

World Population

- 1960.....3.04
- 1980.....4.45
- 2004.....6.37

- 2050.....8.9
- 2050.....10.6

(billions)

Fish Harvest

- 196036
- 1980.....72
- 2000.....131

(million tons)

Overfishing

- 1960..... 5% of world's marine fisheries fished to capacity or overfished
- 2000.....75%

Paper and Paper Products

- 1960.....77
- 1980.....169
- 2004.....335

(millions metric tons)

Deforestation

- Approximately 50% of the world's temperate and tropical forests have been lost.
- Tropics – deforestation at a rate of about 1 acre per second

US Land Use Changes

- Each year the US loses about 2 million acres of open space
- Plus
- About 1.2 million acres of farmland

Biodiversity Loss

- Millennium Ecosystem Assessment – links human activities to a substantial and irreversible decline in biodiversity and estimates that 10% to 30% of bird, mammal, and amphibian species are currently threatened with extinction.
- World Wildlife Fund – estimates that vertebrate populations have declined by one-third in the years between 1970 and 2003.

Biodiversity Loss

- International Union for Conservation of Nature states that:
 - 1 bird out of 8,
 - 1 mammal out of 4,
 - 1 conifer out of 4,
 - 1 amphibian out of 3, and
 - 6 marine turtles out of 7

are all threatened with extinction

Climate

- World Fossil Fuel Use

1960.....2.9

1980.....6.1

2004.....9.0

(trillions tons oil equivalent)

Carbon Dioxide

- Pre-industrial – 280 ppm
(not that high in the last 650,000 years)
- Today – 387 ppm
- Going up
- How far up?