



Water Quality Pollutant Trading

Pollutant trading is a business-like way of helping to improve water quality by focusing on cost-effective, local solutions to problems caused by pollutant discharges to surface waters. Pollutant trading is voluntary and generally involves a party facing relatively high pollutant reduction costs who compensates another party to achieve an equivalent, though less costly, pollutant reduction. Parties trade only if both are better off as a result of the trade. Trading allows parties to decide how best to reduce pollutant loadings within the limits of certain guidelines. The appeal of trading emerges when pollutant sources face substantially different pollutant reduction costs.

The following are the major components of a pollutant trading system:

- Trading parties (buyers and sellers)
- A commodity (a pollutant such as phosphorus)
- Credits or measurable amounts of a commodity to trade
- Ratios to ensure environmental equivalency of trades in a watershed

Pollutant Trading in Idaho

Under Idaho's [Water Quality Standards](#) (IDAPA 58.01.02.055.06), pollutant trading (also known as water quality trading) may be conducted in conjunction with the development or implementation of water quality improvement plans known as total maximum daily loads (TMDLs), which are designed to restore water quality-limited water bodies to meet water quality standards and support beneficial uses.

Over the past several years, DEQ and EPA Region 10, which includes Idaho, explored using water quality trading as a means of meeting water goals. The first water quality trading framework was developed for the lower Boise River to be used by point and nonpoint sources to reduce total phosphorus. An additional water quality trading framework was developed for the Middle Snake/Upper Snake Rock watershed for point sources.

A revised trading guidance was published in October 2016. [Idaho's Water Quality Pollutant Trading Guidance](#) outlines the procedures for conducting water quality trading to improve water quality. The document specifies the conditions under which water quality trading may take place, establishes record-keeping and reporting procedures, and prescribes how best management practices (BMPs) are to be developed for each watershed where water quality trading occurs involving nonpoint sources. In addition, the guidance document includes stand-alone appendices for watersheds authorized to trade and their respective specific trading ratios and BMPs, where applicable.

Frequently Asked Questions—Water Quality Trading in Idaho

What is Water Quality Trading?

Water Quality Trading is a voluntary market based solution for point source discharges to meet effluent limitations in Idaho Pollution Discharge Elimination System (IPDES) permits.

Water Quality Trading provides additional flexibility for regulated point source discharges by allowing the point sources to meet effluent limits by purchasing pollution reduction credits from other sources in the watershed. These credits can be generated by non-point source projects or point sources.

When pollutant sources in a watershed face different costs to control the same pollutant, Water Quality Trading can provide cost savings through the purchase of environmentally equivalent credits to meet IPDES effluent limitations. For example, if non-point source pollutant reductions are cheaper than engineered point source control, a regulated point source may save money by purchasing credits generated by non-point source reductions.

What are the Benefits of Water Quality Trading?

Water Quality Trading provides additional flexibility for regulated point source dischargers to meet effluent limitations. Water Quality Trading may also promote voluntary implementation of non-point source projects by providing an additional economic incentive to install non-point source Best Management Practices (BMPs). Additionally, Water Quality Trading may have ancillary benefits by providing flood control, wildlife habitat, aesthetics, or riparian restoration.

What Types of Pollutants can be Traded in Idaho?

Water Quality Trading can be used to meet nutrient (phosphorus and nitrogen), temperature, and suspended solids effluent limitations. Toxic pollutants, including metals, and bacteria are not eligible for Water Quality Trading. Other pollutants may be considered on a case by case basis.

What are the Laws, Regulations, Policy or Guidance Related to Water Quality Trading?

Water Quality Trading is not codified in the Federal Clean Water Act; however, the United States Environmental Protection Agency (EPA) and EPA policy acknowledges Water Quality Trading is an option for compliance with effluent limits in IPDES or National Pollution Discharge Permits (NPDES). All Water Quality Trading must be consistent with the provision of the Clean Water Act. EPA has issued several policy memos related to water quality trading and has developed a Permit Writer Toolkit. EPA's policy memos and additional information on water quality can be found on [EPA's website](#).

In Idaho Water Quality Trading is authorized by IDAPA58.01.02.055. Water Quality Trading must be consistent with applicable TMDLs, the Clean Water Act, and Idaho's Water Quality

Standards. Idaho has developed [water quality trading guidance](#) that outlines the necessary components of a trading program.

What is a Water Quality Trading Framework?

