PRIVATE WATER ADVISORY COUNCIL
May 14, 2025
Clean Water Testing, 1990 Prospect Court, Appleton

Meeting Notes (DRAFT)

Attendees:

In-person: Marty Nessman (DNR), Jared Niewoehner (DNR), Sara Fry (DNR), Bruce Walker, Tim Jenks, Dennis Crow, Terry Farago, Rick Peterson, Terry Marshall, Bob Gundrum (DNR)

Online: Matt Kouba, Jeff Beiriger, Audrey Boerner (Eau Claire City-County Health Department)

Skilled Trades School (Kouba):

- In addition to training in well drilling, My Skilled Trades includes education in welding, septic, asphalt and water testing.
- Solar and wind are being added to the curriculum.
- The intent is to move in the direction of activities that well drillers engage in. Solar is being requested as a pump alternative in the well drilling industry.
- WWWA Board members have discussed how to attract more people to the well drilling industry.
- The trend is towards bigger drilling firms. Mergers and acquisitions are moving the industry to predominantly large operations.
- An investment has been made in My Skilled Trades bylaws thar are needed for federal aid eligibility.
- The school has worked with ABC to obtain accolades required to run My Skilled Trades independently.
- The school has four employees. Currently, no students are enrolled.
- There are provisions for enrolling students nationwide. NGWA and Oklahoma State University are involved in development of curriculums.
- The school has had a presence at local high school career days (Reedsburg area).
- The school had 34 applicants last year. None enrolled.
- Classes will be offered from the Reedsburg production facility and at a location in Hillsborough.
- State and federal funding is being sought to operate and promote the school.
- Trends are now shifting toward trades which will work in the school's favor.
- My Skilled Trades has reached out to companies like Franklin Electric, drilling companies, Miller Welding and Lincoln Welding.
- Reasons for no enrollment include the image of the well drilling industry as not offering high wages.
- Arrangements made with local hotels for student housing and for shuttles to transport students to and from the school.
- Questions/Comments:
    - Beiriger recently presented (with Jeff Kramer) to the Drinking and Groundwater Advisory Committee. Current water well industry licensing trend was mentioned. The Office of Rural Prosperity was established a couple years back. Beiriger commented that there can't be prosperity in rural areas if potable water and sewage treatment are not available. There is nothing in Office of Rural

Prosperity agenda that addresses infrastructure. Current focus is on broadband availability with little consideration or provisions for clean water and treating waste in rural areas. With regard to a career in the well drilling industry, Beiriger commented that those interested do not have a clear career path for entry into this field. The threat that licensing trends pose to development in Wisconsin is not generally recognized. Beiriger has held discussions on development of a coalition to work with the legislature on this issue. The intent is to bring to light why it is important to reverse these licensing trends. There is no work to be done in rural areas if you can not get a sanitary permit or provide the potable water needed for growth.

- Peterson: Where do things stand on welding training that is needed by driller license applicants?
  - Kouba: Arrangements are being made to bring a Certified Welding Instructor in. The instructor will soon be onboard.
- Nessman: Does My Skilled Trades intend to further expand outreach to schools in Wisconsin?
  - Kouba: Yes, we have had more success promoting My Skilled Trades to the smaller schools and will continue that approach for the near term.
- Marshall: Does this instructor have knowledge of field conditions and what is required when welding casing in the field?
  - Kouba: We drilled a well for this instructor. He is aware of the positions required and the electrodes that we use. He knows that the welding is not done under ideal conditions. He is aware of the spider clamps, the filler welds that are done, the double pass and the 6010 vs 6013 electrodes. He understands that we are probably standing in mud or water while we are welding and the risk that is involved with that. Rain, sun, snow… he understands what the conditions are. He is a practical and hands-on instructor.

Private Water Supply Program Updates

a) ARPA Well Compensation (Nessman)

- This is a federal grant provided to remediate contaminated wells through treatment or by constructing a replacement well.
- The program started in 2022 with a grant of $10 million. This full amount was allocated/awarded within 1.5 years.
- In February of 2025, an additional $5 million was granted.
- Since February:
  - 130 applications have been received
  - 55 new grant awards have been issued including 11 non-comm well awards
  - There are currently about $2.3 million in applications in house
  - About ½ of the grant remains, we are targeting end of August/2025 to have applications in house for the remainder of the $5 million.
  - Money will be appropriated by the end of November with one year to get the work completed.
  - Treatment is included in these dollar amounts.
  - All money must be allocated by the end of 2026.
    - All work must be completed, and all bills sent to the DNR
    - Payment is sent by DNR after bills are received.
- Crow: Roughly how many applications are received per day?

