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(Seattle, Wash.)

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Apr 6th, 3:30 PM - 3:00 PM

## Relational values and valuation: challenges, and possibilities

Kai Chan

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# Relational Values and Valuation— Challenges, and Possibilities



Kai Chan

*Professor*

CHANS Lab (Connecting Human & Natural Systems)  
Institute for Resources, Environment and Sustainability



LEOPOLD LEADERSHIP PROGRAM  
Stanford Woods Institute for the Environment



SSEC

Apr 6, 2018

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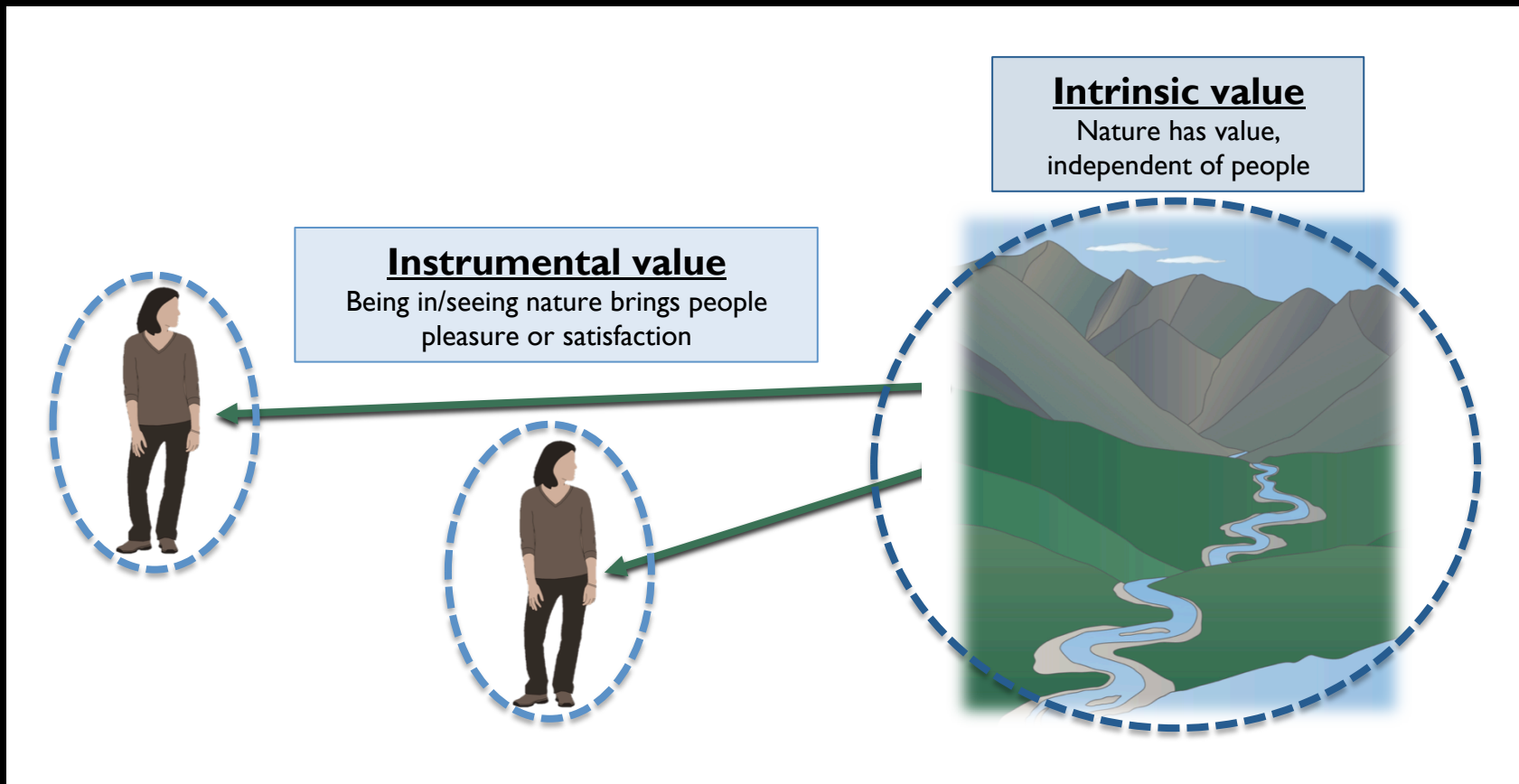
@KaiChanUBC

# Environmental Values: Lore

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1. Two kinds of environmental values: intrinsic, instrumental
2. Values are measures *of* things
3. Values are used to maximize well-being, e.g., in CBA
4. People are mainly motivated by instrumental values

