

Changing Landscapes

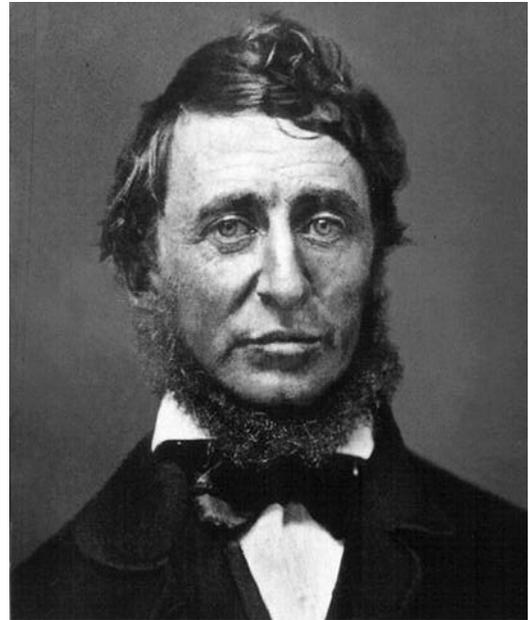
Land use planning curriculum for natural resource professionals

- P** rinciples, people, and policies
- L** and planning and pressures
- A** pproaches
- N** atural resource planning tools

P2: Policies that Direct Natural Resource Planning

Overview

There are a number of State and Federal policies, regulations, and agencies that provide for the protection and use of natural resources. Environmental review and regulation occur at all levels of government. Congress sets policy and develops standards that it directs States to implement and enforce. Environmental review is most often triggered by development or other impacts on natural resources. The type of resource being impacted (water, soil, vegetation, or wildlife) generally dictates the type of review and potential permit necessary for the planned activity. Review and/or permitting activities are also triggered by Federal funding or applicable Federal regulations (for example, federally regulated industries such as telecommunications and energy). Agencies share responsibilities for implementation and oversight.



Philosopher Henry David Thoreau, 1856, contributed to the beginning of the environmental movement in the United States. (Photo: The Thoreau Society Collection at the Thoreau Institute at Walden)

The History of Environmental Policies

The environmental movement in America began with philosophers and thinkers like Henry Thoreau and John Muir as well as conservationists such as Theodore Roosevelt and Gifford Pinchot. President Roosevelt was the first to use Federal statutes in an effort to shield citizens from the negative impacts of unchecked progress. Railroads, public utilities, and large-scale businesses were the first to be placed under regulation by the newly created Federal Commission, the predecessor to today's regulatory agencies. Regulations to control the quality of food, drinking water, and sewage treatment soon followed.



The U.S. Postal Service issued a 6-cent stamp series in 1970 in honor of the environmental movement.



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As the Nation's progress continued during the twentieth century, the need for legal and scientific environmental standards became more evident. Several important modern environmental laws were enacted in the 1960s, culminating in the passage of the National Environmental Policy Act (NEPA) in 1970. NEPA was the first major legislation that provided a clear mandate for all Federal agencies to create and maintain conditions that balance man and nature. The environmental movement continued to gain momentum with additional legislation and amendments in the 1980s and 1990s, including amendments in 1990 that strengthened and extended the Clean Air Act.

Following passage of national environmental laws, it was left to the States to enforce environmental policies and provide regulatory authority. The States' role in environmental policy has increased to include most aspects of waste management, groundwater protection, land use management, transportation, and electricity regulation. States also have the opportunity to oversee implementation and develop stricter standards for air pollution control and pesticide regulation.

Federal Laws, Regulations, and Principal Agencies

Environmental Protection Agency (EPA)

The EPA's mission is to protect human health and the environment. EPA is responsible for writing and enforcing regulations and setting national standards for several environmental laws. EPA is responsible for implementing the following primary environmental laws:



The Clean Water Act was enacted to maintain the integrity of wetlands. (Photo: Robert H. Pos, U.S. Fish and Wildlife Service)

Clean Water Act (CWA) – Defines EPA's responsibilities for restoring and maintaining the chemical, physical, and biological integrity of U.S. waters. It is implemented by States through a variety of programs aimed at preventing point and nonpoint pollution sources, assisting publicly owned water treatment works, and maintaining the integrity of wetlands .

