IN DEFIANCE OF BARRIERS

CREATING A FLOODPLAIN PARK IN COMPTON



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Landscape Architecture
Capstone - Summer 2024
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I believe strongly in the shared equality of humans and the natural world we belong to. One can't flourish without the other. My hope is that this belief translates through the work on the pages that follow.

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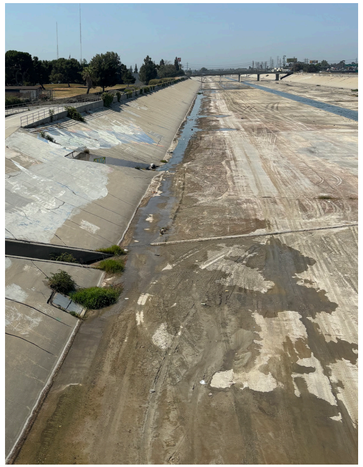
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Drone footage looking south along concrete flood control channel

This project challenges the barriers created by the abandoned Compton Golf Course and the reach of the LA River that runs along its banks. The site offers an opportunity to transform two halves into an interconnected natural refuge for human and nonhuman beings.

The Compton Floodplain Park will restore the natural floodplain and update the adjacent river channel to increase biodiversity and decrease existing barriers to Steelhead migration. Turning this parcel into a park will reduce park inequity in Compton and support the community's connection to its historical processes. This refuge will offer a place of rest for the community of Compton and the migratory Steelhead trout.



Drone footage looking east across golf course towards Dominguez High School



Golf course pro shop entrance



School field trip to Par 3 Golf Course

Par 3 Parcel

Opened in 1958 and designed by John Hilborn, the 'Compton Par-3 Golf Course' survived for over 60 years before shutting it's doors in 2020 due to COVID. It was managed by two employees. During that time this course became a beloved space for the community. Since the course has shuttered, the site has become an unexpected sanctuary for wildlife. While the parts community to have expressed interest in seeing the golf course reopening, there remains questions about how to best maximize this 11.8 acre park space adjacent to the LA River.

Par 3 Golf Course size: 11.8 acres



Historic flood of 1934

Los Angeles River

After a series of historic floods within the LA River in the 1930's, the Army Corps of Engineers began an unprecedented channelization of the entire river from the mouth in Long Beach to it's beginnings in the San Fernando Valley. The purpose of this project was to mitigate future flood risk, protecting the growing population built within the LA River floodplain. Life would forever be altered for residents adjacent to the meandering natural LA River - a river now encased in concrete, cut off from the community and wildlife that relied on it for thousands of years.

River Front Access: 1,300'



River channelization in 1938

SITE LOCATION



South LA Map

- Par 3 Golf Course
  11.8 Acres + 10 Acres of river access



Neighborhood Map

- Par 3 Golf Course
- 1 Compton
- 2 Willowbrook
- 3 Lynwood
- 4 Workman
- 5 Paramount
- 6 Bell Gardens
- 7 South Gate
- 8 Watts



Site Adjacency Map

- Par 3 Golf Course
- 9 Ralph C Dill's Park
- 10 Los Angeles River Trail
- 11 Clinton Elementary School
- 12 Dominguez High School
- 13 Paramount Business Center

SITE PHOTOS



Existing golf course entry - pro shop, parking lot



Chainlink fence perimeter



Looking south down fairway



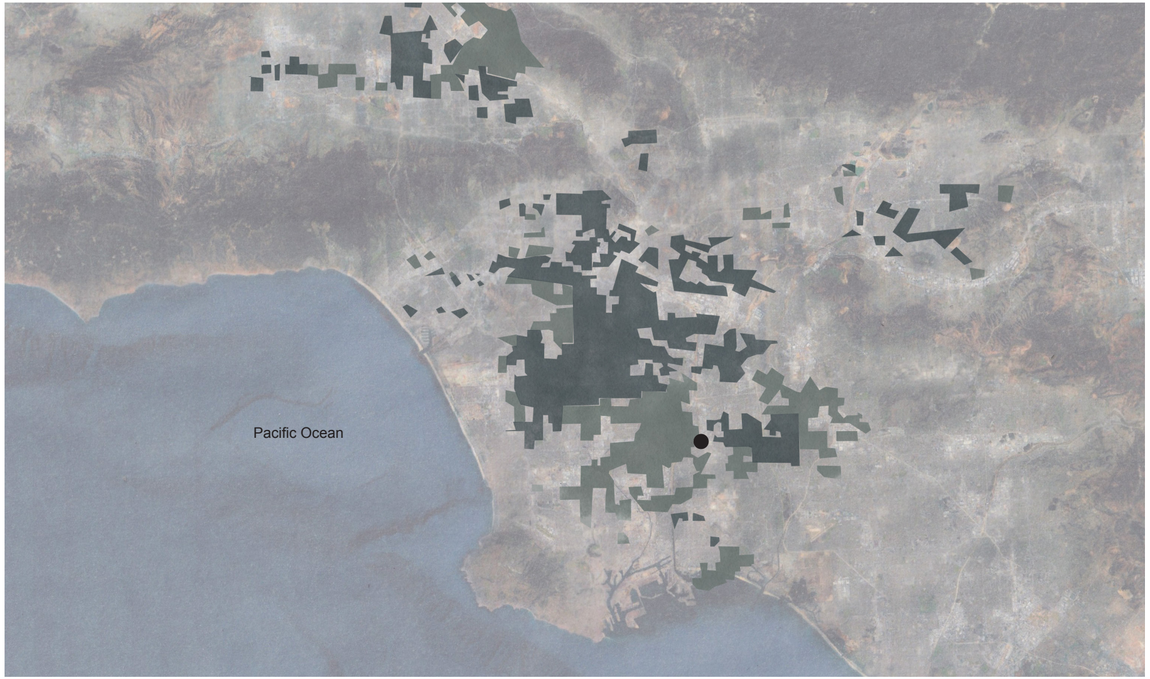
Looking north towards downtown LA

Systemic Barriers

Areas with a large portion of low-income or minority residents often experience limited access to quality parks and green spaces. This is true for Compton which currently uses 1% of its land for parks and recreation, which is way below the national average of 15%. Parks and green spaces provide various health benefits by promoting physical activity, connection to nature, and a place for the community to rest and connect.

The Compton Floodplain Park would add 11.8 acres of natural green space and 10.2 acres of river access to this high park need area.





Park Needs

"This map provides a visual representation of where public dollars dedicated to park infrastructure in LA County should be prioritized to maximize health benefits for residents. The map identifies priority census tracts that have a low life expectancy and low tree canopy or vegetation, that 3) fall within an area identified as 'high park need' (light green) or 'very high park need' (dark green), as determined by the Park Needs Assessment" **/3*

- Very High Park Need with Low Life Expectancy
- High Park Need with Low Life Expectancy
- Par 3 Golf Course (High park need)

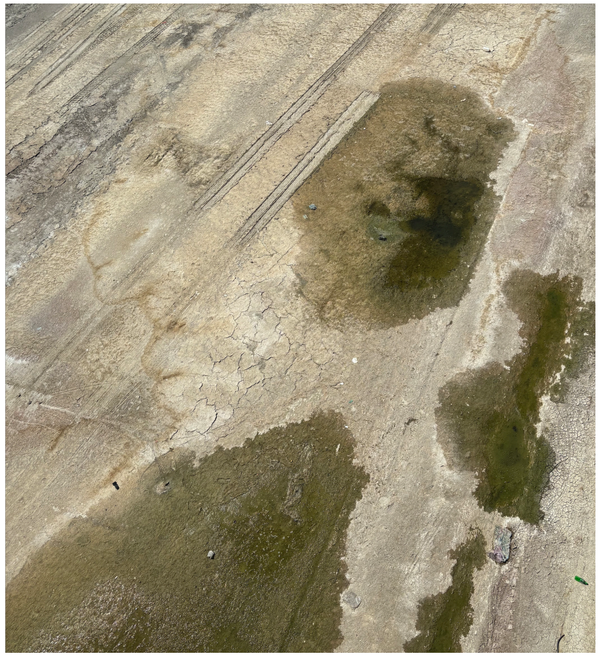
Fish Barriers

Tens of thousands Southern Steelhead Trout historically inhabited the Los Angeles River watershed. In 1997 Steelhead became federally recognized as an endangered species largely due to urbanization, modification of freshwater habitat, and anthropogenic barriers. Since that time, the population has continued to decline. Steelhead are crucial indicators of watershed health and river ecosystem integrity and are currently on the brink of extinction.

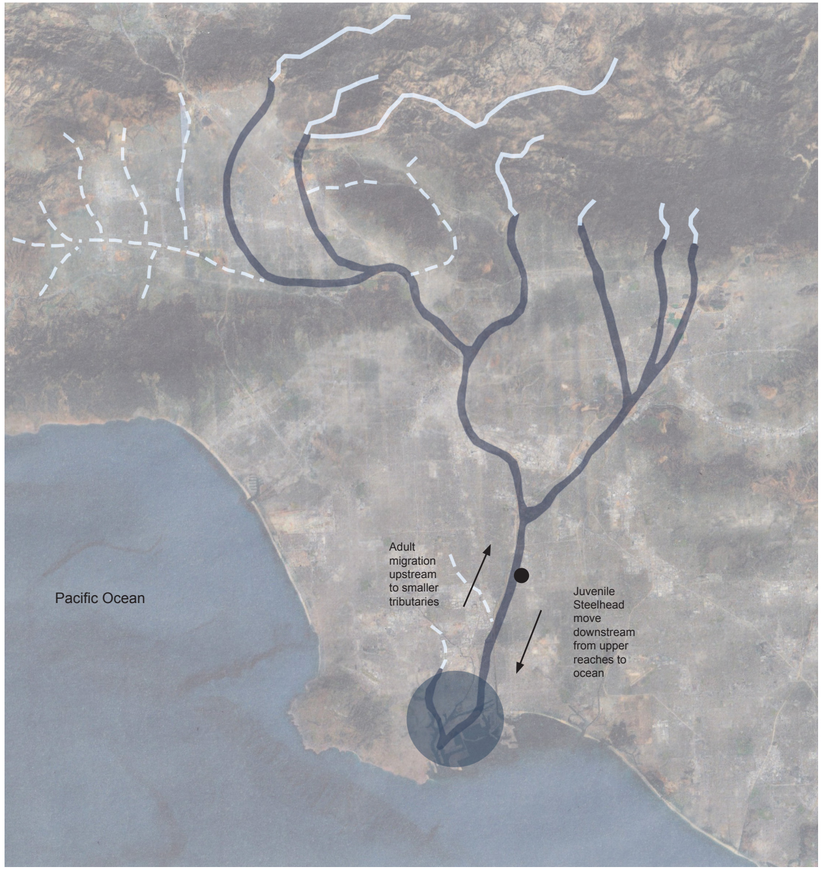
This project has 1300' of river that can be re-imagined into a refuge for migrating Steelhead Trout and other living beings dependent on healthy watersheds.



