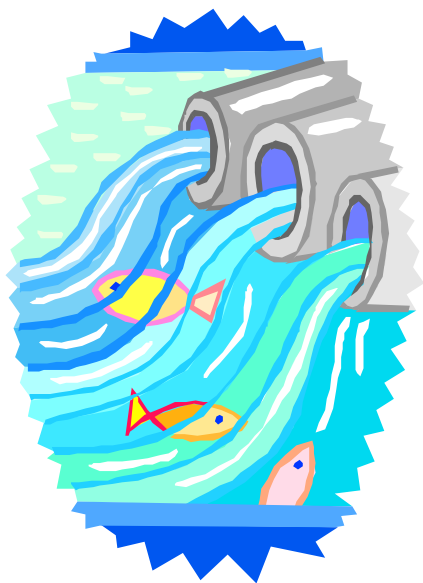


What is Water Quality Trading?



- **Water quality trading** is a voluntary exchange of **water quality credits** generated through pollutant reductions
- Sources with higher pollutant control costs may purchase pollutant credits from sources with lower control costs

What is a Credit?

- A **water quality credit** is a unit of pollutant reduction needed by a buyer (usually measured in pounds equivalent)
 - Generated by a point source controlling its discharge beyond what is needed to meet its effluent limitations
 - Generated by a nonpoint source from the installation of best management practices beyond current practices, state or local requirements.

Trading Between Two Point Sources

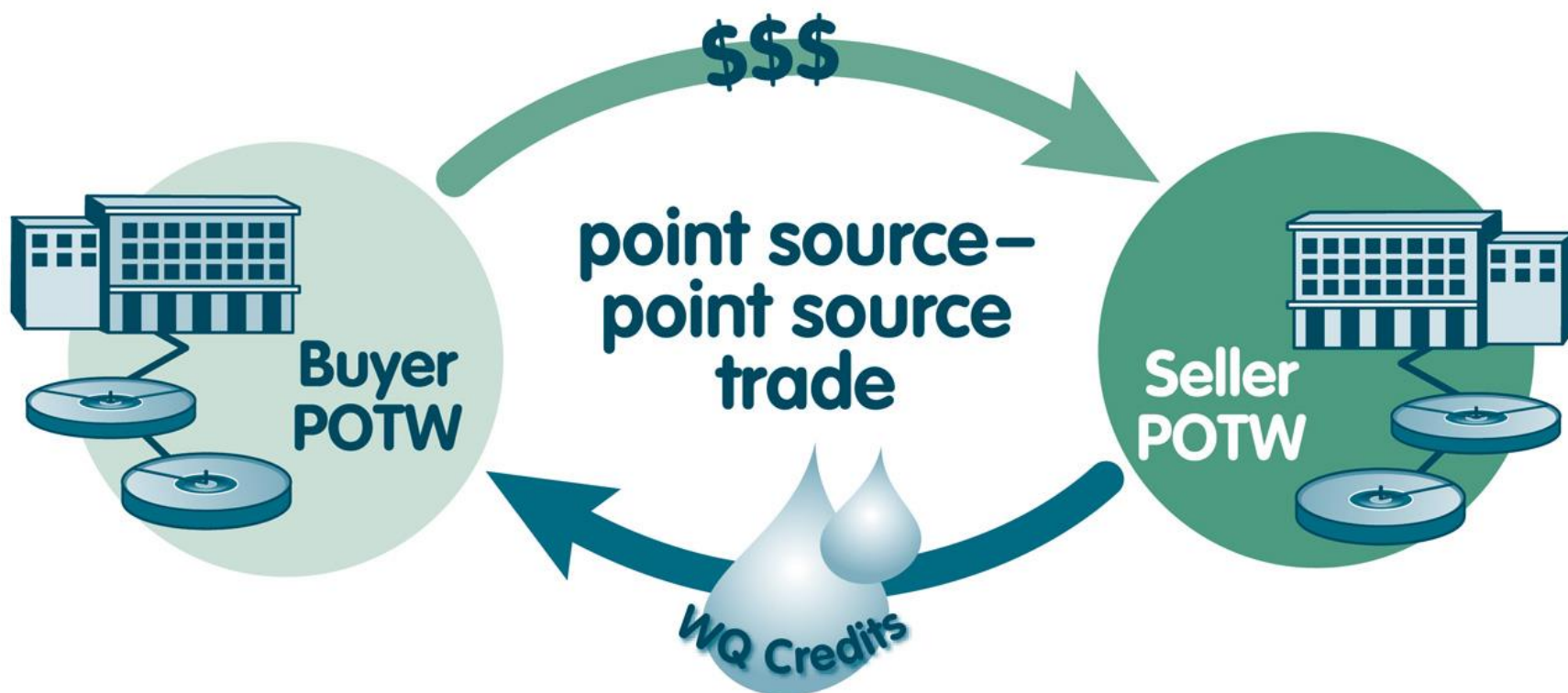
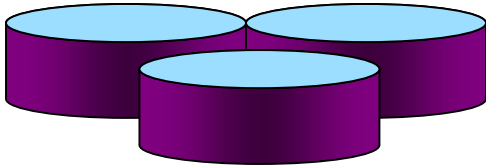


