what really happens over time, what's going on here. I don't know how to handle this kind of question and I haven't talked with many people who do.

Schmidt He thought we should be statistically rigorous and we should not operate intuitively.

Holdridge Right. That's the term, statistically rigorous.

Enright But if you're having a sampling as large as you are suggesting, you'll be there. If that's anything like survey sampling.

Schmidt As far as statistical?

Enright Yes,...I think you would meet that standard. Depending upon how you select who you are putting in, but if you're doing it every 15 months and did that over 5 years, you'd get a pretty good picture of what's going on.

Schmidt If it was just an academic interest situation, if you were testing for some other parameter that doesn't have a health concern, that would be one thing. Fine, then test 10% or test 5%. But with the nitrate being such a health concern for the whole population now, I don't think it's out of line to test a quarter of the wells every year.

Enright I actually think that would be good. This is really a very practical, important concern I think.

Schmidt I think if it comes from the Town as a recommendation, people will have more of a buy into it.

Binder You saw a spike in 1985/1986. I bought my house a couple of years before that. There was a lot in the papers at that time about nitrate levels in Portage County. Now you don't see that in the papers the last couple of years. But boy in that time, it was big news for everybody to get their wells tested. So you saw that big spike in 85/86 but you don't see much in the papers. Every once in a while you'll see an article about fertilizers on the lawn and phosphates and all that but it's been pretty quite the last couple of years.

Holdridge You know this thing started based on quantity concerns. I never had anybody asking anything about quality, it was always quantity. "The water is down, am I going to lose my water." Then we've got this Well #11, that was those people's concern, that the big well was going to suck down their water table, those people being around it.

Binder They both concern quality and quantity. It's a resource we have to keep a better eye on at least.

Holdridge What I'm saying is what got this started, as you mentioned is....

Binder People having to drive in new wells.

DeVita Getting back to the testing in the Southeast sector, I think what Ray was saying was very pertinent because we find in the Town of Hull the well depth varies depending upon who put the well in and how much money they had to go how deep to get the water quality they wanted. I think that's true in that Southeast sector.

Schmidt Yes, it is.

DeVita Well depth is going to vary widely and so is water quality. What Amy's done, somewhat in this report but it's in some other work she did, we know that Southeast sector had agricultural influences and septic system influences. Trying to use this monitoring scheme to try to predict what your neighbor or what your well might have in nitrate concentrations or pesticides, that would be one thing. But I don't think, because nitrate is a health concern and well depths vary and sources vary, the only way to know for certain is to test. In Amy's report here, we've already set up various labs you can send your water sample to. Which brings me back to the table you mentioned or the graph you mentioned with the water testing; that's just data out of our lab, the Water Lab at the University. Anybody in the Town could have sent their water test somewhere else and it would not be reflected in that graph. Most likely it went to the University but that doesn't mean....if a plumber came in to install a well or if a well driller came in to do some work and sent their water test out to Appleton or Green Bay, we wouldn't know about it.

Stemen Do farmers test the wells they irrigate from?

Schmidt Generally not.

Holdridge I understand you have to look at health, but does it make a difference in terms of nitrates, if your well is shallow, however that is defined, or deep?

DeVita It matters but deeper doesn't necessarily mean better or more nitrate concentrations.

Holdridge But isn't that an important question to ask?

Schmidt It'll make a difference but it's not predictable. In some areas, deeper water is more contaminated, in some areas the shallower water is more contaminated. It depends upon what's up-gradient and the practices...for instance in a subdivision, if you have a subdivision where all the lawns are green and the property owners apply it themselves, chances are you're going to have a well problem. If all the lawns are green and you've got licensed applicators putting the stuff out there, the chance of having a nitrate problem is a lot lower because they are only going to put on exactly what they need and no more because that's what they make their money on, putting on just enough.

Holdridge This is a big question. The monitoring. A huge topic of discussion. Anybody who has thoughts about that needs to share them with us. I look particularly at academically (*minded persons*). We ought to be able to do that and then come out with something that tells us something, tells us information that is reliable.

Binder Can you do a contract with the Town of Hull if they bring X amount of samples per year where you'd give them a price break? Is that a no?

