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Wis. Stats. §292.11 - "Spills Law"

- Responsible Party shall take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands or waters of this state.
- Includes:
  - Interim Action
  - Site Investigation (iterative)
  - Select & implement appropriate remedial action
  - Long Term Monitoring/Site Management

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Per- and Polyflouroalkyl Substances (PFAS)

- Large group of human made chemicals used in industry & consumer products
- PFAS is Regulated under Wis. Stats § NR 292.11
- Broad definition of "hazardous substance": "…*which may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or which may pose a substantial present or potential hazard to human health or the environment because of its quantity, concentration or physical, chemical or infectious characteristics…*"

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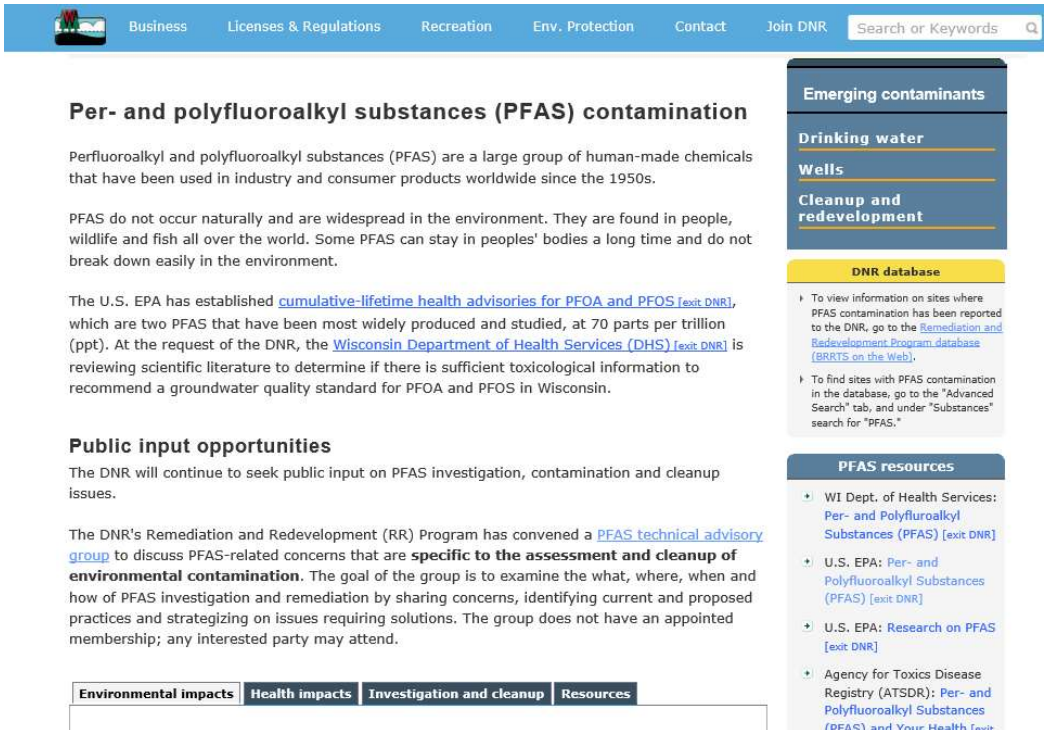
Emerging Contaminants - PFAS

- DNR is developing a PFAS strategy
- Established internal groups to coordinate
- Governor's budget proposes funding for at least two new positions for PFAS contamination issues
- PFAS Website *https://dnr.wi.gov/topic/Contaminants/PFAS.html*