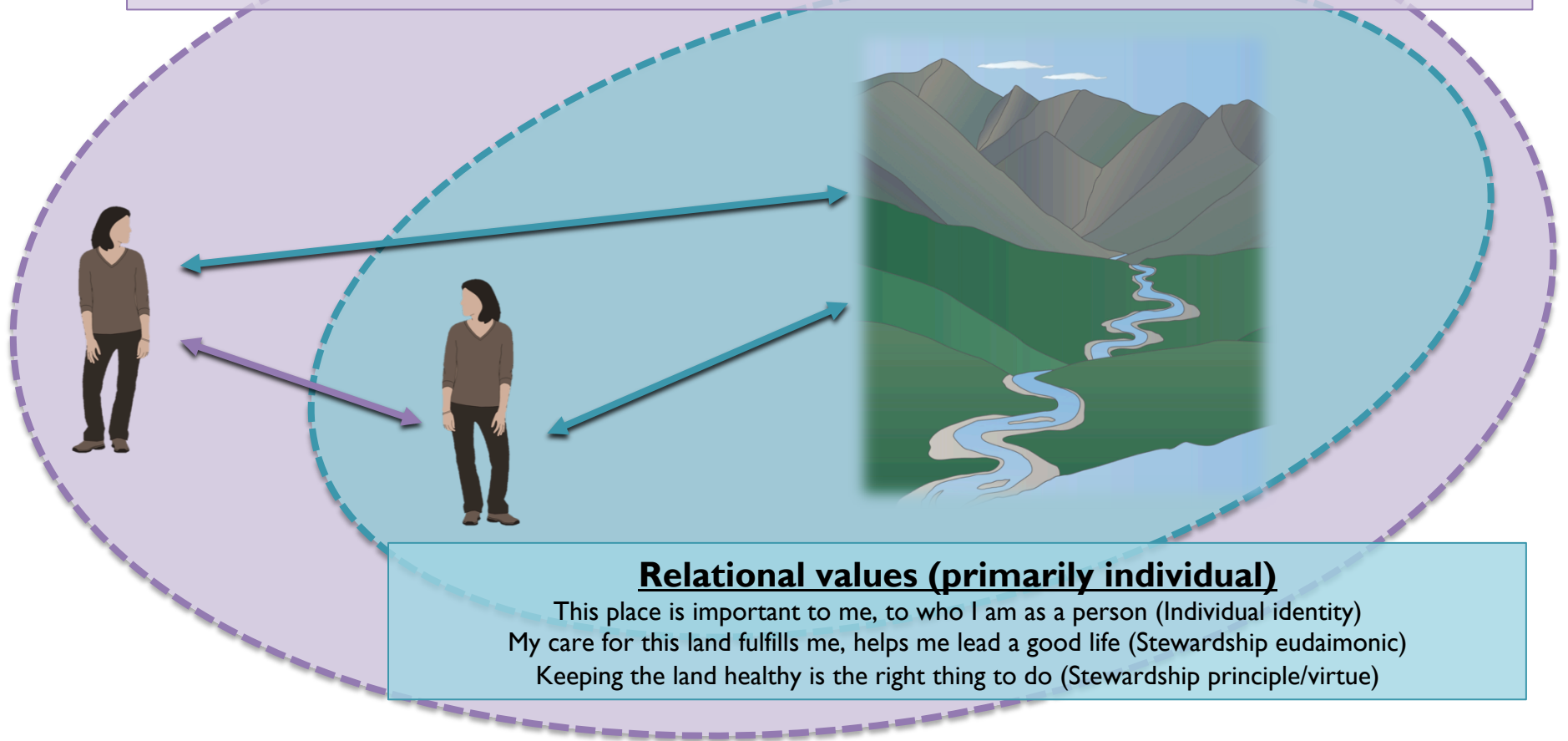
# The Instrumental/Intrinsic View



# The Relational View

## **Relational values (involving the human collective)**

- Place is important to my people, to who we are as a people (Cultural identity)
- Being in nature provides a vehicle for me to connect with people (Social cohesion)
- Caring for ecosystems is crucial to caring for my fellow humans, present and future (Social responsibility)
- Caring for all lifeforms and physical forms is a moral necessity (Moral responsibility to non-humans)



## **Relational values (primarily individual)**

- This place is important to me, to who I am as a person (Individual identity)
- My care for this land fulfills me, helps me lead a good life (Stewardship eudaimonic)
- Keeping the land healthy is the right thing to do (Stewardship principle/virtue)

# Intrinsic vs. Instrumental

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The great divide

- *Intrinsic*: 'Old guard' conservation
- *Instrumental*: 'New' conservation (eco-services, etc.)

***Relational values:***

- Preferences, principles, and virtues associated with relationships
- May unite intrinsic and instrumental, e.g., sacred sites
- Central to IPBES

# Environmental Values: Law I

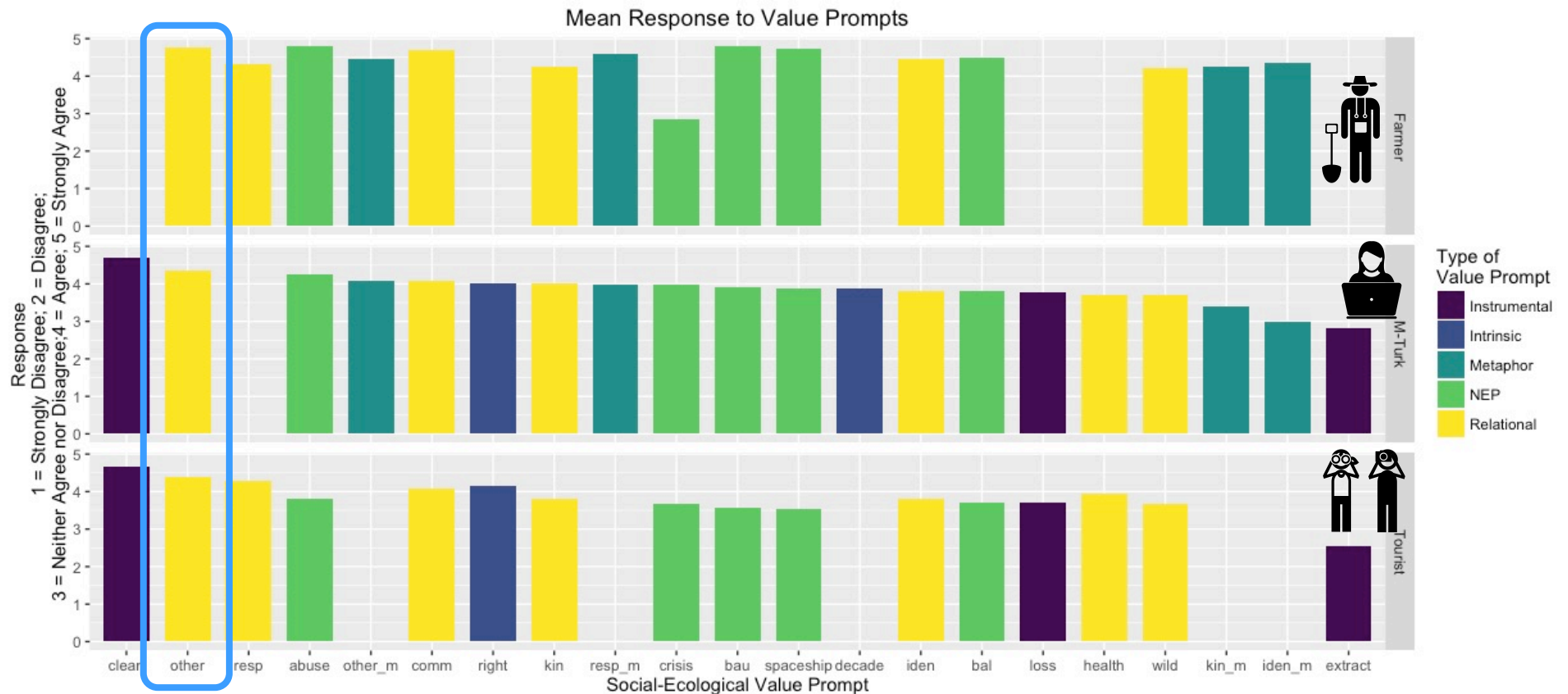
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| Variable  | Category                    | Statement   | Population | Reverse code |
|-----------|-----------------------------|---|------------|--------------|
| abuse     | NEP                         | Humans are severely abusing the environment   | F, T, MT   | n            |
| bal       | NEP                         | The balance of nature is strong enough to cope with the impacts of modern industrial nations  | F, T, MT   | y            |
| bau       | NEP                         | If things continue on their present course, we will soon experience a major ecological catastrophe  | F, T, MT   | n            |
| crisis    | NEP                         | The so-called "ecological crisis" facing humankind has been greatly exaggerated   | F, T, MT   | y            |
| spaceship | NEP                         | The earth is like a spaceship with very limited room and resources  | F, T, MT   | n            |
| comm      | relational                  | There are landscapes that say something about who we are as a community, a people   | F, T       | n            |
| health    | relational                  | My health or the health of my family is related one way or another to the natural environment*  | F, T       | n            |
| iden      | relational                  | I have strong feelings about nature (including all plants, animals, the land, etc.) these views are part of who I am and how I live my life     | F, T       | n            |
| kin       | relational                  | Plants and animals, as part of the interdependent web of life, are like 'kin' or family to me, so how we treat them matters                     | F, T       | n            |
| resp      | relational                  | How I manage the land, both for plants and animals and for future people, reflects my sense of responsibility to and so stewardship of the land | F, T       | n            |
| wild      | relational                  | I often think of some wild places whose fate I care about and strive to protect, even though I may never see them myself                        | F, T       | n            |
| other     | relational (responsibility) | Humans have a responsibility to account for our own impacts to the environment because they can harm other people                               | F, T       | n            |
| decade    | moral                       | Humans have the right to use nature to meet our needs, even if this includes impacts that will take a decade or more to recover                 | MT         | y            |
| right     | moral                       | Humans have the right to use nature any way we want   | F, T       | y            |
| extract   | instrumental (economic)     | Natural resource extraction is necessary for countries to develop   | F, T       | y            |
| clean     | instrumental (health)       | It is important to protect nature so we have clean air and water  | F, T       | n            |
| loss      | instrumental (use)          | We can lose forests and wetlands, as long as we are keeping enough for the environment to function  | F, T       | y            |
|           |                             | <i>The forest/ocean and everything in is like**</i>   |            |              |
| iden_m    | metaphor                    | Something I identify with so strongly that it makes me me   | F, MT      | n            |
| kin_m     | metaphor                    | Forest and everything in it: a family of which I am very much a part  | F, MT      | n            |
| other_m   | metaphor                    | A world we must care for so that any damage doesn't also  | F, MT      | n            |



