

Jessie's Resilient Landscapes Internship

Mapping Yelamu's Historical Landscape



August 4, 2025

Project Goals

Project goal: produce authoritative maps and written narratives documenting the historical cultural and ecological landscape of the ancestral homeland of the Yelamu

Project tasks:

- Data collection
- Photo geolocation
- Map georeferencing
- Synthesis on Islais Creek
- Rephotography

0.33 0.65 1.3 Miles



MYHL study area

Historical Creeks

Historical Habitats

Dune habitats

- Mobile dunes
- Stabilized dune/dune scrub/grassland

Grassland habitats

- Coastal prairie
- Serpentine grassland
- Foothill grassland

Shrubland habitats

- Coastal prairie/scrub
- Coastal bluff scrub
- Coastal scrub
- Maritime chaparral
- Serpentine maritime chaparral
- Serpentine slope wetland/serpentine maritime chaparral complex

Woodland habitats

- Coast live oak woodland
- Riparian woodland
- California bay woodland
- Willow grove

Wetland and lake habitats

- Wet meadow
- Fen
- Dune slack
- Dune-dammed headwater lake
- Dune-dammed pond or lake
- Barrier beach-impounded freshwater lagoon
- Other pond or lake

Coastal habitats

- Beach
- Sandy/Rocky Intertidal

Tidal habitats

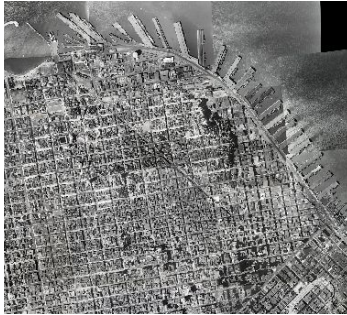
- Tidal marsh
- Tidal flat
- Tidal marsh pond
- Tidal slough
- Tidal coastal lagoon

Ocean and bay

- Deep ocean/bay
- Shallow ocean/bay
- Island

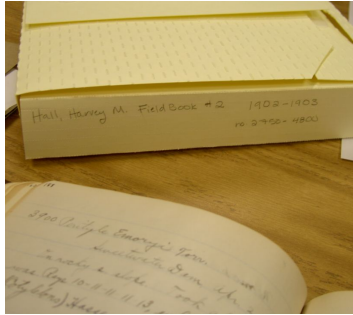
Historical ecology sources

Photos



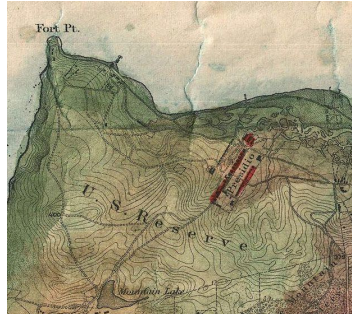
- Landscape photos
- Aerial imagery
- Plus sketches, paintings...

Textual data



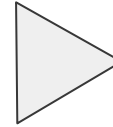
- Herbarium records & specimen data
- Newspaper articles
- Public Land Survey records
- Land Case records
- Explorer's diaries
- Field notebooks
- ...

Maps



- General Land Office plat maps
- Land case maps
- Soil surveys
- US Coast Survey T-sheets
- USGS quads
- County Surveyor's records
- Local plat maps and property surveys
- ...

From
local/regional archives...

