

HYDROLOGY BIKE TOUR

Clockshop presents a 22-mile guided bike tour through the South Bay, led by the City of Los Angeles Bureau of Infrastructure Inspections with Rosten Woo. The tour investigates the southern edge of the Los Angeles basin, where water flows into the Pacific Ocean, visiting manmade wetlands and water treatment facilities in Long Beach and Harbor City. What does water want, and what do we want from water? It examines how humans capture, release, degrade, and improve water and land.

The Hydrology Tour series is part of Clockshop's three-year initiative with Rosten Woo, culminating in a permanent artwork at the Bowtie Wetland Demonstration, a 3-acre stormwater filtration and habitat project along the LA River.

ABOUT THE ARTISTS

Hunter Baoengstrum was born in Huntington Beach and currently lives and works car-free in Los Angeles as an artist, researcher, and cyclist. He has produced tours and works in collaboration with other artists for programming hosted by Canary Test, Human Resources, François Ghebaly, Other Places Art Fair, Melrose Botanical Garden, and Los Angeles Nomadic Division (LAND). Baoengstrum is the founder and general manager of the City of Los Angeles Bureau of Infrastructure Inspections, which explores all the systems that facilitate the functioning of Los Angeles through walking and biking experiences.

Rosten Woo is a designer, writer, and educator living in Los Angeles. He produces civic-scale artworks and works as a collaborator and consultant to a variety of grassroots and non-profit organizations. His work has been exhibited at the Cooper-Hewitt Design Triennial, the Venice Architecture Biennale, the Netherlands Architectural Institute, the Exploratorium, and various piers, public housing developments, tugboats, shopping malls, and parks. Woo is a recent recipient of the Stanton and Emerson Collective fellowships to study civic memory and democracy.

ABOUT CLOCKSHOP

Clockshop works with artists to deepen the connection between communities and public land, in order to build a shared vision of a future based in belonging and care. As a Los Angeles-based arts nonprofit, we produce free public programming and commission contemporary artist projects at Los Angeles State Historic Park in Chinatown and Rio de Los Angeles State Park ("The Bowtie") in Glassell Park, in collaboration with California State Parks.

We cannot do this work without acknowledging that the land we occupy was originally and still is inhabited and cared for by the Native First Peoples of this region. Read our full statement on our website under "Location and Land Acknowledgement."

www.clockshop.org @clockshopla

Listen to *What Water Wants*, a 30-minute audio experience by Rosten Woo on whatwaterwants.org

SUPPORT CLOCKSHOP





01. DEFOREST PARK & WETLANDS

CITY OF LONG BEACH

(RESTORED HABITAT WETLAND

The park is leased to the city by the Los Angeles County Flood Control District, a permitted arrangement that arose out of a grassroots community campaign for access to green space. After a 2018 habitat restoration, three miles of restored wetlands and historic floodplains reopened to the public. In addition to providing protection against flooding, these wetland areas improve water quality of dry season low flows and stormwater that is then released to the Los Angeles River.

02. DOMINGUEZ CHANNEL

This waterway stretches from Hawthorne to the Los Angeles Harbor and is under the jurisdiction of six administering agencies. Historically consisting of mudflats and marshes, the area was dredged and channelized at the end of the 19th century, becoming the drainage endpoint for concentrated industrial runoff. Its entirety has been developed for industrial, commercial, and transportation-related activities, and it has been subject to multiple environmental pollution incidents.

03. MARATHON REFINERY

INDUSTRIAL PROCESSING PLANT

The Los Angeles division of Marathon has crude oil capacity of 365,000 barrels per day, the largest on the West Coast. It neighbors nearby refineries, such as the Phillips 66 Refinery, in South LA, an 8.5-square-mile tract containing the largest concentration of oil refineries in CA, the third-largest oil field in the continental US, and its largest trading port, as well as hundreds of active oil wells.

04. BIXBY MARSHLAND

LOS ANGELES COUNTY SANITATION DISTRICTS

RESTORED HABITAT AND TREATMENT WETLAND

This is a rehabilitation of a former wetland, the Bixby Slough, which was vegetated with native plants and regraded during the restoration process. A pump lifts stormwater and urban runoff from the Wilmington Drain into the marshland, per an agreement between Flood Control and Sanitation following the construction of a flood control channel along the Harbor Freeway and the severance of the marshland's natural water supply. The tract functions as a transitional space between terrestrial and aguatic environments and a habitat for local wildlife.

05. GRACE F. NAPOLITANO PURE WATER INNOVATION CENTER

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

WATER PURIFICATION DEMONSTRATION FACILITY

This facility is a demonstration plant for the program Pure Water Southern California, a collaborative partnership between Metropolitan and the Los Angeles County Sanitation Districts, whose aim is to purify and recycle wastewater currently flowing into the ocean into potable water. The plant produces 150 million gallons of purified water daily through a three-part process; the plant is piloting the implementation of membrane bioreactors (MBRs), and the data collected from this plant is building a case for approval for widespread use by state regulators.

06. KEN MALLOY HARBOR REGIONAL PARK: MACHADO LAKE

CITY OF LOS ANGELES, RECREATION AND PARKS

RESTORED HABITAT AND TREATMENT WETLAND

Originally the site of an ancient freshwater wetland and Suanga and Massunga, two Tongva villages, it was landscaped and constructed as a flood control and irrigation measure in the 20th century. It intakes urban runoff from storm drains year round and is subject to Total Maximum Daily Load (TMDL) requirements. In 2017, a constructed wetland and a super-oxygenation system were installed to improve habitat health, support migratory bird species, and capture pollutants.

07. LONG BEACH MUNICIPAL URBAN STORMWATER TREATMENT PROJECT (LB-MUST)

CITY OF LONG BEACH, PUBLIC WORKS

WATER TREATMENT FACILITY AND CONSTRUCTED TREATMENT WETLAND

The facility (not fully operational yet), located in the Lower Los Angeles River Watershed, treats urban runoff during dry weather and "first flush" stormwater redirected from existing stormwater pump stations along the river. The treated water is returned to the river, and it also supports a two-acre constructed wetland adjacent to the facility. The second phase of operation will pilot the distribution of treated water for irrigation.

CONCEPTS

CONSTRUCTED TREATMENT

WETLANDS use natural processes involving wetland vegetation uptake and retention, soils, and their associated microbial life to improve water quality and maximize the removal of pollutants from stormwater runoff. They often have low construction and maintenance expenses, tolerance for fluctuating water levels, and provide wildlife habitat.

RESTORED HABITAT WETLANDS

reestablish a former wetland's physical, chemical, or biological characteristics and/or ecological integrity. Restoration goals are based on an analysis of the broader watershed and involve mitigating the source(s) of the initial degradation.

NATURE-BASED SOLUTIONS are actions or interventions that harness natural processes to protect, preserve, restore, and manage ecosystems; address socioenvironmental issues; and strengthen the resilience of human

communities and biodiverse habitats.

GREEN/LIVING INFRASTRUCTURE is the practice of bringing together built, natural, and social systems to address longstanding challenges like equity, social-ecological connection, and stewardship, and shifts the focus from things to processes.