EPA-USDA National Workshop on Water Quality Trading

Conservation Practice Evaluation from Edge of Field to Satellite Imagery

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Conservation Practice Evaluation

• Trading must provide real and verifiable reductions

• Trading verification is needed for:
  – Conservation practice implementation sites
  – Program performance and adaptive management

• Must consider long term viability of trading

• Plan for limitations
Program verification monitoring plans should consider:

Physical monitoring
- Practice standards/as built
- Third-party site inspections during construction and operation
- Literature reviews and updates; best available science
- Crediting method and introduced uncertainty
- Trade ratios with adequate margin of safety

Water quality monitoring
- Leveraged water quality monitoring
- Adequate period of record
- Transaction costs
Transaction Costs

• **Water quality trading credits in the Midwest:**
  – Costs of $2 to $50

• **High transaction costs can be cost prohibitive, for example:**
  – Field generates: 300 credits
  – Edge-of-field monitoring costs: $15,000/yr
  – Cost of credit increases by $50
  – New credit cost: $52 to $100
Transaction Costs

- Monitoring cost reductions can occur by leveraging:
  - Other watershed programs
  - Audit style sampling for similar sites
  - Emerging/improved technologies
Questions?

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