

16.4 Threats To Biodiversity

KEY CONCEPT

The impact of a growing human population threatens biodiversity.



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▶ **Preserving biodiversity is important to the future of the biosphere.**

- The loss of biodiversity has long-term effects.
 - loss of medical and technological advances
 - extinction of species
 - loss of ecosystem stability



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▶ Loss of habitat eliminates species.

- Habitat fragmentation prevents an organism from accessing its entire home range.
 - occurs when a barrier forms within the habitat
 - often caused by human development

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- Habitat corridors are a solution to the problem.
 - corridors can be road overpasses or underpasses
 - allow species to move between different areas of habitat



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▶ Introduced species can disrupt stable relationships in an ecosystem.

- An introduced species is one that is brought to an ecosystem by humans.
 - accidental
 - purposeful
- Invasive species can have an environmental and economic impact.



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- Invasive species often push out native species.
 - Burmese python (Florida Everglades)



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- Invasive species often push out native species.
 - mice (Australia)



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- Invasive species often push out native species.
 - kudzu (southeastern United States)



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KEY CONCEPT

Conservation methods can help protect and restore ecosystems.



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- ▶ **Sustainable development manages resources for present and future generations.**
 - Sustainable development meets needs without hurting future generations.
 - resources meet current needs
 - resources will still be available for future use



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- The timber industry has started to adopt sustainable practices.
- Global fisheries have adopted several sustainable practices.
 - rotation of catches
 - fishing gear review
 - harvest reduction
 - fishing bans



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► Conservation practices focus on a few species but benefit entire ecosystems.

- The Endangered Species Act works to protect individual species from extinction.
- A listed species is often called an umbrella species.
 - the habitat in which the species lives must be protected
 - other species are protected because they share the ecosystem



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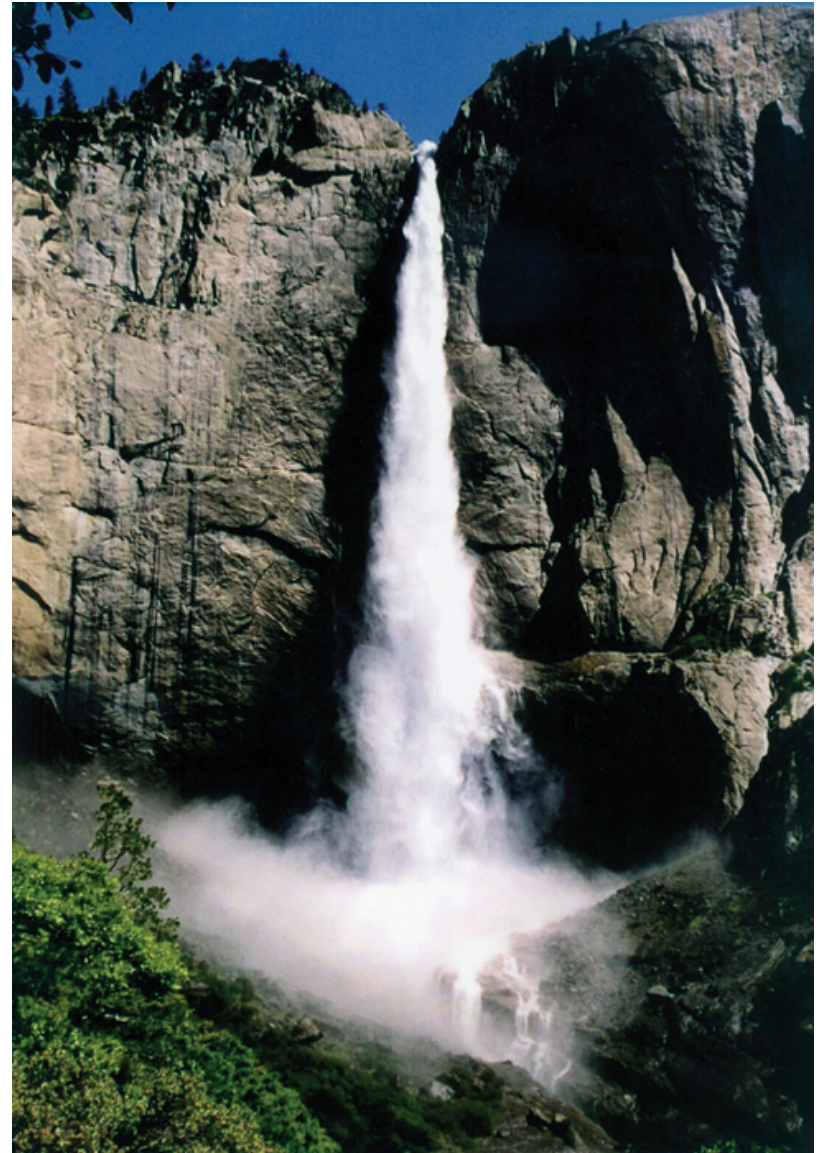
▶ Protecting Earth's resources helps protect our future.

- The Environmental Protection Agency (EPA) was created in 1970.
- The EPA develops policies and regulations to protect the environment.
- Legislation helps to protect the environment and endangered species.
 - Clean Air Act
 - Clean Water Act
 - Endangered Species Act



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- The National Park Service helps manage public lands.
- The park system includes over 390 areas, covering 84 million acres.



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- There are several ways that people can help protect the environment.
 - control population growth
 - develop sustainable technology and practices
 - protect and maintain ecosystems