# Relational Values Resonate



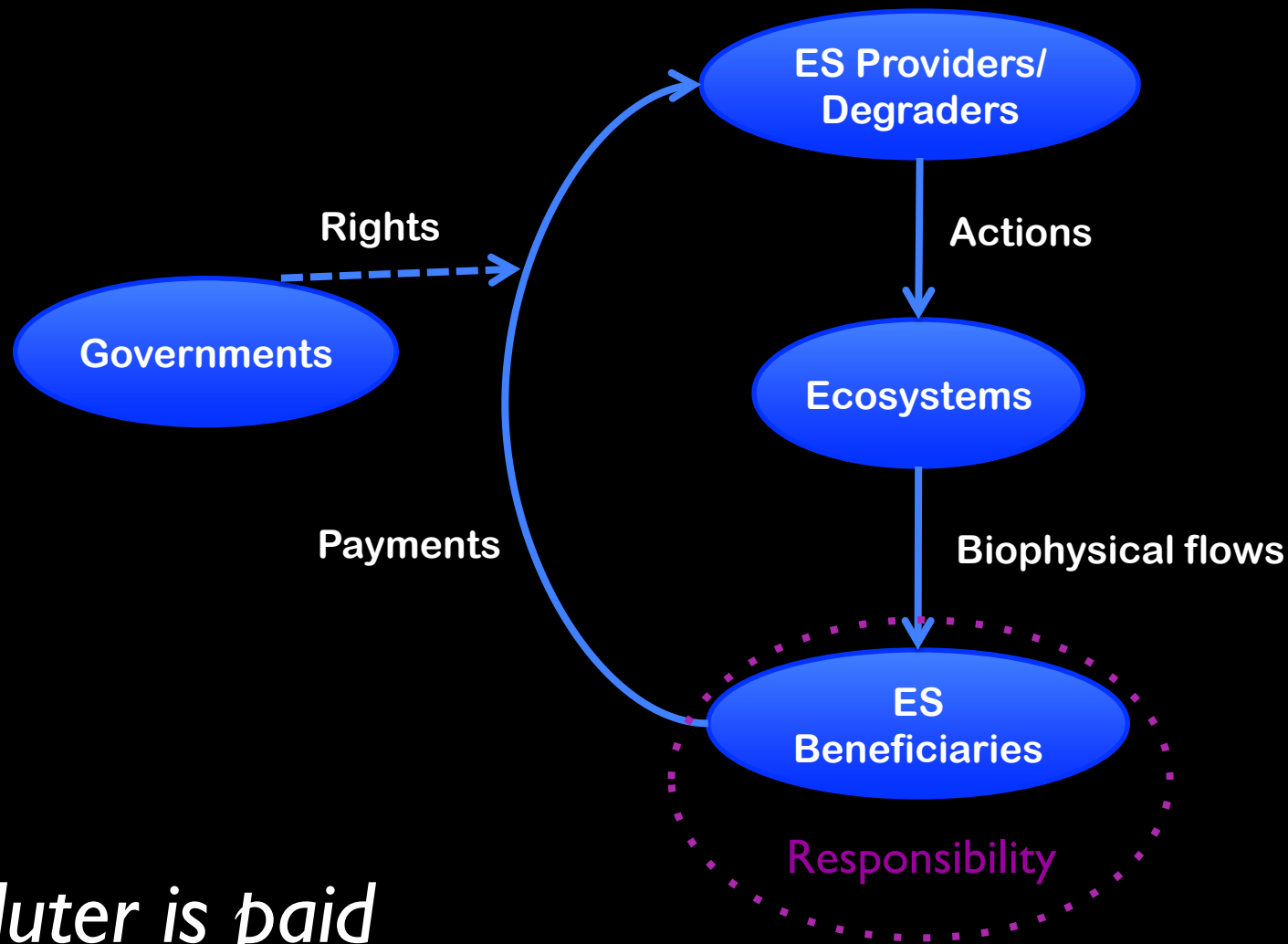
*“Other”: Humans have a responsibility to account for our own impacts to the environment because they can harm other people*