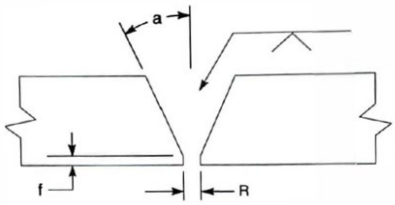
    - Nessman: Applications are mailed to the Fitchburg Service Center. Mail is not received every day. On a weekly basis, seven or eight applications are received.
- Farago: Has the required income level changed with the new grant?
    - Nessman: Income level has not changed. It remains at $100,000 or less for family income.
- Crow: What is the non-comm well income limit?
    - Nessman: The same income limit is in place for the business. The tax return is reviewed for that. In some cases, it is a personal tax return. The same $16,000 award limit is in place with exceptions to grant up to 100% of cost of remediation.
    - Fry: Churches frequently have applied.
- Crow: What is the breakdown on awards for treatment vs well replacement?
    - Nessman: The majority of awards are for well replacement. The exact percentage is not available.
    - Fry: About 1/3 of the applications are for treatment. Some of the applications for treatment are for new wells that were drilled, and the replacement well did not resolve the problem.
    - Nessman: This scenario is fairly rare. We try to avoid these instances during the review process.
    - Niewoehner: Some of these instances are not due to failure of the new well. The new well may have been needed to reduce a contaminant to a treatable level.
    - Fry: This is true in high nitrate areas.
    - Nessman: The same applies to PFAS where often a new well will not reduce PFAS to acceptable levels. Treatment is also needed.
- Marshall: Has anything been done on the emergency level for people with a sand point that is failing due to a nitrate issue?
    - Nessman: Yes, that is available.
    - Fry: Emergency authorizations are still available with the new grant.
    - Marshall: I didn't know that this was still available at the emergency level. I thought you needed to apply and then wait for approval.
    - Nessman: With the new grant, the sampling requirement has changed from submitting two samples to one.
    - Fry: With emergency authorizations, the authorization is conditional. If a sample is not immediately available, the expectation is that sample results will eventually support the level of contamination reported. Recommended remediation is based on the reported contaminant level. The application is submitted, and the sample data is filed after the fact.
- Marshall: How quickly are the emergency applications processed?
    - Fry: Urgent requests can be processed the same day or one day after received.
- Marshall: Most of the time it is a point well that is failing or that has died, and no water sample is available. They know that well had high nitrates two years ago. What do you do in that instance?
    - Fry: There have been instances where it is not feasible to provide a sample from a failing well. We review the history and try to develop a basis for remediation from there.
- Crow: In instances where seasonal conditions cause contaminant levels to vary and a well that once exceeded limits now has levels that are acceptable, what is done in those instances?
    - Niewoehner: As long as there are sample results showing an exceedance within the past two years, an application can be made for remediation.

    - Fry: There have been situations where reverse osmosis treatment has been in use to address contamination for a number of years. New samples can be submitted to determine eligibility and available options for remediation.
- Nessman: Total ARPA awards (from first & second grant) now exceeds $10 million with $8 million paid out. We continue to focus on having payments processed quickly. There have been issues with the DNR receiving a notification that work has been completed. There have been delays in payment resulting when the final payment application is not submitted by the owner to the DNR.
    - Fry: Once the application is received by the DNR, payment is processed within a week. A couple days each week are dedicated to processing these applications. It may be another week or two after approval before finance sends the check out.
- Marshall: Is it still the policy that the DNR will not consider work completed before the grant application has been submitted, or has that changed?
    - Nessman: For those who completed work during the period where the first grant ended and the second grant became available, reimbursement will be provided if it can be shown that the original well was contaminated.
- Marshall: What about someone who has completed work after the second grant became available and they now would like to apply? Will these cases be taken into consideration? This happens when an issue needs to be addressed right away, and they cannot wait for the application process to be completed.
    - Fry: Those instances can be complicated depending on what was done. If we can, we will issue a non-emergency authorization that says if eligible, you will not be penalized for starting before an award has been approved.
    - Nessman: In these cases, we would need to see results from samples taken before the work was started.
    - Fry: There have been situations where geology is different than what was anticipated, and adjustments were required. There was a nitrate replacement well where sandstone was anticipated, but not encountered. Nothing was encountered until they hit granite. The original intent was to extend casing to sandstone. The award had to be revised to include things like hydrofracking. The DNR will work with the owner in instances like these as long as they are kept in the loop.
- Marshall: Where the $16,000 limit is reached with drilling a new well and water from the new well needs treatment due to high iron, conditioning equipment may need to be installed immediately. Can they apply for a second grant for treatment of water from the new well in that same year?
    - Fry: They would apply for another grant. The award limit is $16,000 and they would be applying for two separate awards.
    - Marshall: Iron is not a contaminant. Can they apply for a grant to treat iron?
    - Nessman: We usually try to avoid those situations. In this case we would recommend a full metal screen to see if there are other contaminants present like arsenic.
    - Fry: It can be a balancing act with iron and manganese. When drilling out of high iron levels, manganese levels will sometimes be encountered that will require treatment.
    - Niewoehner: Sometimes a shallower well might be recommended rather than going deeper.
- Nessman: Thank you to well drillers, pump installers and treatment companies that have provided support to the DNR with estimates and answers to questions when revisions were required.

