

**Correlation of
Project WET Activities**

to the

**History/ Social Science Content Standards for
California Public Schools**

and the

**Principles & Concepts of the California
Environmental Education Initiative Model
Curriculum**

Introduction

The purpose of this document is to provide California educators who use Project WET materials with a cross reference to the Grade and Discipline-specific Standards-based learning objectives for K-12 Science and History/Social Science in context to California Environmental Principles and Concepts.

The Environmental Principles and Concepts (EP&C) and Standards-based learning objectives were developed as a template for the development of a "model curriculum" in support the mandate described in Assembly Bill 1548 (Pavley, Chapter 665, Statutes of 2003 and AB 1721 and Pavley, Chapter 581, Statutes of 2005) called the "Environmental Education Initiative (EEI). Information about the "EEI" can be obtained at: <http://www.calepa.ca.gov/Education/EEI> . January 2012

*** Denotes an activity with California specific adaptations or materials.**

**For more information about the California Project WET program, contact Brian Brown,
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In creating this document, the previous Project WET correlations to the Science and History/ Social Science Content Standards were reviewed, as well as comments received from California educators using Project WET activities, the intent of the Content Standards as described in the 'Framework for Public Schools' published by the California Department of Education and the EEI learning objectives. We invite comments, critiques and suggestions from any California educator to help refine these correlations for all future users of the Project WET program.

Kindergarten

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<i>K.1. Students understand that being a good citizen involves acting in certain ways.</i>		
1. Follow rules, such as sharing and taking turns, and know the consequences of breaking them.	<ul style="list-style-type: none"> • Common Water (p: 253)* • Long Haul (The) (p: 273) • Pass the Jug (p: 450)* 	<ul style="list-style-type: none"> • List examples of basic rules people need to follow regarding natural systems and resources (e.g., littering, fishing).
<i>K.3. Students match simple descriptions of work that people do and the names of related jobs at the school, in the local community, and from historical accounts.</i>		
	<ul style="list-style-type: none"> • Common Water (p: 253) • Urban Waters (p: 413)* 	<ul style="list-style-type: none"> • Match simple descriptions of work that people do and the names of related jobs to extraction, harvesting, transporting and consuming natural resources.
<i>K.4. Students compare and contrast the locations of people, places, and environments and describe their characteristics.</i>		
1. Determine the relative locations of objects using the terms near/far, left/right, and behind/in front.	<ul style="list-style-type: none"> • A-Maze-ing Water (p: 236) • Rainy-Day Hike (p: 169) 	
2. Distinguish between land and water on maps and globes and locate general areas referenced in historical legends and stories.	<ul style="list-style-type: none"> • A-maze-ing Water (p: 231) • Blue Planet (p: 130) 	
3. Identify traffic symbols and map symbols (e.g., those for land, water, roads, cities).	<ul style="list-style-type: none"> • Rainy-Day Hike (p: 169) 	

<p>4. Construct maps and models of neighborhoods, incorporating such structures as police and fire stations, airports, banks, hospitals, supermarkets, harbors, schools, homes, places of worship, and transportation lines.</p>	<ul style="list-style-type: none"> • A-Maze-ing Water (p: 236) • Rainy-Day Hike (p: 169) 	<ul style="list-style-type: none"> • Construct maps and models of natural systems near their school, home or community (e.g., streams, parks, wooded areas).
<p>5. Demonstrate familiarity with the school's layout, environs, and the jobs people do there.</p>	<ul style="list-style-type: none"> • A-Maze-ing Water (p: 236) • Rainy-Day Hike (p: 169) 	<ul style="list-style-type: none"> • Recognize that the environment surrounding the school today is most likely different from what it was when the school was built. • List jobs at the school related to the use and maintenance of any natural systems at the school (e.g., school gardens, green spaces).

K.5. Students put events in temporal order using a calendar, placing days, weeks, and months in proper order.

	<ul style="list-style-type: none"> • House of Seasons (Portal) 	
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K.6. Students understand that history relates to events, people, and places of other times.

<p>3. Understand how people lived in earlier times and how their lives would be different today (e.g., getting water from a well, growing food, making clothing, having fun, forming organizations, living by rules and laws).</p>	<ul style="list-style-type: none"> • Common Water (p: 249) • The Long Haul (p: 273) • Cold Cash in the Icebox (Portal) 	<ul style="list-style-type: none"> • Recognize that people in earlier times used many of the same goods and ecosystem services as we do today (e.g., timber, clean water, food). • Identify that in earlier times people more directly consumed the goods and ecosystem services from natural systems rather than obtaining them from secondary sources (e.g., food markets, lumber yards). • Explain that the quantity of goods consumed by people increases as human communities grow (e.g., water and energy consumption).
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1st Grade: A Child's Place in Time & Space

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<i>1.1 Students describe the rights and individual responsibilities of citizenship.</i>		
1. Understand the rule-making process in a direct democracy (everyone votes on the rules) and in a representative democracy (an elected group of people make the rules), giving examples of both systems in their classroom, school, and community.	<ul style="list-style-type: none"> • Common Water (p: 253) • Pass the Jug (p: 450) 	
2. Understand the elements of fair play and good sportsmanship, respect for the rights and opinions of others, and respect for rules by which we live, including the meaning of the "Golden Rule."	<ul style="list-style-type: none"> • Common Water (p: 253) • Pass the Jug (p: 450) 	
<i>1.2 Students compare and contrast the absolute and relative locations of places and people and describe the physical and/or human characteristics of places.</i>		
1. Locate on maps and globes their local community, California, the United States, the seven continents, and the four oceans.	<ul style="list-style-type: none"> • Blue Planet (p: 130) • Discover the Waters of Our National Parks (p: 500)* 	
3. Construct a simple map, using cardinal directions and map symbols.	<ul style="list-style-type: none"> • A-maze-ing Water (p: 231) • Discover the Waters of Our National Parks (p: 500)* • Rainy-Day Hike (p: 169) 	

<p>4. Describe how location, weather, and physical environment affect the way people live, including the effects on their food, clothing, shelter, transportation, and recreation.</p>	<ul style="list-style-type: none"> • A-maze-ing Water (p: 231) • Blue Planet (p: 130) • Common Water (p: 249) • Discover the Waters of Our National Parks (p: 500)* • House of Seasons (Portal) • Long Haul (The) (p: 273) • The Thunderstorm (p: 209) 	<ul style="list-style-type: none"> • Describe how location, weather, and the physical environment interact to create specific conditions that determine what humans use for food, clothing, shelter, transportation, and recreation. • Recognize that human communities are generally located in close proximity to the natural systems (e.g., forests, farmland, bodies of water) that provide the goods and ecosystem services upon which humans depend. • Explain that human activities and naturally-occurring events can change natural systems. • Provide examples of how changes to natural systems can affect how people live.
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1.3 Students know and understand the symbols, icons, and traditions of the United States that provide continuity and a sense of community across time.

<p>3. Identify American symbols, landmarks, and essential documents, such as the flag, bald eagle, Statue of Liberty, U.S. Constitution, and Declaration of Independence, and know the people and events associated with them.</p>	<ul style="list-style-type: none"> • Discover the Waters of Our National Parks (p: 500)* 	
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1.4. Students compare and contrast everyday life in different times and places around the world and recognize that some aspects of people, places, and things change over time while others stay the same.

<p>2. Study transportation methods of earlier days.</p>	<ul style="list-style-type: none"> • The Long Haul (p: 273) • Water Concentration (Portal) 	
<p>3. Recognize similarities and differences of earlier generations in such areas as work (inside and outside the home), dress, manners, stories, games, and festivals, drawing from biographies, oral histories, and folklore.</p>	<ul style="list-style-type: none"> • Common Water (p: 249) • The Long Haul (p: 273) • Water Concentration (Portal) 	<ul style="list-style-type: none"> • Recognize that in earlier generations, a greater proportion of jobs were directly related to the extraction, harvesting, transporting and consumption of natural resources (e.g., farming and food production). • Provide examples of how jobs related to the extraction, harvesting, transporting and consumption of natural resources have changed from the past to the present. • Compare energy use between past and present methods for extracting, harvesting, transporting and consuming natural resources.

1.6. Students understand basic economic concepts and the role of individual choice in a free-market economy.

2. Identify the specialized work that people do to manufacture, transport, and market goods and services and the contributions of those who work in the home.

• **Urban Waters (p: 413)***

• List jobs that are related to extracting, harvesting, transporting and consuming natural resources.

