

Elementary School Lesson Plan – Lesson 1
Theme: An Introduction to the LA River

Subject: Physical, Life, and Social Sciences

Objective	<p>Students understand the history of the River, and that humans and nature are interconnected. By understanding the past, humans have the ability to change the present and future of their environment.</p>
Standards	<p>CA STANDARDS</p> <p>SS 3.1.2. 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> <p>SS 3.3.3 Trace why...community was established, how individuals and families contributed to its founding and development, and how the community has changed over time...</p> <p>LS 3.3.c. Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism...and some are beneficial (human impact).</p> <p>LS 3.3.d. Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.</p> <p>SS 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> <p>SS 4.2.1 Discuss the major nations of California Indians, including... describe how they depended on, adapted to...the physical environment...</p> <p>SS 4.2.3 Describe the Spanish exploration and colonization of California, including the relationships among soldiers, missionaries, and Indians (e.g., Juan Crespi...).</p> <p>SS 4.4.7 Trace the evolution of California’s water system into a network of dams, aqueducts, and reservoirs. (watershed, Los Angeles River channel)</p> <p>SS 5.1.1 Describe how geography and climate influenced the way various nations lived and adjusted to the natural environment...</p> <p>NGSS STANDARDS</p> <p>3-LS2-1. Cause and effect relationships are routinely identified and used to explain change.</p>

	<p>3-LS3-2. Use evidence to support the explanation that traits can be influenced by the environment.</p> <p>3-LS2.C. (DCI) Habitat Dynamics, Functioning, and Resilience When the environment changes in ways that affect a place’s physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die. (secondary to 3-LS4-4)</p> <p>3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.</p> <p>ESS2.E: Biogeology (DCI) Living things affect the physical characteristics of their regions.</p> <p>4-ESS3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.</p> <p>ESS3.B: Natural Hazards (DCI) A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impacts</p>
Vocabulary	<p>Indigenous people The first inhabitants of a particular area, sometimes called Native Americans. They live in harmony with nature.</p> <p>Colonization The action or process of settling among and establishing control over over an area.</p> <p>Engineer A person who designs, builds, or maintains engines, machines, or public works.</p> <p>Channelization The process of filling up the River with concrete.</p>
Materials	<ul style="list-style-type: none"> ● If you are a Source to Sea Scholar, pre-assessments must be taken before the start of Lesson 1. Students have the option to either complete them online or as physical copies to be returned to the FoLAR team. It should not be graded in class. ● Projector ● Lesson 1 presentation ● Lesson 1 worksheets

	<ul style="list-style-type: none"> • Go over River Rover behavioral expectations
Key Points	<ul style="list-style-type: none"> • The Tongva are one of several groups of Indigenous people of the Los Angeles Basin. • Over 3,000 years ago, Indigenous people thrived on the resources of the River and coexisted with the habitat. They adapted to the habitat, instead of altering it. • This is a stark contrast to how Angelenos have related to the River in the last 200 years. • When the Spanish arrived in Southern California in the 1800s, they sought fertile land to produce crops. • We live on the same land as the Tongva did, but have much less biodiversity due to human impact. • The expansion of the railroad brought an influx of people and the River’s resources could not sustain the new population. • In the 1930s, in response to flooding of businesses and communities along the River’s floodplain, The Army Corps of Engineers covered the LA River in concrete, straightened it, and narrowed it. • Human impact has altered the environment and affected organisms’ ability to reproduce and survive. Impacted species die or migrate to find resources. Some have adapted, like the native coyote.
Possible Extensions	<ul style="list-style-type: none"> • https://www.latimes.com/projects/la-me-tongva-study-guide/ • https://www.latimes.com/projects/la-me-tongva-words/ • Have students prepare questions to ask friends and family what they know about the LA River. Share in class. • Create a class mural illustrating the web of life of the LA River 3,000 years ago • Ask students to imagine and write a story about what it might have been like to live in a Tongva Village along the LA River 1,000 years ago.