

SILVER LAKE RESERVOIR



ENVIRONMENTAL SITE ANALYSIS

LANDSCAPE DESIGN 4
WINTER 2020
INSTRUCTOR: MATTHEW SHIMER

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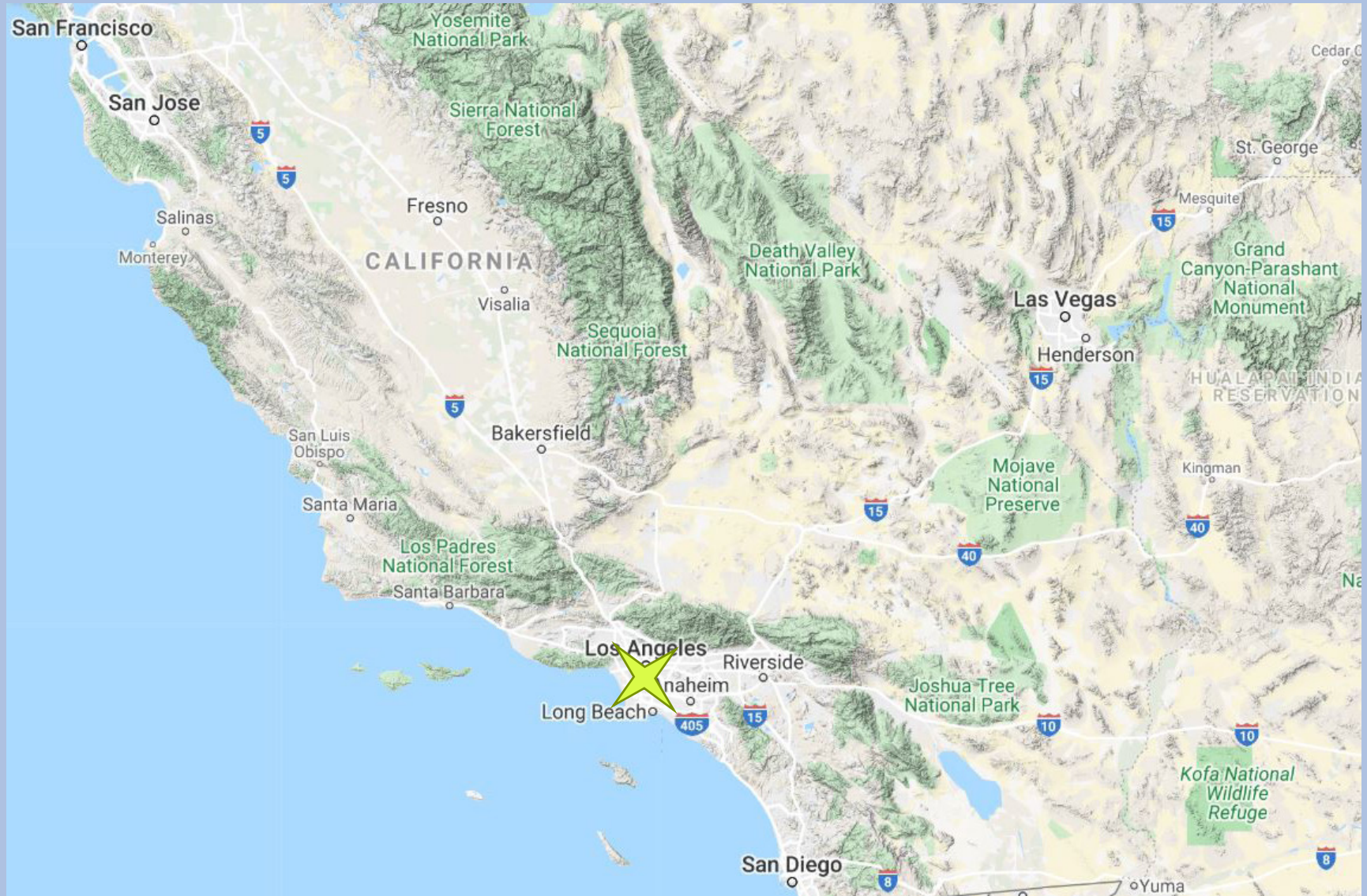
“

IT IS OURS TO **HAVE AND TO HOLD**
— FOR **WILDLIFE**, FOR **HEALTHY ENJOYMENT**,
AND MOST IMPORTANT, A **SUSTAINABLE WATER FUTURE**.
IT IS AN **OPPORTUNITY** AND A **CHALLENGE** THAT **MAY**
NOT BE REPEATED IN OUR LIFETIMES TO MAKE THIS
A **WORLD-CLASS ASSET** THE CITY NEEDS AND DESERVES.

BY CRAIG COLLINS, SLF BOARD MEMBER

”

REGIONAL CONTEXT



> UNITED STATES.

> SOUTHERN CALIFORNIA.

LOS ANGELES.

SILVER LAKE.

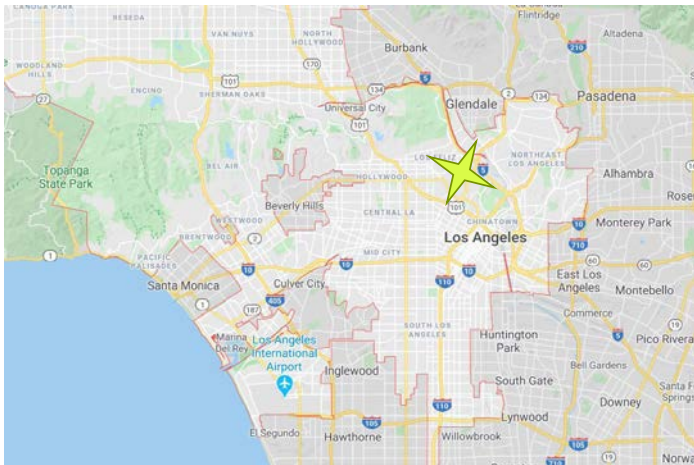
SOCAL & THE SOUTH COAST

Southern California comprises of the southernmost counties of California, characterized by heavily developed urban environments, intermixed with open spaces that have a varied collection of geologic, topographic, and natural ecosystem landscapes. This diversity outnumbers other major regions in the state and even in the county. The South Coast (16+ million people) is the most heavily urbanized region in the state and is where Los Angeles county can



