WDNR PFAS Strategy

Staffing

Staff updates:

Bridget Kelly
RR Program Coordinator
Emerging Contaminants

Jay Nielsen
Environmental Management
Policy Coordinator

WDNR Programs - PFAS

- Remediation and Redevelopment
- Drinking Water and Groundwater
- Water Quality – surface water, waste water, biosolids
- Waste and Materials Management
- Fisheries
- Office of Great Waters
- Air Management
- Lab Certification
- Communications

PFAS Technical Advisory Group (TAG)

- Quarterly ***'Full Group' Meetings*** –Environmental Management Division + Others From Agency

  Subgroup Meetings –in-between meetings –individual bureaus

- Subscribe for email updates: https://public.govdelivery.com/accounts/WIDNR/subscriber/new?topic_id=WIDNR_922

TAG – Purpose and Scope

- DNR facilitates meetings focused on what, where, when and how of PFAS assessment.
- Our goal is to:
  - Identify current and proposed practices for assessment and treatment
  - Strategize on issues requiring solutions
  - Share concerns
  - Communicate about PFAS Initiatives
- Stakeholder Spotlight
  - What do you want DNR to know about?

State of PFAS in Wisconsin

- DNR working closely with impacted communities
  - Marinette and Peshtigo –Listening Sessions and Foam Sampling
  - Madison Well study
- Governors Budget -$$ allocated for PFAS projects
- Standard development - to go to NRB
  - NR 140 groundwater
  - NR 809 drinking water
  - NR 105 surface water quality

State of PFAS in Wisconsin

Governor's Executive Order #40 –Directed PFAS Action in State

i. Develop interagency coordinating council by DNR, DHS and DATCP, including other state agencies.

ii. Develop a public information website for PFAS.

iii. Expand monitoring of fish and wildlife.

iv. Develop regulatory standards.

v. Modify the Voluntary Party Liability Exemption to protect state tax payers.

vi. Assess opportunities for using natural resources damage claims for PFAS.

Internal Work Groups

- Survey and Voluntary Testing of WPDES Facilities
- Fish and Wildlife
- Screening, Prioritizing, and Geolocating PFAS Sources
- Biosolids and Landspreading
- Foam on waterways
- AFFF
- Effective Disposal (Incineration, Landfill efficacy)
- PFAS Research
- More to come…..

Drinking Water and Groundwater

DHS Recommendations – Received June 21, 2019

Substance	New or Existing	Enforcement Stannard Recommended Value		Preventive Action Limit Recommended Value	
1,1-Dichloroethane	Existing	No Change	850 µg/L	No Change	85 µg/L
1,2,3-Trichloropropane	Existing	↓	0.3 ng/L	↓	0.03 ng/L
1,4-Dioxane	Existing	↓	0.35 µg/L	↓	0.035 µg/L
Aluminum	Existing	No Change	200 µg/L	No Change	20 µg/L
Bacteria (Total coliform)	Existing	No Change	0	No Change	0
Bacteria (*E. coli*)	New	n/a	0	n/a	0
Barium	Existing	No Change	2 mg/L	No Change	0.4 mg/L
Boron	Existing	↑	2,000 µg/L	↑	400 µg/L
Clothianidin	New	n/a	1,000 µg/L	n/a	200 µg/L
Cobalt	Existing	No Change	40 µg/L	↓	4 µg/L*
Dacthal MTP and TPA degradates	New	Combine with dacthal	70 µg/L	↓	7 µg/L*
Glyphosate	New	n/a	10 mg/L	n/a	1 mg/L
Glyphosate AMPA degradate	New	n/a	10 mg/L	n/a	2 mg/L
Hexavalent chromium	New	n/a	70 ng/L	n/a	7 ng/L
Imidacloprid	New	n/a	0.2 µg/L	n/a	0.02 µg/L
Isoxaflutole & Isoxaflutole Diketonitrile (DKN)	New	n/a	3 µg/L	n/a	0.3 µg/L
Isoxaflutole Benzoic Acid (BA)	New	n/a	800 µg/L	n/a	160 µg/L
Molybdenum	Existing	No Change	40 µg/L	↓	4 µg/L*
PFOA & PFOS	New	n/a	20 ng/L	n/a	2 ng/L
Strontium	New	n/a	1,500 µg/L	n/a	150 µg/L
Sulfentrazone	New	n/a	1,000 µg/L	n/a	100 µg/L
Tetrachloroethylene (PCE)	Existing	↑	20 µg/L	↑	2 µg/L
Thiamethoxam	New	n/a	100 µg/L	n/a	10 µg/L
Thiencarbazone-methyl	New	n/a	10 mg/L	n/a	2 mg/L
Trichloroethylene (TCE)	Existing	↓	0.5 µg/L	↓	0.05 µg/L

