



**LATERAL CONNECTIVITY OF THE  
SACRAMENTO RIVER**

---

JSUC BERKELEY LATERAL GROUP

La'Keshia Stewart, Jon-Vincent Holden, Xihan Yao, Mafe Gonzalez, Wendy Millan



**Accessibility**

**Lateral Connectivity**

**Current Conditions**

**Public Crossing the River**

**Bringing the City to the River**

**Ecological Lateral Connectivity**

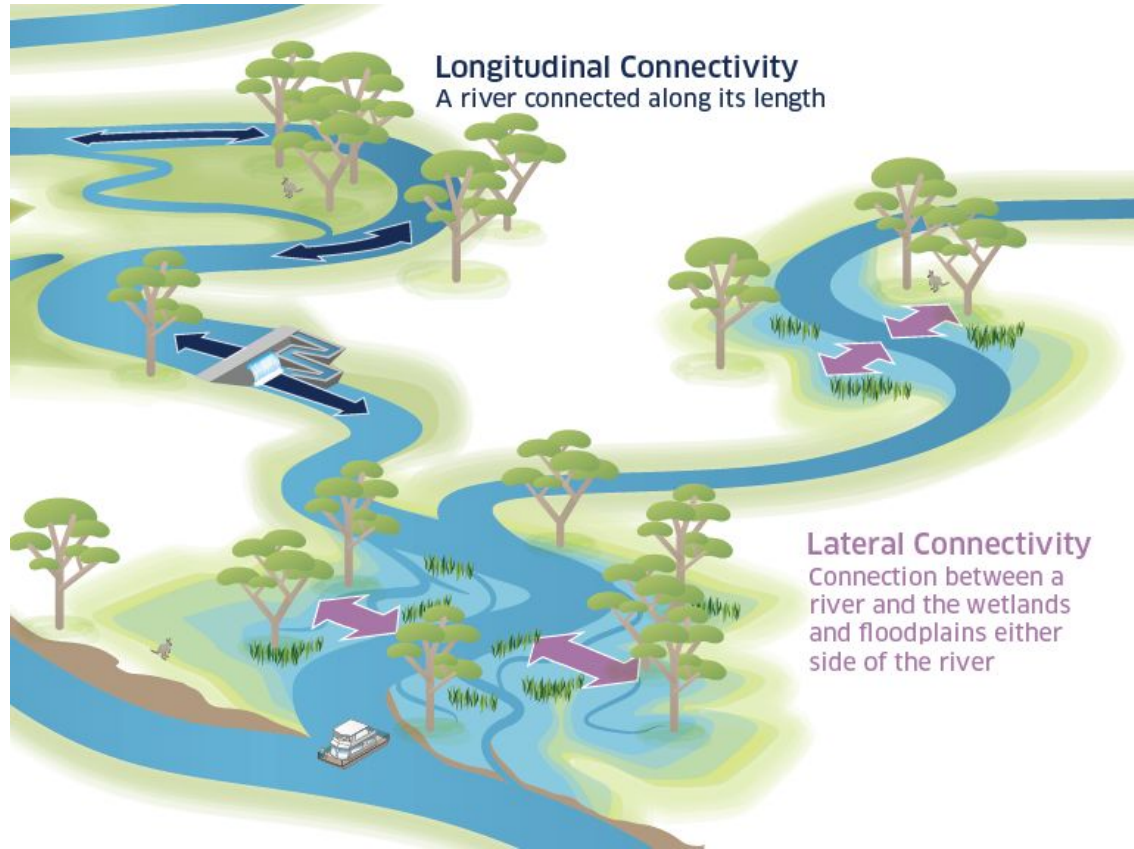
**Summary**

# Table of Contents

# Why accessibility?

- Che et al. (2012) -“Connectivity is related to accessibility and, although there is no universal definition of the concept of accessibility”...
- Navarro (2000)- for whom accessibility is the possibility of performed recreational, aesthetic and education activities on the waterfront as protecting wildlife and its inhabitants