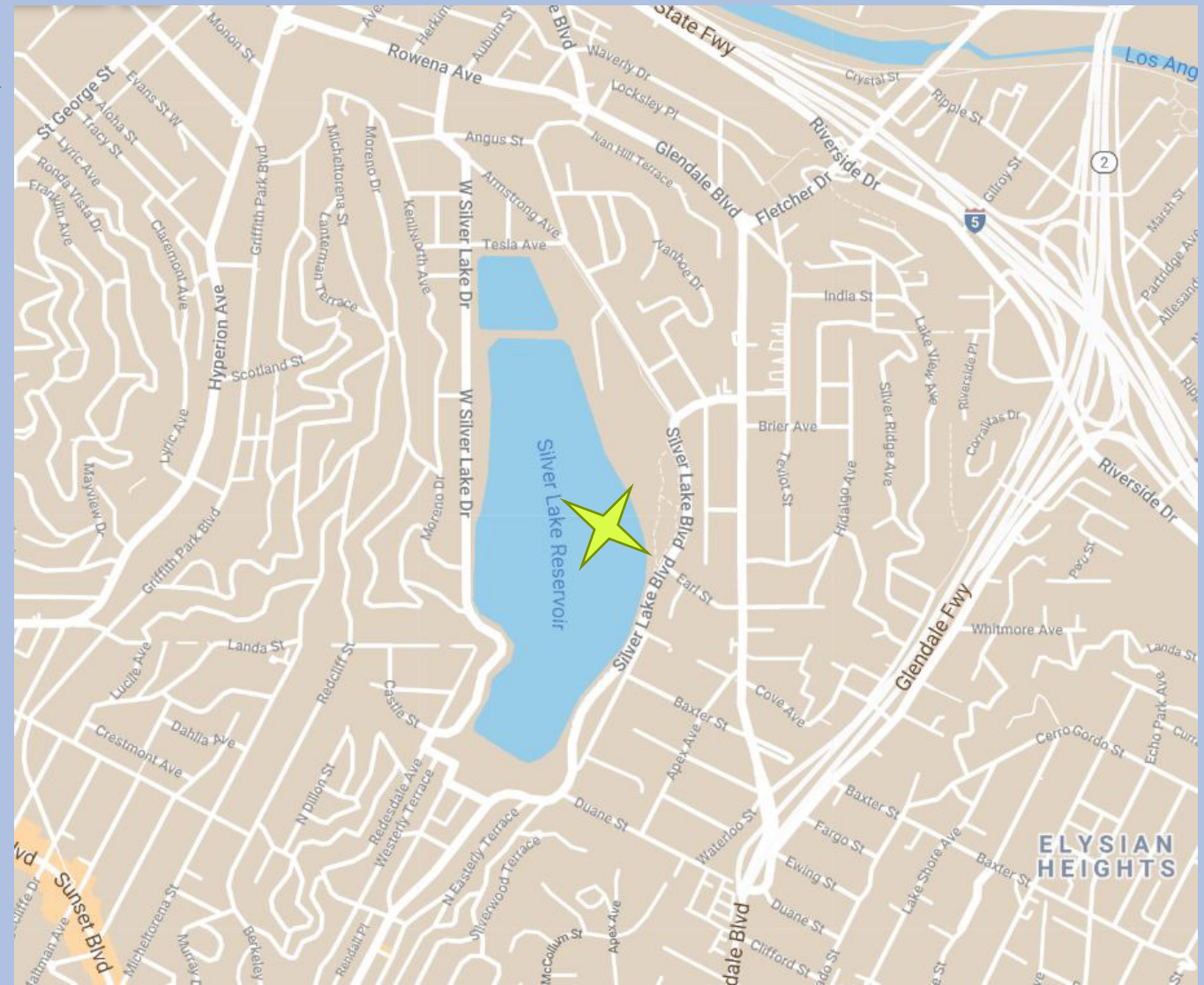
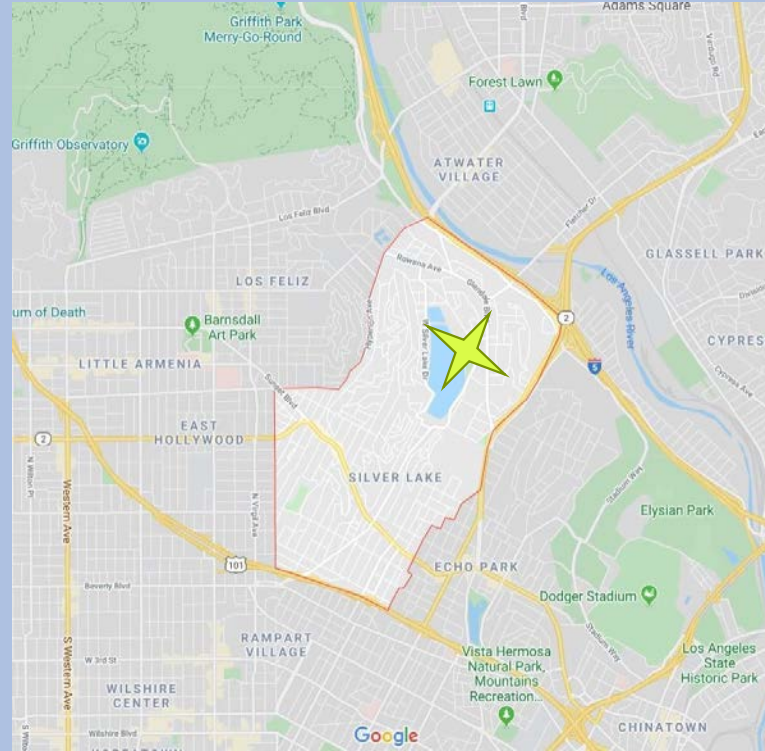
be found. The region consists of sprawling suburban development interspersed with dense urban city centers, most notably Los Angeles (3.8+ million people). The most prominent regional feature is the sprawling coastal metropolis along a coastal plain, interspersed with low-lying hills and a few inland valleys. The climate is recognizably Mediterranean, with hot and dry summers, followed by cool and wet winters. Rain is low to moderate and often infrequent, with freezing temperatures being even rarer.

