



PFAS Contamination in the Marinette Peshtigo Area

Listening Session 3

November 20th, 2019



Welcome and Agenda

- What Is A Listening Session – What To Expect From This Meeting And Future Meetings
- Updates Since Last Listening Session
- Overview: PFAS Investigation + Clean-up in Marinette and Peshtigo Area
- PFAS and Fish
- Upcoming Listening Session Schedule
- Listening Session – Opportunity For Community Feedback



What is a Listening Session?

- Commitment made by DNR to provide a monthly, in-person forum for area residents to meet with DNR and DHS staff.
- Your opportunity to ask questions and discuss concerns about PFAS investigation in Marinette and Peshtigo



What is a Listening Session?

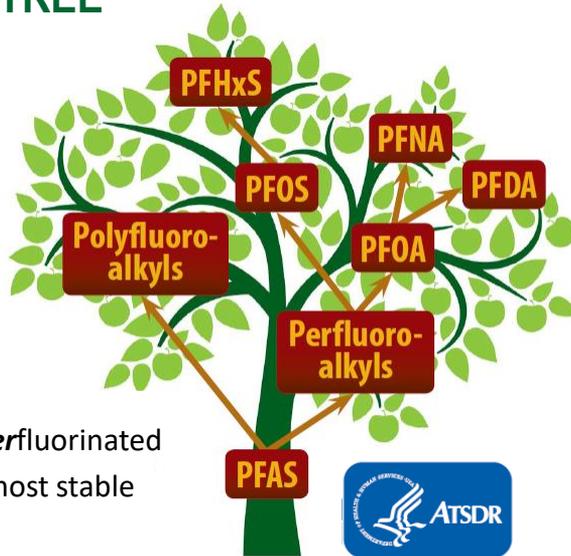
- Committed to open and ongoing communication – ask questions, give feedback, let us know what topics you want to hear about:
 - Call (888-626-3244) or
 - email DNRJCIPFAS@wisconsin.gov
- Also – check out our FAQs and latest investigation information
 - <https://dnr.wi.gov/topic/Contaminants/Marinette.html>



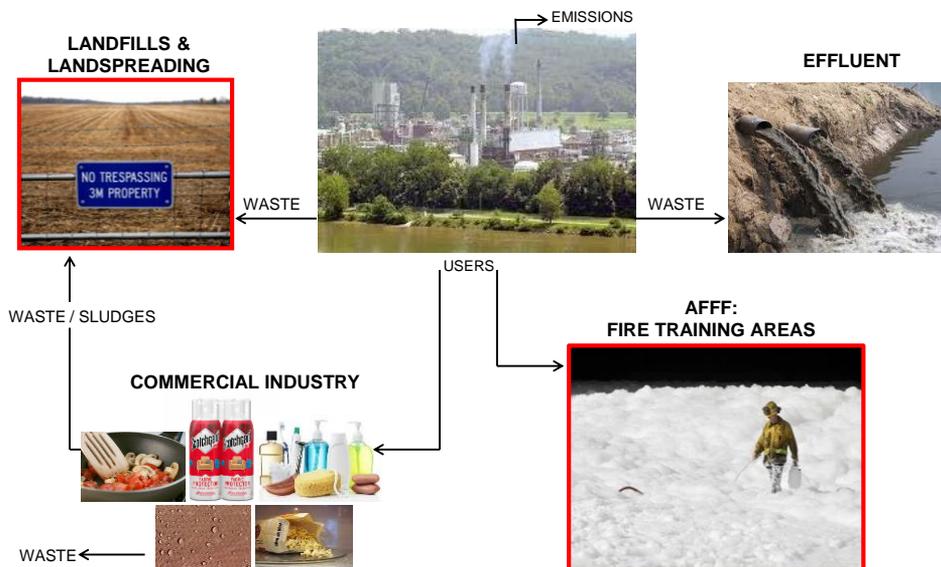
PFAS FAMILY TREE

PFAS Family

- 1000's of others
- Short- to long-chain
- *Poly-* degrades to *Perfluorinated*
- Perfluorinated are most stable



SOURCES TO ENVIRONMENT

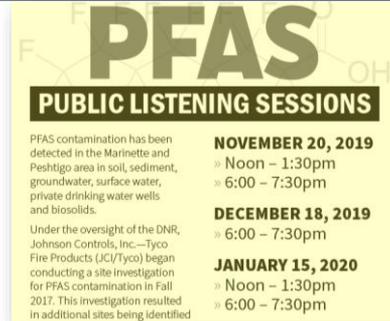


Listening Session Updates

Post Card Mailing

Mailed over 11,000 post cards

- ✓ City of Peshtigo
- ✓ City of Marinette
- ✓ Town of Peshtigo
- ✓ Town of Porterfield

PFAS

PUBLIC LISTENING SESSIONS

PFAS contamination has been detected in the Marinette and Peshtigo area in soil, sediment, groundwater, surface water, private drinking water wells and biosolids.