# What is lateral Connectivity?



# **Social Connectivity**

Context: Current Conditions

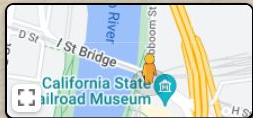


# I Street Bridge

Sacramento, California

Google

Street View - Feb 2021



Google



# Tower Bridge, Capitol Mall



50 Tower Brg  
Sacramento, California

Google

Street View - Oct 2020



Google



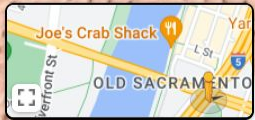
# Tower Bridge, Capitol Mall

198 CA-275

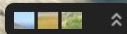
Sacramento, California

Google

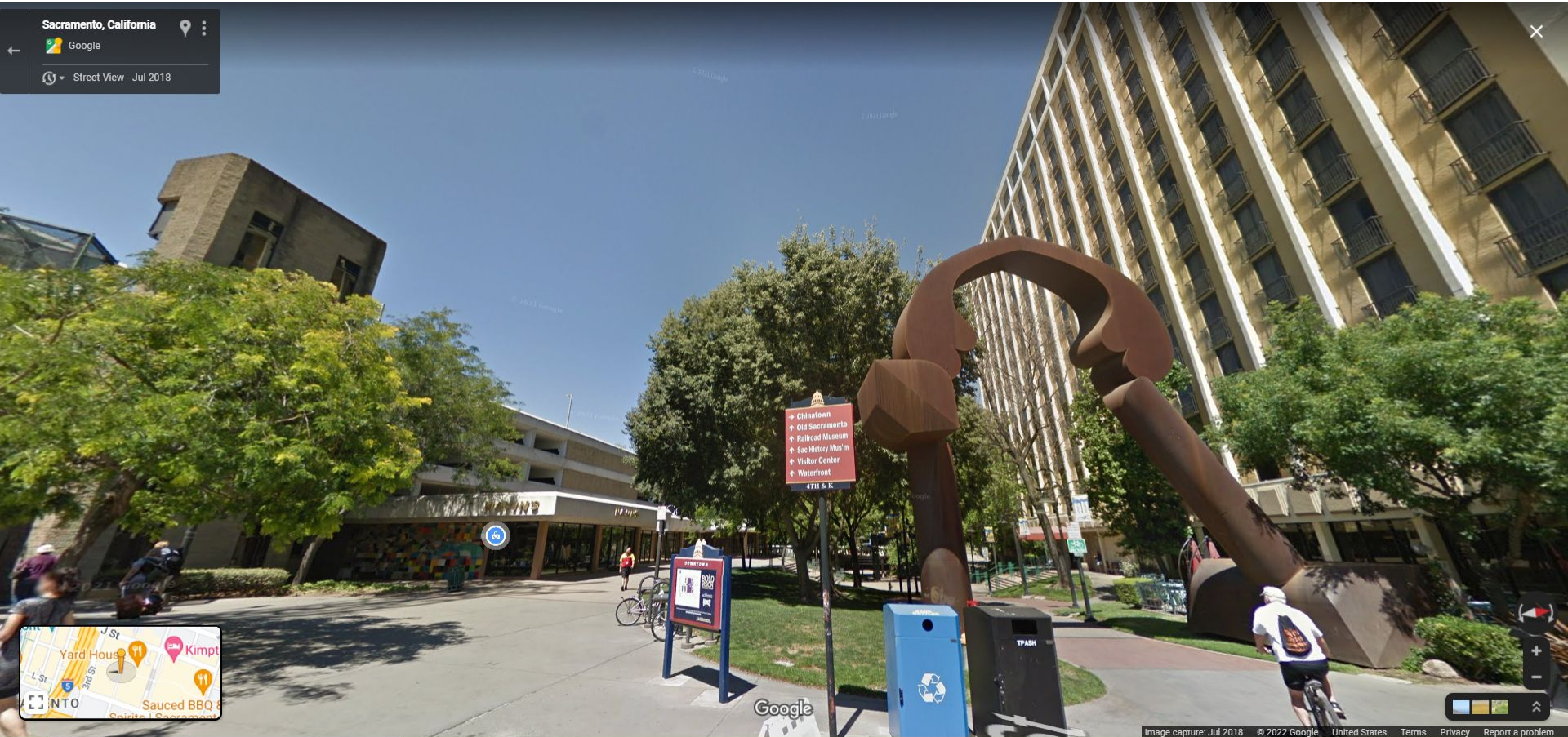
Street View - Dec 2020



Google



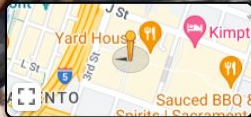
# K Street Tunnel



Sacramento, California

Google

Street View - Jul 2018



# K Street Tunnel

324 K St  
Sacramento, California

Google

Street View - May 2017

**NO VEHICLES**  
**SKATE BOARDING**  
**ROLLER SKATING**  
WILL BE CITED  
S.C.C. 12.44.070  
12.44.080 12.44.050  
CITY OF SACRAMENTO

