Wisconsin
Department of Natural Resources

Drinking Water and Groundwater Study Group Meeting

Fitchburg

November 2, 2017

WISCONSIN
DEPT. OF NATURAL RESOURCES

Status of Rock County Groundwater and Nitrate Work Group

Rick Wietersen

Environmental Health Director for the Rock County Public Health Department

High Capacity Well Update

Adam Freihoefer
Water Use Section Chief

2017 Act 10 Overview

State of Wisconsin

2017 Senate Bill 76

Date of enactment: **June 1, 2017**
Date of publication*: **June 2, 2017**

2017 WISCONSIN ACT 10

AN ACT *to amend* 281.34 (2); and *to create* 281.34 (1) (ek), 281.34 (2g) and 281.34 (7m) of the statutes; **relating to:** replacement, reconstruction, and transfer of an approved high capacity well, recommendation of special groundwater measures by the Department of Natural Resources, and metering requirements and grants for certain high capacity wells.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION **1.** 281.34 (1) (ek) of the statutes is created to read:

281.34 (**1**) (ek) "Reconstruct" means to modify original construction including deepening, lining, installing or replacing a screen, and underreaming.

SECTION **2.** 281.34 (2) of the statutes is amended to read:

281.34 (**2**) APPROVAL REQUIRED FOR HIGH CAPACITY WELLS. ~~An~~ Except as provided under sub. (2g), an owner shall apply to the department for approval before construction of a high capacity well begins. ~~No~~ Except as provided under sub. (2g), no person may construct or withdraw water from a high capacity well without the approval of the department under this section or under s. 281.17 (1), 2001 stats. An owner applying for approval under this subsection shall pay a fee of $500.

SECTION **3.** 281.34 (2g) of the statutes is created to read:

281.34 (**2g**) REPAIR, REPLACEMENT, RECONSTRUCTION, AND TRANSFER OF OWNERSHIP OF AN APPROVED HIGH CAPACITY WELL. (a) Except as provided in par. (e), if a high capacity well has been approved under this section or under s. 281.17 (1), 2001 stats., the owner of that well may take any of the following actions without obtaining an additional approval under this section:

1. Repair and maintain the high capacity well.

2. Construct a new high capacity well to replace the existing high capacity well if the new high capacity well will be constructed in accordance with department standards that apply to the construction of new high capacity wells on the date that construction of the replacement high capacity well begins, if the existing high capacity well is filled and sealed as provided in rules promulgated by the department, and if any of the following applies:

a. The purpose of replacement is to remedy or prevent contamination. The owner of the well shall submit documentation of the contamination to the department in the manner and form required by the department.

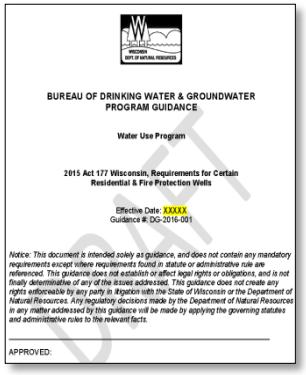
b. The replacement high capacity well will be drilled to substantially the same depth as the existing high capacity well and either will be located within a 75–foot radius of the existing high capacity well or will be located farther from the nearest groundwater protection area than the existing high capacity well and not be located within any other groundwater protection area.

3. Reconstruct the high capacity well, if the reconstructed high capacity well is constructed to substantially

* Section 991.11, WISCONSIN STATUTES: Effective date of acts. "Every act and every portion of an act enacted by the legislature over the governor's partial veto which does not expressly prescribe the time when it takes effect shall take effect on the day after its date of publication."

- Replacement, reconstruction, and transfer of high capacity wells
- Model and evaluate hydrology of specified water bodies to determine whether existing and potential groundwater withdrawals are causing significant impacts to water bodies
- High capacity wells constructed, replaced, reconstructed, or transferred within the study area after June 3, 2017, must submit metered water use to DNR
- Lake associations allowed to obtain a high capacity well to assist in study of lake within study area

2017 Act 10 Update



BUREAU OF DRINKING WATER & GROUNDWATER PROGRAM GUIDANCE

Water Use Program

2015 Act 177 Wisconsin, Requirements for Certain Residential & Fire Protection Wells

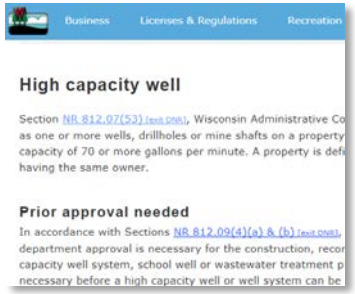
Effective Date: XXXXX
Guidance #: DG-2016-001

