Resilient Coastal Communities & Valuing our Natural Assets: Past, Present and Future.

The Nature Conservancy
Protecting nature. Preserving life.™

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Restore America's Estuaries, 2014

Impacts

Fishing $6.3B

Real estate - $28.7B
Construction - $5.8B

428,630

Human Impacts

Property values

Municipal Tax Revenue

JOBS

Commercial fisheries

Drinking water

Rec. fishing & boating

Beaches & swimming

Health

Ecosystem Services

Ecological Impacts

Marsh loss

Seagrass decline

Increased HAB's

Fish kills

Excess N groundwater

From fertilizer, wastewater, atmospheric deposition

97,927 licenses ($22-$75 each) + insurance, boat maintenance, supplies. ~$1B

Tourism ~$5B+ annually

Why Value Natural Assets?

COSTS - 1

- Upgraded infrastructure (grey). $2B
- Wetland restoration (green). $1.3M

COSTS - 2

- Upgraded infrastructure (grey). $2B
- Wetland restoration (green). $1.3M

BENEFITS - 1

+ Denitrification technology, avoidance cost. $5M

BENEFITS - 2

+ Denitrification technology, avoidance cost. $5M

+ 10% recreational boating. $100M

+5% commercial fishing. $315M

NPV calculated at 3%, assumes 20yr infrastructure lifespan

BCR = 0.0025

BCR = 3.086


How do we use social science research to understand people's values?

Aggregate WTP

To understand the impact of the WTP results we can look at it in aggregate

- $17.20/month * 12 → **$206.40** WTP per household/per year
- $206.40/year * 950,446 households → **$196,172,054** WTP across all LI households/per year
- $196,172,054 * 20 → **$3,923,441,080** WTP across all LI households with 10 years of payments (assumes no interest, inflation, rate of return or population growth)

In summary, if each household were WTP $17.20/month for the next twenty years the investment would exceed $4B with just a modest interest rate

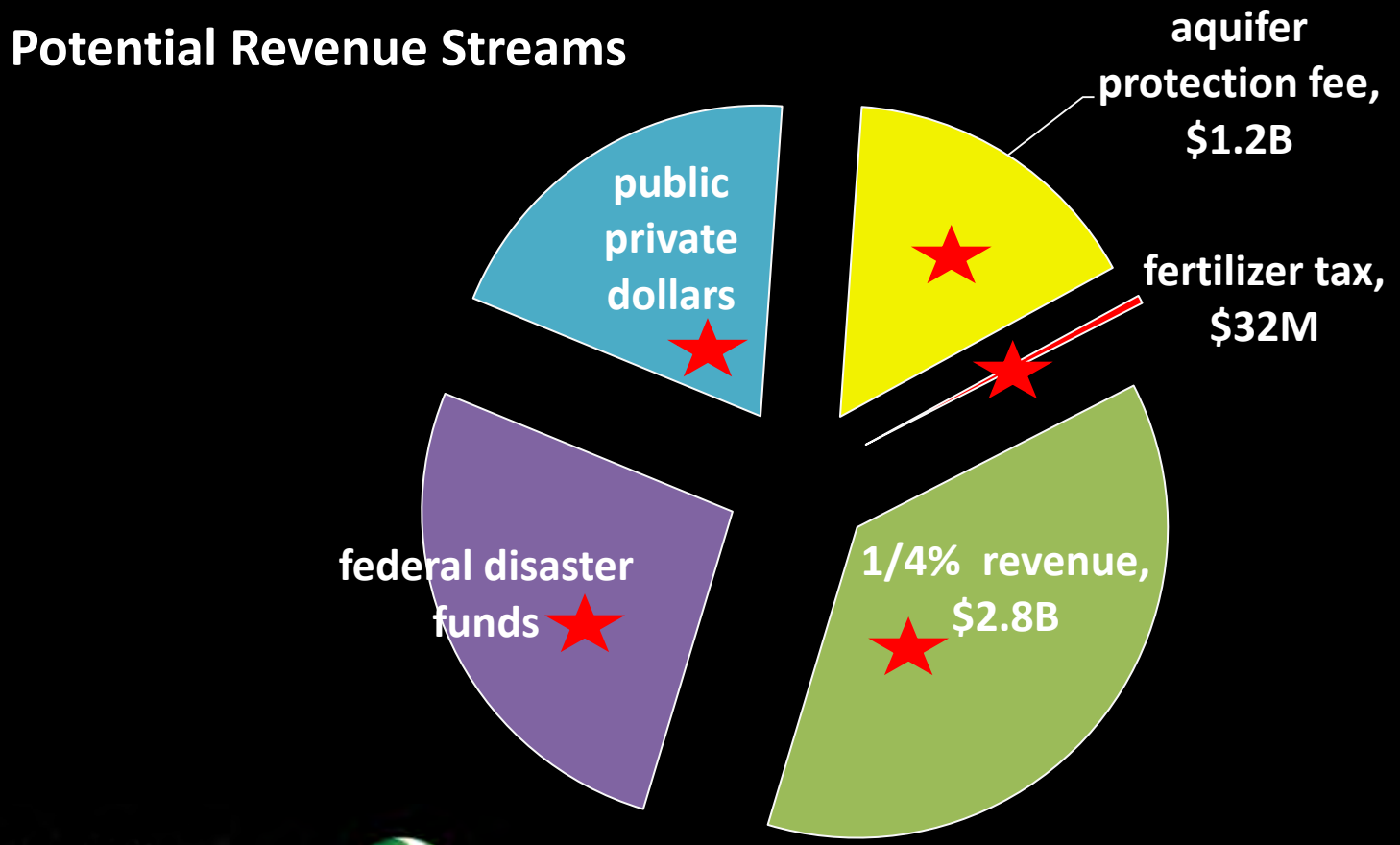
*Household #'s based on LI census data

This is going to be expensive…

- Placing a fee on water bills, higher for those that use more water and lower for those that use less **(69%)**
- Creating an additional sales tax of 2% on pollutants that are commonly found in household hazardous waste such as batteries, paint, pesticides and fertilizer. **(63 %)**
- Increasing sales tax by one-quarter of one percent. **(56 %)**

- 20% → $6/month or $60 annually.
  $60M
- 32,432 tons of fertilizer → 1,621,600 40lb bags
  $1.6M
- ¼% → $70m Suffolk, $70m Nassau
  $140M

…so where does the money come from?



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Thank you

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