2nd Grade: People Who Make A Difference

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
2.1. Students differentiate between things that happened long ago and things that happened yesterday.		
<p>2. Compare and contrast their daily lives with those of their parents, grandparents, and/ or guardians.</p>	<ul style="list-style-type: none"> • Common Water (p: 249)* • Long Haul (The) (p: 273) • Pass the Jug (p. 447)* 	<ul style="list-style-type: none"> • Compare and contrast their dependence on natural systems and resources with that of their parents, grandparents, and/ or guardians. • Provide examples of jobs related to extraction, harvesting, transportation and consumption of natural resources in the past and present. • Recognize that the ways we use natural resources (goods and ecosystem services) from natural systems has changed over time and can be discovered by comparing our daily lives with those of recent generations.
2.2 Students demonstrate map skills by describing the absolute and relative locations of people, places, and environments.		
<p>4. Compare and contrast basic land use in urban, suburban, and rural environments in California.</p>	<ul style="list-style-type: none"> • Color Me a Watershed, Part I (p: 239) • Common Water (p: 249)* 	<ul style="list-style-type: none"> • Identify the role of land and water resources in food production. • Provide examples of how natural processes such as climate and weather affect the quality, quantity, and reliability of food resources. • List jobs associated with the production and consumption of food. • Recognize that more food must be produced to support growing human populations. • Provide examples of farming or ranching practices that have changed over the past century. • Describe some of the effects of food production and consumption on natural systems.
2.4. Students understand basic economic concepts and their individual roles in the economy and demonstrate basic economic reasoning skills.		
<p>1. Describe food production and consumption long ago and today, including the roles of farmers, processors, distributors, weather, and land and water resources.</p>	<ul style="list-style-type: none"> • Common Water (p: 249)* • House of Seasons (Portal) • Long Haul (The) (p: 273) 	<ul style="list-style-type: none"> • Identify the role of land and water resources in food production. • Provide examples of how natural processes such as climate and weather affect the quality, quantity, and reliability of food resources. • List jobs associated with the production and consumption of food. • Recognize that more food must be produced to support growing human populations. • Provide examples of farming or ranching practices that have changed over the past century. • Describe some of the effects of food production and consumption on natural systems.

3. Understand how limits on resources affect production and consumption (what to produce and what to consume).

- **House of Seasons (Portal)**
- **Life Box (The) (p: 69)**
- **Pass the Jug (p: 447)**

- Recognize that food production depends on the availability of natural resources (goods and ecosystems services) from natural systems (e.g., water, air, light, soil nutrients).
- Explain that natural systems contain limited supplies of natural resources (e.g., water, soil nutrients).
- Identify that limits on natural resources can influence food production.
- Provide examples of how decisions about what to produce and what to consume can be affected by the quality, quantity and reliability of the resources provided by natural systems.

3rd Grade: Continuity and Change

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<p>3.1. Students describe the physical and human geography and use maps, tables, graphs, photographs, and charts to organize information about people, places, and environments in a spatial context.</p>		
<p>1. Identify geographical features in their local region (e.g., deserts, mountains, valleys, hills, coastal areas, oceans, lakes).</p>	<ul style="list-style-type: none"> • Discover the Waters of Our National Parks (p: 500)* • Incredible Journey (The) (p: 155)* 	
<p>2. Trace the ways in which people have used the resources of the local region and modified the physical environment (e.g., a dam constructed upstream changed a river or coastline).</p>	<ul style="list-style-type: none"> • A-maze-ing Water (p: 231) • Common Water (p: 249)* • Discover the Waters of Our National Parks (p: 500)* • Incredible Journey (The) (p: 155)* • Long Haul (The) (p: 273) • My Water Footprint (p: 441) • Water Audit (p: 475) 	<ul style="list-style-type: none"> • Recognize the ways that people use the resources (goods and ecosystem services) that are provided by the ecosystems (natural systems) in their local region. • Identify the ways humans have changed the natural systems (physical and living environment) in their local region to extract, harvest, transport and consume natural resources (goods and ecosystem services). • Provide examples of how the extraction, harvesting, transportation and consumption of natural resources have influenced the natural systems in the local region. • Explain that some changes to the natural systems are detrimental while others may be beneficial or neutral in their effects.
<p>3.2. Students describe the American Indian nations in their local region long ago and in the recent past.</p>		
<p>2. Discuss the ways in which physical geography, including climate, influenced how the local Indian nations adapted to their natural environment (e.g., how they obtained food, clothing, tools).</p>	<ul style="list-style-type: none"> • Discover the Waters of Our National Parks (p: 500)* • Water Crossings, Part II (p: 489) 	<ul style="list-style-type: none"> • Provide examples of goods and ecosystem services that were used by specific American Indian nations. • Explain how local Indian nations adapted to their natural environment so that they could extract, harvest, transport and consume natural resources (goods and ecosystem services). • Describe how physical geography, including climate, affected the natural resources (goods and ecosystem services) upon which American Indian nations depended. • Explain how the American Indian nations affected the natural systems where they lived.
<p>4. Discuss the interaction of new settlers with the already established Indians of the region.</p>	<ul style="list-style-type: none"> • Common Water (p: 249)* • Discover the Waters of Our National Parks (p: 500)* 	

3.3. Students draw from historical and community resources to organize the sequence of local historical events and describe how each period of settlement left its mark on the land.

<p>2. Describe the economies established by settlers and their influence on the present-day economy, with emphasis on the importance of private property and entrepreneurship.</p>	<ul style="list-style-type: none"> • Common Water (p: 249)* • Pass the Jug (p: 447)* 	<ul style="list-style-type: none"> • Identify the basis of the economies of the settlers including the roles of the goods and ecosystem services provided by local natural systems. • Explain the importance of private property rights and responsibilities of land ownership in the settlement of new areas. • Describe the importance of the natural resources (goods and ecosystem services) provided by natural systems as the basis of the economy of settlers. • Explain how the availability of natural systems and resources influence decisions about how and where the settlers should select the location of their property.
<p>3. Trace why their community was established, how individuals and families contributed to its founding and development, and how the community has changed over time, drawing on maps, photographs, oral histories, letters, newspapers, and other primary sources.</p>	<ul style="list-style-type: none"> • Common Water (p: 249)* • Pass the Jug (p: 447)* • Water Crossings (p: 487) 	<ul style="list-style-type: none"> • Identify the goods and ecosystem services provided by natural systems in their local areas that contributed to the founding and development of their communities. • Trace how the ecosystems in and near their communities changed over time, by drawing on maps, photographs, oral histories, letters, newspapers, and other primary sources. • Describe how the dependence of their communities on local natural systems and resources has changed over time by drawing on maps, photographs, oral histories, letters, newspapers, and other primary sources.

3.4. Students understand the role of rules and laws in our daily lives and the basic structure of the U.S. government.

<p>3. Know the histories of important local and national landmarks, symbols, and essential documents that create a sense of community among citizens and exemplify cherished ideals (e.g., the U.S. flag, the bald eagle, the Statue of Liberty, the U.S. Constitution, the Declaration of Independence, the U.S. Capitol).</p>	<ul style="list-style-type: none"> • Discover the Waters of Our National Parks (p: 500)*
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3.5. Students demonstrate basic economic reasoning skills and an understanding of the economy of the local region.

<p>1. Describe the ways in which local producers have used and are using natural resources, human resources, and capital resources to produce goods and services in the past and the present.</p>	<ul style="list-style-type: none"> • Common Water (p: 249)* • Choices and Preferences, Water Index (Portal) • Pass the Jug (p: 447)* • There is No Away! (p: 453) • Virtual Water (p: 289) • Water Concentration (Portal) • Water Crossings (p: 487) 	<ul style="list-style-type: none"> • Provide examples of the natural resources (goods and ecosystem services) used by local producers in the past and the present. • Compare the costs and benefits of methods used by local producers to extract, harvest, transport and consume natural resources in the past and present.
<p>3. Understand that individual economic choices involve trade-offs and the evaluation of benefits and costs.</p>	<ul style="list-style-type: none"> • Choices and Preferences, Water Index (Portal) • Long Haul (The) (p: 273) • My Water Footprint (p: 441) • Pass the Jug (p: 447)* • There is No Away! (p: 453) • Virtual Water (p: 289) • Water Concentration (Portal) 	<ul style="list-style-type: none"> • Recognize the wide spectrum of considerations (e.g., economic, legal, environmental, public health, and socio-cultural) that can be involved in making economic choices. • Describe the importance of considering the full spectrum of factors in evaluating the benefits, costs and trade-offs of individual economic choices.

4th Grade: California: A Changing State

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<p>4.1. Students demonstrate an understanding of the physical and human geographic features that define places and regions in California.</p>		
<p>1. Explain and use the coordinate grid system of latitude and longitude to determine the absolute locations of places in California and on Earth.</p>	<ul style="list-style-type: none"> • Piece It Together (Portal) • Great Water Journeys (Portal) 	<ul style="list-style-type: none"> • Use the coordinate grid system of latitude and longitude to determine the absolute location of various landforms, bodies of water, vegetation and climatic zones in California and on Earth.
<p>2. Distinguish between the North and South Poles; the equator and the prime meridian; the tropics; and the hemispheres, using coordinates to plot locations.</p>	<ul style="list-style-type: none"> • Piece It Together (Portal) • Great Water Journeys (Portal) 	
<p>3. Identify the state capital and describe the various regions of California, including how their characteristics and physical environments (e.g., water, landforms, vegetation, climate) affect human activity.</p>	<ul style="list-style-type: none"> • Discover the Waters of Our National Parks (p: 493)* • Incredible Journey (The) (p: 155)* • Seeing Watersheds (p: 187) • Water Crossings (p: 487) 	
<p>4. Identify the locations of the Pacific Ocean, rivers, valleys, and mountain passes and explain their effects on the growth of towns.</p>	<ul style="list-style-type: none"> • Back to the Future (p: 307) • Blue Planet (p: 125) • Blue River (p: 135) • Color Me a Watershed, Pt. I (p: 239) • Common Water (p: 249)* • Discover the Waters of Our National Parks (p: 493)* • High Water History (p: 321) • Incredible Journey (The) (p: 155)* • My Water Address, Take Action! (p: 433) • Seeing Watersheds (p: 187) • Water Crossings (p: 487) 	

<p>5. Use maps, charts, and pictures to describe how communities in California vary in land use, vegetation, wildlife, climate, population density, architecture, services, and transportation.</p>	<ul style="list-style-type: none"> • Back to the Future (p: 307) • Color Me a Watershed, Pt. I (p: 239) • Discover the Waters of Our National Parks (p: 493)* • High Water History (p: 321) • Incredible Journey (The) (p: 155)* • My Water Address, Take Action! (p: 433) • Seeing Watersheds (p: 187) • Water Crossings (p: 487) 	
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4.2. Students describe the social, political, cultural, and economic life and interactions among people of California from the pre-Columbian societies to the Spanish mission and Mexican rancho periods.

