

Real world fails on water, pollution and the economy

David Zetland

Economist, Aguanomics Solutions

Environmental and Resource Economics Seminar

OSU ~ 24 Oct 2013

Water failures

Theory: Water has personal (excludable) and social (non-excludable) uses

Reality: Both mismanaged and mixed up (e.g., shortages, no e-flows, wasted wastewater)

- Retail:**
- ▶ Missing scarcity and CapEx costs
 - ▶ Prices based on average (not marginal) cost
 - ▶ Fixed/variable cost/revenue mismatches

- Bulk:**
- ▶ Overallocated rights
 - ▶ Failure to secure rights
 - ▶ Missing markets for rights

Pollution confusion

- ▶ Pigouvian taxes correct prices (e.g., carbon tax)
- ▶ Pigouvian taxes do not produce DWLs
- ▶ Correction weakened if losers uncompensated
- ▶ Coasian better for point sources (e.g., river pollution)
- ▶ Regulation better for weak price signals (e.g., ag practices) or asymmetric cost-benefit (tailwater)

New (?) solutions: Joint accountability (peer monitoring) or losers pay winners (divide and conquer)

aguanomics.com/2009/01/pigouvian-tax-fail.html

aguanomics.com/2013/01/pigouvian-taxes-do-not-produce.html

Mismeasuring the economy

Economists owe ecology an apology (ssrn.com/abstract=2230931)

- ▶ GDP misses non-cash transactions (homemade cookies)
- ▶ P&L (budget) misses balance sheet (natural capital)
- ▶ Static theory (prisoner's dilemma) misses dynamic reality
- ▶ Too much risk, too little uncertainty
- ▶ EKC theory fails if $\uparrow TC > \downarrow MC$

Problem: Government policies overemphasize GDP growth (elections!) but ignores non-GDP costs (e.g., bullets vs. dead; timber vs. forests; gasoline vs. congestion)

Suggestion: Pursue vaguely right (set a tax, somewhere) over exactly wrong.

Now let's have some questions!

Blog: aguanomics.com

Book: endofabundance.com

Contact: dzetland@gmail.com