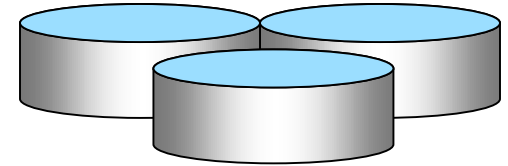
Illustration of a Trade Between Point Sources

Facility A



**Technology
Reduces
200 lbs**

Facility B



Need: 120 lbs reduction



Selects: Treatment



**200 lbs – 120 lbs
= 80 lbs**

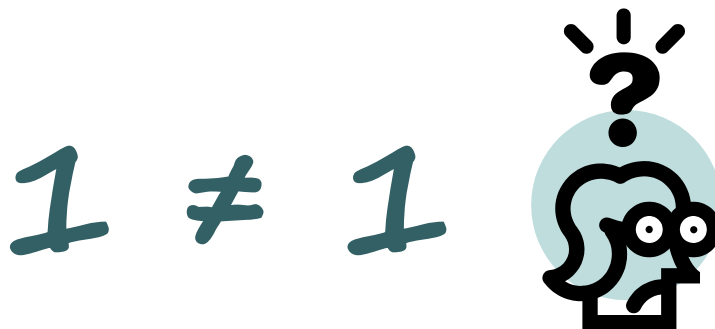
Need: 50 lbs reduction



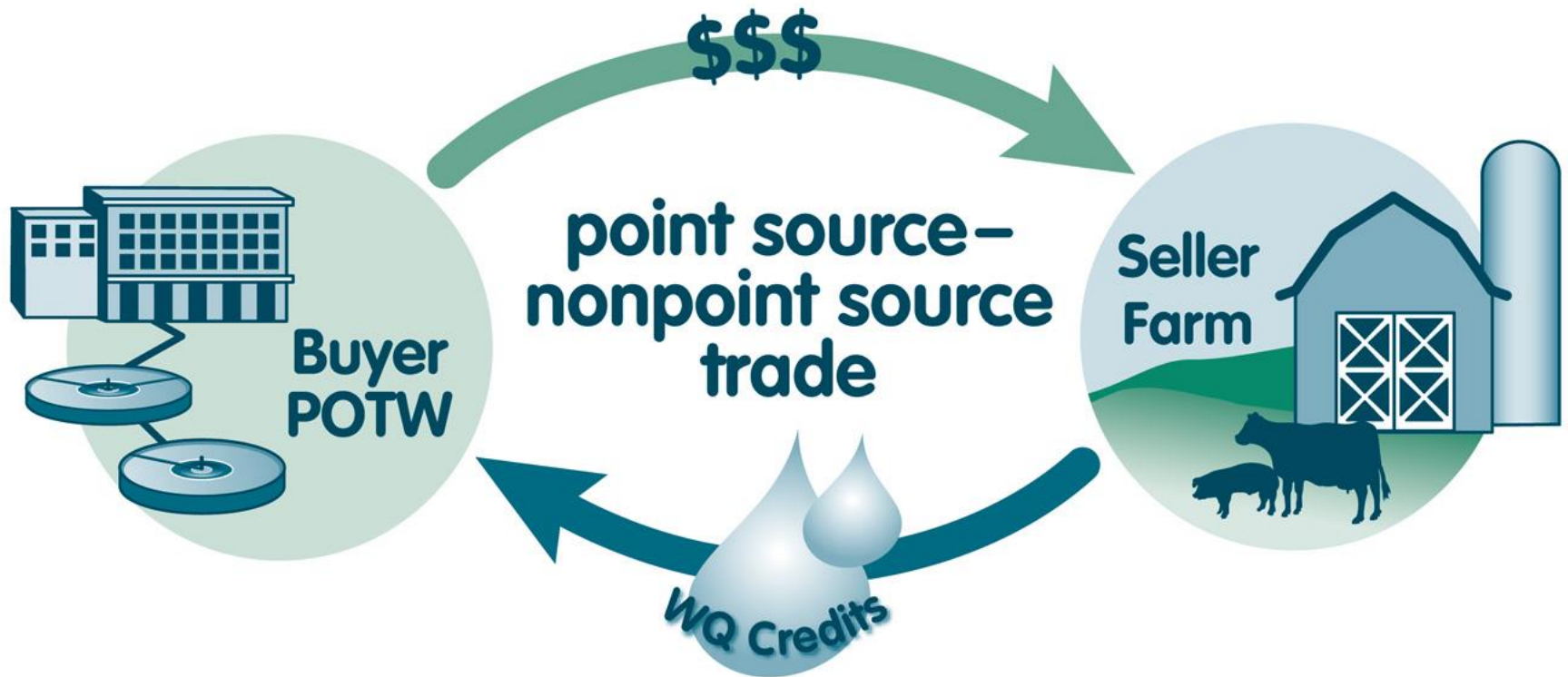
Selects: Trading

