



The Un-Quantifiable Values of Conservation Lands

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Why an economic analysis is incomplete
and in part inappropriate

Why there are no values that are not
economic (i.e it's the economy stupid!)

Why an economic analysis is incomplete and in part inappropriate



An economist
“knows the price of everything
and the value of nothing”.

Pimm 1997



An economist

“knows the price of everything and
the value of nothing”

“there is more to a whale than its
meat”

Pimm 1997



“The spiritual value of nature is not an ill-defined figure to incorporate into a total economic value framework, it is the framework within which we humans and our plans are graciously assigned a significance. That may be the greatest value of nature.”

Cooper 2010

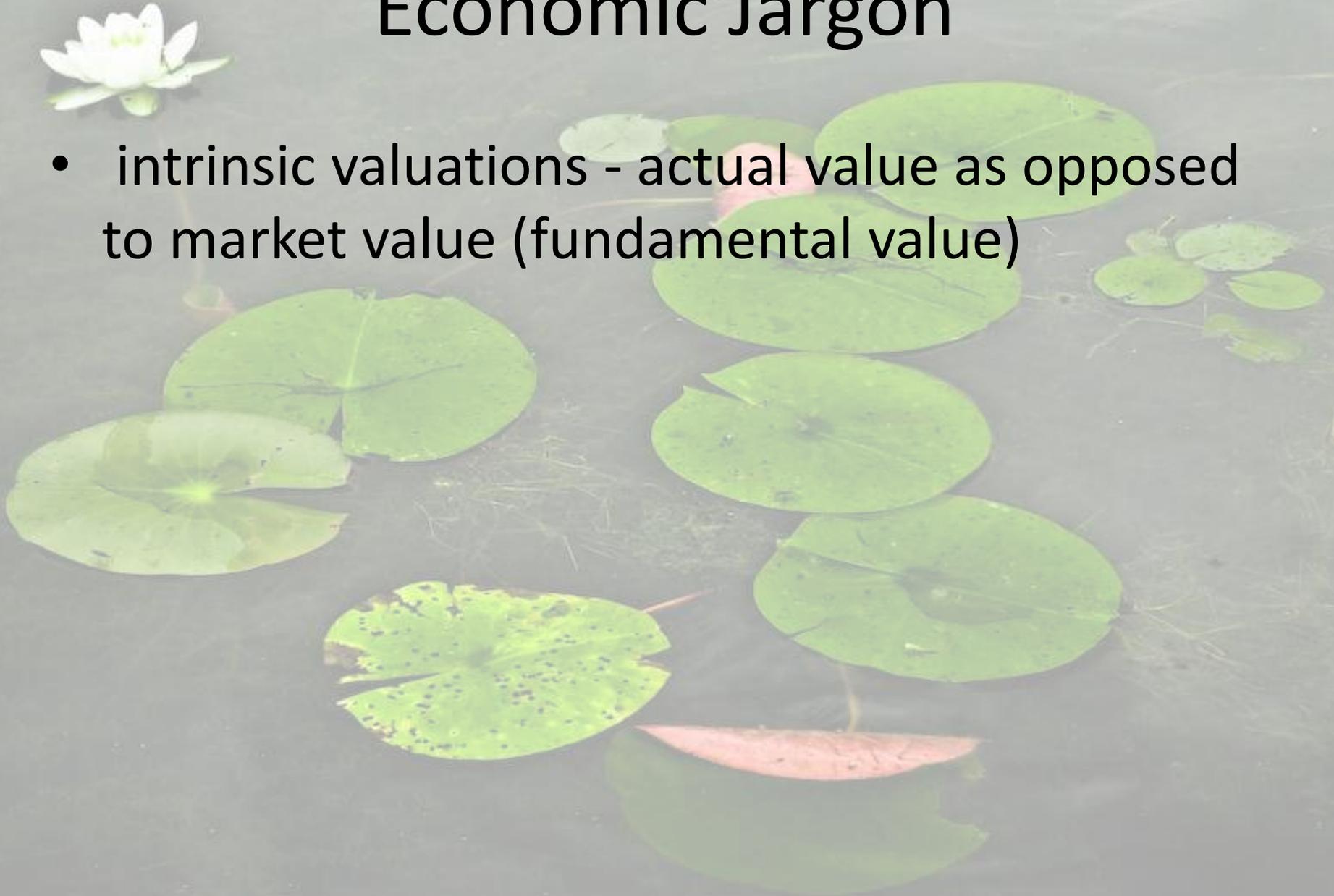


"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise"
(Leopold 1949)

Why there are no values that are not economic

Economic Jargon

- intrinsic valuations - actual value as opposed to market value (fundamental value)



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- Total Economic Value (TEV) – use and nonuse values of an ecosystem



Total Economic Value (TEV)

- **Use Value – Direct:** Obtained through a removable product in nature (e.g. timber, fish, water).
- **Use Value – Indirect:** Obtained through a non-removable product in nature (e.g. ecosystem services).
- **Option Value:** Placed on the future ability to use the environment. This reflects the willingness to preserve an option for potential future use.
- **Non-Use Value:** Placed on a resource that will never be used, separated as existence value or bequest value.