Trading Frameworks are subbasin or watershed specific plans that outline the necessary components of a trading program that will provide consistency with Total Maximum Daily Loads, Idaho's Water Quality Trading Guidance, Water Quality Standards, and the Clean Water Act.

Idaho's Water Quality Trading Guidance strongly encourages development of watershed specific Trading Frameworks before water quality trading activities begin in a watershed. If a Trading Framework is not developed and approved, parties interested in trading will still be required to address all elements required by Idaho's Water Quality Trading Guidance.

DEQ anticipates Trading Frameworks will be developed in cooperation with local stakeholders, including any applicable Watershed Advisory Groups. Trading Frameworks are noticed for public comment before DEQ approves Trading Frameworks.

What are the Required Components of a Trading Framework?

The Water Quality Trading Guidance requires Trading Frameworks to incorporate the following elements:

1. Eligible trading participants
2. Trading area
3. Baseline
4. Credit quantification methods
5. Trading ratios
6. Risk mitigation mechanisms;
7. Project pre-screening
8. Allowable BMPs
9. Credit life
10. Project design, maintenance, implementation, and performance confirmation
11. Project site implementation and performance
12. Credit registration and trade tracking
13. Permit conditions guidance
14. Adaptive management

For more detail on each component of a Trading Framework refer to the [Water Quality Trading Guidance](#).

What is Required to Participate in Water Quality Trading?

To participate in water quality trading a Trading Framework should be in place that addresses the required components. Once a Trading Framework is developed, a Trading Plan is needed to incorporate trading elements of the permit or other binding agreements between buyer and sellers of credits. Trading Plans may incorporate the terms of a Trading Framework by

reference. In situations where a Trading Framework has not been established, trades may be facilitated by Trading Plans that address all of the required elements of a trading framework.

Before credits can be utilized by a point source discharger, the IPDES permit must be modified to incorporate the Trading Plan. During the permit modification process, permit writers will review the Trading Plan to ensure that any proposed trading activity provides consistency with applicable State and Federal regulations.

There is not an Approved Trading Framework in my Watershed, so is Water Quality Trading still an Option?

Yes, the Water Quality Trading Guidance allows trading absent an approved framework, so long as the Trading Plan addresses all of the components required in a Trading Framework. The Trading Plan will require significantly more detail when there is not an approved Trading Framework for a watershed.

What are Baselines?

Baselines are the limits or expectations for reductions from point sources and nonpoint sources that would apply absent trading. The baseline is the basis for credit calculation. A point source buyer's baseline would be the effluent limits in its IPDES permit. In trading scenarios a point source buyer can purchase credits to meet its baseline. A baseline for a point source seller is also the effluent limit for the particular pollutant being traded. Alternatively, a point source seller could generate credits by reducing its discharge below its effluent limitation, with the amount below their limit being the credit amount available to sell.

Baselines for non-point sources are somewhat more complicated but are based off of similar rationale. Where TMDLs are in place, the baseline is the non-point source load reduction needed to meet the goals of the TMDL, also referred to as the Load Allocation. The individual nonpoint source's share of the Load Allocation is the amount of the pollutant the TMDL infers must be reduced by each nonpoint source in order to meet the Load Allocation. For a non-point source seller to generate credits, they must reduce more than the amount expected of an individual nonpoint source's load reduction needed to meet the non-point source goals of the TMDL. The amount available to sell as a credit is the amount reduced beyond the individual nonpoint source's baseline. This amount may not need to be reduced all at once before being able to generate a credit, but the timeframe for meeting the baseline must be addressed in the Trading Plan or a DEQ-approved Trading Framework.

Can Public Funds be used to Generate Credits for Non-Point Source Projects?

Idaho's Water Quality Trading Guidance states that credit portions of project cannot be funded with cost share funds, but cost share funds can be used to meet baseline—Cost share funds, or more specifically public dollars dedicated to conservation purposes, can make bigger and more robust projects. DEQ supports using cost share funds to help nonpoint sources meet baseline requirements, including using those funds to install baseline BMPs (e.g., a nutrient management plan or irrigation management plan). However, the proportion of a credit-eligible project funded by public dollars dedicated to conservation cannot be used to generate credits.

For example, if NRCS' Environmental Quality Incentives Program cost shares 50% of a sediment basin, and a farmer pays for 50%, then the farmer could sell 50% of the total credits from the project.

Another way to look at it is that public funds are intended to be used to help a nonpoint sources make reductions to meet the Load Allocation, rather than implement projects to generate credits – i.e., the reduction beyond the individual nonpoint source's baseline must be paid with non-public dollars.