b) Licensing Updates

- There are two areas within NR 146 licensing requirements where welding is mentioned:
  - **Welding Training Requirements** (NR146.04(2)(h)7)
  - **Pump Installer license/registration exceptions** (NR 146.03(2)(c)6 / NR 146.03(2)(d)7)

- **Welding Training Requirements (Gundrum)**
- Driller license applicant training requirements have been in place since January of 2020.
- Six of 33 training hours are to be completed in welding.
- There have been requests to reduce the training hours from six to three.
- An overview of what would be included in a six-hour training has been provided by Certified Welding Instructors.
- The intent here is to show why six hours of training is appropriate given parameters that a well driller needs to consider including power source, electrodes, materials and environmental conditions.
- Marshall: The gap designated as "R" in the drawing is not how casing is assembled in the field. If you are going to require a gap, alignment will likely be affected. This is something that is not done in the field.



a = 30°, +10°, −0°
f = 1/16 in. ± 1/32 in.
R = 1/8 in. ± 1/16 in.
I.D. MISMATCH = 1/16 in. MAX.

- Walker: A pocket knife might be used to provide a gap for alignment.
- Marshall: Typically, there is no gap. If the pipe is not cut square, a screw driver might be used to provide a gap on one side for straight alignment of the casing. Casing is not always cut square, but the manufacturer will state that it is within tolerance.
- Niewoehner: These details are for training. This is not something that is going to be required.
- Walker: Also, the bevel has a small edge where the electrode is going to burn through. If you have a gap, there is potential to leave a residue on the inside of the casing.
- Gundrum: This figure comes from the AWS standard. Why the gap is required there is not clear.
- Marshall: This is a normal welding spec. It has been in place for quite some time. I was taught in high school to have that gap between the two metals.
- Gundrum: The overview for six hours of training includes:
  - Shielded Metal Arc Welding (SMAW) process
  - Technical skills needed to weld various materials using SMAW process
  - One hour dedicated to process theory
  - Five hours dedicated to hands-on training activity
  - The welder's skills are assessed throughout hands-on training
  - Hands-on training includes:
    - Applying SMAW process to well casing position and joint type.
    - Electrical theory and electrode selection (E6010, E6011, E7018)

        - Power source amperage and polarity - settings and adjustments needed to produce a quality weld given electrode selection and casing material
        - Material preparation, preheating and alignment
        - Identifying and understanding causes of discontinuities
        - Care, handling and storage of electrodes
        - Environmental factors that affect weld quality
- Gundrum: Given these parameters, is it agreed that six hours of training would be suitable? What if a driller changes employers and is required to use a different power source?
- Farago: I don't see where six hours is needed. A similar welding approach is used by all of us. If a driller changes employers, there is no difference in welding processes used.
- Gundrum: What about material preparation and preheating?
- Marshall: Preheating is not done. It doesn't happen.
- Farago: In the winter when it is below 32°F we preheat.
- Jenks: There needs to be some balance to this approach. There are some who will not take the time to train an employee before sending them into the field.
- Marshall: I don't have a problem with it, but I would have a problem with field staff standing over my shoulder and telling me to preheat a casing joint.
- Gundrum: This is not a requirement… this is for training purposes.
- Marshall: I understand that, but it tends to work its way into code.
- Niewoehner: Most training is set for ideal conditions and not for the field. That is just how trainings are. But we understand the concern.
- Gundrum: Maybe it should be left to the discretion of the instructor as to whether three hours or six hours are required.
- Farago: I would agree with that. If instructor allows an applicant to go at their own pace and if they are ready after four rather than six hours, the instructor can release them. Some applicants may need the full six hours while others may not.
- Gundrum: What do you typically do for storage and handling of electrodes?
    - Marshall: They are stored is sealed containers.
    - Farago: Ours are sealed in plastic. Open containers are stored in a refrigerator in the shop with a light bulb in it.
- Gundrum: Training is not expected to make the applicant a top-notch welder, but it will provide the basis for becoming competent.
- Niewoehner: With regard to concerns about code revisions, the trend there has been to move away from specifics in code and more towards a performance-based approach.