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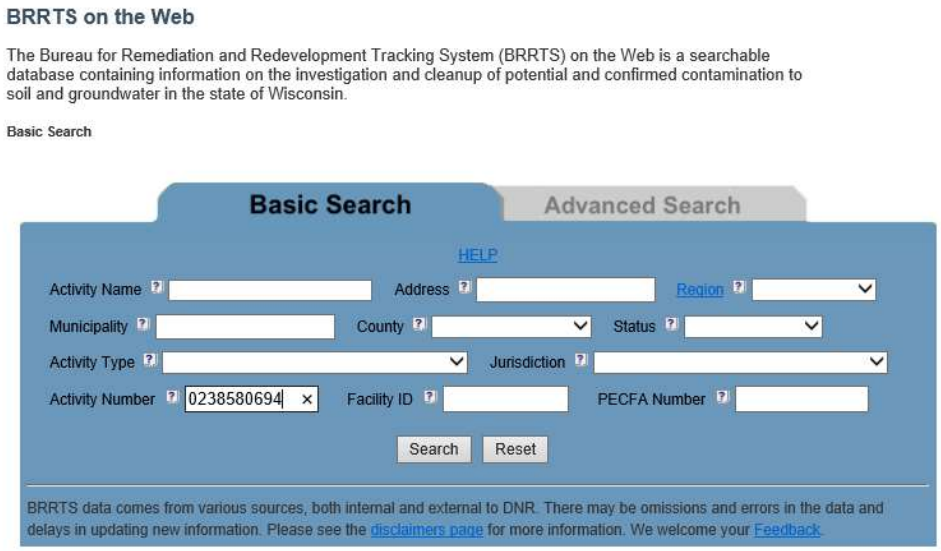
Spills Law Authority – DNR

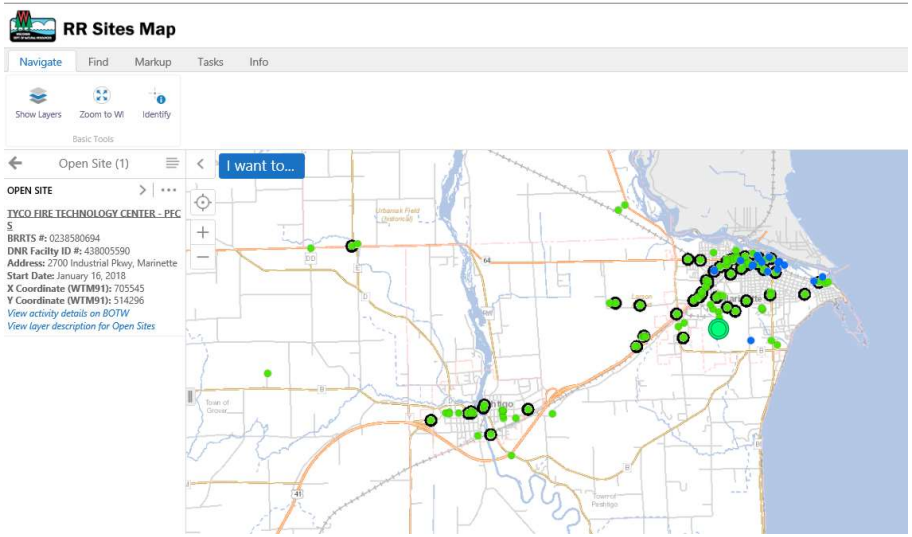
- Regulatory oversight to ensure Responsible Party is following the law
  - Wis. Stats. § 292.11 and Wis. Admin. Code chs. NR 700-754
- Oversee Responsible Party actions: interim actions, site investigation, remediation, and long term monitoring/site management
- Review fee based submittals & provide comments
- Upload documents to DNR Database - BOTW

Environment Remediation and Redevelopment Cleanup Redevelopment Partnership

DNR Database - BOTW

- Remediation and Redevelopment database of Contaminated Properties – BRRTS on the Web (BOTW)
- Access JCI Case file via database *or* interactive map
- https://dnr.wi.gov/topic/brownfields/rrsm.html
- BRRTS Case 02-38-580694, can access site documents





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Spill Law Authority – Responsible Party

- Take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands or waters of this state.
- Follow Wis. Stats. § 292.11 and Wis. Admin. Code chs. NR 700-754
- Hire consultant, submit Site Investigation Workplan, Site Investigation Report, Remedial Action Plan, Implement Remedial Action
  - Fees are not required

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Site Investigation Process

- Governed by Wis. Admin. Code ch. NR 716
  - Collecting site data for impacted media (e.g. samples soil, groundwater, surface water, sediment, fish, etc.)
    - Iterative/Cycle
  - Goal is to define degree and extent of environmental impacts
- October 2018 Site Investigation Report
    - "Not Approved": Internal DNR nomenclature. Not a rejection of the report. Letter recognizes that Site Investigation is not complete.

