



An Investment Approach to Estuary Restoration

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To Restore or Not to Restore: that is the (old) question



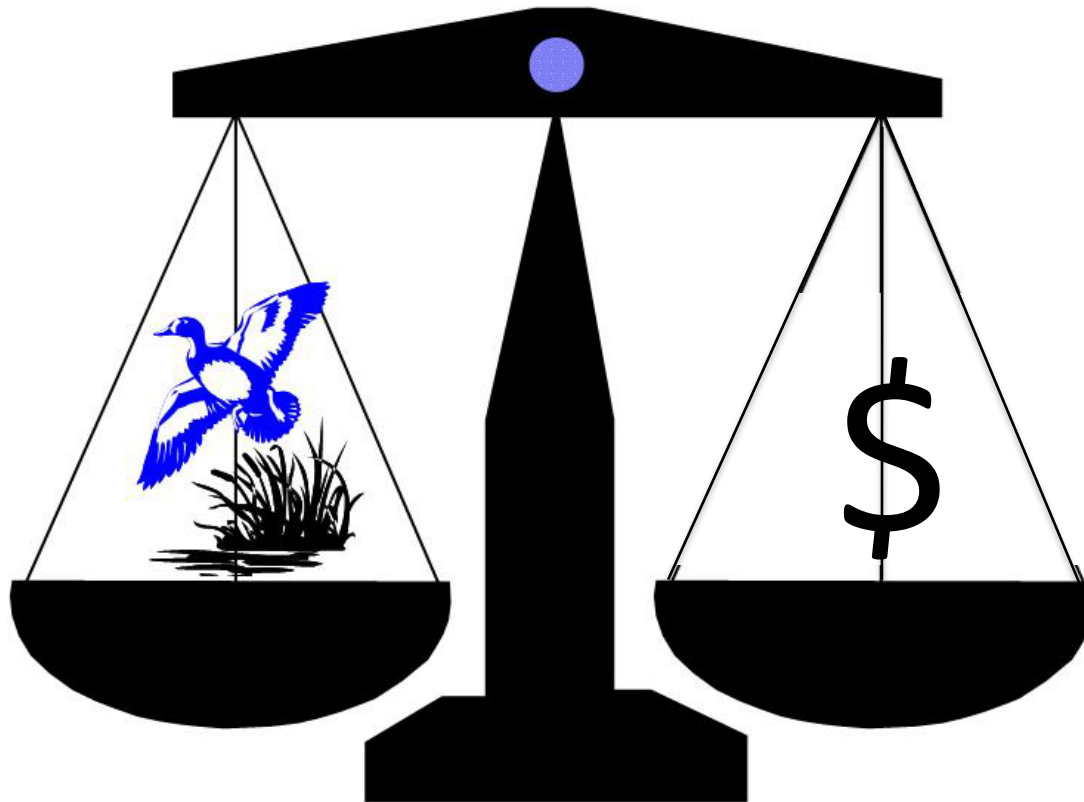


Old School Restoration Decisions

- Do we have the \$?
- Do we have a partner?
- Is the restoration important to fish?
- How long will it take?