<p>2. Identify the early land and sea routes to, and European settlements in California with a focus on the exploration of the North Pacific (e.g., by Captain James Cook, Vitus Bering, Juan Cabrillo), noting especially the importance of mountains, deserts, ocean currents, and wind patterns.</p>	<ul style="list-style-type: none"> • Great Water Journeys (Portal) 	<ul style="list-style-type: none"> • Identify the reasons for the development of the early land and sea routes used in exploration of the North Pacific (e.g., the discovery, extraction, harvest and consumption of natural resources). • Describe the influence of various geographic features including mountains, deserts, ocean currents, and wind patterns on the development of land and sea routes used in European exploration and settlements in California. • Recognize the roles of key explorers in the discovery of natural systems that would provide goods and ecosystem services for the continued growth and development of European nations. • Provide examples of the effects of exploring the North Pacific on the geographic extent, composition, biological diversity, and viability of natural systems found in that region. • Identify how the demographics, distribution and consumption rates of human populations in Europe influenced the geographic extent, composition, biological diversity, and viability of natural systems in the North Pacific.
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<p>4. Describe the mapping of, geographic basis of, and economic factors in the placement and function of the Spanish missions; and understand how the mission system expanded the influence of Spain and Catholicism throughout New Spain and Latin America.</p>	<ul style="list-style-type: none"> • Water Crossings (p: 487) 	
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4.3. Students explain the economic, social, and political life in California from the establishment of the Bear Flag Republic through the Mexican-American War, the Gold Rush, and the granting of statehood.

2. Compare how and why people traveled to California and the routes they traveled (e.g., James Beckwourth, John Bidwell, John C. Fremont, Pio Pico).

• Water Crossings (p: 487)

- Identify the goods and ecosystem services provided by California's natural systems that attracted various well-known individuals (James Beckwourth, John Bidwell, John C. Fremont, Pio Pico) and the multitudes of individuals and families to migrate to California.
- Describe how the decisions to settle in some areas of California rather than others were influenced by the goods and ecosystem services provided by the natural systems.
- Compare how and why people traveled to California and the routes they chose.

4.4 Students explain how California became an agricultural and industrial power, tracing the transformation of the California economy and its political and cultural development since the 1850s.

5. Discuss the effects of the Great Depression, the Dust Bowl, and World War II on California.

• Dust Bowls and Failed Levees (Portal)

- Recognize the relationship between the Dust Bowl and the Great Depression on the availability and consumption of the goods and ecosystem services from natural systems.
- Identify the role of human practices (e.g., agriculture) in altering the cycles that operate within natural systems and the relevance of those practices to the Dust Bowl.
- Provide examples of how the migration to California that resulted from the Great Depression, the Dust Bowl, and World War II influenced the consumption of goods and ecosystem services from California's natural systems (e.g., growth of human communities directly and indirectly consumed natural resources).
- Recognize that the capacity of natural systems to adjust to these humancaused alterations depends on the scope, scale, and duration of the activity and the nature of their byproducts (e.g., the effects of the "temporary" internment camps (e.g., Manzanar) and migrant work camps (e.g., to house Dust Bowl migrants remain visible on California's landscape after many decades.)

<p>7. Trace the evolution of California's water system into a network of dams, aqueducts, and reservoirs.</p>	<ul style="list-style-type: none"> • Blue River (p: 135) • Common Water (p: 249)* • Discover the Waters of Our National Parks (p: 493)* • Incredible Journey (p. 155)* • Pass The Jug (p. 447)* • Water Crossings (p: 487) 	<ul style="list-style-type: none"> • Identify the importance of California's water to humans, human communities, and natural systems. • Describe how the availability of a reliable supply of clean water influenced the growth of human communities and the development of California's agriculture-based economy. • Describe how the development of California's water system has influenced the natural systems of the state (e.g., Mono Lake, Owen's Lake, Salton Sea). • Describe how the health of California's natural systems directly affects the quality, quantity, and reliability of California's water supply. • Explain how California's economic health is related to the reliability and quantity of water resources available for human use. • Identify the spectrum of considerations that are involved in making decisions about California's water system (e.g., legal factors, economic factors, environmental sustainability, public health, and socio-cultural factors). • Describe how the assessment of these decision-making factors have changed over time in response to changing conditions, which influences how those decisions are made.
<p>9. Analyze the impact of twentieth-century Californians on the nation's artistic and cultural development, including the rise of the entertainment industry (e.g., Louis B. Meyer, Walt Disney, John Steinbeck, Ansel Adams, Dorothea Lange, John Wayne).</p>	<ul style="list-style-type: none"> • Dust Bowls and Failed Levees (Portal) 	

5th Grade: United States History and Geography: Making a New Nation

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<p>5.1. Students describe the major pre-Columbian settlements, including the cliff dwellers and pueblo people of the desert Southwest, the American Indians of the Pacific Northwest, the nomadic nations of the Great Plains, and the woodland peoples east of the Mississippi River.</p>		
<p>1. Describe how geography and climate influenced the way various nations lived and adjusted to the natural environment, including locations of villages, the distinct structures that they built, and how they obtained food, clothing, tools, and utensils.</p>	<ul style="list-style-type: none"> • Discover the Waters of Our National Parks (p: 493)* • Irrigation Interpretation (Portal) • Water Messages In Stone (Portal) 	<ul style="list-style-type: none"> • Recognize that pre-Columbian peoples (cliff dwellers and pueblo people of the desert Southwest, the American Indians of the Pacific Northwest, the nomadic nations of the Great Plains, and the woodland peoples east of the Mississippi River) all depended on the goods and ecosystem services provided by natural systems for their survival. • Describe how geography and climate and the natural resources (goods and ecosystem services) available in different regions of North America determined the lifestyles of the communities that developed in each area. • Provide examples of how the structures, clothing, tools, utensils, and choice of foods varied as a result of the natural resources available in particular regions of the continent. • Identify how decisions by the various Indian nations regarding the location of villages, the structures they built, and the methods used to obtain various goods were influenced by the health and viability of natural systems. • Explain that ancient cultures sometimes changed the location of their villages in response to changes in the availability of the goods and ecosystem services provided by the natural systems where they lived. • Explain that pre-Columbian peoples had the same needs as we do today (e.g., water, food, shelter) even though we often meet some of those needs in different ways.
<p>5.2. Students trace the routes of early explorers and describe the early explorations of the Americas.</p>		

3. Trace the routes of the major land explorers of the United States, the distances traveled by explorers, and the Atlantic trade routes that linked Africa, the West Indies, the British colonies, and Europe.

• **Great Water Journeys (Portal)**
• **Water Crossings (p: 487)**

- Identify the principle natural resources sought by the major land explorers of the United States and exchanged through the Atlantic trade routes that linked Africa, the West Indies, the British colonies, and Europe.
- Describe how the climate and physical geography of the United States, the Atlantic, Africa, the West Indies, the British colonies, and Europe influenced the development of the major routes.
- Recognize that the cycles and processes operating within natural systems, such as wind patterns, ocean currents and climate, influenced the routes and distances traveled by the land explorers and traders.
- Trace the routes of the major land explorers of the United States, the distances traveled by explorers, and the Atlantic trade routes that linked Africa, the West Indies, the British colonies, and Europe.

5.8. Students trace the colonization, immigration, and settlement patterns of the American people from 1789 to the mid-1800s, with emphasis on the role of economic incentives, effects of the physical and political geography, and transportation systems.

