HISTORICAL INQUIRY QUESTION

What were the costs and benefits of Los Angeles urban growth in the 1920s?

LOST LA EPISODE

Building the Metropolis
What were the costs and benefits of Los Angeles urban growth in the 1920s?

Author of Lesson
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Content Standards
11.5.7: 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.

11.11.5: 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.

12.1.4: Evaluate the role of private property as an incentive in conserving and improving scarce resources, including renewable and nonrenewable natural resources.

12.2.2: Discuss the effects of changes in supply and/or demand on the relative scarcity, price, and quantity of particular products.

CCSS Standards
RH. 11-12.9: Integration information of diverse primary and secondary sources into a coherent understanding or idea.

WHST.11-12.2: Write informative/explanatory texts, scientific procedures including the narration of historic events.

SL.11-12.4: Present information, findings and supporting evidence, conveying a clear and distinct perspective.

Lost LA Episode
Building the Metropolis. In the course of its relentless growth, Los Angeles paved over its local prairies and drained its wetlands. But the city’s ecological destruction extended far beyond Southern California. Take the once-mighty temperate rainforests of California’s
Redwood Coast. Only five percent of the state’s old-growth Redwood forests now remain – a fact for which Los Angeles deserves a great deal of blame.

**Overview of Lesson**
In this lesson students will explore the factors that lead to building the infrastructure of Los Angeles and its surrounding communities using the Redwoods of Northern California. Students will discuss the environmental costs and benefits of urban growth in Los Angeles in the 1920s and will engage in a debate to consider if the costs outweigh the benefits of urban growth in this time frame.

**Sources**
- A. Undated photographs courtesy of the Ericson Photograph Collection, Humboldt State University Library.
- B. Undated photographs courtesy of the Ericson Photograph Collection, Humboldt State University Library.
- C. 1914 advertisement courtesy of the USC Libraries.
- D. Undated photographs courtesy of the Ericson Photograph Collection, Humboldt State University Library.

**Procedures**
Note: The teacher should prep for this lesson by hanging Sources A-E around the classroom in preparation for the Gallery Walk. Two sources of each should be hung for classrooms with more than 25 students.

1. **Warm Up (10-15 minutes)**
   Gallery Walk: The teacher presents photographs Sources A-E from Humboldt, USC, and U.S. Fire Service Archives. The teacher introduces students to the See/Means/Matters (Handout 1) strategy. This strategy will be used by students to analyze each source during the gallery walk. Consider modeling the strategy with Source A: For example, the teacher asks students:
   - What do you see?
   - What do you think it means?
   - What is important or matters?

   Students participate in the Gallery Walk. Then the teacher debriefs the Gallery Walk by providing students an opportunity to engage in discussions about the importance of trees as a local resource.
   - What do they think the trees were used for?
   - Were people in the past right or wrong about using the Redwood for their needs and wants?
2. **Background Information** (30 minutes)
   Next, the teacher has students read the excerpt by Jared Farmer, "Old-Growth Infrastructure: Redwood in Los Angeles" (Handout 2). Students should actively read by annotating, writing notes in the margins, or visual note taking such as:
   
   "?” for confusion
   "!” for Surprise/controversial
   "*" for the Main Idea
   
   Students should be able to explain the main idea of the excerpt.

3. The teacher has students answer questions and discuss in small groups, then transition to a larger class discussion about Farmer’s main points. (Optional: Student may do this for homework or read as a whole class.)

4. **Reinforce** (15-20 minutes)
   Show the Lost LA episode of "Building the Metropolis," Season 2, Episode 3, “Red Gold.” Start time 00:55 seconds; End time: 8:05

5. While viewing the clip, the teacher has students take notes to answer the following Critical Thinking Questions:
   
   **Comprehension**: What is the main idea of Red Gold?
   **Application**: Could this happen today?
   **Analysis**: What are the parts or features of the lumber market (buyers/sellers) that made it?
   **Evaluation**: What is more critical? Environment or Economic Progress/Urban Growth?

   Note: Consider pausing the video at these points of interest:
   
   2 min 19 sec - 2 min 38 sec: Trolley, Oil Derricks, Ocean Piers, Ocean Port
   4 min 45 sec: California Map of Ancient Redwoods in 1850
   4 min 5 sec: California Map of Ancient Redwood in 2017

   The teacher has students share out their answers

6. **Extension** (10 -15 minutes)

7. Students fill out the Costs & Benefits T-Chart: Los Angeles Urban Growth (Handout 3)

8. The teacher has each student, pair, or whole class complete the T-chart (Handout 2). One side BENEFITS (ex. new ideas, new labor, available land), on the other COSTS (ex. overcrowding of environmental stress). Have students in pairs list as many benefits and costs as the L.A. Urban Growth.