# Values: Law 2

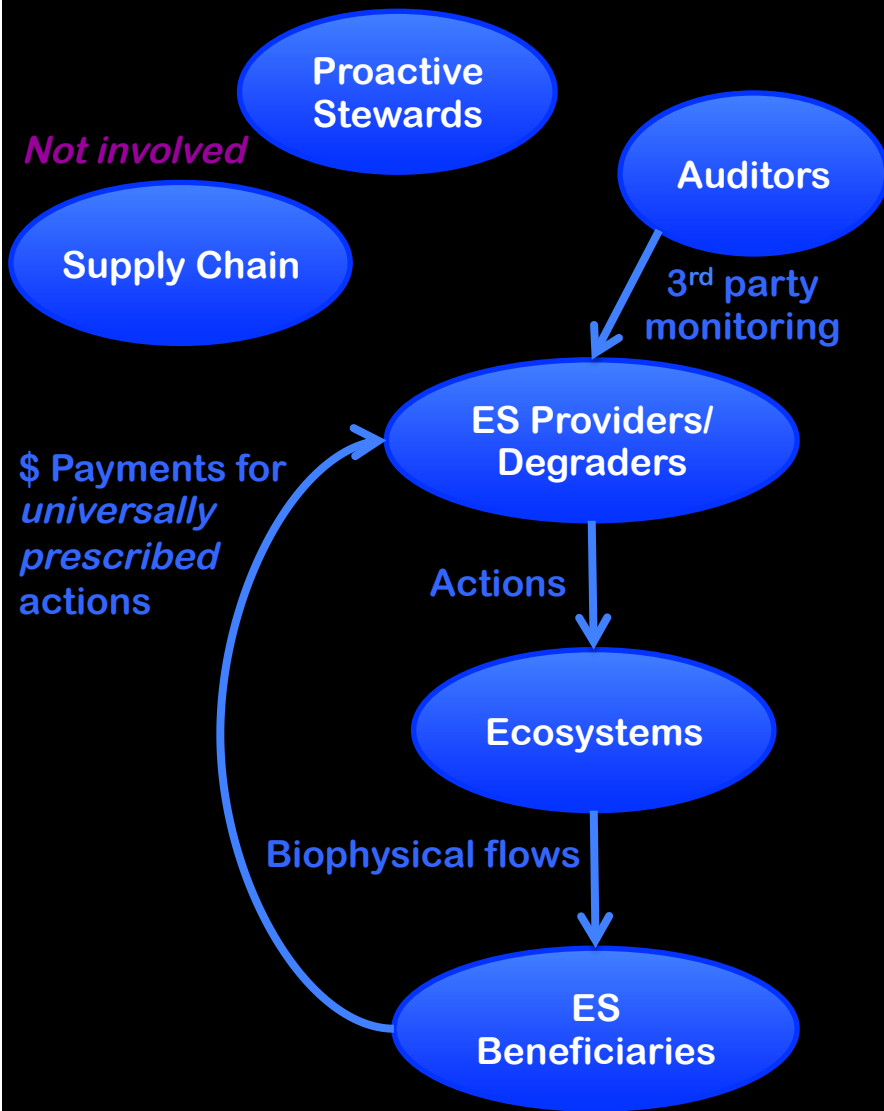
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1. Two kinds of environmental values: intrinsic, instrumental  
NO. There are also *relational values*
2. Values are measures *of* things  
... or statements *about* things (e.g., desired relationships)
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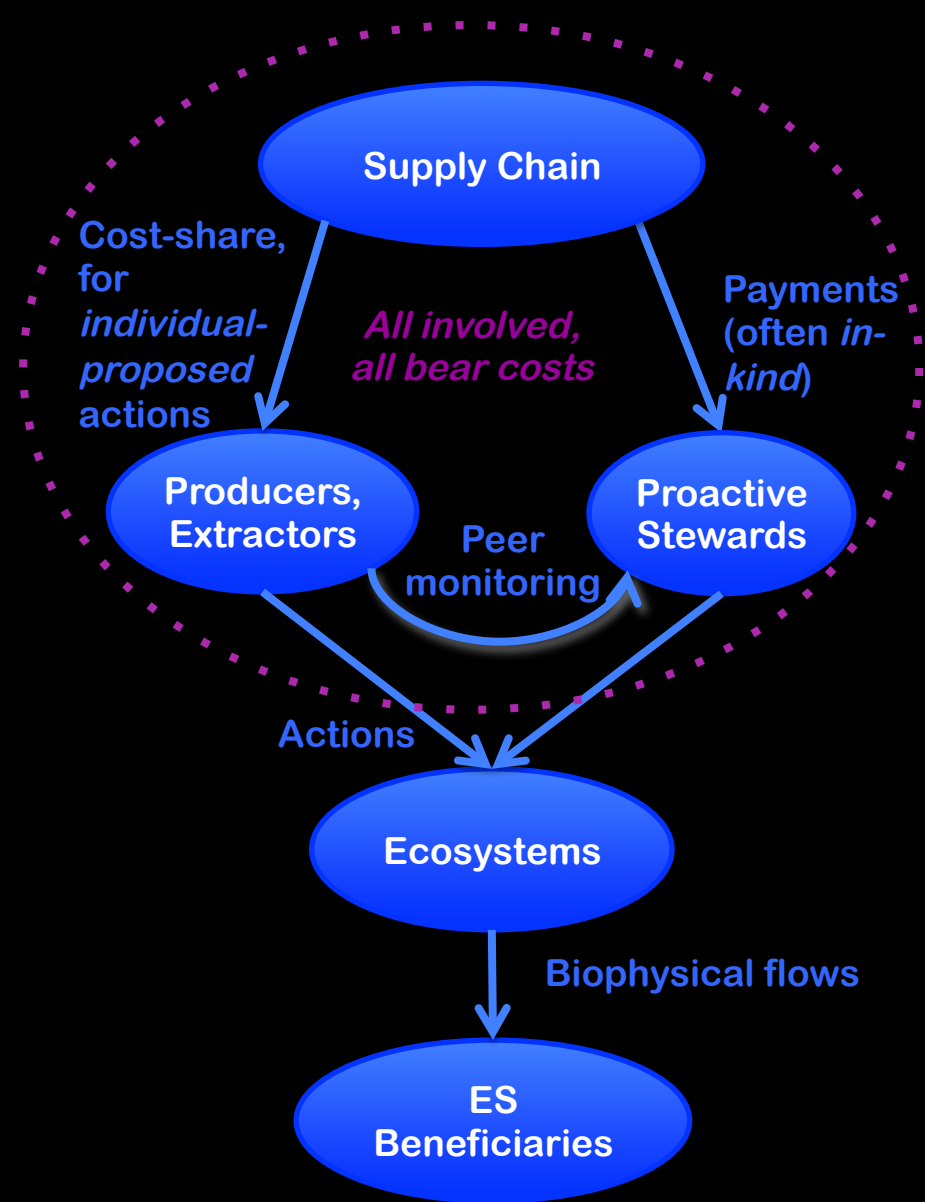
## 2. Misplaced Rights & Responsibilities



*Polluter is paid*



**A. Old PES**



**B. Reimagined PES**

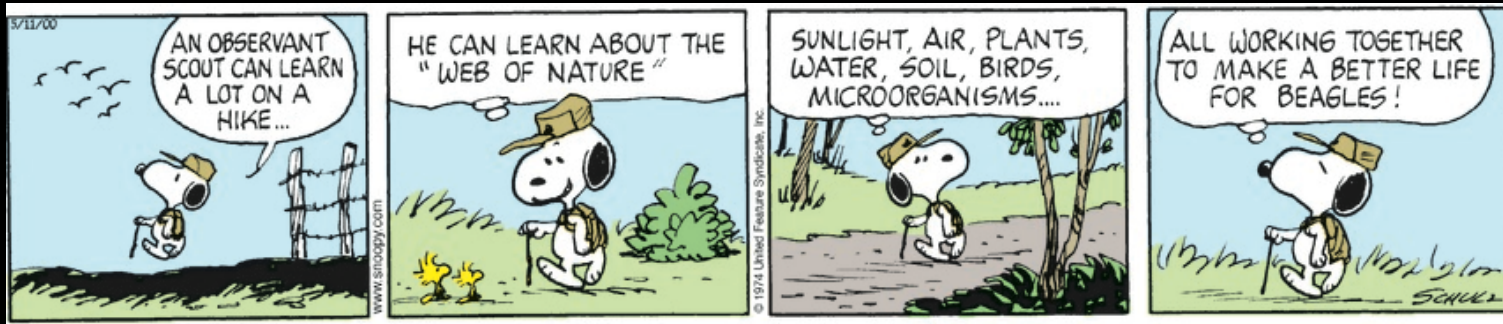
# Values: Law 3

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... or to determine appropriate institutions & policies
4. People are mainly motivated by instrumental values