Under the oversight of the DNR, Johnson Controls, Inc.—Tyco Fire Products (JCI/Tyco) began conducting a site investigation for PFAS contamination in Fall 2017. This investigation resulted in additional sites being identified.

NOVEMBER 20, 2019
 » Noon – 1:30pm
 » 6:00 – 7:30pm

DECEMBER 18, 2019
 » 6:00 – 7:30pm

JANUARY 15, 2020
 » Noon – 1:30pm
 » 6:00 – 7:30pm

* Copies of the post card are available

Files at Library

Case files available at:

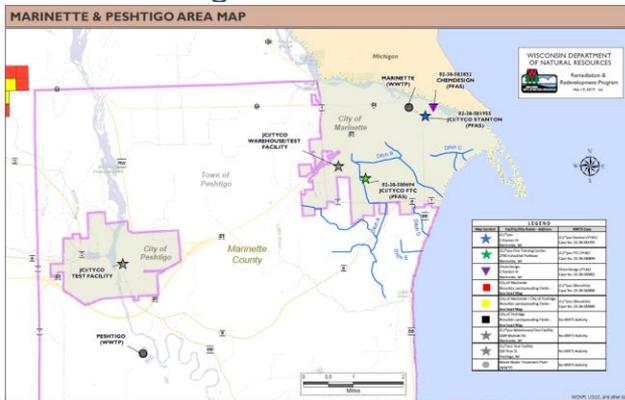
- 1) Stephenson Library - 1700 Hall Ave, Marinette
- 2) City of Peshtigo Library, 331 French St, Peshtigo

Listening Session Updates

- Since the last Listening Session in October, 2019.....**What We Heard From You**
- **Communication**
 - For new attendees – revisit previously discussed concepts – what is each entity’s role
 - What challenges are we facing
- **Time to discuss individual issues**
 - DNR and DHS staff available from 1:30pm – 3:30pm today + additional folks in common area (one-on-one)
- **Meeting format**
 - Return back to open forum QA (stations not preferred)
 - Continue to look for large venue (stay tuned to email messages)

WISCONSIN DNR Department of Natural Resources
PFAS in Marinette & Peshtigo – The Basics

- JCI/Tyco and ChemDesign must investigate and clean-up PFAS contamination in accordance with NR 700 Wis Admin Code
- 3 cases associated with JCI/Tyco and 1 case for ChemDesign



Each case based on a site or facility where a discharge of PFAS occurred – each in a different stage of the investigation....discuss process in next slides

WISCONSIN DNR Department of Natural Resources
Roles and Responsibilities

Wis Stat 292 + NR 700

- Requires notification of PFAS discharge to DNR → determines responsible parties
- Establishes a process for investigation and remediation of environmental pollution
- ‘Self-Implementing’ rule

