



## What is Water Quality Trading?

Through the application of technology and water quality-based standards, the Clean Water Act has been incredibly successful in reducing the amount of pollution entering our nation’s waters. However, a survey in 2000 of one third of these waters found that 40% of rivers, 45% of streams, and 50% of lakes still do not support their designated beneficial uses.<sup>1</sup> Attaining water quality goals will require creative and cost-effective approaches to incentivize additional pollution reductions.

### Connecting Point and Non-point Sources

Water quality trading and the use of offsets provide a credible mechanism for regulatory compliance that allows regulated point sources to meet their permit obligations by paying for pollutant reductions in the watershed that wouldn’t have occurred otherwise.

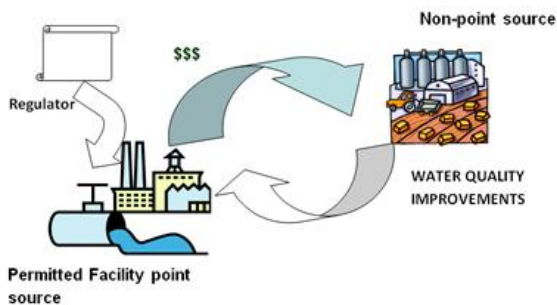


Figure 1. Water quality trading shifts compliance investment from gray to green infrastructure. Source: Bear River Watershed Information System.

Water quality trading connects those that need to create pollution reductions with those that can best supply them, sometimes at a lower cost. Point or non-point entities who are able to reduce their pollutant load below required levels can sell their excess reductions as *credits*. In most trading programs, credits are generated through the implementation of best management practices (BMPs) by non-point sources. Point sources with limited or less ecologically valuable treatment options can purchase these credits and use them toward their regulatory obligation, achieving better overall pollutant reductions than strict controls at point sources alone.

### A Watershed-based Approach

Enabling point sources to pay for non-point source reductions through trading also provides a more holistic and watershed-based approach to improving

water quality. Restored riparian buffers, upgrades in irrigation infrastructure, nutrient management, and other BMPs act as *green infrastructure*, enhancing the capacity of the surrounding natural system to reduce pollutant inputs.

This is a resilient alternative to filtration, treatment, and other *gray infrastructure* features. Shifting compliance-based investment from gray to green infrastructure can spur BMP practices where they are needed most, improve watershed health, and help address the root causes of water quality degradation within the watershed.



### Creating a Successful Program

The keys to a successful water quality trading program are quality standards for projects, transaction transparency, and trackable pollutant reductions grounded in sound science and clear lines of accountability. The responsibilities of permittees, unregulated trading entities (non-point sources or project developers), federal and state agencies, local governments, and landowners need to be clearly defined. A trading program must also have consequences in case of failed compliance.

From a public trust and transparency perspective, there is great value in having consistent methods of quantifying water quality improvements, including models, BMP efficiency rates, and other tools. In all cases, water quality trading should apply high, consistent standards with the ultimate goal of achieving cleaner water.

<sup>1</sup> US Environmental Protection Agency, Office of Water. “Final Water Quality Trading Policy”. January 13, 2013.