National Environmental Policy Act (NEPA) – Defines the responsibility of Federal agencies, regulated industries, and funding recipients for integrating environmental values into their decisionmaking processes. Federal agencies are required to conduct environmental reviews prior to implementing new programs or making changes to existing programs.

Clean Air Act (CAA) – Defines EPA's responsibilities for protecting and improving the Nation's air quality and addressing the ozone layer. It is put into practice through State Implementation Plans developed by each State.

Resource Conservation and Recovery Act (RCRA) – Defines EPA's responsibility for controlling hazardous waste from the "cradle to grave" and provides a framework for managing nonhazardous solid wastes. The EPA or States require permitting for companies that manage solid or hazardous wastes. Although RCRA is a Federal statute, many States carry out the program.



The Clean Air Act defines EPA's responsibilities for protecting the Nation's air quality. (Photo: U.S. Fish and Wildlife Service)

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – Commonly known as Superfund, the CERCLA defines EPA's responsibility for providing Federal responses to releases or threatened releases of hazardous substances that may endanger public health or the environment.

The passage of NEPA in 1970 provided a national policy that encouraged a productive and harmonious coexistence between man and the environment.

Environmental Policy Timeline

1963—>Clean Air Act

1964—>Wilderness Act

1966—>Endangered Species Preservation Act

1970—>National Environmental Policy Act, Resource Conservation and Recovery Act

1972—>Federal Water Pollution Control Act, Federal Environmental Pesticide Control Act, Ocean Dumping Act, Coastal Zone Management Act

1980—>Comprehensive Environmental Response, Compensation, and Liability Act

Safe Drinking Water Act (SDWA) – Defines EPA’s responsibility for setting national health-based standards for drinking water quality and overseeing the State, locality, and private water suppliers who implement those standards.

Toxic Substances Control Act (TSCA) – Defines EPA’s responsibility for requiring reporting, record keeping, testing, and restrictions related to chemical substances and/or mixtures.

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) – Defines EPA’s responsibility for controlling pesticide distribution, sale, and use. All pesticides used in the United States must be registered by EPA.

Federal Emergency Management Agency (FEMA)

FEMA’s mission is to build, sustain, and improve the Nation’s capability to prepare for, protect against, respond to, recover from, and mitigate all hazards. FEMA is part of the U.S. Department of Homeland Security and is responsible for providing Federal response to disasters.

Robert T. Stafford Disaster Relief and Emergency Act (Stafford Act) – Defines FEMA’s responsibility for overseeing State and local disaster response activities, including preparedness, risk assessment, floodplain management, and integrating hazard mitigation into comprehensive planning.

National Oceanic and Atmospheric Administration (NOAA)

NOAA’s mission is to protect life and property and conserve and protect natural resources through science, service, and stewardship. NOAA’s products and services range from weather forecasting and climate monitoring to fisheries management, coastal restoration, and support of marine commerce.



The Safe Drinking Water Act defines the EPA’s responsibility for setting national standards for drinking water quality.



FEMA is responsible for providing Federal response to disasters such as Hurricane Katrina.

Coastal Zone Management Act (CZMA) – Defines NOAA’s and EPA’s responsibility for encouraging applicable States to voluntarily develop and implement a comprehensive coastal management program that preserves, protects, develops, and where possible, restores or enhances valuable natural coastal resources. Federal financial assistance is available to States that participate.