* Although DHS is not recommending a change in the enforcement standard for this substance, we are recommending a change in the preventive action limit. Please refer to the specific science support documents for each of the substances for more detail.

DHS Recommendation

- PFOA (perfluorooctanoic acid) and
- PFOS (perfluorooctane sulfonic acid)

- Combined Standard
  - NR 140 Enforcement Standard (ES) - 20 ng/L
  - NR 140 Preventive Action Limit (PAL) - 2 ng/L

How Wisconsin Compares to Other States

		Groundwater (all values in ppt)				
		PFOA	**PFOS**	**PFHxS**	**PFNA**	***Groundwater Standard/Guideline Policy Type***
Colorado	*Singular or combined*	70	70			*Site-specific Groundwater Quality Standard (proposed)*
Delaware	*Singular or combined*	70	70			*Reporting Level (not promulgated)*
Massachusetts		20	20	20	20	*Groundwater Standard (proposed)*
Michigan	*Singular or combined*	8	16			*Clean-up Standard (proposed)*
Minnesota		35	15	47		*Guidance Level*
New Hampshire		12	15	18	11	*Ambient Groundwater Quality Standard (proposed)*
New Jersey		10	10		10	*Groundwater Quality Standard*
Vermont	*Singular or combined*	20	20	20	20	*Cleanup Level (enforceable)*
Wisconsin	*Singular or combined*	20	20			*Groundwater Standard (proposed)*

Cycle 10 Rulemaking Timeline

Spring 2018

- DNR letter sent to DHS [PDF] - March 2, 2018

↓

Summer 2019

- DHS response to letter from DNR [PDF] - June 21, 2019

↓

Fall 2019

- Statement of Scope [PDF exit DNR] approved by DNR secretary, governor

← (We are here)

Additional DHS Recommendations – “Cycle 11”

Cycle 11 list sent to DHS

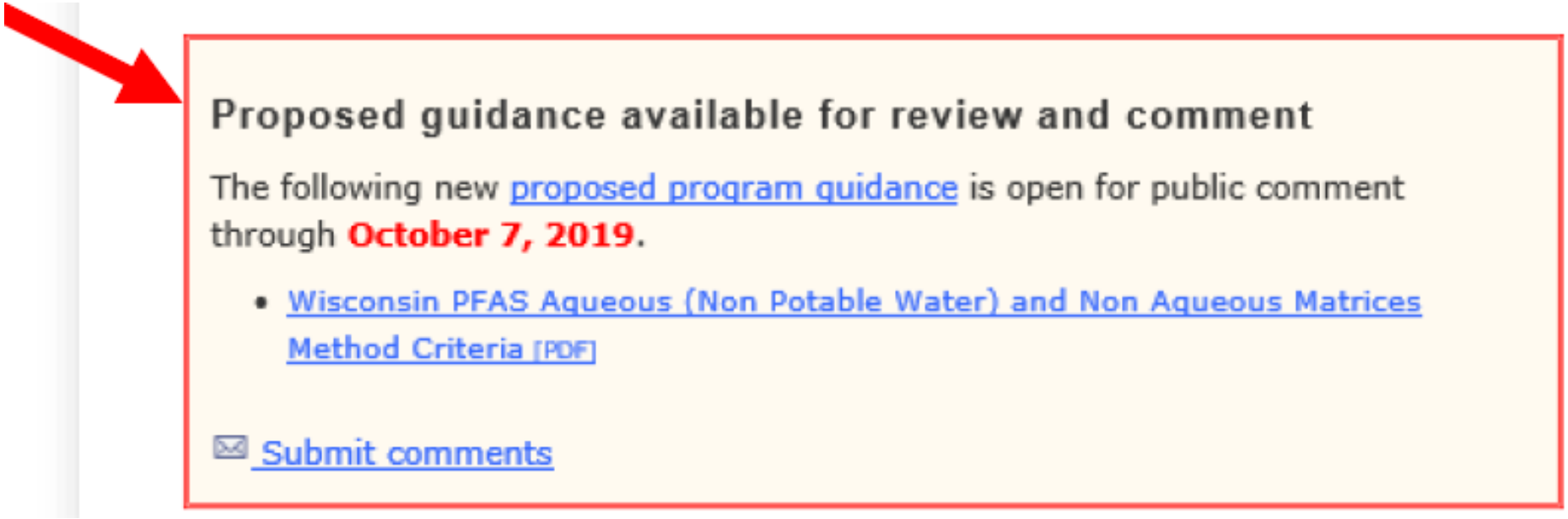
- 6 Agricultural chemicals
  - 4 herbicides, 1 insecticide, 1 fungicide
- 34 PFAS compounds