Notice: This document is intended solely as guidance, and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations, and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

APPROVED:

DRAFT

Guidance for the reconstruction, replacement, & transfer of high capacity wells



Business | Licenses & Regulations | Recreation

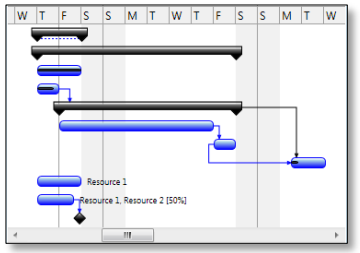
High capacity well

Section NR 812.07(53) [exit DNR], Wisconsin Administrative Co
as one or more wells, drillholes or mine shafts on a property
capacity of 70 or more gallons per minute. A property is defi
having the same owner.

Prior approval needed

In accordance with Sections NR 812.09(4)(a) & (b) [exit DNR],
department approval is necessary for the construction, recon
capacity well system, school well or wastewater treatment p
necessary before a high capacity well or well system can be

Update DNR's high capacity well website



Begin project scope and timeline for Act 10 study

High Capacity Well Website

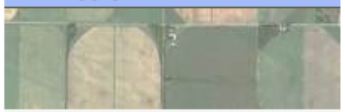
Wells

High capacity wells

A high capacity well is a well that has the capacity to withdraw more than 100,000 gallons per day, or a well that, together with all other wells on the same property, has a capacity of more than 100,000 gallons per day. Residential wells and fire protection wells are excluded from the definition of a high capacity well, and their pumping capacities are not included in the calculation of a property's well capacity.

In accordance with Sections NR 812.09(4)(a) & (b), Wis. Adm. Code [exit DNR], prior department approval is necessary for the construction or operation of a high capacity well system, school well or wastewater treatment plant well.

Apply for a new well



- Application and instructions
- Tips for accurately locating a well
- Well application review process

Changes to approved wells

- Replacements
- Reconstructions
- Property transfers
- Filling and sealing

Maps and well data

- Well application search
- High cap well search
- Interactive map (Water use viewer)
- Wisconsin water use report

Water use

- Pumpage reporting guidance
- Report your water use
- Register your withdrawal
- Pay water use fee
- Water use permits

Related topics

- Wells
- Drinking water
- Groundwater
- Water use

Central Sands Lakes Study

In June 2017 2017 Wisconsin Act 10 [exit DNR] (Act 10) was signed into law. Under Act 10, the DNR has the authority to evaluate and model the impacts of groundwater withdrawals on three specific lakes in the Central Sands region.

- Central Sands Lakes Study
- Subscribe to updates on the Central Sands Lakes Study

Contact information

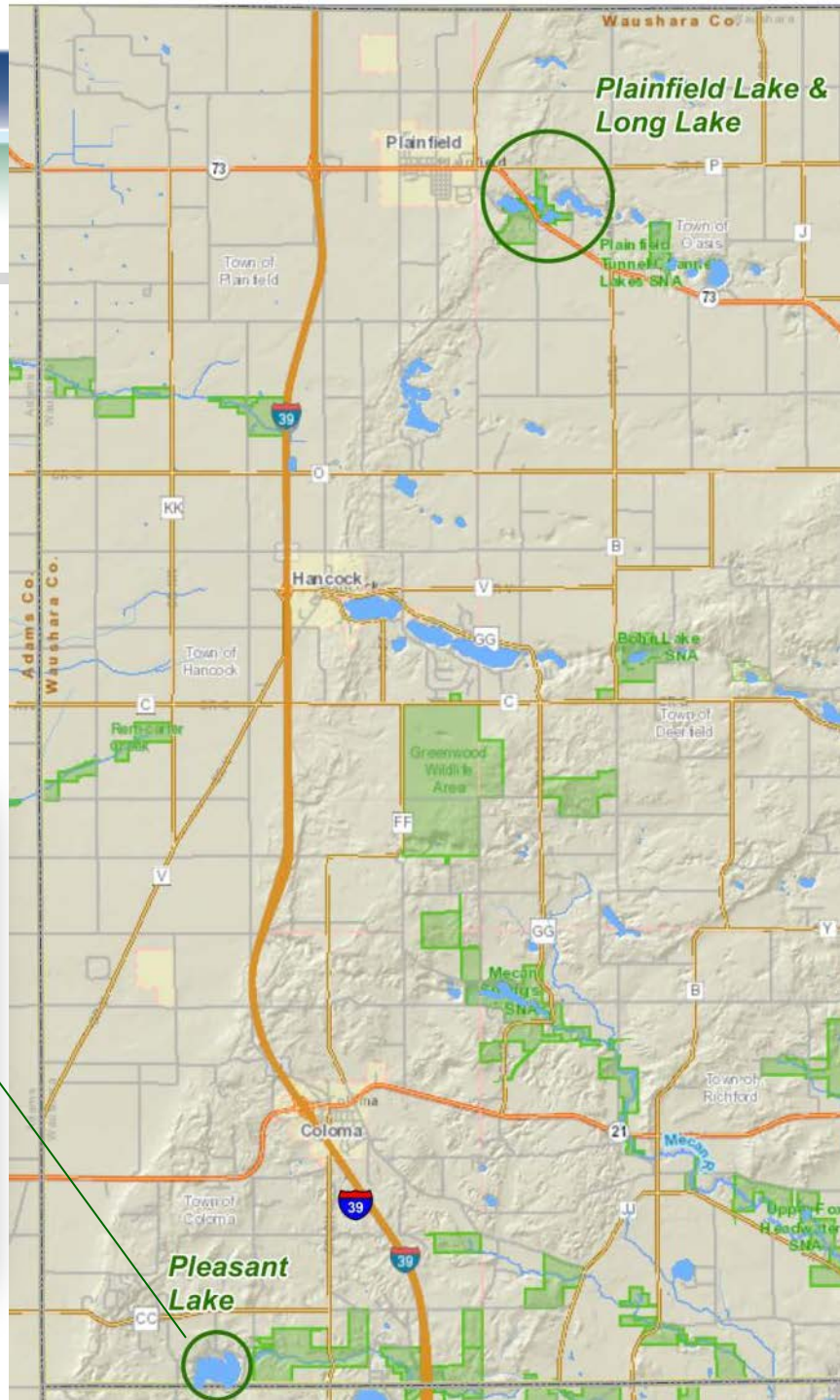
For information on high capacity wells, contact:

Water use program staff
DNRHiCapApplications@wisconsin.gov
608-266-2299

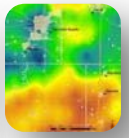
http://dnr.wi.gov/topic/Wells/HighCap/

Central Sands Lakes Study

Evaluate and model hydrology of Pleasant Lake, Plainfield Lake, Long Lake “to determine whether existing and potential groundwater withdrawals are causing or are likely to cause a significant reduction of the lake's water level below its average seasonal levels”



Central Sands Lakes Study



Data Collection

Groundwater Flow Modeling

Resource Evaluation for Significance

Field Study

If significant impacts are identified and special measures required…

Study findings, identify potential special measures, and economic impact analysis

Public Hearing

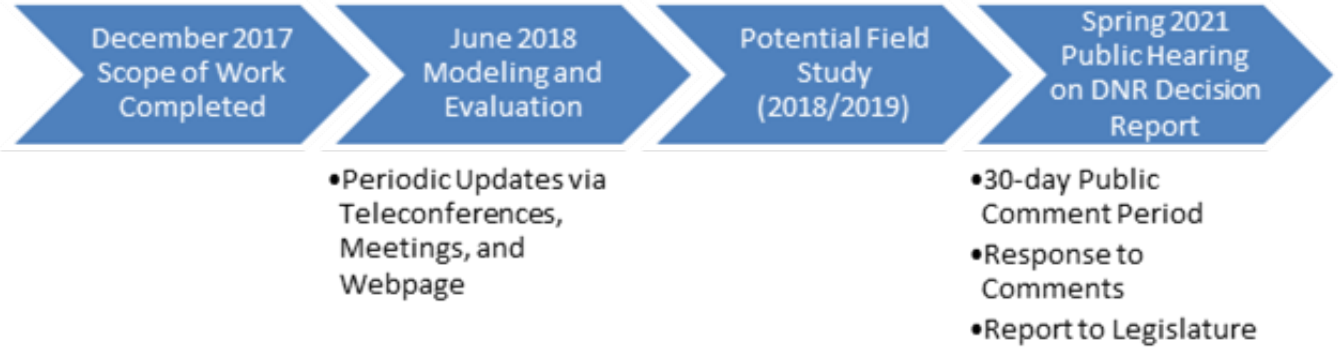
Reports to Legislature

WISCONSIN DEPT. OF NATURAL RESOURCES

Central Sands Lakes Study

Key Dates:

- June 3, 2017 - Act 10 becomes law
- November 2017 - Scope of work is released
- June 3, 2021 - Deadline for the DNR to submit deliverables to Legislature



Contact Information

Adam Freihoefer
Adam.Freihoefer@Wisconsin.gov
(608) 267-7638

Break

Beyond RTCR Assessment Requirements: Identifying Microbial Contaminants to Suggest Corrective Actions

Alyssa Beck and Sharon Kluender

Wisconsin State Laboratory of Hygiene

Program Update:
Cross Connection Control Workgroup

Eileen Pierce
Drinking Water and Groundwater Field Supervisor

Goal

Achieve consistent implementation of cross connection control program requirements across Wisconsin, s. NR 810.15, Wis. Adm. Code.

