Warm-Up 10FEB2016

 What are the main uses of public lands in the United States?

- Due tomorrow: 10 Vocabulary
- Celebration will be a take home, you will have the class period to work on your project

- Land Management Practices vary according to land use
 - Grazing, Mining, Forestry, Residential, Industrial, etc.

Rangelands

• Dry, open grasslands that are primarily used for cattle grazing.



Figure 10.7
Environmental Science
© 2012 W. H. Freeman and Company

- Overgrazing in the western US
- Grazing allotments based on productive lands similar to the Eastern US
- Ecology of the landscape is different, more sensitive



Taylor Grazing Act 1934

- To prevent over grazing and an attempt to prevent "tragedy of the commons"
- Some cases requires ranchers to mitigate negative consequences of grazing

Native vs Non-Native Grazing



Forests

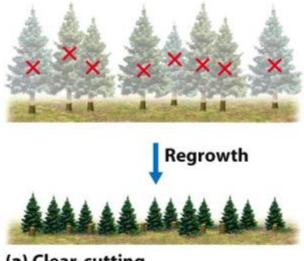
 Areas dominated by trees and other woody vegetation.



Figure 10.10
Environmental Science
© 2012 W. H. Freeman and Company

Timber Harvest Practices

- Clear-cutting- removing all, or almost all the trees in an area.
- Selective cutting- removing single trees or relatively small numbers of trees from a forest.



(a) Clear-cutting





(b) Selective cutting

Figure 10.8 **Environmental Science** © 2012 W. H. Freeman and Company



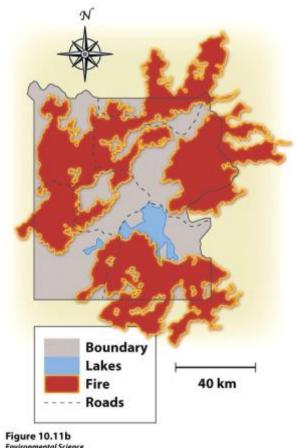


Fire Management

• prescribed burns- a fire is deliberately set under controlled conditions.



Figure 10.11a **Environmental Science** © 2012 W. H. Freeman and Company



Environmental Science © 2012 W. H. Freeman and Company

Fire Management

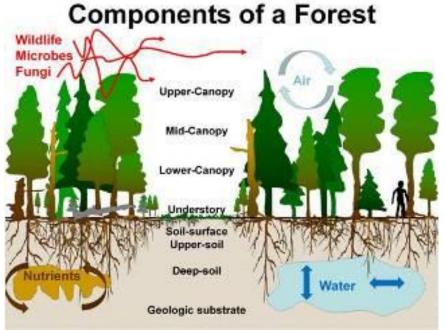
• Fire suppression





Forest ecology

 Fire is often essential to maintaining a diversity of plants and a diverse canopy structure

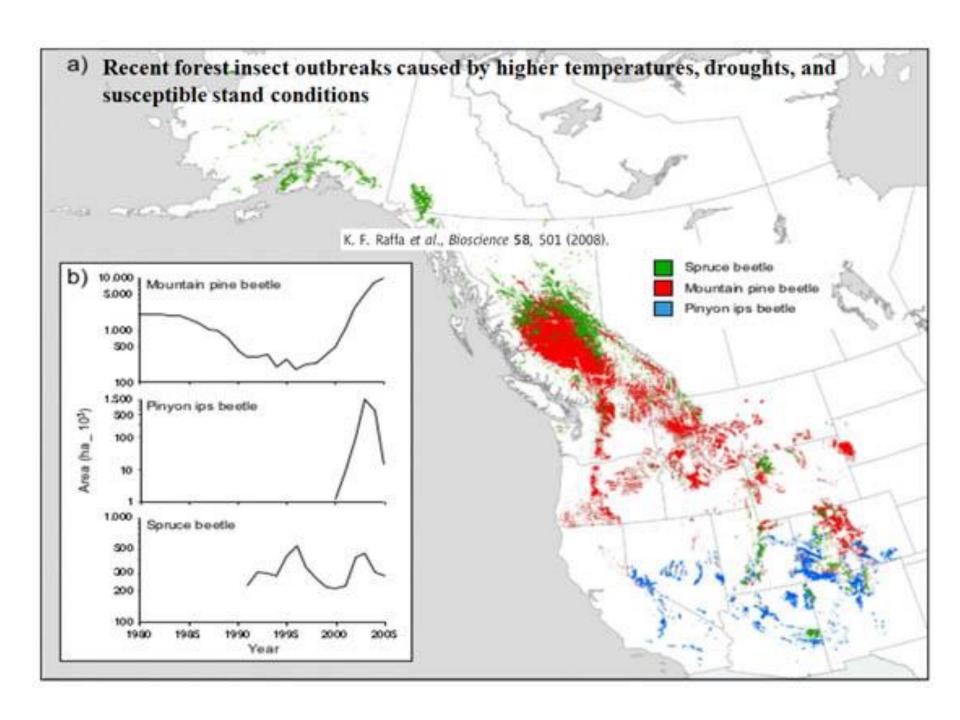




Pine Beetle







Forests

• National Parks- established to preserve scenic views and unusual landforms.