DHS estimated recommendations –Fall 2020

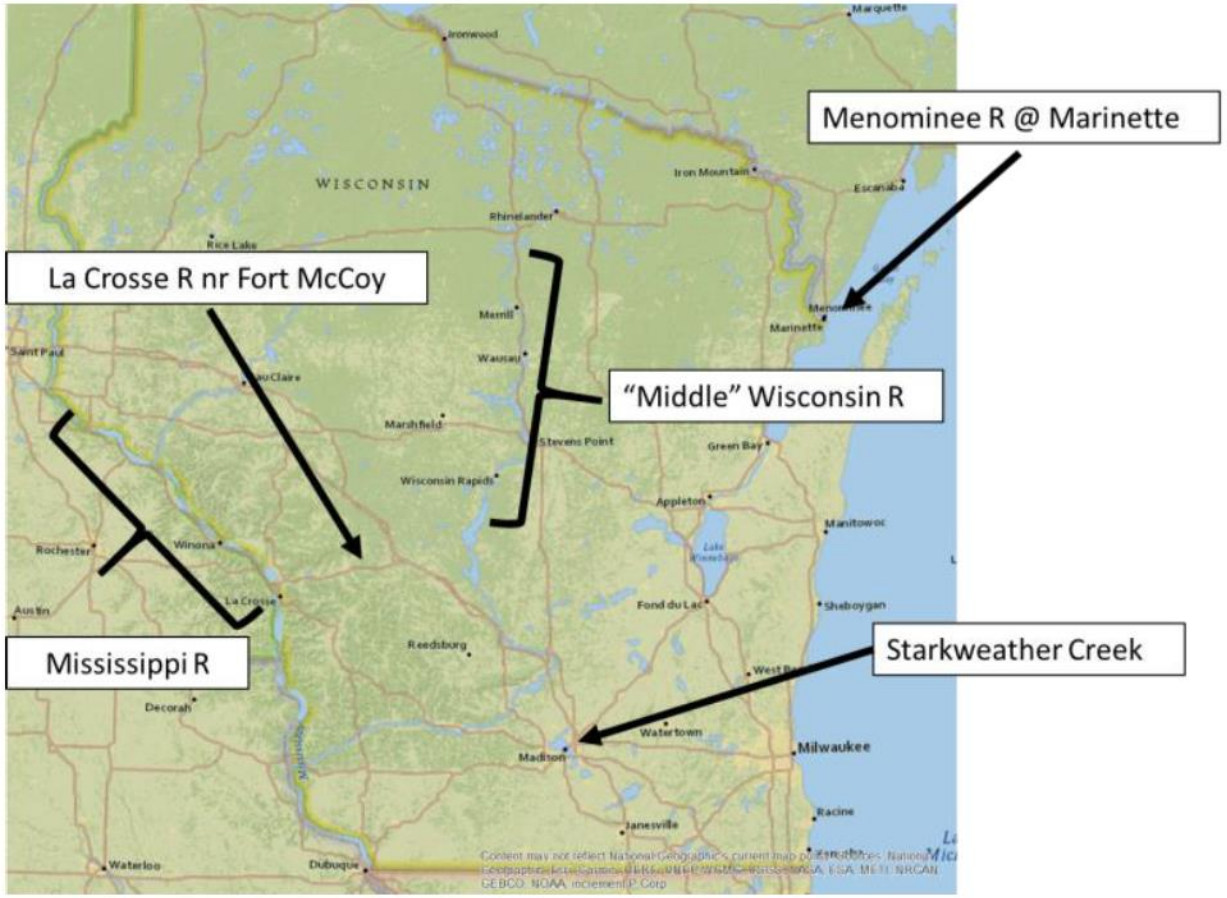
Laboratory Analytical Methods

WI method criteria bridges the gap until EPA's non potable method is published

36 compound list selected based on most likely to be present



Surface Water and Fish Tissue in 2019.



DNR PFAS Initiatives – SPGeo Group