# Motivations

- Instrumental values only one moral dimension



- Actually, 5 moral foundations: **purity/sanctity**, **authority/respect**, **in-group/loyalty**, **fairness/reciprocity**, and **harm/care**\*
- *In practice, all 5 are largely relational*

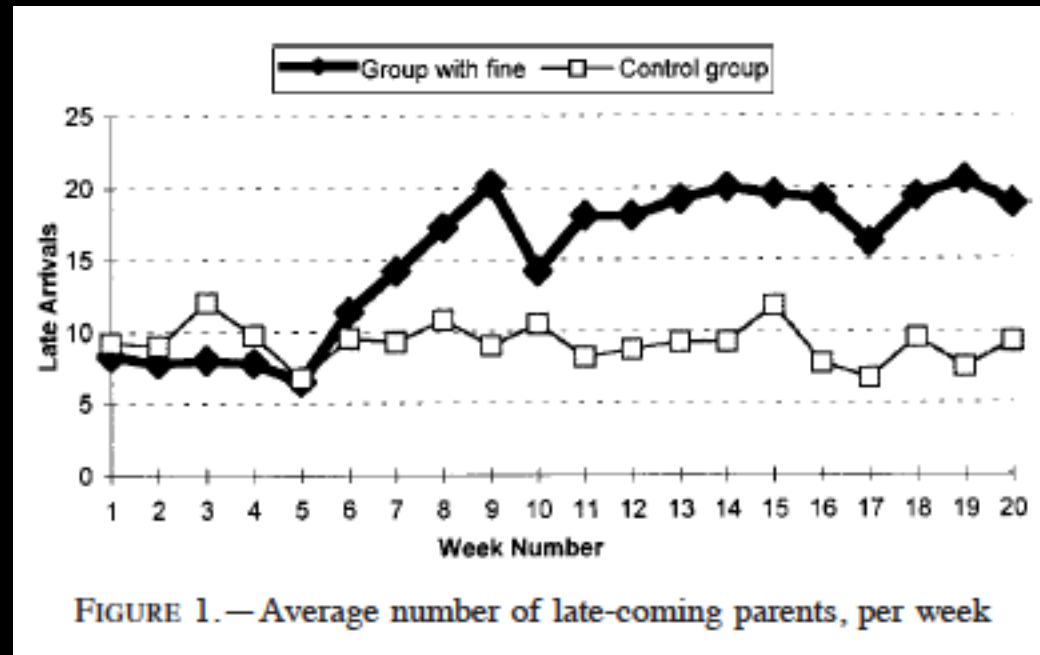
# Relational Values

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Prominent across a wide swath of humanity:

- Classic (e.g., Aristotelian)
- Contemporary Western
- Indigenous (e.g., *Tsawalk*, *Sumak kawsay*)
- Feminist (e.g., care ethics)
- Eastern philosophies (e.g., Confucian, Buddhist)

# 3. Motivational Crowding Out



*Money breeds mercenaries*

Gneezy & Rustichini 2000 "A fine is a price"  
Chan et al. 2017 *Ecol. Econ.*



# PES → Auctions → Awards

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“Land steward: How can we help you do more?”

1. Reward stewardship, not an output
2. Steward is paid
3. Co-pay to crowd *in* intrinsic motivations
4. Forget ss-additionality: focus on value change
5. Honour code & peer monitoring?
6. Impact offsets / User fees for nature
7. Inspire agency

# Values: Law 4

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NO. There are also *relational values*
2. Values are measures *of things*  
... or statements about things (e.g., desired relationships)
3. Values are used to maximize well-being, e.g., in CBA  
... or to determine appropriate institutions & policies
4. People are mainly motivated by instrumental values  
NO. And relational values present great opportunities

# Acknowledgements

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Terre Satterfield

PNAS coauthors

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CHANS = Connecting Human and Natural Systems



**N SERC**  
**CRSNG**



Canada Foundation for Innovation  
Fondation canadienne pour l'innovation

# Questions?

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# References

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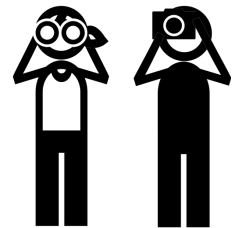
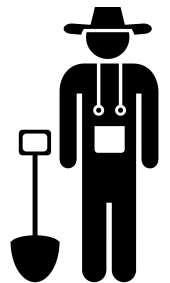


# Empirics

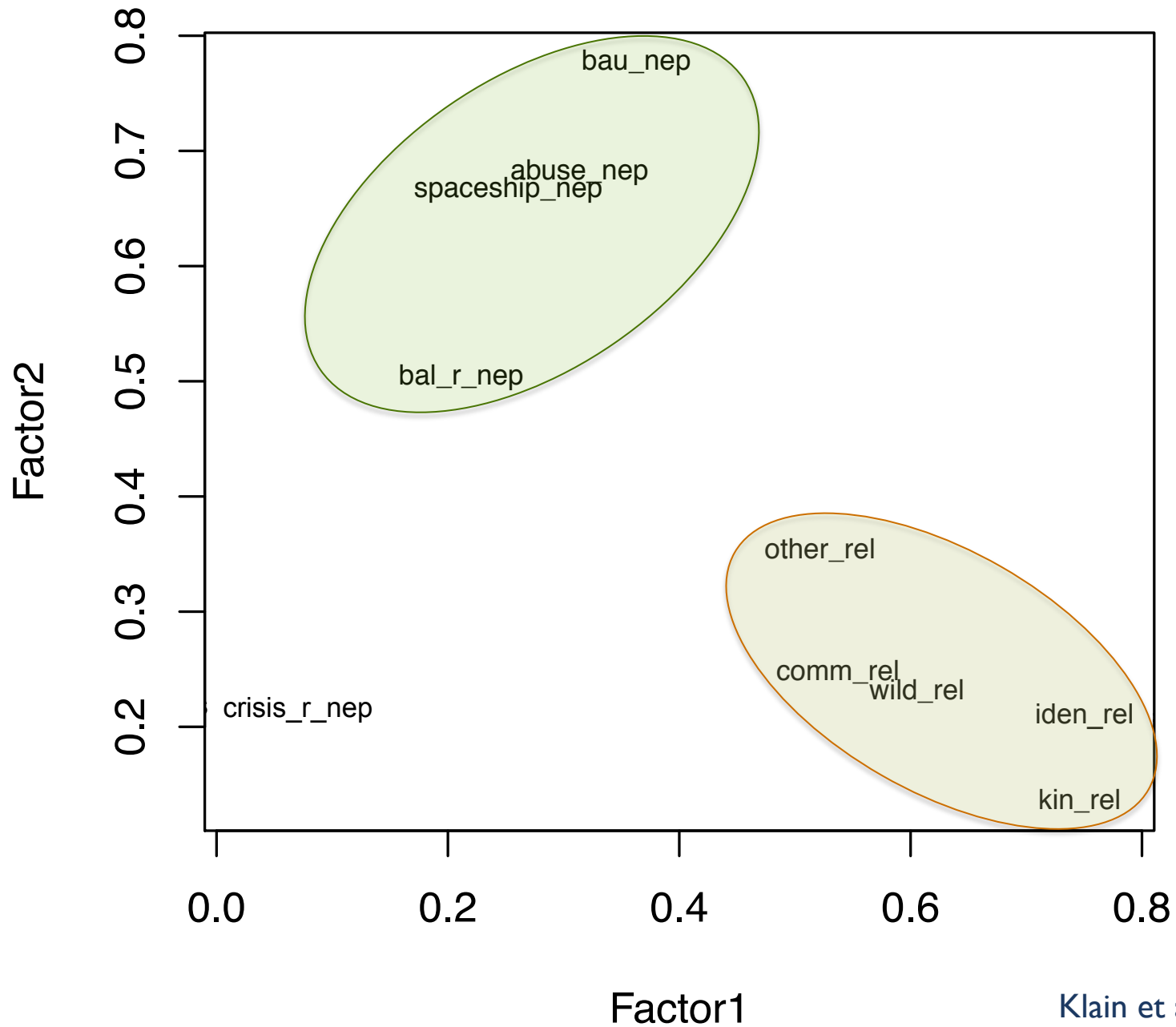
- 1. Do strong relational values statements resonate?*
- 2. Do such statements correlate, as a single construct?*
- 3. Do relational values resonate in the same way as intrinsic or instrumental values, etc., or differently?*

