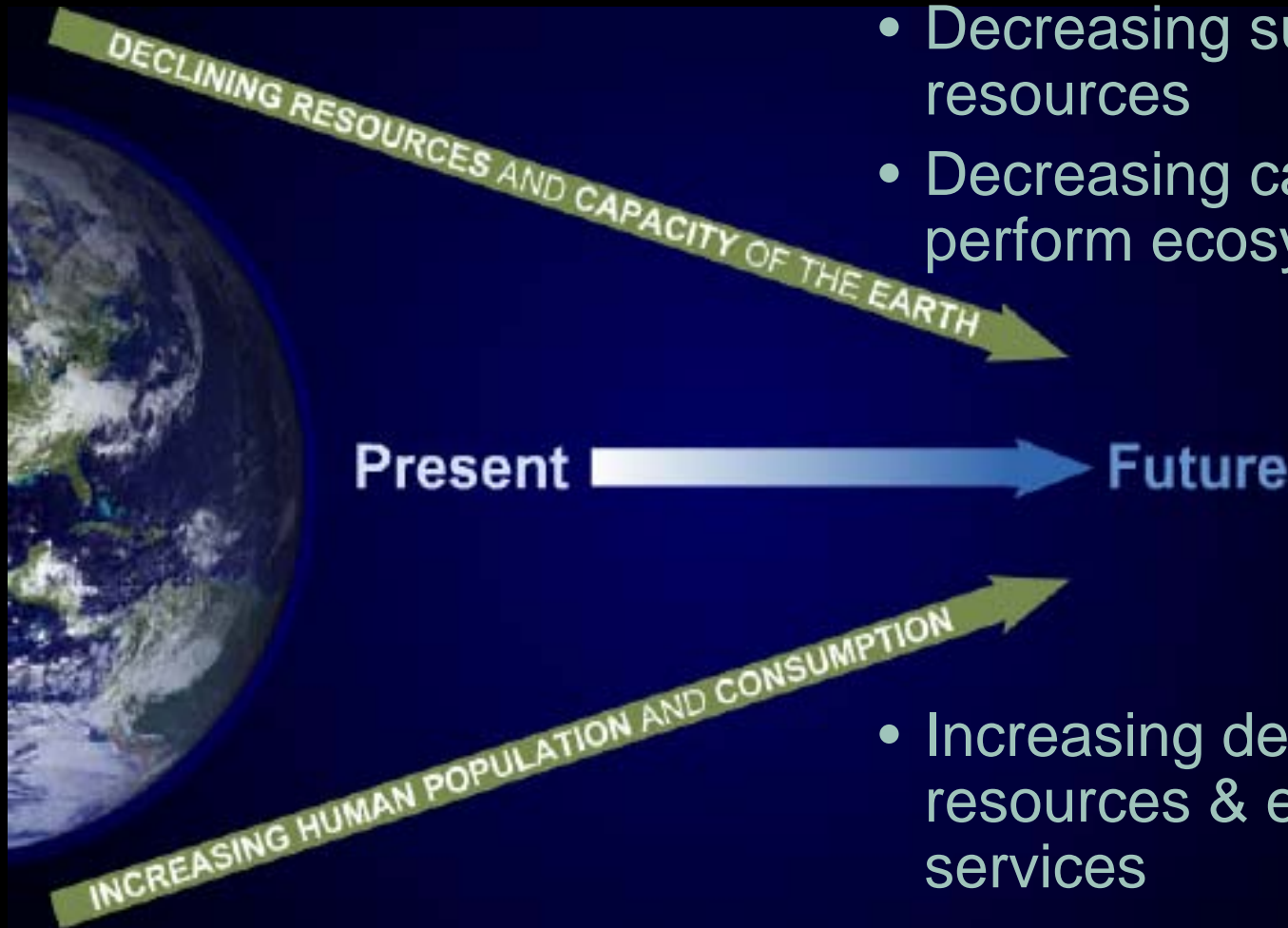


# A Supply & Demand Problem



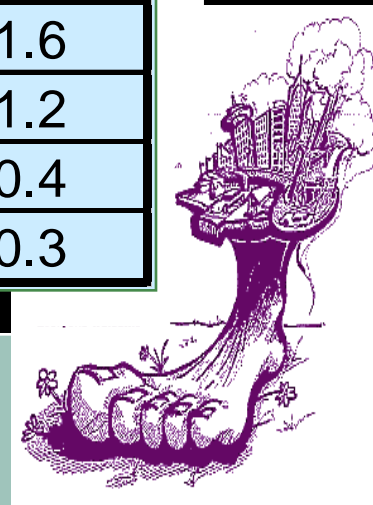
- Decreasing supply of natural resources
- Decreasing capacity to perform ecosystem services

