Proposed Strategy:

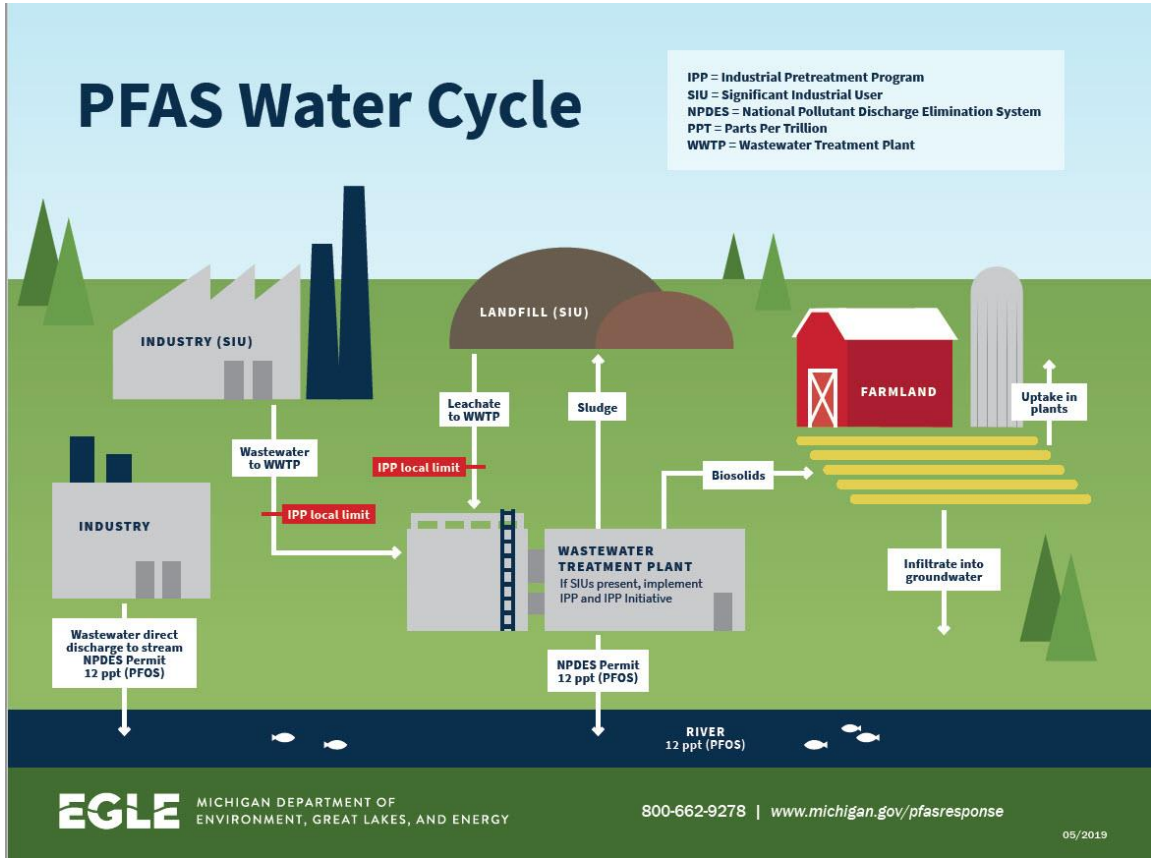
PFAS in Wastewater in Wisconsin

Jason Knutson
Wastewater Section Chief
Wisconsin DNR

Adrian Stocks
Water Quality Program Director
Wisconsin DNR

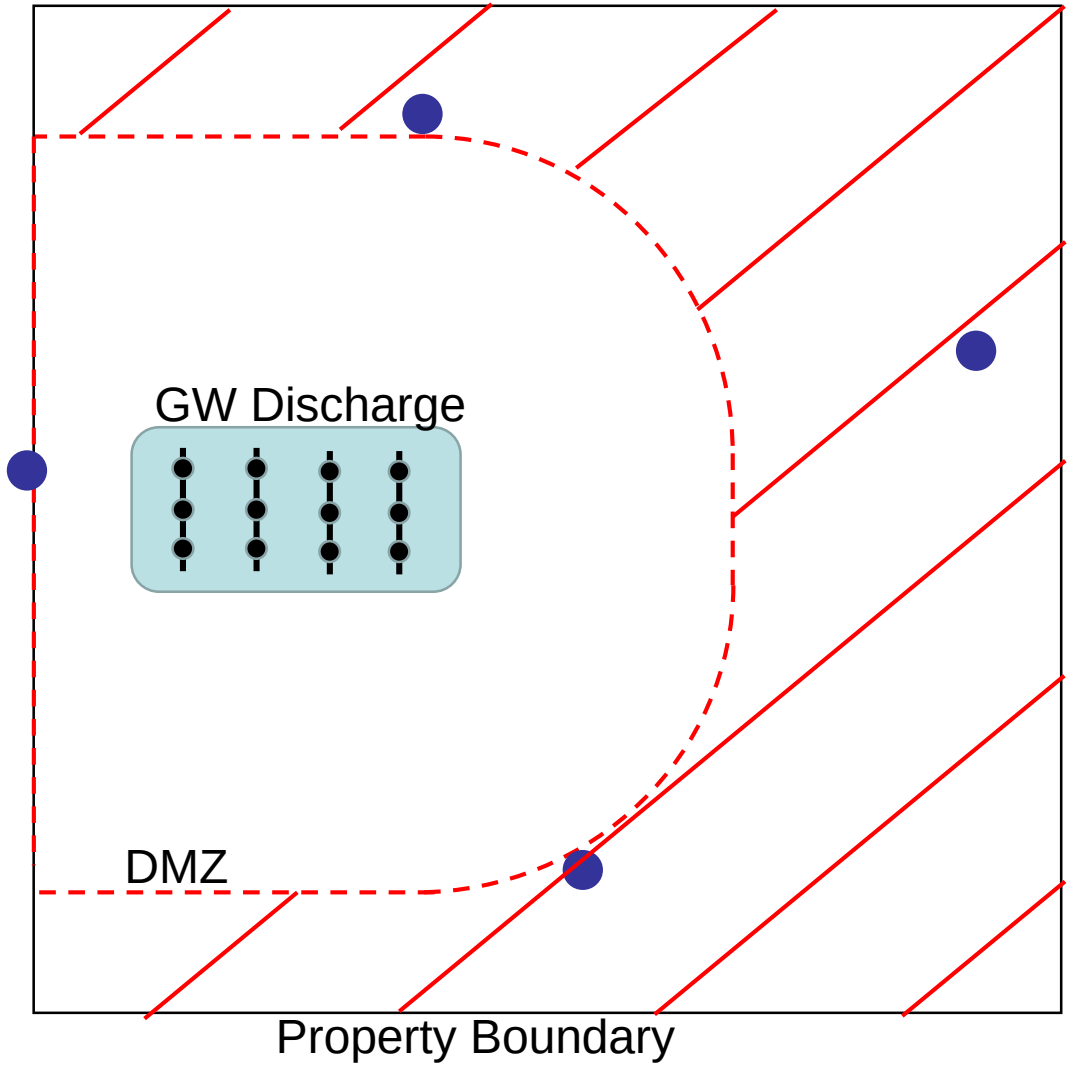
Topics

- Groundwater Standards
- Water Quality Standards (Surface)
  - Triennial Standards Review
  - Standards Development Process
- Lab Certification
- Scoping Extent of Contamination
- Emphasis on Addressing Sources
  - Pretreatment
- Biosolids