Drone footage looking south along concrete river channel, I-710 fwy to the west



Drone footage of collected sediment and algae blooms within existing channel



Southern California Steelhead stream life cycle pre-channelization

Historic Waterways

This is a conceptual diagram of the Steelhead life cycle within the Los Angeles River Watershed including the Rio Hondo, from the estuary at Long Beach to spawning and rearing grounds in the upper tributaries in the San Gabriel Mountains.

- Supporting Streams
- Primary Spawning
- Primary Migration Route
- Estuary / Rearing
- Par 3 Golf Course (Lower LA River)



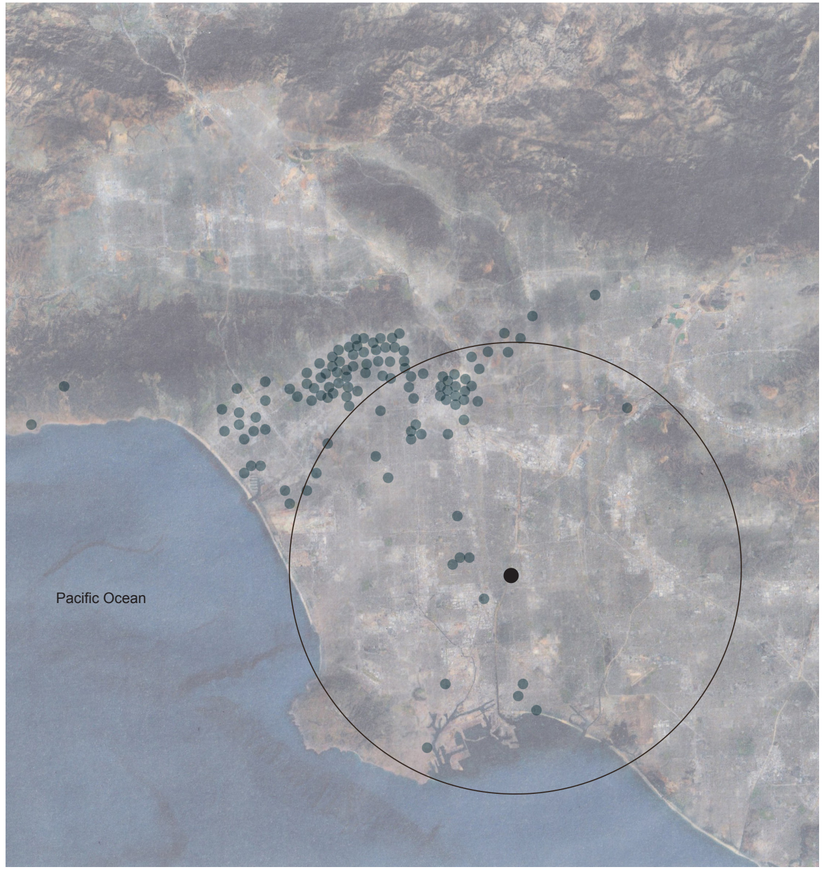
Existing Fish passage barriers within the Los Angeles River Watershed

Fish Passage Barriers

Here we begin to chart the barriers that prevent Steelhead and other Native fish from migrating to their historic spawning areas. The vast majority of these obstacles were installed after the channelization of the LA River.

- Structural / Hydraulic Barriers
- Supporting Streams
- LA River Channel
- Par 3 Golf Course (Lower LA River)

SITE INVENTORY



Southern California Steelhead stream lifecycle pre channelization

Art accessibility

This is a 20 mile radius map showcasing LA County Museum's distance from project site. The edge of the radius travel time on a Saturday takes 30 minutes to arrive by car or 1.5 hours by public transit. Providing art access on site will empower the community and serve as a teaching tool about natural processes of the LA River.

- Museums
- 20 mile radius
- Par 3 Golf Course (Lower LA River)

SITE INVENTORY



Vegetation Study

Utilizing this study we can understand the original design of the golf course, the fair ways and borrow views from the original design to enhance user experience at the park.

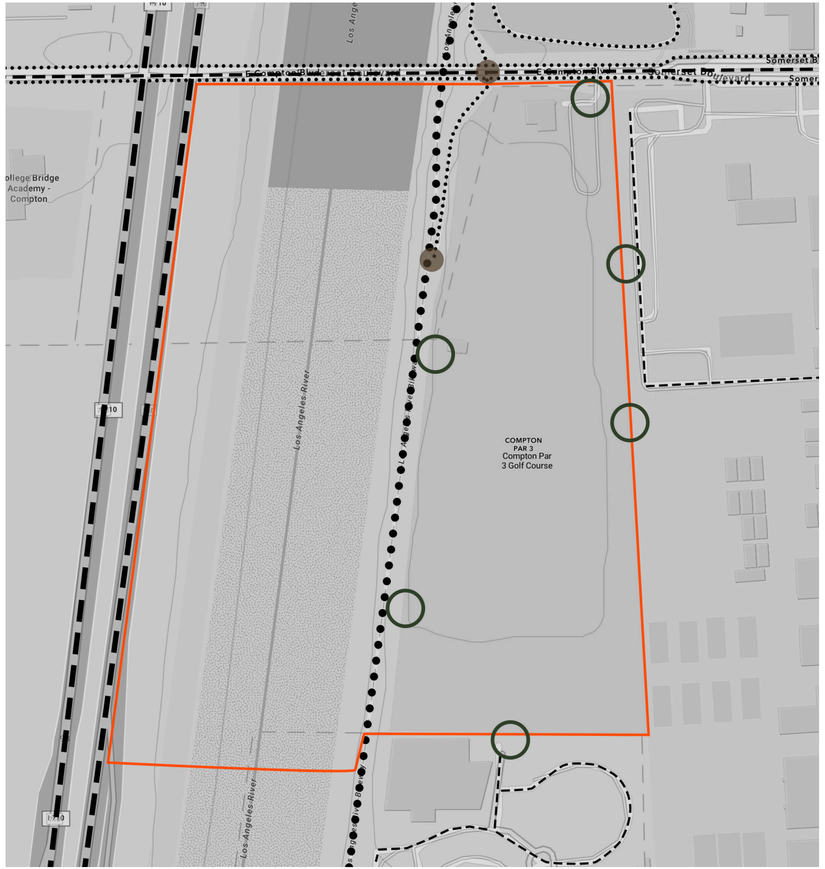
- Existing tree canopy
- Existing shrubs



Adjacent Schools

There are 7 schools within a half mile of the project site - roughly 4,000 students attend annually here. These neighboring school's outside common / play areas are predominantly covered in concrete and asphalt, reflecting heat and repelling rainwater. Open areas of irrigated turf grass may appear natural but are anything but. With little shade, and hyper focused sports play (soccer, baseball, etc) it leaves much to be desired. A park that stimulates natural play, offers shade and plant diversity is desperately needed.

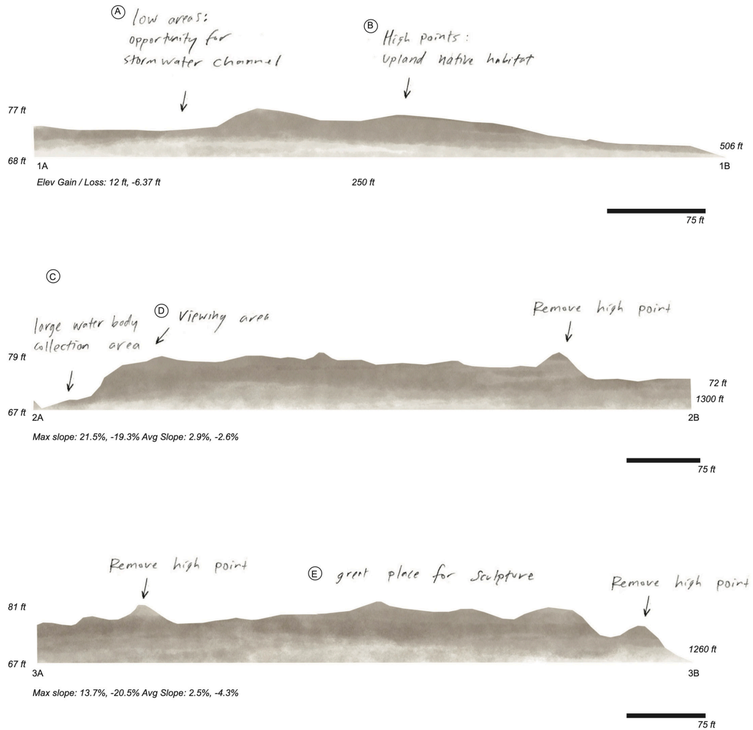
- K - 12 Schools
- Los Angeles River
- Project boundary



Circulation Map

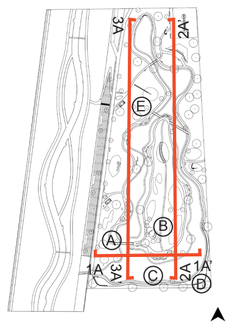
Vehicle and pedestrian circulation play a key role in site access. Identifying existing traffic patterns helps us determine safe areas for crossing, parking, entry points and traffic noise.

