

Session 18: What's the Use of Non-Use Values?

- James Boyd – Non-Use Values: The Importance and Challenge of Commodity Definition
- Robert Johnston – Selecting Biophysical Indicators for Economic Valuation and Non-Use Ecosystem Services
- Paul Ringold – Metrics to Represent Non-Use Values of Streams and Lakes
- Colin Phifer – Biophysical Metrics for Quantifying Non-Use Values: Examples from Three Ecosystem Types in the United States
- Julie Hewitt – Incorporating Non-Use Values in Regulatory Decision Making

Our Core Questions

- What biophysical measures usefully represent existence values?
- What is the “right” conceptual definition for “reference conditions”?
- How do different organizations use information on existence value in biophysical or value terms?

Existence Values: The Importance and Challenge of Commodity Definition

James Boyd

Resources for the Future

The Question

- What in nature gives rise to existence values?
- For EVs, what should natural scientists measure and track?
- Session is not about how to monetize existence values
- Focus is on **biophysical measures** – FEGS or linking indicators
 - Amenable to valuation
 - Or as standalone indicators

What Are Existence Values?

- They are *not* the value of
 - Consumption (harvests, withdrawals values)
 - Damage avoidance (flood attenuation benefits)
 - Non-consumptive use (aesthetics or recreational benefits)
 - Future use or enjoyment (option and bequest values)
 - Others' use or enjoyment (altruistic values)

So What Are They?

- Wikipedia

A class of economic value, reflecting **the benefit people receive from knowing that a** particular environmental resource, such as Antarctica, the Grand Canyon, endangered species, or any other organism or **thing exists**

- Operational Definition (economists)

The residual value not explained by all the other kinds of value

Are They Real?

89% percent of Americans agree with the statement that

“I support protecting wilderness areas just so they will always exist in their natural condition, **even if no one were to ever visit or otherwise benefit from them.**”

See National Survey on Recreation and the Environment

Green (2013)

Wainger et al (2018)

Caution



“Virtually any object invested with symbolic importance will have an existence value”

Robert Nelson, The Independent Review, Vol.I, No.4, Spring 1997

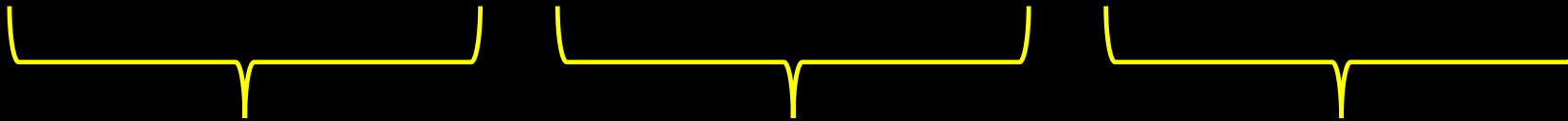
If we try to measure everything, we may measure nothing

The Easiest Examples – Species

Harp Seals

Harp Seals





Use Value

Option Value

Existence
Value

The Biophysical Measure?

- Does it exist (yes/no)
- Abundance, Extinction Probability, Population Viability Measure
- Conceptually clear, though some pragmatic issues
 - 1300 T&E species in US
 - 16,000 IUCN endangered
 - The difference between



and



Also (Seemingly) Straightforward

- Iconic places
 - The Grand Canyon, Yosemite, Antarctica
- Note that these places can't go extinct
- Or can they?
 - If Colorado River stops flowing does Grand Canyon “go extinct” as an icon?
 - If Yosemite is denuded of trees?
 - If Antarctica's ice melts?

The Real Conundrum

- The existence value of **systems** and their **qualities**
- Are these existence values real?
 - Rob Johnston will discuss
- When you talk to people, here's what they say they want...

I Want It To Be...

“Fixed”

“Natural”

“Like it Was”

“Healthy”

What biophysical measures
would capture this?

Pragmatism

- Only the most iconic systems?
 - No, could take too much off the table
- Measure these in a way that is transparent and makes sense to the public

“Healthy”

“Like it Was”

“Fixed”

“Natural”

Measures of “Departure From Reference Condition”

- Big issue: Definition of “Reference Condition”
- What do these mean?

“Healthy”

“Like it Was”

“Fixed”

“Natural”

Relative to What & When?