

Establishing Water Quality Trading Banks: Opportunities and Barriers

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Solving problems, guiding decisions – worldwide



Overview

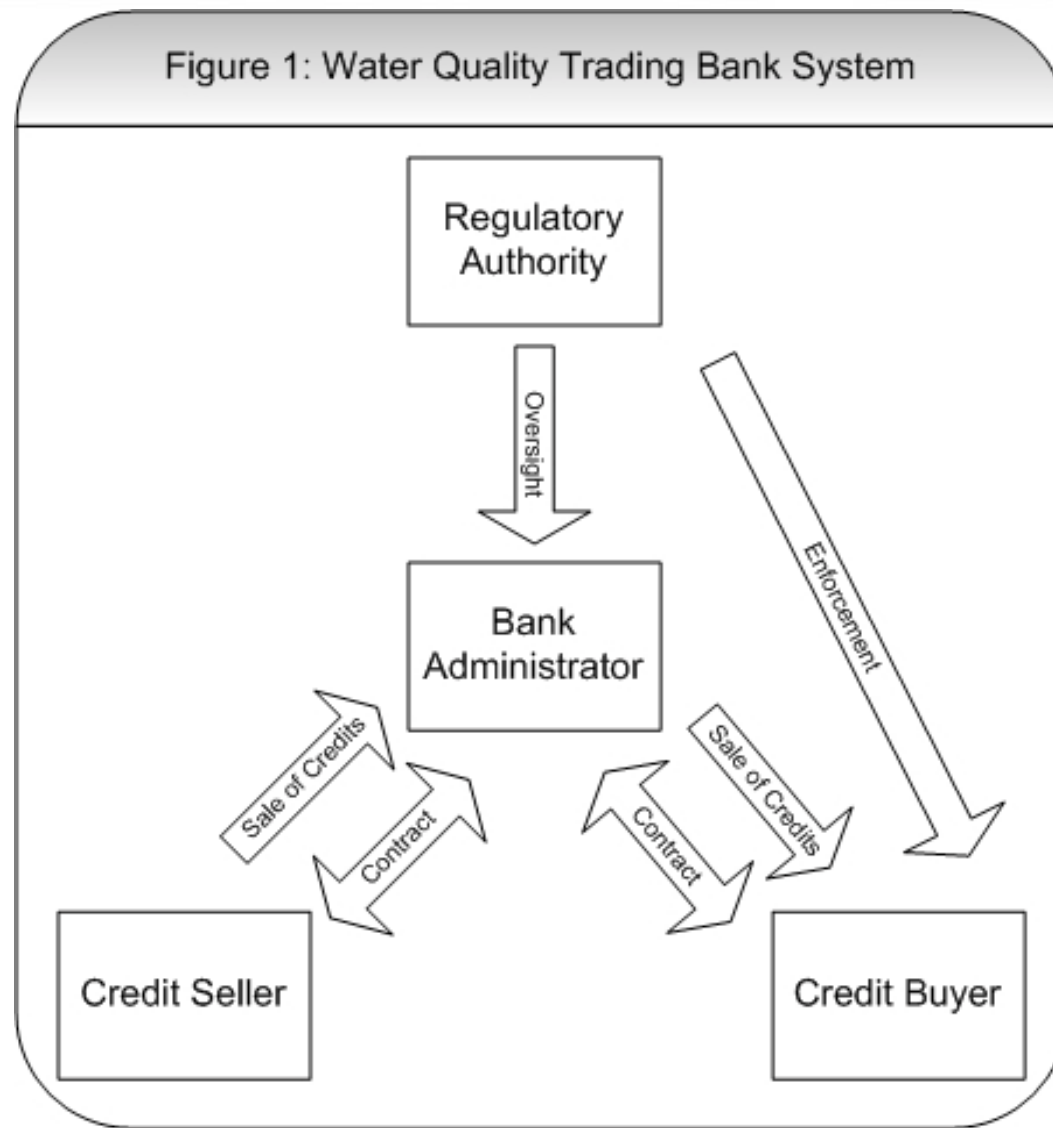
1. What is a WQT “bank”?
 - Key features, schematic, comparison with other types of trading programs
2. What are opportunities of a WQT bank?
 - Reduced transaction costs, reduced demand uncertainty, reduced liability
3. What are barriers to establishing a WQT bank?
 - Transfer of legal liability, timing of credit production
4. Examples
 - Great Miami River Watershed Water Quality Credit Trading Program
5. Conclusion