<p>2. Name the states and territories that existed in 1850 and identify their locations and major geographical features (e.g., mountain ranges, principal rivers, dominant plant regions).</p>	<ul style="list-style-type: none"> • Blue River (p: 135)** • Discover the Waters of Our National Parks (p: 493)* • Pass the Jug (p: 447) • Water Crossings (p: 487) 	<ul style="list-style-type: none"> • Name the states and territories in the United States that existed in 1850. • Provide examples of the geographic features of the states and territories that existed in 1850 (e.g., mountain ranges, rivers, dominant plant regions). • Identify the goods and ecosystem services provided by the natural systems in these states and territories that existed in 1850. • Explain why the major cities in these states and territories were typically located on natural waterways.
<p>3. Demonstrate knowledge of the explorations of the trans-Mississippi West following the Louisiana Purchase (e.g., Meriwether Lewis and William Clark, Zebulon Pike, John Fremont).</p>	<ul style="list-style-type: none"> • Great Water Journeys (Portal) 	<ul style="list-style-type: none"> • Identify the reasons for the explorations of the trans-Mississippi West following the Louisiana Purchase (e.g., identifying and cataloging goods and ecosystem services available west of the Missouri river). • Describe the roles of key explorers (e.g., Meriwether Lewis and William Clark, Zebulon Pike, John Fremont) in locating natural resources that supported the economic growth of the United States and encouraged westward expansion.
<p>4. Discuss the experiences of settlers on the overland trails to the West (e.g., location of the routes; purpose of the journeys; the influence of the terrain, rivers, vegetation, and climate; life in the territories at the end of these trails).</p>	<ul style="list-style-type: none"> • Blue River (p: 135)** • Discover the Waters of Our National Parks (p: 493)* • Make a Mural (p: 515) • Pass the Jug (p: 447) • Water Crossings (p: 487) 	<ul style="list-style-type: none"> • Identify reasons that the settlers moved to the West (e.g., population growth in the Eastern United States, the availability of untapped sources of natural resources in the West). • Recognize that the natural systems in the American territories west of the Mississippi and Missouri Rivers influenced the experiences of settlers as they traversed the overland trails to the West (e.g., the influence of the terrain, rivers, vegetation, and climate). • Describe how the cycles and processes that operate within natural systems influenced the experiences of settlers as they traversed the overland trails to the West (e.g., the choice and location of the routes, seasons to travel, and length of journey). • Provide examples of the factors that influenced the settlers' decisions to migrate and settle in particular areas (e.g., availability of natural resources, character of the region's natural systems). • Explain how life in the territories at the end of the overland trails was different from life in the regions from which these settlers had originally come.

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<i>Chronological and Spatial Thinking</i>		
<p>1. Students place key events and people of the historical era they are studying in a chronological sequence and within a spatial context; they interpret time lines.</p>	<ul style="list-style-type: none"> · Back to the Future (p: 307) · Color Me a Watershed, Pt. I (p: 239) · Common Water (p: 249)* · Great Water Journeys (Portal) · House of Seasons (Portal) 	
<p>2. Students correctly apply terms related to time, including past, present, future, decade, century, and generation.</p>	<ul style="list-style-type: none"> · Back to the Future (p: 307) · Color Me a Watershed, Pt. I (p: 239) · Common Water (p: 249)* · Great Water Journeys (Portal) · House of Seasons (Portal) · Incredible Journey (The) (p: 155)* · Long Haul (The) (p: 273) · Make a Mural (p: 515) · My Water Footprint (p: 441) · Pass the Jug (p: 447) · Water Crossings (p: 487) 	
<p>3. Students explain how the present is connected to the past, identifying both similarities and differences between the two, and how some things change over time and some things stay the same.</p>	<ul style="list-style-type: none"> · Back to the Future (p: 307) · Color Me a Watershed, Pt. I (p: 239) · Common Water (p: 249)* · House of Seasons (Portal) · Long Haul (The) (p: 273) · Make a Mural (p: 515) · Pass the Jug (p: 447) · Water Crossings (p: 487) 	
<p>4. Students use map and globe skills to determine the absolute locations of places and interpret information available through a map's or globe's legend, scale, and symbolic representations.</p>	<ul style="list-style-type: none"> · A-maze-ing Water (p: 231) · Back to the Future (p: 307) · Blue Planet (p: 125) · Color Me a Watershed, Pt. I (p: 239) · Great Water Journeys (Portal) · Pass the Jug (p: 447) · Rainy-Day Hike (p: 169) · Water Crossings (p: 487) 	

5. Students judge the significance of the relative location of a place (e.g., proximity to a harbor, on trade routes) and analyze how relative advantages or disadvantages can change over time.

- **A-maze-ing Water (p: 231)**
- **Back to the Future (p: 307)**
- **Color Me a Watershed, Pt. I (p: 239)**
- **Common Water (p: 249)***
- **Discover the Waters of Our National Parks (p: 493)***
- **Long Haul (The) (p: 273)**
- **Pass the Jug (p: 447)**
- **Water Crossings (p: 487)**

Research, Evidence, and Point of View

2. Students pose relevant questions about events they encounter in historical documents, eyewitness accounts, oral histories, letters, diaries, artifacts, photographs, maps, artworks, and architecture.

- **Back to the Future (p: 307)**
- **Color Me a Watershed, Pt. I (p: 239)**
- **Common Water (p: 249)***
- **Discover the Waters of Our National Parks (p: 493)***
- **Great Water Journeys (Portal)**
- **Long Haul (The) (p: 273)**
- **Make a Mural (p: 515)**
- **Pass the Jug (p: 447)**
- **Water Crossings (p: 487)**

Historical Interpretation

2. Students identify the human and physical characteristics of the places they are studying and explain how those features form the unique character of those places.

- **Blue Planet (p: 125)**
- **Blue River (p: 135)**
- **Discover the Waters of Our National Parks (p: 493)***
- **House of Seasons (Portal)**
- **Incredible Journey (The) (p: 155)***
- **Make a Mural (p: 515)**
- **Pass the Jug (p: 447)**
- **Water Crossings (p: 487)**

3. Students identify and interpret the multiple causes and effects of historical events.

- **Common Water (p: 249)***
- **Pass the Jug (p: 447)**
- **Water Crossings (p: 487)**

4. Students conduct cost-benefit analyses of historical and current events.

- **My Water Footprint (p: 441)**

6th Grade: World History and Geography: Ancient Civilizations

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<p>6.1. Students describe what is known through archaeological studies of the early physical and cultural development of humankind from the Paleolithic era to the agricultural revolution.</p>		
<p>2. Identify the locations of human communities that populated the major regions of the world and describe how humans adapted to a variety of environments.</p>	<ul style="list-style-type: none"> • Irrigation Interpretation (Portal) • People of the Bog (Portal) • Raining Cats & Dogs (p: 521) • Water Messages In Stone (Portal) 	<ul style="list-style-type: none"> • Identify the locations of early human communities that populated the major regions of the world. • Provide examples of the factors that influenced the settlement of early human communities in a variety of environments in each of the major regions of the world. • Compare the methods used by different early human communities to extract, harvest, transport and consume natural resources in the major regions of the world. • Describe how humans adapted their practices to the goods and ecosystem services, as well as to the cycles and processes that operated in the natural systems that they inhabited.
<p>3. Discuss the climatic changes and human modifications of the physical environment that gave rise to the domestication of plants and animals and new sources of clothing and shelter.</p>	<ul style="list-style-type: none"> • Irrigation Interpretation (Portal) • Just Passing Through (p: 163) • People of the Bog (Portal) • Piece It Together (Portal) • Raining Cats & Dogs (p: 521) • Rainstick (The) (p: 529) • Water Messages In Stone (Portal) 	<ul style="list-style-type: none"> • Identify both the climatic changes and human modifications of the physical environment that early humans caused as their populations grew. • Describe the effects of the climatic changes and human modifications of the physical environment on the natural systems they inhabited and harvested. • Explain the processes that gave rise to the domestication of plants and animals. • Provide examples of new sources of clothing and shelter developed by humans from the Paleolithic era to the agricultural revolution. • Recognize that as the climate warmed and the environment changed, human populations moved into new areas to obtain more goods and ecosystem services from natural systems. • Describe the methods used by humans to extract, harvest, transport and consume natural resources and how those methods influenced the geographic extent, composition, biological diversity, and viability of natural systems. • Explain the relationship between the domestication of plants and animals (e.g., agriculture and ranching), textiles, cooking and preserving food, and work specialization. • Describe how these new practices and their resulting byproducts affected the natural systems that these human communities inhabited.

