

ECOSYSTEM SERVICES – WHAT'S THE BOTTOM LINE?

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CONTEXT

- Ecologist since 1965; user of ecological services since 1950s
- 38+ yrs consulting on “ecological services”
- Clients are commercial & industrial firms
- NRDA's since 1984
- Many scars from \$\$\$ costs vs. ecological service benefits “discussions”
- Clients’ questions and concerns are similar in 2009 as is 1971



WHAT ARE ECOSYSTEM SERVICES (ES)?

- Audience is usually executive or senior mgt level business people, with limited ecological expertise
- Explain ES in terms practical & relevant to them
- Response likely to be:
 - “OK, that feels good but ... ”
 - Or sometimes: “You mean I gotta pay \$100,000 for some duck?!”



WHAT IS THE DRIVER?

- What current law or regulation applies?
 - NRDA's are current common driver
- Is there a legal requirement coming?
- Voluntary compliance program?
- Public relations: “Good Neighbor = Good Will” for use in other negotiations to lower costs
- Is there an economic (=bottom line) plus?
- Can ES lower costs of some other required activity? How would it generate revenue?



HOW MUCH/MANY DO I NEED?

- How are ecosystem services measured?
- Tangible and relevant metrics or units
- DSAYs are essence of NRDA's but "iffy" to explain
- Acres of restored wetland - OK



COST PER "UNIT"?

- "Red ink" side of the ledger
- \$\$\$\$ are the relevant language to client
- Components of cost incl. internal labor, stakeholder transactions, out-of-pocket expenses, legal and consultant fees, property acquisition, actual implementation, monitoring and adaptive management
- Client will want complete cost estimate & time line



INCOME PER UNIT & BOTTOM LINE?

- “Black ink” side of ledger
- Often the first & over-riding question, even if not spoken
- Majority of shareholder stock (= share price &/or dividend) usually rules
- Time horizon typically short – month to few year; not decades
- However, forced compliance with regulation(s) may result in an unexpected increase in efficiency of a process, decrease in costs, and net increase in bottom line.



AVAILABILITY OF ECOSYSTEM SERVICES?

- Success!!! – if you get this far in discussion
- Large landowner – maybe on site
- Various “banks” (e.g., mitigation, DSAY credits)
- Numerous options presented at this conference
- ***Economists can value anything but there still must be a market and buyers!!!!***



WHAT IS THE MARKET?

- *Economists can value anything but there still must be a buyer!!!!*
- Currently limited but developing
- Mostly “one-off” or site/situation-specific
- Far from an “off the shelf” commodity
- For many companies, the motto is **“We will be first to be third.”**



BOTTOM LINE

- Concept unfamiliar to most industry mgrs.
- Client needs
 - Explicit driver
 - Understanding of ESs in relevant terms
 - Real cost and benefit \$\$\$ value for ES for P/L statement
 - Rapid ROI
- Tools, models and SUCCESS stories needed (i.e., black ink >>>> red ink)
- Public, esp. stockholder majority, needs to be enlightened and to accept cost of ES and potential short-term reduction in dividend for long-term ecosystem benefits