- I-710 FWY
- Primary vehicle circulation - Compton Blvd
- Secondary vehicle circulation - side streets
- LART - L.A. River Trail
- Primary pedestrian circulation
- Pedestrian connection nodes
- Park access points
- Project boundary

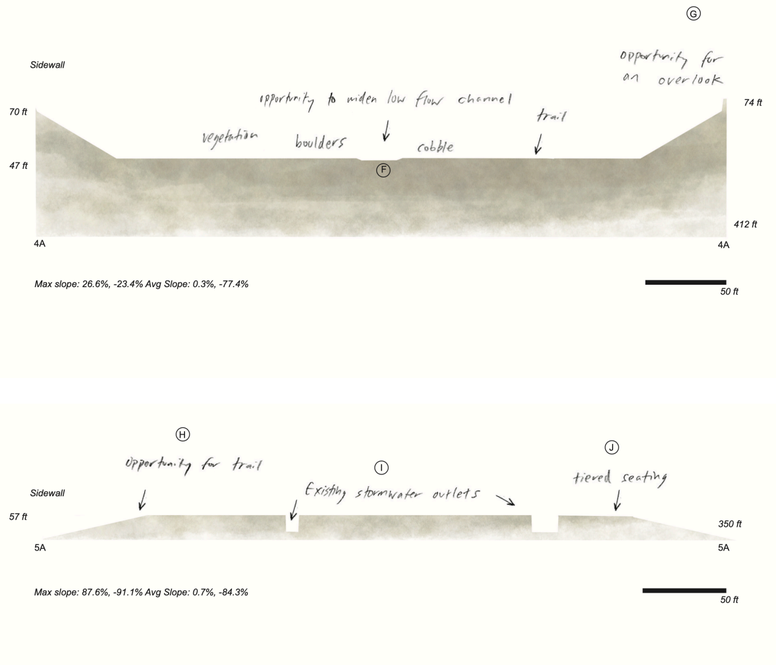


Topographic Study

These are topographic studies of the project site. Since this was designed as a golf course, there are bunkers and false fronts creating a series of hilly progressions throughout the site. These features of high and low progressions can help us direct and retain storm water while also utilizing borrowed views throughout the park.

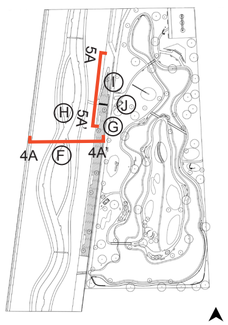


Key map



Channel Study

These are the sections of the river channel that run through the project site. The storm drain BI 6101 Paramount mainline cuts into the northwest corner of the project site sub grade. This is the widest reach of river within the 51 miles of the watershed - capable of holding vast amounts of water.



Key map



Green Sunfish - *Lepomis cyanellus*



Tilapia - *Oreochromis niloticus*



Amazon Sailfin Catfish - *P. pardalis*



Common Carp - *Cyprinus carpio*



Brown Bullhead - *Ameiurus nebulosus*



Largemouth Bass - *Micropterus salmoides*



Black Bullhead - *Ameiurus melas*



Fathead Minnow - *Pimephales promelas*



*** Steelhead Trout** - *Oncorhynchus mykiss*



*** Arroyo Chub** - *Gila orcutti*



*** Three-spined Stickleback**- *G. aculeatus*



Mosquito Fish - *Gambusia affinis*

Fish species of Lower LA River

The majority of the fish species on this chart are invasive exotic species. Many of these exotic species prey on smaller fish and rely on the warmer slow moving water of the lower river.

* Native fish to the river and efforts are underway to help restore these endangered fish species.



Red Shouldered Hawk - *Buteo lineatus*



Least Bell's Vireo - *Vireo bellii pusillus*



Red Winged Blackbird - *Agelaius*



Black Headed Grosbeak - *P melanocephalus*



American Kestrel - *Falco sparverius*



Belted Kingfisher - *Megaceryle alcyon*



California Towhee - *Melozone crissalis*



Killdeer - *Charadrius vociferus*



Snowy Egret - *Egretta thula*



Olive Sided Flycatcher - *Contopus cooperi*



Green Heron - *Butorides virescens*



Western Tanager - *Piranga ludoviciana*

Bellwether Birds

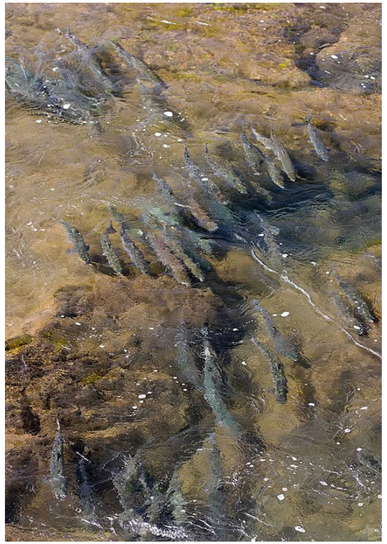
These birds are indicators of a healthy ecosystem and historically occupy the floodplains of the LA River, many of these birds have been seen within the reaches of the remaining lower la river wetlands. Therefore, with appropriate restoration efforts and effective storm water holding - visitor of the Compton Floodplain Park might too get to see these special creatures.

USERS













USERS

Local residents
Students
Teachers
Hikers
Cyclists
Families
Research groups
Conservation groups
Equestrian riders
Citizen scientists
Birdwatchers

Wildlife
Coastal sage scrub
Southern Willow scrub
Riparian Oak Woodland

USERS

COMPTON POPULATION	90,986
GENDER	
Female	51%
Male	49%
AGE	
< 10 years	15%
10 - 17 years	13%
18 - 24 years	10%
25 - 34 years	14%
35 - 44 years	14%
45 - 54 years	12%
55 - 64 years	11%
65 + years	10%
RACIAL DIVERSITY	
Hispanic	71%
African American	25%
Two or more races	1%
Asian	1%
White	1%
Other	1%
Hawaiian / Pacific Islander	0%
American Indian / Alaskan Native	0%



Compton is a diverse city known for it's rich history within the arts but the diversity of Compton isn't just in it's people - it's also in the wildlife and plant communities that have been here for thousands of years. This park is for all beings that call Compton Home



KEY TAKEAWAYS:

Case studies within the watershed / adjacencies

River history

Community engagement strategies / findings

Demographic surveys



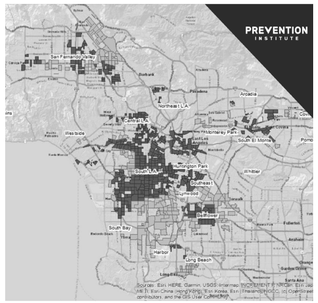
KEY TAKEAWAYS:

Scope of intervention allowed by Army Corps

Hydraulic models relating to storm surge

Vegetation types

Fish resting pocket design



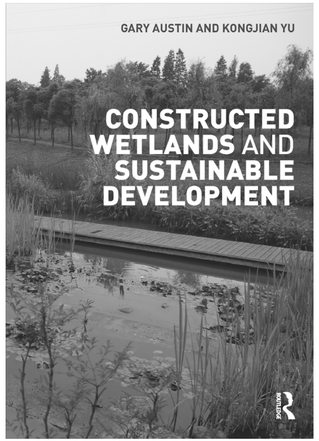
KEY TAKEAWAYS:

Park needs of South LA

Demographic break downs

Economic conditions of South LA

Life expectancies in park poor areas



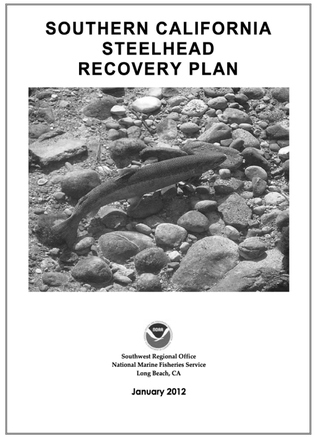
KEY TAKEAWAYS

Wetland design strategies within urban areas

Classifications of storm water run off

Technical terms relating to wetland anatomy

Methods of storm water treatment



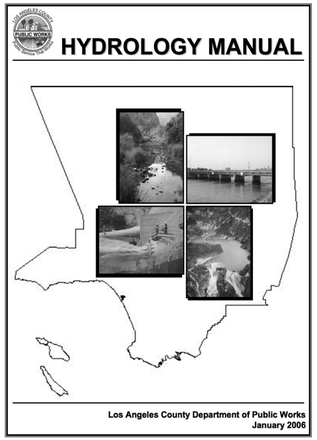
KEY TAKEAWAYS

Identifies critical habitat areas

Species history / genetic structure

Habitat characteristics preferred by Steelhead

Watershed recovery strategies



KEY TAKEAWAYS

Geology / Soil types of South LA

Flood protection diagrams

Catch basin flow calculations

Hydraulic design guidelines







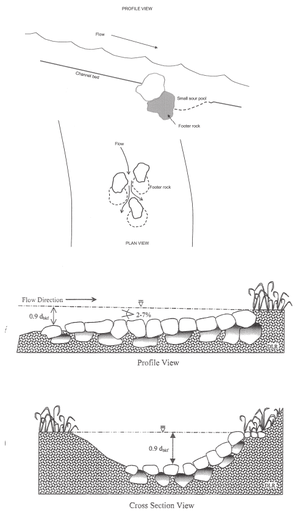
Deforest - Dominguez Gap Wetlands
Long Beach, CA
LA County Public Works

This project transformed a historic spreading ground basin into a 39- acre dynamic wetland along the lower LA River. Originally the basin was designed to replenish groundwater during storms. This site treats river water and urban run off through a series of pools, storing as much water as possible before being discharged back into the river. This park provides over 2 miles of recreated wetland and habitat. This restoration is the largest habitat restoration project to date on the LA River. Additional programming includes equestrian trails, hiking and biking trails, environmental learning.

