

# Mining in the Conservation Estate

Valuing natural resources:  
some considerations from an economist's point of view

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*PANEL DISCUSSION*

# Why is it so important to put a value on nature?????

*Putting a monetary value on nature is controversial*

- ❑ some argue nature has an “**intrinsic value**”
- ❑ many argue the **economic framework is inadequate** to the task of valuing nature

...how can we possibly value ecological risk or basic ecosystem functions?

Constanza *et al.* (1997) published an *aggregate annual value* of ‘nature’s services’ at \$18-61 trillion

does this make sense????

## A pragmatic perspective ...

“Valuation is fundamental to an action-oriented ecological economics. There is no escape from the phenomenon of **opportunity cost** in a finite world.” (D. Pearce)

To economists choice cannot be dissociated from valuation  
→ choices reveal preferences, i.e. to choose one option in preference to another is to value it more highly!

*Putting it in context...*

government's proposal to mine within the conservation estate shows there is a real **opportunity cost** to preserving some of NZ's nature  
namely, the **value of mining exploits**

# What to do?

Following David Pearce's paradigm...

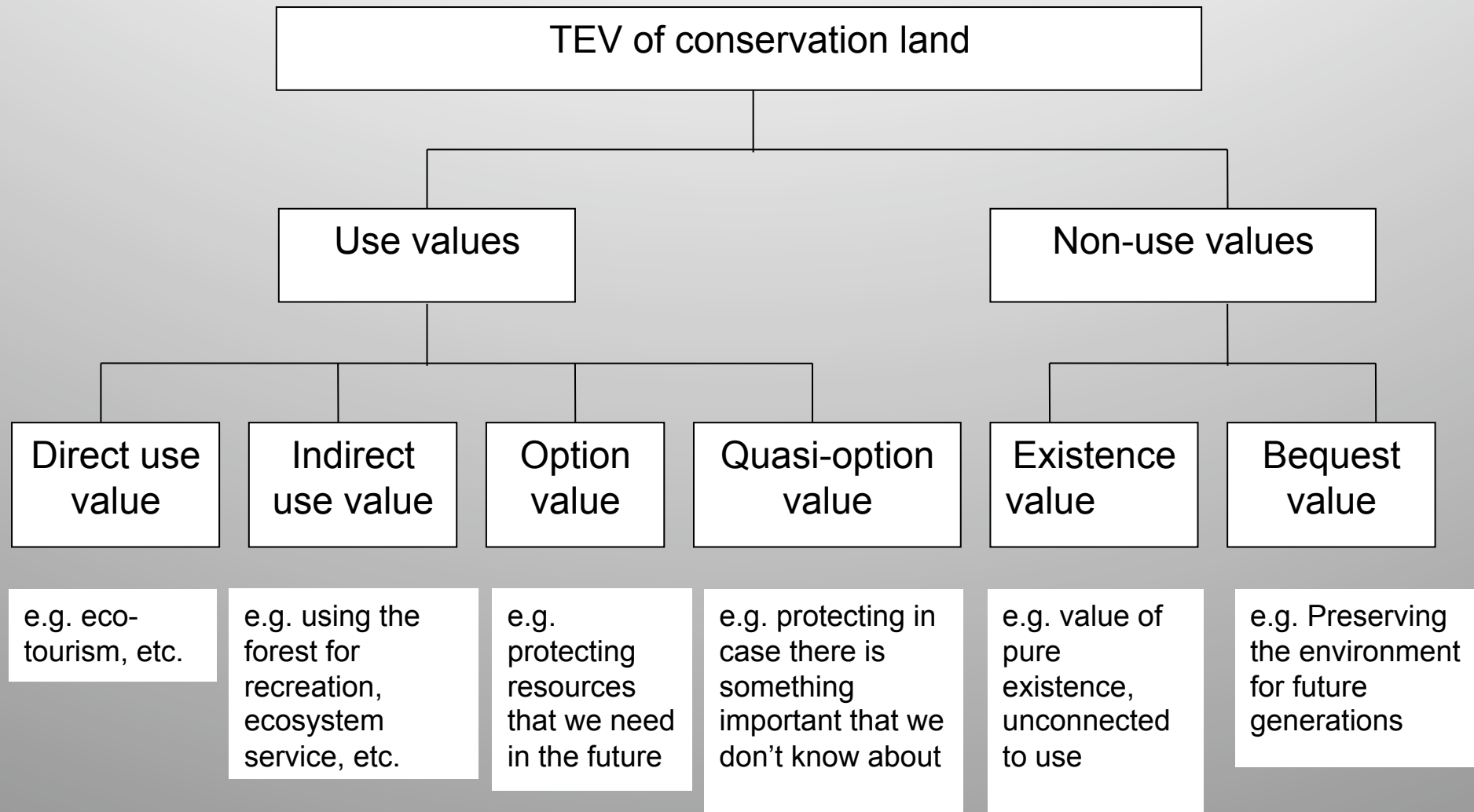
1. The values of 'nature' or biodiversity have to be demonstrated to those who make the decision
2. If these values are found to be significant, a way must be found to appropriate or capture them

## ***Key question:***

will the calculation of cost and benefits of preserving nature make a case for conservation?

I.e. will the demonstrated values outweigh the benefits from mining?

# The Total Economic Value (TEV) approach



# Attaching values to indirect and non use values is problematic ...

*Much criticism outside and within economics to the use of methods such as*

◇ **contingent valuation methods** (“how much are you willing to accept for mining not to occur within the conservation estate?”)

◇ **benefit transfer** (transferring values captured at one place and time to environmental goods & services at another place and time)

◇ **replacement cost methods** (how much would it cost to restore/replace the environmental service in question?)

# Alternatives to the TEV approach?

- Pluralistic / multi-scalar / multi-criteria method?
- Option and non-use values: issues of irreversibility and patrimony?

*But how pragmatic are these, and how will they be incorporated in the government's cost-benefit analysis?*

## Some thoughts for a submission:

- ❖ We need an informed and transparent debate: do we apply a TEV approach or do we as a society choose a more pluralistic approach?
- ❖ What type of values can be **demonstrated**? What exactly is the opportunity cost (i.e. how much is the government expecting to generate in revenue)?
- ❖ If the demonstrated values are significant, how can we **appropriate** them? Should we start charging the likes of Peter Jackson for using conservation land in films?