U.S. Fish and Wildlife Service (USFWS)

The U.S. Fish and Wildlife Service is a bureau within the U.S. Department of the Interior whose mission is to conserve, protect, and enhance the Nation’s fish, wildlife, and plant resources, and their habitats. The USFWS is responsible for enforcing Federal wildlife laws, protecting endangered species, managing migratory birds, restoring nationally significant fisheries, conserving and restoring wildlife habitats, assisting with international conservation efforts, and distributing Federal funding to State fish and wildlife agencies through various programs, including the Wildlife Sport Fish Restoration program.

Endangered Species Act (ESA) – Defines the responsibilities of the USFWS and NOAA for providing a program for conserving threatened and endangered plants and animals and the habitats in which they are found. Critical habitat is designated for each species, and actions within the critical habitat areas are regulated at the State level.

The Lacey Act – Defines the responsibility of the USFWS, NOAA, and the USDA for prohibiting trade in wildlife, fish, and plants that have been illegally taken, possessed, transported, or sold. Enforcement occurs at inspection stations and border crossings.

U.S. Department of Agriculture (USDA)

The mission of the USDA is to provide leadership for the Nation’s food supply, agriculture, and natural resources. The Agency utilizes sound public policy, science, and management to provide an integrated and responsive program. The USDA provides oversight for numerous Federal agencies, including the U.S. Forest Service and the Natural Resources Conservation Service, that are responsible for providing USDA natural resource programs and services.

Food, Conservation, and Energy Act of 2008 (Farm Bill) – Executive Order that defines the USDA’s responsibilities for governing the bulk of Federal agriculture and related programs for the next 4 years. It addresses commodities, resource conservation, nutrition, credit, rural development, research, forestry, energy, horticulture and organic agriculture, livestock, crop insurance, commodity futures, trade, and taxes.

Noxious Weeds and Invasive Plants - Executive Order 13112 – Defines invasive species as “...an alien (or non-native) species whose introduction does, or is likely to, cause economic or environmental harm or harm to human health.” This Executive Order created the National Invasive Species Council, which coordinates interagency resources for invasive species management.

U.S. Forest Service

The U.S. Forest Service is an agency of the USDA that is responsible for stewardship and management of public lands in national forests and grasslands. The mission of the Forest Service is to sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations. In addition to resource management, the Forest Service is authorized to provide technical and financial assistance to the public.



The U.S. Fish and Wildlife Service manages migratory birds, among other responsibilities. (Photo: Gary Kramer, U.S. Fish and Wildlife Service)

National Forest Management Act of 1976 (NFMA) – Authorizes the Forest Service to provide long-range planning to ensure the future supply of forest resources while maintaining a quality natural environment. This is implemented by the Forest Service through periodic, renewable resource assessments.

Cooperative Forestry Assistance Act of 1978 – As amended, authorizes the Forest Stewardship Program, Urban and Community Forestry Program, and the Forest Legacy Program to provide technical assistance, through State forestry agency partners, to nonindustrial private forest owners that encourages and enables active, long-term forest management.

Healthy Forests Restoration Act (HFRA) – Contains a variety of provisions to expedite hazardous fuel reduction and forest restoration projects on specific types of Federal land that are at risk of wildland fire or insect and disease epidemics.

National Fire Plan of 2000 (NFP) – A response to the HFRA, the NFP defines the U.S. Forest Service and Department of the Interior’s responsibility for responding to severe wildland fires , reducing their impacts on communities, and ensuring sufficient future firefighting capabilities.

States play a prominent role in every area of environmental policy, collectively issuing a majority of all environmental permits and enforcement actions for which they receive very little funding.

State Policies, Regulations, and Agency Authority

Responsibility for carrying out and enforcing Federal policies, standards, and regulations is generally directed to State agencies or departments within four specific areas: agriculture, environmental protection, natural resources, and emergency management or public safety. States may further divide the responsibility for natural resources among additional departments.