- **Pump Installer license exception – "Qualified welder" (Gundrum)**
- Gundrum: Moving to the second area where welding requirements come into play, the exception provided in NR 146 allows an unlicensed individual to install a weld-on pitless adapter if that individual is a "**welder**" contracted by a licensed pump installer or by a registered pump installing business. The proposed revision to NR 146 will add a definition for "**Qualified welder**" and the term "**welder**" in NR 146.03(2)(c)6 and NR 146.03(2)(d)7 will be replaced with "**Qualified welder**".
- Gundrum: How often is the weld-on pitless adapter used over other alternatives and in what cases is it preferred over a clamp-on, bolt-on or bolt-through pitless adapter?
- Farago: We use weld-on 80% percent of the time. We will use the clamp-on when there is standing water so that we are not welding casing while standing in water.

- Jenks: Probably 98% of my pitless adapters are weld-on. Clamp-ons have a tendency to leak. If there is not room to dig and we don't want to be in the trench any longer than we have to, we might use the clamp-on.
- Marshall: I use weld-on type 100% of the time with steel casing. For PVC wells I will use a clamp-on.
- Gundrum: Where is the bolt through type used?
- Marshall: Bolt through can only be used on PVC casing. By code it is only allowed on PVC casing.
- Nessman: How often would you contract with a welder to install a pitless adapter?
- Marshall: Most well drillers would not contract a welder, but a plumber or pump installer would because they don't have the equipment.
- Nessman: This is an unusual exception that exists in statute, so it was brought into the code. If you are under contract or employed by a licensed pump installer, you don't need a license to do that work anyway. So maybe this isn't as big an issue as we may think.
- Farago: Pump installers and plumbers are contracting welders to do it. But a well driller is not likely to hire it out.
- Marshall: If someone is an employee of my company, does he need to be qualified for welding before installing a weld-on pitless adapter?
- Gundrum: The words "or employed by" should be removed from the exception in code language so that it reads: "*A pump installer license is not required for a **welder** installing a welded pitless adapter or pitless unit under contract with ~~or employed by~~ a licensed individual pump installer or registered pump installing business*".
- Gundrum: For the license exception, the term "**Qualified welder**" means an individual who holds a welding certification or who has passed a 2G vertical fixed pipe welding **performance qualification test** administered by a certified welding instructor.
- Farago: When welding a pitless adapter, you are not going to be using the 2G vertical fixed pipe position.
- Gundrum: In applications where a pitless unit is welded to steel casing, the 2G vertical fixed pipe position will be used.
- Marshall: For a pitless unit you would weld on a Wisconsin code coupling and spin on the pitless unit.
- Gundrum: But you would never weld a pitless unit to steel casing?
- Marshall: You can, but I have never personally installed one that way.
- Niewoehner: You will see that done more on the municipal side.
- Fry: Often you will see a welder contracted to install a weld-on pitless adapter on a community and high-cap well that is pressure tested. They want to be sure that it is a quality weld that will pass the pressure test.

- **Welding Performance Qualification Test Overview (Gundrum)**
- Gundrum: The intent of the performance qualification test is to verify competency in welding steel well casing, a weld-on pitless adapter, or a weld-on pitless unit.
- Positions where welding competency is to be demonstrated include:
    - 2G vertical fixed pipe (for well casing joint)
    - Fillet vertical up (for weld-on pitless adapter)
- Group discussion: For a weld-on pitless adapter, those present used differing approaches to rod selection and direction of the weld for installation of a weld-on pitless adapter. Some use 6011 electrode vertical down with DC welder, others used 7018 vertical up or in all directions needed for pitless adapter install. Some only use 7018 on

a horizontal weld due to the rod angle that needs to be maintained and because the bead tends to "run". For a vertical weld, going down was thought to be easier than vertical up. With vertical down the puddle is supported as the weld progresses in the downward direction. Some do a first pass on the pitless with 6011 and a second pass with 7018 if the install requires pressure testing. The 6011 "burns in" and provides penetration on the first pass. Some use only the 6011 for a pitless install while others use only the 7018.