K St



Google

# K Street Tunnel

K St

Sacramento, California

Google

Street View - May 2017



Google

# K Street Tunnel

**K St**  
Sacramento, California

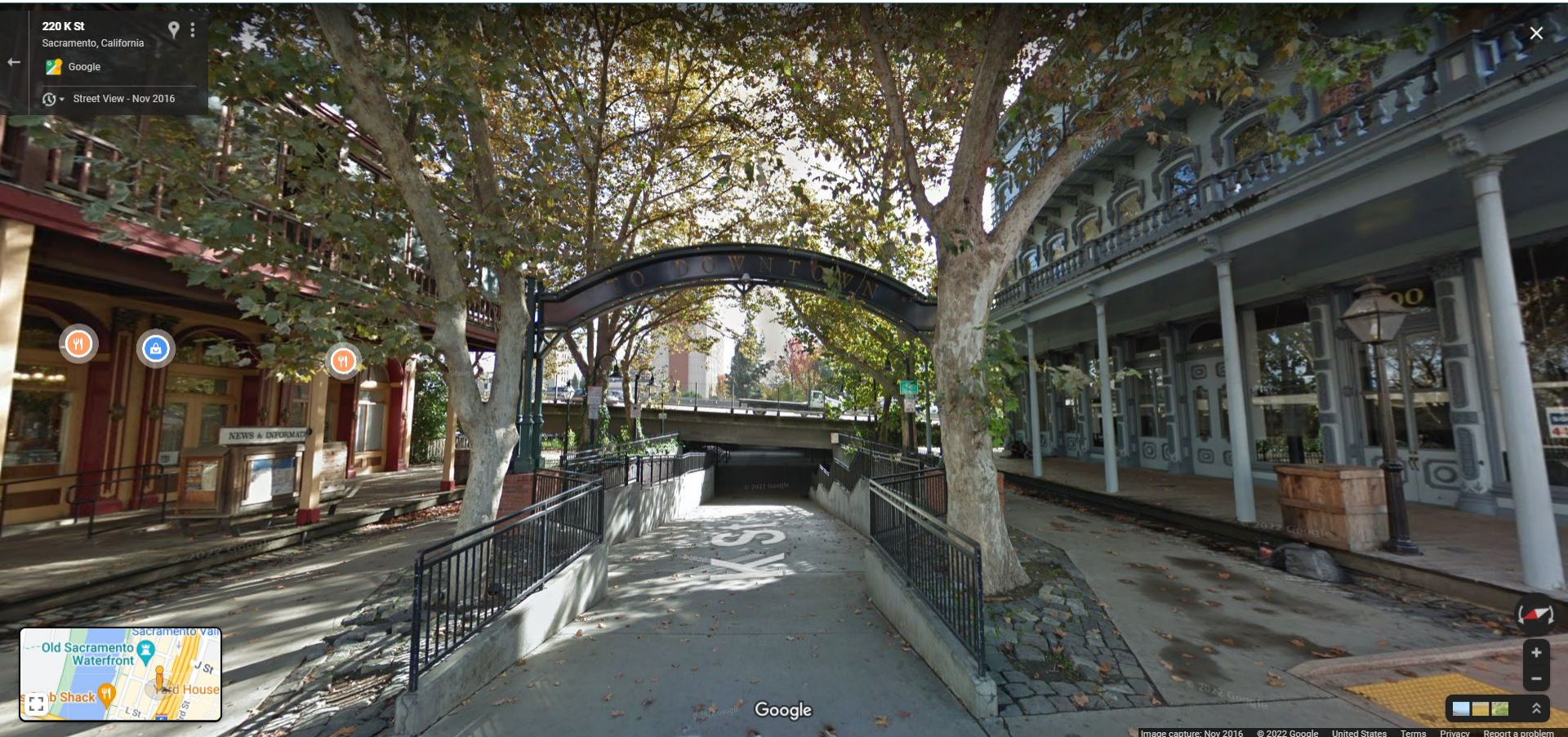
Google

Street View - May 2017



Google

# K Street Tunnel



# K Street Tunnel

1100 2nd St  
Sacramento, California

Google

Street View - Dec 2020



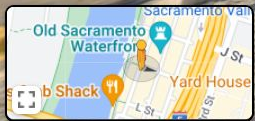
# K Street Tunnel

1098 Front St

Sacramento, California

Google

Street View - Nov 2020



Google

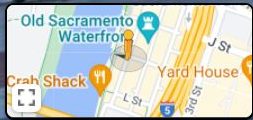


# K Street Tunnel

1101 Front St  
Sacramento, California

Google

Street View - Dec 2020



Google

# **Social Lateral Connectivity**

## I. Public Crossing the River

# Bridges

## Pros

- Develop regional collaboration and cohesiveness
- More open public space to move through
- Creating accessibility for an 8 years old and 80 years old

## Cons

- High impact invasive infrastructure
- Disturb habitat and water flow

# FALLS PARK on the Reedy



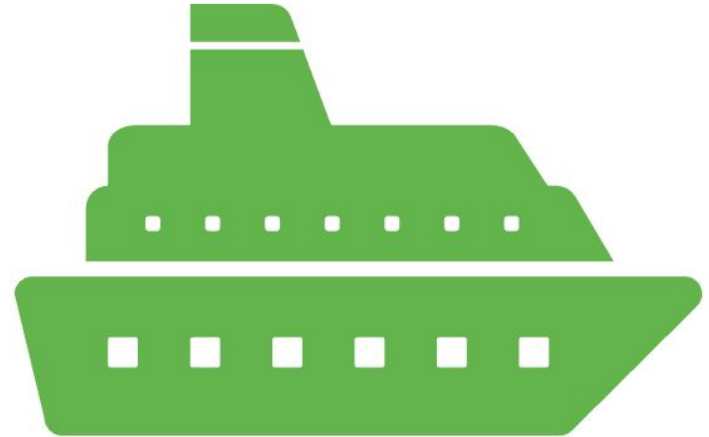
Falls Park | Greenville, SC - Official Website and pages - Work - Microsoft Edge





# FERRIES

- Why Ferries
  - Bike trail, going from one side to another, west Sacramento to Sacramento
- **Amenities**
  - Restrooms, Cafe's
- **Tourist Attraction & Themed Days**
  - Sacramento at Sunset
  - Holidays
  - Marathons
- **Proceeds 10%**
  - Maintenance & Homeless population aid



# Theory on Ferries

- “Ferries systems have continued to evolve with the provision of fixed links... such systems have adapted to co-exist with fixed link transport and have been incorporated into programs revitalising waterfront areas (Fox, 2016; Tanko & Burke, 2016; Weisbrod & Lawson, 2003)

## Pro's

- Easy to develop
- Creates economies
- Tourist and local attraction
- Provides aid and assistance to those in need

## Con's

- Emissions
- Wildlife disturbance







CityCat

CityCat

# Gondola

## Pros

- Low impact, low energy
- Ability to move from one side to the other
- Overview of the river

## Cons

- Restricted to just one line
- Not accessible for everyone?