Why there are no values that are not economic

Total economic values of protected areas



Use values

Non-Use values

Direct Use

Recreation

Sustainable
Harvesting

Wildlife
Harvesting

Fuel-wood

Grazing

Agriculture

Gene

Education

Research

Indirect Use

Ecosystem Services

Climate stabilization

Flood control

Ground-water
recharge

Carbon sequestration

Habitat

Nutrient retention

Natural disaster
prevention

Watershed protection
Natural services

Option

Future Information

Future uses

Bequest

Use and non-use
values for legacy

Existence

Biodiversity

Ritual or spiritual
values

Culture, heritage

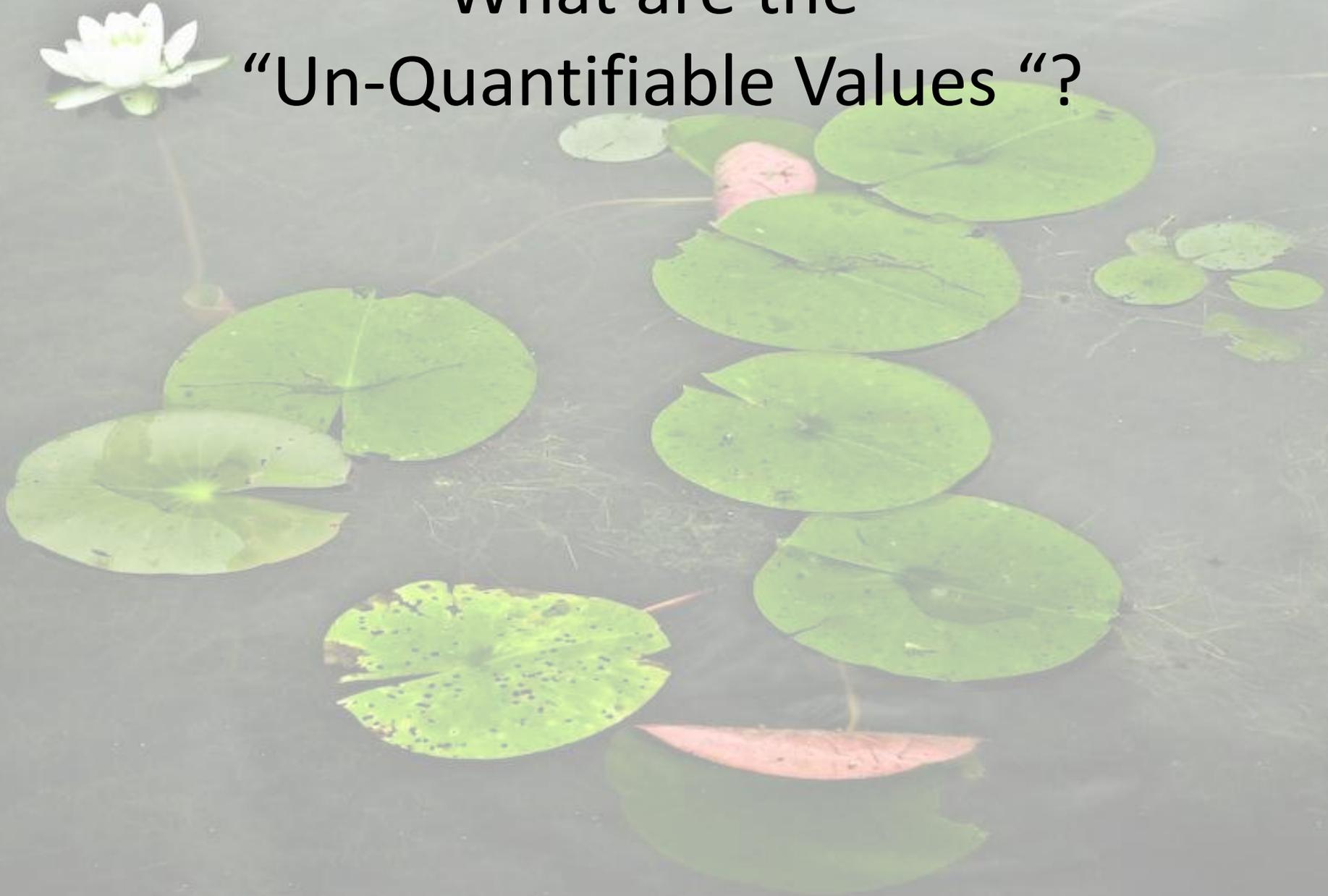
Community values

Landscape

Phillips (1998), adapted from Barbier et al., (1997)

Why there are no values that are not economic

What are the “Un-Quantifiable Values “?



Why there are no values that are not economic

What are the “Un-Quantifiable Values “?

- Psychological, cognitive, attitudinal, spiritual
- Health
- Cultural, societal, community