- Purpose

–Screening, priority setting and geolocating of known or likely PFAS sources

– Develop protocols to help in prioritizing sites

–Coordinate collection of PFAS sampling data and tools for analysis

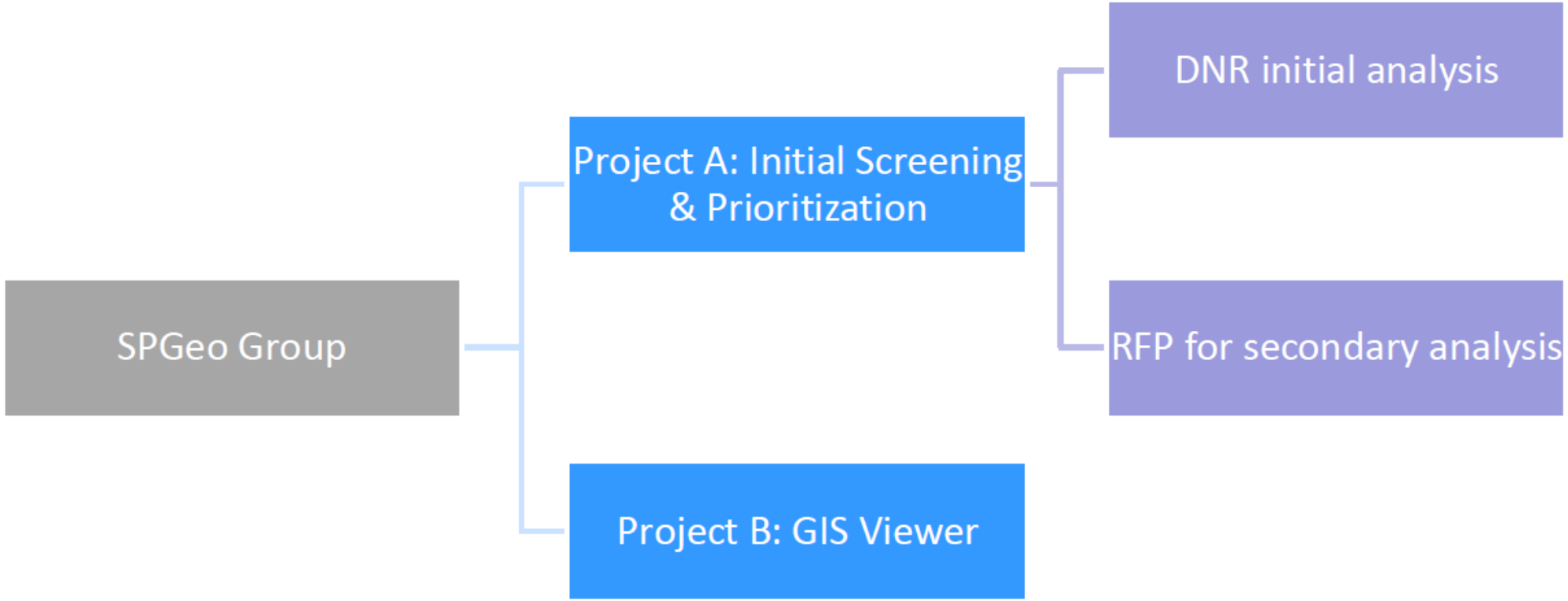
–Develop external GIS viewer for display of data and site information