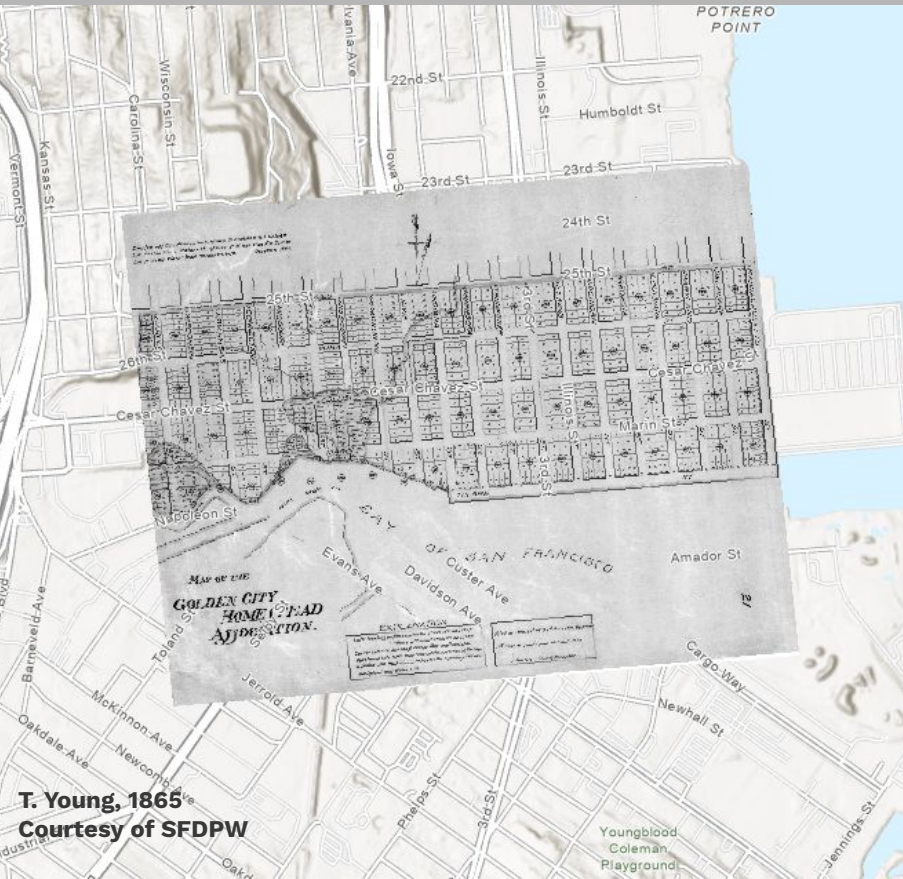


- **SF Public Library**
- **Bancroft Library**
- **California Academy of Sciences**
- **Jepson Herbarium**
- **Society of CA Pioneers**
- Online Archive of CA
- Calisphere
- California State Archive
- California State Library
- Sutro Library
- SF State University
- CHS Archive
- UC Library
- Stanford University
- ...

***Visited in person**

Georeferencing

(majority ~1850-1910)



T. Young, 1865
Courtesy of SFDPW



Humphreys, 1876
Courtesy of David Rumsey

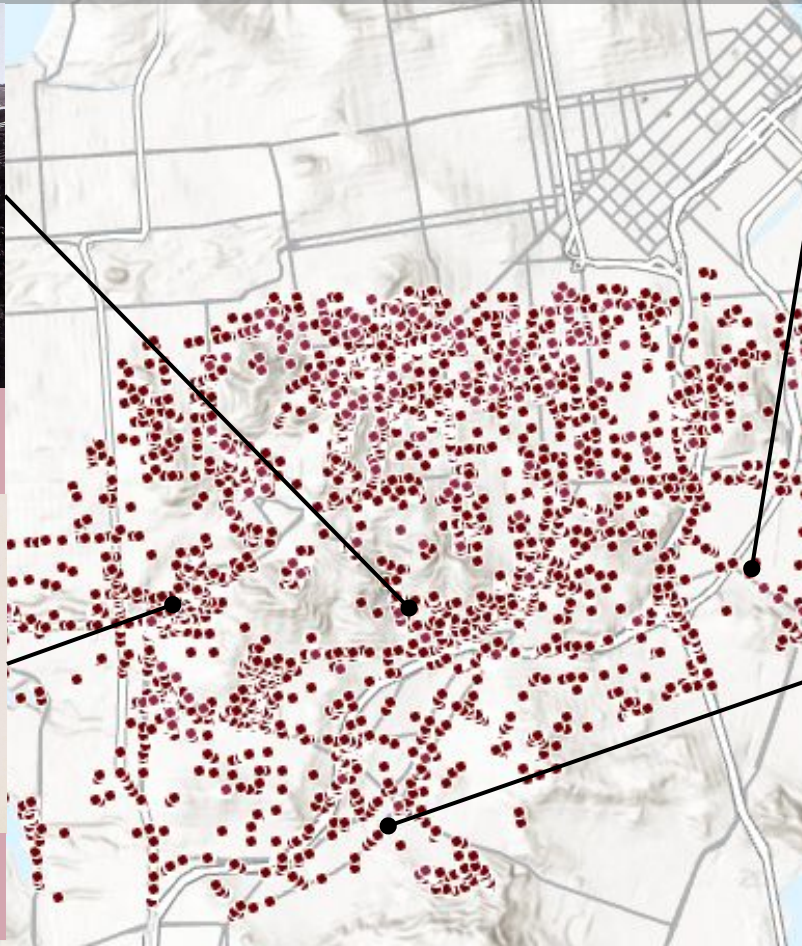
Geolocated Photos



"Islais Creek" ca. 1891
Courtesy of Glen Park Historical Association



"View 1, San Miguel Ranch" ca. 1910
Courtesy of California State Library



"NW From Fairfax Ave. & Quint St. Islais Creek." ca. 1915
Courtesy of UC Berkeley, Bancroft Library