LOCAL CONTEXT



SILVER LAKE, LOS ANGELES

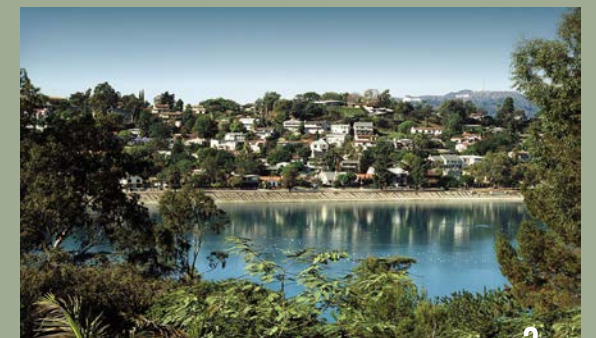
Los Angeles lies in a basin in Southern California, adjacent to the Pacific Ocean. It is the most populous city in the state. In the central region of the city is the 2.75 square mile neighborhood of Silver Lake.



UNITED STATES.
SOUTHERN CALIFORNIA.
> LOS ANGELES.
> SILVER LAKE.

THE NEIGHBORHOOD OF SILVER LAKE

Silver Lake is a residential and commercial neighborhood, distinguished by its parklands, hilly neighborhoods, and winding streets. Silver Lake's most noticeable feature is its expansive water reservoir. The prime real estate overlooking the reservoir is known as the Moreno Highlands and is home to celebrities, architectural treasures, and Spanish-style homes. On the south end of the neighborhood, there is Sunset Junction, the "downtown" section. Sociable and walkable, it provides residents with restaurants, shopping, and entertainment venues.



TIMELINE



EARLY 1800's

Before development the reservoir area was a natural marsh, fed by the Los Angeles River. The course of the Los Angeles River would experience dramatic shifts before it was artificially re-engineered.



1906: IVANHOE RESERVOIR BUILT

Built by community developer Hugo Reid, a Scottish-Mexican immigrant, the area he named 'Ivanhoe' was said to have reminded him of the verdant Scottish highlands. This smaller reservoir originally had a wooden cover on it to prevent evaporation, and was completed in 1906.



1907-1908: SILVER LAKE RESERVOIR BUILT

The Silver Lake Reservoir was built as a backup supply to the main Los Angeles water source, the Owens Valley aqueduct, if it should fail. The reservoir could supply its population with up to 3 weeks of water. It was engineered by William Mulholland using innovative construction techniques for the time; it was named after politician and Water Board commissioner Herman Silver, lending the surrounding neighborhood its namesake as well.

At left: a hand-colored lantern slide of the reservoir soon after initial completion



1911-1918: PLAN FOR PUBLIC SPACE

Shortly after construction of the reservoir, plans emerged to connect it to a great public parkway running from Wilshire Blvd., and develop the area around the reservoir into a public space. A grove of Eucalyptus trees were planted as part of this effort, some of which still exist today. Unfortunately Herman Silver passed away in 1913, and development of the park stopped in 1918 due to lack of funds.



1932: RESERVOIR EXPANSION

In the 1930's the reservoir was expanded and retrofitted; this is when the chain link fence was first installed around the perimeter, and barbed wire soon after to protect it. Also at this time Cypress trees were planted along the South Dam.



1950: RESERVOIR RE-SLOPED

The reservoir was drained, the sides re-sloped and then paved over to keep back vegetation.



**1988:
SLRC FORMED**

The nonprofit Silver Lake Reservoirs Conservancy was formed by Silver Lake community members in response to LADWP's proposal to build a large, industrial-style filtration plant where the current Meadow Park is.

**1989:
RESERVOIRS BECOME A
HISTORIC MONUMENT**

The city of Los Angeles proposed that all small reservoirs should be covered for water quality, which was heavily opposed by residents for aesthetic reasons. In 1989 Silver Lake and Ivanhoe Reservoirs were made a historic monument.



**1996:
PEDESTRIAN JOGGING PATH**
Following the tragic death of a pedestrian at the reservoir and the subsequent suicide of the driver, a designated 3.5 km jogging path was planned. Construction began in 1996 and took 16 years to complete.

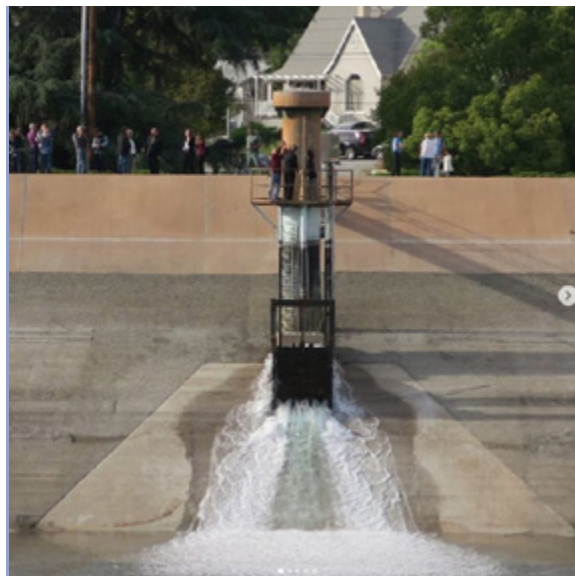


2000: MASTERPLAN
A waterplan to create an improved site was developed; it was created before the bodies of water were decommissioned.