- Resources

–Allocated $150,000 in FY19 for projects

DNR PFAS Initiatives

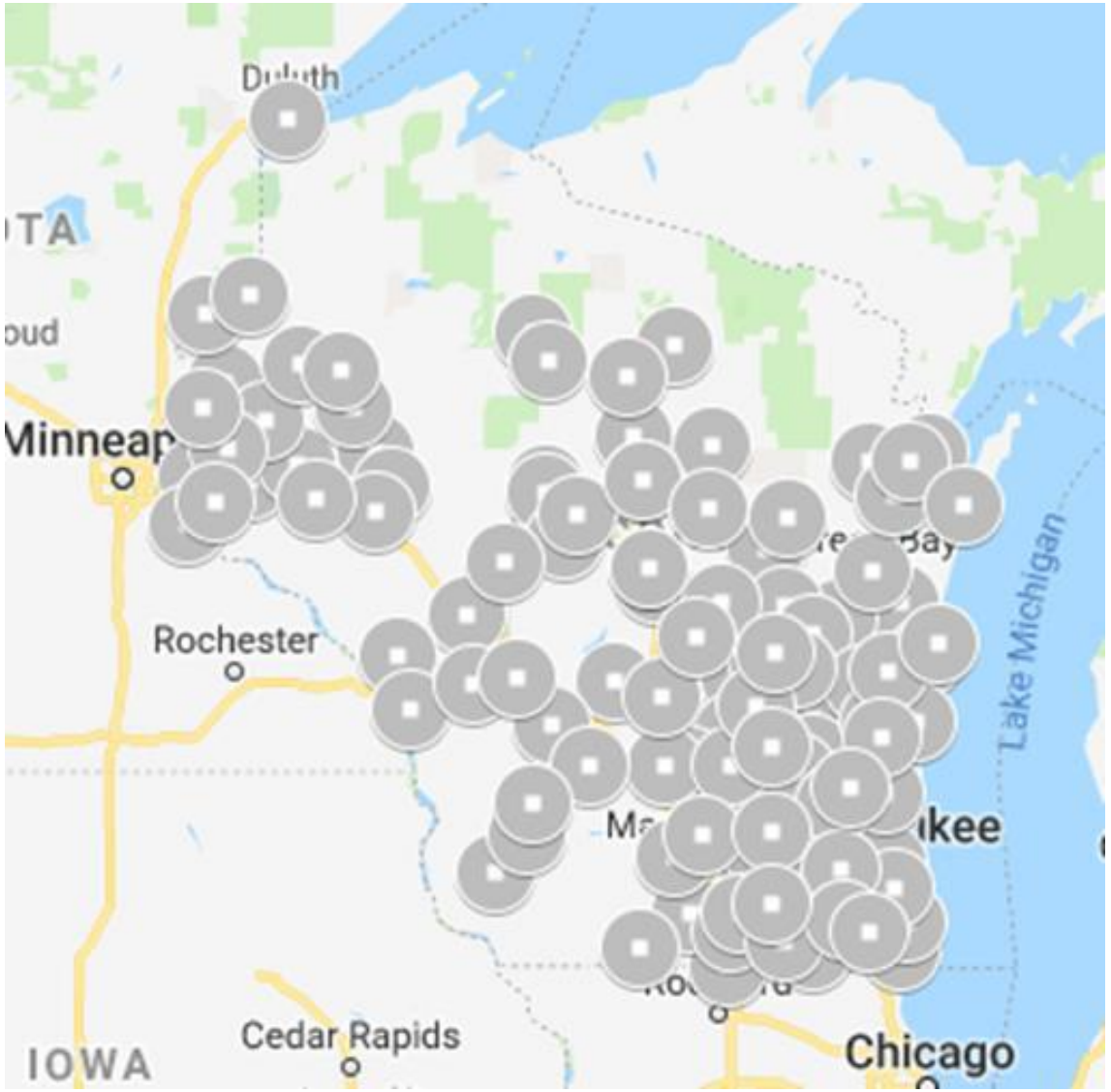
- **Screening, Prioritization and GIS (SPGeo) Group**