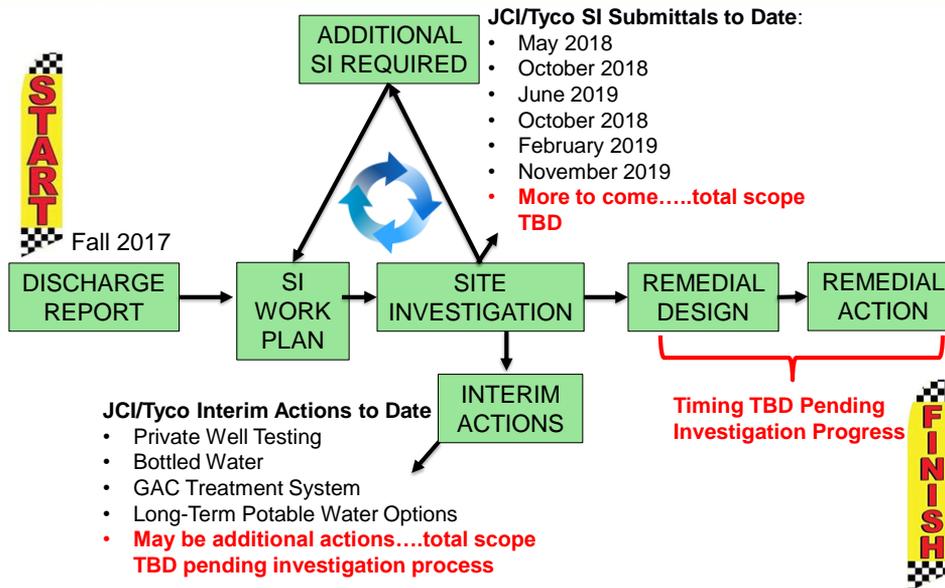
DNR’s Role

- Works with RP to ensure NR 700 requirements are met:
 - Site investigation
 - Interim Actions
 - Public Notification
 - Remediation
 - Continuing Obligations
- *Via fee based review process*
- Work collaboratively with health agencies to ensure public health protection
- Work collaboratively with local governments on long term solutions to contamination issues

RP’s Role
 -JCI/Tyco
 -ChemDesign

- Develop and implement site investigation – determine degree and extent of contamination
- Implement interim actions to ensure public health protection
- Develop and implement remediation plan
- Develop and implement long term solutions
- Commitment to continuing obligations

WISCONSIN DNR Department of Natural Resources **Site Investigation and Clean-up Process**



WISCONSIN DNR Department of Natural Resources **What Challenges Are We Facing**

- DNR developing understanding of how PFAS is unique from other contaminants.....we're still learning
- PFAS Nationally – lots of unanswered questions
- JCI/Tyco Delays
 - Timing of deliverables – moving targets
 - Receipt of biosolids work-plan with message to DNR 'you do it'
 - Partial data packages – limits DNR's ability to evaluate JCI/Tyco's work product efficiently and effectively (i.e. Heath Lane and Long Term Water Options)
 - Data submitted without analysis of what data means





Private Well Sampling

- What if PFAS found in private wells collected by individual?
- Report Results to DNR
- DNR evaluation
 - Demonstrate sampling techniques
 - Certified Lab
 - Report to DNR via NR706
 - Can have off-site exemption if they are not a source
 - General Liability Clarification/No Action Required



What Challenges Are We Working Through

- Foam at Leaf + Krause and in Peshtigo River
 - Source of foam not well understood
 - Public notification in coordination with local health agencies
 - (888-626-3244) or by email (DNRJCI PFAS@wisconsin.gov)
- Heath Lane Site Investigation
 - Limited data provided to DNR
 - DNR has requested additional data from JCI/Tyco to understand total picture
- Long Term Water Options
 - Completed site investigation has been a moving target
 - Lots of moving pieces - multiple communities involved
- Other sources
 - PFAS fingerprinting is a new and complex aspect of PFAS science
 - no smoking gun

Next Steps and Timeline

- **Oct 2019** - Ditch B Treatment System in Operation 2019
- **Dec 2019** - Data Summary Report Anticipated from JCI/Tyco
 - All data collected to date.
- **Jan 2020** – ChemDesign SIWP for Biosolid Fields
- **Spring/Summer 2020** – JCI/Tyco Additional Data Collection
 - Bay and Fish sampling
- **Fall 2020** – JCI Full Site Investigation Report
 - Conceptual Site Model – key to understanding big picture and long term remediation goals
- **2021** – JCI/Tyco FTC Anticipated On-site Remedial Evaluation

Update - PFAS in Deer

- The DNR is working with partners to sample approximately 20 in/around the JCI complex
- Samples will be collected in winter of 2020
- Work with DHS to interpret results and evaluate need for any advisory





PFAS in WI Deer - Sampling

- **Individual Hunter Deer Meat Sampling:** PFAS testing is not possible at deer check stations. While the state cannot endorse or recommend any lab, the following labs confirmed that they will analyze PFAS samples from deer tissue.
- **Vista Analytical Laboratory**
Contact: Martha Maier, mmaier@vista-analytical.com
Phone: 916-673-1520
Website: www.vista-analytical.com
- **Battelle**
Contact: Jonathan Thorn, thornj@battelle.org
Phone: 781-681-5565
Website: www.battelle.org
- **GEL Laboratories, LLC**
Contact: Robert Pullano, rlp@gel.com
Phone: 843-556-8171
Website: www.gel.com