2007: CONTAMINATION
In 2007 water from the reservoirs was found to contain toxic, cancer-causing bromate, a combination of naturally occurring bromides, chlorine and sunlight. Both reservoirs were drained; the Ivanhoe reservoir was filled with shade balls to prevent sunlight from interacting with water; silver lake reservoir was closed off from the water system and decommissioned.



2011: SILVER LAKE MEADOW
On a piece of land adjacent to the reservoir, previously filled-in due to stagnant water issues, a 1.2 hectare park is opened to the public. It was designed by Mia Lehrer & Associates.



2015: RESERVOIR DRAINED, AGAIN
By the 2010's both reservoirs were decommissioned, being unfit to supply water to the public, and were essentially man-made lakes. In 2015, the water was drained so a new pipeline for alternative water sources to the reservoirs could be installed. The new sources for water to keep the reservoirs full will be made up of mostly groundwater from surrounding areas. Water was turned back on in 2017.



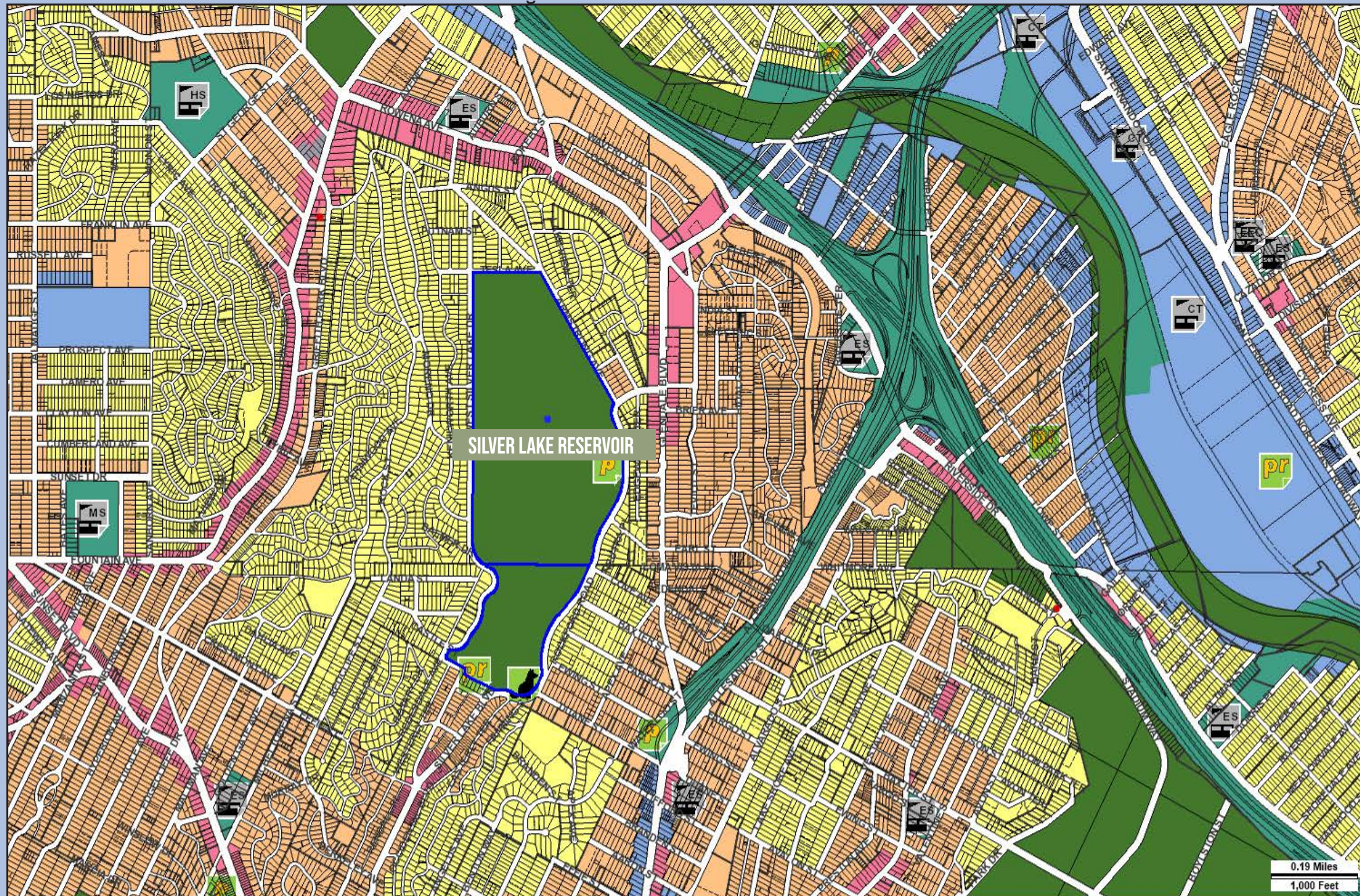
2018: SLCMP MASTERPLAN UPDATES
LADWP and BOE (Bureau of Engineering) sign off on updates to the original masterplan begun in the year 2000. In May of 2018, work on the Silver Lake Reservoir Complex Masterplan continues.

THE FUTURE....

To maintain a filled body of water, the plans in progress include construction of groundwater collection network of catch basins around the reservoir; to treat the water coming in, which will be less clean than the previous water source, DWP will install aeration and filtration systems. These projects are expected to complete by 2021.

Plans for public use at the complex are still in development, with design and engineering teams in place. Many community groups and outreach efforts exist to discuss different possibilities for the future of the site.

