

Warm Up

Radium has a half-life of 1500 years. How long will it take for 250kg of Radium to decay down to less than 10kg?

Name that Legislation!

Review

Sets a time table for phasing out ozone-depleting substances.

Montreal Protocol

**Sets goal of creating
“fishable, swimmable”
waterways by setting
water quality standards.**

Clean Water Act

- Protects all **marine** mammals, including cetaceans (whales, dolphins, and porpoises), pinnipeds (seals and sea lions), sirenians (manatees and dugongs), sea otters, and polar bears w/in waters of USA

Marine Mammal Protection Act

Requires mining companies to put funds into escrow to assure land reclamation after mining has ceased.

**SURFACE MINING
RECLAMATION AND
CONTROL ACT**

**Regulates
manufacture and
use of pesticides.**

**Federal
INSEcticide,
FUNgicide, and
ROdenticide Act**

Provides for conservation of species that are endangered or threatened throughout all or a significant portion of their range, and conservation of ecosystems on which they depend

ENdAngered Species Act

**Established Superfund
for emergency response
and remediation of toxic
sites.**

**COMPREHENSIVE
ENVIRONMENTAL
RESPONSE,
COMPENSATION AND
LIABILITY ACT**

Superfund = toxic site that gov.
cleans up for public safety



- AKA Brownfield

**Established air
quality standards for
primary and
secondary pollutants.**

Clean Air

Act

7 Criteria Air Pollutants

- Particulate Matter (PM10, PM2.5)
- Sulfur Dioxide (SO₂)
- Nitrogen Dioxide (NO₂)
- Carbon Monoxide (CO)
- Ozone (O₃)*
- Lead (Pb)

*Note: The pollutant ozone is not emitted directly into the air, but is formed from precursor emissions of nitrogen oxides (NO_x) and volatile organic compounds (VOC) during the ozone season. Likewise much of the PM_{2.5} emissions are sulfates and nitrates that form from SO_x and NO_x.



**Agreement among 150
nations to reduce
greenhouse gases.**

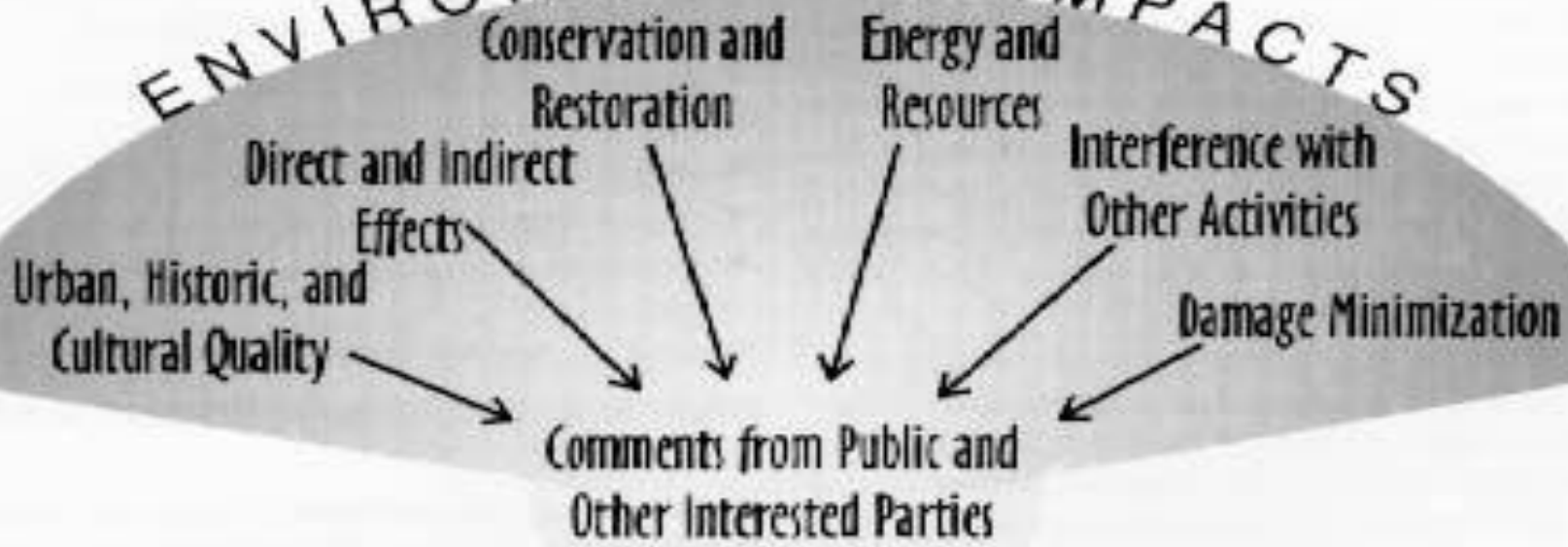
Kyoto protocol

**Established the EPA
and requires
Environmental Impact
Statements for major
federal construction
projects.**

**National
ENVIRONMENTAL
POLICY Act**

**PROPOSED
PROJECT**

ENVIRONMENTAL IMPACTS



**ENVIRONMENTAL
IMPACT
STATEMENT**

**Governs the disposal
of solid waste and
hazardous materials**

**RCRA → Resource
Conservation and
Recovery Act**

Law that bans trafficking in illegal wildlife. In 2008, the act was amended to include plants and plant products such as timber and paper...first ban on trade in illegally sourced wood products.

Lacey Act of 1900

**Establishes primary
drinking water
standards and
establishes
groundwater
protection program**

Safe Water Drinking Act

**List species that cannot be
commercially traded as live
specimens or wildlife
products internationally**

**CONVENTION ON INTERNATIONAL
TRADE IN ENDANGERED SPECIES
(CITES)**

**United States federal law
enacted in 1934 that regulates
grazing on federal public
land.**

Taylor Grazing Act

**Name that
Agency!**

Review

**Manages and
oversees the national
parks and many of
the wilderness areas
in US.**

National Park

Service

**Tracks emerging and
existing diseases
and threats to
environmental
health.**

**CENTERS FOR DISEASE
CONTROL AND
PREVENTION**

Monitors ocean and atmospheric environmental conditions on a global scale (like El Nino).

**National Oceanic
and Atmospheric
Administration**

**This agency regulates
hunting and fishing
licenses as well as the
Endangered Species
Act.**

**FISH and
WILDLIFE
Service**

**Established by NEPA to
coordinate, investigate,
and enforce
environmental issues and
laws.**

**ENVIRONMENTAL
PROTECTION
AGENCY**

Governs the national forests of the United States. Gifford Pinchot was the first head of the agency.

National Forest Service