How Do Pollutant Load Reductions Become Tradable Credits?

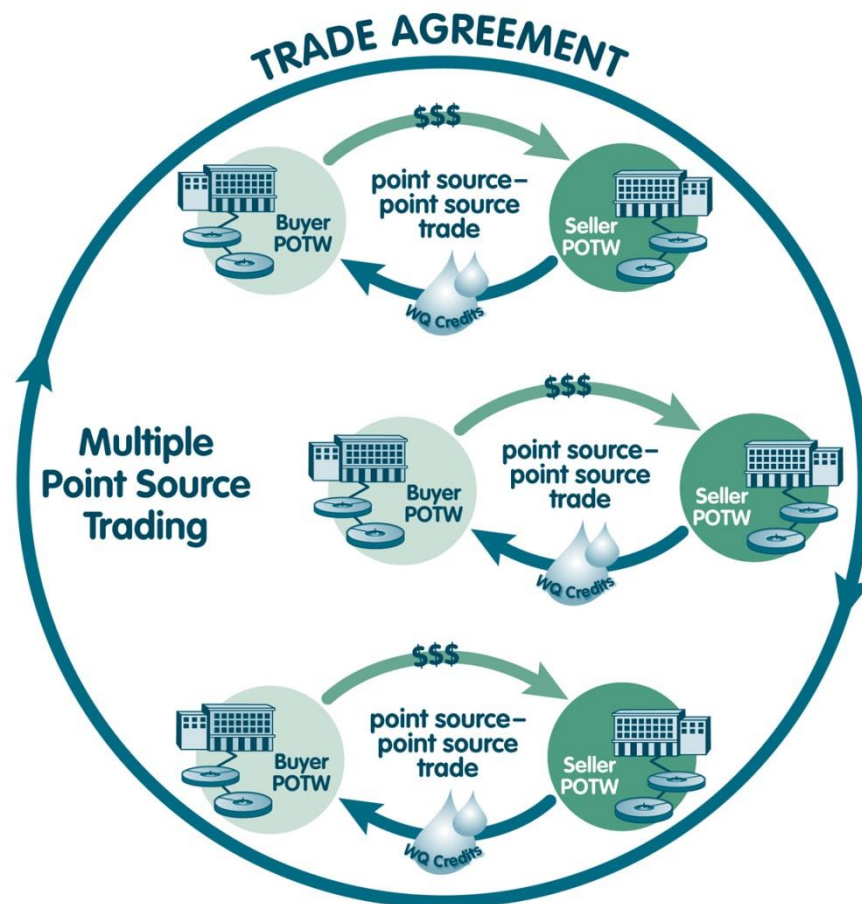
- One credit isn't always equivalent to one pound of pollutant reduction
- Consider factors that affect the water body and effectiveness of reductions, commonly called a trade ratio
- Credits must contribute to water quality improvements