- Gundrum: Certified Welding Instructors are testing applicants on the following parameters:
    - For steel well casing joint –
        - Position – 2G vertical fixed pipe
        - Plain end 6" dia.
        - ASTM 53 – 0.280" wall
        - DCEP or AC power source
        - Electrodes: E6010, E6011 or E7018
        - Joint type – Single "V" Groove
    - For a weld-on pitless adapter:
        - Joint type – Fillet
        - Position – Vertical up
        - Flat plate steel at right angle
        - 0.5" thick by 4" wide by 6" long
        - DCEP or AC power source
        - Electrodes: E6010, E6011 or E7018
    - The applicant selects a preferred power source and rod for the test.
    - The applicant also verbally demonstrates knowledge of:
        - Material and procedure requirements (ASTM/API/AWS)
        - Shielded metal arc welding process (SMAW)
            - ✓ Preparation and alignment of materials
            - ✓ Preheat requirements
            - ✓ E6010, E6011 or E7018 electrode selection
                - ❖ power source considerations
                - ❖ material, position, and pass considerations
            - ✓ Power source amperage and polarity - set and adjust as needed to produce a quality weld.
            - ✓ Care, handling, and storage of electrodes
            - ✓ Environmental factors that affect weld quality
- Gundrum: What adjustments to amperage are typically needed? Depending on rod selection and material being welded, aren't adjustments to amperage required to produce a good weld?
- Marshall: After initial set up, the amperage does not need to be adjusted. Once you know where in needs to be set, the amperage does not change from job to job.
- Niewoehner: How about variation in materials sourced from different suppliers?
- Marshall: That is a good point. There can be bad steels sourced form U.S. and China or other foreign suppliers. With some steel when you are welding the bevel, it blows right through. Then you need to put a patch over it to strengthen that spot. There are differences in steel out there.
- Jenks: You can have differences in rods as well. You can use only 6011, but different brands of 6011 will weld differently. Staying with the same rod brand will avoid seeing this variation. While it's the same spec and the same rod, it should be the same from one brand to the next, but its not.

- Gundrum: What about depth of the well, casing material used and required tensile strength of a weld joint? Will that affect rod selection?
- Marshall: No. Whether well depth is 300 ft vs 100 ft you will use the same rod.
- Gundrum: Back to the performance qualification test, the final test inspection criteria that a Certified Welding Instructor will use includes:
    - Visual inspection for discontinuities:
        - porosity, cracks, undercut, overlap, weld size, and profile
    - Mechanical / destructive tests
        - per AWS D1.1-2025 Structural Steel Welding Code
        - cross section etches, fillet weld break and bend tests
- Walker: Returning to 7018 rod selection for a weld-on pitless adapter installation, AI online source says "***E7018 is well suited for vertical up welding with welds built from the bottom up. Proper technique and practice are essential to manage the rod's flow and prevent weld defects***" which is why I use the 6011 because the results with the 7018 were not satisfactory. "***Vertical down welding: while 7018 can be used in vertical positions, it is typically not recommended for vertical down welding. Other electrodes like the 6010 are more suitable for this type of welding***." The pooling, ponding or running of the weld bead caused problems when the 7018 was used for vertical down. I never tried using it in a vertical up position. The 6011 works better for me. Also, the 6011 is a coated rod that is much more forgiving for slag or paint if the paint is not removed from the pitless before welding. Also, if not preheating, the moisture can come out of the steel when using the 7018 and cause problems. This is why using a 6010 or 6011 for the first pass works well because these rods reduce the effects of moisture.

- **License Exam Results by License Type (Gundrum)**
- License exam questions were reviewed and revised in 2020. Study guides for license exam preparation were introduced in October of 2020. Water well driller and pump installer license exam results data from Oct. of 2020 through April of 2025 were compiled. The results were presented.
    - Pump Installer License exams:
        - # of individuals who made a first attempt at passing: 268
        - # of individuals who had to take the exam more than once: 47
        - # of individuals who took the exam twice: 29
        - # of individuals who took the exam three times:15
        - # of individuals who took the exam four times: 2
        - # of individuals who took the exam five times: 1
    - Water Well Driller License exams:
        - # of individual who made a first attempt at passing: 26
        - # of individuals who had to take the exam more than once: 7
        - # of individuals who took the exam twice: 3
        - # of individuals who took the exam three times:2
        - # of individuals who took the exam four times: 2
- Marshall: In the case of the individual who took the pump installer exam 5 times and still did not pass, are provisions made for people who generally have trouble passing a written exam?
- Gundrum: Some applicants do not do well taking the exam in a group setting where there can be distractions. If requested the department will make arrangements to offer the exam in-person, one on one.
- Jenks: Is it the same questions or sections of the code that people are getting wrong are does that vary from person to person?