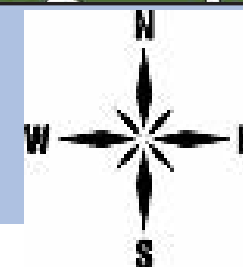
ZONING



Address: 2700 W TESLA AVE
APN: 5439032900
PIN #: 148-5A207 3

Tract: TR 903
Block: None
Lot: PT LT A
Arb: 1

Zoning: [Q]OS-1XL
General Plan: Open Space



LEGEND

LEGEND

GENERALIZED ZONING

- OS, GW
- A, RA
- RE, RS, R1, RU, RZ, RW1
- R2, RD, RMP, RW2, R3, RAS, R4, R5, PVSP
- CR, C1, C1.5, C2, C4, C5, CW, WC, ADP, LASED, CEC, USC, PPSP, MU, NMU
- CM, MR, CCS, UV, UI, UC, M1, M2, LAX, M3, SL, HJ, HR, NI
- P, PB
- PF

GENERAL PLAN LAND USE

LAND USE

RESIDENTIAL

- Minimum Residential
- Very Low / Very Low I Residential
- Very Low II Residential
- Low / Low I Residential
- Low II Residential
- Low Medium / Low Medium I Residential
- Low Medium II Residential
- Medium Residential
- High Medium Residential
- High Density Residential
- Very High Medium Residential

COMMERCIAL

- Limited Commercial
- Limited Commercial - Mixed Medium Residential
- Highway Oriented Commercial
- Highway Oriented and Limited Commercial
- Highway Oriented Commercial - Mixed Medium Residential
- Neighborhood Office Commercial
- Community Commercial
- Community Commercial - Mixed High Residential
- Regional Center Commercial

FRAMEWORK

COMMERCIAL

- Neighborhood Commercial
- General Commercial
- Community Commercial
- Regional Mixed Commercial

INDUSTRIAL

- Commercial Manufacturing
- Limited Manufacturing
- Light Manufacturing
- Heavy Manufacturing
- Hybrid Industrial

PARKING

- Parking Buffer

PORT OF LOS ANGELES

- General / Bulk Cargo - Non Hazardous (Industrial / Commercial)
- General / Bulk Cargo - Hazard
- Commercial Fishing
- Recreation and Commercial
- Intermodal Container Transfer Facility Site

LOS ANGELES INTERNATIONAL AIRPORT

- Airport Landside / Airport Landside Support
- Airport Airside
- LAX Airport Northside

OPEN SPACE / PUBLIC FACILITIES

- Open Space
- Public / Open Space
- Public / Quasi-Public Open Space
- Other Public Open Space
- Public Facilities

INDUSTRIAL

- Limited Industrial
- Light Industrial

CIRCULATION

STREET

- Arterial Mountain Road
- Collector Scenic Street
- Collector Street
- Collector Street (Hillside)
- Collector Street (Modified)
- Collector Street (Proposed)
- Country Road
- Divided Major Highway II
- Divided Secondary Scenic Highway
- Local Scenic Road
- Local Street
- Major Highway (Modified)
- Major Highway I
- Major Highway II
- Major Highway II (Modified)

FREEWAYS

- Freeway
- Interchange
- On-Ramp / Off-Ramp
- Railroad
- Scenic Freeway Highway

MISC. LINES

- Airport Boundary
- Bus Line
- Coastal Zone Boundary
- Coastline Boundary
- Collector Scenic Street (Proposed)
- Commercial Areas
- Commercial Center
- Community Redevelopment Project Area
- Country Road
- DWP Power Lines
- Desirable Open Space
- Detached Single Family House
- Endangered Ridgeline
- Equestrian and/or Hiking Trail
- Hiking Trail
- Historical Preservation
- Horsekeeping Area
- Local Street

- Major Scenic Highway
- Major Scenic Highway (Modified)
- Major Scenic Highway II
- Mountain Collector Street
- Park Road
- Parkway
- Principal Major Highway
- Private Street
- Scenic Divided Major Highway II
- Scenic Park
- Scenic Parkway
- Secondary Highway
- Secondary Highway (Modified)
- Secondary Scenic Highway
- Special Collector Street
- Super Major Highway

- MSA Desirable Open Space
- Major Scenic Controls
- Multi-Purpose Trail
- Natural Resource Reserve
- Park Road
- Park Road (Proposed)
- Quasi-Public
- Rapid Transit Line
- Residential Planned Development
- Scenic Highway (Obsolete)
- Secondary Scenic Controls
- Secondary Scenic Highway (Proposed)
- Site Boundary
- Southern California Edison Power
- Special Study Area
- Specific Plan Area
- Stagecoach Line
- Wildlife Corridor