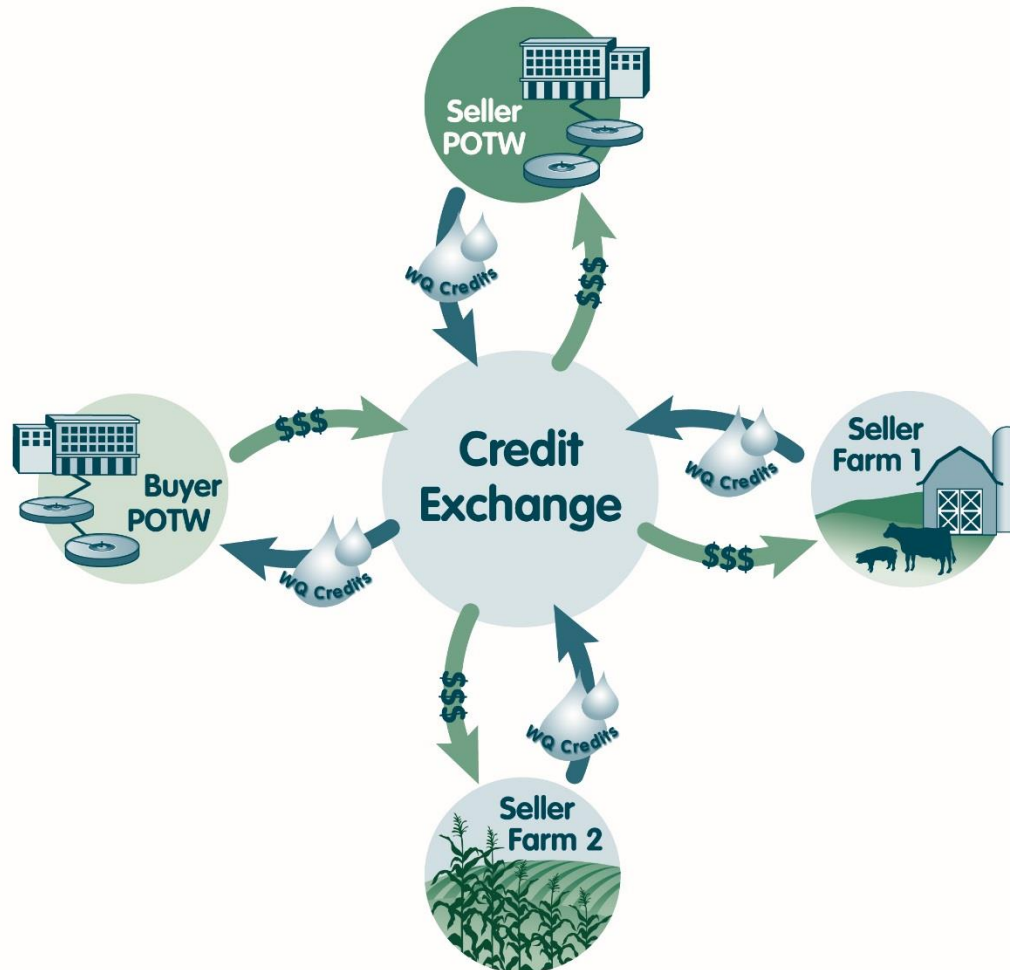
Point Source – Nonpoint Source Trades



Multiple Facility Point Source Trading

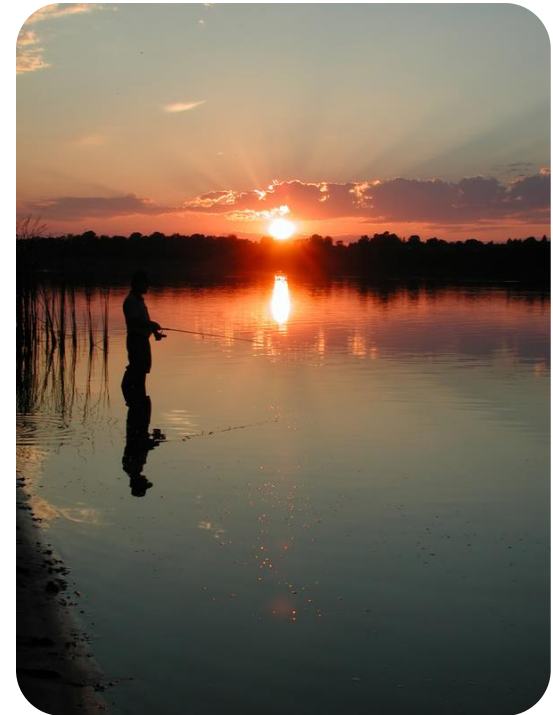


Credit Exchange



Under What Water Body Conditions May Trading Occur?

- Unimpaired waters to maintain WQS
- Impaired waters
 - Pre-TMDL
 - TMDL



What Limits Apply When Trading?

- **Baseline:** Discharge level that applies in the absence of trading (*buyers and sellers*)
- **Minimum control level:** Discharge level that a buyer must meet through treatment before buying credits (*buyer only*)
- **Trading limit:** Discharge level a seller would be held to in order to generate and sell credits (*point source sellers only*)

February 6, 2019 Memorandum

- Established a new vision for market-based approaches. Takes precedence over existing policy (EPA's 2003 Water Quality Trading Policy and EPA's 2009 Water Quality Trading Toolkit for Permit Writers).
- Established Market-Based Principles
 - Watershed-scale Implementation
 - Adaptive Management
 - Banking Credits
 - Flexibility in Baselines
 - Credit Stacking
 - Financing for Nonpoint Practices

Baselines Federal Register Notice

- Implements the February 6 Memo principle on baselines.
- Asks for comment on the specific policy changes and clarifications
- Asks for other areas where clarification is needed to reconcile 2003 Water Quality Trading Policy with the 2019 Memo

Baselines Federal Register Notice

- Six Options. These options can be used individually or together in developing a program.
 - A. (The need for a new) Definition of Baseline
 - B. Baselines for Water Quality Trading
 - C. Incremental Baselines
 - D. Compliance Schedules
 - E. Water Quality Standard Variances
 - F. Alternative Approaches to Disaggregation
 - G. In-Lieu Fee Program

Additional Resources

- Water Quality Trading Web Site
<https://www.epa.gov/npdes/water-quality-trading>
- Policy Proposal
<https://www.epa.gov/npdes/nonpoint-source-baselines-water-quality-trading>

Questions?