- Niewoehner: When the old exam questions were reviewed in 2020, some questions were found to worded poorly or were misleading. Now there is a good data set, and it may be a good time to see if there are common questions that people are missing.
- Jenks: There will be areas of the exam with topics that people are not exposed to depending on what part of the state they are from. Jet pumps are common in some parts of the state, but not seen in others.
- Niewoehner: The water well driller exam has geology related questions. That is something that varies depending on where you are in the state.
- Gundrum: A number of individuals have requested feedback on questions they missed. Feedback has been provided a few times. There didn't appear to be common topic areas that were missed. Pulling specific applicant exam results is a bit of a process, but it can and has been done.
- Niewoehner: The study guide includes information on everything that is on the exam.
- Peterson: What is a passing score?
- Gundrum: A score of 75% or better is passing.
- The following exam results data was presented:

Pump Installer 1st Attempt Results

TOTAL	PASS	FAIL	PASS %	Average Score
268	185	83	69%	77.9%

PIP	
COUNT	268
MAX	96
MIN	28
MEAN	77.92

Water Well Driller 1st Attempt Results

TOTAL	PASS	FAIL	PASS %	Average Score
26	18	8	69%	78%

WDP	
COUNT	26
MAX	92
MIN	58
MEAN	78.30

c) Field and Enforcement Updates

- **Field Updates (Niewoehner)**
- Tom Puchalski is retiring
- County assignment update
    - Central Wisconsin County assignments were revised. Steve Janowiak and Adam Scheunemann switched a few counties.
- GEFCO training was attended by John Bowen and Ben Degner.
- High Cap notification and Pump Installer notification system updates are in progress.
    - Fry: A basic form that provides the reason for notification, location and start date will be provided.
    - A dropdown menu with all licensed installers will be available.
    - Included will be a map that allows point placement for the field rep to have access to the location.
- Niewoehner: We are looking at expanding and updating the pump installer notifications.
- Marshall: On the pump installing side, when service work is being done, a pump installer can be in a lot of different locations within a one-day period. It can be difficult to notify the DNR of your location when you are out doing service work. Schedules change as well. With existing installs, it might be difficult for the DNR follow or be on site when the work is done.

- **Enforcement updates (Niewoehner)**
- Marshall: Sampling enforcement is for samples not being taken?
- Fry: Yes, for samples not taken.
- Jenks: Is anything being done to follow up on poor well inspections?
- Niewoehner: Some of the inspections require professional judgement as to when something should be called out or if the inspector fails to call it out.
- Jenks: An example is an inspection report that said an unprotected buried suction line would be grandfathered.
- Niewoehner: We don't have the ability to see those.
- Nessman: That is where you need to use the fact sheets that are available online. If the bad actor is identified, we can make an attempt to do something.
- Jenks: Turning someone in is not a good thing because somehow that will always come back to you.
- Niewoehner: There are anonymous tip lines as an FYI.
- Jenks: It's an example where there are people out there doing this work that really don't know the code.
- Nessman: There has been some enforcement with unlicensed inspectors, but we need the facts and need to be able to prove it before enforcement can be taken.
- Crow: A lot of people are filling out the form with no explanation. They are not taking the time to refer to the code to identify why something is wrong.
- Peterson: In a lot of transactions, the realtor is taking the sample and there is no well inspection.
- Jenks: As the banks tighten up, there will be more inspections done.
- Peterson: The driving force for an inspection is the lender.
- Niewoehner: We can provide fact sheets or develop new ones where there is a repetitive issue that comes up.
- Jenks: An example is the required pump height off the floor. In the code it only applies to a basement, pit, or alcove but makes no mention as to whether it is above grade. So, as it is written, a pump on a garage floor or a pump house floor is not required to be one foot off the floor. This is in 812.32(2)(b).
- Nessman: It should be the same in 812.42 for existing installations.
- Jenks: It only references a basement floor there. It really should be for any floor.
- Peterson: What is the reason for it? It is a sealed system, and there is no risk that it will contaminate the well.
- Nessman: It was originally intended for when non-pressure conduit was allowed. The requirement was then 6" off the floor.
- Jenks: It was 24" for a while. That is why this came up. There was an offset pump in a box-L coming in and the pump ins 6" off the floor in a utility room inside of a shop/garage.
- Peterson: But that was existing.
- Jenks: Yes, but by today's code it would comply sitting on the floor.
- Nessman: We can look at making the change with the current revision, but we are already through public comment period. If it is mentioned at all in the public comments, we can make a change to it.
- Peterson: That is an arbitrary number. If the basement floods it is going to burn out the pump.
- There is a reference in NR 812.29(1).
- Jenks: Where you would have the casing in a pump house, you will be ok because you are already at 12", but if you come off with a box-L, with a pitless unit and concentric