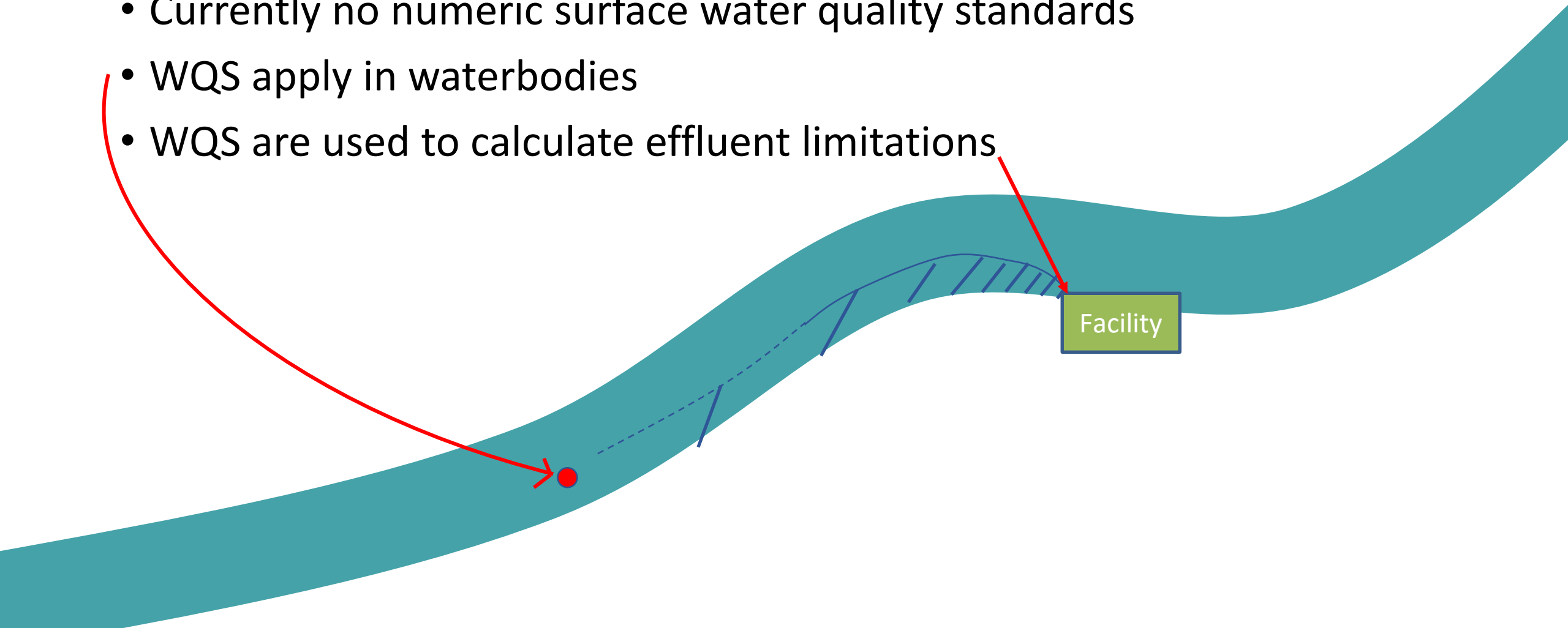
Groundwater Standards

- Currently no numeric standards
- DHS evaluating potential PFAS GW Standards
  - Enforcement Standards
  - Preventative Action Limit
  - (Different than MCLs)
- Would apply outside DMZ
- Upon recommendation, DNR may begin rulemaking to adopt
  - Drinking/Groundwater Program
  - Implications for WPDES



Surface Water Quality Standards

- Currently no numeric surface water quality standards
- WQS apply in waterbodies
- WQS are used to calculate effluent limitations



Triennial Standards Review – Priorities for 2018-2020

A

Antidegradation
Bacteria Criteria Revision
Biocriteria
Chloride Variance Streamlining
Designated Uses Process Revision
P Assimilative Capacity in GLs
P Site Specific Criteria
Wetlands Floristic Assessment
Numeric Benchmarks

C

Aquatic Life
Criteria Revisions

F

P Criteria for
2-Story Lakes

Arsenic Variance
Process

B

Cyanobacteria
Human Health Criteria Revisions
Mercury MDV
Outstanding/Exceptional Resource
Water Process Revision
PFOS/PFOA

D

Ammonia
Arsenic
Chloride
Total Suspended Solids (TSS)
Copper
Nitrate/Nitrogen

DNR beginning preliminary
Stages of drafting a
Statement of Scope

A: In Progress
B: New Priorities
C: Priorities, but limited progress expected
D: Barriers to progress
E: Not Priorities

WISCONSIN
DEPT. OF NATURAL RESOURCES

Rulemaking Process

Currently here →

DNR PERMANENT ADMINISTRATIVE RULE PROMULGATION PROCEDURE

[When Governor approval of scope received after April 2013] Rev. 7/10/18

PHASE I – Scope Statement

1. Scope statement completed and approved by the Secretary.

2. Scope statement submitted to DOA for review of explicit authority.

3. DOA submits the scope statement to the Governor who may approve or reject the scope statement.

4. Governor issues written notice of approval via email to the Department rule officer.

5. Scope statement is submitted to Legislative Reference (LRB) for publication in the Administrative Register. The LRB will note the expiration date of the scope statement in the Register. 2017 WI ACT 39.

6. Scope statement is also submitted to chief clerks of the legislature for distribution to JCRAR, who may request a public hearing on the scope statement. 2017 WI ACT 57.

7. Yellow sheet is prepared to reserve time on NRB agenda for scope approval and conditional approval of the Notice of Public Hearing and Notice of Submittal to Legislative Council.

