

1. The values society places on natural resources and the environment are changing

- Historically **forest** were valued solely for timber harvests and 'cleared' land; now recognize benefits from standing forests.
- **Fisheries** historically considered limitless, but many harvested to point of collapse.
- **Biodiversity** historically not considered as a resource; some species (nuisances) systematically eliminated, others systematically introduced.
- Concern over **fossil fuels** historically limited to fears of 'running out'; now recognized that use leads to climate change and air pollution.

2. Traditional policy approaches have often made matters worse rather than better:

- Traditional management often based on **physical principles** for management, **such as MSY** in fisheries and forestry.
- Traditional **public forest management** has led to wasteful harvesting; wrong harvest ages, wrong forests.
- Traditional **fisheries management** has caused economic waste: low returns, low wages, chronic unemployment, over-capacity, diminished stocks.
- Attempts to **control species loss** by land-use restrictions (ESA) have led to perverse incentives, few successes.
- Failure to correct externalities from **fossil fuel** use has caused over-exploitation, pollution, climate change.

3. Correct application of economics can produce better outcomes.

- Use economics to understand and exploit **behavioral motivations** to achieve conservation and efficiency objectives.
- Economics leads to **property rights policies**:
 - for **fisheries** (ITQs);
 - for **forests** (controlling deforestation, promoting more efficient harvests);
 - cap and trade' policies to control externalities from **fossil fuels**.
- -for **biodiversity**, use of conservation easements, payments for ecosystem services.
- **Economics** can:
 - Help develop **appropriate goals** (B/C principle);
 - Provide guidance in **policy instruments** for achieving goals.
 - Prevent use/harvesting** when costs exceed benefits.