

CLIMATE CHANGE'S EFFECT ON PEOPLE: PAST & PRESENT



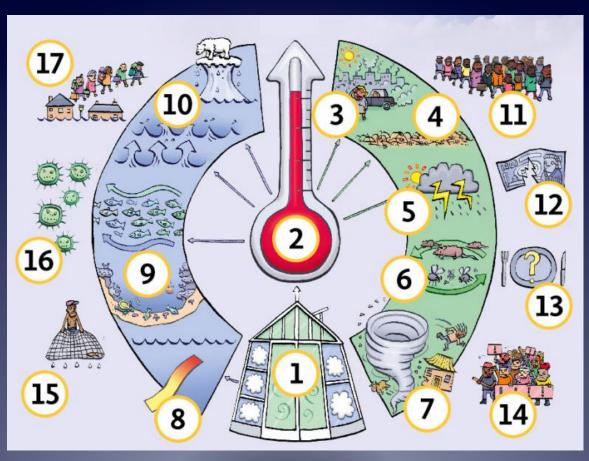


Topics for Discussion

- How Does Climate Change Effect Us?
- Climate Change in the Past:
 - Impact on the Mayan Civilization
- Climate Change in the Present:
 - Impacts on Louisiana's Isle de Jean Charles Band of Biloxi-Chitimacha Indians
 - America's First 'Climate Change Refugees'

How Does Climate Change Effect People?

(think-pair-share)

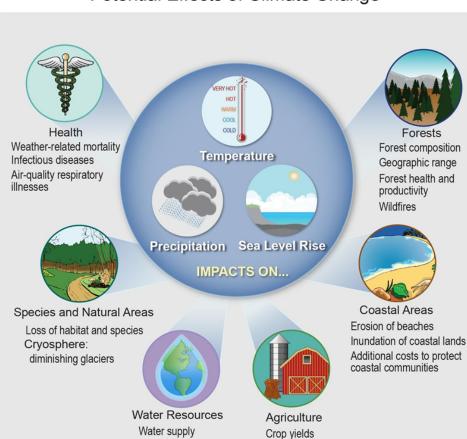


How Does Climate Change Effect People?

- Health
- Agriculture/Fisheries
- Energy
- Water
- Ecosystems
- Forests
- Coastal Areas
- Recreation



Potential Effects of Climate Change



Water quality

Competition for water

Irrigation demands

How Does Climate Change Effect People?

• Health

- Temperature-Related Illnesses
- Air Quality-Related Illnesses
- Spreading Diseases



Agriculture/Fisheries

- Crop & Species Losses = Food Shortages
- **Energy**
 - Increased Demand = Energy Shortages

• Water

- Low or Dried-Out Streams, Rivers, Ponds, Lakes (reservoirs)
- Public Water Supply Shortages, Irrigation Restrictions, Reduced Hydropower, Transportation Disruptions

How Does Climate Change Effect People?

- Ecosystems (plants and animals)
 - Altered/Diminished Habitat
- Forests
 - Spread of Pests
 - Increased Wildfires
- Coastal Areas
 - Coastal Cities Flooded
 - Coastal Wetlands Destroyed
- Recreation
 - No Snow = No Skiing/Snowboarding
 - Beach Erosion = No Beach



Impact of Climate Change on the Maya Civilization

- Maya civilization one of the most dominant indigenous societies of Mesoamerica (Mexico and Central America) before the 16th-century Spanish invasion. Experienced growth over 2,700 years between 3,800-1,100 years before present (B.P.), followed by collapse @ 1,100 B.P., and a 600-yr transition to villages
- Maya culture centered in one area (shown in green) Yucatan Peninsula (in modern-day Guatemala, Belize, parts of Mexican states Tabasco and Chiapas, and western parts of Honduras and El Salvador)





- EARLY MAYA PERIOD (3,800-2,250 B.P.)
 - Agricultural culture (corn [maize], beans, squash and cassava [manioc])
 - City and pyramid-builders Mirador one of the greatest cities ever built
- <u>CLASSIC MAYA PERIOD (2,250-1,100 B.P.)</u>
 - 40 cities with plazas, palaces, temples and pyramids, and ball-courts
 - Each city @ 5-50,000 people; total est. population ca. 2 million
 - Cities surrounded/supported by large population of farmers
 - Farming = primitive "slash-and-burn" agriculture; also irrigation, and terra
 - "Collapse" @ ca. 1,100 B.P. Why?!?
 - o **Possible causes**: 1) exhausted environment; 2) constant warfare led to broken trade alliances, politics, and religion; or 3) **climate change** (droug

