

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

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ACES – December 5, 2018



# About the study

## Scope



Voluntary market for carbon offsets



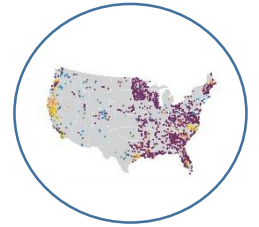
Compliance markets for forest and land-use carbon offsets



Compliance markets for wetland/stream credits



Compliance & voluntary markets for species/habitat mitigation credits

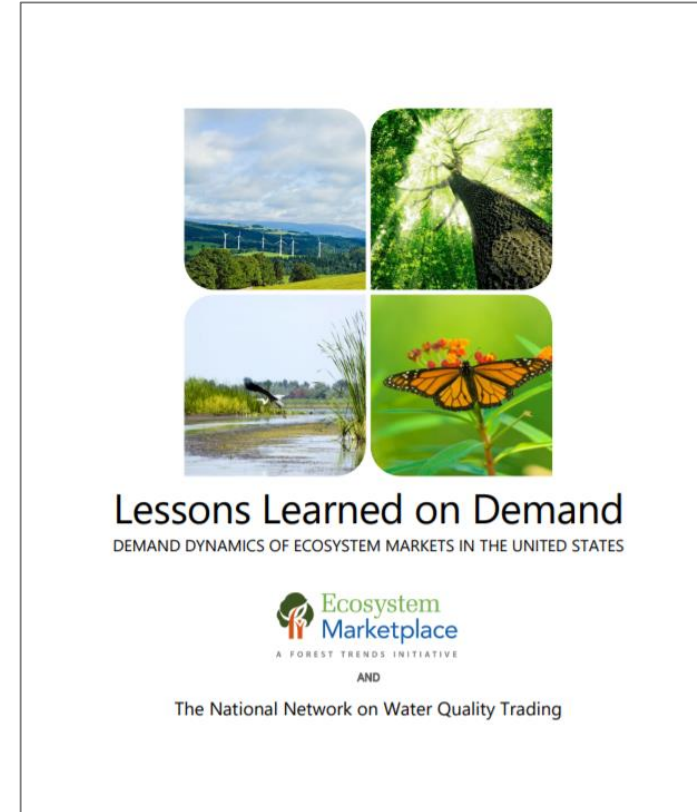
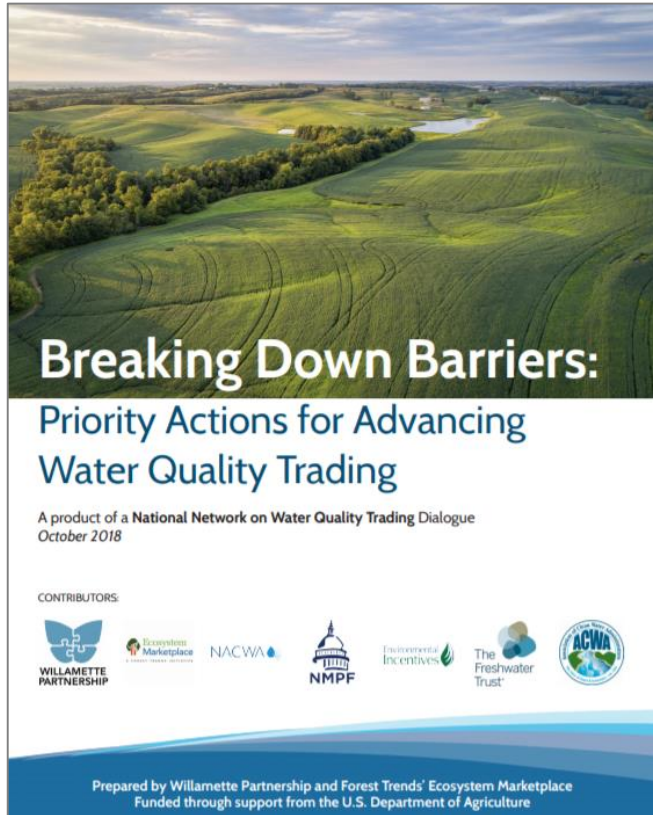