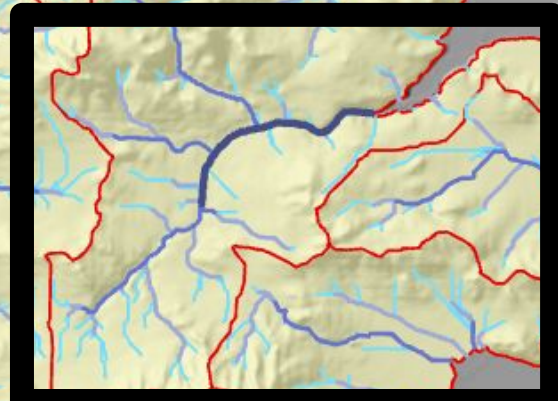
"Cayuga near Mt. Vernon" ca. 1909
Courtesy of OpenSF History

Islais Creek Background + Features

Historic Watershed Mapping

 Watershed Boundary

Strahler Stream Order



Seep City Map

Glen Canyon

Lake Geneva
Geneva Marsh

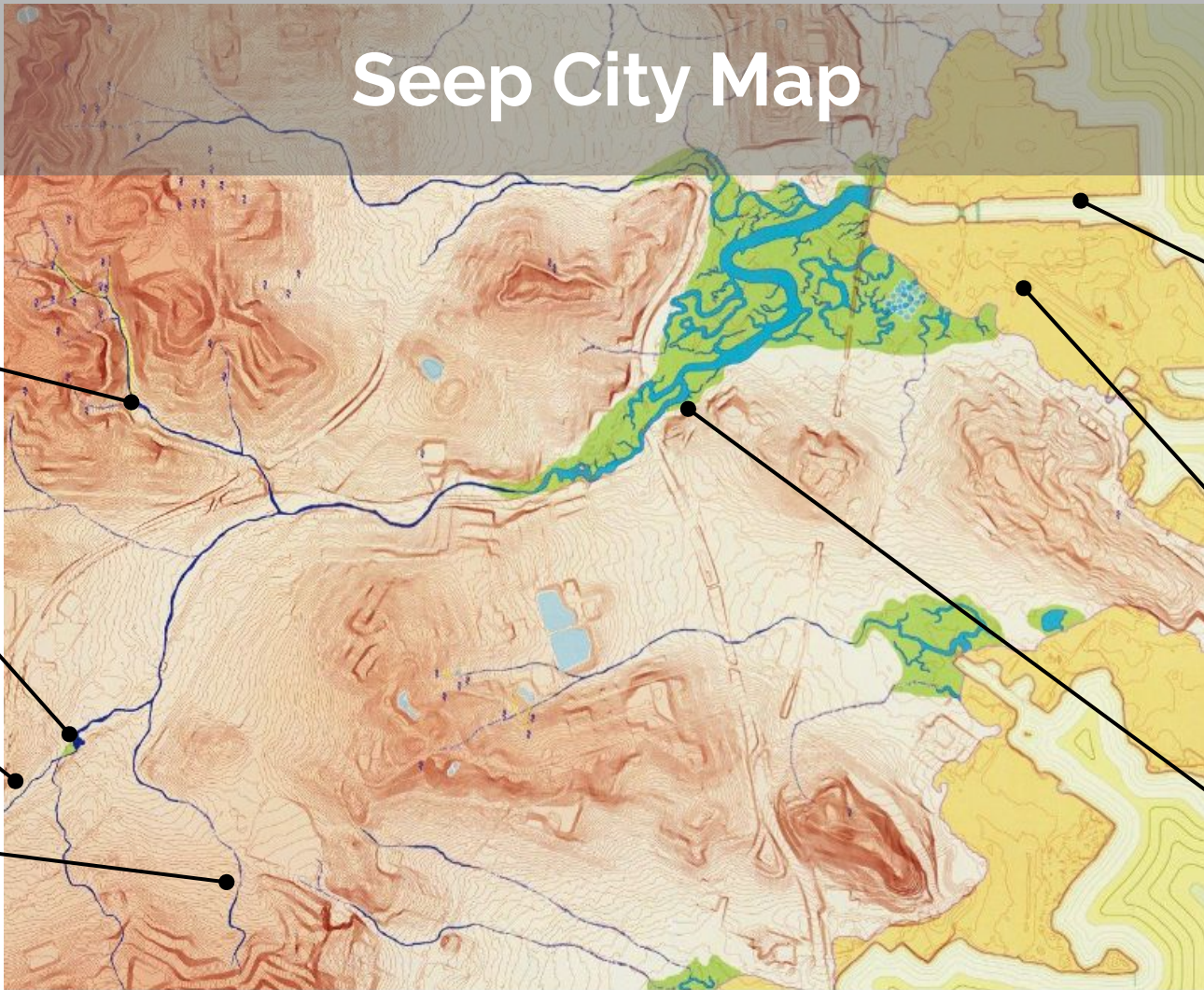
Cayuga
Creek

West End
Creek

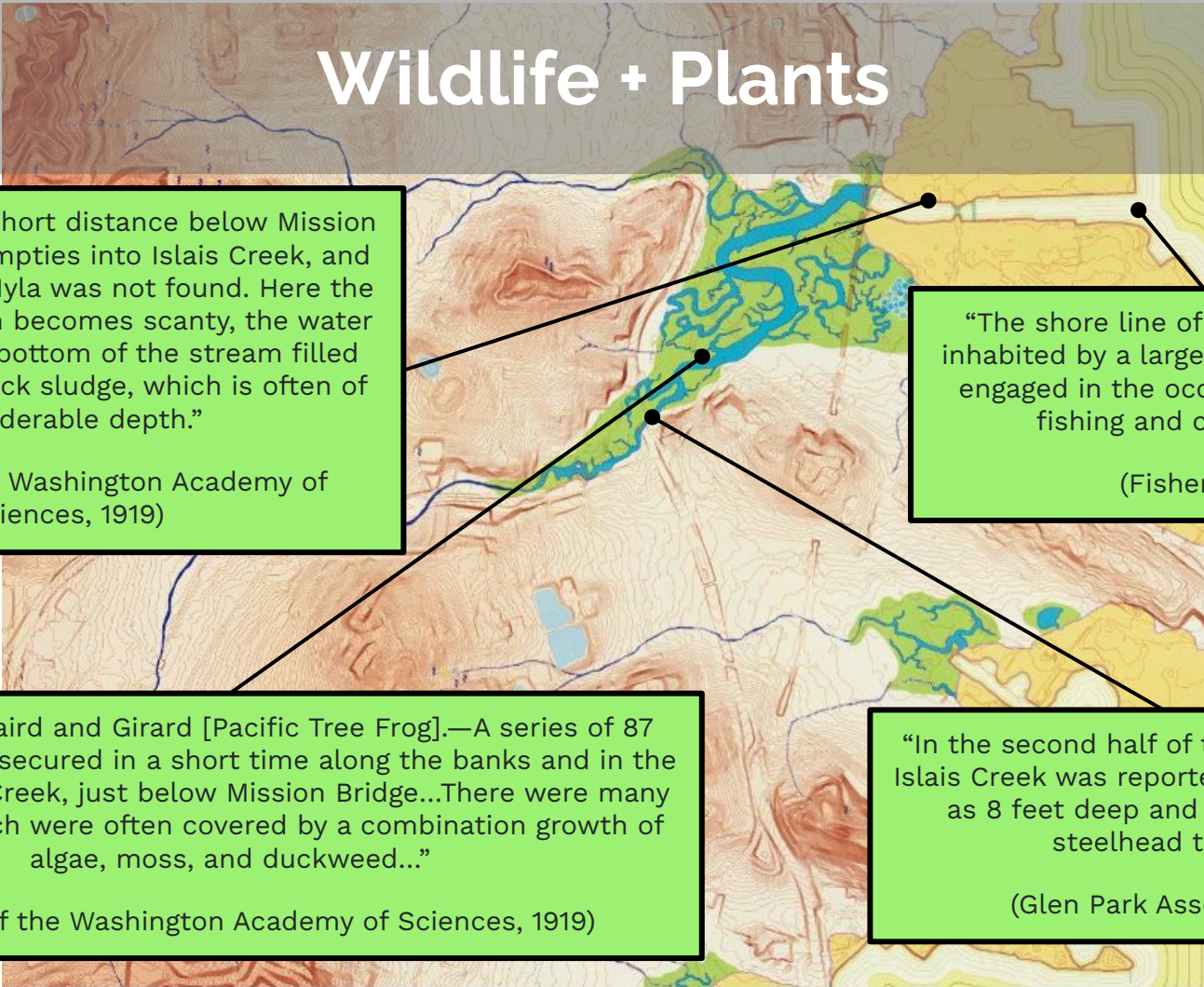
Channel

Tidal Marsh

Islais Creek



Wildlife + Plants



“Down stream, a short distance below Mission Bridge, a sewer empties into Islais Creek, and below this point Hyla was not found. Here the aquatic vegetation becomes scanty, the water impure, and the bottom of the stream filled with a barren, black sludge, which is often of considerable depth.”

(Journal of the Washington Academy of Sciences, 1919)

“The shore line of this tidal flat was inhabited by a large number of Chinese engaged in the occupation of shrimp fishing and clam digging”

(Fisher, 1916)