Key Takeaway

This restoration takes the concept of LA River floodplain revitalization to heart. While nestled into a highly developed mixed use neighborhood - it has become a stronghold for sensitive wildlife populations. I like the idea of daylighting existing storm drain culverts on my site to provide year round habitat to local / migrating wildlife. It has a highly naturalistic curvilinear form that runs parallel to the river channel softening the concrete's presence. I also like the idea of the wetland offering outdoor learning classrooms for students.





Mission Creek
Santa Barbara, California
Questa

The Mission Creek Watershed has headwaters in the Los Padres National Forest. The creek extends nearly 7.5 miles from the mountains and moves through Santa Barbara to the ocean. Flooding in 1995, 1998, and 2005 led to the Lower Mission Creek Flood Control Project resulting in the widening of the creek channel to increase the flood flow capacity and mitigate flooding. Widening the channel was also used to enhance aquatic habitat and fish passage conditions. These resting pools provide steelhead rest during floodwater surges, protecting them from velocity barriers that would otherwise prevent them from surviving creek navigation.

Key Takeaway

Researching the Mission Creek Watershed shows that their can be design interventions that enhance and protect both human and non-human beings. The channel widening also works within the current confines of the channelized river showing us that we can restore migratory passage and ecological functions without much intervention. Beyond the in-channel restoration the design also maximizes the area and creates a new relationship between the river and the community.







Tippet Rise
Fishtail, Montana
Alban Bassuet

Set on a working ranch, Tippet Rise hosts classical chamber music and recitals and exhibits large-scale outdoor sculptures featuring the art work from the likes of Ensemble Studio, Alex Calder, Patrick Dougherty, Ai Weiwei and many others. The journey to each sculpture on this 12,500 acre site is solely your own. Pieces are placed thoughtfully and sparsely on the landscape to allow for intimate contemplation with the works, with oneself and with the rolling soft hills north of Yellowstone National Park.

Key Takeaway

Designed for those with an adventurous spirit - the idea of having interpretive, one of a kind visitor experiences is really important to my park design. The journey to access each sculpture is a memory in and of itself. Works are site specific and react to the natural conditions of the region. It is a living, breathing, working entity that evolves and features new work which helps incite lifelong patrons. The idea of sculpture being so interpretive, and that the park is as much about your own experience as it is about the works themselves are big takeaways for me.







Sagehen Creek Field Station
Truckee, CA
UC Berkeley

This remote field station located within the Sagehen Experimental Forest is a central hub of a network of regional research areas referred to as the Central Sierra Field Research Stations. The station is stream side and features a large outdoor class area, a dry lab, underwater stream observation for students and researchers and offers residencies for artists and scientific researchers. Programing is dedicated to outdoor science education and creative practice. Sagehen offers courses in river restoration, regional ecology and conservation.

Key Takeaway

The idea of a site that is dedicated to outdoor learning for students isn't new. But in areas where parks are lacking in biodiversity and opportunities to connect to wildlife, the exposure to this kind of programming is of great benefit. The idea of an immersive underwater observation area for kids to study life within the wetland is a very fun way to engage with on site ecology. To set up a working curriculum with surrounding schools is a great way to connect to the local community and create lasting partnerships to help ensure the site is managed and cared for long term.





This project challenges the barriers created by the abandoned Compton Golf Course and the reach of the LA River that runs along its banks. The site offers an opportunity to transform two halves into an interconnected natural refuge for human and nonhuman beings.

The Compton Floodplain Park will restore the natural floodplain and update the adjacent river channel to increase biodiversity and decrease existing barriers to Steelhead migration. Turning this parcel into a park will reduce park inequity in Compton and support the community's connection to its historical processes. This refuge will offer a place of rest for the community of Compton and the migratory Steelhead trout.

GOAL 1



Reduce park inequity barriers in Compton by offering a public green space that connects the LA River to the abandoned golf course supporting the communities' rest and connection to the natural processes of place.

Objective 1 - Connect the river and the floodplain park via the LA River Trail

Objective 2 - Enhance awareness within the community to inspire stewardship through sculpture

GOAL 2



Weaken barriers to Steelhead migration by creating a restored floodplain park and transforming the river channel to enhance biodiversity.

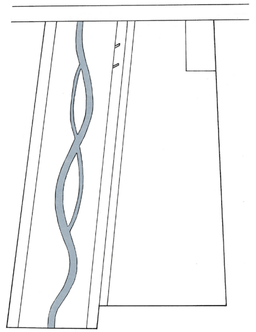
Objective 1 - Update channelized river to support steelhead migration and increase wildlife habitat

Objective 2 - Restore Native floodplain habitat

BARRIERS



Barrier - River storm surge velocity prevents Steelhead migration



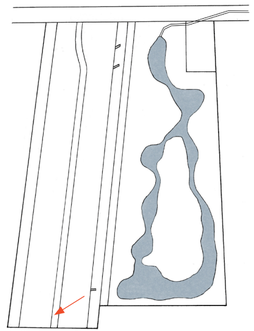
Defiance - Redesign existing low flow river channel to support Steelhead migration



Process drawing of naturalized low flow channel



Barrier - Existing storm drain prevents floodplain process



Defiance - Daylight storm drain to create floodplain on site

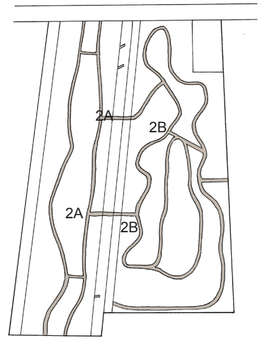


Process drawing of daylight storm drain inflow

BARRIERS



Barrier - Walls and fences prevent river and park access



Defiance - Provide access points and trail systems that loop through park and river



Process drawing of entrance area to park

EXISTING SITE



Existing fence, with locked entry points



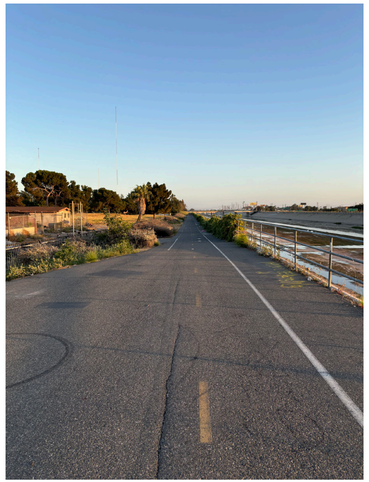
Existing pedestrian circulation



LA River Trail (LART) with no rest areas or shade, very hot



Inspired by the plight of the Steelhead's journey within the concrete river, and the community of Compton 's lack of access to natural green space - the subsequent pages identify on site barriers and explores defiant design solutions.

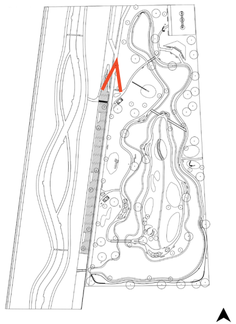


Existing Divide Between Parcels

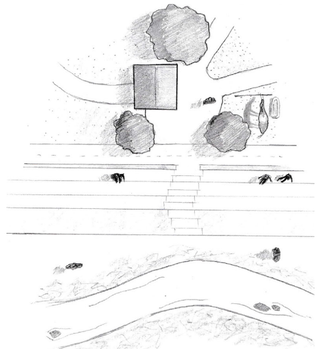
- Barrier to shade
- Barrier to passive recreation
- Barrier to group gathering
- Barrier to river access
- Barrier to public park access
- Barrier to equestrian water access
- Barrier to safe night navigation

Solutions:

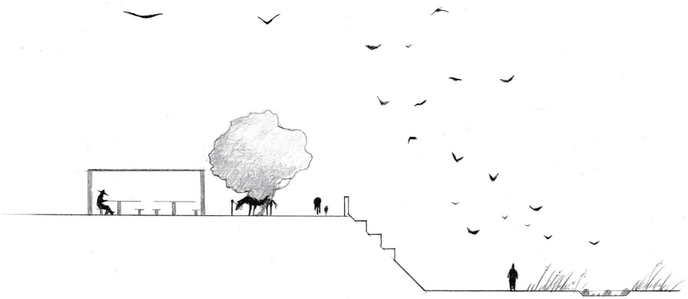
- Trees planted along LART reducing heat
- Tiered sidewall seating in river channel
- Shaded pergola with picnic tables
- Staircase to river access
- Hitching post, watering trough area
- Soft up lighting
- Designated LART crossing signage



Key map

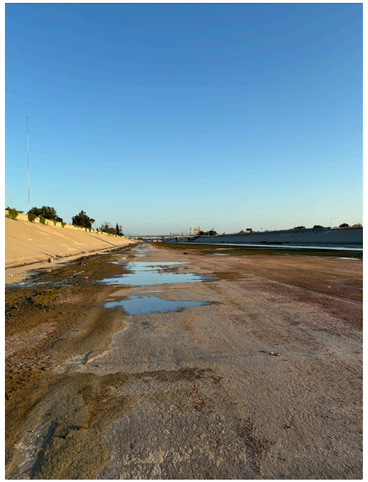


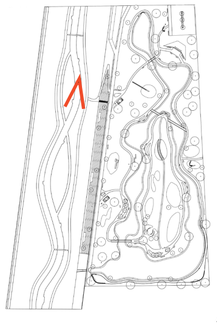
Aerial view of tiered sidewall river seating, LART, shaded rest area, equestrian watering hole



Section of shaded park pergola rest area, LART, tiered seating into river channel, migratory waterfowl (NTS)

BARRIER ANALYSIS - IN CHANNEL DESIGN





Key map



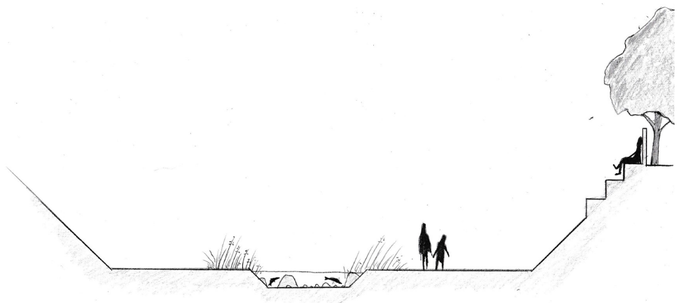
Aerial of meandering low flow channel with vegetation, boulders