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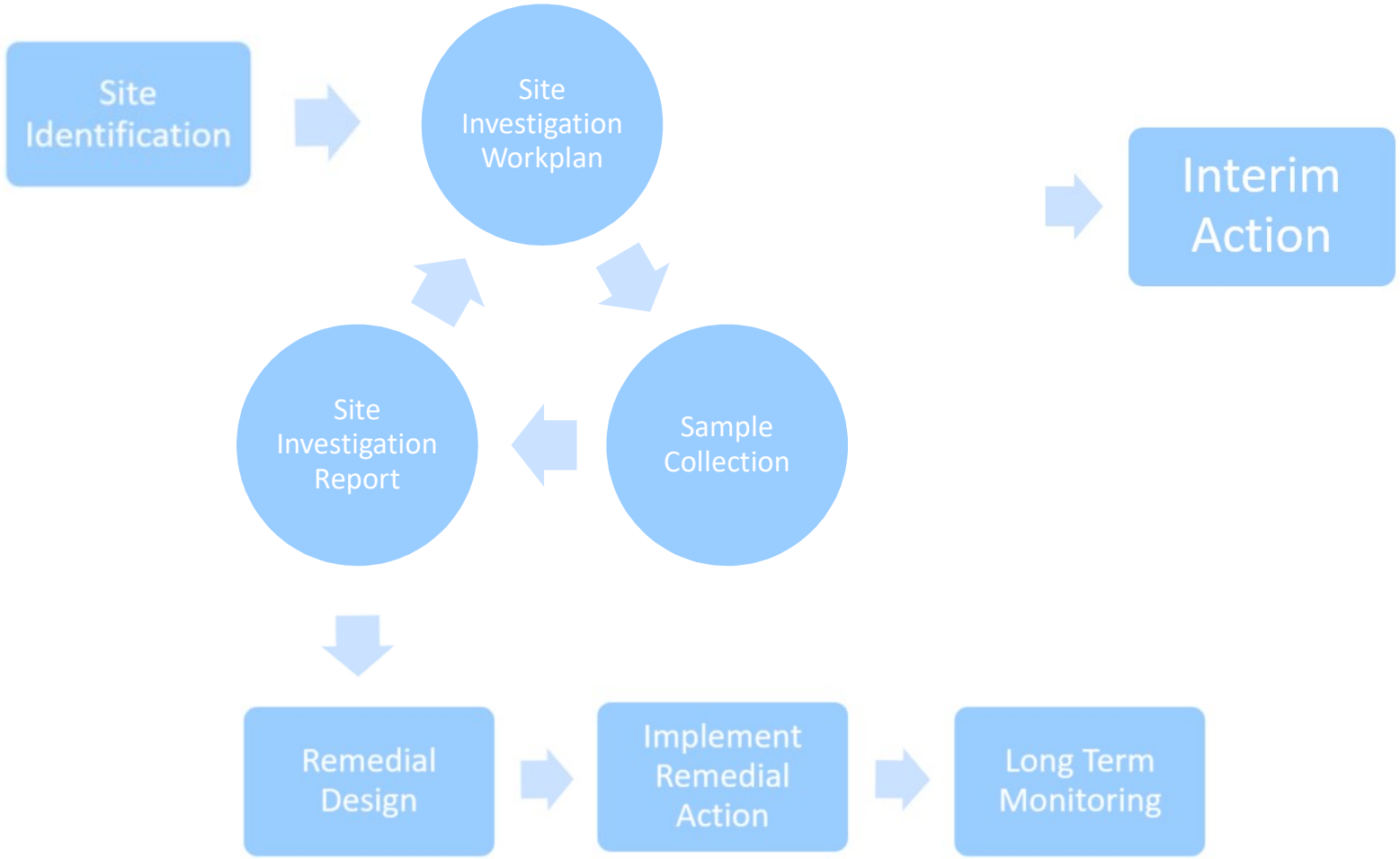
Site Investigation Process



Interim Action

- Governed by Wis. Admin. Code NR 708.11
  - NR 708.11 (1) (a): *"Interim action shall be taken where it is necessary to contain or stabilize a discharge of a hazardous substance or environmental pollution, in order to minimize any threat to public health, safety, or welfare or the environment."*
    - Providing bottled water,
    - Sampling of Private Wells,
    - Installation of Granulated Active Carbon (GAC) Point of Entry Treatment System (POET),
    - Ditch A (Ditch B - proposed) surface treatment systems