8. Green Sheet package is prepared to request NRB approval of scope statement and conditional approval of the Notices.

9. NRB meeting is held for approval of the scope statement and conditional approval of the notices.

PHASE II – Rule Development

10. Proposed rule language is prepared in Board Order format.

11. Complete the analysis section of the board order.

12. Does the rule require incorporation by reference? If yes, be sure to update analysis. See step 23.

PHASE III – Soliciting Comments on Economic Impact

13. Solicitation Notice is prepared for seeking comments on economic impacts of the proposed rule.

14. Drafting bureau meets with the Department Economist to determine Economic Impact level.

15. Fiscal estimate and Economic Impact Analysis (FE/EIA) prepared using Fiscal Estimate form DOA-249.

16. Solicitation Memo to NRB is prepared informing the Board of the department's intent to seek comments on economic impact.

17. Solicitation Memo and other documents are routed, then approved by the Secretary's office and submitted to NRB.

18. Solicitation Notice and other documents are sent by the drafting bureau to affected businesses, interested parties; rules officer posts on the DNR website.

PHASE IV – Public Hearings

19. Public hearing documents are prepared for 15-day passive review by the NRB.

20. Rule documents sent to the Legislative Council for their 20-working day review; docs also sent to DOA and Chief Clerks for referral to JCRAR, 2017 WI Act 57

21. The public hearing notice is published in the Administrative Register.

22. Public hearing is held and public comment period closes.

PHASE V – Final Rule Adopted by NRB and Governor

23. Board order for proposed rule may be modified as necessary based on public comments received and Incorporation by Reference if needed.

24. Yellow Sheet is prepared to hold a place on NRB agenda for adoption of proposed rule.

25. Green Sheet package is prepared and approved by the Secretary to request NRB adoption of the proposed rule.

26. NRB meeting is held requesting adoption of final rule.

27. Final rule and rule checklist is submitted by the rule officer requesting Governor approval.

28. The rule officer notifies JCRAR that the Department has submitted a rule to the Governor for approval.

PHASE VI – Legislative Review This is the 30 month deadline. The end result is that rulemaking must go from scope statement publication to legislative review within 30 months. 2017 WI ACT 57.

29. Report to Legislature and Notices prepared and submitted to Assembly and Senate Chief Clerks.

30. Standing Committee's review completed. (30 days; an additional 30 days can be requested by the committees).

31. JCRAR Reviews the rule and can object to the rule in whole or in part, or just review. Usually a 30 day review. Rule officer notes the final date of the review time period.

32. The Department rule officer prints the rule and it is signed by the Secretary; the rule officer files with LRB.

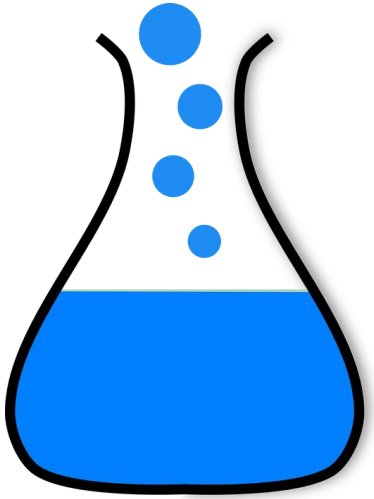
33. Rule proof received from LRB, the program reviews the proof copy and it's returned to the LRB by rule officer.

34. Final Rule is published in the end of month Administrative Register.

35. Rule becomes effective the first day of the month following publication in the Administrative Register.

WISCONSIN DEPT. OF NATURAL RESOURCES

Lab Certification



- WI DNR will offer lab certification:
  - 36 PFAS compounds
  - Drinking water, aqueous, and non-aqueous (solid) matrices
  - Target date - July 2019
    - Audits begin August 2019
- Drinking water samples: EPA Method 537.1
- Non-drinking water samples (including solids): Will need to follow WI PFAS SOP
  - Comments on SOP from labs have been received
    - Under consideration, expected to be complete July 2019

