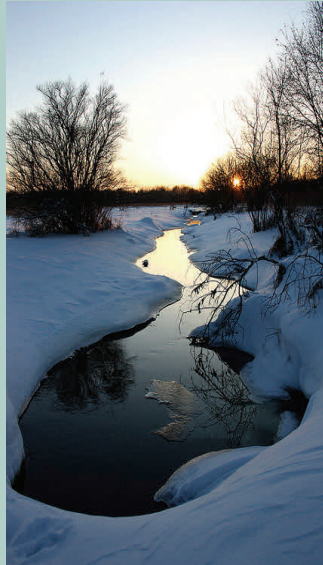




# Water Quality Trading

## What is Water Quality Trading (WQT)?



### WATER QUALITY TRADING IS...

- A compliance option that provides point sources with the flexibility to acquire pollutant reductions from other sources in the watershed to offset their point source load to comply with a permit limit (WQBEL)
- A strategy built on partnerships between point source facilities and their trading affiliates including other point sources, landowners, municipalities, private or public entities
- A compliance approach that must result in an overall reduction in pollutant load

### WATER QUALITY TRADING IS NOT...

- Adaptive management
- The appropriate solution for all point source facilities

### POLLUTANTS THAT CAN BE TRADED:

- Phosphorus
- Total Suspended Solids (TSS)
- Temperature
- Nitrogen
- Other pollutants excluding toxic bioaccumulative chemicals of concern

### ACRONYMS

- AM: adaptive management
- BMPs: best management practices
- DNR: Wisconsin Department of Natural Resources
- NPS: nonpoint source
- WPDES: Wisconsin Pollutant Discharge Elimination System
- WQBEL: water quality based effluent limit
- WQT: water quality trading



Urban BMPs can be used to generate credits for WQT.

### Feasibility in your watershed:

Although WQT may be an economically viable compliance option in some watersheds, it may not be a feasible option for everyone. To determine the trading feasibility in your watershed, DNR recommends that you:

1. Calculate the pollutant offset needed: The difference between the pollutant load from the point source and the permit discharge limit.
2. Identify a credit broker/exchange, if applicable: The goal of this step is to determine if a credit broker or exchange can be used to establish the trade and identify credit generators in the watershed. A credit broker or exchange does not need to be used, but they can improve the administrative feasibility of water quality trading. County Land Conservation Departments or other entities may be willing to serve as a broker or exchange in your watershed.
3. Identify potential credit generators: Any land use feature in your watershed that contributes the pollutant of concern may be a potential trading opportunity. This can include point sources or nonpoint sources. This step helps to verify that trading partners are available in your watershed.
4. Assess availability of credit: This step verifies that there is sufficient credit in your watershed to cover the offset needed.

Once you have determined that WQT is a feasible compliance option, and preferable to other options, the next step is to develop a WQT plan.

### ROLES OF PARTNERS IN WQT:

There are several potential roles for WQT participants:

- **Credit User**— The point source using trading credits to comply with a permit limit
- **Credit Generator**— A permitted discharge or other entity that reduces their own pollutant load so that "credit" is generated.
- **Credit Broker/Exchange**— A third party that brings potential trading partners together. A broker performs the research necessary to match credit users and credit generators based on location, pollutant type, amount, and timing.

# Water Quality Trading Plan

Seven trading elements must be adequately addressed in order to develop a successful water quality trading strategy. The purpose of the water quality trading plan is to verify that the regulatory requirements for WQT have been met, and submit the plan to WDNR for review and approval.

Upon approval, WDNR will reissue the WPDES permit with trading requirements built in.



A grass waterways is an example of a n agricultural BMP that can be used to generate credits for WQT.

## THE SEVEN ELEMENTS OF WATER QUALITY TRADING:

<u>ELEMENTS OF TRADING</u>	<u>DESCRIPTION</u>
1 Pollutant	The regulated contaminant being traded (ex. Phosphorus).
2 Participants	The persons or entities involved in the water quality trade which can include the credit user, credit generator, credit broker or exchange.
3 Credit	The standardized unit of a given pollutant that is available for trading. This amount is usually measured in pounds.
4 Credit Threshold	The amount of pollution reduction that needs to be achieved before credits are generated.
5 Trade Ratio	Trade ratios are used to ensure the amount of reduction resulting from the trade has the same effect as the reduction that would be required without the trade. Potential components of a trade ratio include delivery, uncertainty, equivalency, and retirement.
6 Location	The location of the credit user compared to the generator. The credit user and generator <i>must</i> discharge, either directly or indirectly, to the same water body.
7 Timing	Credits must be generated before they can be used to offset a permit limit. This means that trading practices must be established and effective before the limit takes effect.

## Trade Ratios

Trade ratios are used to account for uncertainties associated with WQT resulting from location, delivery, equivalency, reserve, and practice uncertainty. A trade ratio can also be thought of as a multiplier. For example, a trade ratio of 2:1 means two pounds of pollutant reduction is equivalent to one pound of pollutant reduction credit.

**Every trade will have a unique trade ratio given the site-specific concerns of the trade in question.** There are several ways to reduce the trade ratio multiplier:

- Avoid trading with credit generators downstream of the discharge point.
- Use practices with a high margin of certainty, i.e., those practices with a high probability of success.
- Consider point to point source trades before trading with nonpoint sources.

To calculate a trade ratio you need to know the practice that will be used to generate the credits, and the location where the credits will be generated. See available guidance for specific details about calculating trade ratios.

## WHAT IS INCLUDED IN A WPDES PERMIT?

Before a point source can use WQT to demonstrate compliance with a permit limit, the permit must be modified or reissued to allow for WQT. The following components of the WQT plan are included in the facility's WPDES permit, and are enforceable.

- Final permit limit (WQBEL)
- Summary of pollutant reduction credits
- Language referring to the trade agreements submitted with the WQT plan
- Annual reporting requirements
- A requirement that the permittee notify the WDNR when becoming aware that credits become unavailable or the s. 283.84 trade agreement must be modified or concluded
- Other permit conditions

If changes to the WQT plan occur during the term of the permit, the change may need to be public noticed or the permit may need to be modified to reflect the change.

## FOR MORE INFORMATION

- Visit the DNR website: <http://dnr.wi.gov/>, search "trading"
- Review available guidance—*Water Quality Trading How-To Manual* and *Guidance for Implementing Water Quality Trading in WPDES Permits*
- Send questions to the email address: [dnrphosphorus@wisconsin.gov](mailto:dnrphosphorus@wisconsin.gov)
- View informational webinars



Fact sheet for information only  
 Prepared by:  
 Wisconsin Department of Natural Resources  
 Box 7921  
 Madison, WI 53707-7921