



Protecting nature. Preserving life.

**An interdisciplinary
approach to
valuing ecosystem
service benefits
from coastal
restoration**

**Elizabeth Schuster
Environmental
Economist**



Photo: The Nature Conservancy with aerial support from LightHawk

HOW DO WE INCREASE SUPPORT FOR CONSERVATION?



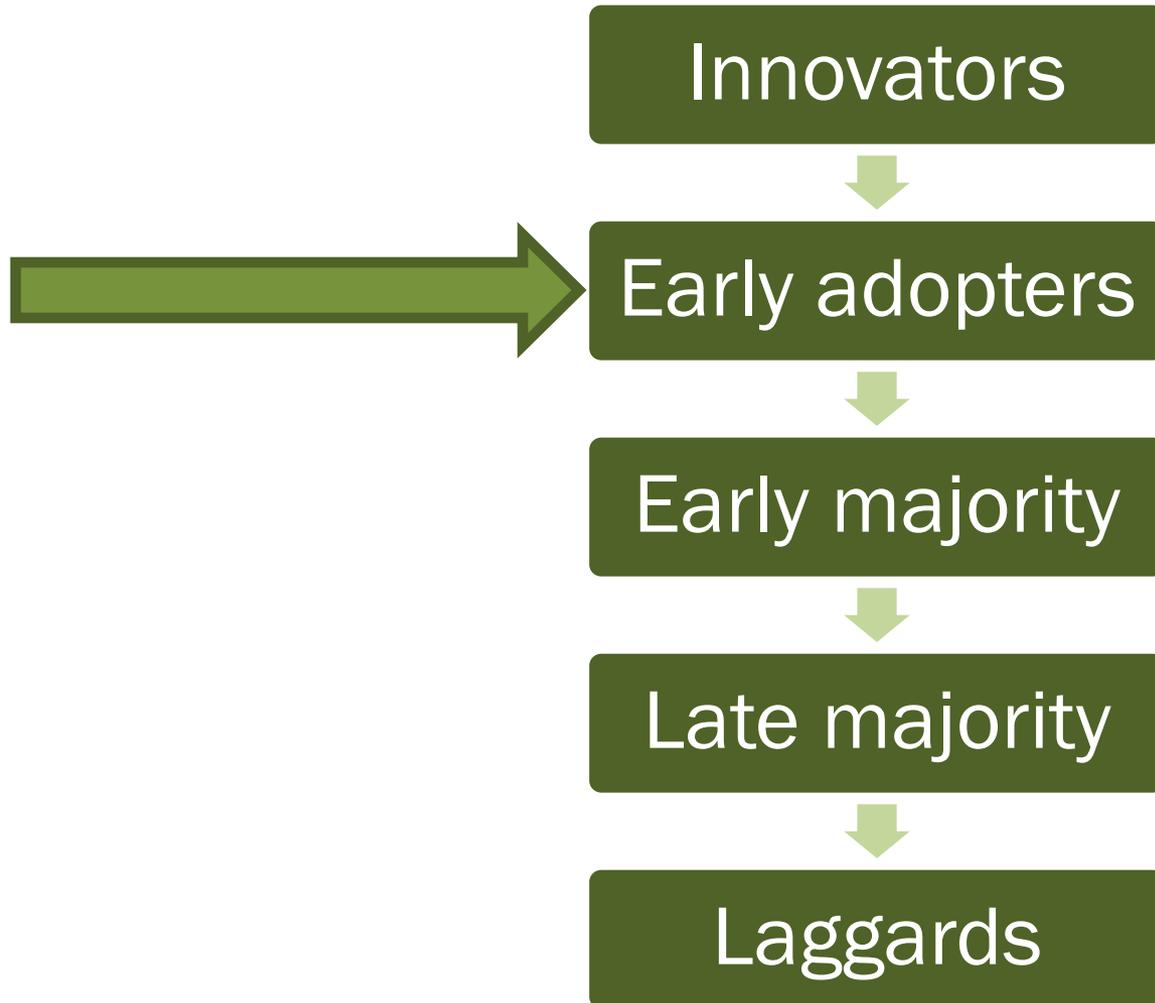
Photo: The Nature Conservancy

NATURE-BASED SOLUTIONS

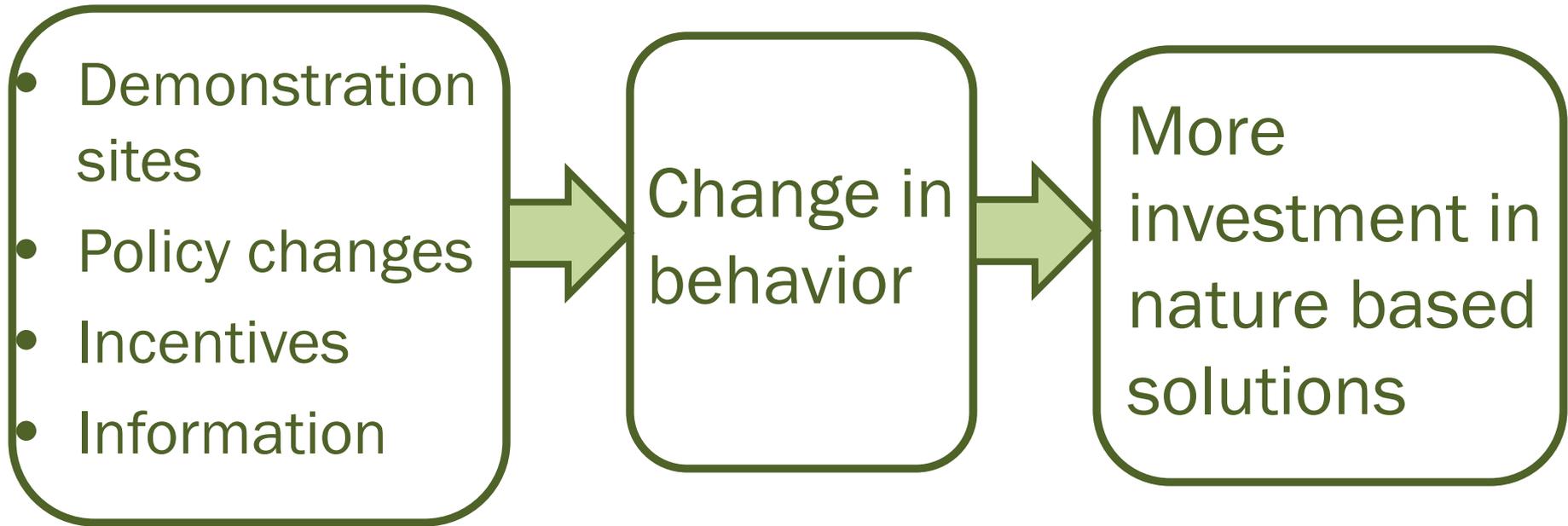


Photos: The Nature Conservancy,

INNOVATION AND NEW TECHNOLOGY



ADOPTION OF NATURE BASED SOLUTIONS



GUIDEBOOK



Define project scope

```
graph TD; A[Define project scope] --> B[Conduct rapid stakeholder assessment]; B --> C[Set socioeconomic goal for the project]; C --> D[Select relevant metrics]; D --> E[Determine appropriate study design];
```

Conduct rapid stakeholder assessment

Set socioeconomic goal for the project

Select relevant metrics

Determine appropriate study design

DEFINE PROJECT SCOPE



Photo: The Nature Conservancy

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WHAT IS A RAPID STAKEHOLDER ASSESSMENT?



Photo: The Nature Conservancy

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TYPES OF RESTORATION PROJECT GOALS

Project goals

Ecological goals

- Erosion control
- Water quality
- Habitat
- Hydrological enhancement

Socioeconomic goals

- Community resilience
- Cultural values
- Economic development
- Recreation
- Water quality

GOALS AND PROJECT DESIGN



Photo: The Nature Conservancy

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SELECTING RELEVANT METRICS



Photo: The Nature Conservancy

TYPES OF SOCIOECONOMIC METRICS

- o Change in damage costs to surrounding homes (\$)
- o Changes in the number of days per month that road is flooded (#)
- o Change in spending by birders (\$)
- o Number of new visitors to the restoration site (#)

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DETERMINE APPROPRIATE STUDY DESIGN



Gandy's Beach Preserve in 2006 (left) and 2010 (right), Delaware Bayshore, New Jersey.
Photos: The Nature Conservancy

HAS THIS APPROACH LED TO SUCCESS FOR CONSERVATION GROUPS?

- Oyster restoration in Mobile Bay, Alabama
- Coastal adaptation planning in Connecticut

REMEMBER THE REFRIGERATOR?



NATURE-BASED SOLUTIONS



Elizabeth Schuster
Environmental Economist
eschuster@tnc.org



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