



A Breakthrough Collaboration: The Economics of Ecosystems

Mary Draves

Global Director, Remediation and Restoration

The Dow Chemical Company

Leadership Perspective

“There is no longer a choice between economic growth and ecological conservation – they are interdependent.”

- *Andrew Liveris, Chairman and CEO, The Dow Chemical Company*

“This collaboration will demonstrate to other organizations and companies that incorporating nature’s services into decisions is a responsible, smart and viable business strategy.”

- *Mark Tercek, President and CEO, The Nature Conservancy*



Collaboration Launch, January 2011

Novel Collaboration: Dow and The Nature Conservancy

Two leading global organizations forging new ground

Founded on common belief that business has a key role in preserving nature while growing

Shared science and economics expertise – developing new private sector methods

Rooted in mutual respect

Commitment to transparent process and published results



Valuing Nature – A Strategic Fit for Dow and The Nature Conservancy

Working to create a “new normal” where nature is a critical consideration in business.

Applying scientific knowledge and experience to develop methodology and tools to be used across industry.

Encouraging investment in Green Infrastructure

Sharing knowledge with policy makers and key stakeholders.



Collaboration Goals

Demonstrate how an NGO and Fortune 50 corporation can work together

Serve as a model for other companies

Develop tools

Encourage action from policymakers and other leaders

Increase investment in protecting natural systems and services



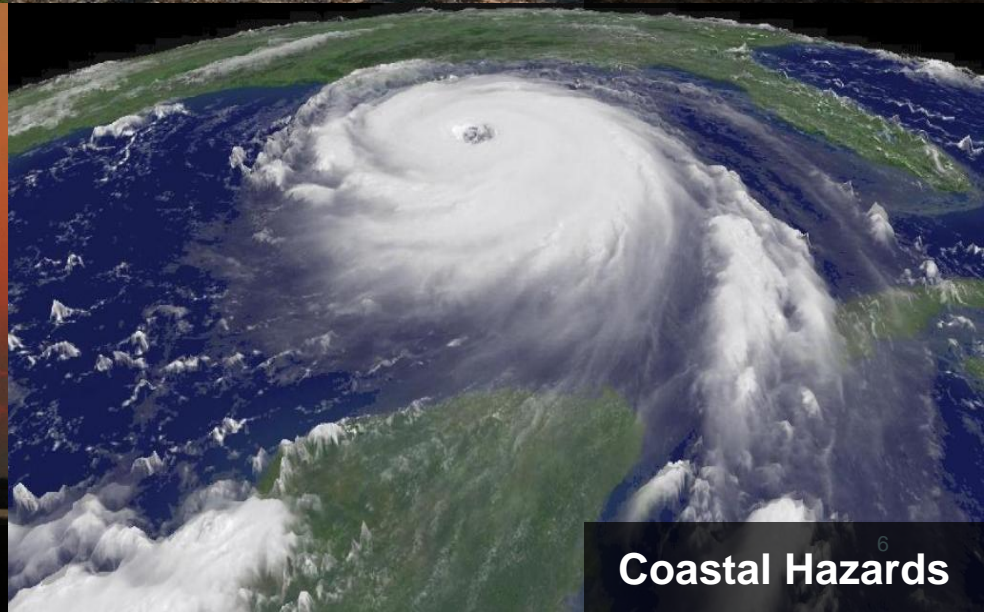
Freeport, Texas



Fresh Water



Air Quality



Coastal Hazards

Air Quality

Opportunity: Improve air quality through reforestation

Outcomes:

- This emerging measure can be cost-competitive compared to conventional control options
- Provides co-benefits for people and nature that conventional controls do not
- Has broader application potential
 - Methodology submitted to State and EPA

Water Supply

Opportunity: Preventing disruption to freshwater supply caused by climate change.

Outcomes:

- Currently, “access to water” is inexpensive, but future shortages could drastically change that dynamic.
- With expected increased frequency and duration of drought periods in the Brazos River Basin, “access to water” risk increases.
- Cost-competitive solutions include: irrigation efficiency, municipal rebates and flood plain allocation.
- Results highlighted the value of Dow’s water rights as a natural capital asset and provided a value range for price forecasting.

Coastal Hazards

Opportunity: Mitigating coastal hazards with natural infrastructure

Outcomes:

- Evaluated how surrounding marshes and coastlines protect the facility and community from storm surges and hurricanes.
- Coastal analysis allows Dow to understand the role of habitat and sea level rise at Freeport and other sites.
- Resulted in a method that can be used to assess the role of habitats in coastal risk mitigation.

Tool Development: ESII

- Ecosystems Services Identification and Inventory (ESII)
- Provides a rapid assessment of ecosystem services at a site level.
- Uses ecological attributes to identify and quantify ecosystem services.
- Translates the production of services into economic benefits.
- Expected to provide estimates of the value of ecosystem services from the business site to the surrounding community.
- Currently developing software for a tablet device that a site technician could use.

A Win-Win Proposition



Improved
Conservation
Outcomes

Improved
Business
Performance



DIALOGUE



Ludington Michigan



Air Quality: Analysis Results Based on Hypothetical Reforestation Project

Reforestation likely a cost-effective air pollution abatement strategy, while providing broader benefits to communities and wildlife.