piping into a pump house or a building, that pump could be sitting on the floor, and it will meet code whereas in a basement it would not.

- Peterson: I don't think it is necessary because it is a sealed system. The intent is to protect the well and the aquifer and with a sealed system its not going to contaminate the well if the jet pump is under water.
- Walker: Why are we looking at the pump impeller being a foot off the floor when it is the point of highest pressure? Why aren't we looking at the intake being a foot off the floor?
- Jenks: This is not an issue until you have to sign your name to an inspection, or you have to work on this type of system. We have raised existing pumps up in basements where the six-inch height was OK, but someone wrote them up on it. It resulted in much work with little gained.

d) Annual Report Update (Fry)

- Annual reporting summary for 2023 was presented.
    - 38 letters were sent for the 2023 calendar year
        - 14 NONs
        - 24 warnings
        - One person entered into secondary enforcement
        - One new referral letter
    - The biggest issue was late submittals which was paperwork not coming in within 30 days or samples not being submitted.
    - One licensee had 82% of samples submitted late
    - Two licensees had approximately 90% of their samples missing
- Marshall: It is no longer realistic to expect samples to be submitted within the 30-day time frame. When you go back for a sample, people will not let you into the house or you have to wait until they come back, and it is sometimes 60 days before you can get in to sample. It is not like it use to be. Things have changed. So, I hope you are flexible on that because 30 days is not realistic.
- 2024 Annual Report
    - Letters are not out yet; they will be out by the end of May.
    - Only 7 letters are going out for the 2024 calendar year.
        - Six NONs
        - One warning
        - No one is getting newly referred
        - One person has an existing referral
- Reasons for changes seen in 2024 reporting:
    - Accountability: Those who were not previously making sampling a priority are now making it a priority
    - More people are planning ahead. When they know they will not be getting back to sample within 30 days, they are notifying the DNR that sample will not be submitted within 30 days.
        - In 2023, there were only 147 requests for reporting variances
        - In 2024, there were requests for 781 reporting variances
        - Many of the variances are due to inability to sample because electric power was not available.
        - Where there is new construction, often sampling cannot be done within 30 days.
- Marshall: What you are referring to is reporting on a new well log. But the requirement for new pump install is also 30 days. Things do not happen as fast as they used to with new construction and building homes.

- Fry: The good news is that people are paying closer attention and planning ahead when they know a sample will not be submitted on time.

e) Mobile Well Driller Viewer (Fry)

- We are moving away from the AGOL downloaded mobile app to a browser based mobile application.
- You will no longer need to maintain the downloaded app.
- Phone screen size and resolution will determine if you see the full version or the mobile version.
- A comparison between mobile and desktop versions of the browser-based viewer was provided.
    - Nitrate penetration, groundwater protection features, LiDAR and administrative boundaries will not be available on the mobile version of the browser based well driller viewer.
- The field maps (AGOL) version will be retired May 30, 2025.
- Peterson: Will the browser-based version geo-locate you in the field as it did with the previous version?
    - Fry: Yes, and you can set it up to have the same fields and layers that were used previously.
- Peterson: I am still having problems finding well construction reports for wells that I am inspecting. The wells are from 1993.

f) Rule Revision Updates for NR 812 and NR 146

- **Next Steps (Nessman)**
- Responses to comment received from public hearing are in progress
- Revisions will be made to board orders and rule requirements based on comments received.
- Target date for NRB approval of the revisions is set for September 2025.
- **Summary of comments received – NR 146 (Gundrum)**
- Request to provide a definition of “General Supervision”.
- NR 146.04(2)(h)7 - Request to reduce welding training requirement from six-hour duration to three hours.
- Regarding 146.08(2): Required upgrades to any noncomplying water well, heat exchange drillhole or pump installation feature. The upgrade shall comply with the laws and rules and with any plans, specifications, variances and approvals approved by the department in effect at the time the upgrade is performed.
    - There are some instances where this just isn’t practical. Is the variance process used in these cases?
- NR 146.105 - Regarding requirement for heat exchange drillholes to be filled and sealed by a licensed heat exchange driller – request to allow filling and sealing by licensed water well driller.
- Request to reduce the proposed one-year grace period for continuing education attendance completion to 6 months from date of expiration.
- Request to discontinue allowance for rig operator re-registration rather than renewal.
- Suggested change to online renewal waiver request submittal deadline and deadline for completion of continuing education when renewing by mail rather than online.