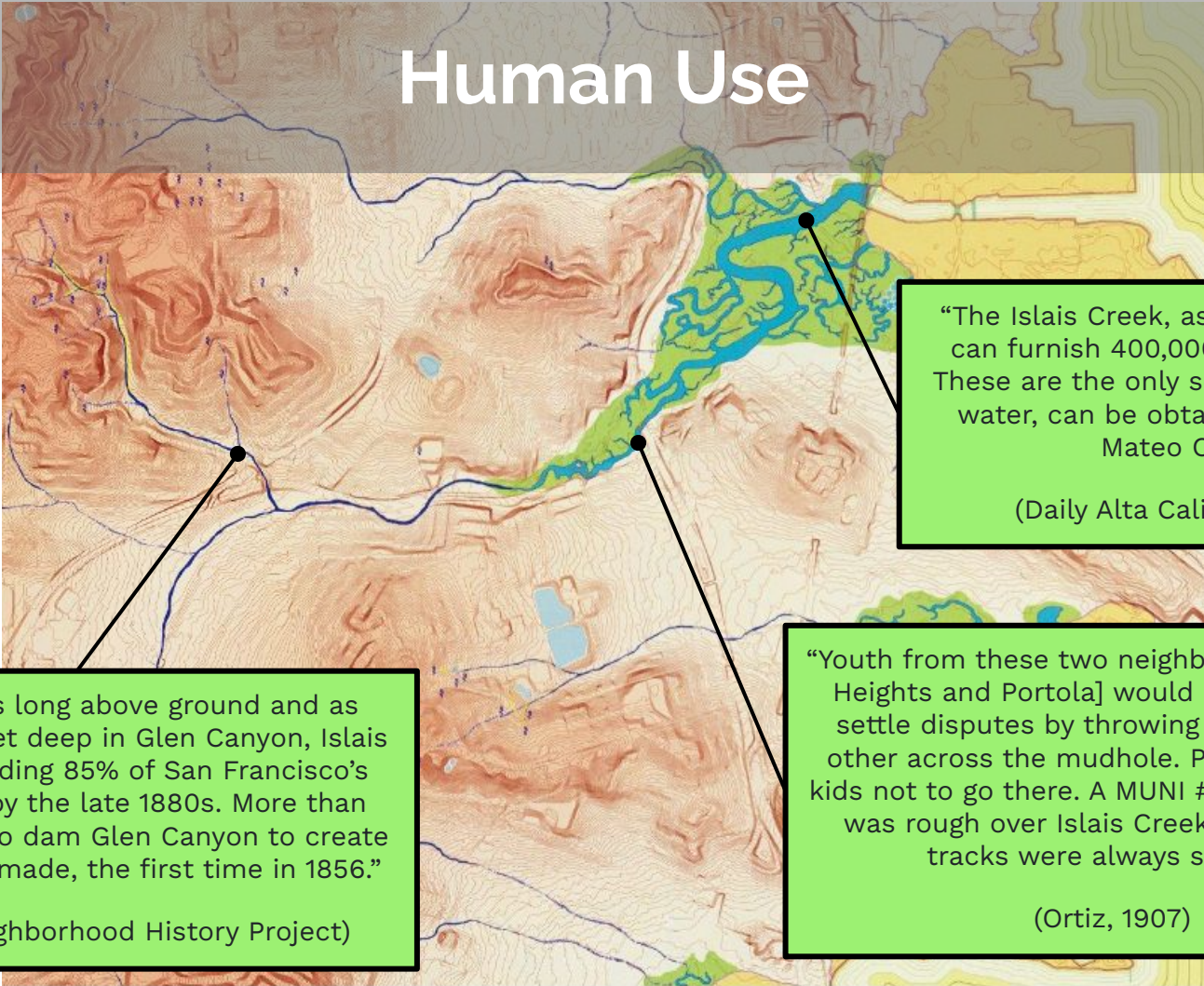
“*Hyla regilla* Baird and Girard [Pacific Tree Frog].—A series of 87 specimens was secured in a short time along the banks and in the pools of Islais Creek, just below Mission Bridge...There were many side pools which were often covered by a combination growth of algae, moss, and duckweed...”

(Journal of the Washington Academy of Sciences, 1919)

“In the second half of the 19th century, Islais Creek was reported to be as much as 8 feet deep and fishable with steelhead trout.”

(Glen Park Association)

Human Use

A topographic map of the San Francisco Peninsula, specifically the area around San Francisco and San Mateo. The map shows the coastline, major roads, and topographical features. Islais Creek is highlighted in green and blue, flowing from the inland area towards the coast. Three black dots are placed on the map: one on the creek near the coast, one on the creek further inland, and one on a road to the west. Lines connect these dots to text boxes. The title 'Human Use' is at the top.

“The Islais Creek, as we are informed, can furnish 400,000 gallons per day. These are the only sources from which water, can be obtained, except San Mateo Creek.”