# **Social Lateral Connectivity**

## II. Bringing the City to the River

# Trail network

## Pros

- Build upon existing trail network
- Multi-jurisdictional accessibility
- Promotes inclusivity for all abilities and demographic backgrounds
- Low disturbance and reconnects people with the environment

## Cons

- Cost and Maintenance
- Acquiring land and the right of way





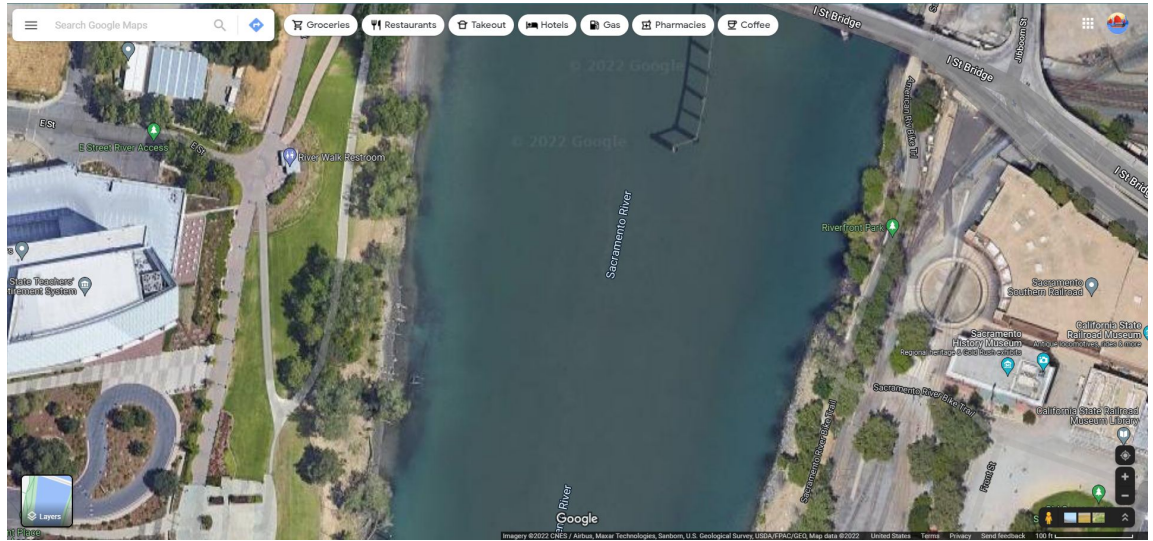
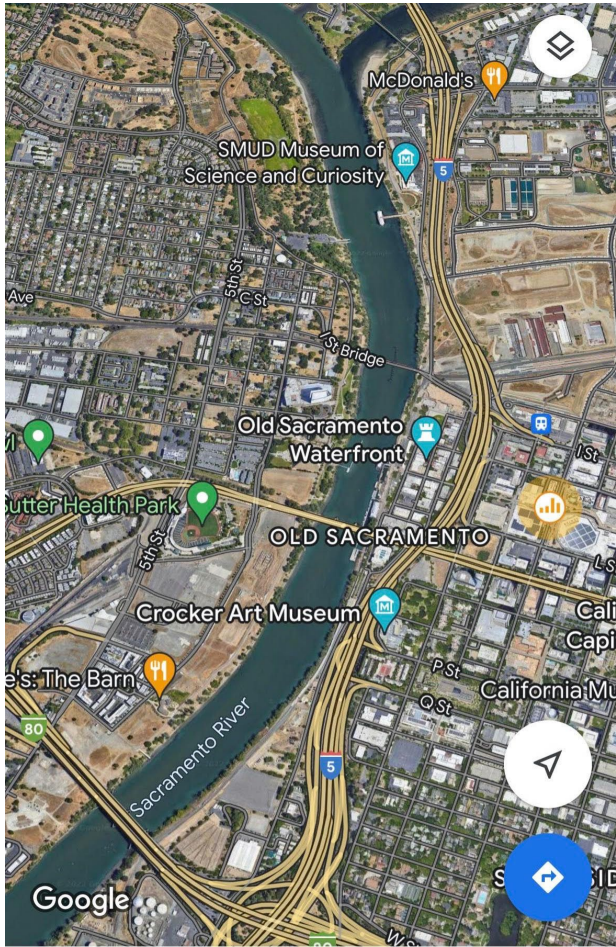




# Crossing obstacles



# **Ecological Lateral Connectivity**



There is limited opportunity to eliminate the levees.  
But there is the chance to improve the habitat quality.

