

# Inquiry Set 1.6 - Costs and Consequences

---

<b>I. Inquiry Set Introduction</b>	
<b>Inquiry Set Title</b>	Costs and Consequences
<b>Brief Description</b>	This inquiry set can be used to explore the ways in which people chose to harvest the redwoods throughout the nineteenth century. The set's investigative question — What have been the costs (consequences) of the decisions of people in the past? — can be used to guide students through the images to understand what some of the costs are of choosing to log or preserve redwoods.
<b>Authors</b>	Rachel Reinhard, Director, UCB History-Social Science Project Beth Slutsky, Program Coordinator, CHSSP Shelley Brooks, Program Coordinator, CHSSP
<b>Grade Levels</b>	1
<b>Topics/Concepts</b>	cost, consequence, redwood tree, preservation, logging, Gold Rush
<b>CA HSS Standards / Frameworks</b>	A Child's Place in Time and Space <b>1.6</b> Students understand basic economic concepts and the role of individual choice in a free-market economy.
<b>Framework Excerpt</b>	Students may continue their development of analytical skills by identifying the costs of their decisions. They should recognize that a cost is what is given up in gaining something. This fits with the economic concept of exchange. When students trade, they gain something, but they also give up something. What they give up is the cost of the choice. It should be emphasized that each choice has a cost (a simple example is the story of the Three Little Pigs, where two of the pigs give up safety for play).
<b>Standards</b>	<b>California English Language Development Standards for Grade 1</b>  A. Collaborative

## Costs and Consequences

	<p>1. Exchanging information and ideas with others through oral collaborative conversations on a range of social and academic topics            3. Offering and supporting opinions and negotiating with others in communicative exchanges</p> <p>C. Productive            11. Supporting own opinions and evaluating others' opinions in speaking and writing</p> <p><b>Common Core State Reading Standards for Literacy in History/Social Studies, Grade 1</b></p> <p>7. Use the illustrations and details in a text to describe its key ideas.</p>
<p><b>Investigative Question</b></p>	<p>What have been the costs of the decisions of people in the past?</p>
<p><b>Historical Background</b></p>	<p>Redwood trees, the tallest trees in the world, are native to California. As more people moved to California during the Gold Rush, they were amazed by the state's natural resources. Redwood trees were believed to be an almost unlimited resource, and a logging industry developed around turning these giant trees into building materials. By the late 1800s, the redwood forests had been extensively logged.</p> <p>The images in this inquiry set can be used to explore the ways in which people chose to harvest the redwoods throughout the 19th century, and a choice made in the 1960s to protect some of these trees from logging. The set's investigative question — What have been the costs (consequences) of the decisions of people in the past? — can be used to guide students through the images to help them understand some of the costs of choosing to log or preserve redwoods.</p> <p>Before looking through the sources in this set, project for the class a topographical map of California. Together, find the parts of the state that have forests. Look at your own location in the state and discuss what grows where you live. Then point out where Humboldt County is located, as this is the site for the images included in this set. Students should describe the details they see in each image. Use these details to complete the organizer as a whole class, noting costs and benefits. A suggested writing exercise is included.</p>
<p><b>Map</b></p>	<p>Humboldt County, Arcata, Redwood National and State Parks, Siskiyou County</p>

II. Source Sets

#1 Primary Source

1890 Humboldt Redwood



<b>Title of Source</b>	Big Tree, 22 ft. in diameter, Jas. Brown's Claim, Humboldt Co. Calif.
<b>Date</b>	circa 1890
<b>Holding</b>	California Historical Society