POTW Screening Initiative

125 POTWs

- 27 Authorized Pretreatment Programs
- 87 Other POTWs with SIUs
- 10 found by query of permit fact sheets
- 1 community with PFAS in water supply



POTW Screening Initiative

Voluntary sampling of influent and effluent

–36 PFAS compounds

–Use isotope dilution method

–Within 90 days of receipt of letter

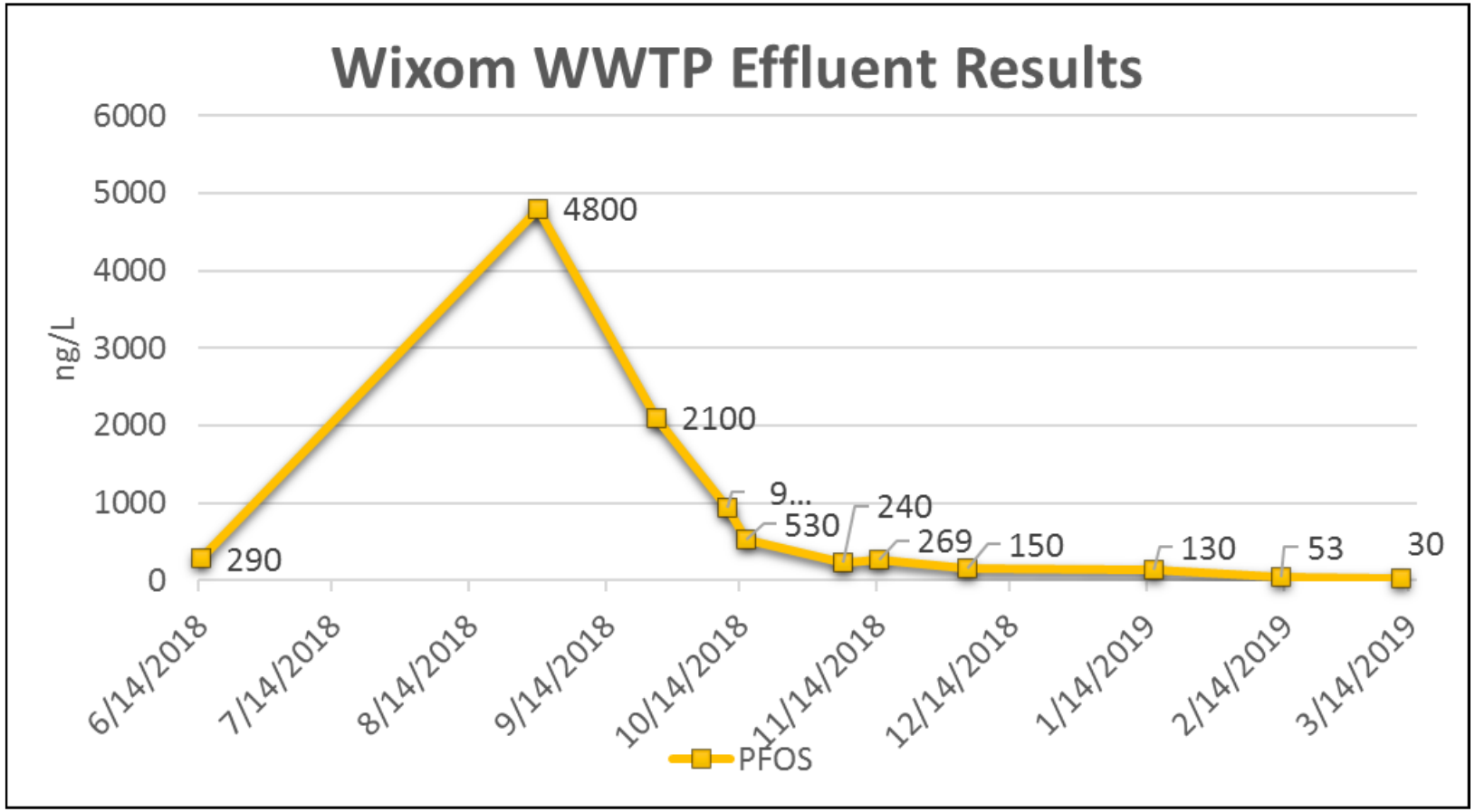
- Source Identification and Reduction

–Invitation to work with DNR to develop plan to sample potential sources

–Invitation to work with DNR and sources to eliminate PFAS

- Product substitution
- Operational Controls
- Cleanup of historical contamination
- Pretreatment

POTW Screening Initiative



- Intended outcome: scope the extent of the PFAS problem in Wisconsin and take source reductions measures.