(Daily Alta California, 1860)

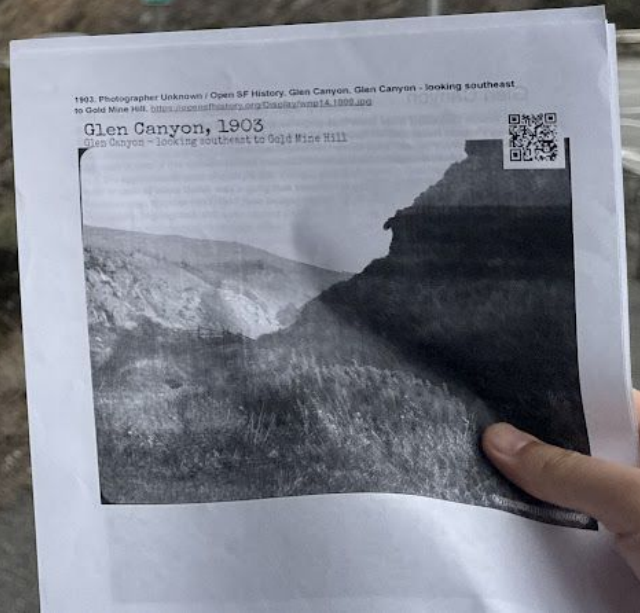
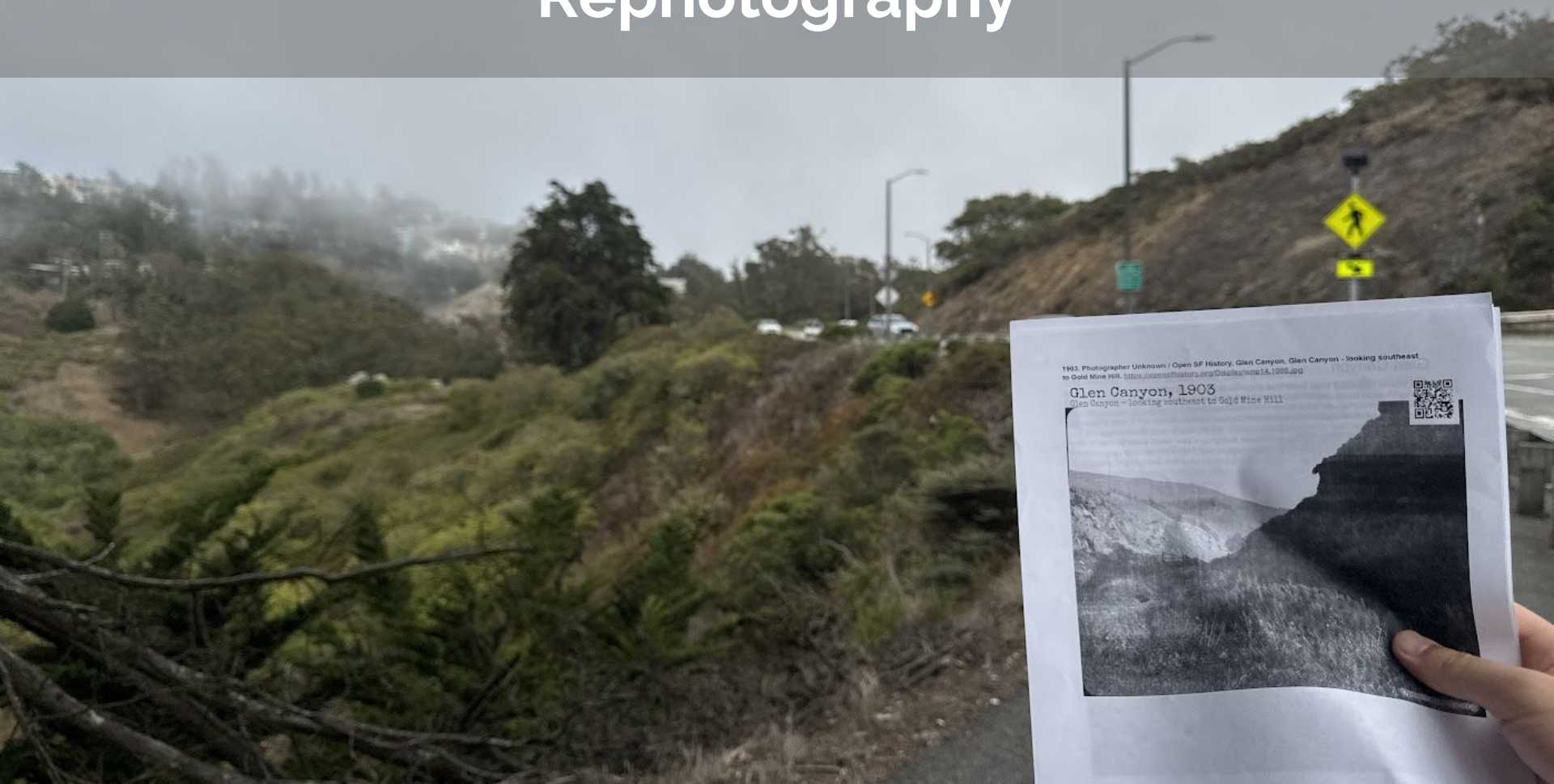
“Once 3.5 miles long above ground and as much as eight feet deep in Glen Canyon, Islais Creek was providing 85% of San Francisco’s drinking water by the late 1880s. More than once, proposals to dam Glen Canyon to create a reservoir were made, the first time in 1856.”