PFAS in Wisconsin Fish

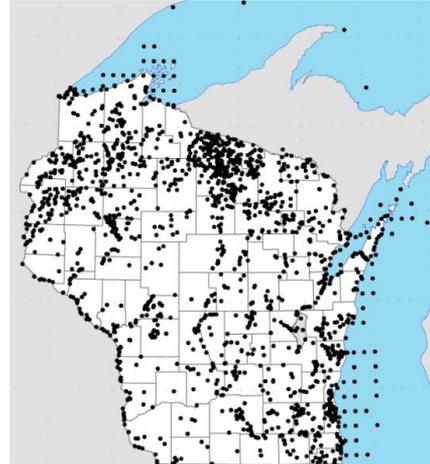
Sean M. Strom





Fish Contaminants Monitoring Program

- Samples from 25 to 100 sites/year
- Primary Contaminants
 - Hg
 - PCBs
 - Banned Chlorinated Pesticides (Primarily Great Lakes)
 - Dioxins/Furans (Select species in Great Lakes and WI River)
- “Emerging” Contaminants
 - PBDEs
 - Pharmaceuticals

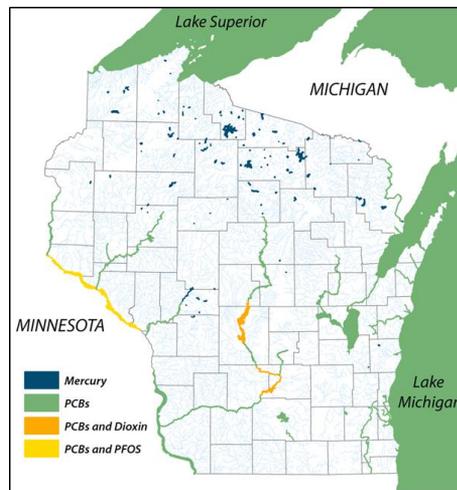


- PFAS!



Fish Contaminants Monitoring Program

- Contaminants that drive advisories:
 - Widespread:
 - PCBs,
 - Hg
 - Localized:
 - Dioxins,
 - PFOS