**Assessment** (5 minutes)

**Ticket out the Door (Handout 4)**

What were the costs and benefits of Los Angeles urban growth in the 1920s?
Bibliography

SOURCE A

Excelsior Redwood Company, Eureka California: Trainload of logs, Date & Photographer Unknown

The Ericson Photograph Collection, https://calisphere.org/item/ark:/13030/ft8t1nb2ys/
SOURCE B
“Among the Redwoods in California, Logging in Vance Woods”, Date & Photographer Unknown
The Ericson Photograph Collection, https://calisphere.org/item/ark:/13030/ft467n99pz/
California Redwood Products

Leading manufacturers of a variety of wood products after investigation into the properties of many woods are using California Redwood exclusively.

The reasons for the use of Redwood are shown in the following extracts from sales literature published by these manufacturers.

From the country's largest manufacturer of ice cream cabinets

“...the ice cream cabinets are constructed entirely of wood, lasting for decades. Redwood being used for the outer case...are the only cabinets that will keep ice cream in perfect condition when electric fans are used. The smoothness of Redwood being a non-conductor of heat, the warm air is kept from the inner compartment and the cold air not allowed to escape and thereby cause condensation of moisture (freezing) on the outer case, as a metal cabinet will do.”

Ice cream cabinet made of California Redwood

From a leading manufacturer of incubators

“Every...incubator is made entirely of seasoned California Redwood, the wood which has long been used for incubator construction. Redwood does not crack, warp, split or fall apart. It does not absorb odors; it lasts a lifetime.”

Incubator built of California Redwood

From one of the largest tank and pipe manufacturers

“Long experience has proved that California Redwood is the best obtainable material for tanks and pipe. Redwood contains a natural preservative which makes it impervious to the destructive action of acids and alkalies. It requires no paint and the pipes which have lain for hundreds of years in the forests have been sent to the mill and sawed into lumber. These remarkable trees contain no pitch or resinous matter and the wood is very difficult to ignite and very slow burning even when dry.”

Water tank and wood pipe made of California Redwood

From one of the largest storage battery companies

“California Redwood is the best resistant to acid yet discovered. It is not attacked by nature to defy the attacks of acids and alkalies. It will not warp, crack or swell, and is a non-conductor of heat and cold. Its grain is unusually straight and fine, and it is sufficiently dense to be impervious to battery sediment, yet it is porous enough to absorb the electrolyte and permit the free passage of current. The use of California Redwood separators is the surest possible protection against the ‘spitting’ of plates and short-circuiting due to warping and buckling.”

Storage battery separators made of Redwood

From a leading manufacturer of candy boxes

“California Redwood has proved itself to be a most desirable material from which to make boxes. It is naturally a beautifully grained wood—light, strong, durable and absolutely odorless. Aside from this there is the inevitable charm of romance connected with the Redwoods—the oldest and largest living things in the world.”

Candy box made entirely of California Redwood

From the catalogue of a large clothing chest manufacturer

“For conveniently storing clothing, bedding, furs, etc., nothing suits the purpose so admirably as Redwood chests. The natural preservative of Redwood makes these chests a safeguard against insects of all kinds.”

Clothing chest built of California Redwood

From a leading casket manufacturer

“There is no comparison between Redwood and any other wood for our purpose. It works up far more smoothly than other woods and the casket is covered and trimmed gives a far better appearance because of the fact that it smooths down under the sander. Redwood’s freedom from knots or wormholes and its natural resistance to rot and decay provide strong selling arguments.”

Casket made of California Redwood

Because clear Redwood lumber, free from knots and other defects and with a texture which lends itself to Linderman and all other wood-working processes, Redwood is coming into general use for the products described and also for cigar boxes, furniture, kitchen cabinets, refrigerators, pianos, talking machines and fireproof cookers.

In our mills at Scotia, California, is a completely electrified, electrically operated manufacturing plant with special machinery for producing Redwood for wood manufactured products. Our facilities are sufficient to insure an annual supply of Redwood for a half century or more. Our Chicago office will gladly send you detailed information.

The Pacific Lumber Co.