(Glen Park Neighborhood History Project)

“Youth from these two neighborhoods [Bernal Heights and Portola] would come there to settle disputes by throwing rocks at each other across the mudhole. Parents warned kids not to go there. A MUNI #25 street car ... was rough over Islais Creek because the tracks were always sinking.”

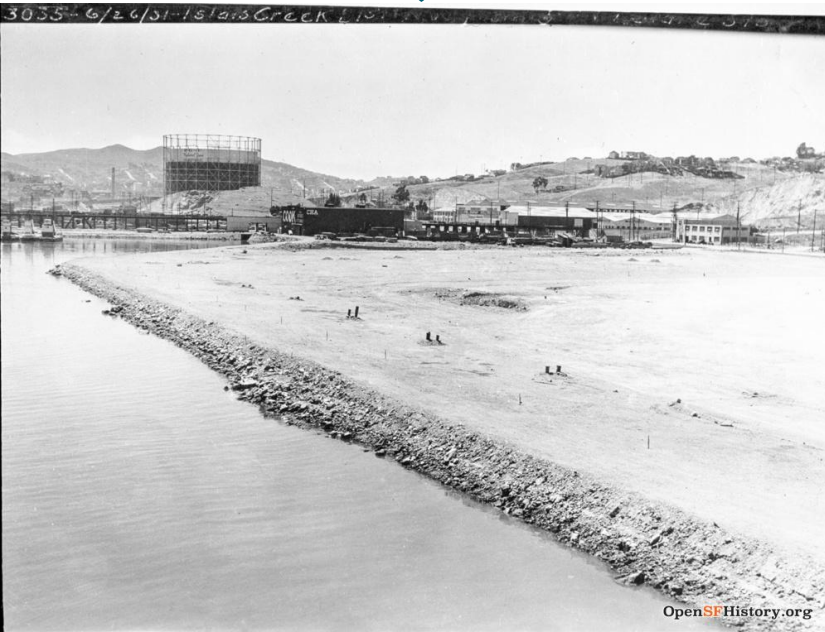
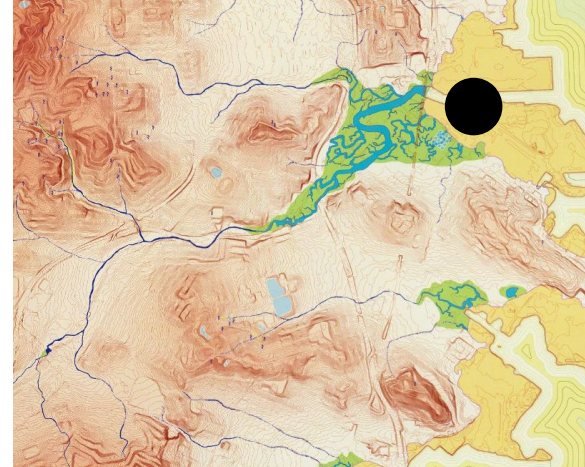
(Ortiz, 1907)

Rephotography



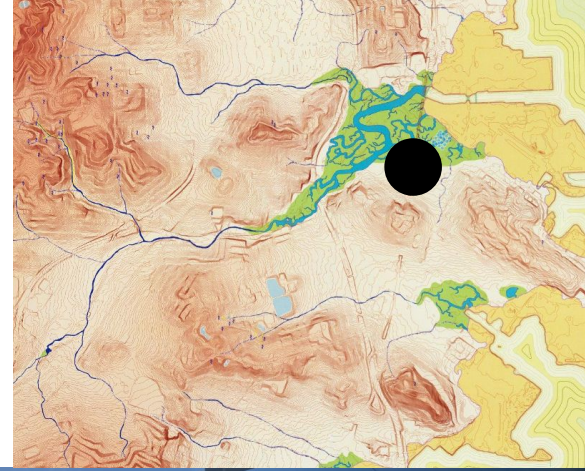
Islais Creek Channel, 1931, OpenSF History

View west from 3rd Street Bridge over
Islais Creek showing fill on north bank of
creek, now Tulare Avenue



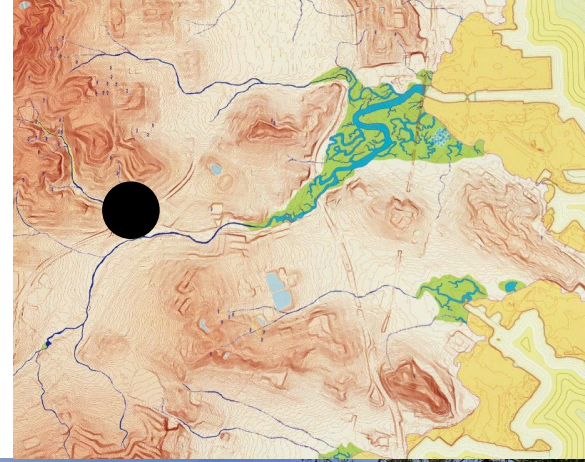
Islais Creek, 1915, Online Archive of California