PFAS Fish Monitoring

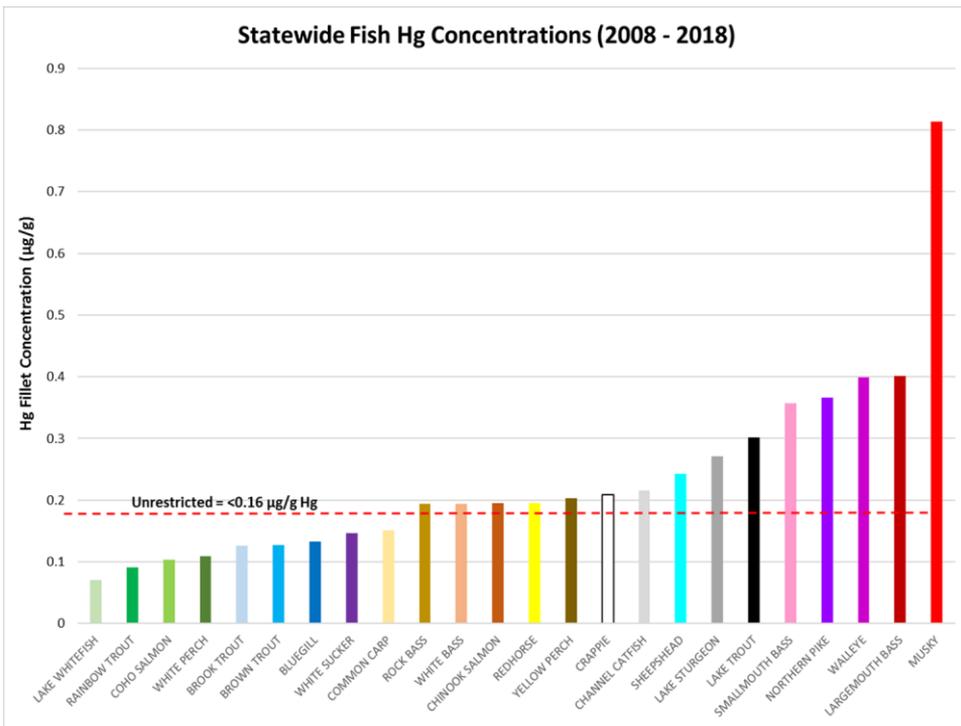
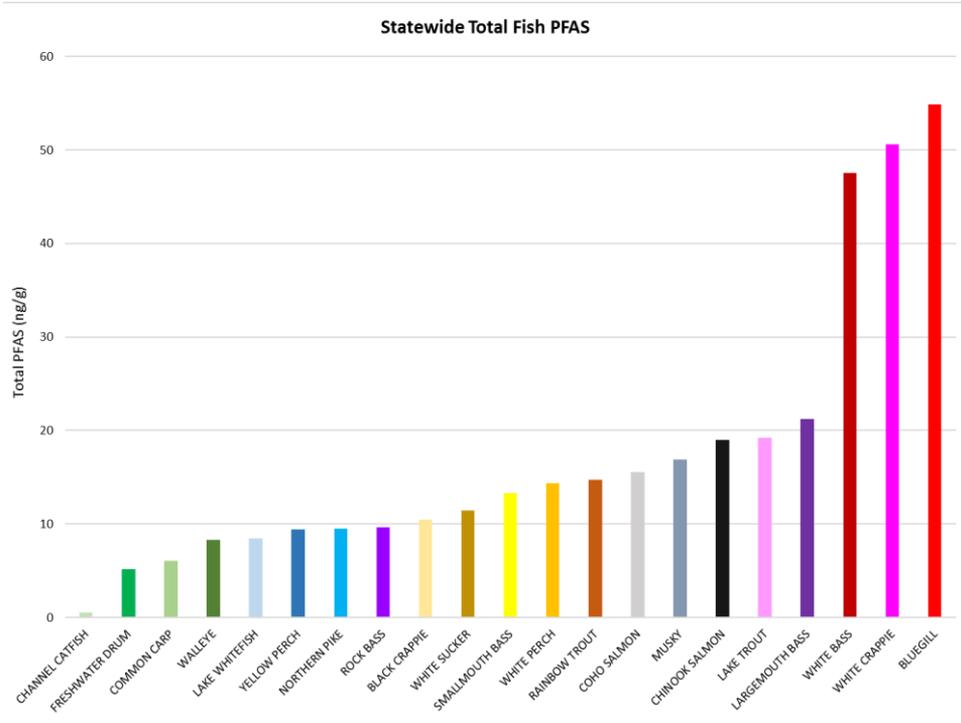
- 2006-2012 – subset of samples analyzed for PFAS, combined with PFAS data from EPA
 - WDNR sampled fish from rivers with high industrial use, Great Lakes AOCs
 - PFOS found in >99% of samples
 - PFOS variation:
 - Species: highest in fillets of white bass, crappie, and bluegill
 - Location: highest in fillets from Mississippi River, lowest in fillets from Lake Superior