DeVita No. The homeowner's package is discounted so heavily as it is. If we were to do all the tests individually, it adds up to around \$90. The package is put together for \$49. We honestly don't make money on the homeowner's package.

Binder I'm just wondering.

Bowen Is the water testing technology improving?

DeVita Absolutely. But for the analytes in that homeowner's package, they're pretty much the same. But when we look at well testing for uranium, arsenic, lead, cadmium, that technology is improving as is some of the technology for some of the other things Amy mentioned in the report, the pesticides, pharmaceuticals and personal care products, artificial sweeteners, that technology is....our lab has really benefited from a recent grant that we obtained some new instrumentation....

Holdridge You're state of the art.

DeVita We are.

Holdridge And it's convenient. We'll put in this report, probably in the index the name of those other labs and site that so if people want to go there...

Nitka It's in the report.

Holdridge But I think a reference to what we're talking about in your organization and reference an appendix and let people go there if they want to. That's an option. The last statement (handout E) is #7 and taken right out of Amy's report; "The Town of Hull should provide developers with information regarding groundwater flow. Maps indicating the direction of flow will allow developers to strategically place wells and septic systems in new subdivisions to reduce the risk of contamination reaching drinking water sources." We'll probably elaborate on that and say not just new subdivisions but in new housing constructing as a lot of people have a 2 acre lot with a house but are not part of a subdivision.

Holdridge Then finally we have what we call the Executive Summary (handout F). This would change once the Board adopts whatever they adopt. This is what we would then give to the press. "Safe and uncontaminated drinking water is becoming a major public health goal both in Wisconsin and the United States. The Town of Hull, like the other 16 towns in Portage County and the over 1,700 towns in Wisconsin, rely on individual household wells for their drinking water. Water coming from those wells is not regulated by government. Standards as guidelines have been set but individual householders have to monitor their drinking water and take remedial action when necessary. Stevens Point and other cities and villages in Wisconsin have mandated water quality standards that must be met. Stevens Point has 8 wells to monitor and these wells are strictly regulated by the state and federal government. On the other hand, the Town of Hull has over 2,000 individual household wells and no government regulation. For Hull officials to determine the quality of over 2,000 wells is a challenging undertaking. Following inquires from Hull citizens, the Hull Board of Supervisors in April 2011 created the Water Study Task Force assisted by local experts to determine the quality and quantity of Hull water. The Hull effort is unique among towns in Wisconsin." Then the rest of this is pretty much what Amy wrote. She summarizes the 4 (*sectors*).

Then the last statement, "The Hull Board of Supervisors will be taking up Water Study Task Force recommendations following review by the Hull Plan Commission. Their recommendations include a public education initiative utilizing public media and direct communication to Hull households and additional testing of Hull's drinking water and what can be done to improve water quality. A monitoring program for Hull's 4 sectors will be established with particular attention to the Southeast sector where nitrate levels tend to be higher. Discussion will be initiated with Stevens Point to share data since water quantity is very important to both the Town of Hull and the City of Stevens Point. Additional focus will be on areas in the Town of Hull nearby municipal Well #11. Finally, Hull will establish a management plan to collect data on a long-term, consistent basis and report those results to the Hull Town Board and Hull citizens at the Town's annual meeting in April." That will change based on... (*Board approval*). So that's what we've got.

Stemen John, I've talked with several people about getting water tested and they say, "Where do we get the bottles? We don't know a thing about the University, have no idea where to go."

Holdridge It's kind of frightening to go over there sometimes.

Stemen They used to be able to go over to the Ruth Gilfrey building and that was fine. Now it's at the University with buildings all over. You have no idea where to go if you're not familiar with the University.

Binder So Bill is going to tell us.

DeVita If you want to save the gas, you can call the lab and we'll send you out a bottle. If you want to drive in to the University, you can park in Lot X which is the metered lot right at the end of Stanley Street. Or you could take Stanley Street right into Lot D which is....

Stemen What's the phone number? That would be easier.

DeVita 346-3209.

Bowen Isn't it one of the tallest buildings on campus?

DeVita It has a glass stairwell on the east end.

Bowen Good, then put a rotating beacon on top of that building.

Stemen It's easy for you guys. You know where you're going.