 National wildlife refuges- managed for the purpose of protecting wildlife

 National wilderness areas- set aside to preserve large tracts of intact ecosystems or landscapes.

Federal Regulations

- National Environmental Policy Act (NEPA)mandates an environmental assessment of all projects involving federal money or permits.
- Environmental impact statement (EIS)outlines the scope and purpose of the project.
- Environmental mitigation plan- outlines how the developer will address concerns raised by the projects impact on the environment





- What are the ways in which timber is harvested in US forests, and how do they compare in terms of the environmental impact?
- What is the significance of the National Wilderness Area designation for parts of federally owned lands?
- What is NEPA and what is the environmental impact statement (EIS)?

Residential Land

- Suburban- areas surrounding metropolitan centers with low population densities.
- Exurban- similar to suburban areas, but are not connected to any central city or densely populated area.

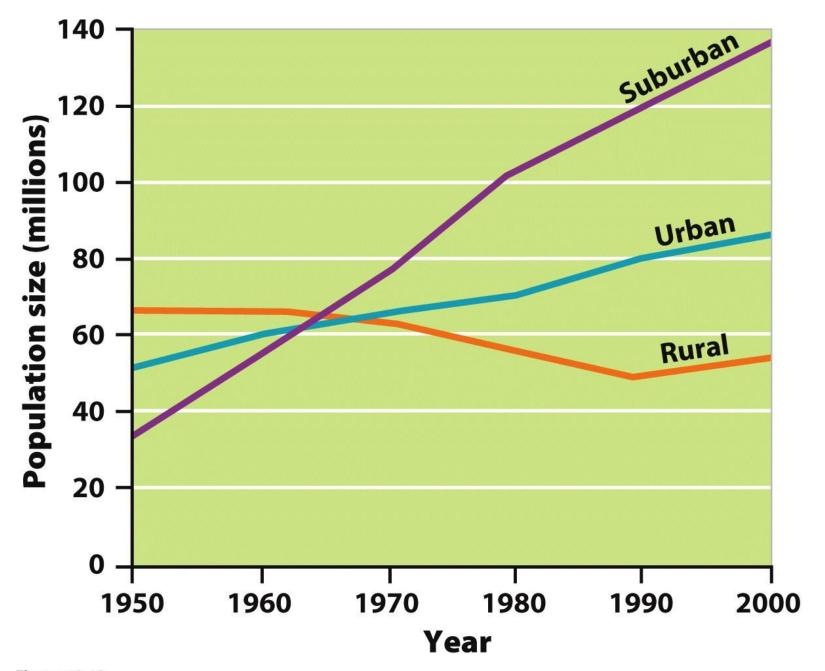


Figure 10.13

Environmental Science

© 2012 W. H. Freeman and Company

Urban Sprawl

- Urban sprawl- the creation of urbanized areas that spread into rural areas.
- The four main concerns of urban sprawl in the U.S. are:
 - automobiles and highway construction
 - living costs (people can get more land and a larger house in the suburbs for the same amount of money)
 - urban blight (city revenue shrinks as people move to the suburbs)
 - government policies (zoning is an attempt to reduce sprawl or shape growth)

