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EPA Perspective: EPA National WQT Policy

Agricultural Outlook Forum

March 2, 2007

Ginny Kibler, EPA

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

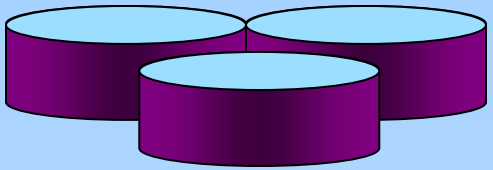
- Documented lower costs
- Faster reductions early in the program
- For Water markets involving nonpoint sources there are additional benefits:
  - Reduced erosion
  - Flood control
  - Increased and improved habitat
  - Control of multiple pollutants

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

Illustration of a Trade

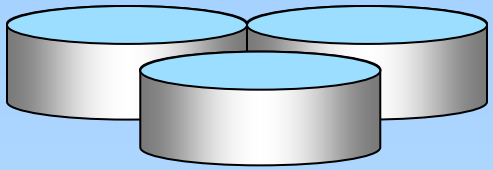
Facility A



Needs: 120 lbs

Technology Reduces 200 lbs

Facility B



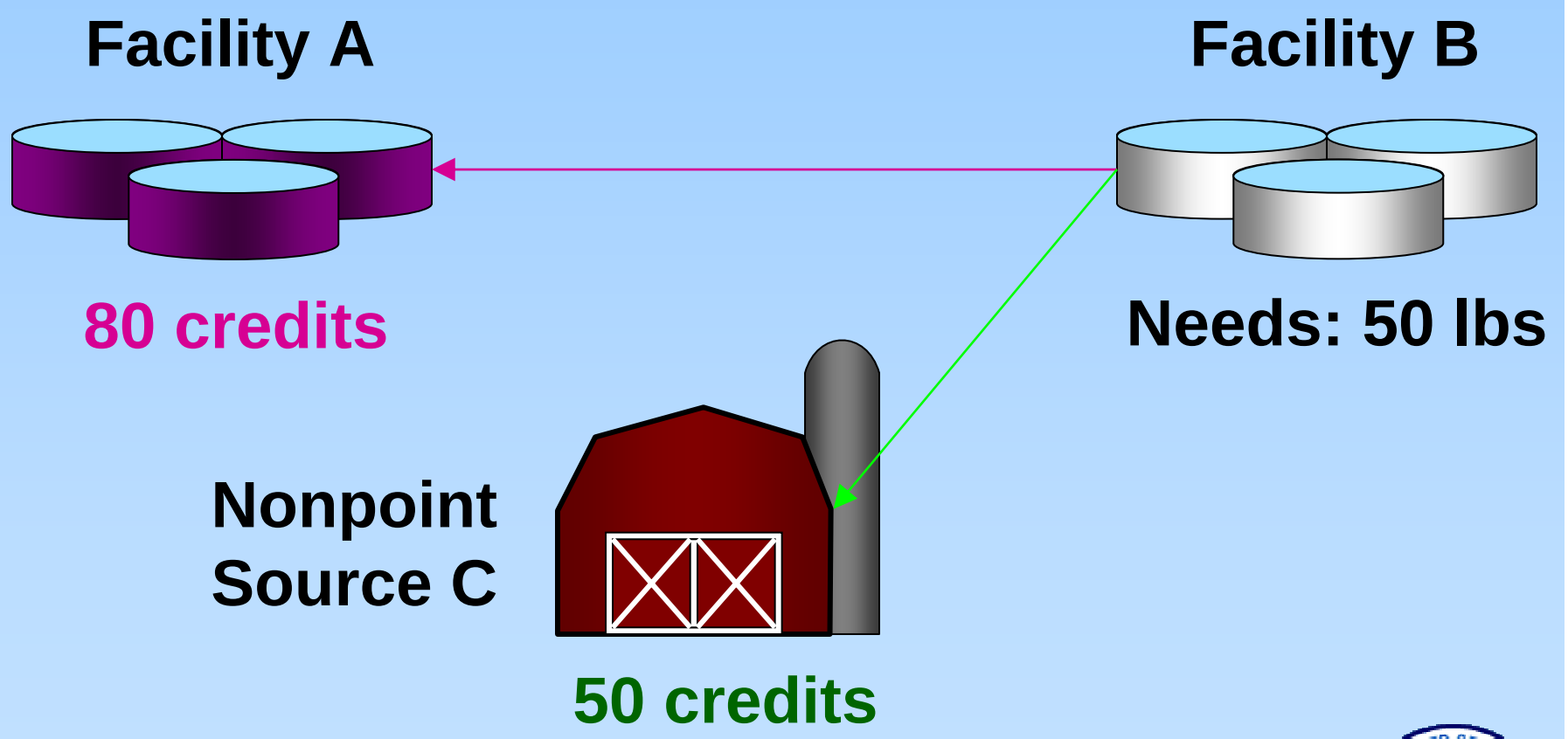
Needs: 50 lbs

Best Option: Technology

Best Option: Trading

200 lbs – 120 lbs
= 80 credits

Illustration of a Trade



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

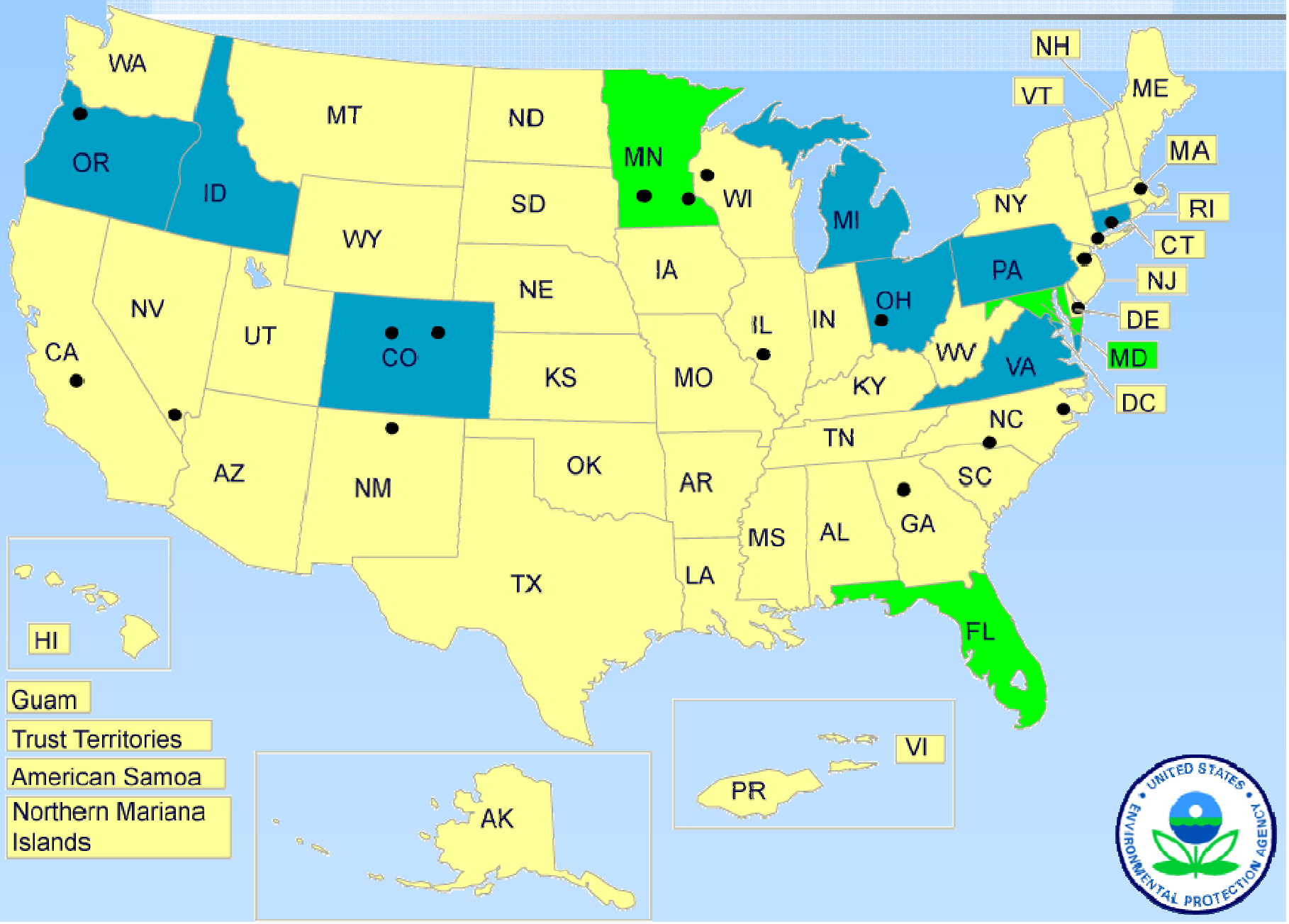
IS ANOTHER OPTION FOR A REGULATED FACILITY TO MEET ITS PERMIT LIMITS

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

Status of WQT in US



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

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