1. What Is a WQT Bank?

- Key features

- Third party takes ownership of credits.
- No link between buyer and seller of credits.
- Credits from various sources are normalized into a common unit with a common price.
- Key players: bank administrator, credit buyer, credit seller, regulatory authority.

1. What Is a WQT Bank?, cont.



1. What Is a WQT Bank?, cont.

- Comparison with other types of trading programs
 - Bilateral negotiation
 - Credit buyers and sellers directly negotiate with each other.
 - Common structure of WQT program.
 - Third-party broker
 - Similar to bilateral negotiation but a third party facilitates negotiation between buyer and seller.
 - Exchange
 - Fluid transactions between buyers and sellers with uniformity of credits and market-clearing prices.
 - Structure used in air emissions trading; currently, there are no water quality exchanges.

2. Opportunities of a WQT Bank

- Reduced transaction costs (credit buyers and sellers)
 - No search and information cost to find a trading partner and negotiate the trade.
 - Credit buyer has the greatest savings potential – buys pre-approved credits.
 - Transaction costs are transferred from buyers and sellers to the bank.
- *High transaction costs reduce the necessary cost differential between buyers and sellers and are a major barrier to executing cost-effective trades.*

2. Opportunities of a WQT Bank, cont.

- Reduced demand uncertainty (credit sellers)
 - Bank initiates credit generation and approves projects.
 - Bank takes ownership of credits and assumes risk of not finding a buyer.
 - Credit seller is guaranteed demand for the generated credits.
 - Credit seller is still responsible for the quality of the credits.
- *Demand uncertainty can be a major impediment to nonpoint source (credit seller) participation in WQT programs.*

2. Opportunities of a WQT Bank, cont.

- Reduced liability uncertainty (credit buyers)
 - Credit buyer purchases approved credits.
 - If a project fails, the bank, not the credit buyer is legally and financially liable for the quality of the credits.
 - There is no direct link between the credit buyer and the credit seller.
- *Uncertainty about legal and financial liability can be a major impediment to point source (credit buyer) participation in WQT programs.*

3. Barriers to Establishing a WQT Bank

- Transfer of legal liability
 - Provides participation incentive for credit buyers.
- *Transfer of legal liability not possible under the legal framework governing EPA's WQT policy.*
 - Potential alternative solutions:
 - Hybrid between bank and bilateral negotiations concepts.
 - Establishment of a “reserve pool” of credits.

3. Barriers to Establishing a WQT Bank, cont.

- Timing of credit production
 - Completing credits in advance of using them reduces risk of water quality deterioration.
 - Long-term banking of credits reduces need to carefully match credit supply and demand.
 - Temporal components of water quality make long-term banking undesirable.
- *Banking of credits for use in different time periods not permitted under EPA policy.*
 - Potential solution:
 - Overproduction or “reserve pool” of credits.

4. Examples

- Fully functioning WQT banks do not currently exist.
- The “Great Miami River Watershed Water Quality Credit Trading Program” is starting its first year of operation.
 - Key features include:
 - Central role of a “bank administrator”
 - Collective liability of all credit buyers
 - Insurance pool of credits

5. Conclusion

- WQT banks provide the opportunity to reduce barriers currently limiting many trading programs.
- Banks have to be designed within the current frameworks of EPA policy.
- Follow and learn from the experience of the Great Miami River trading program.
- For more information about this topic:
<http://www2.eli.org/pdf/wqtforum/SiemAhlLand05.pdf>