# Methods

- Included various value statements in surveys of ...
  - 400 M-Turkers in NE USA (online)
  - 253 farmers in Costa Rica (paper)
  - 350 tourists in Costa Rica (paper)
- Analyzed via PCA, factor analysis

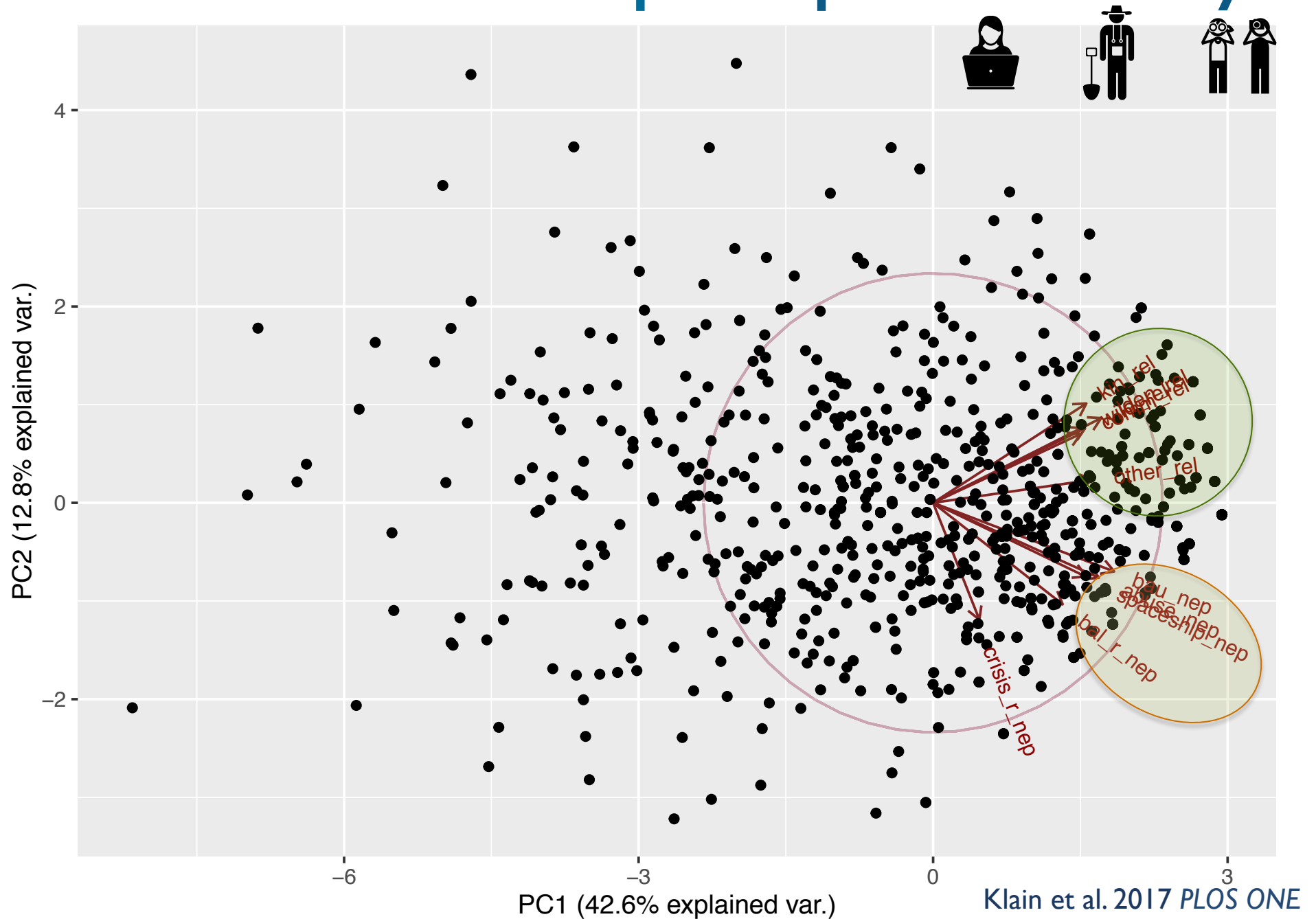


# Relational vs. NEP: People respond differently





# Relational vs. NEP: People respond differently



# Empirics: Discussion

*1. Do strong relational values statements resonate?*

*Yes!*

*2. Do such statements correlate, as a single construct?*

*Yes*

*3. Do relational values resonate in the same way as intrinsic or instrumental values, etc., or differently?*

*Differently*

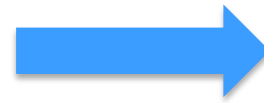
A new values paradigm?

At the very least, some new leverage.