Existing River (Concrete Flood Channel)

- Barrier to fish passage
- Barrier to species revitalization
- Barrier to river recreation
- Barrier to natural ecological functions
- Barrier to wildlife habitat
- Barrier to clean, cold water
- Barrier to groundwater recharge
- Barrier to beauty

Solutions:

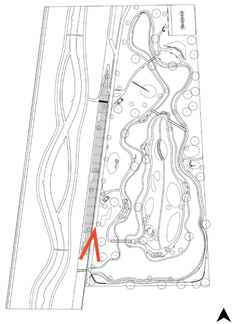
- Fish resting pockets
- Widened low flow channel
- Meandering low flow channel
- Anchor boulders, cobble to low flow channel bottom
- Create sidewall seating / observation areas
- Provide multi use river trail
- Plant herbaceous vegetation
- Connect day lit stream to river at south end of site to ad colder, cleaner water



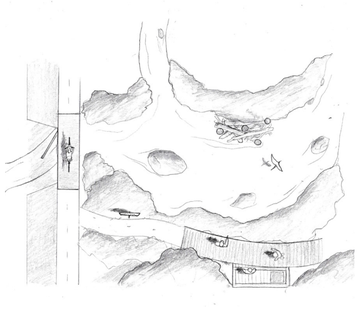
Section of flood channel, low flow channel with naturalized enhancements, sidewall seating (NTS)

BARRIER ANALYSIS - STORM WATER WETLAND





Key map



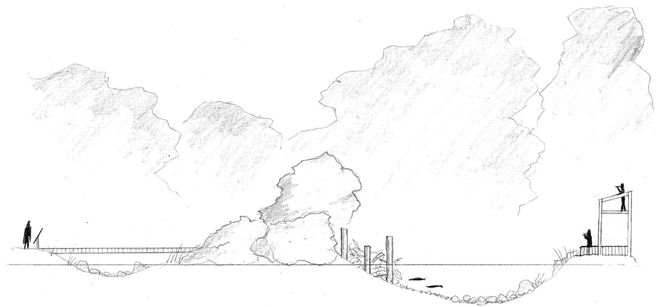
Aerial of interior ephemeral wetland, logjam, boardwalk, LART

Existing Underground Storm drain BI-6101

- Barrier to cleaner water
- Barrier to natural floodplain
- Barrier to natural streams
- Barrier to wildlife habitat
- Barrier to groundwater recharge
- Barrier to community observing riparian processes
- Barrier to (natural) tributary connection to river

Solutions:

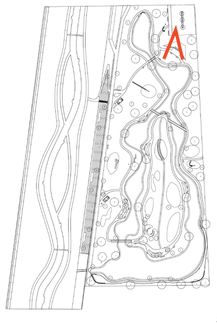
- Day-lit storm drain preventing run off from entering river
- Stream simulation with ephemeral pools for water retention
- Native riparian / wetland vegetation to clean water and support wildlife habitat
- Seasonal storm water pooling areas will draw in insects, birds and other wildlife to rehabilitate biodiversity
- Signage, overlooks, trail system to provide access and education to natural riparian processes
- Flap gate at south end of site allowing cleaned, cooled storm water back into river channel



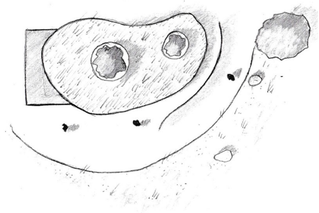
Section of ephemeral wetland, signage, footbridge, logjam, boardwalk (NTS)

BARRIER ANALYSIS - PARK ACCESS POINTS





Key map



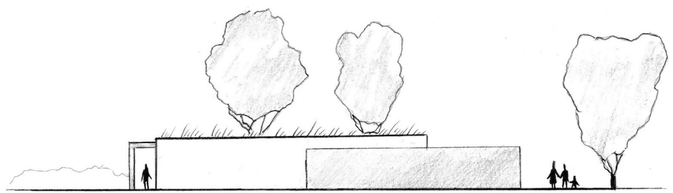
Aerial of cultural center with living roof, tree wells, steel river wall

Existing Exclusion

- Barrier to immersive nature
- Barrier to community gathering
- Barrier to mental health relief
- Barrier to a place of rest
- Barrier to recreational space
- Barrier to natural learning
- Barrier to park access
- Barrier to natural history

Solutions:

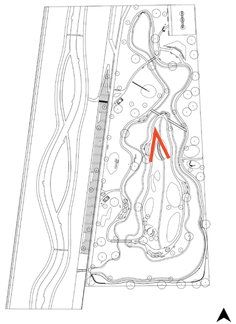
- Open park to public
- Diverse Native plant community installation
- Private entrances connected to school playgrounds
- Community center on site
- Offered workshops and community programming
- Solitude seating areas
- Multi use shade structures for group use
- Engage local schools for field trips, outdoor classrooms
- Informative signage



Section of river wall, rammed earth entrance, glass front (NTS)

BARRIER ANALYSIS - AWARENESS / STEWARDSHIP





Key map



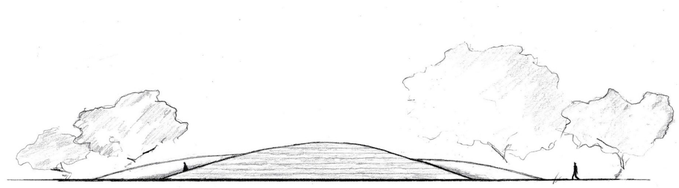
Aerial of swimming rammed earth entry walls

Existing Community Relationship with Place

- Barriers to perspectives of wildlife
- Barriers to identifying local Native plants
- Barrier to an awareness of local natural systems
- Barrier to awareness of floodplain processes
- Barrier to awareness of healthy river characteristics
- Barrier to art accessibility
- Barrier to classroom curriculum

Solutions:

- Immersive sculpture
- Cultural center workshops
- Field trip programming with local schools
- Educational nature signage
- Observation areas
- Native habitat planting wildlife
- Rest areas that encourage contemplation
- Natural materials
- Interactive stream area



Section of swimming rammed earth walls (NTS)

CONSTRAINTS



1 Concrete flood control channel to remain

2 Maintain flood surface water profile

3 Flood control parapet wall to remain

4 Seasonal storm surge flow velocity prevents Steelhead passage

5 Significant 50% grade change from LA River Trail to concrete channel bottom

OPPORTUNITIES



1 Transform low flow channel to mimic natural river

2 Create deeper channels to mitigate impact on surface water profile

3 Create movable access gates to allow access to river

4 Provide fish resting pockets, boulders, vegetation to provide velocity refuge during storms

5 Daylight existing sub grade storm drain to create a floodplain

6 Create sidewall seating for enhanced river access

7 Use existing trees for basis of riparian woodland to sequester carbon

8 Use existing gates to provide connection

9 Create immersive sculpture that enhances awareness to the Steelhead


Multi modal considerations for trails

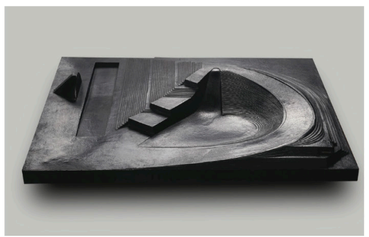

Sycamore trees and the dappled light that makes clearings desirable


Minimalist clean lines that balance with the natural landscape


Southern willow scrub wetlands vegetation


Earth mounds and how we interact with them


Species specific educational signage


Deconstructing earthen forms into geometric shapes


Examples of vegetation, boulder refugia in urban river context

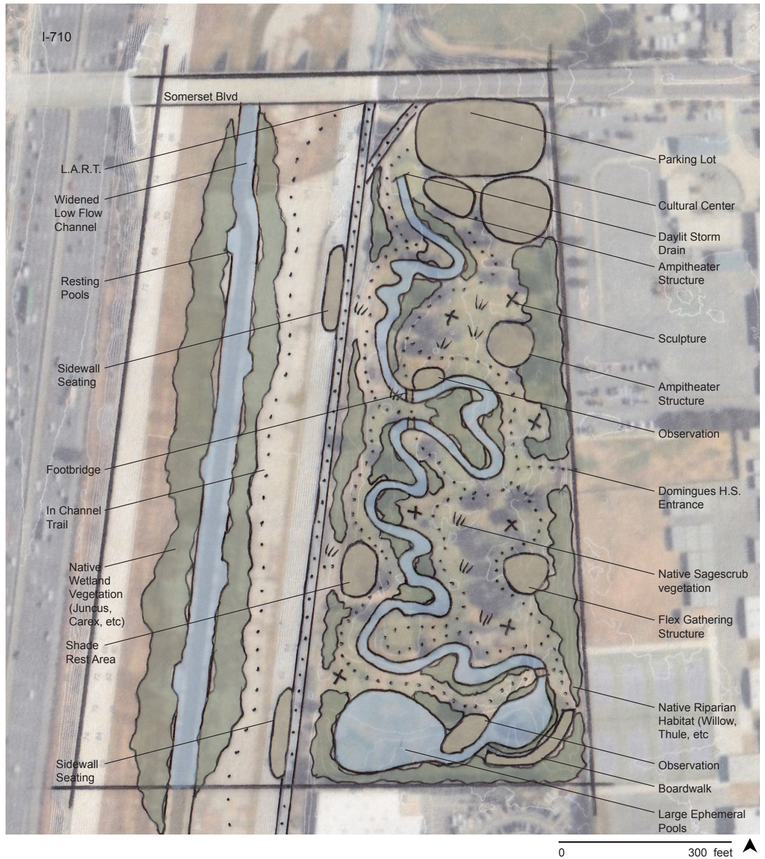

Sub grade sculptural experiences to simulate channelized river travel



'Braid Fragment' explores the radical concept of running the low flow channel of the LA River through the site to engage in actual floodplain restoration. The new watershed would feature habitat islands of dense Native vegetation (Willow, Thule, Cottonwoods, etc) offering visitors a chance to see a wild, natural flowing river up close, helping bridge the gap between accessible dynamic natural areas and the densely developed urban landscape of Compton.

