

UNIT OF STUDY

Title: Toward a Sustainable Future Subject/Course: Environmental Science Length: 4 weeks	
Topic: Economics and Sustainable Communities Grade: 11-12 Designer: D Wright	
UNIT GOALS AND EXPECTATIONS	
IMPORTANT CONCEPTS/UNDERSTANDINGS: <ol style="list-style-type: none"> 1. Public policy governs society’s interactions with the environment through laws and regulations created by the interactions between the business community, non-governmental organizations, and the three branches of our government. 2. A nation’s wealth is dependent upon produced assets, natural capital, and human resources. . 3. Public policy development has a life cycle consisting of four stages: recognition, formulation, implementation, and control. 4. Environmental public policy has created a cleaner, healthier, and more enjoyable environment. 5. Society decides how policies are made. In the United States the prevailing decision making tool is risk-based decision making. 6. Urban sprawl creates new environmental problems or makes existing ones worse. 	ESSENTIAL QUESTIONS: <ol style="list-style-type: none"> 1. How does public policy govern society’s interactions with the environment through laws and regulations? 2. What are the four stages of public policy development? 3. How has public policy help create a cleaner, healthier environment? 4. What criteria is used by society when setting policies for the environment?
STUDENT LEARNING EXPECTATIONS: NS.4.ES.1-Collect and analyze scientific data using appropriate mathematical calculations, figures and tables. SP.3.ES.13-Distinguish between developed and developing countries. SP.3.ES.10-Predict the long-term societal impact of specific health, population, resource, and environmental issues. SP.3.ES.9-Evaluate personal and societal benefits when examining health, population, resource, and environmental issues.	SP.3.ES.2-Investigate the relationships between human consumption of natural resources and the stewardship responsibility for reclamations including disposal of hazardous and non-hazardous waste NS.4.ES.3- Utilize technology to communicate research findings. NS.5.ES.2- Explain why scientists should work within ethical parameters.
SPECIFIC DECLARATIVE KNOWLEDGE – What I know Identify the criteria used to identify or classify public policy issues. Describe the structure of societies current environmental policy. Identify and describe natural ecosystem wealth factors. Understand the role of public policy in ecosystems. Name and describe the three major changes in human civilization that have affected the environment.	SPECIFIC PROCEDURAL KNOWLEDGE – What I need to do Make clear and unbiased observations. Make predictions according to a pattern. Identify correctly information found on graphs, tables and charts. Use research skills to gather information.

UNIT ASSESSMENTS (Include tasks related to Dimensions 3 and 4 and Bloom's Taxonomy)	
Discuss (in writing) the idea of a sustainable approach to the Earth's environment. Chapter Content Brainstorming	
Traditional Assessments: Unit test. Written quizzes. Chapter outline Activity analysis	Other Evidence of Learning: Chapter Content Brainstorming Daily notebook entries. TI-83 lab Chapter Content Brainstorming LHS 4-step vocabulary

ACTIVITIES AND LEARNING EXPERIENCES	Resources
<p>Identify and define key words and vocabulary: (using LHS vocabulary format) Benefit-cost analysis, centrally planned economy, free market economy, land, labor, capital, ecological economists, economic production produced assets, natural capital, human resources, human capital, social capital, knowledge assets, Environmental Policy Act, Environmental Protection Agency, effectiveness, efficiency, Highway Trust Fund, exurban migration, exurbs, Intermodal Surface Transportation Efficiency Act (ISTEA), Transportation Equity Act for the Twenty-first Century (TEA-21), eroding or declining tax base, urban blight, urban decay, Slum Dwellers International (SDI), Sustainable Communities Network, Smart Communities Network, Chattanooga Venture, President's Council on Sustainable Development</p> <p>Science Careers Research and Power point Economic Production/Natural Capital Research</p>	<p>Environmental Science: Toward A Sustainable Future</p> <p>Media Center</p> <p>Internet</p> <p>Smartboard</p> <p>Power point</p> <p>Newspaper/Magazines</p> <p>Lab exercises</p> <p>TI-83 calculator w/ probes</p>

Career Connections
<p>Politician Economist Sociologist Ecologist Environmental Engineer Lobbyist</p>