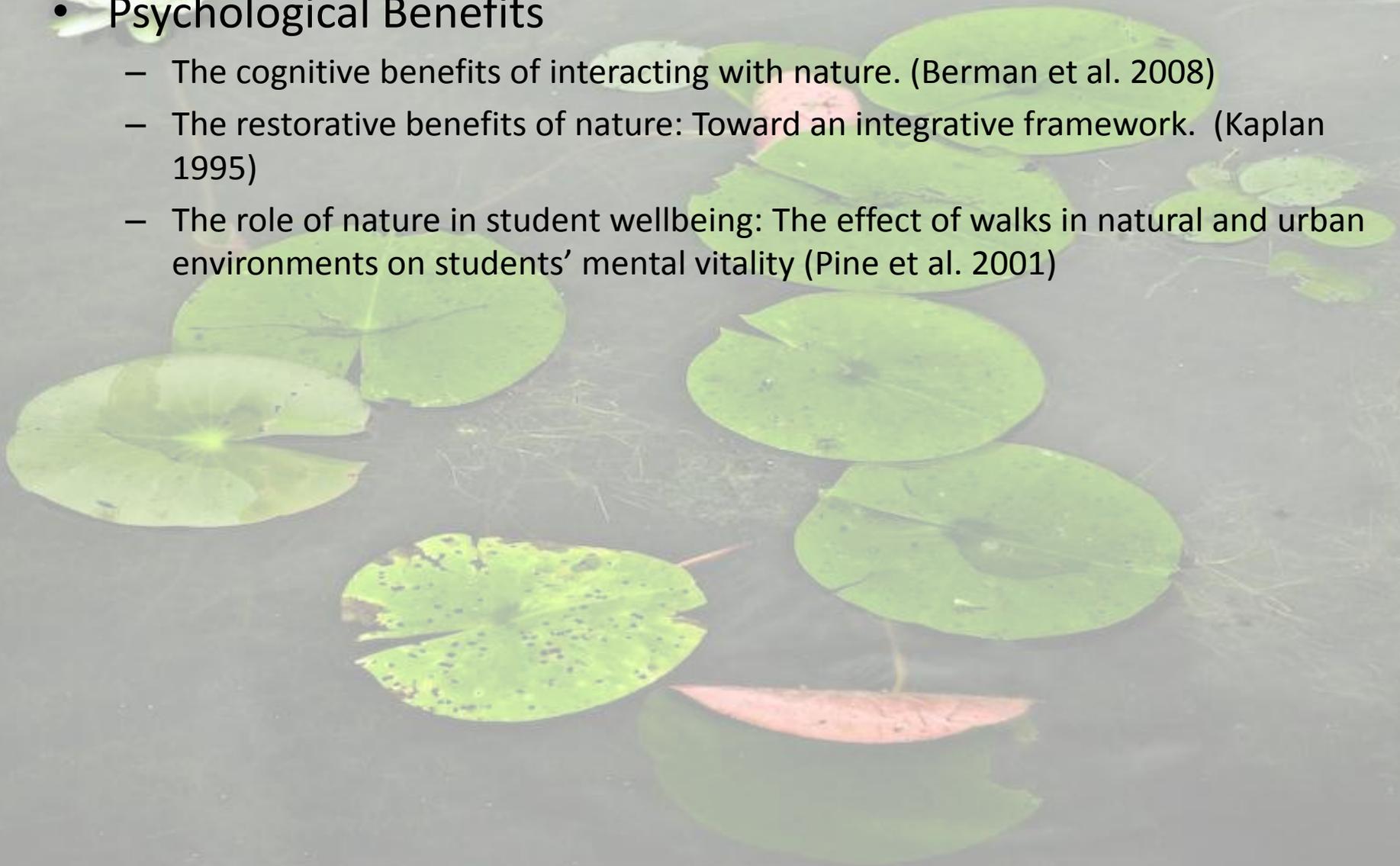
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Unexpected Economic Benefits



- Psychological Benefits

- The cognitive benefits of interacting with nature. (Berman et al. 2008)
- The restorative benefits of nature: Toward an integrative framework. (Kaplan 1995)
- The role of nature in student wellbeing: The effect of walks in natural and urban environments on students' mental vitality (Pine et al. 2001)



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- Health Benefits

- Green is good for you. (Clay, R.A. 2008)
- Accounting for benefits and costs of urban greenspace. (McPherson 1992)
- How nature contributes to physical and mental health. (Pretty 2004)
- Coping with ADD: The surprising connection to green play settings (Taylor et al. 2001)

