Lessons Learned on Demand: Demand Dynamics of Ecosystem Markets in the US

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National Network on Water Quality Trading
About the study

Scope

- Voluntary market for carbon offsets
- Compliance markets for forest and land-use carbon offsets
- Compliance markets for wetland/stream credits
- Compliance & voluntary markets for species/habitat mitigation credits
- US-Focused

Methods

- Targeted rapid review of US environmental markets
- Academic and grey literature and Ecosystem Marketplace’s historical published markets analysis and internal data
- Emphasis on case studies and synthesis of real-world evidence
Summary

www.forest-trends.org/ecosystem-marketplace
Lessons Learned

Compliance demand requires:

- Environmental Impact
- Bad Alternatives
- Clear Regulatory Signals
Lessons Learned

Regulators are critical gatekeepers of demand

- In terms of market design and implementation/interpretation of market rules

“...When trading comes in, the question is, is the juice worth the squeeze? Are you going to put five staff on implementing a program that four facilities are going to use to offset a few hundred pounds of nitrogen or phosphorus?”
- A state water quality resource coordinator
Cost isn’t the only demand driver

• Buyers also consider co-benefits, predictability and simplicity
Oregon’s Carbon Dioxide Standard gives new power plants 3 options to address CO\textsubscript{2} emissions:

• on-site emissions reductions
• develop emissions reduction projects offsite
• fund emissions reduction projects carried out by a state-recognized nonprofit
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Lessons Learned

Regulatory risk is a concern for potential credit buyers

• Invalidation risk
• Perception of risk is hard to shake
California Air Resources Board

• In 2014, CARB invoked 88,955 offsets from an offset project in Arkansas due to a missing federal permit

• Result: buyers saw offsets as risky
Legal challenges impact demand—and are rarely resolved quickly

“We are currently going through an appeal of one of our permits that authorizes the use of a trading program to meet load reductions. That takes up our time and leaves us less time to do actual program administration.”
- A state environmental program manager
Lessons Learned

In compliance markets, the public sector may have the advantage in **predicting demand**
North Carolina Department of Transportation

• Plans 7 years in advance
• Predicts needs for wetland, stream, or water quality offsets
• Uses funds from in-lieu fees to contract with private companies to deliver mitigation projects
• Result: private sector carries implementation & financing risk while the public sector provides transparency around long-range planning
Thank you

Questions?