Successful Legislation

Examples of successful planning and policies include the following:

- Land Use and Development Planning – Vermont Act 250:
<http://energy.gov/savings/vermont-land-use-and-development-act-250-vermont>
- No Net Loss – New Jersey’s No Net Loss Reforestation Act:
http://www.state.nj.us/dep/parksandforests/forest/community/No_Net_Loss.htm
- Forest Conservation – Maryland’s Forest Conservation Act:
<http://www.dnr.state.md.us/forests/programapps/newFCA.asp>



The U.S. Forest Service is responsible for sustaining the health, diversity, and productivity of the Nation’s forests and grasslands.



The National Fire Plan of 2000 defines Federal agency responsibility for responding to severe wildland fires.

Agriculture

Each State Department of Agriculture is responsible for setting agricultural policies, enforcing regulations, and providing assistance to agricultural producers. Additional responsibilities may include consumer protection, public health, environmental advocacy, agricultural marketing, and public information and awareness. Many States also have a State Plant Board that assists in these efforts.

Environmental Protection

The EPA directs each State to implement and enforce standards and regulations related to environmental quality, energy, soil and water conservation, and water resources. The primary goal is to improve the quality of air, water, and soil resources for their sustainable use. At the State level, the two most prominent objectives are protection of water resources and soil and water conservation.

The EPA authorizes States to take responsibility for watershed management and the monitoring, laws, rules, standards, financial assistance, permits, engineering, compliance, and enforcement for all public drinking water and water pollution control efforts. The Clean Water Act requires States to produce a Continuing Planning Process (CPP) document that provides the State's strategies for water quality planning and management.

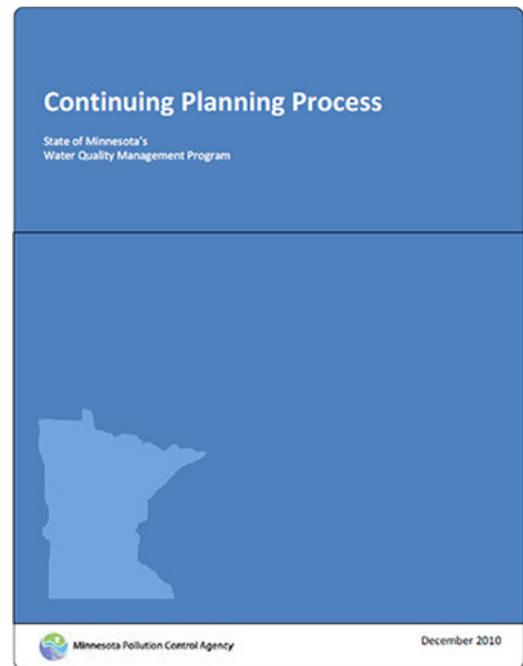
To see Minnesota's CPP, go to <http://www.pca.state.mn.us/index.php/view-document.html?gid=15647>.

Water pollution degrades streams, rivers, and lakes, making the water unsafe for drinking, swimming, or fishing. The Clean Water Act authorizes the protection of water resources from pollution through the National Pollutant Discharge Elimination System (NPDES) permit program, which controls water pollution by regulating point and nonpoint sources that discharge pollution into waters of the United States. Other Federal laws that relate to the NPDES program include the Endangered Species Act, National Environmental Policy Act, and the Coastal Zone Management Act. State agencies are responsible for implementation, compliance, and enforcement of the EPA's regulations and standards, including stormwater management, best management practices, and sediment and erosion control.

For an innovative approach to stormwater management in Lenexa, KS, go to <http://www.lenexa.com/raintorecreation/index.html>.

Natural Resources

Managing and protecting fish, forest, and wildlife resources is generally under the purview of State natural resource or conservation departments. These agencies also provide opportunities for all citizens to learn about, enjoy, and use these resources. They facilitate the public's participation in resource management. To read about a comprehensive approach to conservation, go to the Highlands Conservation Act at <http://www.highlandscampaign.org/conservation-act>.



Minnesota Continuing Planning Process document cover.



