FRIENDS OF THE LA RIVER

High School Lesson Plan - Lesson 1

Theme: An Introduction to Human Impact on the LA River

Subject: Physical, Life, and Social Sciences

Objective	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.
Standards	**LS 9.c.** Students know the importance of water to society, the origins of California's fresh water, and the relationship between supply and need. **SS 11.5** Students analyze the major political, social, economic, technological, and cultural developments of the 1920s. **HS-ESS3-2** Science knowledge indicates what can happen in natural systems—not what should happen. The latter involves ethics, values, and human decisions about the use of knowledge. **HS-ESS3.B:** Natural Hazards/Disasters - Natural hazards and other geologic events have shaped the course of human history; [they] have significantly altered the sizes of human populations and have driven human migrations. **HS-ESS3.C:** Human Impacts on Earth Systems - The sustainability of human societies and the biodiversity that supports them requires responsible management of natural resources. **HS-ETS1.B:** Developing Possible Solutions - When evaluating solutions, it is important to take into account a range of constraints, including cost, safety, reliability, and aesthetics, and to consider social, cultural, and environmental impacts. **HS-ESS3-4.** - Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.*
Vocabulary	**Indigenous people** The first inhabitants of a particular area, sometimes called Native Americans. They live in harmony with nature. **Colonization** The action or process of settling among and establishing control over over an area. **Engineer** A person who designs, builds, or maintains engines, machines, or public

	works. **Channelization** The process of filling up the River with concrete.
Materials	• 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 • Go over River Rover behavioral expectations
Key Points	• 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	• 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.