In Comes Economics





Need a Strategy – An Investment Strategy

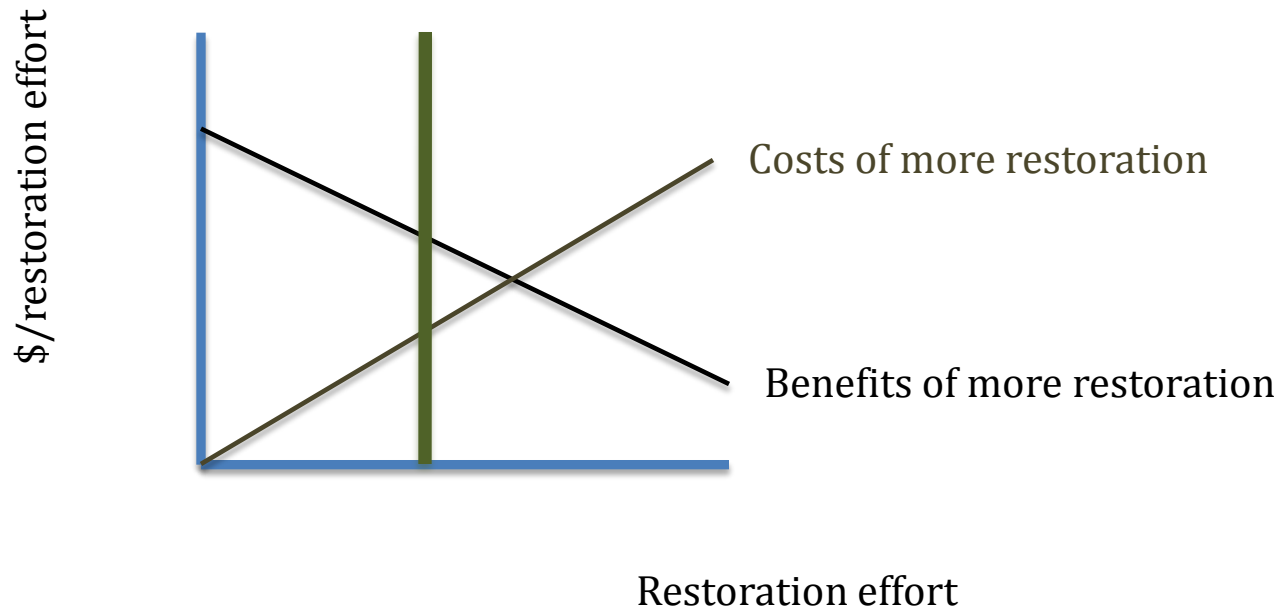


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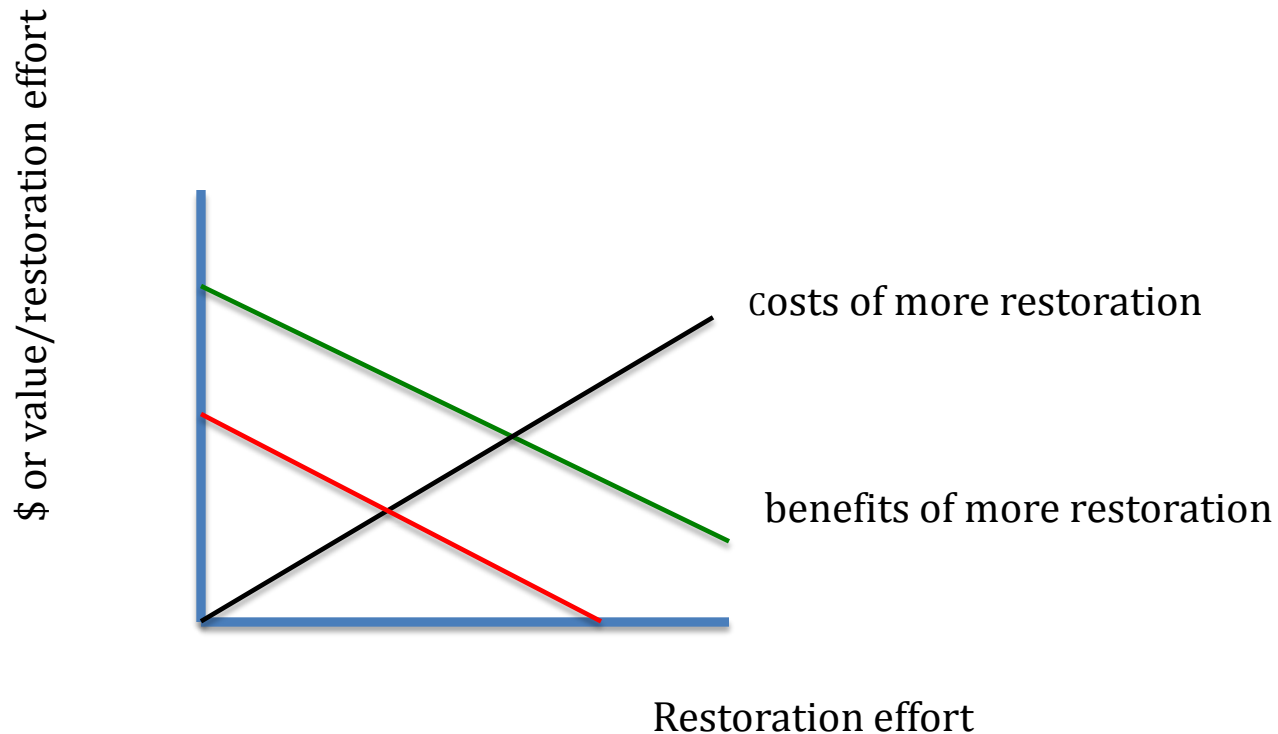


Look for wetlands that are underperforming (I)





Look for wetlands that are underperforming (II)





What makes for a potentially more valuable wetland?

- Near (potential) users
 - urban wetlands
 - home owners
 - beaches
- Obvious economic benefits
- Charismatic species or cultural resources



Look for Bargains

- Depressed real estate markets
- Volunteer opportunities
 - Volunteers v. job creation
- Low tech vs. high tech restoration
- Beneficial uses (e.g. use USACE sediments)



Difference is the Key

$$\begin{array}{r} \text{Potential Benefits} \quad - \quad \text{Cost of Restoration} \\ \\ = \\ \\ \text{BANG!} \end{array}$$

VALUE *BARGAIN*



Diversify

- Maintain a portfolio of ecosystem services
 - Ecosystem resilience has value
 - Guarantees that restoration has future value
 - Sea level rise
 - Ocean acidification
 - Changing human preferences



Be Active in Setting Goals

- Choose the restored wetland you want
- Historical restoration may be
 - Low value
 - High cost
 - Unsustainable
- Ecological vs. Economic Goals



Pursuit of Economic and Ecological Goals

- National Ocean Policy
- Coastal and Marine Spatial Planning
- Revised Principles and Guidelines for Federal Water Projects
- OMB – recent RAE NOAA report



Restoring Ecological and Economic Infrastructure



NERR Chesapeake Bay, MD



Questions, comments, complaints?

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