7th Grade- World History and Geography: Medieval and Early Modern Times

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<p>7.2 Students analyze the geographic, political, economic, religious, and social structures of the civilizations of Islam in the Middle Ages.</p>		
<p>5. Describe the growth of cities and the establishment of trade routes among Asia, Africa, and Europe, the products and inventions that traveled along these routes (e.g., spices, textiles, paper, steel, new crops), and the role of merchants in Arab society.</p>	<ul style="list-style-type: none"> • Color Me a Watershed (p: 239) • Common Water (p: 249) • Great Water Journeys (Portal) • Poison Pump (p: 107) • Springing Into Action (p: 203) • Super Sleuths (p: 113) • Water Crossings (p: 487) 	<ul style="list-style-type: none"> • Describe how the growth of human populations and cities led to the establishment of trade routes among Asia, Africa, and Europe to import various goods and products (for example, agricultural products). • Describe how improvements to agricultural practices on the Arabian Peninsula increased supplies of food and other agricultural products (sometimes creating surpluses), which led to the growth of trade. • Provide examples of the goods, products, and inventions that were transported along these routes (for example, spices, textiles, paper, steel, new crops). • Describe how towns were settled along well-known trade routes, thus allowing Arab society to take advantage of raw materials from locations that were even more distant from the region. • Provide examples of the direct and indirect influences of trade routes on the natural systems that were the sources of the goods and products that were being transported.
<p>7.8 Students analyze the origins, accomplishments, and geographic diffusion of the Renaissance.</p>		
<p>5. Detail advances made in literature, the arts, science, mathematics, cartography, engineering, and the understanding of human anatomy and astronomy (e.g., by Dante Alighieri, Leonardo da Vinci, Michelangelo di Buonarroti Simoni, Johann Gutenberg, William Shakespeare).</p>	<ul style="list-style-type: none"> • Energetic Water (Portal) • Water Inspirations (p: 535) 	<ul style="list-style-type: none"> • Discuss the role of scientific discovery, mathematics, and cartography during the Renaissance in improving human knowledge of organisms, natural systems, and the planet as a whole, a process that continues today.
<p>7.10 Students analyze the historical developments of the Scientific Revolution and its lasting effect on religious, political, and cultural institutions.</p>		

<p>1. Discuss the roots of the Scientific Revolution (e.g., Greek rationalism; Jewish, Christian, and Muslim science; Renaissance humanism; new knowledge from global exploration).</p>	<ul style="list-style-type: none"> • Energetic Water (Portal) • Healthy Habits (p: 63) • Poison Pump (p: 107) 	<ul style="list-style-type: none"> • Discuss the role of the Scientific Revolution and new knowledge from global exploration in improving human understanding of the natural world, thus improving our ability to make better decisions about resources and natural systems, a process that continues today.
<p>2. Understand the significance of the new scientific theories (e.g., those of Copernicus, Galileo, Kepler, Newton) and the significance of new inventions (e.g., the telescope, microscope, thermometer, barometer).</p>	<ul style="list-style-type: none"> • Energetic Water (Portal) • Healthy Habits (p: 63) • Poison Pump (p: 107) 	<ul style="list-style-type: none"> • Explain the significance of the new scientific theories of Copernicus, Galileo, Kepler, and Newton and of new inventions in improving human understanding of the natural world, thus improving our ability to make better decisions about resources and natural systems, a process that continues today.
<p>7.11. Students analyze political and economic change in the sixteenth, seventeenth, and eighteenth centuries (the Age of Exploration, the Enlightenment, and the Age of Reason).</p>		
<p>2. Discuss the exchanges of plants, animals, technology, culture, and ideas among Europe, Africa, Asia, and the Americas in the fifteenth and sixteenth centuries and the major economic and social effects on each continent.</p>	<ul style="list-style-type: none"> • Invaders (p: 263) 	

8th Grade- United States History and Geography: Growth and Conflict

Academic Content Standards

Project WET Activities

Environmental Education Initiative Learning Objectives

8.2 Students analyze the political principles underlying the U.S. Constitution and compare the enumerated and implied powers of the federal government.

6. Enumerate the powers of government set forth in the Constitution and the fundamental liberties ensured by the Bill of Rights.

• Water Bill of Rights (Portal)

8.6 Students analyze the divergent paths of the American people from 1800 to the mid-1800s and the challenges they faced, with emphasis on the Northeast.

1. Discuss the influence of industrialization and technological developments on the region, including human modification of the landscape and how physical geography shaped human actions (e.g., growth of cities, deforestation, farming, mineral extraction).

- **Cold Cash In the Icebox (Portal)**
- **Color Me a Watershed (p: 239)**
- **Discover the Waters of Our National Parks (p: 493)**
- **Energetic Water (Portal)**
- **Grave Mistake (A) (p: 315)**

- Identify the influences of industrialization and technological developments on the natural systems in the Northeast region.
- Provide examples of both short-term and long-term effects of industrialization and technological developments on the natural systems in the Northeast region.
- Discuss how the physical geography of the region and the natural systems that are found there (e.g., forests, wetlands) influenced human actions (e.g., growth of cities and ports, deforestation and drainage of wetlands, farming, mineral extraction).
- Describe the role of scientific and technological knowledge in industrialization and technological developments on the region.
- Describe the influence of industrialization and technological developments on the growth of human populations in the region.
- Provide examples of the effects of the growing human population on the natural systems in the region (e.g., chemical byproducts, reshaping of the landscape).
- Categorize the direct and indirect effects of industrialization and technological developments as beneficial, neutral or detrimental to the natural systems in the Northeast region.

8.8 Students analyze the divergent paths of the American people in the West from 1800 to the mid-1800s and the challenges they faced.

2. Describe the purpose, challenges, and economic incentives associated with westward expansion, including the concept of Manifest Destiny (e.g., the Lewis and Clark expedition, accounts of the removal of Indians, the Cherokees' "Trail of Tears," settlement of the Great Plains) and the territorial acquisitions that spanned numerous decades.

- **Great Water Journeys (Portal)**
- **Water Crossings (p: 487)**

- Identify the reasons for westward expansion in terms of exploration for natural resources (goods and ecosystem services).
- Recognize the role of the growing population in the United States in relation to the westward expansion.
- Describe the effects of the westward expansion on the natural systems and resources that were being settled.
- Provide examples of the economic incentives provided to individuals willing to settle in the West that are related to natural resources (e.g., homesteading, land ownership).
- Explain how the concept of Manifest Destiny related to the control of additional territories and the natural resources that they contained.

4. Examine the importance of the great rivers and the struggle over water rights.

- 8-4-1, One For All (p: 299)
- Easy Street (Portal)
- High Water History (p: 321)
- Irrigation Interpretation (Portal)
- Long Haul (The) (p: 273)
- Pass the Jug (p: 447)
- Seeing Watersheds (p: 187)
- Water Crossings (p: 487)

- Identify the role that the great rivers and water resources played in the West from 1800 to the mid-1800s (e.g., the location of towns, farming and ranching).
- Describe the role of scientific and technological knowledge in the establishment of water rights.
- Provide examples of the economic, political, legal, and cultural factors that played a role in decisions about water rights in the West.
- Describe how the great river systems and struggles over water rights influenced the development of economic, political, and legal systems in the West.
- Compare the issues related to water use and management in the West with other parts of the United States.

8.12 Students analyze the transformation of the American economy and the changing social and political conditions in the United States in response to the Industrial Revolution.

1. Trace patterns of agricultural and industrial development as they relate to climate, use of natural resources, markets, and trade and locate such development on a map.

- 8-4-1, One For All (p: 299)
- Choices and Preferences (Portal)
- Cold Cash in the Icebox (Portal)
- Common Water (p: 249)
- Easy Street (Portal)
- Long Haul (The) (p: 273)
- Pass the Jug (p: 447)*
- Water Concentration (Portal)
- Water Crossings (p: 487)

- Recognize patterns of agricultural and industrial development as they relate to climate, use of natural resources (i.e., goods and ecosystem services) and availability of markets.
- Describe the role of scientific and technological knowledge in agricultural and industrial development.
- Describe how technological advances in industry and agriculture during the late nineteenth and twentieth centuries influenced the growth of human populations and communities.
- Provide examples of how the technological advances in industry and agriculture during the late nineteenth and twentieth centuries affected the natural systems where this development was taking place.
- Explain how political, economic, cultural and environmental factors affected technological advances in industry and agriculture during the late nineteenth and twentieth centuries.

<p>5. Examine the location and effects of urbanization, renewed immigration, and industrialization (e.g., the effects on social fabric of cities, wealth and economic opportunity, the conservation movement).</p>	<ul style="list-style-type: none"> • Back to the Future (p: 307) • Color Me a Watershed (p: 239) • Common Water (p: 249)* • Discover the Waters of Our National Parks (p: 493)* • Dust Bowls and Failed Levees (Portal) • Grave Mistake (A) (p: 315) • High Water History (p: 321) • Humpty Dumpty (p: 335) • Pass the Jug (p: 447) • Price Is Right (The) (p: 357) • Sum of the Parts (p: 283) • Water Concentration (Portal) • Water Crossings (p: 487) 	<ul style="list-style-type: none"> • Describe the role of the growing population in the United States on the growth of cities and consumption of natural resources. • Recognize the factors that were considered in decisions regarding the growth and urbanization of cities (e.g., choice of areas and materials for construction, transportation systems). • Provide examples of how the growth of cities resulted in increasing demands for goods and ecosystem services from natural systems (e.g., agricultural products, forestry products) that placed greater demands on farmland (soils, water) and forests (timber). • Describe the direct and indirect effects of urbanization on the surrounding natural systems. • Explain the role of the Industrial Revolution in the development of the conservation movement. • Describe the role of scientific and technological knowledge in urbanization, renewed immigration, and industrialization, wealth and economic opportunity, and the conservation movement.
<p>9. Name the significant inventors and their inventions and identify how they improved the quality of life (e.g., Thomas Edison, Alexander Graham Bell, Orville and Wilbur Wright).</p>	<ul style="list-style-type: none"> • Energetic Water (Portal) 	