- **Summary of comments received – NR 812 (Nessman)**
- Definitions
- Well product requirements
- Clarification of plumbing requirements (attempting to match plumbing code as much as possible)
- Variance language: The variance section was rewritten – most items remained the same.
- Use of bentonite chips in fractured formations: A comment was submitted related to exploration drilling for minerals and the use of bentonite chips.
- Marshall: Was the situation addressed where a well in a pit is taken out of service? Is there no longer a setback required from that pit?
    - When the well is taken out of service, it is no longer a well pit.
- Marshall: Are we able to require that they fill the pit once the well is taken out of service? Do we have authorization to make them fill the pit?
- Nessman: The intent of the revision was to remove the need to fill and seal the pit if it had valves in it. We may have removed the requirement to fill and seal the pit. That will be reviewed in the revision. The pit might be retained for another purpose. Once the well is gone, the DNR's jurisdiction no longer stands, and it becomes more of a safety issue.
- Marshall: With respect to setback distance, is there anything mentioned in the revision regarding setback distance from the pit for a new well?
- Nessman: Well pits are not mentioned in the setbacks.
- Marshall: I have been told that optimal units has been approved for 12 years.
- Nessman: We have approved the product, but he revision language was related to placement on top of the well casing so that it would be considered a part of the well with the control module inside the well casing. The modules are actually next to the casing. They are not inside the well.
- Marshall: Actually, it is located on top of the well.
- Nessman: I didn't realize that it was approved that way when I rewrote it so I will need to go back and change that.
- Marshall: The 301 controllers are approved for moisture areas and the setup is made for the controller to go in there. That was approved long ago. It is part of the well.
- Nessman: I will address that, and you will still be able to use it.
- Jenks: Essentially it is just increasing the diameter of the casing.
- Nessman: Many people thought it was not allowed because of the provision that you can not have electrical controls inside of the well.

New Business

- Newly Published (03/24/2025) WGNHS Surficial Geology Map
- The Driven Point fact sheet was revised to update contact information.

Old Business

- Marshall: Thank you for the work done on NR 146 and NR 812 rule revisions.
- Nessman: A new Advisory Council well driller representative needs to be appointed.
    - Peterson: Chad Van De Yacht is being appointed for this position.
    - Nessman: I will send him the appointment letter. We will make sure that his term starts in January. We could actually have him start this year.

- Jenks: Has there been any developments with use of the “Press Couplings”?
    - Nessman: People are generally in favor of it, but it is not covered with the current code revision. It will require a code revision for use to be approved in Wisconsin. Tight specifications will be required. I have received a couple of phone calls inquiring about them.
    - Marshall: It seems that there is too much opportunity for failure there.
    - Niewoehner: Plumbness and alignment may be an issue.
    - Marshall: The force that is required to pull the casing from the coupling (38,000 to 40,000 lbs.) is exceeded with pull-back on the rig.
    - Jenks: If you drill and drive and were driving into sandstone at 100 ft or less, you could probably save on the welding time. But If something goes wrong and you have to pull back, you may lose your hole.
    - Marshall: You need to push on the pipe to seat it. You need to secure the casing somehow so that you can apply the amount of pressure needed to compress it all the way. If there is not enough refusal while the pipe is being driven down the hole, the casing may not be fully compressed and seated into the coupling.
    - Nessman: Before the code is changed, there would be an advisory committee, and the product would be reviewed before it would be approved for Wisconsin.

January Meeting Minutes

- Nessman: We haven’t been approving meeting minutes. Does anyone have changes or corrections to the January meeting minutes?
    - No revisions. Motion was made to approve the meeting minutes. Minutes from January meeting were approved.

Future Meeting Dates:

- October 2025:
    - Stevens Point – Schmeeckle Reserve
    - October 8
- January 2026:
    - Lake Delton – Kalahari Resort
    - January 7

Adjourn