# Improve habitat quality: LA RIVER

## ACTIONABLE SCIENCE

### Designing Low-Flow Channels in Confined Urban Rivers to Improve Aquatic Habitat Quality and Connectivity



BUREAU OF  
RECLAMATION

California's Los Angeles River was once a free-flowing river that frequently flooded. It was the primary source of freshwater for the City before the opening of the Los Angeles Aqueduct in 1913. After a series of floods in the early 20th century, this

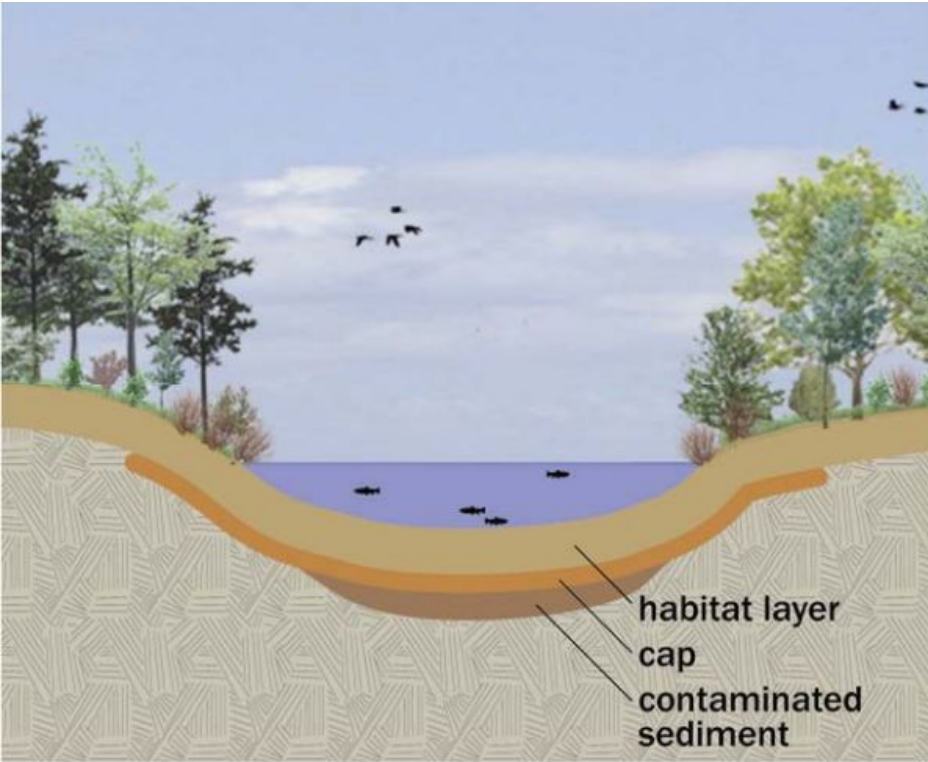


## KEY ISSUES ADDRESSED

Watersheds throughout the western United States have become increasingly urbanized over the last century. Degraded ecological conditions have resulted from



# Restoration of river bank: HOUSATONIC RIVER





# Improve habitat quality: LA RIVER





# SUMMARY

## Social connectivity

### I. Public Crossing the River

#### 1. Bridges:

- a. Big Dam Bridge
- b. Reedy River– Greenville (multi-jurisdictional connectivity)

#### 2. Ferries

- a. Sanitation stations: restrooms, drinkable places
- b. Cafes'