Grades 6-8: Historical and Social Sciences Analysis Skills

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<i>Chronological and Spatial Thinking</i>		
<p>1. Students explain how major events are related to one another in time.</p>	<ul style="list-style-type: none"> • Back to the Future (p: 307) • Color Me a Watershed (p: 239) • Common Water (p: 249)* • Dust Bowls and Failed Levees (Portal) • Energetic Water (Portal) • Great Water Journeys (Portal) • High Water History (p: 321) • Nature Rules! (p: 277) • Pass the Jug (p: 447)* • Water Concentration (Portal) 	

<p>2. Students construct various time lines of key events, people, and periods of the historical era they are studying.</p>	<ul style="list-style-type: none"> · Common Water (p: 249)* · Dust Bowls and Failed Levees (Portal) · Energetic Water (Portal) · Great Water Journeys (Portal) · High Water History (p: 321) · Nature Rules! (p: 277) · Poison Pump (p: 107) · Water Bill of Rights (Portal) · Water Concentration (Portal) 	
<p>3. Students use a variety of maps and documents to identify physical and cultural features of neighborhoods, cities, states, and countries and to explain the historical migration of people, expansion and disintegration of empires, and the growth of economic systems.</p>	<ul style="list-style-type: none"> · Back to the Future (p: 307) · Color Me a Watershed (p: 239) · Discover the Waters of Our National Parks (p: 493)* · Grave Mistake (A) (p: 315) · Great Water Journeys (Portal) · High Water History (p: 321) · Nature Rules! (p: 277) · Piece It Together (Portal) · Poison Pump (p: 107) · Water Crossings (p: 487) 	

Research, Evidence, and Point of View

<p>1. Students frame questions that can be answered by historical study and research.</p>	<ul style="list-style-type: none"> · Back to the Future (p: 307) · Cold Cash In the Icebox (Portal) · Color Me a Watershed (p: 239) · Common Water (p: 249)* · Dust Bowls and Failed Levees (Portal) · Grave Mistake (A) (p: 315) · Great Water Journeys (Portal) · High Water History (p: 321) · Invaders (p: 263) · Irrigation Interpretation (Portal) · Nature Rules! (p: 277) · Poison Pump (p: 107) · Water Bill of Rights (Portal) · Water Crossings (p: 487) 	
<p>2. Students distinguish fact from opinion in historical narratives and stories.</p>	<ul style="list-style-type: none"> · Dust Bowls and Failed Levees (Portal) · Grave Mistake (A) (p: 315) · Irrigation Interpretation (Portal) · Nature Rules! (p: 277) · Poison Pump (p: 107) 	

<p>3. Students distinguish relevant from irrelevant information, essential from incidental information, and verifiable from unverifiable information in historical narratives and stories.</p>	<ul style="list-style-type: none"> · Back to the Future (p: 307) · Dust Bowls and Failed Levees (Portal) · Grave Mistake (A) (p: 315) · High Water History (p: 321) · Irrigation Interpretation (Portal) · Nature Rules! (p: 277) · Poison Pump (p: 107) · Raining Cats & Dogs (p: 521) · Water Bill of Rights (Portal) 	
<p>4. Students assess the credibility of primary and secondary sources and draw sound conclusions from them.</p>	<ul style="list-style-type: none"> · Dust Bowls and Failed Levees (Portal) · Grave Mistake (A) (p: 315) · High Water History (p: 321) · Nature Rules! (p: 277) · Poison Pump (p: 107) 	
<p>5. Students detect the different historical points of view on historical events and determine the context in which the historical statements were made (the questions asked, sources used, author's perspectives).</p>	<ul style="list-style-type: none"> · Dust Bowls and Failed Levees (Portal) · High Water History (p: 321) · Long Haul (The) (p: 273) · Nature Rules! (p: 277) · Poison Pump (p: 107) 	
<p><i>Historical Interpretation</i></p>		
<p>1. Students explain the central issues and problems from the past, placing people and events in a matrix of time and place.</p>	<ul style="list-style-type: none"> · Dust Bowls and Failed Levees (Portal) · Energetic Water (Portal) · Grave Mistake (A) (p: 315) · High Water History (p: 321) · Invaders (p: 263) · Irrigation Interpretation (Portal) · Nature Rules! (p: 277) · Pass the Jug (p: 447)* · Poison Pump (p: 107) · Water Bill of Rights (Portal) · Water Concentration (Portal) 	

2. Students understand and distinguish cause, effect, sequence, and correlation in historical events, including the long- and short-term causal relations.

- **8-4-1, One For All (p: 299)**
- **Back to the Future (p: 307)**
- **Color Me a Watershed (p: 239)**
- **Common Water (p: 249)***
- **Discover the Waters of Our National Parks (p: 493)***
- **Dust Bowls and Failed Levees (Portal)**
- **Easy Street (Portal)**
- **Energetic Water (Portal)**
- **Grave Mistake (A) (p: 315)**
- **Great Water Journeys (Portal)**
- **Healthy Habits (p: 63)**
- **High Water History (p: 321)**
- **Invaders (p: 263)**
- **Irrigation Interpretation (Portal)**
- **Just Passing Through (p: 163)**
- **Long Haul (The) (p: 273)**
- **Nature Rules! (p: 277)**
- **Pass the Jug (p: 447)***
- **Poison Pump (p: 107)**
- **Water Bill of Rights (Portal)**

3. Students explain the sources of historical continuity and how the combination of ideas and events explains the emergence of new patterns.

- **8-4-1, One For All (p: 299)**
- **Back to the Future (p: 307)**
- **Color Me a Watershed (p: 239)**
- **Common Water (p: 249)***
- **Dust Bowls and Failed Levees (Portal)**
- **Easy Street (Portal)**
- **Energetic Water (Portal)**
- **High Water History (p: 321)**
- **Invaders (p: 263)**
- **Irrigation Interpretation (Portal)**
- **Nature Rules! (p: 277)**
- **Pass the Jug (p: 447)***
- **Poison Pump (p: 107)**
- **Water Bill of Rights (Portal)**
- **Water Concentration (Portal)**

<p>4. Students recognize the role of chance, oversight, and error in history.</p>	<ul style="list-style-type: none"> · Back to the Future (p: 307) · Dust Bowls and Failed Levees (Portal) · Grave Mistake (A) (p: 315) · Great Water Journeys (Portal) · Healthy Habits (p: 63) · High Water History (p: 321) · Invaders (p: 263) · Irrigation Interpretation (Portal) · Nature Rules! (p: 277) · Poison Pump (p: 107) 	
<p>5. Students recognize that interpretations of history are subject to change as new information is uncovered.</p>	<ul style="list-style-type: none"> · Dust Bowls and Failed Levees (Portal) · Nature Rules! (p: 277) 	

10th Grade- World History, Culture, and Geography: The Modern World

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
10.3 Students analyze the effects of the Industrial Revolution in England, France, Germany, Japan, and the United States.		
<p>2. Examine how scientific and technological changes and new forms of energy brought about massive social, economic, and cultural change (e.g., the inventions and discoveries of James Watt, Eli Whitney, Henry Bessemer, Louis Pasteur, Thomas Edison).</p>	<ul style="list-style-type: none"> • Energetic Water (Portal)* 	<ul style="list-style-type: none"> • Identify how scientific and technological changes and new forms of energy brought about massive social, economic, and cultural change. • Describe how the inventions and discoveries of James Watt, Eli Whitney, Henry Bessemer, Louis Pasteur, Thomas Edison depended on natural systems for the basic resources used and/or more efficiently extracted as a result of these inventions and discoveries (e.g., sources of energy transformed into electricity). • Provide examples of how the increased demands on natural systems that resulted from these changes, as well as the availability of new forms of energy, influenced the availability of natural resources and the health and functioning of the natural systems (e.g., the byproducts of energy production for industrialization, such as the burning of coal and the harnessing of rivers for hydroelectric power).
<p>3. Describe the growth of population, rural to urban migration, and growth of cities associated with the Industrial Revolution.</p>	<ul style="list-style-type: none"> • Back to the Future (p: 307) • Color Me a Watershed, Pt. I (p: 239) • A Grave Mistake (p: 315) • High Water History (p: 321) • Sum of the Parts (p: 283) • Super Sleuths (p: 113) 	<ul style="list-style-type: none"> • Identify the relation between the Industrial Revolution and the growth in human populations in urban areas (e.g., migration from rural to urban areas for new jobs). • Describe how the urbanization of the population that resulted from the Industrial Revolution influenced the natural systems surrounding the cities and towns directly and indirectly (e.g., the development of new housing and transportation systems, energy transmission systems). • Provide examples of changes to laws, policies, and incentives associated with natural resource use and management that resulted from the growth of population, rural to urban migration, and growth of cities associated with the Industrial Revolution.
<p>5. Understand the connections among natural resources, entrepreneurship, labor, and capital in an industrial economy.</p>	<ul style="list-style-type: none"> • 8-4-1, One for All (p: 299) • Back to the Future (p: 307) • Energetic Water, (Portal)* • High Water History (p: 321) • Nature Rules! (p: 277) • Pass the Jug (p: 447) • Urban Waters (p: 413) • Virtual Water (p: 289) 	<ul style="list-style-type: none"> • Recognize natural systems and the resources they provide (goods and ecosystem services) as the basic capital for the development of an industrial economy. • Provide examples of the major connections between natural systems and resources, and entrepreneurship, labor, and capital in industrial economies (e.g., the labor necessary to extract, harvest, transport, and produce goods and ecosystem services for human communities).