- Increasing demand for resources & ecosystem services

# Ecological Footprints

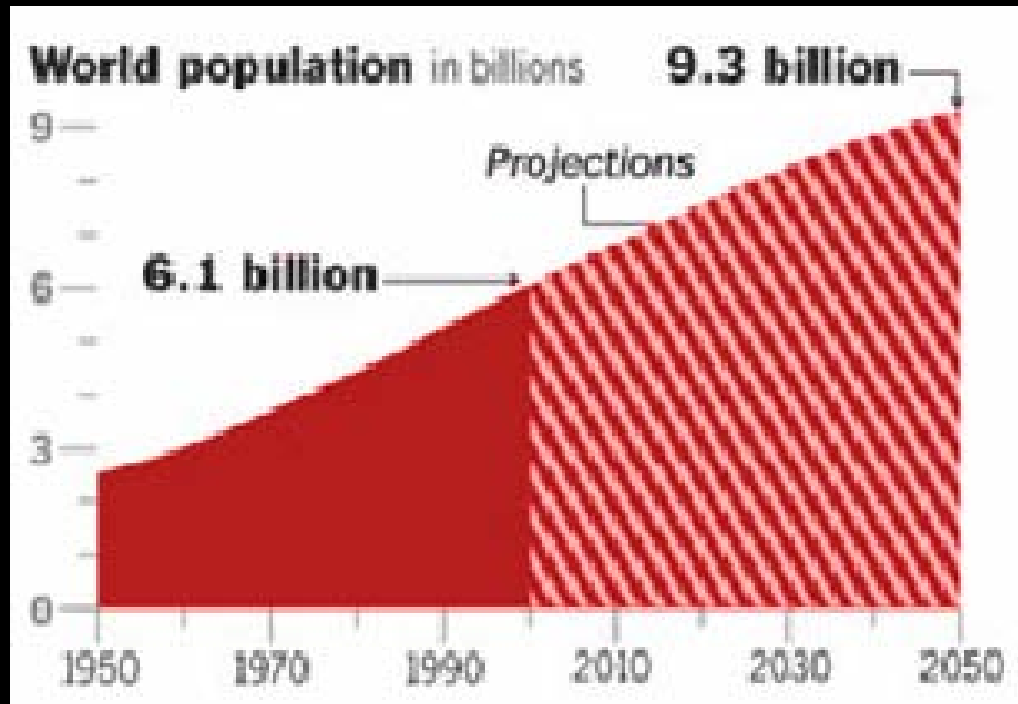
Demand  
exceeding  
supply

Country	Footprint [ha/cap]	Capacity [ha/cap]	Deficit [ha/cap]
United States	10.3	6.7	-3.6
Australia	9.0	14.0	5.0
Canada	7.7	9.6	1.9
Russia	6.0	3.7	-2.3
United Kingdom	5.2	1.7	-3.5
Japan	4.3	0.9	-3.4
France	4.1	4.2	0.1
Spain	3.8	2.2	-1.6
Mexico	2.6	1.4	-1.2
China	1.2	0.8	-0.4
India	0.8	0.5	-0.3