#### 3. Gondolas

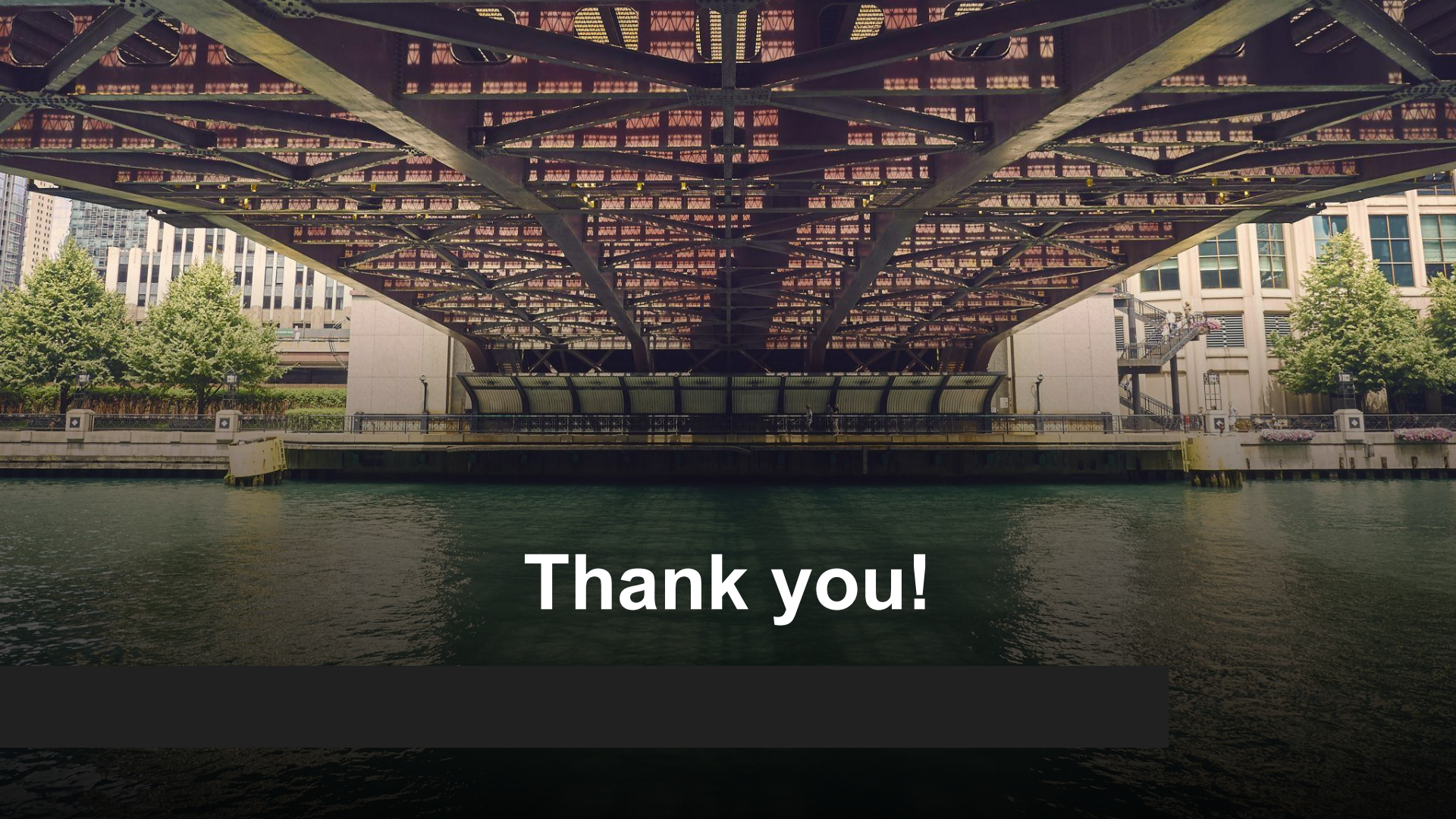
- a. Colorado River

### II. Bringing city to the river

- a. Network
- b. Crossing obstacles

## Ecological Connectivity

- a. Pros vs Cons



**Thank you!**