11th Grade- United States History and Geography: Continuity and Change in the Twentieth Century

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<p><i>11.2 Students analyze the relationship among the rise of industrialization, large-scale rural-to-urban migration, and massive immigration from Southern and Eastern Europe.</i></p>		
<p>2. Describe the changing landscape, including the growth of cities linked by industry and trade, and the development of cities divided according to race, ethnicity, and class.</p>	<ul style="list-style-type: none"> • Back to the Future (p: 307) • Color Me a Watershed, Pt. I (p: 239) • A Grave Mistake (p: 315) • High Water History (p: 321) • Nature Rules! (p: 277) • Pass the Jug (p: 447) • Sum of the Parts (p: 283) • There is No Away! (p: 453) • Virtual Water (p: 289) 	<ul style="list-style-type: none"> • Provide examples of how the growing population in the United States changes the landscape and influences the natural systems where cities are expanding. • Recognize the factors that are considered in decisions regarding the growth and urbanization of cities (e.g., choice of areas and materials for construction, transportation systems). • Provide examples of how the growth of cities results in increasing demands for goods and ecosystem services from natural systems (e.g., agricultural products, forestry products) that places greater demands on farmland (soils, water) and forests (timber). • Describe the direct and indirect effects of urbanization on the surrounding natural systems.

6. Trace the economic development of the United States and its emergence as a major industrial power, including its gains from trade and the advantages of its physical geography.

- 8-4-1, One for All (p: 299)
- Color Me a Watershed, Pt. I (p: 239)
- Discover the Waters of Our National Parks (p: 493)*
- Pass the Jug (p: 447)*
- Sum of the Parts (p: 283)
- There is No Away! (p: 453)
- Urban Waters
- Virtual Water (p: 289)

- Identify the advantages of the physical geography that enabled the United States to emerge as a major industrial power.
- Describe how natural systems and physical geography provide resources (goods and ecosystem services) upon which economic development is based.
- Explain that economic development directly and indirectly affects natural systems.
- Provide example of how economic development can directly influence natural systems (e.g., conversion of landscapes).
- Provide example of how economic development can indirectly influence natural systems (e.g., release of byproducts of agricultural and industrial practices).

11.5 Students analyze the major political, social, economic, technological, and cultural developments of the 1920s.

7. Discuss the rise of mass production techniques, the growth of cities, the impact of new technologies (e.g., the automobile, electricity), and the resulting prosperity and effect on the American landscape.

- Back to the Future (p: 307)
- Color Me a Watershed, Pt. I (p: 239)
- Energetic Water, (Portal)*
- A Grave Mistake (p: 315)
- High Water History (p: 321)
- Invaders! (p: 263)
- Pass the Jug (p: 447)*
- Sum of the Parts (p: 283)
- There is No Away! (p: 453)
- Urban Waters (p: 413)
- Virtual Water (p: 289)

- Identify the relationship between mass production techniques and: the consumption of natural resources; the rates of consumption of manufactured goods; and the production of byproducts that may have detrimental, beneficial or neutral effects on natural systems.
- Describe the direct and indirect influences of growing cities on the American landscape and the associated natural systems.
- Provide examples of the direct and indirect effects of new technologies (e.g., automobiles, electricity) on natural systems (e.g., consumption of land for transportation systems, release of toxic and non-toxic byproducts and waste materials).

11.6 Students analyze the different explanations for the Great Depression and how the New Deal fundamentally changed the role of the federal government.

3. Discuss the human toll of the Depression, natural disasters, and unwise agricultural practices and their effects on the depopulation of rural regions and on political movements of the left and right, with particular attention to the Dust Bowl refugees and their social and economic impacts in California.

- **Dust Bowls and Failed Levees (Portal)**
- **High Water History (p: 321)**
- **Irrigation Interpretation (Portal)****
- **Nature Rules! (p: 277)**

- Identify how natural disasters and unwise agricultural practices can diminish the productivity of natural systems on a short-term or long-term basis.
- Describe how diminishing the productivity and/or functioning of a natural system can influence the human population in an area.
- Provide examples of laws, policies and human practices that were changed to ameliorate the effects of the natural disasters and unwise agricultural practices that occurred during the Depression and Dust Bowl era.
- Describe the effects of migration of the Dust Bowl refugees into California (e.g., new housing developments, increased demands for water and other resources on natural systems and resources).
- Identify how the assessment of economic, social, and environmental costs can change as the result of major events such as the Depression and natural disasters like the Dust Bowl that occurred during this era.

11.8 Students analyze the economic boom and social transformation of post–World War II America.

<p>1. Trace the growth of service sector, white collar, and professional sector jobs in business and government.</p>	<ul style="list-style-type: none"> • Urban Waters (p: 413) 	
<p>6. Discuss the diverse environmental regions of North America, their relationship to local economies, and the origins and prospects of environmental problems in those regions.</p>	<ul style="list-style-type: none"> • Back to the Future (p: 307) • Choices and Preferences (Portal) • Color Me A Watershed (p: 239) • Discover the Waters of Our National Parks (p: 493)* • Get The Groundwater Picture (p: 143) • High Water History (p: 321) • Invaders! (p: 263) • Nature Rules! (p: 277) • Nature Rules! (p: 277) • Pass the Jug (p: 447) • Water Court (Portal) • Whose Problem Is It? (Portal) 	<ul style="list-style-type: none"> • Identify the major ecosystems and environmental regions in North America. • Provide examples of the goods and ecosystem services provided to the human communities and local economies by major ecosystems across the environmental regions of North America. • Describe the methods used by human communities to extract, harvest, transport, manufacture products and consume goods and ecosystem services from the major ecosystems in their regions. • Explain the relationship between the methods used to extract, harvest, transport, manufacture products and consume goods and ecosystem services and the prospects for environmental problems in these regions. • Provide examples of how, as a result of environmental problems in these regions, the assessment of social, economic, political, and environmental factors has changed over time and influenced decisions about processes used to extract, harvest, transport, and manufacture products and consume goods and ecosystem services.

11.11 Students analyze the major social problems and domestic policy issues in contemporary American society.

<p>5. Trace the impact of, need for, and controversies associated with environmental conservation, expansion of the national park system, and the development of environmental protection laws, with particular attention to the interaction between environmental protection advocates and property rights advocates.</p>	<ul style="list-style-type: none"> • 8-4-1, One for All (p: 299) • Back to the Future (p: 307) • Choices and Preferences (Portal) • Color Me A Watershed (p: 239) • Discover the Waters of Our National Parks (p: 493)* • Get The Groundwater Picture (p: 143) • High Water History (p: 321) • Invaders! (p: 263) • Nature Rules! (p: 277) • Nature Rules! (p: 277) • Pass the Jug (p: 447) • Sum of the Parts (p: 283) • There is No Away! (p: 453) • Water Court (Portal) • Whose Problem Is It? (Portal) 	<ul style="list-style-type: none"> • Recognize the spectrum of factors considered in making decisions about resources and natural systems and how those factors influence decisions. • Identify the benefits and costs associated with the establishment and maintenance of the national park, national wildlife refuge and national forest systems. • Provide examples of the social, economic, and political considerations that lead to controversies associated with environmental conservation and the development of environmental protection laws. • Provide examples of laws, policies and regulations related to the use and management of natural systems and resources that influence individual property rights and liberties. • Identify the role of environmental protection advocates and property rights advocates in generating the controversies associated with environmental conservation and the enforcement of environmental protection laws.
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12th Grade- Principles of American Democracy and Economics

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<p>12.1 Students explain the fundamental principles and moral values of American democracy as expressed in the U.S. Constitution and other essential documents of American democracy.</p>		
<p>3. Explain how the U.S. Constitution reflects a balance between the classical republican concern with promotion of the public good and the classical liberal concern with protecting individual rights; and discuss how the basic premises of liberal constitutionalism and democracy are joined in the Declaration of Independence as “self evident truths.”</p>	<ul style="list-style-type: none"> • Pass the Jug (p: 447) • Water Court (Portal) 	<ul style="list-style-type: none"> • Identify how decisions made regarding natural resources and systems, such as land use and land ownership, reflect a balance between the classical republican concern with promotion of the public good and the classical liberal concern with protecting individual rights.
<p>6. Understand that the Bill of Rights limits the powers of the federal government and state governments.</p>	<ul style="list-style-type: none"> • Water Bill of Rights (Portal) 	<ul style="list-style-type: none"> • Describe how the Bill of Rights limits the powers of the federal government and state governments in relation to land use, land ownership, and control over the process of making decisions about resources and natural systems. • Provide examples of how the powers of the federal government and state governments have changed over time in relation to the assessment of environmental concerns.
<p>12.2 Students evaluate and take and defend positions on the scope and limits of rights and obligations as democratic citizens, the relationships among them, and how they are secured.</p>		
<p>1. Discuss the meaning and importance of each of the rights guaranteed under the Bill of Rights and how each is secured (e.g., freedom of religion, speech, press, assembly, petition, privacy).</p>	<ul style="list-style-type: none"> • Discover the Waters of Our National Parks (p: 493)* • Pass the Jug (p: 447) • Water Bill of Rights, (Portal) • Water Court (Portal) 	<ul style="list-style-type: none"> • Recognize the significance of the clause in the Fifth Amendment regarding the taking of private property for public use in relation to the establishment of park, wildlife refuge and forest systems at the national and state level. • Explain the influence of the Tenth Amendment in delegating federal and state powers to make decisions about resources and natural systems, and describe how this has changed over time.