DEMOGRAPHICS



POPULATION

32,890 TOTAL



50.35%



49.64%



HOUSEHOLDS

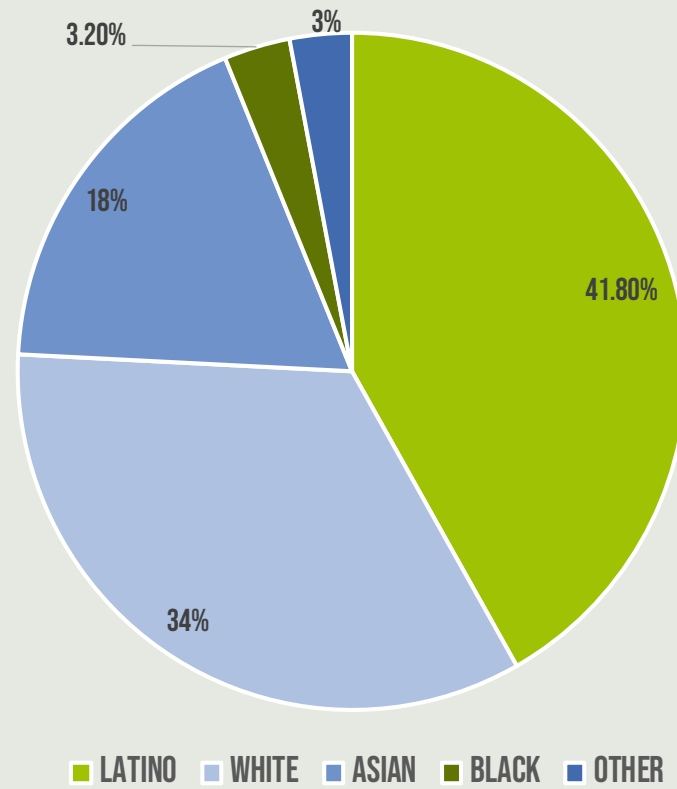
11,954 TOTAL



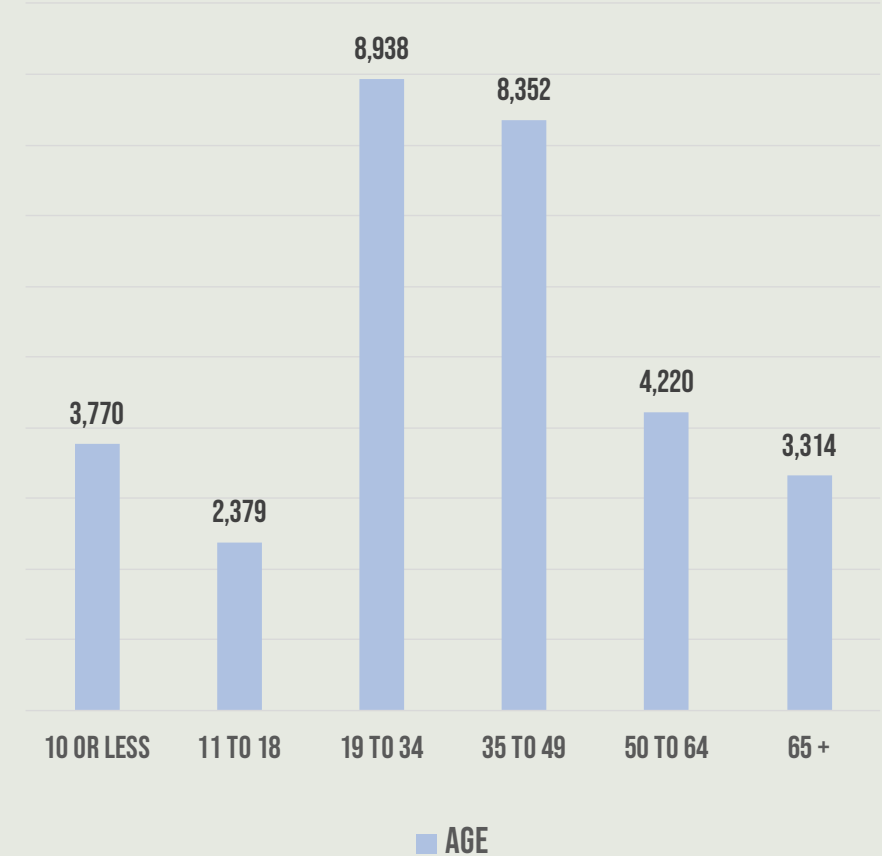
3 PEOPLE PER HOUSEHOLD (AVERAGE)



