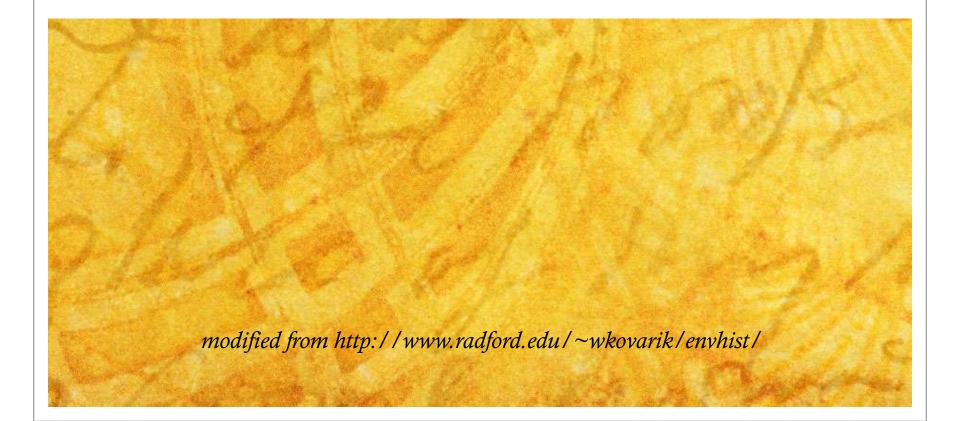
History of Environmentalism



Environmental issues have surfaced throughout human history.

- public health
- conservation
- preservation of nature
- smoke abatement
- municipal housekeeping
- occupational disease
- air and water pollution

Ancient Civilizations



Air pollution was common in large towns– from dust, wood smoke, tanneries, animal manure and other things

- Ancient Rome was notorious for **sewage**-filled streets
- Timbering stripped the forests of Babylon, Greece, Lebanon and Italy as civilization rose.
 - The **wood energy crisis** led Greeks to use passive **solar energy** by orienting their cities and houses toward the sun

before 1200 AD Soil conservation was not widely practiced. China, India and Peru understood the long term impact of soil erosion and tried to prevent it

The Middle Ages & Renaissance



- Plague devastates Europe, leads to the beginnings of a public health system
- Timbering in the forests of England, France, Germany leaves totally stripped land, forcing a switch to coal
- Occupational diseases are investigated, begin to recognizes public health problems



The Era of Enlightenment



Reason overtakes superstition.

Ben Franklin's fight against water pollution. Movement to clean up waterways, slums and prisons.

Thomas Malthus predicts that eventually, **food** and **resources** will run out as **populations explode**.

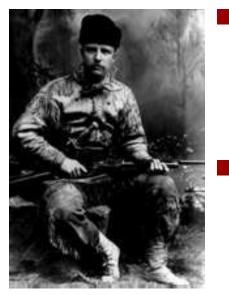
New technologies create new pollution.

The Industrial Revolution



- **Living conditions** in urban areas horrify reformminded commissions.
- Pure drinking water and sanitation is spurred by epidemics of typhoid and cholera
- **Smog** episodes begin killing residents of large cities like London.
- <u>Conservation of wilderness</u> areas begins with the killing of an enormous tree, called the "**Mother of the Forest**".
- Water pollution carried disease, John Snow, traced a part of the cholera epidemic to a contaminated water pump in 1855.

The Progressive Era



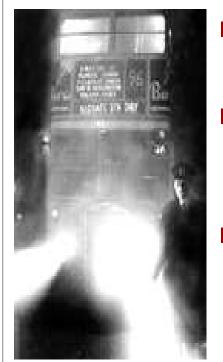
- Reform was a common concern for working conditions, slum housing, food poisoning, sanitation, drinking water, polluting industries and more
- <u>Teddy Roosevelt</u> and his forester <u>Gifford Pinchot</u> characterized the era with ideas about conserving large tracts of land and putting other forests to "**wise use**."
- John Muir opposes the "wise use" idea and fights for outright preservation of unspoiled wilderness
- New organizations like women's clubs and the Sierra Club are formed.

The Roaring Twenties & The Depression



- National Coast Anti Pollution League is formed. Concerns about oil and sewage pollution.
 International oil dumping treaty passed by Congress in 1924.
- Harvard M.D. Alice Hamilton describes Charles Kettering of General Motors, as "nothing but a murderer"; Hamilton's fight to point out alternatives.
- **Civilian Conservation Corps** is founded by <u>FDR</u> during the depression.
- The "chemurgy" movement replaces petroleum with farm alcohol. Other industrial uses for agricultural crops begins.

World War II & The Fifties



- Synthetic rubber and chemicals from renewable resources proved vital to winning WWII
- "A Sand County Almanac" by Aldo Leopold is published in 1948. Expresses the expanding sense of human responsibility.
- Deadly smog episodes in Pennsylvania, London, New York, and Los Angeles. Air pollution crisis is underway. 1955 the first international air pollution conference is held.
- Increasing CO2 buildup reported by Scripps Oceanographic Institute scientists.

The Sixties



1960-1970

- Rachel Carson's book "Silent Spring" pesticides are killing the birds.
- Senate hearings in 1965 reveal falsified lead industry research by the gasoline companies and General Motors
- June 22, 1969, **oil and chemicals** in the Cuyahoga River in Cleveland, Ohio catch fire
- UNESCO conference on "Man and His Environment" takes place in San Francisco in 1969.

"The Tragedy of the Commons" by Garrett Harden argues that unregulated industry could turn the planet in a wasteland

The Seventies



- The Environmental Protection Agency (EPA) is formed
- Air pollution is cut back. (catalytic converters on new cars that use only unleaded gasoline)
- Water pollution is greatly decreased through a massive sewage treatment expansion program.
 - Toxic chemicals become more troubling.
- Nuclear power safety increases. (Three Mile Island accident).
- **1970-1980** Energy crisis in oil supply.

The Eighties



- Bhopal mass **poisoning** in India; the Chernobyl **nuclear** reactor disaster in Ukraine; and the Challenger shuttle and Exxon Valdez **oil spills** in the U.S.
- Ozone depletion from fluorocarbons is finally taken seriously, <u>Montreal Protocol</u> in 1987 is signed.
- Legislation for **cleaning up toxic waste** passes Congress.
- The Rainbow Warrior, a Greenpeace ship bombed by French secret service agents in New Zealand in 1985.
- Warnings about **global climate change** become more convincing as evidence mounts.

The Nineties



- Earth Summit occurred in Rio, Brazil in 1992. The world leaders agreed to combat global warming, protect biodiversity and stop using dangerous poisons.
- Global Warming: CO2 gas, released from burning fossil fuel like gasoline, diesel, coal, oil and gas was causing the planet to heat up.
- Lack of landfill space leads to the beginning of recycling bins. Green products grew in numbers at the supermarket shelves.

The Present 2000-2012

Assignment:

Find 5 Environmental Impact that has occurred between the years 2000-2012 and Explain how it impacts the environment.