Optimize efficient use of resources by DNR and the regulated community.

Feedback from Third Party Inspection Agent:

DNR is inconsistent in determining which commercial properties are of "similar or lesser risk" to residential properties. This affects how often surveys are required; every 2 years or every 10 years.

s. NR 810.15(1)(c), Wis. Adm. Code.

Scope

- Update DNR Operations Handbook
- Update Annual Report Form, if necessary. Explore electronic reporting.
- Develop templates for DNR use.
- Develop training for DNR.

Workgroup

- Include internal and external stakeholders.
- Provide regular updates to the DG Study Group
- Post any proposed changes or new guidance for public review and comment.

How you can help …

- Suggest external participants
  - Municipal Water System Representative
  - Third Party Inspection Agent
  - Large Industrial/Commercial Representative (High Risk)
  - Licensed Plumber Representative
  - Other?
- Monitor progress
- Provide Input

Contact Information

Eileen Pierce
eileen.pierce@wisconsin.gov
(608) 275-3311

Program Update:
Lead & Copper Monitoring Updates

Adam DeWeese, Public Water Supply Section Chief
and
Cathy Wunderlich, Public Water Engineering Section Chief

Number of Active Sites

NR 809.547(3), Wis. Adm. Code

Public Water System Size (# People Served)	# of sites (Standard Monitoring)	# of sites (Reduced Monitoring)
>100,000	100	50
10,001−100,000	60	30
3,301 to 10,000	40	20
501 to 3,300	20	10
101 to 500	10	5
≤ 100	5	5

Site Selection

Tier 1

- Single Family Home
  - Constructed in 1983 or 1984 and has copper plumbing with lead solder
  - Lead plumbing
  - Lead service or lead gooseneck

Tier 2

- Building with multiple users (multi-family building or business)
  - Constructed in 1983 or 1984 and has copper plumbing with lead solder
  - Lead plumbing
  - Lead service or lead gooseneck

Tier 3

- Single Family Home
  - Constructed prior to 1983 and has copper plumbing with lead solder

Exceptional

- Doesn't meet Tier 1-3 criteria

Monitoring Site Plans and Revisions

State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Lead and Copper Monitoring Site Change Request

Form 3300-315 (10/17)

Notice: Pursuant to s. NR 809.547 Wis. Adm. Code, each water supplier or public water system (System) shall complete a materials evaluation of their distribution system in order to identify a pool of targeted sampling sites that meet the requirements of the aforementioned code. The Department of Natural Resources (DNR) is providing this form for proper documentation when changes to the list of targeted sampling sites or re-evaluating the pool of targeted sampling sites is being requested . This includes the addition of new monitoring sites, inactivation of existing monitoring sites, changes in service line or plumbing materials, monitoring faucet, tier designation, or address. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31-19.39, Wis. Stats.). *Citations refer to Wisconsin Administrative Code.*

SECTION A– MONITORING SITE PLAN REQUIREMENTS

In accordance with 809.547(2)(d), Systems monitoring for lead and copper must collect samples from the same sampling sites from which they previously collected samples. Given this requirement, Systems may only have a limited number of Active Sites in their Monitoring Site Plan (up to 1.5 times the lead/copper sample requirement). For example: if a system must collect 30 lead/copper samples, only 45 Active Sites can be maintained in the Monitoring Site Plan. The 15 additional sites serve as a back-up pool for monitoring in the event that one of the other Active Sites cannot be accessed. Systems may have an unlimited number of Inactive Sites in their Monitoring Site Plan available for back-up use. All Active and Inactive sites must meet Lead-Copper Rule Sample Site Criteria. If a site no longer meets LCR Sample Site Criteria, it will be permanently ended.

Please Note: Systems must request and gain approval from their DNR Representative to activate an Inactive Site prior to conducting any sampling at that location.