WI DNR Role in Determining a Long Term Potable Water Solution

- Responsible Parties required under Spills Law and NR 700 series of WI Administrative code to:
  - Restore the environment to the extent possible
  - Select appropriate remedial action for pathways of concern
    - Pathways of concerns include drinking water
    - Selected remedial actions must be implementable

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Long Term Potable Water Solution

- WI DNR supports provision of water from a “Community Water Supply.”
  - Community Water Supplies provide the most protected and reliable source of drinking water.
    - Regulated by the Federal Safe Drinking Water Act
    - Regularly monitored for all regulated contaminants
    - Required to have emergency operations and supply plans
    - Operated by certified individuals

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Long Term Potable Water Solution

- Options for community water supplies include:
  - Extension of nearby municipal water source
  - Formation of a sanitary district operated by a municipal entity that could either purchase water from nearby municipal water source or create its own source (i.e. wells or surface water intake)
  - Series of shared wells, operated by private entities such as a homeowners association

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Long Term Potable Water Solution

- WI DNR does not have regulatory authority to require a municipality to extend its service or sell water to another public water system.
- WI DNR does not have regulatory authority to require an implementable solution within a specific time frame.
- WI DNR has had conversations with JCI, Marinette, and Town of Peshtigo regarding implementable long term potable water solutions.
- JCI is currently working with both the Town of Peshtigo and the City of Marinette regarding and implementable long term potable water solution.

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Additional Slides As Needed

Fish

- DNR has been tracking the amount of pollutants (PCBs, Mercury, dioxins/furans, etc.) in fish since the 1970's.
- DNR began monitoring of PFAS in fish from the Great Lakes and major river systems in 2006.
- PFAS concentrations in fish from Great Lakes is lower than those sampled from major River Systems, particularity Mississippi River.
- In 2007, the DNR and DHS first issued a PFAS-based (specifically PFOS) consumption advisory of 1 meal/week for some fish species found in the Mississippi River. This advisory remains in place today.
- The DNR continues to routinely monitor levels of pollutants in fish, including many PFAS, in Wisconsin's rivers and the Great Lakes.

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Fish - continued

- DNR collected fish in 2017 (25 fish) and 2018 (17 fish) from Green Bay and the Menominee River up to the first dam. The remaining sections of the Menominee River (upstream of the first dam) are on schedule to be sampled in 2019.
- We are still awaiting the results on all of the fish collected in 2017 and 2018, but preliminary results indicate PFAS levels similar to levels observed in past sampling events. While PFAS was detected in nearly all of the fish (this is expected), any advisory based on PFAS would be superseded by advisories based on PCBs (the PCB advisory is more protective). Fish consumption advisories already exist for fish from the Menominee River and Green Bay due to PCBs.
- Fish from the Menominee River upstream of the first dam are sampled approximately every five years. Fish from Green Bay are also sampled on a five year rotating basis.

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Wildlife

- PFAS accumulation in wildlife is an emerging area of research.
- We are aware of Michigan's recent findings in one deer on the eastern border of the Lower Peninsula.
- Michigan's investigation is the first of its kind that we are aware of, and very little scientific information exists on whitetail deer and PFAS chemicals.
- We are working closely with our environmental partners within the agency on this important issue and its potential effects to wildlife.
- Though deer may not readily show symptoms of PFAS exposure, sick deer reporting is the most efficient way to monitor deer herd health. If you observe a sick deer contact your local biologist in your county which is available via the following link: https://dnr.wi.gov/topic/wildlifehabitat/sickdeer.html.

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Water Quality

- Wastewater
- DNR Requested Marinette Wastewater Treatment Plant Biosolid be held
- DNR is studying Biosolid containing PFAS Application to Fields
- Until then, the DNR has requested Marinette Public Works landfill or incinerate biosolids

- Surface Water
- DNR plans to perform surface water quality sampling at select locations in 2019
- Requiring PFAS testing and treatment in general discharge permits from known sites (e.g. JCI and Husky refinery fire)