In this proposal the flood channel would remain as is, helping mitigate flood risk. New opportunities would emerge for recreation within the channel during the low flow season. Re-routing the low flow channel would ensure water is always present on site and provide incredible habitat and resting areas for the migrating Steelhead and countless other wildlife species. Footbridges and boardwalks engage visitors and invite them into this one of a kind connection the a river restored offering rest and a new level of connection to their community. Additional shaded resting areas will be provided connecting users of the LART to the park. Users of the LA River Trail (LART) will also receive an enhanced navigation experience as they move along the trail, 2 bridges will cross over the new low flow channel providing an even more exciting experience. Site specific sculpture will be another element connecting users to the conditions that migrating steelhead encounter within the Los Angeles River Watershed, featuring interactive works that engage users of all ages. A special feature of this site will be an elevated wooden overlook that provides viewers with dynamic views of the park.

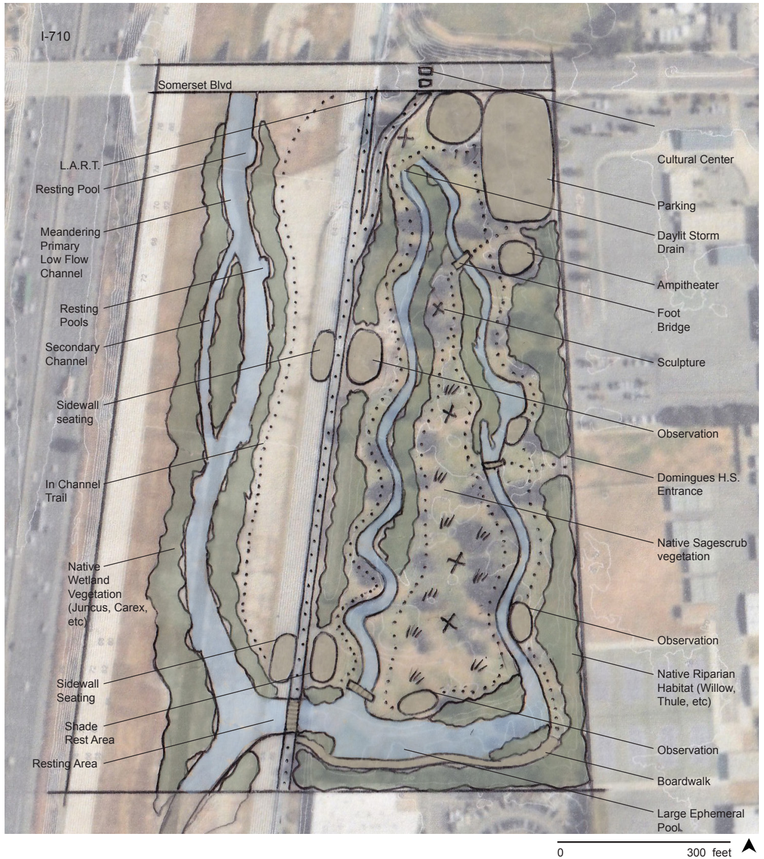
CONCEPT 2 - STREAM SIMULATOR



'Stream Simulator' explores a more minimal approach to the day lit storm drain on land and the designated low flow channel within the river. Within the park, the day lit storm drain will transform into a meandering natural stream with large pooling areas at the south end of the site to help support floodplain habitat. Providing areas for communal gathering is central to this design. A cultural center, an amphitheater, several shaded structures throughout the park can support outdoor class field trips, birthdays and get-togethers. Another element bringing people's awareness to the non human beings of the watershed are the sculptures on site, representative of the barriers that migrating steelhead must overcome within the 51 miles of the river are scattered throughout the park. These sculptural elements draw users in and encourage interaction. Other connective design elements include, a private entrance for the local high school, footbridges crossing the stream, observation areas adjacent to the stream, and a wooden boardwalk that takes users into the thickest natural area of the ephemeral pools on the south end of the site. Native Sage scrub habitat will be planted in the higher elevation areas above the stream providing a dynamic range of plant types.

Within the river itself, this design iteration works within the confines of the existing low flow channel, adding cut out areas for fish to rest during storms on their migration up river and proposes vegetation along the immediate areas paralleling the low flow channel. A multi use trail gently rolls along this habitat corridor, with elevated cut out seating areas within the sidewall of the river channel.

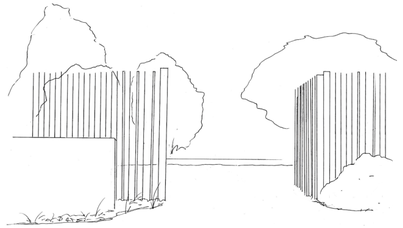
CONCEPT 3 - NON STRANDING



'Non Stranding' is inspired by the idea of providing a way out for all living beings during the highs and lows of storm water surge. A concept that at present is not possible within the confines of the concrete channel and an inaccessible green space. In this concept the daylit storm water features two channels within the park that eventually link up at the south end to create large, deep ephemeral pools, supported by a ribbon of riparian habitat corridors throughout the park. This will provide a dynamic and healthy park for the community to enjoy.

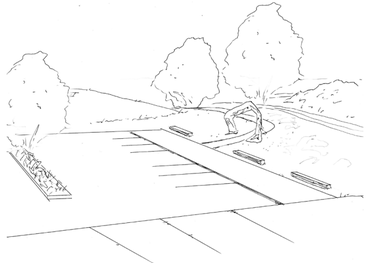
The primary elements within the park will feature observation areas along the stream connecting users to the natural processes of the watershed, shaded resting areas connecting users of the park and the LA River Trail (LART), a cultural center, an amphitheater, boardwalks, footbridges, signage and sculpture. All meant to bridge the divide between natural systems and the community of Compton. A private entrance also connects the local highschool to the site.

The in-channel interventions focus on a meandering, widened low flow channel with a secondary channel to help mitigate fish stranding and algae growth during low flows. Herbaceous vegetation within the channel will clean water, provide cover and food for wildlife and also add aesthetic value to the channel. By adding cobble to the substrate, and anchoring small boulders in place - we can add complexity to the hydrology of the river making it a more viable habitat for migrating Steelhead. Fish resting pools are also featured within the new meandering low flow channel, and a multi use trail winds along the river. There are also two large tiered, shaded seating areas along the western sidewall of the channel.



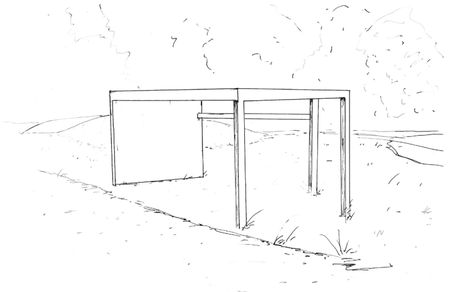
ENTRANCE GATES

A series of steel slatted gates on the north, west, east sides of the park provide easy access to the site, that also close at dusk.



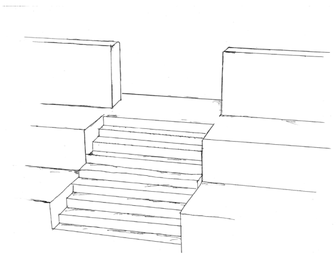
PARKING LOT ENTRANCE

Parking lot entrance from Compton Blvd provides a direct vehicular access and a welcoming entrance to the park.



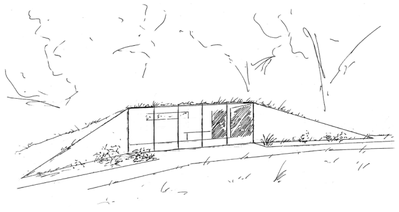
LA RIVER TRAIL SHADED REST AREA

LA River Trail shaded resting areas offers shade and comfort to users of the river trail. This area also connects visitors to the interior of the floodplain park.



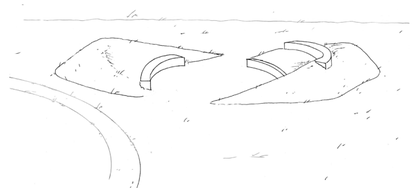
RIVER STEPS + SIDEWALL SEATING

River steps + sidewall seating allows river access to the community, and invites users to enjoy river front access, seldom seen along the LA River.



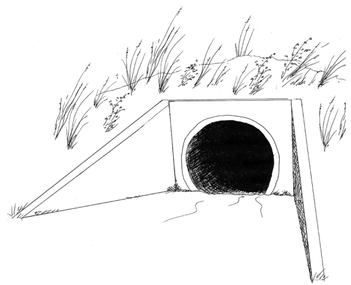
CULTURE CENTER

What at first appears a soft rolling hill viewed from the parking lot, transforms along the trail into a self sustaining culture center that offers workshops, natural history classes and community gathering.



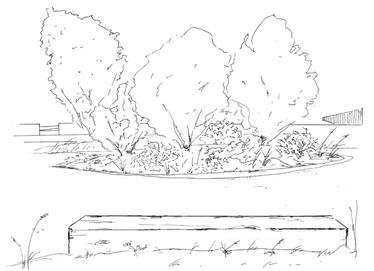
MOUNDED EARTH AMPHITHEATER

A rolling intersection of hills are transformed into a community gathering area on the south end of the park to share stories, meet new people and reconnect to the natural powers of the park.



CONCRETE WINGWALL CULVERT

This concrete culvert will allow captured storm water runoff to enter the Floodplain Park on the north end of the site.



