

# AP Environmental Science Exam Prep Session: Global Change

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## AP Environmental Science Topic Outline

### VII. Global Change (10–15%)

#### A. Stratospheric Ozone

(Formation of stratospheric ozone; ultraviolet radiation; causes of ozone depletion; effects of ozone depletion; strategies for reducing ozone depletion; relevant laws and treaties)

#### B. Global Warming

(Greenhouse gases and the greenhouse effect; impacts and consequences of global warming; reducing climate change; relevant laws and treaties)

#### C. Loss of Biodiversity

1. Habitat loss; overuse; pollution; introduced species; endangered and extinct species
2. Maintenance through conservation
3. Relevant laws and treaties

## Important Terms

**Greenhouse Effect:** a vital process, required for life to exist on Earth. If accelerated, it's bad, leading to global warming.

**Effects of Global Warming:** rising sea level (*due to thermal expansion not melting ice*), extreme weather, droughts (*which lead to famine*), and extinctions.

**Ozone Depletion:** caused by CFCs, methyl chloroform, carbon tetrachloride, halon, methyl bromide all of which attack stratospheric ozone. Negative effects of ozone depletion include increased UV radiation, skin cancer, cataracts, and decreased plant growth.

## Important Legislation

**Kyoto Protocol:** controlling global warming by setting greenhouse gas emissions targets for developed countries.

**Montreal Protocol:** phase out of ozone depleting substances.