## Costs and Consequences

	<table border="1"> <tr> <td data-bbox="390 196 680 277"><b>Institution</b></td> <td data-bbox="680 196 2001 277"></td> </tr> <tr> <td data-bbox="390 277 680 342"><b>Link to Record</b></td> <td data-bbox="680 277 2001 342"><a href="http://www.oac.cdlib.org/findaid/ark:/13030/kt4d5nc64d/">http://www.oac.cdlib.org/findaid/ark:/13030/kt4d5nc64d/</a></td> </tr> </table>	<b>Institution</b>		<b>Link to Record</b>	<a href="http://www.oac.cdlib.org/findaid/ark:/13030/kt4d5nc64d/">http://www.oac.cdlib.org/findaid/ark:/13030/kt4d5nc64d/</a>
<b>Institution</b>					
<b>Link to Record</b>	<a href="http://www.oac.cdlib.org/findaid/ark:/13030/kt4d5nc64d/">http://www.oac.cdlib.org/findaid/ark:/13030/kt4d5nc64d/</a>				
<b>For the Student</b>	<p>California is special. It has more types of plants and animals than any other state. This is due to the fact that the state has so many different landscapes, which include mountains, deserts, coastline, and valleys. So much lives and grows in these different landscapes, even in the deserts where there is little water. What lives and grows where you live? Redwoods grow along the coast in the northern part of the state. These are the tallest trees in the world.</p>				
<b>For the Teacher</b>	<p>Redwood trees rely on coastal fog to thrive. Their natural range is from Big Sur, California, to southern Oregon. People appreciate the redwood tree for its wood. California Native people have long used it for building dwellings and boats. A single tree can produce a good deal of lumber, and this wood has natural resistance to fire and insects.</p>				
<b>#2 Primary Source</b>	<b>Lumber Bull Team, 1893</b>				



<b>Title of Source</b>	Men with ox team hauling logs
<b>Holding Institution</b>	California Historical Society
<b>Link to Record</b>	<a href="https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/">https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/</a>

# Costs and Consequences

<b>For the Student</b>	The California Gold Rush brought many, many people to California. They needed wood to construct homes and businesses and for gold mining equipment. They looked to the huge trees in the redwood forests and began to cut these down to use as construction material. The wood was too heavy for people to move. They used strong animals to move the logs out of the forest.
<b>For the Teacher</b>	The logging industry worked to cut down as many big trees as they could reach in the redwood forests. This form of logging was devastating to the animals and plants growing in this forest ecosystem.
<b>#3 Primary Source</b>	<b>Logging Train</b> 

## Costs and Consequences

	<table border="1"> <tr> <td data-bbox="392 198 724 277"><b>Title of Source</b></td> <td data-bbox="724 198 1997 277">John Vance's Logging Train, Mad River, California</td> </tr> <tr> <td data-bbox="392 277 724 347"><b>Holding Institution</b></td> <td data-bbox="724 277 1997 347">California Historical Society</td> </tr> <tr> <td data-bbox="392 347 724 417"><b>Link to Record</b></td> <td data-bbox="724 347 1997 417"><a href="https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/">https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/</a></td> </tr> </table>	<b>Title of Source</b>	John Vance's Logging Train, Mad River, California	<b>Holding Institution</b>	California Historical Society	<b>Link to Record</b>	<a href="https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/">https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/</a>
<b>Title of Source</b>	John Vance's Logging Train, Mad River, California						
<b>Holding Institution</b>	California Historical Society						
<b>Link to Record</b>	<a href="https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/">https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/</a>						
<b>For the Student</b>	Once railroad tracks were built in California, people used trains to carry the very heavy logs to the places where people would cut them up into usable pieces. Do you see the barn in the back of this photo? What is it made from?						
<b>For the Teacher</b>	The railroad in California caused rapid deforestation in many areas of the state, especially in the Sierra Nevada mountains near gold and silver mines and in the redwood forests of the northwest. People from around the country were in awe at the size of California's coast redwood. Most mature coast redwoods are 200 to 300 feet tall. A large redwood trunk was once brought across the country on a train to display at a world's fair in the late 1800s.						
<b>#4 Primary Source</b>	<b>Siskiyou County Logging</b>						



<b>Title of Source</b>	Northern California Lumber Company train ready to be unloaded
<b>Holding Institution</b>	California Historical Society
<b>Link to Record</b>	<a href="https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/">https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/</a>