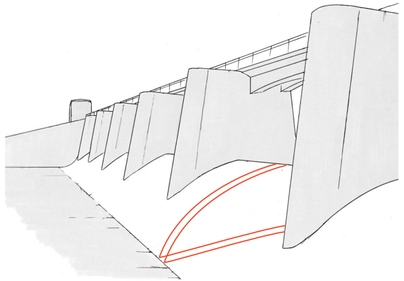
MOUNDED RESTING POCKET

Along the primary trail loop, resting pockets for human visitors are offered. Screened by shrubs, these pockets offer benches, perfect for visitors in search of a quiet place.



PHASE 1:

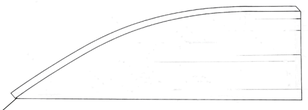
Sepulveda Dam currently prevents Steelhead passage.



PHASE 2:

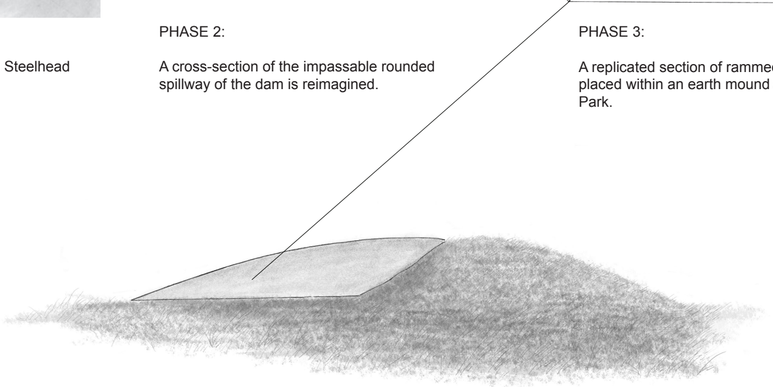
A cross-section of the impassable rounded spillway of the dam is reimagined.

Section



PHASE 3:

A replicated section of rammed earth is placed within an earth mound at Floodplain Park.



INSPIRATION

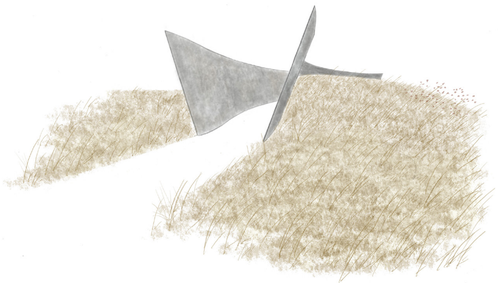
Using sculpture in the Compton Floodplain Park to highlight the Steelhead's journey we will build an essential connection between site and stewardship to help conserve our natural world.



'ENGINEERED LOG JAM'

2024. Reclaimed timbers on site

Imitates log jams installed into rivers used to help improve salmonid habitat during restorations.



'CHANNEL WALL'

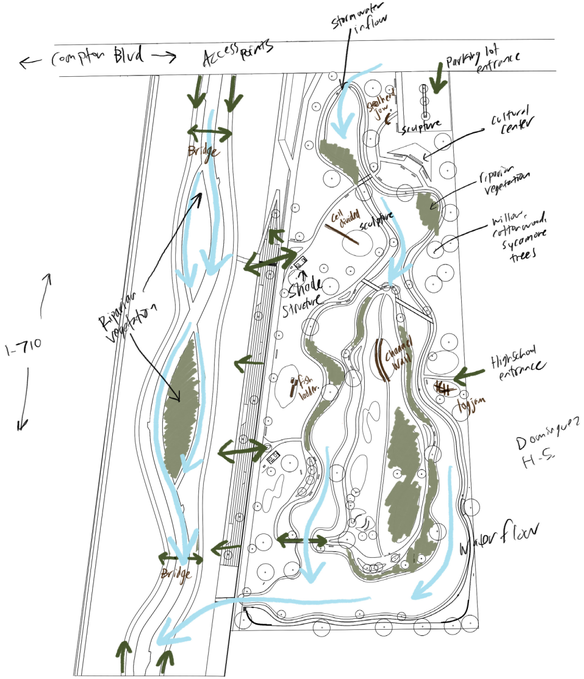
2024. Rolled steel, mounded earth

Reflects the divided genetic populations of Steelhead trout above and below the dams within the Los Angeles River Watershed.



















'Resting Pockets' is inspired by the idea of providing a way out for all living beings during the highs and lows of storm water surges. In this concept, the daylit storm water features two channels within the park that eventually link up at the south end to create large, deep ephemeral pools, supported by a ribbon of riparian habitat corridors through the park. This will provide a dynamic and healthy park for the community to enjoy. All meant to bridge the divide between natural systems and the community of Compton.

Park Interior

1	Parking lot
2	Cultural center
3	Primary trail loop
4	Sculpture
5	Access ramp
6	LART shade structures
7	Access steps
8	Sidewall seating
9	River trail loop
10	Primary low flow channel
11	Secondary low flow channel
12	Seasonal low flow footbridges
13	Primary fish resting pockets
14	Secondary trail
15	Amphitheater
16	Earth mound field
17	Boardwalk



WELCOME TO THE COMPTON FLOODPLAIN PARK

PERSPECTIVE - PARK ENTRANCE



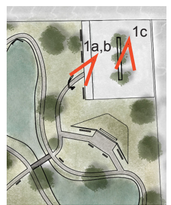
1a Park entrance facing west



1b Permeable parking lot



1c Stormwater inflow pool



ENLARGEMENT - PARK ENTRANCE

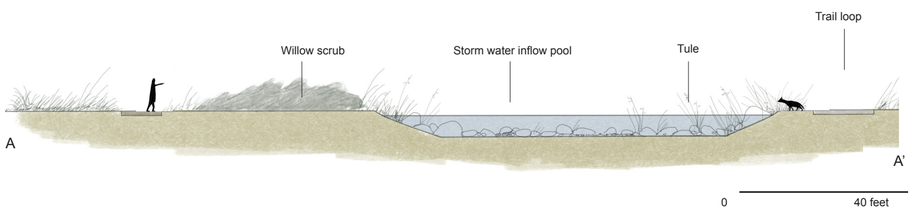


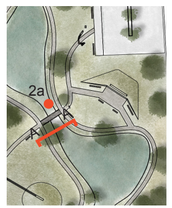
2a

0 30 feet

LEGEND

1 Parking lot
2 Timber benches
3 Sculpture
4 Culture center
5 Footbridge
6 Trail loop
7 Storm water inflow

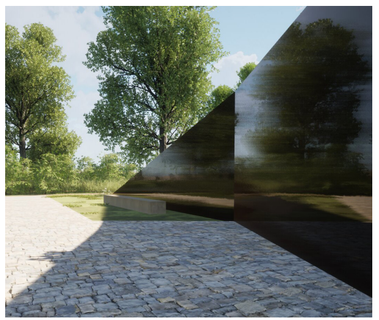




PROGRAMMING - CULTURAL CENTER



3a Cultural center



3b Glass facade



3c Earthen roof edge

RIVER PLANTING PALETTE



'Cottonwood'
Populus fremontii



'Sandbar Willow'
Salix exigua



'Black Elderberry'
Sambuca nigra



'Western Sycamore'
Platanus racemosa



'CA Wild Rose'
Rosa californica



'Mule Fat'
Baccharis salicifolia



'Tule'
S. californica



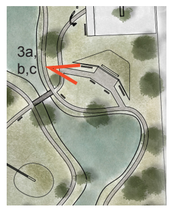
'Deer Grass'
Muhlenbergia rigens



'Mugwort'
Artemesia douglasiana

Native riparian vegetation







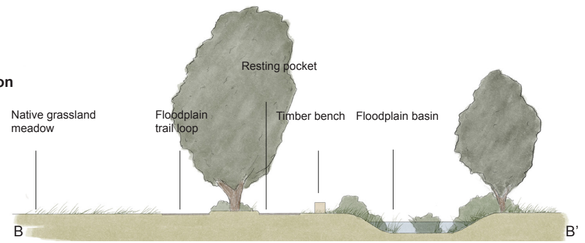
LEGEND

1 Floodplain basin
2 Riparian vegetation
3 Resting pocket
4 Timber benches
5 Secondary trail loop
6 Primary trail loop

4a Human resting pocket

0 30 feet

Section



0 10 feet





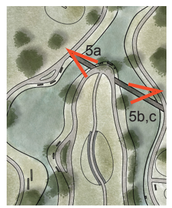
5a Long view of floodplain from island footbridge



5b Reclaimed timber footbridge



5c Floodplain at capacity





6a Profile view



6b Terminus of sculpture

‘Cell Divided’

2024. Rammed earth, mounded earth

Reflects the divided genetic populations of Steelhead trout above and below the dams within the Los Angeles River Watershed





7a Southern entrance



7b Perspective view

‘Channel Wall’

2024. Rolled steel, mounded earth

Imitating the flood control channel walls of the LA River, this immersive work is designed to simulate channelized river travel of the Steelhead.