2805 McCormick Building, Chicago
New York, N. Y. Kansas City, Mo.
San Francisco, Cal. Los Angeles, Cal.

The Largest Manufacturers and Dealers of California Redwood
Members of the California Redwood Association

The Pacific Lumber Co., San Francisco, Calif.
233 Broadway, New York City
121 California St., San Francisco
“After logging, Vance’s Mad River/among the redwoods in California, Date & Photographer Unknown
Ericson Photograph Collection, https://calisphere.org/item/ark:/13030/ft4w1003gp/
SOURCE E
Exterior general view residence Gamble House, 4 Westmoreland Place, Pasadena, 1947
https://calisphere.org/item/5909a6e9d45202d9bada41ce67c13e4b/
## HANDOUT 1: SEE-MEAN-MATTERS

**See** What information is being presented? What facts are presented?

**Mean** What does this information mean? What are its implications? What thoughts/emotions does it evoke?

**Matter** So what? What is the significance of this text/visual? What are its impacts?

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<tr>
<th>Source</th>
<th>See</th>
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<th>Matters</th>
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From Southern California, the redwood forest of Humboldt and Del Norte counties is a two-day drive. It might as well be another country. L.A. does palms and jacarandas, not redwoods. In Golden State history, timber barons and tree-sitters seemingly belong somewhere north of Berkeley. Angelenos do not consider themselves remotely connected to the “redwood wars.”

That’s not quite right. Lumber from coast redwood (Sequoia sempervirens) is all over the metropolis, both hidden from view and hiding in plain sight – a legacy of a commercial relationship. Southern California’s greatest construction phase, the first half of the 20th century, coincided with the heaviest cutting on the redwood coast.

At the time of statehood in 1850, something like 2 million acres of northwestern California were covered in redwood. By 2000, only 5 percent of this old growth remained, effectively all of it protected in public reserves. That’s the “redwood forest” famous around the world. There’s also a second, much larger "redwood forest": cutover land regrown as plantations.

For the building of California civilization, old-growth redwood “outranked all other natural resources,” including gold, argued Willis Jepson, the state’s leading botanist, in 1923. These trees contained more “clear” or "grade-A" lumber than any trees any loggers had ever seen. “Grade-A” meant solid, knot-free heartwood with fine, straight grains. Clear redwood was perfect building material. No other wood product matched its combination of lightness, evenness, and durability. It almost deserved the extravagant claims of the California Redwood Association, which advertised “nature’s lumber masterpiece" as shrink-proof, warp-proof, split-proof, blemish-proof, insect-proof, rot-proof, and waterproof.

Best of all for Golden State consumers, redwood was cheap and available. They found uses for it everywhere – inside, outside, underground.

Imagine taking a day trip from Los Angeles to Long Beach in the 1920s. You sit on redwood seats in a trolley moving over tracks laid on redwood ties; you gaze at downtown buildings topped with redwood tanks; you pass a forest of redwood derricks on Signal Hill; and you arrive at a beachfront equipped with redwood boardwalks and redwood piers, with a view of a port built upon redwood piling.
Inside their homes, too, Californians of yesteryear relied on redwood whenever they opened a faucet or flushed a toilet. For water delivery and sewage disposal, many cities used tongue-and-groove redwood stave pipes, reinforced with wire hoops.

Even to the grave, redwood used to be a class-leveler. Funeral homes once carried affordable caskets made of “wood everlasting.” Even pet cemeteries offered “Nature’s Timeless Protection” in the form of cat-sized caskets. In one year, 1948, the California casket industry consumed over 21 million board feet of solid redwood. Some of the finest lumber ever made was planted six feet under at Forest Lawn.

Recalling the go-go period of state growth, you may wonder if California made a wise trade: An ancient forest in the north for an instant metropolis in the south. In the original Promised Land, the old-growth Cedars of Lebanon were depleted, but the world got Solomon’s Temple out of the transaction. In America’s promised land, what did the world get — the Gamble House? To be fair, edifices may be the wrong measure of worth in Greater Los Angeles. Think instead of all the one-story bungalows in once-affordable neighborhoods subsidized by hundreds of years of slow growth on the foggy North Coast. Modern L.A. may have been built on sunshine, and peddled with palms, but without redwood it couldn’t have grown like a weed.

**Questions for reading**

1. In what counties are the Redwood forest located?

2. What products were made from Redwood?

3. Why was Redwood so widely used?

4. How might the demand for Redwood impact the environment?

5. Is there any natural resource we overuse today that is endangered?
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<tr>
<th>Costs</th>
<th>Benefits</th>
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HANDOUT 4: TICKET OUT THE DOOR: WHAT WERE THE COSTS AND BENEFITS OF LOS ANGELES URBAN GROWTH IN THE 1920S?