The award-winning Lake Lenexa dam manages stormwater and provides recreational opportunities in Lake Lenexa, Kansas. (Photo: http://www.lenexa.com/Assets/departments/raintorecreation/pdfs/project_lakelenexa.pdf)

The 2008 Farm Bill laid the foundation for State natural resource agencies and conservation departments to use their programs to benefit forestry and wildlife. This bill required States to complete a Statewide Forest Resource Assessment and Strategy (now called a State Forest Action Plan) that analyzes forest conditions and trends and delineates priority rural and urban forest landscape areas and issues.

View example Forest Action Plans at <http://forestactionplans.org>.

Emergency Management and Public Safety

Many States have a Department of Public Safety or Homeland Security that is responsible for emergency management and public safety, including fire safety. Programs within these departments provide support services and resources to help local law enforcement agencies. State and local emergency management officials coordinate with FEMA's regional offices to protect against, respond to, recover from, and mitigate all natural and manmade hazards. Many State resource agencies also coordinate with FEMA and their Department of Public Safety to provide wildfire management.

Relevant Factsheets

P1 – *An American History of Planning* – Provides background on how and why policies have been developed.

L2 – *Scales of Planning: From Landscapes to Ecosystems* – Provides an understanding of policy use at different planning scales.

N3 – *Regulatory Approaches to Protecting Natural Resources* – Provides additional information on regulations for resource protection.

N6 – *Planning Tools to Protect Water Quality* – Provides the regulatory background to policies communities must implement and follow.

Resources

Buck, Susan J. 1996. Understanding environmental administration and law. Washington, DC: Island Press. 73 p.

Federal Emergency Management Agency. 2011. <http://www.fema.gov>. (20 April 2011).

National Oceanic and Atmospheric Administration. 2011. <http://www.noaa.gov>. (20 April 2011).

U.S. Department of Agriculture. 2011. <http://www.usda.gov>. (20 April 2011).

U.S. Department of Agriculture, Natural Resources Conservation Service. 2011. <http://www.nrcs.usda.gov>. (20 April 2011).

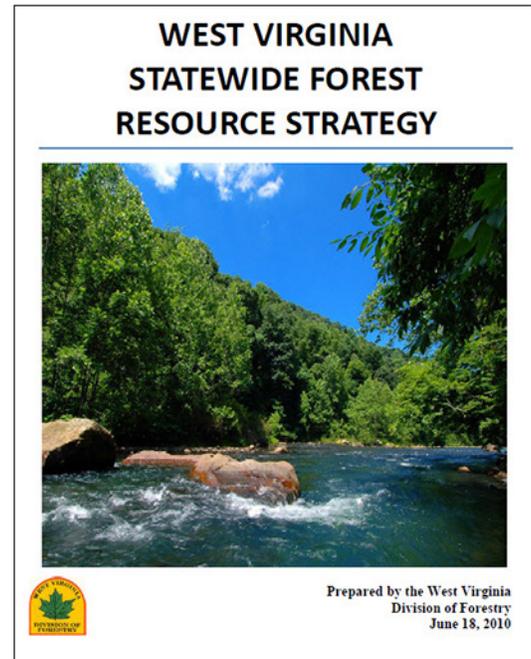
U.S. Environmental Protection Agency. 2011. <http://www.epa.gov>. (20 April 2011).

U.S. Fish and Wildlife Service. 2011. <http://www.fws.gov>. (20 April 2011).

U.S. Forest Service. 2011. <http://www.fs.fed.us>. (20 April 2011).

U.S. Government Regulations. <http://www.regulations.gov>. (20 April 2011).

Vig, Norman J.; Kraft, Michael E. 2003. Environmental policy: new directions for the twenty-first century. Washington, DC: CQ Press: 24–28.



The 2008 Farm Bill required States to assess their forest resources and develop a prioritized statewide strategy for managing them.

Acknowledgements

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