ETHNICITY

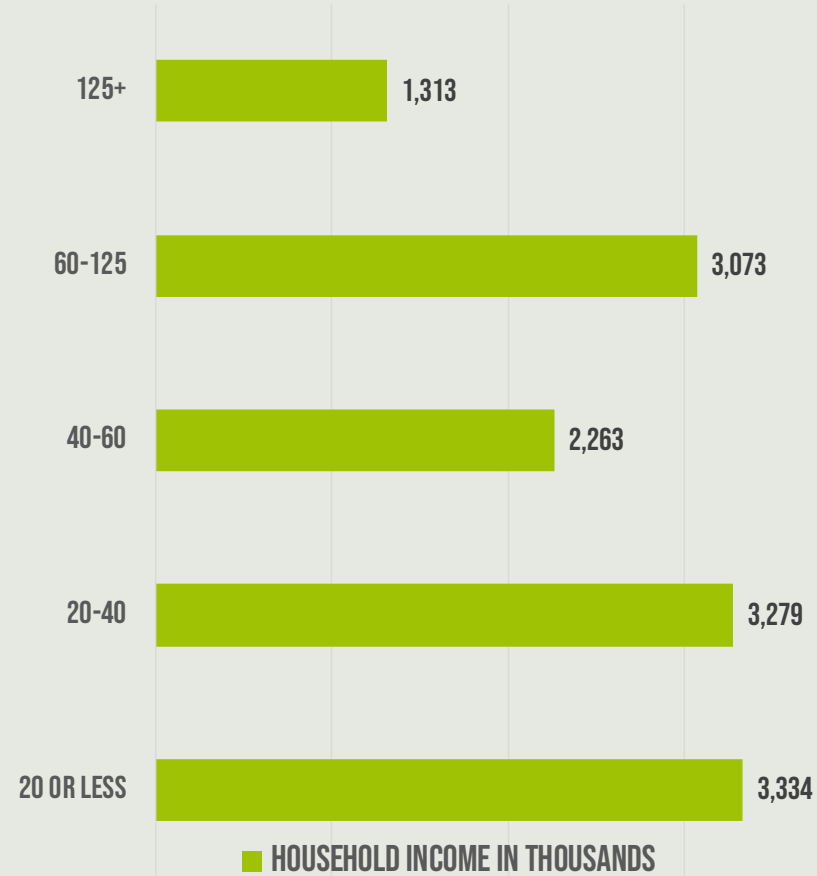


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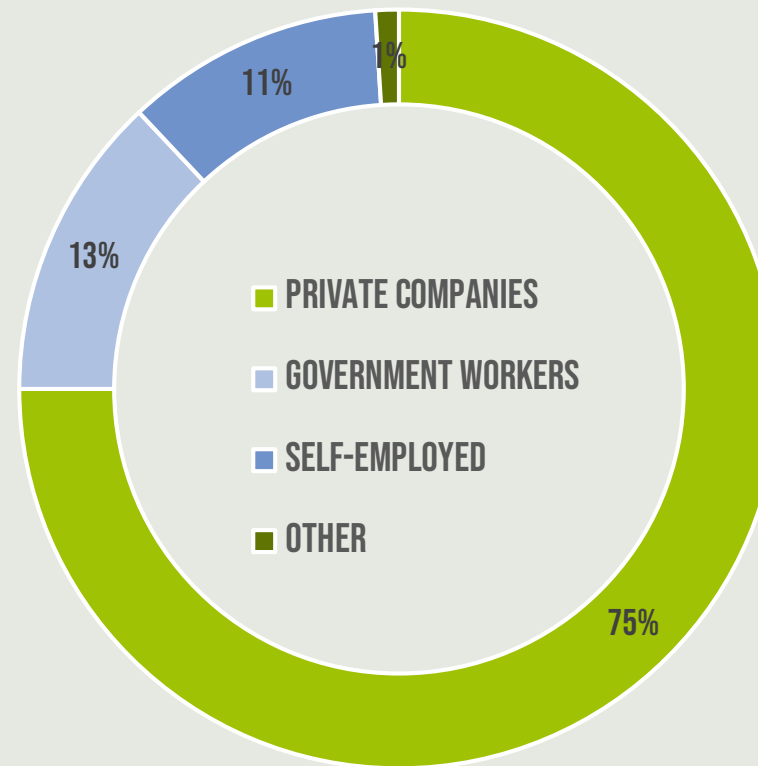


SILVER LAKE, LOS ANGELES

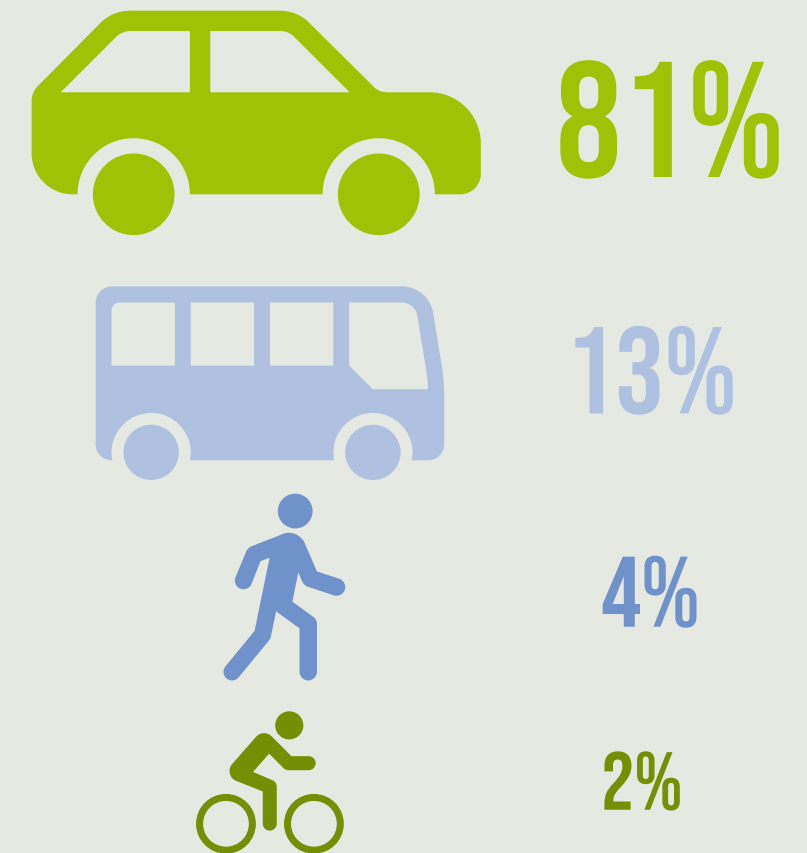
\$ HOUSEHOLD INCOME



EMPLOYMENT



TRANSPORT TO WORK





SILVERLAKE DEVELOPMENT



1

2600 WEST SILVERLAKE DRIVE

4 STORIES, RESIDENTIAL - PROPOSED

2

1933 GRIFFITH PARK BLVD.

3 STORIES, RESIDENTIAL - COMPLETED

3

2468 NORTH GLENDALE

5 STORIES, MIXED USE - PROPOSED

4

RIDGE SILVER LAKE

10 SMALL LOT SUBDIVISION - COMPLETED

EIR RESOURCE FINDINGS

POTENTIAL IMPACT OF DEVELOPMENT ON EXISTING SITE RESOURCES

ENVIRONMENTAL IMPACT REPORT
(EIR) 2006 & 2013

SLRC BYPASS PROJECT

PURPOSE

Evaluate environmental and community impact of necessary pipeline construction due to the decommissioning of Ivanhoe and Silverlake Reservoirs as potable sources of water, also known as **SLRC Bypass Project**.



CULTURAL

- Silver Lake & Ivanhoe Reservoirs City Historic Cultural Monument
- Silver Lake Chlorination Station & Meter House, Mediterranean Revival style, 1927

OPPORTUNITIES & CONSTRAINTS

- Reservoirs to be maintained as water bodies in perpetuity.
- These existing structures have potential historical significance to the origin on the reservoirs.