Schmidt Let me ask a question. Would it be a service to the public if the Planning & Zoning office made bottles available?

Stemen Absolutely.

DeVita Because it's easier to access?

Schmidt We could certainly do that.

Holdridge The other thing I was thinking about, if we get this thing going, why couldn't we do something here?

Stemen What about the Town of Hull having it?

Bowen Yes, I think that's the ideal place.

DeVita You could have Patty or Barb or whoever give us a call. Somebody could drop them off.

Holdridge How would you get them back? You really just get a report back to people anyway, don't you? Once you do the testing.

DeVita Right. We send a report in the mail. There's an interpretive guide with the report as well.

Stemen We could pick them up (*the bottles*) here and pay here.

Binder I don't know if they want to deal with the money.

Stemen Somebody's got to deal with it.

Holdridge We've got some people around here that are pretty good with accounting.

Stemen You need the water within so many hours right?

DeVita Right, to do the bacteria test accurately. We need it within 30 hours but we prefer to have it within 24. If it's after 30 hours, we have to flag it. If it's after 48 hours, we can't touch that.

Holdridge Bill, you live right on Torun right?

DeVita Right. We could start a courier service.

Bowen They'd drop them off here and you could pick them up.

Wilz I'd like to add that I get my water tested more regularly than most. I'm in that area. We had ours done 6 months ago and it really is easy Al. I'm not saying you shouldn't have bottles here to pick up but the people over there (*at WEAL*) are great and they handle it, give you a little kit, they explain it and everything. You feel like you can get out and get this thing done, thinking, "I can do this, it's not a big deal."

Stemen If you can find it (*the WEAL office*). So many people don't even know where the University is. They say things like, "I'm 80 years old, I can't climb up those stairs."

Holdridge That's been a concern in the past, trying to go to the University for a program, where to park.

DeVita There's an elevator, there's a handicap entrance, there are signs.

Schmidt John, I'd like to comment on letter E (handout), #7 "Town of Hull should provide developers with information regarding groundwater flow." That is available on the Portage County website in the on-line mapping. We have the groundwater 10 foot contours so the flow is perpendicular to the contours.

Holdridge You people issue the septic forms right?

Schmidt Right.

Holdridge This would be important. We issue the building permit.

Schmidt That would be important. But when you're issuing a building permit, do they have the septic system and the well shown on that plan?

Holdridge I don't know.

Schmidt Because we could certainly put up a life-size map of the Town of Hull with the groundwater contours on it showing the direction of the groundwater flow.

Holdridge I think we could have our building inspector review that from the perspective of the homeowners.

Schmidt Yes, if you want to do that.

Enright It's not just the developers but the septic installers, sometimes when they install new septic systems on a lot, they move it.

Schmidt Right.

Holdridge They could move it from where it's supposed to be?

Enright Well they might move it to a new place because it won't perk in the old place. Actually they always do that don't they?

Schmidt If they move it on the lot, it might be up-gradient from somebody's well now.

Wilz Or when it was built, not knowing. Mine is up-gradient from my well and it could have been placed anywhere when the house was built but they didn't know that back then.

Binder I just wanted to say thanks to those that came in and worked on this report. It's very easy to understand. It's a very good looking report, comprehensive. I appreciate you taking your time to come in and help us out. Nobody likes to give up an evening.

Holdridge I think we've got to give them a hand (*applause*).

Binder Even though Amy didn't have a lot to say.

Nitka It's all in the report.

Holdridge She said it all in her writing.

A motion was made by Bob Enright to approve the report as revised along with any minor changes needed. Seconded by Jocelyn Reid. Motion passed.

Holdridge What we'll probably do is schedule a special meeting of the Hull Town Board. We'll invite all the people and invite the members of the Task Force and we'll see that they get a copy of the draft report before it goes to the Town Board. That was a great group, great participation. We had a solid group.

8. DATE OF NEXT MEETING: *The next Hull Plan Commission meeting will be held on Tuesday, July 24, 2012 at 5:30 p.m.*

9. ADJOURNMENT: *Meeting adjourned at 8:00 p.m.*

Respectfully submitted,

Patty Amman, Plan Commission Secretary
Town of Hull, Portage County