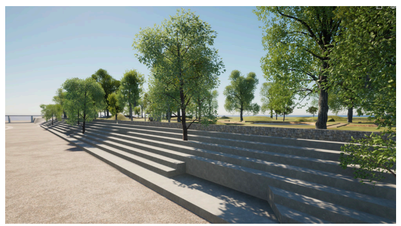




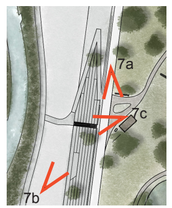
7a Shade along the LA River Trail



7b Parapet wall gate to river



7c Sidewall seating from river channel





8a LA River Trail shade structure



8b Reclaimed timber benches



8c Wooden horse hich post

Upland sage scrub



'Toyon'
Heteromeles arbutifolia



'Chapparal Mallow'
M. fasciculatus



'Quail Bush'
Atriplex lentiformis



'Coyote Brush'
Baccharis pilularis



'CA Sagebrush'
A californica



'CA Buckwheat'
E. fasciculatum



'Deer Grass'
Muhlenbergia rigens

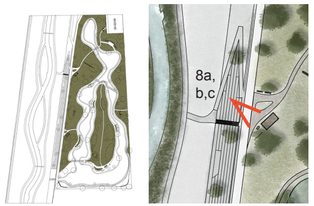


'Purple Needlegrass'
Stipa pulchra



'Alkalai sacaton'
Sporobulus airoides

Upland sage scrub





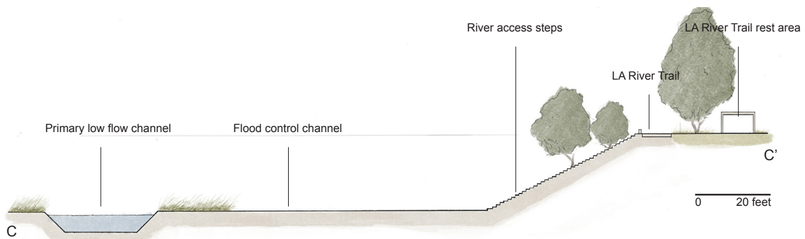
9A Park and river access

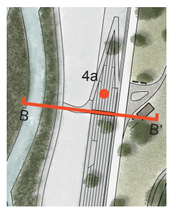
0 30 feet

LEGEND

1 LA River Trail
2 Shade structure
3 Park entrance
4 ADA river ramp
5 River steps
6 River trail loop
7 Existing concrete channel

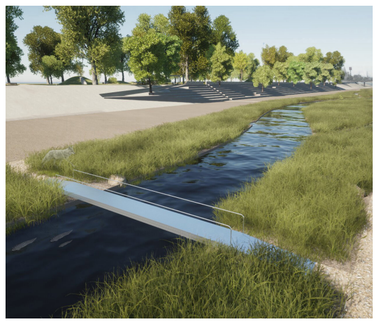
Section







11a Channel confluence



11b Seasonal alluminum footbridge



11c Primary channel

RIVER PLANTING PALETTE



'Mexican Rush'
Juncus mexicanus



'Pale Spikerush'
E. macrostachya



'Fringed Willow Herb'
E. ciliatum



'Tule'
S. californica



'Beardless Wild Rye'
E. tritichoides



'Mugwort'
Artemsia douglasiana



'Wrinkled Rush'
Juncus rugulosus

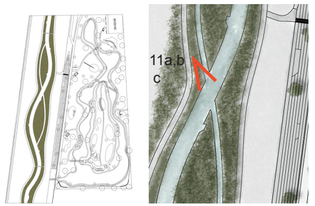


'Alkali Bulrush'
B. maritimus



'Broadleaf Cattail'
Typha latifolia

Native herbaceous riparian vegetation



ENLARGEMENT - RIVER CONFLUENCE

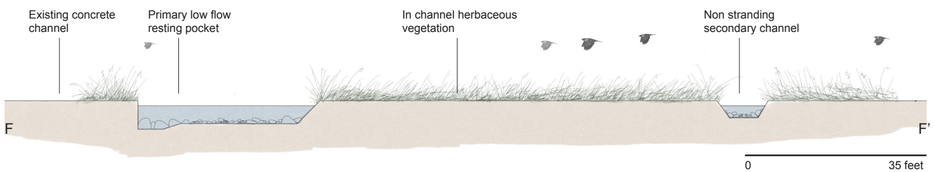


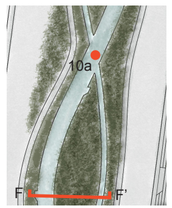
LEGEND

1 Western multi-modal trail
2 Eastern multi-modal trail
3 Primay resting pocket
4 Grouted boulders
5 Primary low flow channel
6 Riparian vegetation
7 Secondary low flow channel
8 Existing flood control channel

10a Primary, secondary low flow channels

0 30 feet

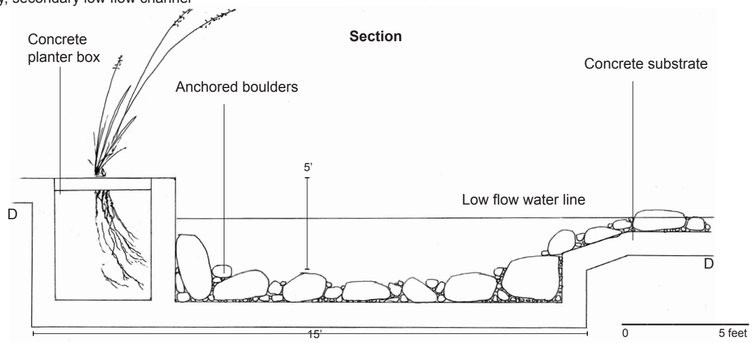




PERSPECTIVE - MEANDERING RIVER

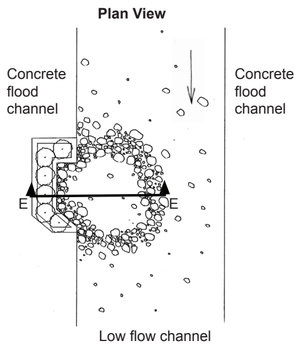


Primary, secondary low flow channel



Fish pocket

Cut-out concrete resting pools with grouted boulders and cobble located at 200' intervals along the channel. In addition to the cut-outs that provide velocity relief during fish passage, grassy vegetation, and boulders provide cover, shade and attract aquatic food sources for fish.

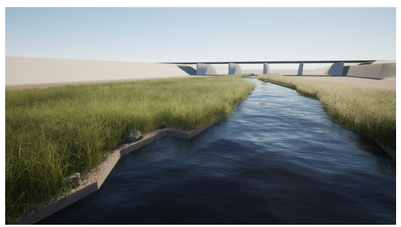




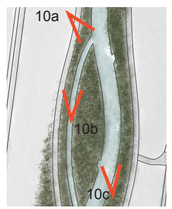
10a Full length of the braided channel



10b Grouted boulders, cobble on channel surface



10c Steelhead Resting pocket



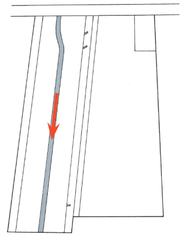


IN THE END

11.8 acres of floodplain habitat restored

10.2 acres of viable habitat for Southern Steelhead

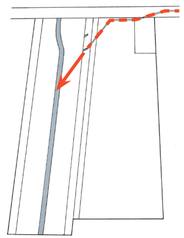
22 acres of greenspace for Compton



Barrier - River storm surge velocity prevents Steelhead migration



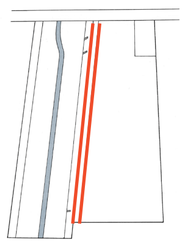
Defied - Redesigned river supports Steelhead migration



Barrier - Existing stormdrain prevents floodplain process



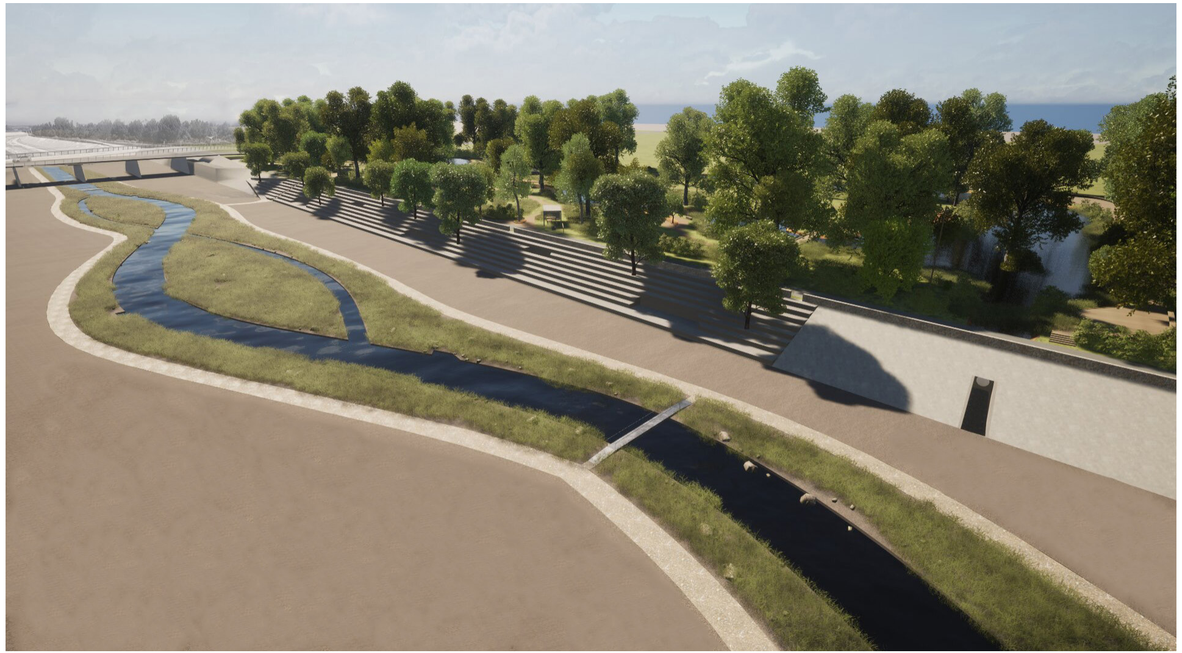
Defied - Daylit stormdrain created floodplain onsite



Barrier - Walls and fences prevent river, park access



Defied - Provided access points connecting park to river





“ALL FLOURISHING IS MUTUAL” - Robin Wall Kimmerer

In Loving Memory of:

Patricia Steiger
May 26, 1929 - April 10, 2024

Ray Steiger Sr.
December 30, 1932 - June 27, 2024

A special thank you:

Misti Huskey

Ray Steiger + Wendy Steiger

Isaac Brown

Russell Marlow

Ed Wallace

Carol Bornstein

Tom Rau

David Squires

Adriana Garcia

Nathan Nunéz

Meg Coffee

Steven Chavez

The entire Pandemic Pod 2024

Spiritual acknowledgment to:

Red Tailed Hawks

Southern Steelhead

Theodore Steiger

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