Source: Michigan EGLE, “Michigan’s IPP PFAS Initiative” (May 2019)

POTW Screening Initiatives – Municipal WW Effluents

Study Component A:

Determine the TYPE and QUANTITIES of PFAS Associated with POTWs and Streams Receiving POTW Effluents

- (a)Quantify PFAS within the POTW –dual emphasis (1)retention(influent –effluent); (2)cycling/processing of PFAS within the facility. Sample influent and effluent streams and locations within the treatment facility, including sludges and biosolids slurries
- (b)Quantify PFAS in the Stream Receiving the POTW Effluent. Stream water and sediment samples upstream of discharge, in the mixing zone, and downstream of mixing zone

POTW Screening Initiatives – Landspread Biosolids

Study Component B:

Determine the Impacts to Soils, Surface-and Ground Waters of PFAS-Containing Municipal Biosolids Spread on Agricultural Fields

- (a) Quantify PFAS within the fields receiving biosolids. Samples of soils and soil-water
- (b) Quantify PFAS in groundwater samples near the agricultural field study sites and in regional deeper groundwater

DNR PFAS Initiatives - AFFF

Fire Depts and Airport Surveys; BMPs; and Possible Clean Sweep

- Purpose

–Determine where PFAS containing foams have been used, stored, trained with through State Survey

–Develop protocols to reduce use of PFAS-containing foams –BMPs + Fire Responder Health and Safety

–Coordinate collection and disposal of PFAS-containing foams across the state

- Resources

–Allocated $50,000 in FY19 for projects

DNR PFAS Initiatives

Other Actions in progress

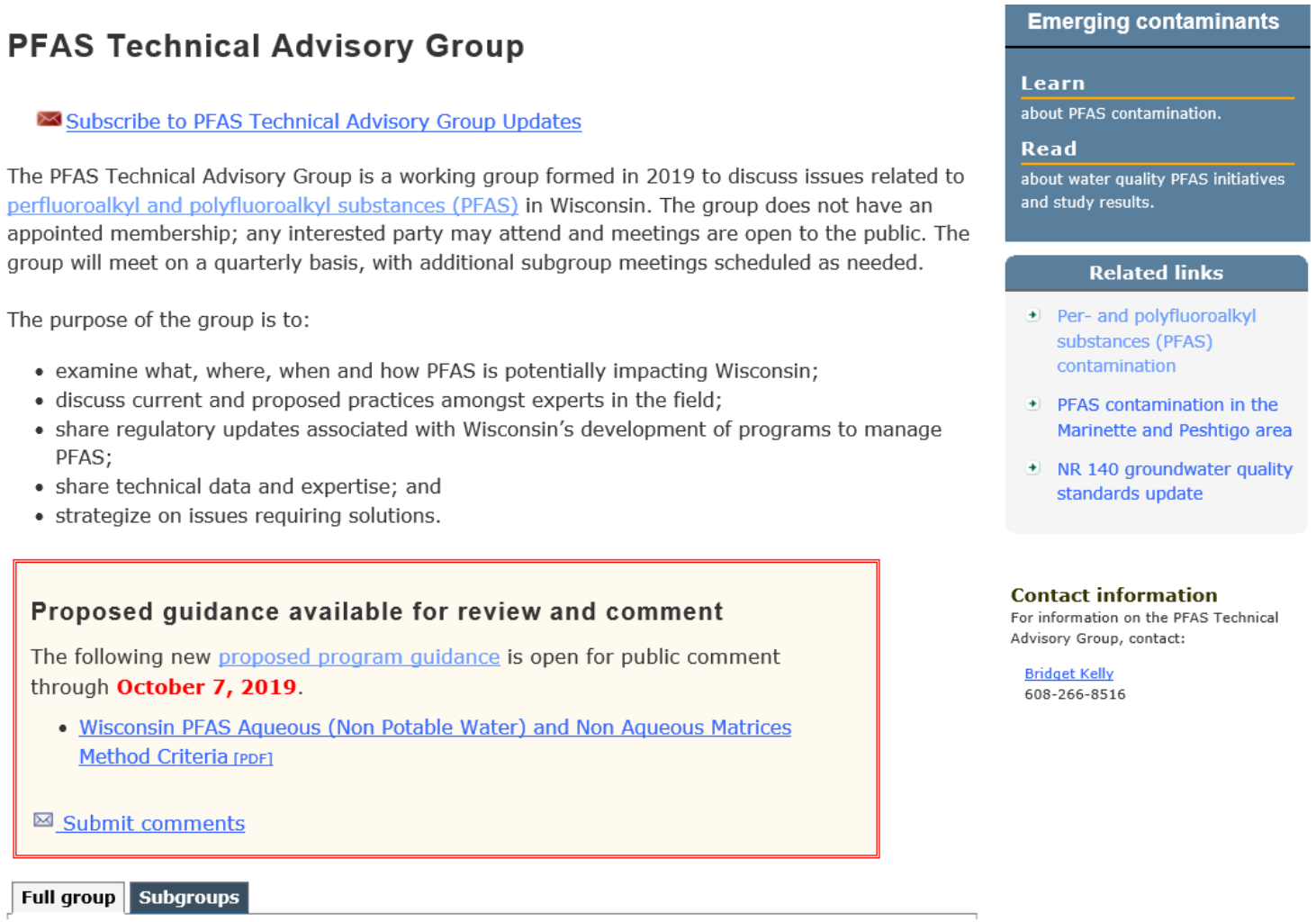
- Dewatering projects – interim process
- Waste-Materials Management
- Research Needs Identification