Lead and Copper Rule Sample Site Criteria:

Tier 1 Site: Single Family Structures with:	Tier 2 Site: Multi-family Structures or other buildings with:	Tier 3 Site: Single Family Structure with:	Exceptional Site: Sites where plumbing materials are representative of water system:
i) Full or partial lead service lines; or ii) Lead gooseneck; or iii) Lead plumbing within the home; or iv) Copper plumbing with lead solder; constructed between Jan 1983 and Sept 1984	i) Full or partial lead service lines; or ii) Lead gooseneck; or iii) Lead plumbing within the home; or iv) Copper plumbing with lead solder; constructed between Jan 1983 and Sept 1984	i) Copper Plumbing with lead solder; constructed before January 1983	i) Copper plumbing without lead solder; constructed after 1984 ii) Tier 1, 2, or 3 sites with whole-house water softeners iii) Other, non-metallic plumbing materials (PVC, galvanized)

SECTION B – MONITORING SITE PLAN CHANGE REQUESTS

List monitoring site change requests in the table below. Include all of the details associated with building type/age, sampling location, and service line and plumbing materials using the change codes identified below. See Example Entry.

Change Code	Tier Designation	Year Built	Cold Water Faucet	Building Type	Service Line Material - Street Side	Service Line Material - Customer Side	Building/Premise Plumbing
A = Activate Existing Site AA = Add New Site as Active (For immediate use) I = Inactivate Existing Site AI = Add New Site as Inactive (For back-up use) C = Change Site Information E = End Site - Permanently Remove (No longer meets LCR Criteria)	T1 = Tier 1 T2 = Tier 2 T3 = Tier 3 TE = Exceptional	*At a minimum, specify one of the following:* < 1983 *or* = 1983/1984 *or* > 1984	B = Bathroom K = Kitchen A = Alternate, describe	SF = Single Family Structure (Residence) MF = Multi-Family Structure* O = Other, describe **Although some communities consider duplexes multi-family dwellings they are considered multi-family under LCR*	L = Lead Pipe C = Copper Pipe GN = Lead Gooseneck G = Galvanized P = Plastic O = Other, describe		L = Lead pipe C = Copper Pipe without Lead Solder CLS = Copper Pipe with Lead Solder G = Galvanized P = Plastic O = Other, describe

Triggered Action Level Exceedance

PWS COMPLETES PBCU MONITORING REQUIREMENT

↓

DWS CALCULATES 90TH PERCENTILE
PWS HAS ALE

↓

PWS COLLECTS ADDITIONAL COMPLIANCE SAMPLING
BEYOND MINIMUM REQUIREMENT

↓

DEPT. IN ACCORDANCE WITH 809.547 (5) MUST ACCEPT ADDITIONAL COMPLIANCE SAMPLE S
DWS RE-CALCS 90TH PERCENTILE - REDUCES TO VALUE < ALE

↔ 809.547 (5) ADDITIONAL MONITORING BY WATER SUPPLIERS. THE RESULTS OF ANY MONITORING CONDUCTED IN ADDITION TO THE MINIMUM REQUIREMENTS OF THIS SECTION SHALL BE CONSIDERED BY THE WATER SUPPLIER AND THE DEPARTMENT IN MAKING ANY DETERMINATIONS, I.E., CALCULATING THE 90TH PERCENTILE LEAD OR COPPER LEVEL, UNDER THIS SUBCHAPTER.
***LETTER VS. INTENT

↓

DEPT. IN ACCORDANCE WITH 809.547 (4)(d)2. RETURNS SYSTEM TO REDUCED ANNUAL MONITORING UNTIL FURTHER NOTICE

PROCESS INCLUDES:

1. DNR REP PHONE CALL TO SYSTEM – NOTIFICIATION THAT SAMPLING PROCESS DID NOT MEET THAT WHICH IS MOST PROTECTIVE OF PUBLIC HEALTH – CO SUPPORT
2. LETTER FROM DEPT NOTIFYING PWS OF RETURN TO REDUCED ANNUAL MONITOIRNG

↔ 809.547 (4)(D)2. .....THE DEPARTMENT SHALL REVIEW, AND WHERE APPROPRIATE, REVISE ITS DETERMINATION WHEN THE WATER SUPPLIER SUBMITS NEW MONITORING OR TREATMENT DATA, OR WHEN OTHER DATA RELEVANT TO THE NUMBER AND FREQUENCY OF TAP SAMPLING BECOMES AVAILABLE.

Contact Information

Adam DeWeese
Adam.DeWeese@wisconsin.gov
(608) 264-9229

Cathy Wunderlich
Cathrine.Wunderlich@Wisconsin.gov
(608) 266-0857

Wrap – up and adjourn

Adjourn

Next Meeting Date:

January 31, 2018

GEF 2, State Natural Resources Building, Madison, 9:30a.m. – 12:30 p.m.

Meeting minutes will be posted on the Drinking Water & Groundwater Study Group website