

**Using Ecosystem Services in the
Law, Policy and Management of
Natural Resources**

What Do Ecosystem Services Add to Management of Natural Resources?

- **New Social or Political Arguments**
- **Improved Private Decisionmaking**
- **Improved Public Decisionmaking**
- **Markets for Ecosystem Services (MES)**
- **Payments for Ecosystem Services (PES)**
- **Improved Implementation of Regulatory Laws**



New Social or Political Arguments



Improved Private Decisionmaking

- **Individual Decisions**
- **Financial Accounting**
 - **International Accounting Standard 41**
 - **AASB 141**
 - **Valuation of living plants and animals**
 - **Disney**
- **Corporate Investigation**
 - **Natural Capital Leadership Compact**
 - **Valuing Natural Capital Initiative**
 - **Natural Capital Declaration**

Improved Public Decisionmaking

- **Decisions & Planning**
 - National Principles & Guidelines for water projects
 - Environmental Impact Assessments
 - NEPA
 - Cost-Benefit
- **National Accounting: Beyond GDP**
 - UN Statistical Commission for Environmental & Economic Accounts (SEEA)
 - Central Framework
 - World Bank's Wealth Accounting & Valuation of Ecosystem Services (WAVES)
- **Agency Accounting**

Markets for Ecosystem Services

Voluntary Markets



Regulatory Markets



Markets for Ecosystem Services

Commodity Markets

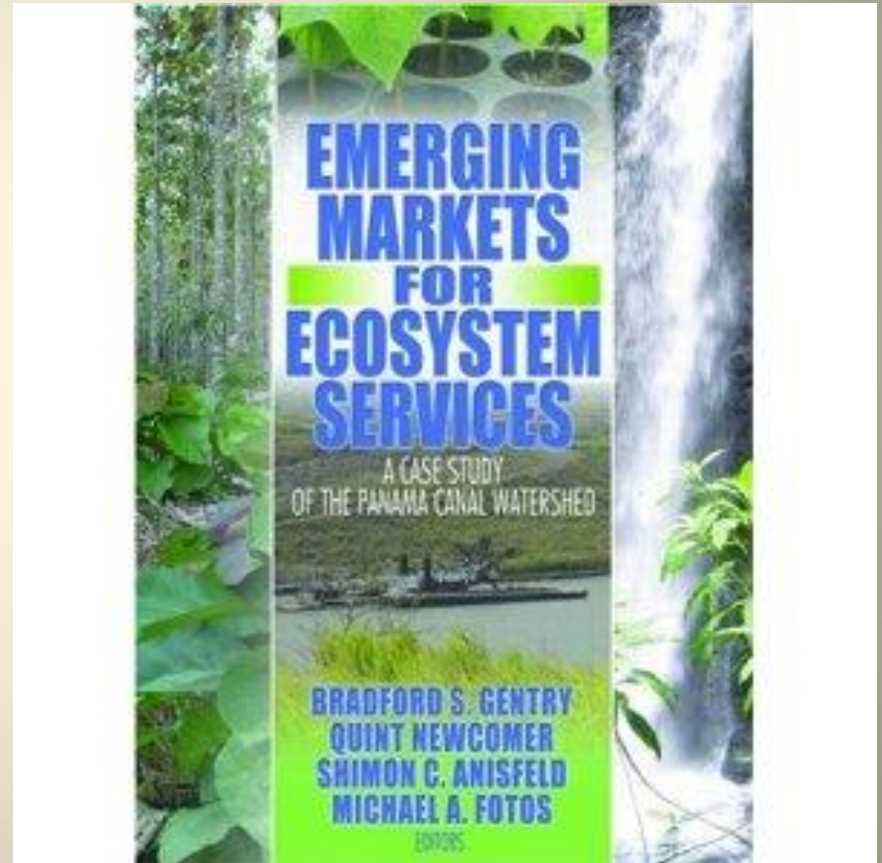


Heterogeneous Markets

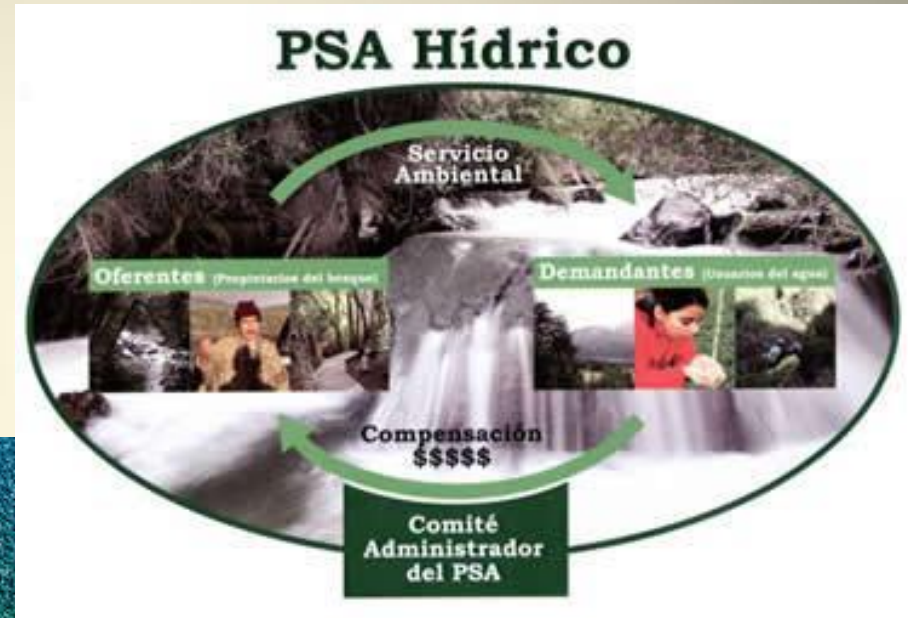


Practical Implementation Challenges: Markets for Ecosystem Services

1. Property Rights
2. Collective Action Problems
 - Free riders
3. Thin Markets
4. Need for “Bundling”
5. Monitoring Behavior
6. Enforcement
7. The “Baseline Challenge”



Direct Governmental Payments for Ecosystem Services



Improved Implementation of Regulatory Laws

- Refined/Added Goals



Improved Implementation of Regulatory Laws

- Refined/Added Goals
- Mitigation Comparison