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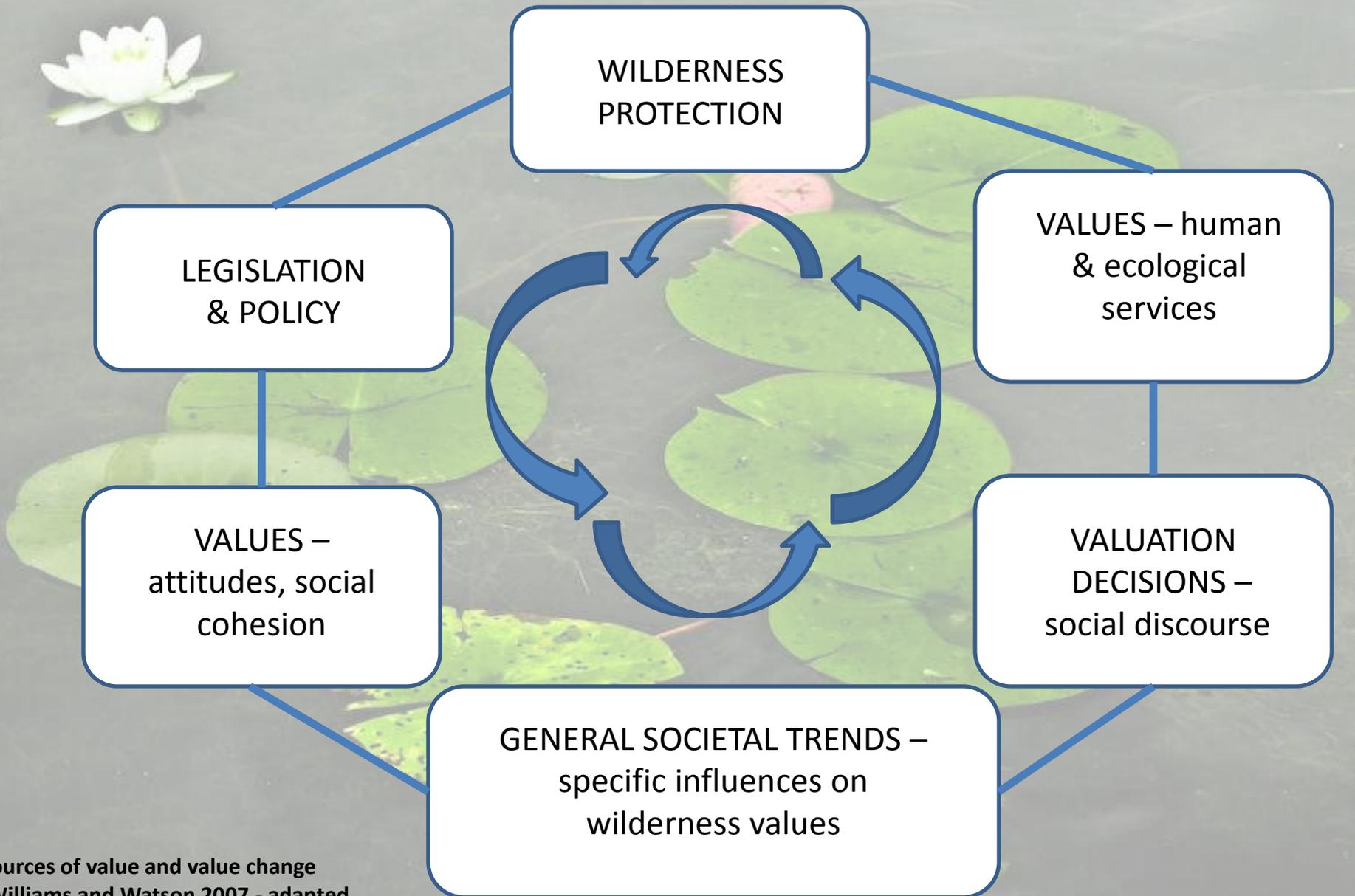
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- Cultural/Societal Benefits

- The spiritual dimension of Protected Areas: overlooked and undervalued (Higgins-Zobig 2008)
- Can Nature Make Us More Caring? Effects of Immersion in Nature on Intrinsic Aspirations and Generosity (Weinstein et al. 2009)
- Wilderness Values: Perspectives From Non-Economic Social Science (Williams and Watson 2007)

Why there are no values that are not economic



Sources of value and value change
(Williams and Watson 2007 - adapted
from Watson and Landres 1999).

Why there are no values that are not economic



“Without healthy ecosystems, lasting and sustained social and economic development is impossible”

(Janishevski, *et al.* 2008)

Why there are no values that are not economic



“Without healthy ecosystems, lasting and sustained social and economic development is impossible”

(Janishevski, *et al.* 2008)

“To save every cog and wheel is the first rule of intelligent tinkering”

(Leopold 1949)

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