<p>2. Explain how economic rights are secured and their importance to the individual and to society (e.g., the right to acquire, use, transfer, and dispose of property; right to choose one's work; right to join or not join labor unions; copyright and patent).</p>	<ul style="list-style-type: none"> • 8-4-1, One For All (p: 299) • Pass the Jug (p: 447) • Urban Waters (p: 413) 	<ul style="list-style-type: none"> • Describe how laws, regulations and policies affecting land use and land ownership can have a major influence on the growth of human populations and communities. • Describe how laws, regulations and policies also directly affect the extraction, harvest, transportation, and consumption of natural resources, as well as management of the resulting byproducts.
<p>5. Describe the reciprocity between rights and obligations; that is, why enjoyment of one's rights entails respect for the rights of others.</p>	<ul style="list-style-type: none"> • 8-4-1, One For All (p: 299) • Pass the Jug (p: 447) • Sum of the Parts (p: 283) • Urban Waters (p: 413) • Whose Problem Is It? (Portal) 	<ul style="list-style-type: none"> • Identify the spectrum of factors considered in making decisions about resources and natural systems, how those factors influence decisions, and how the enjoyment of one's rights in relation to the environment entails respect for the rights of others. • Provide examples of how decisions related to the use and management of natural systems and resources can result in the need to establish a balance between individual rights and liberties and choices related to the "common good."
<p><i>12.3 Students evaluate and take and defend positions on what the fundamental values and principles of civil society are (i.e., the autonomous sphere of voluntary personal, social, and economic relations that are not part of government), their interdependence, and the meaning and importance of those values and principles for a free society.</i></p>		
<p>2. Explain how civil society makes it possible for people, individually or in association with others, to bring their influence to bear on government in ways other than voting and elections.</p>	<ul style="list-style-type: none"> • Water Court (Portal) 	<ul style="list-style-type: none"> • Identify examples of how civil society makes it possible for people, individually or in association, to influence the factors considered in making decisions about natural systems, resources, and environmental management and, in turn affect how those factors influence decisions. • Provide specific examples of how people, individually and in association, have influenced decisions about natural systems, resources and environmental management.

12.7 Students analyze and compare the powers and procedures of the national, state, tribal, and local governments.

<p>5. Explain how public policy is formed, including the setting of the public agenda and implementation of it through regulations and executive orders.</p>	<ul style="list-style-type: none"> • Water Court (Portal) • Perspectives (Portal) 	<ul style="list-style-type: none"> • Describe how public policy is formed, including the setting of the public agenda and implementation of it through regulations and executive orders, using a historical environmental issue as an example.
<p>6. Compare the processes of lawmaking at each of the three levels of government, including the role of lobbying and the media.</p>	<ul style="list-style-type: none"> • Perspectives (Portal) • Water Court (Portal) 	<ul style="list-style-type: none"> • Compare the processes of lawmaking at each of the three levels of government, including the role of lobbying and the media, using a historical environmental issue as an example.
<p>7. Identify the organization and jurisdiction of federal, state, and local (e.g., California) courts and the interrelationships among them.</p>	<ul style="list-style-type: none"> • Water Court (Portal) 	<ul style="list-style-type: none"> • Describe the jurisdiction of federal, state (e.g., California), and local courts and the interrelationships among them regarding decisions about ownership, management and use of natural systems and resources, and responsibilities for environmental management issues.

12th Grade- Principles of Economics

Academic Content Standards	Project WET Activities	Environmental Education Initiative Learning Objectives
<i>12.1 Students understand common economic terms and concepts and economic reasoning.</i>		
<p>1. Examine the causal relationship between scarcity and the need for choices.</p>	<ul style="list-style-type: none"> • 8-4-1, One for All (p: 299) • Choices and Preferences (Portal) • Get The Groundwater Picture (p: 143) • Pass the Jug (p: 447) • There is No Away! (p: 453) • Whose Problem Is It? (Portal) • Your Hydrologic Bank Account (p: 223) 	<ul style="list-style-type: none"> • Recognize the causal relationship between scarcity of the goods and ecosystem services provided by natural systems and the need for choices. • Provide examples of how the quality, quantity and reliability of the goods and ecosystem services provided by natural systems are directly affected by the health of those systems.
<p>4. Evaluate the role of private property as an incentive in conserving and improving scarce resources, including renewable and nonrenewable natural resources.</p>	<ul style="list-style-type: none"> • Storm Water (p: 395) • There is No Away! (p: 453) • Water Audit (p: 469) 	<ul style="list-style-type: none"> • Identify and analyze examples of conservation and the improvement of scarce resources that have been achieved through ownership of private property. • Identify and analyze examples of renewable and nonrenewable natural resources that are managed through the system of private property ownership. • Explain how incentive systems are used to encourage specific management practices that conserve natural resources (e.g., endangered species, coal, timber, oil).

12.2 Students analyze the elements of America's market economy in a global setting.

<p>2. Discuss the effects of changes in supply and/or demand on the relative scarcity, price, and quantity of particular products.</p>	<ul style="list-style-type: none">• 8-4-1, One for All (p: 299)• Money Down the Drain (p: 351)• Pass The Jug (p: 447)• Price Is Right (The) (p: 357)• Your Hydrologic Bank Account (p: 223)	<ul style="list-style-type: none">• Provide contemporary examples of the effects of changes in supply and/or demand on the relative scarcity, price, and quantity of particular goods and ecosystem services that are provided by natural systems (e.g., oil, hydroelectric power, water, agricultural products).• Describe the direct and indirect effects on natural systems of changes in supply and/or demand for specific goods and ecosystem services (e.g., changing water flow to obtain either water supplies or hydroelectric power).• Provide examples of laws, policies, and incentives that have been developed to regulate changes in supply and/or demand on the relative scarcity, price, and quantity of particular products (e.g., hydroelectric power, water, agricultural products).
<p>4. Explain how prices reflect the relative scarcity of goods and services and perform the allocative function in a market economy.</p>	<ul style="list-style-type: none">• Money Down the Drain (p: 351)• Price Is Right (The) (p: 357)	<ul style="list-style-type: none">• Explain how prices reflect the relative scarcity of goods and ecosystem services using international trade in regulated plant and animal products as an example.
<p>10. Discuss the economic principles that guide the location of agricultural production and industry and the spatial distribution of transportation and retail facilities.</p>	<ul style="list-style-type: none">• 8-4-1, One for All (p: 299)• Price Is Right (The) (p: 357)• Storm Water (p: 395)• Whose Problem Is It? (Portal)• Your Hydrologic Bank Account (p: 223)	<ul style="list-style-type: none">• Provide examples of the influence of environmental management considerations on the economic considerations that guide the location of agricultural production and industry and the spatial distribution of transportation and retail facilities.• Identify environmental management considerations that are influenced by the location of agricultural production and industry, and the spatial distribution of transportation and retail facilities.

12.3 Students analyze the influence of the federal government on the American economy.

<p>1. Understand how the role of government in a market economy often includes providing for national defense, addressing environmental concerns, defining and enforcing property rights, attempting to make markets more competitive, and protecting consumers' rights.</p>	<ul style="list-style-type: none"> • 8-4-1, One for All (p: 299) • Discover the Waters of Our National Parks (p: 493)* • Money Down the Drain (p: 351) • Price Is Right (The) (p: 357) • Storm Water (p: 395) • Urban Waters (p: 413) • Whose Problem Is It? (Portal) • Your Hydrologic Bank Account (p: 223) 	<ul style="list-style-type: none"> • Describe examples of environmental laws, regulations, policies and incentives that influence the market economy. • Explain the effects of these environmental laws, regulations, policies and incentives on making markets more or less competitive; and, protecting consumers' rights, as well as environmental and human health.
<p>2. Identify the factors that may cause the costs of government actions to outweigh the benefits.</p>	<ul style="list-style-type: none"> • 8-4-1, One for All (p: 299) • Money Down the Drain (p: 351) • Price Is Right (The) (p: 357) • Storm Water (p: 395) • Urban Waters (p: 413) • Your Hydrologic Bank Account (p: 223) 	

12.6 Students analyze issues of international trade and explain how the U.S. economy affects, and is affected by, economic forces beyond the United States's borders.

<p>3. Understand the changing role of international political borders and territorial sovereignty in a global economy.</p>	<ul style="list-style-type: none"> • Invaders!, pt. III (p: 263) 	
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