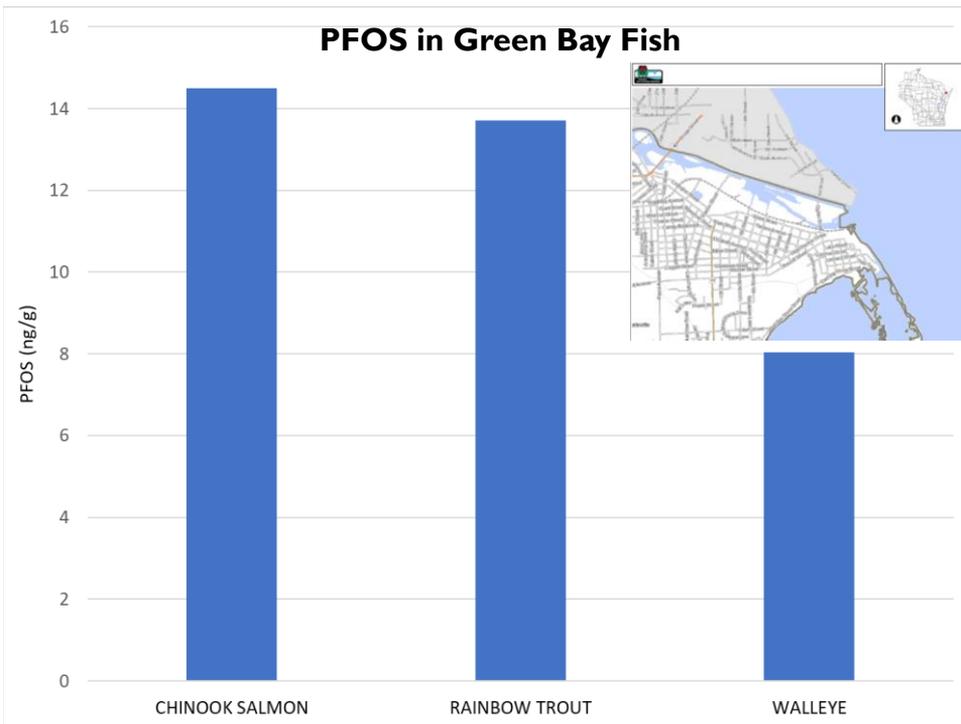
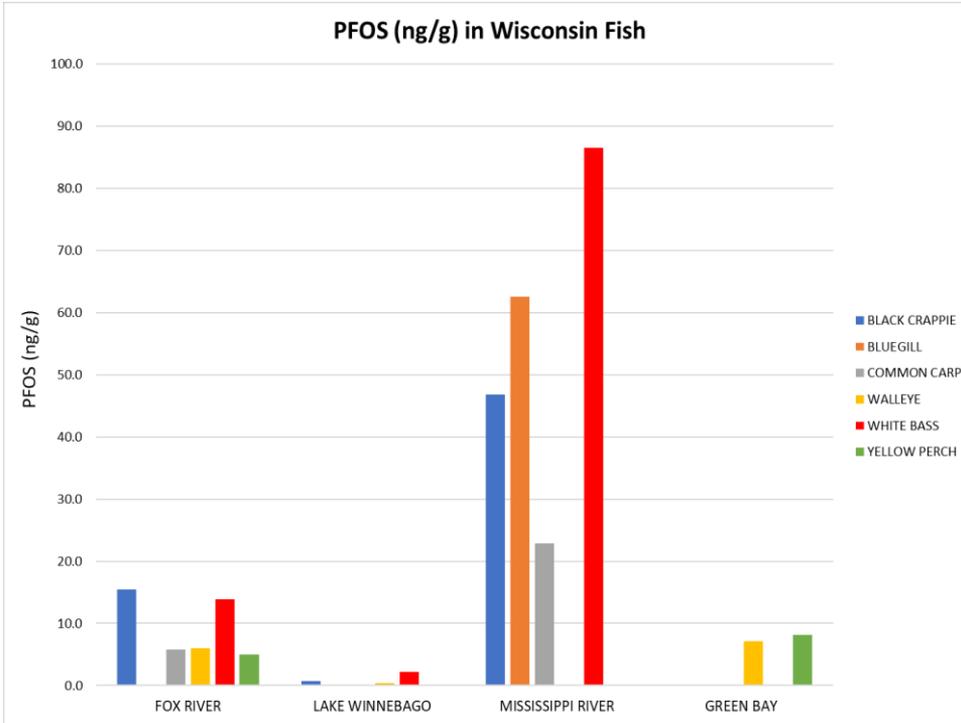


Fish Consumption Advisories

- Locations within the Mississippi River have PFOS-based advisories
 - Pool 3 – bluegill, crappie
 - pool 4 – bluegill
 - Pools 5, 5a, and 6 – bluegill, crappie
- PFAS levels detected in fish from other locations were not high enough to supersede advisories already in place for PCBs
 - PCB levels generated more restrictive advice







Conclusions

- PFAS monitoring is now a regular part of contaminants monitoring program
- PFOS most frequently detected and present in highest concentrations
 - Concentrations associated with proximity to source/use and species of fish
 - Mississippi River only location with current PFOS based consumption advisory
 - Consumption guidelines currently under review by DHS

Listening Session Schedule

- Developing agenda items

Listening Session	Date	Time(s)	Topics 
Listening Session 1	Wednesday, September 18, 2019	6-7:30 p.m.	Foam/water Sampling
Listening Session 2	Wednesday, October 16, 2019	6-7:30 p.m.	Deer
Listening Session 3	Wednesday, November 20, 2019	noon-1:30 p.m. and 6-7:30 p.m.	Fish
Listening Session 4	Wednesday, December 18, 2019	6-7:30 p.m.	TBD
Listening Session 5	Wednesday, January 15, 2020	noon-1:30 p.m. and 6-7:30 p.m.	
Listening Session 6	Wednesday, February 19, 2020	6-7:30 p.m.	

- Public Meeting – Long Term Potable Water Solutions
Holding off on scheduling this meeting so DNR can review analysis of options. This way, we are able to provide clear and complete information to the public.



Listening Session Format

- **Format:**

- Open Q/A Session

- **Ground Rules:**

- Purpose of Listening Sessions
- 3-mins per person → everyone has the opportunity to ask their questions
- Keep comments constructive
- Attack the problem not the person