View Northwest from Fairfax Ave along
Railroad Trestle



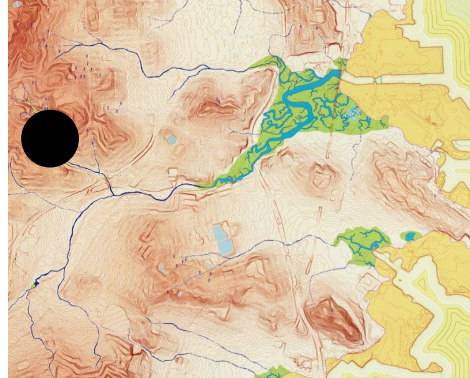
Islais Creek, 1891, Glen Park Historical Society

Islais Creek Exiting Glen Park



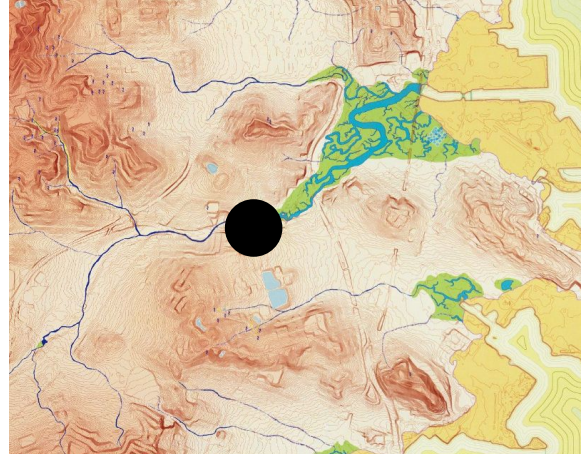
Glen Canyon, 1903, OpenSF History

Looking Southeast to Gold Mine
Hill



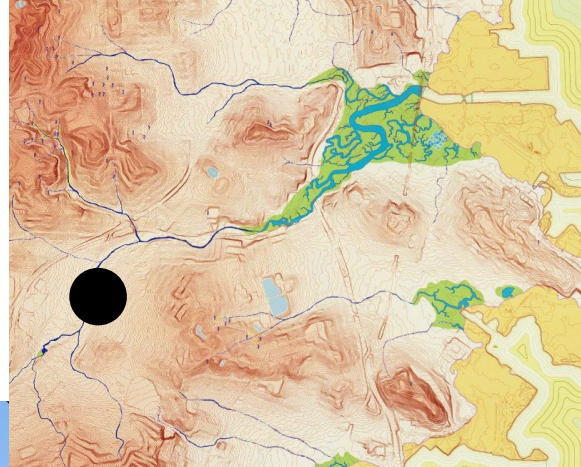
Alemany near Mission, 1930, OpenSF History

View east from the Mission Street
Viaduct showing construction



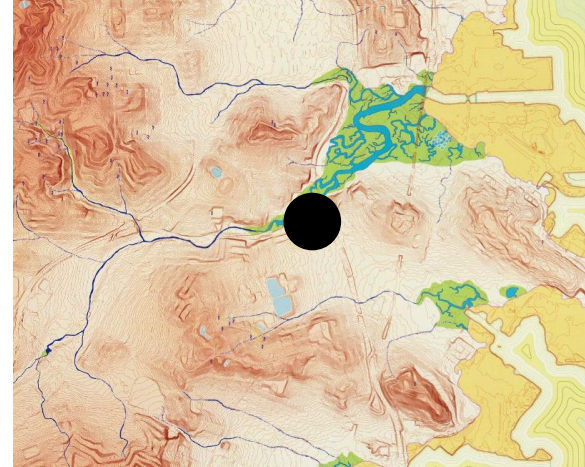
Cayuga & Mt. Vernon, 1907 OpenSF History

View east on future Cayuga Avenue
toward Mt. Vernon showing work to
build a culvert for Islais Creek diversion



Islais Creek, 1913, OpenSF History

View north across Islais Creek towards
Bernal Heights along University



Main takeaways from Historical Ecology

- Understanding how different data mediums come together
- Unique application of historical data
- Data is spatial

Some things that I have learned from all projects

- GSI workshop- Getting residents invested in urban ecology has huge potential for change
- GSI carbon- Trial and error, reiteration with results
- OE- Collaboration across agencies and nonprofits is necessary

Thanks for having me this summer!

jkong2@stanford.edu