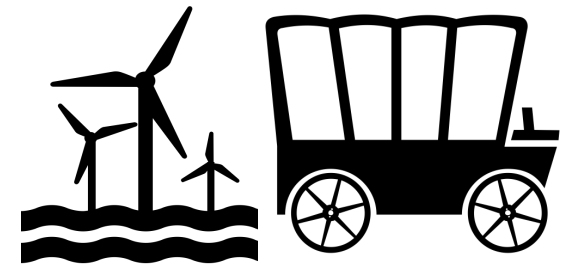
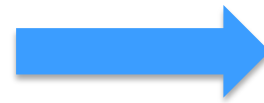
# Relational values help explain attitudes re: wind farms



NEP  
0.118\*\* + Relational  
0.186\*\*

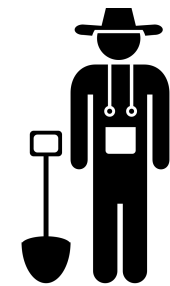


NEP  
0.194\*\* + Relational  
0.381\*\*



# Farm attitudes align with RVs, more than NEP

- Lifestyle, economic and conservation attitudes
- Relational values correlated positively to lifestyle and conservation attitudes and negatively to economic attitudes
- NEP did not correlate to any of the attitudes



|  | Lifestyle          | Economic | Conservation      | Average NEP | Avg metaphors      | Avg RV |
|--|--------------------|----------|-------------------|-------------|--------------------|--------|
|  | -0.04              |          |                   |             |                    |        |
|  | <b>0.44</b><br>*** | 0.07     |                   |             |                    |        |
|  | 0.03               | -0.05    | <b>-0.01</b>      |             |                    |        |
|  | 0.13               | -0.13    | 0.12              | -0.04       |                    |        |
|  | <b>0.22</b><br>**  | -0.12    | <b>0.18</b><br>** | -0.02       | <b>0.64</b><br>*** |        |

# Discussion

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- Are ES our instrumental use of instrumental values for intrinsic value protection?
- Calculation/depiction of instrumental values is rarely the route to lasting conservation
- ... And it brings its own relational baggage
- So, don't employ ES without considering relationships and values—existing and desired

