Topics

- Overview of Environmental Markets
- What is water quality trading
- Who is involved in water quality trading
- When can water quality trading occur
- National view – what’s happening now
Overview of Environmental Markets

- Have been around for over two decades
- Water:
  - Colorado WQ Trades – mid 1980’s
    - Cherry Creek
    - Dillon Reservoir
- Air:
  - SOx and NOx markets
  - Climate Change Trading
Benefits of Environmental Markets

- Documented lower costs
- Faster reductions early in the program
- For Water markets involving nonpoint sources there are additional benefits:
  - Reduced erosion
  - Flood control
  - Increased and improved habitat
  - Control of multiple pollutants
What is Water Quality Trading?

- Voluntary exchange of pollutant reduction credits
- Sources with higher pollutant control costs may purchase pollutant credits from sources with lower control costs
Facility A
Needs: 120 lbs
Best Option: Technology
200 lbs – 120 lbs = 80 credits

Facility B
Needs: 50 lbs
Best Option: Trading

Technology Reduces 200 lbs
Facility A

80 credits

Nonpoint Source C

50 credits

Facility B

Needs: 50 lbs

B can trade with A or C
What is Being Traded?

- **Credits:**
  - A unit of pollutant reduction usually measured in pounds equivalent
  - Generated by a point source over-controlling its discharge
  - Generated by a nonpoint source from the installation of best management practices beyond those required for baseline
What pollutants are "tradable"?

- National Policy allows trades for:
  - Total Nitrogen
  - Total Phosphorus
  - Sediment
  - Cross-pollutant trading
  - Other pollutants?

- National Policy does not support trades for:
  - Persistent bioaccumulative toxics (PBTs)
Who is Involved in WQ Trading?

- Point Sources
- Nonpoint Sources
- States
  - Permit Authority
  - Others (DNR, DEP)
- EPA
- Brokers (3rd parties bringing together buyers and sellers)
- Others (conservation organizations, watershed groups, etc.)
Requires Local Champions

- A party interested in trading
  - (Neuse River)

- A third party broker
  - (Great Miami River)

- A state permit authority
  - (Long Island Sound)
When can trading occur?

- Trading in unimpaired waters
- Trading in Impaired Waters with TMDL
- Trading in Impaired Waters without TMDL
- Pretreatment
- Intra-plant
When can trading NOT occur?

- Trading cannot be used to meet technology-based effluent limitations.
- Trades cannot result in nonattainment of an applicable water quality standard.
- Trading may not adversely affect water quality at an intake for drinking water supply.
- Trading cannot allow a discharger to exceed a cap established under a TMDL.
Trading Scenarios:
Water Quality Trading
What is in it for you?

- **Point Source Buyer**
  - cost-savings

- **Point Source Seller**
  - earlier return on investment

- **Nonpoint Source Seller**
  - Source of income while:
    - Investing in land improvement
    - Investing in cost-saving practices
Summary
WATER QUALITY TRADING IS ANOTHER OPTION FOR A REGULATED FACILITY TO MEET ITS PERMIT LIMITS
Formula for Water Quality Trading:

Trading is:

- **DRIVEN** by regulation
- **MOTIVATED** by economics
- **GOVERNED** by local trading rules
- **BUILT** on trust

TRADING WILL NOT BE VIABLE EVERYWHERE
WQT Keys to Success

- Transparent
- Real
- Accountable
- Defensible
- Enforceable
Future of Trading

- Point-nonpoint Trading – current focus
- Considerable potential for water quality improvement
- Potential win-win-win solution for point sources, agriculture and the environment
Contact

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