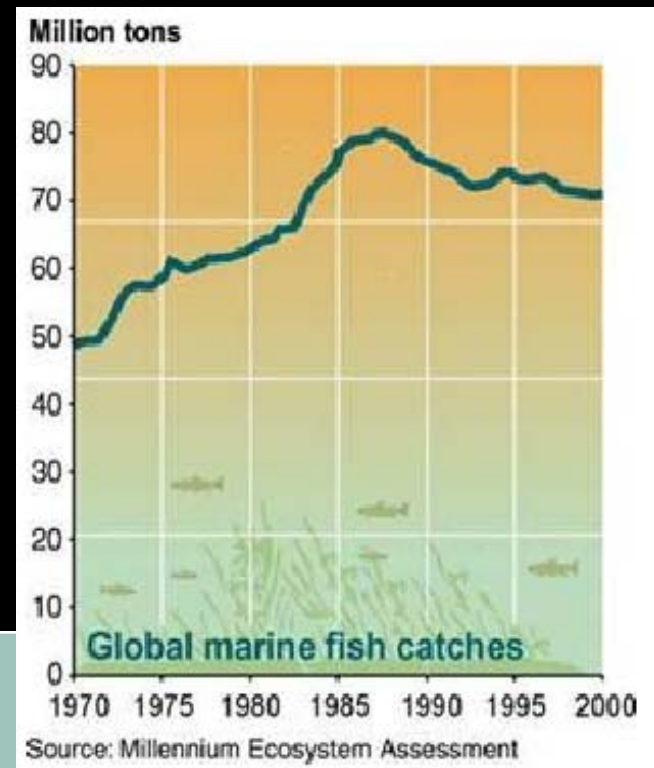
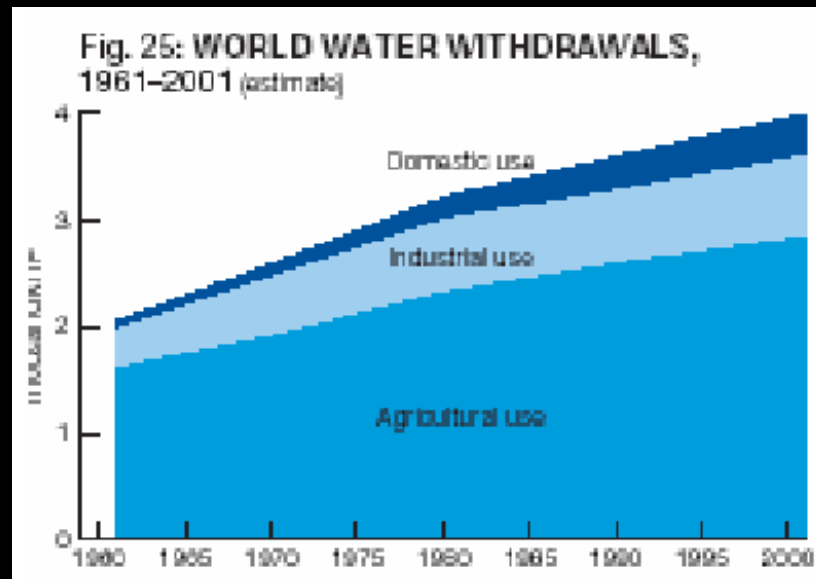
# The Global Situation

- Increasing population



# The Global Situation

- Increasing population
- ↓
- Increasing demands

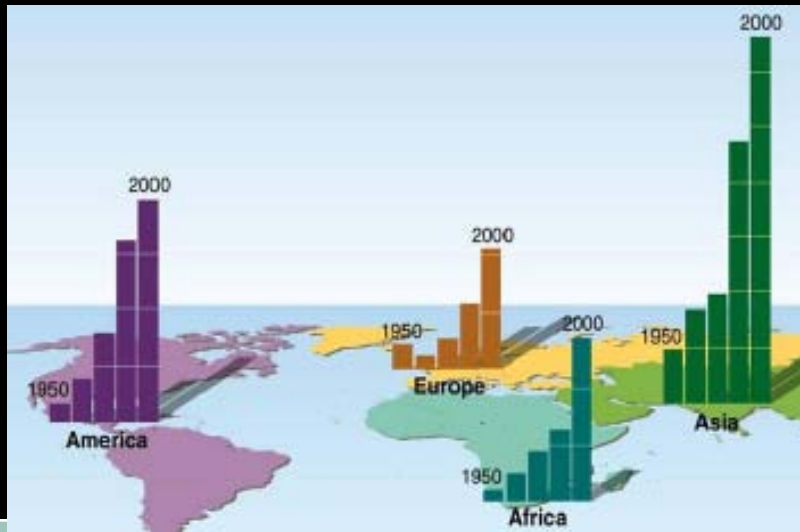


# The Global Situation

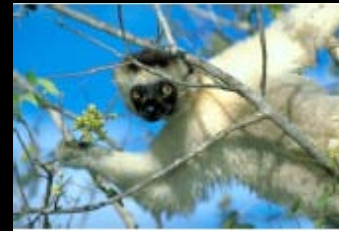
- Increasing population
- Increasing demands