## Costs and Consequences

<b>For the Student</b>	At a mill, workers turn logs into lumber (wood to use for building). People like to use redwood because it is a strong wood that lasts a long time.
<b>For the Teacher</b>	By 1853 there were already nine lumber mills in operation in Eureka (Humboldt County). This photograph was taken in 1902. Lumber mills in the northwestern part of the state remained busy for well over 100 years.
<b>#5 Primary Source</b>	<b>Logs at the Mill, 1964</b>



7 ACRES OF THESE NOW  
AT ARCATA MILL 'A' -  
FROM PRAIRIE CR, LOST MAN + LITTLE LOST  
MAN CR, REDWOOD CR.

## Costs and Consequences

	<table border="1"> <tr> <td data-bbox="394 199 701 293"><b>Title of Source</b></td> <td data-bbox="701 199 1995 293">Scene at Arcata Mill "A", Humboldt County</td> </tr> <tr> <td data-bbox="394 293 701 363"><b>Holding Institution</b></td> <td data-bbox="701 293 1995 363">California Historical Society</td> </tr> <tr> <td data-bbox="394 363 701 433"><b>Link to Record</b></td> <td data-bbox="701 363 1995 433"><a href="https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/">https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/</a></td> </tr> </table>	<b>Title of Source</b>	Scene at Arcata Mill "A", Humboldt County	<b>Holding Institution</b>	California Historical Society	<b>Link to Record</b>	<a href="https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/">https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/</a>
<b>Title of Source</b>	Scene at Arcata Mill "A", Humboldt County						
<b>Holding Institution</b>	California Historical Society						
<b>Link to Record</b>	<a href="https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/">https://oac.cdlib.org/findaid/ark:/13030/kt2j49q0s2/</a>						
<b>For the Student</b>	These valuable redwood trees were used for lumber long after the Gold Rush. In this photo from 1964, we can see many logs waiting to be cut into usable parts.						
<b>For the Teacher</b>	This photograph shows acres' worth of redwood trees waiting to be turned into lumber at the Arcata Mill.						
<b>#6 Primary Source</b>	<b>Logged Redwoods and National Park Ranger, 2013</b>						



<b>Title of Source</b>	Redwood National Park, California, USA: A park ranger inspects a redwood tree that has been vandalized to steal a "burl"
<b>Date</b>	2013
<b>Holding Institution</b>	National Park Service
<b>Link to Record</b>	<a href="https://www.nps.gov/redw/learn/news/newton-drury-parkway-will-be-closed-at-night-due-to-incre">https://www.nps.gov/redw/learn/news/newton-drury-parkway-will-be-closed-at-night-due-to-incre</a>

## Costs and Consequences

	<a href="#">ased-wood-poaching.htm</a>
<b>For the Student</b>	In the early 1900s, many people were worried that the beautiful redwood trees would be destroyed by logging operations. These people wanted at least some of the redwoods to be left alone to grow as long as they could. In 1968, Redwood National Park was formed to offer protection for these trees and to welcome visitors who want to see these trees. In areas nearby, logging still continues.
<b>For the Teacher</b>	The push for preserving these redwoods in Humboldt County began as early as 1910. Early efforts created forest preserves, but the demands of World War II allowed for additional logging to happen within the preserve borders. Eventually the Save-the-Redwoods League succeeded in having both national and state parks established to protect some of the old-growth redwoods (which have been growing for hundreds of years) in Humboldt County. Outside the parks' borders, redwood logging continues on younger redwood trees.

### III. English Language Development extension activity

This exercise is meant to help students examine choices made at different times in the past, and consider the costs associated with each choice represented in the photographs.

Teacher directions:

1. Work with students to complete this visual analysis chart. Doing this as a whole class, or as small groups will help students to exchange ideas and modify their own ideas about costs of choices made in the past.
2. After students complete this chart, have them compose a paragraph that compares image 2,3, or 4 with image 1 or 5 to consider what the costs are of logging versus having a forest left intact. The topic sentence should make a claim about which choice (logging or preserving trees) is a bigger cost. Be sure to tell students that there is no right answer to the claim, but that what matters is how the claim is supported with evidence. The students should use three details from the chart as evidence. The students should have a concluding sentence that re-establishes their claim and explains what a consequence may be.