

“The American Southwest: Are We Running Dry?”

Key California Content Standards Linkages (Grades 5-12)

Water, Water Everywhere...Or Is It?—Activities 1a and 1b

Science Standards Correlations

Earth Science (grade 5)

5.3.a – Students know most of the Earth’s water is present as salt water in the oceans, which cover most of Earth’s surface.

5.3.d – Students know that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.

5.3.e – Students know the origin of the water used by their communities.

5.4.b – Students know the influence that the ocean has on the weather and the role that the water cycle plays in weather patterns.

The Basin—Activities 2a and 2b

Science Standards Correlations

Earth Science (grade 6)

6.2.a – Students know water running downhill is the dominant process in shaping the landscape, including California’s landscape.

6.2.b – Students know rivers and streams are dynamic systems that erode, transport sediment, change course, and flood their banks in natural and recurring patterns.

Ecology (grades 9-12)

6.b – Students know how to analyze changes in a ecosystem resulting from changes in climate, human activity, introduction of nonnative species, or changes in population size.

California Geology (grades 9-12)

9.9.c – Students know the importance of water to scarcity, the origins of California’s fresh water, and the relationship between supply and need.

History-Social Science Standards Correlations

United States History (grade 11)

11.6.4 – Students analyze the effects of and the controversies arising from New Deal economic policies and the expanded role of the federal government in...resource and energy development projects like Hoover Dam.

Salinity—Activities 3a and 3b

Science Standards Correlations

Earth Science (grade 6)

6.2.a – Students know water running downhill is the dominant process in shaping the landscape, including California’s landscape.

6.2.b – Students know rivers and streams are dynamic systems that erode, transport sediment, change course, and flood their banks in natural and recurring patterns.

Ecology (grades 9-12)

6.b – Students know how to analyze changes in an ecosystem resulting from changes in climate, human activity, introduction of nonnative species, or changes in population size.

Law of the River Game—Activity 4

History-Social Science Correlations

Principles of American Democracy (grade 12)

12.7.1 – Students explain how conflicts between levels of government and branches of government are resolved.

12.7.5 – Students explain how public policy is formed, including the setting of the public agenda and implementation of it through regulations and executive orders.

12.7.6 – Students compare the processes of lawmaking at each of the three levels of government, etc.

The Delta—Activity 5

History-Social Science

Principles of American Democracy (grade 12)

12.7.1 – Students explain how conflicts between levels of government and branches of government are resolved.

12.7.5 – Students explain how public policy is formed, including the setting of the public agenda and implementation of it through regulations and executive orders.

12.7.6 – Students compare the processes of lawmaking at each of the three levels of government, etc.

Science Standards Correlations

Ecology (grades 9-12)

6.a – Students know biodiversity is the sum total of different kinds of organisms and is affected by alterations of habitats.

6.b – Students know how to analyze changes in an ecosystem resulting from changes in climate, human activity, introduction of nonnative species, or changes in population size.

California Science Content Standards

Key Linkages to *Investigation and Experimentation* processes for Grades 5-12

Investigation and Experimentation

- Select appropriate tools (thermometer, litmus paper, etc) and technology (spreadsheets, Internet searches, etc.) to perform tests, collect data, analyze relationships, and display data, all of which lead to quantitative and qualitative observations.
- Record data by using appropriate graphic representations (water conservation, Colorado River allocations, etc.) and make inferences based on those data.
- Communicate the steps and results from an investigation in written reports and oral presentations.
- Communicate the logical connection among hypotheses, science concepts, tests conducted, data collected, and conclusions drawn from the scientific evidence.
- Recognize the cumulative nature of scientific evidence.
- Analyze situations and solve problems that require combining and applying concepts from more than one area of science (for example, when discussing erosion, groundwater and water quality problems—mixing both chemistry and earth science).

California History-Social Science Standards

Key Linkages to *Historical and Social Science Analysis Skills* for Grades 5-12

Chronological and Spatial Thinking

- Students use a variety of maps and documents to interpret human movement, including population growth and needs, along with environmental preferences

Research, Evidence and Point of View

- Students distinguish fact from opinion in historical narratives and stories.
- Students construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations

Historical Interpretation

- Students explain the central issues and problems from the past, placing people and events in a matrix of time and place.
- Students understand and distinguish cause, effect, sequence, and correlation in historical events, including the long- and short-term causal relations.
- Students interpret basic indicators of economic performance and conduct cost-benefit analyses of economic and political issues.
- Students analyze human modifications of landscapes and examine the resulting environmental policy issues.