Next PFAS EAG Meeting

December 13th: 10am – 2pm

PFAS Website

- https://dnr.wi.gov/topic/Contaminants/PFASGroup.html



PFAS Technical Advisory Group

Subscribe to PFAS Technical Advisory Group Updates

The PFAS Technical Advisory Group is a working group formed in 2019 to discuss issues related to perfluoroalkyl and polyfluoroalkyl substances (PFAS) in Wisconsin. The group does not have an appointed membership; any interested party may attend and meetings are open to the public. The group will meet on a quarterly basis, with additional subgroup meetings scheduled as needed.

The purpose of the group is to:

- examine what, where, when and how PFAS is potentially impacting Wisconsin;
- discuss current and proposed practices amongst experts in the field;
- share regulatory updates associated with Wisconsin's development of programs to manage PFAS;
- share technical data and expertise; and
- strategize on issues requiring solutions.

Proposed guidance available for review and comment

The following new proposed program guidance is open for public comment through **October 7, 2019**.

- Wisconsin PFAS Aqueous (Non Potable Water) and Non Aqueous Matrices Method Criteria [PDF]

Submit comments

Full group | Subgroups

Emerging contaminants

Learn
about PFAS contamination.

Read
about water quality PFAS initiatives and study results.

Related links

- Per- and polyfluoroalkyl substances (PFAS) contamination
- PFAS contamination in the Marinette and Peshtigo area
- NR 140 groundwater quality standards update

Contact information
For information on the PFAS Technical Advisory Group, contact:

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608-266-8516

In the News

- 10/7/19 news release: DNR's First Round of Sampling Shows PFAS Contamination at Surface Water Monitoring Locations in Wisconsin [Additional information is on the Water quality PFAS initiatives page.]
- 8/2/19 news release: DNR announces results of Madison PFAS contamination pilot study [Additional information is in the Environmental impacts tab.]
- 7/22/19 news release: DNR taking more steps to protect Wisconsin drinking water
- 7/22/2019: Letter from DNR to Municipal Wastewater Facilities [PDF]
  - List of Municipal Wastewater Facilities Receiving DNR Letter [PDF]
- 6/21/19 news release: DHS, DNR, DATCP Work to Make Groundwater Cleaner
- 6/21/19 letter from DHS to DNR: Summary of Cycle 10 Recommendations [PDF]