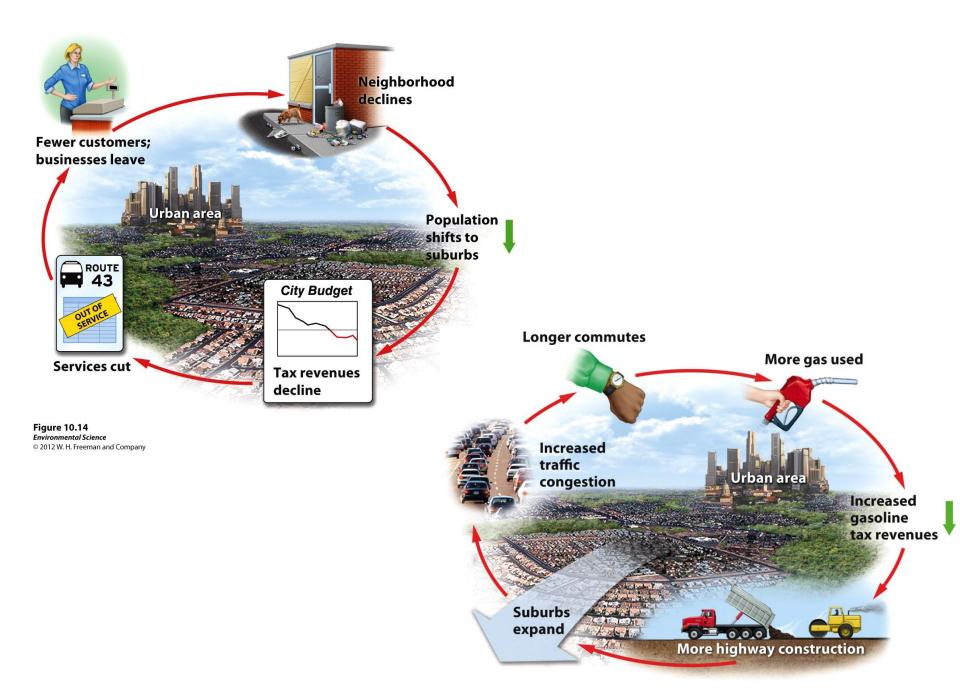
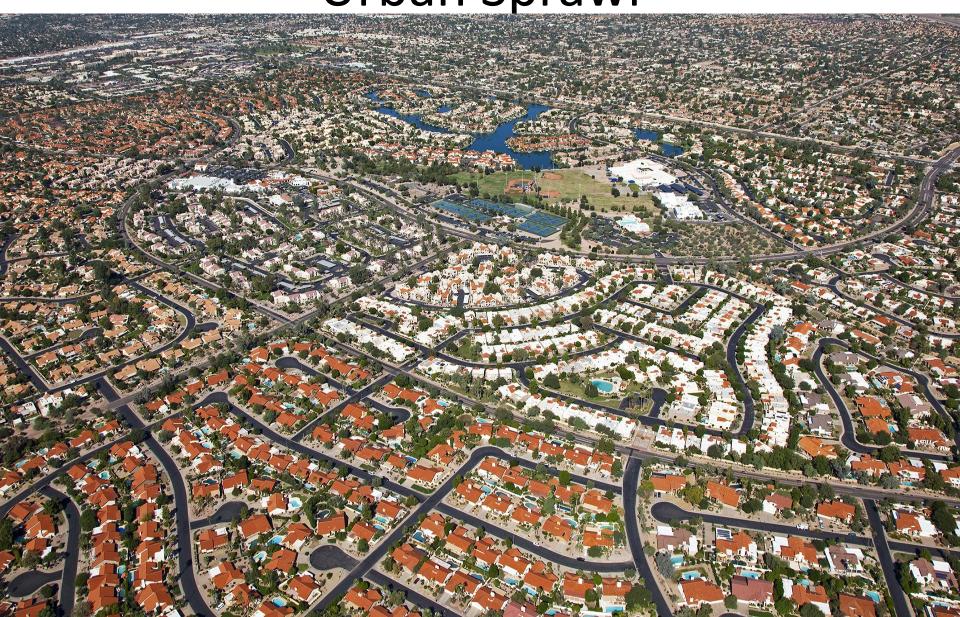


Figure 10.15
Environmental Science
© 2012 W. H. Freeman and Company

Urban Sprawl



Government Policies

- Highway Trust Fund- a federal gasoline tax to pay for construction and maintenance of roads and highways.
- Zoning- a planning tool to create quieter and safer communities. For example, prohibiting the development of a factory or strip mall in a residential area.
- Multi-use zoning- allows retail and high-density residential development to coexist in the same area.
- Subsidized mortgages- low interest rates offered to people to purchase a home that would otherwise not be able to do so.

Smart Growth

- Mixed land uses
- create a range of housing opportunities and choices
- create walkable neighborhoods
- encourage community and stakeholder collaboration in development decisions
- take advantage of compact building design

Smart Growth

- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, farmland, natural beauty and critical environmental areas
- Provide a variety of transportation choices
- Strengthen and direct development toward existing communities
- Make development decisions predictable



Figure 10.16
Environmental Science
© 2012 W. H. Freeman and Company



Figure 10.17
Environmental Science
© 2012 W. H. Freeman and Company

- What are urban sprawl and smart growth?
- How can zoning help reduce urban sprawl?

 Buena Vista as an example of success and failure in smart growth



Hints for the Planning Project

- The expectation is you are synthesizing all your knowledge in the city planning project
- Look back through the chapter or your notes to ensure that you can demonstrate all the key ideas in your written document and short presentation on Wednesday.



Figure 10.18
Environmental Science
© 2012 W. H. Freeman and Company

Warm-up

11FEB2016

- What is urban sprawl and smart growth?
- How does zoning help reduce urban sprawl?

Hints for the Planning Project

- Notice you haven't had much other homework this week, so the expectation is you are synthesizing all your knowledge in the city planning project (this is worth more than a test grade!)
- I would look back through the chapter or your notes to ensure that you can demonstrate all the key ideas in your written document, your plan, and a short presentation on Thursday.
- Connectivity between your natural areas, etc.