Making the Case for Environmental Markets

Ted Toombs

Center for Conservation Incentives



Finding the ways that work

Main Point

Environmental markets can move society closer to a sustainable economy by offering a mechanism to internalize environmental costs of doing business.



Road Map



Who is EDF?

What are environmental markets?

Examples

Discussion



Who is EDF?

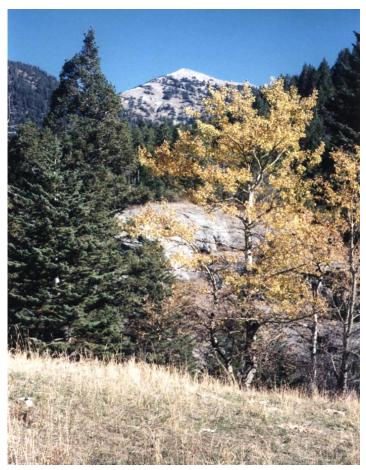
Who is Environmental Defense Fund?

Founded in 1967 (DDT)

Over 700,000 members

Mostly private, non-corporate funding

Headquarters in N.Y. with offices in Washington D.C., San Francisco, Boulder, Raleigh, Austin, Boston, L.A., Sacramento, and Beijing China





Current Program/ Objectives

- Land, Water, and Wildlife Harness market incentives to encourage stewardship
- Health Protect human health from exposure to harmful chemicals and toxic emissions
- Climate Stabilize greenhouse gas emissions at a level sufficient to avert dangerous interference with our climate
- Oceans Revive the oceans and the fishing communities that depend on them



"Finding the Ways that Work"

strong SCIENCE – guided by scientific evaluation of environmental problems uncommon PARTNERSHIPS –engaging America's corporations to find an intersection between profit and planet innovative MARKETS – harnessing a powerful engine of change



What are Environmental Markets?

Destructive Markets





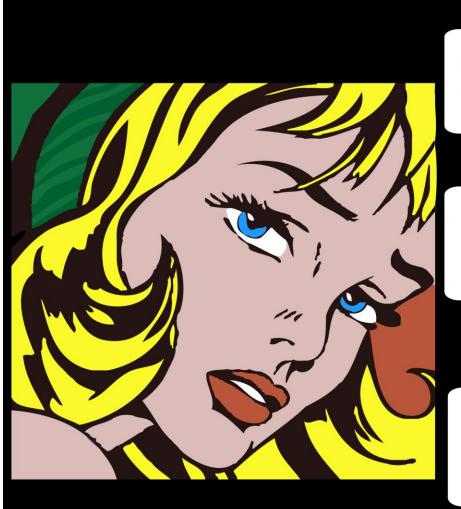
Landowners



Corporations



Agencies



"Oh great! Now I have more work to do. Thanks a lot!"

"You can't leave us out of this! WE are responsible for wildlife in this state!"

"I've got better things to do, so leave me alone with your Fancy schemes."

NGOs

"These so-called environmental markets are just ways of letting the big bad oil companies get off scott free!"

"All I care about is raising more money For conservation. IF it does that, then I'm all For it!"



Definitions

"Environmental markets are mechanisms that give nature a value and force the economy to look into its blind spots"

- R. Bayon 2008



Markets vs. PES

Markets	PES	
Tradable Dev. Rights	Conservation Easements	
Tradable wetland mitigation credits	Conservation lease or purchase	
Tradable biodiversity credits	Payments for Access (i.e. hunting, ecotourism)	
Tradable pollution allowances	Farm Programs (payments for practices)	



Gov't vs. Markets

<u>Criteria</u>	<u>Gov't</u>	<u>Market</u>
Source \$	Taxes	Polluters
Who sets price	Gov't	Market
# Buyers	Single	Multiple
Interaction	Gov't mediated	Direct or Gov't
Price signal	masks	raises



Conservation Benefits

- 1) More conservation than without offsets
- 2) Better conservation outcomes
- 3) Opportunity to internalize externalities
- 4) Give greater economic value to nature
- 5) Significant new source of finance



Development Benefits

- 1) Better relationships with agencies, etc.
- 2) Enhanced reputation, regulatory "good will"
- 3) Easier access to capital
- 4) Reduced cost of compliance
- 5) Strategic opportunities in new markets



Regulator/Policy Benefits

- 1) Encourage companies to increase conservation w/o requiring new rules
- 2) Ensure development projects are planned in the context of sustainable development
- 3) Better balancing of costs and benefits of economic development



Community Benefits

- 1) Jobs + Environment, not vs. environment
- 2) Negotiate optimal outcomes at bigger scale
- 3) A means to identify pre and post-project ecosystem benefits



The Keys

Measuring environmental value

Impacts relative to benefits

Identifying, or stimulating demand

- Regulations "stick"
- Incentives "carrot"



Examples

Biodiversity Offset

"conservation actions intended to compensate for the residual, unavoidable harm to biodiversity caused by development projects, so as to ensure no net loss of biodiversity"

- IUCN, Kate, etal. 2004



Golden-cheeked Warbler





Fort Hood Successes

Total Investment to Date:

Landowner Cost Share:

Area Under Contract (\$141/acre):

Existing Occupied GCW Habitat

Under Contract (\$888/acre):

Contract Length

\$1,954,666

\$451,295

13,858 acres

2201 acres

10-25 years

Cost under alternative method \$16.5 million



Utah Prairie Dog



Stick: ESA

Carrot: Faster permitting, increased take

Buyer: Developers

Seller: Farmers



Exchange System



Need Take
Developers
Energy Industry
Transportation

Facilitating Entity

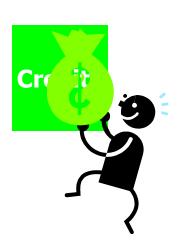
Private
Landowners
Protect Habitat



Exchange System







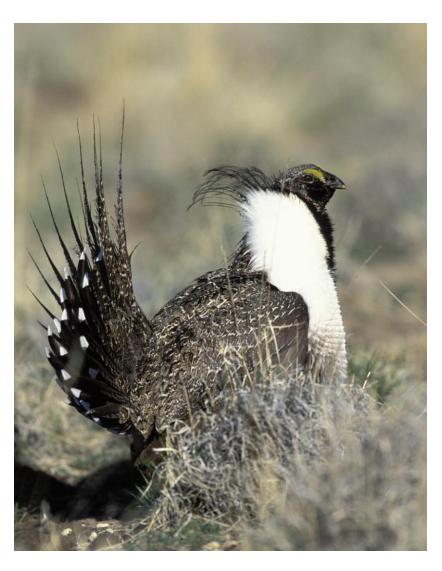
Facilitating Entity



Private
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Sage Grouse?



Stick: ESA?

Carrot: Permitting?
Regulatory
Assurances?

Buyers: Oil/Gas Co.

Sellers: Ranchers

Kramer, USFWS



Mitigation Hierarchy

Avoid

 \longrightarrow

Minimize



Offset



Oil and Gas



Wyoming Core Areas Approach

Colorado



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