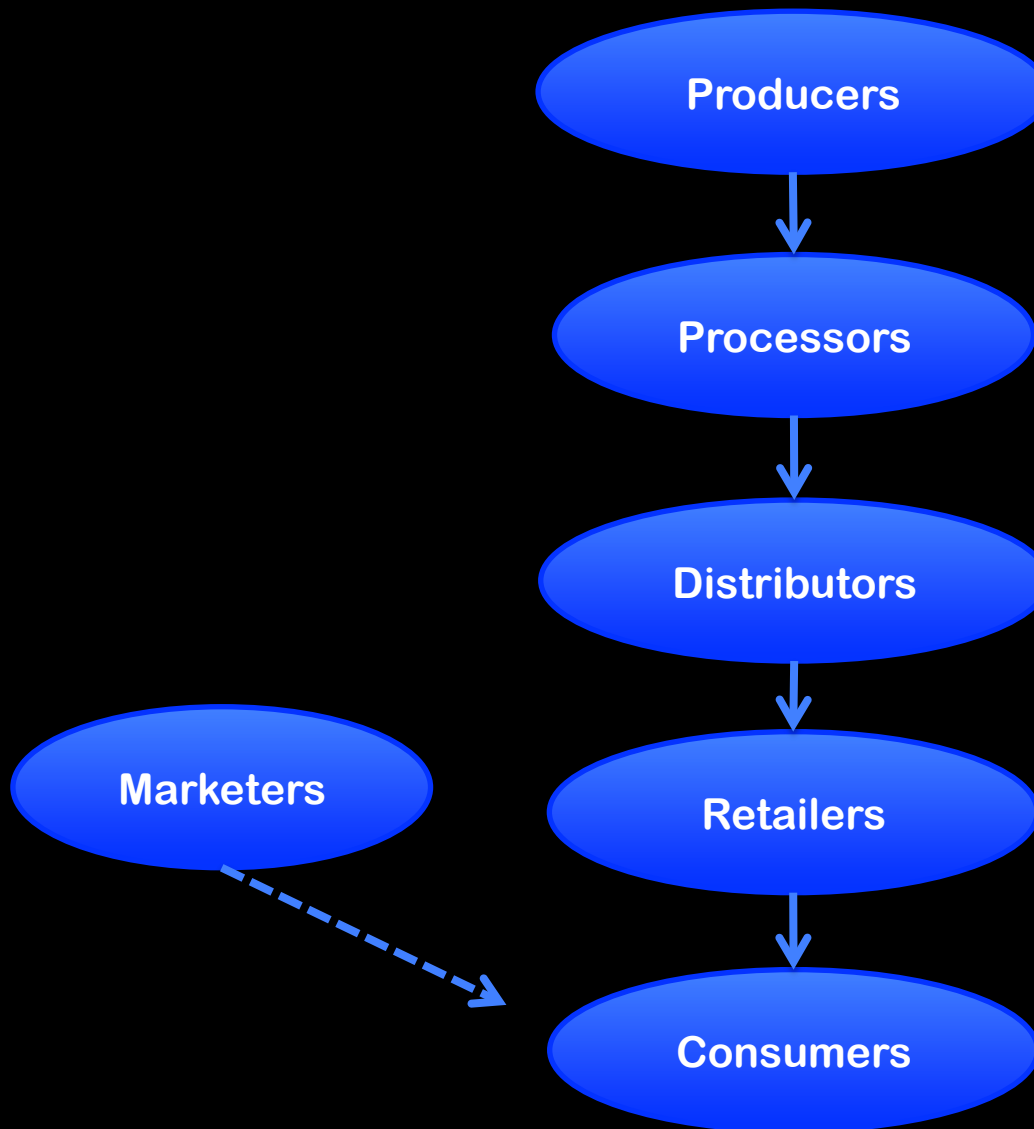
# Discussion

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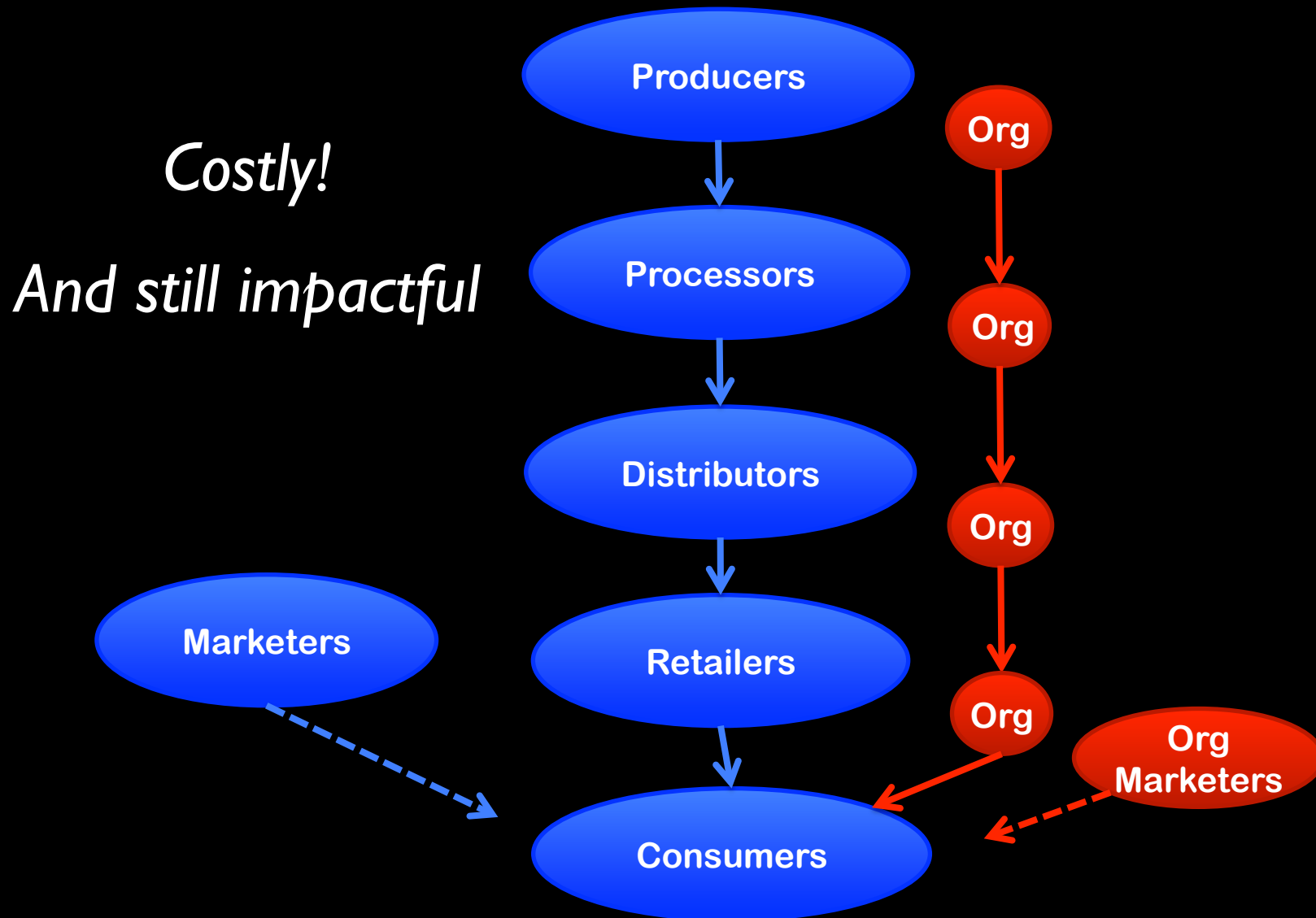
- The domination of intrinsic & instrumental values is based on myths
- *Relational values* are broadly motivating, central to ES and to well-being
- *It's time to engage directly with relational values, actively bolstering and fostering ones consistent with conservation*

# Certification is cool, but ...

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# Certification is cool, but ...





# E.g., Ocean-Positive (O+)

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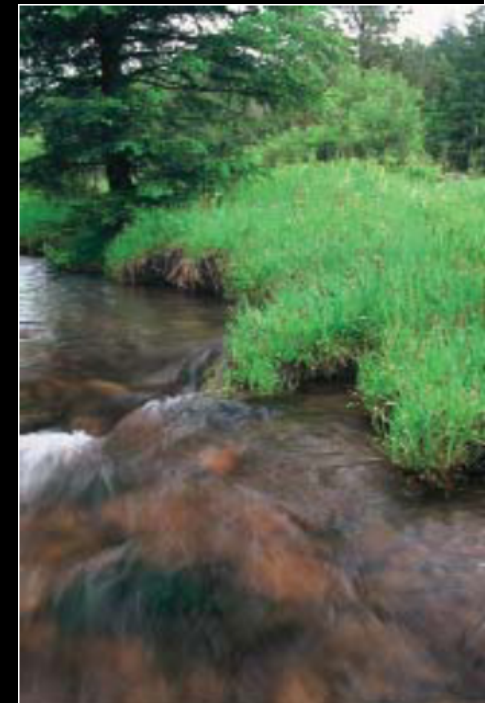
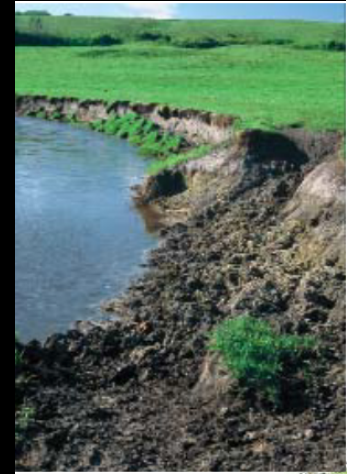
Connect consumer/retailer concern to actions that do good, linked to but de-coupled from the product



# E.g., Project Beef

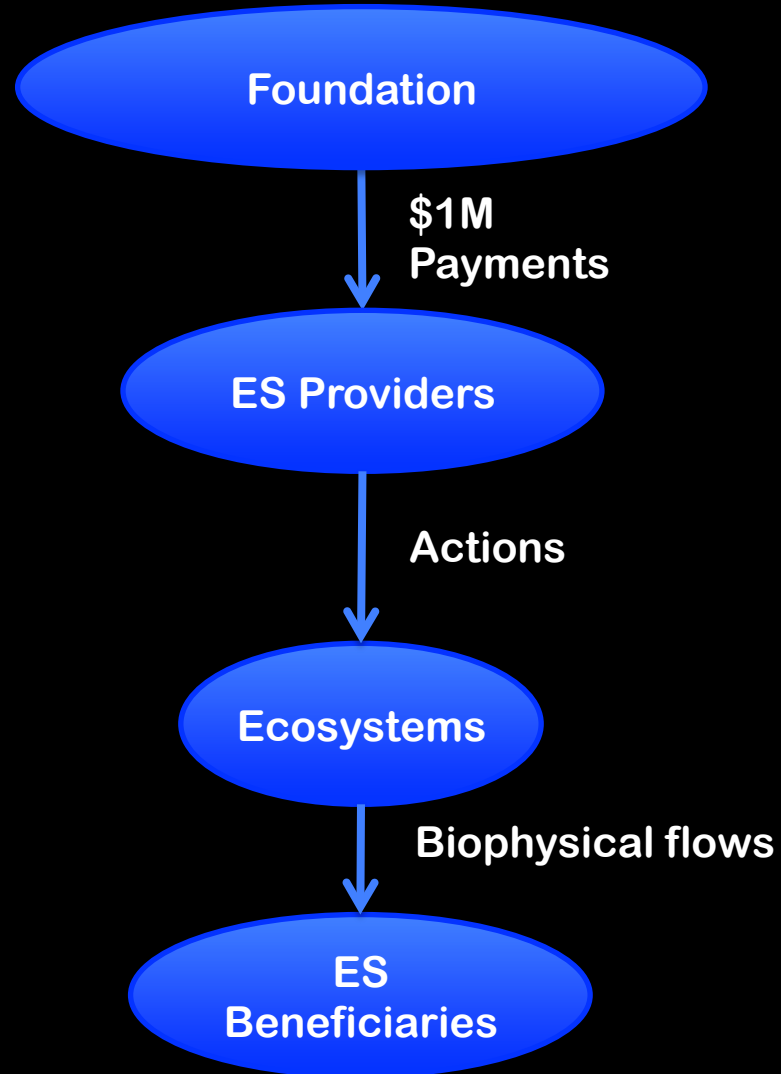
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# Stewardship Bonds

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# Stewardship Bonds