- Cumulative impacts



- Dwindling supply



# Principles

Melbourne Principles

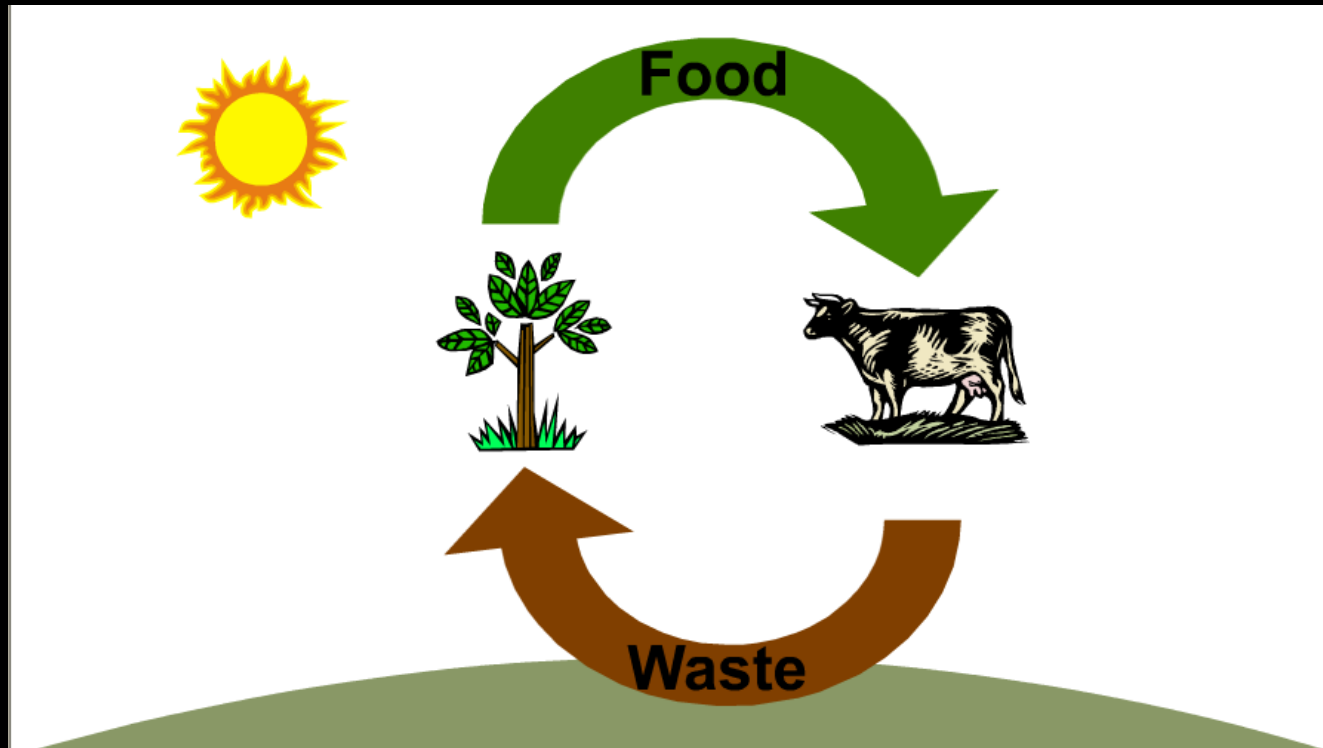
Ahwahnee Principles



Natural Step Principles

Smart Growth Principles

# Natural Cycles in Balance



# Disturbing the Cycles



Destroying the 'engine'



Inability of people to meet their needs

Digging it up too quickly



Poisoning the system



# The Natural Step Principles

1. Eliminate our contribution to increasing concentrations in nature of substances extracted from the earth's crust

- Use mined materials efficiently, in closed loops
- Use abundant metals
- Use renewables



# The Natural Step Principles

## 2. Eliminate our contribution to increasing concentrations in nature of substances produced by society

- Use synthetic materials efficiently, in closed loops
- Avoid harmful materials
- Use abundant / natural & biodegradable



# The Natural Step Principles

3. Eliminate our contribution to increasing degradation of nature by physical means
  - Efficient use of land and resources
  - Using previously developed lands



# The Natural Step Principles

4. Eliminate our contribution to the systematic undermining of people's capacity to meet their needs

- Promote basic needs for all
- Inclusionary decision making
- Affordability

