Beyond Benefit/Cost Analysis: The Economics of Local Coastal Programs

Or

Let's Take the "Con" out of Economics

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Cost/Benefit Analysis

**Theory**
- All Benefits and Costs can be Measured Precisely
  - These measures are commensurate in dollar terms.
  - We can estimate future values with reasonable certainty.
  - These measures are discounted at a market or social rate of discount

**Reality**
- Uncertainty reigns
  - Many assets or damages are difficult to estimate today (e.g., tidal flooding)
  - Future Values more uncertain
  - Some values may be incommensurate
  - Economists disagree VEHEMENTLY over discount rates w climate change
* Valued at “Market” rates
  * Depends on Zoning
  * And Other Attributes
* Residentially Zoned Land worth more
  * Is this endogenous?
* Public Land almost always worth less per acre
* Chronic Flooding Lowers Land Value
* Engineering and Construction Costs have Risen faster than CPI
* USACE/FEMA Flood Damage Curves follow “bathtub” model
* Cost of re-routing infrastructure often underestimated
Recreation

* Beaches: No one understands WTP
  * Erosion Reduces WTP but CCC has ruled Value of a Beach Day = $40
  * CSBAT: RIP
* Coastal Trails: Limited Data
* Golf Courses: How to Value the loss of a hole
Most beach EFGS only includes recreation and storm damage protection

Other EFGS not Valued
  * We don’t understand
  * We don’t know how to value in $ terms

A No-Net Loss Policy may make more sense
Mainstream View
* Use Market Rates
* Next Generation will be Better Off

Alternative View
* Use “Social Rate”< Market Rate
* Next Generation Screwed

NO CONSENSUS ON THE PROPER DISCOUNT RATE

Ventura County Property Damages by Type (No Discount Rate)
Impacts

* Local Decision-Makers interested in Economic Tax Impacts
  * Impacts on Commerce Important
  * Beach Tourism Generates Tax Revenue
  * Flooding Generates Economic Impacts

<table>
<thead>
<tr>
<th>Site</th>
<th>Yearly Attendance</th>
<th>Estimated Spending in Ventura County</th>
<th>Estimated Sales Taxes Generated</th>
<th>Estimated Transient Occupancy Taxes</th>
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<tr>
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* Need Better tools to evaluate all of these changes/impacts
  * Better Analysis of Flooding
  * How to Assess the Impacts of Beach Erosion post CSBAT
  * Better Way to Evaluate Ecology and Public Land
  * Beach Sustainability Index
Questions?