US-Focused

## 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

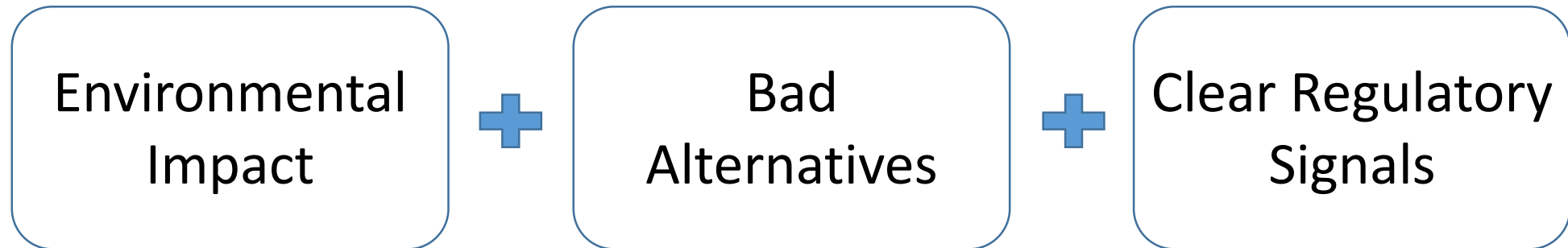
# Summary



[www.forest-trends.org/ecosystem-marketplace](http://www.forest-trends.org/ecosystem-marketplace)

# Lessons Learned

Compliance demand requires:



# 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



# Lessons Learned

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<sub>2</sub> 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



# Lessons Learned

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

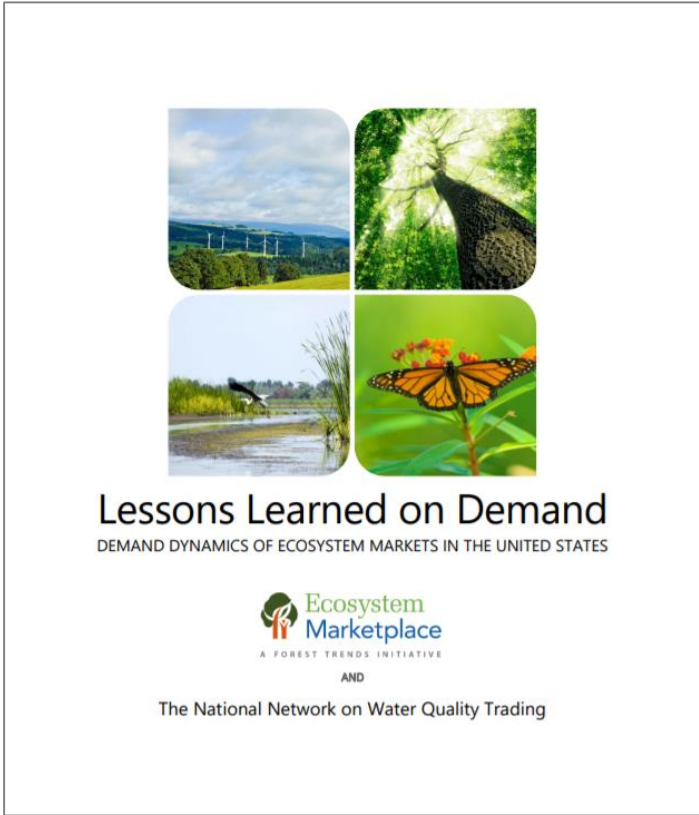
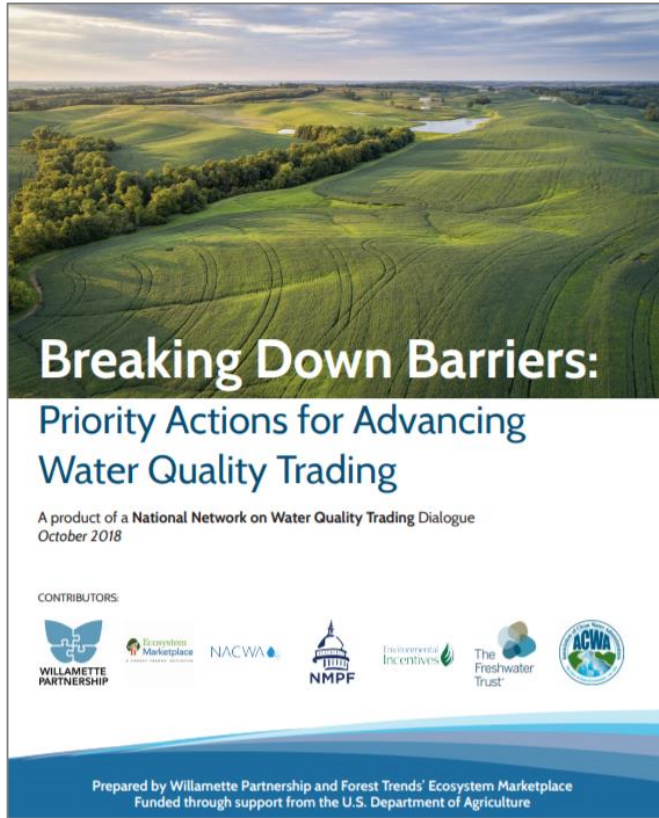
In compliance markets, the public sector may have the advantage in **predicting demand**



## 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





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# Thank you

## Questions?