First Step: Scoping the Problem

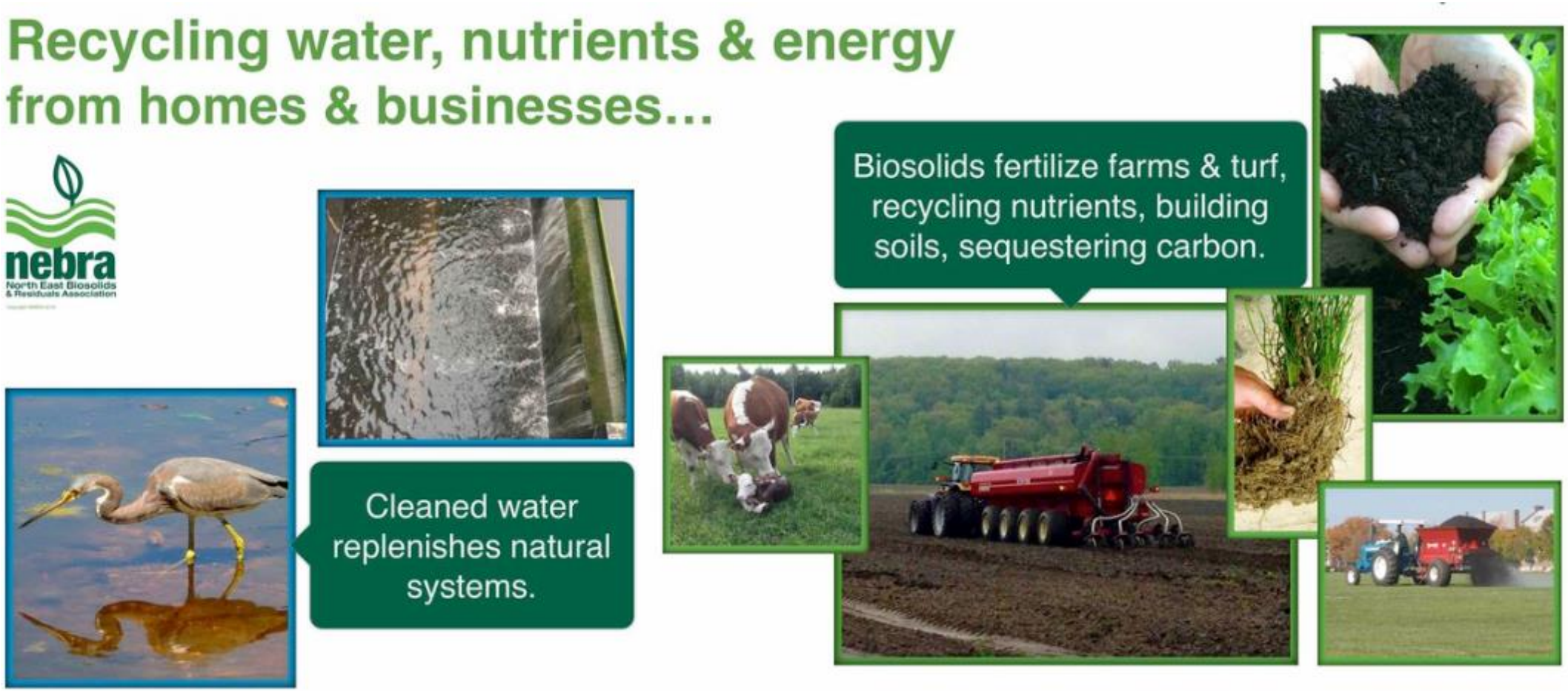
- Problem: Aware of health risks, but lack effluent data
  - Michigan's experience indicates reason to expect elevated PFAS in effluent from industries and POTWs with Pretreatment Programs
- Proposal:
  - Letter to POTWs with Pretreatment Industries and Industries
  - Request single effluent sample for suite of PFAS chemicals (whichever lab is able to return; minimum PFOS and PFOA)
- Goal:
  - Allow DNR and public to understand extent of PFAS contamination
  - Allow DNR to accurately project economic impact of PFAS Standards
  - Allow DNR to prioritize interim efforts to work with permittees to address large PFAS sources

Next Steps

- Where PFAS is found:
  - Also sample biosolids to determine partitioning to biosolids/effluent
  - Develop monitoring plan to identify PFAS sources
    - POTWs: focus on pretreatment industries
    - Industries: review additives, sample internally after different processes
    - Reduce/Eliminate PFAS sources
    - Evaluate impacts
    - Follow-up as needed
- Department:
  - Develop regulatory tools
  - Support PFAS elimination and treatment with available tools
  - Support research on PFAS partitioning in WWTPs and on landspreading

Biosolids

Land application of municipal sludge or biosolids for beneficial reuse is a common practice.



Land application of biosolids may be a significant dispersal mechanism of PFAS compounds.

Reducing sources of PFAS to WWTP will result in lower concentrations in biosolids.

Discussion