Transactions Costs & Environmental Water Transactions

SU/NFWF Workshop
Stanford, CA
January 15, 2014

Bruce Aylward
w/Dustin Garrick
Ecosystem Economics LLC
Questions Posed

✧ Have you or other researchers been able to identify any common factors (be they state policies, state program staffing, NGO strategies, social acceptance, etc.) that can help lower transaction costs?

✧ Conversely, have you identified factors that tend to drive costs up, such as number of protests, understaffed state programs, specific requirements of state agencies, etc.?

✧ Have there been any discernible trends in transaction costs, either regionally in the Columbia Basin, specific states, or in specific watersheds, over time.

✧ What, if any, lessons can you draw from the last ten years of experience in the CBWTP in terms of making environmental allocations of water efficiently?
Structure

✧ What are transaction costs?
✧ How much are they? Are they high or low?
✧ What are the trends
✧ Factors that affect transaction costs
✧ Lessons learned and a question
Sources/Reading


Sources of Transaction Costs

- Sketchy water rights
- Cultural and socioeconomic impacts
- Limited hydro-ecological and water use data
Transaction Costs in the Columbia Basin

✧ Average: $2,300/cfs or $6.40/AF (per year of instream water)

✧ “Relatively Low”

✧ Significant variation across:
  ★ Time
  ★ Watersheds within states
Trends in Transaction Costs
Per Unit of Water by Subbasin, 2003-7 v. 2008-10

BiTerroot
Blackfoot
Deschutes
Grande Ronde
John Day
Methow
Salmon
Umatilla
Walla Walla**
Willamette
Yakima

$ per CFS  $ per AF
Scatterplot Analysis of Necessary and Sufficient Conditions for Water Recovery, 2003-7

Water Rights Reform
Configuration of Causal Conditions Labeled by Limiting Factor

- Exclusion
- Transferability
- Administration
- Limiting Factor
- Linear(Diagonal)
Lessons Learned

✧ Why are transaction costs relevant?
✧ High water recovery and high TCs may coincide, particularly in start up period
✧ Economies of scale
✧ Cost effectiveness data helps to track success, make tradeoffs across competing priorities, and develop strategies to get to scale
Strategies

✧ Context and sequencing matter, success can be contagious, so get effective workarounds and pilots going early.

✧ Harness crises and broader drivers

✧ Reinvest in enabling conditions and build capacity

✧ Build coalitions to get to scale.

✧ Diversify funding sources to build capacity.
Final Questions

✧ What if there is a willing buyer and a willing seller but no deal (on price)?

✧ How does this relate or not to transaction costs?