



# Adaptive Management vs. Water Quality Trading

# Information is available

- Phosphorus webinars
  - Adaptive management
  - Water quality trading
  - Compliance schedules
  - Phosphorus limits
- Adaptive management factsheet
- NR 217.18, Wis. Adm. Code
- Trading framework document



Visit <http://dnr.wi.gov>, search  
“*phosphorus rule*”

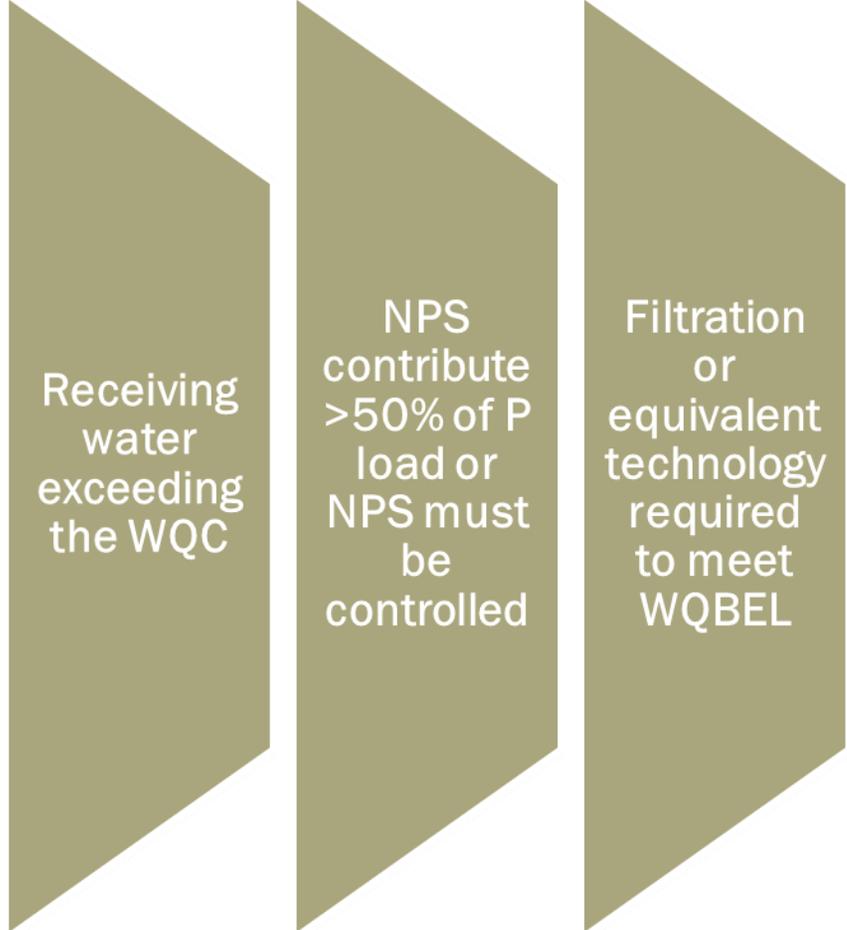
# Similarities

- Voluntary compliance options for phosphorus
- Designed to be used when it is economically preferable to control nonpoint sources or other point sources of P
- Both require nonpoint and/or other point source reductions
  - Contractual agreements should be made
  - Need to look in same watershed
- WDNR will not serve as broker for either program



# Adaptive Management Overview

- Goal: fix impaired waters
- Must meet eligibility requirements
- Develop an AM plan
  - Identify partners
  - Describe and quantify management measures
  - Identify where reductions will occur
- Determine success
  - BMP success
  - WQ improvement
  - Modeling and/or monitoring



Receiving  
water  
exceeding  
the WQC

NPS  
contribute  
>50% of P  
load or  
NPS must  
be  
controlled

Filtration  
or  
equivalent  
technology  
required  
to meet  
WQBEL

# What is Included in an AM Permit?

- **Interim limits** (NR 217.18(3)(e))
  - Permit term 1: 0.6 mg/L
  - Permit term 2: 0.5 mg/L
  - Permit term 3: final water quality limit
    - Can be recalculated
- **Compliance Schedules for interim limits/WQBEL**
- **Actions proposed in AM plan** (NR 217.18(3)(b))
- **Monitoring Requirements** (NR 217.18(3)(a))
- **Annual reporting** (NR 217.18(3)(d))
  - Implementation status
  - Monitoring results
  - Management updates
  - Modifications to the plan

# Trading Overview

- An exchange of pollutant reduction credits
- Can trade PS to PS or PS to NPS
- Must result in an improvement in water quality and a net reduction of the pollutant being traded
- Credits should be generated and used in the same time period
- Must manage uncertainty
  - Trade ratios
- Interim vs. final trades
  - Can get interim credit to bring NPS into compliance
  - Can get long-term credits for holding NPS lower than minimum compliance needs
- No longer a pilot!

# What's included in the permit?

- Phosphorus WQBEL
- Permit language allowing credits to be used when demonstrating compliance with the limit
- Reporting requirements for source and amount of credits acquired
- Certification by permittee that BMPs are in place and are effective



# Differences



1. **Pollutants Covered-** Trading can cover a array of pollutants, AM is only for P
2. **End Goals** — Adaptive Management focuses on achieving water quality *criterion* for P; Trading focuses on attaining compliance with a permit *limit*
3. **Implementation Area** — Trading typically only allows strategies upstream of the point source; AM includes reduction strategies in a watershed.
4. **Offsets** — Calculation of Trading offsets requires trade ratios and margins of safety; AM does not
5. **Timing** — Trading credits must be generated prior to permit issuance; AM allows permittees to reduce effluent P over time
6. **Monitoring** — AM requires in-stream monitoring and annual reports; Trading does not
7. **Eligibility** — Eligibility requirements differ for AM and Trading

# What Can AM get you that trading can't?

- Time
  - Don't have to generate credits before they can be used
  - Have one permit term to get good, two to get great, and three to get to criteria
- Flexibility
  - Can adjust plans as you gain more experience
  - Flexible action area
  - Flexibility in quantifying offset requirements and interim success
  - Can always switch to a different option if AM doesn't work, including trading
- Potentially fewer offsets required
  - Trade ratios, delivery ratios, credit thresholds not required



# What Can trading get you that AM can't?

- Certainty
  - “Easy as 1, 2, 3”- calculate the offset, do the offset, and meet your limit
  - Do not need to meet criteria
- Potential pollutants
  - Can look at both TSS and P trades
- Experience
  - Trading has already been done in Wisconsin and in other states

# Adaptive Management



# Water Quality Trading

	Adaptive Management	Trading
Nonpoint source dominated watershed	✓	✓
Water quality criteria can be attained	✓	⊘
Water quality criteria cannot be attained in a reasonable timeframe	✗	⊘
Multiple parties interested in reducing P in a watershed	✓	✗
Need to comply with MS4 permits	✗	✓

✓ - Good!

✗ - Not Preferable

⊘ - Does not matter

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Questions???

