

10. Ecosystem Services Session

10:00 – 11:45 a.m.

Room: Hemisphere B

Moderator:

Carl Shapiro

Discussants:

Jim Boyd

Robert Costanza

Sara Lynch

Ben Simon

Amanda Desantis

Mark Nechodom (absent)

A key concept of the New Green Economy is ecosystem services.

Ecosystem services are business services produced from nature:

-provide storm protection

-eg. water

We must work toward incorporating ecosystem services into business

Ben Simon

-Conditions that allow exchange

Scarcity must be involved for exchange

Transaction costs

-Never going to have ideal economic circumstances

-Department of Interior regulatory perspective

Government buyer and individual seller

Individual buyers must have government regulation

Regulations create scarcity

-Scaling- adjusting size of compensatory measures for damages

There will not be transactions unless the scaling is correct

-Costs

Monitoring enforcement costs

Government buyer: funding

-Conservation banks

Most in conservation banks are in CA with only a modest amount of acreage

Department of Fish and Wildlife invested into several of these banks

If one damages one acre, how many acres do you need to save? (Scaling issues)

Some conservation banks will restore degraded areas and resell it

Jim Boyd

-What are ecosystem services?

The terminology is terrible because the public does not understand what ES are.

Nature creates and provides us with wealth

We must manage this, make it grow

There are no institutions to regulate this market

-Teddy Roosevelt

Started viewing nature this way

-Nature is a collection of interrelated factories

Are we damaging these factories?

We depend on these factories

Wetlands are natural speed bumps for hurricanes

Hurricane Katrina

-Beginning of a love between ecology and economics

The problem is neither ecology nor economics are great communicators

Need to convey that resources come from nature

Understand these factories and limitations

Are they damaged? How do we fix them?

-GDP

Scientifically derived data thermometer for economics

We need a "Green GDP"

We should not focus on GDP while nature suffers

Robert Costanza

-No longer economy vs. ecology

-Rivalness: does the possession of a good prevent others from having it?

-Excludable: do the benefits go to one owner?

-Ecosystem services are public goods and don't fit in to either of these

Open access to public

We need to establish property rights for resources

-Need a common sector

Trusts?

Land trusts

Atmosphere trust:

Cap and auction return and dividends system

Watershed trusts

Conventional markets will not deal correctly with ecosystem services

Damages to the ecosystems need a fee

-Key Points/ Conclusion

Need new commons sector

Understanding how these sectors influence society

Amanda Desantis

-Private sector perspective from DuPont

Everyone relies on natural resources

-Need to monitor global trends on natural resources

-Products

Omega three fish tablets

Fish resources were unsustainable

Increased sustainability

-Integrating user sustainability

-Incorporating this into the Green Economy

Linking scientists to practitioners

Lifecycle assessment of products

Tool developers

Promoting benchmarking of companies

Collaborating with NGOs

-Business newsletters for employees showing sustainability

Carbon footprint calculations for employees

-Instilling this concept into new leaders

-Personal practices

Trains vs. cars

-Get concept down to the local municipalities

-Ecosystem services coming to age

Sarah Lynch

-Location:

Orlando Florida

Greater everglades ecosystem

Northern and Southern everglades now severed

Pump excess freshwater east and west due to severed everglades

Lake Okeechobee now a runoff area (polluted)

Need to create reservoirs to clean and store water

Water Management District

One jurisdiction responsible for watershed

North of Lake Okeechobee

Half of acres are cattle ranches in Florida

Can the landowners help retain their runoff water?

Water Management on Ranchlands

8 operational infrastructures

If rancher completes certain terms, then they don't have to continue after project ends

Water retention by ranches, they get paid to help them stay economically viable

Lessons Learned

Not a cost share, it creates profit

Needs to have a buyer

Cannot do a "build it and they will come"

Specific demands by buyer

Sufficient Sellers

10, 000 acre/feet for the 8 operational areas

Many groups need to come together for a success

Discussion

Tracking versus estimating and subtracting from GDP

Exxon Valdez

Should have been subtracted from GDP instead of increasing

Carbon footprint by product

TruCost.org or .com: tool to help companies rank impacts by other companies

How do you incorporate goods and services that have not been given a cost?

Cannot do spot analyses (not feasible)

New institutional structure from current market

Market incentives

Trusts for the Chesapeake Bay

Reward production of public benefits

Charge damages

Water Management Districts

Several groups that regulate the same resource

Very Difficult

A Community of Ecosystem Services (ACES)