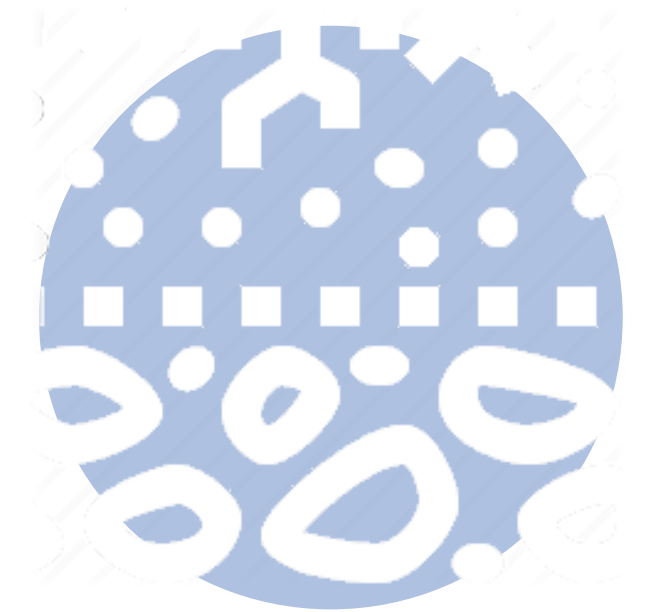


WATER & HYDROLOGY

- Silver Lake Reservoir
- Ivanhoe Reservoir
- Storm water runoff & direct precipitation

OPPORTUNITIES & CONSTRAINTS

- Reservoir Existing Uses: Industrial service and process supply, non-contact water recreation & wildlife habitat. Potential Uses: contact water recreation & warm fresh water habitat.
- Minimize sediment conveyance during construction activities



EARTH & SOIL

- Silty and sandy fill & quaternary alluvium to 43' below ground surface.

OPPORTUNITIES & CONSTRAINTS

- Grading & excavation may result in soil erosion and sedimentary runoff
- Mapped fault lines exist within the site precluding need for geotechnical testing and cut/fill ratio limitation

EIR RESOURCE FINDINGS

POTENTIAL IMPACT OF DEVELOPMENT ON EXISTING SITE RESOURCES



AVIAN NESTING LIFE

- Great Blue Herons, *Ardea herodias*
- Ruddy Duck, *Oxyura jamaicensis*
- Eared Grebe, *Podiceps nigricollis*
- Bufflehead, *Bucephala albeola*
- Canada Goose, *Branta canadensis*
- Special status bats

AVIAN WILDLIFE

- House finch, *Carpodacus mexicanus*
- American crow, *Corvus brachyrhynchos*
- Common Raven, *Corvus corax*
- North Mockingbird, *Mimus polyglottos*

PALEONTOLOGICAL

- High potential for scientifically important fossil remains in sandstone

NATIVE PLANT LIFE

- *Platanus racemosa*, Western Sycamore
- *Quercus agrifolia*, Coast Live Oak

OPPORTUNITIES & CONSTRAINTS

- Pre-construction surveys for special status species
- Vegetation removal must occur outside breeding season

OPPORTUNITIES & CONSTRAINTS

- Elimination of chlorine to water supply may result in increased forage supply for migratory water fowl.
- No fish will be introduced to the water supply

OPPORTUNITIES & CONSTRAINTS

- Paleontological construction monitor retained when necessary.

OPPORTUNITIES & CONSTRAINTS

- Riparian plant communities evaluated
- Evaluate protected plant species on site

OPEN SPACE AND CONSERVATION

The framework seeks to create an integrated public and private open space system that serves and is accessible by the City's population — and is unthreatened by encroachment by other land uses.

THE FRAMEWORK

Los Angeles
City Planning

ISSUE

- 1 Open space conservation often competes with development.
- 2 There is a deficiency of open space in the City.
- 3 The Los Angeles River presents unrealized opportunities for enhancing the open space network.
- 4 Existing development patterns and lack of funding have led to limited park acquisition.
- 5 Park standards are outdated and do not reflect current conditions and needs.



OBJECTIVE

Protect the City’s natural settings from the encroachment of urban development, allowing natural resources to contribute to the sustainability of the region.

Enhance existing open spaces and recreation facilities and provide connections from targeted growth areas.

Manage open space to minimize environmental risks to the public.

Ensure that open spaces contribute to the stability and identity of the communities and neighborhoods they adjoin.

Provide adequate funding for open space resource management and development.

POLICIES

- Encourage water reuse technology adoption by City agencies
- Preserve habitat linkages to provide wildlife corridors
- Conserve undeveloped watersheds as open spaces
- Preserve natural viewsheds in hillside and coastal areas
- Encourage increase of open space to protect wild areas

- Establish the linear open space system in the Citywide Greenways Network map to enhance connections at multiple levels
 - Regional: beaches, mountains, and the Los Angeles River
 - Community: parks and civic open spaces
 - Neighborhood: pedestrian-friendly streets and public facility open space (schools, small parks, and community gardens)
- Protect and expand equestrian resources and maintain safe links in major public open space areas
 - Maintain equestrian facilities on publicly owned lands
 - Preserve the Horsekeeping Supplemental Use District
 - Promote and maintain a trail system within the City

- Preserve flood plains, landslide areas, and steep terrain areas as open space to minimize the risk to public safety
- Ensure safety of users of the City’s open space system
- Utilize development standards to promote open space visibility

- Distribute open space and recreational facilities across the City, particularly in communities where deficiencies exist
- Connect neighborhoods to the Citywide Greenways Network
- Involve residents in the selection and design of local parks
- Leverage air rights to “heal” neighborhoods divided by freeways
- Utilize nontraditional open spaces to address deficiencies
- Seek development of public open spaces in private development
- Encourage small scale open spaces at and adjacent to transit stations
- Site open space adjacent to existing public facilities and encourage agreements that make private open space accessible to the public

- Establish open space financing programs
- Link with air quality mandates, flood control requirements, and water reclamation needs
- Facilitate assessment districts for street amenity improvements

ONE OF THE OBJECTIVES






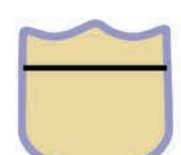
ENSURE THAT OPEN SPACES CONTRIBUTE TO THE STABILITY AND IDENTITY OF THE COMMUNITIES AND NEIGHBORHOODS THEY ADJOIN.

WATERSHED

A Watershed is an area of land where water drains to the lowest point. It includes all rivers, streams and underground flow. Silver Lake is a micro-shed within the Ballona Creek Watershed. Ballona Creek Watershed is the largest watershed draining to the Santa Monica Bay.



LEGEND

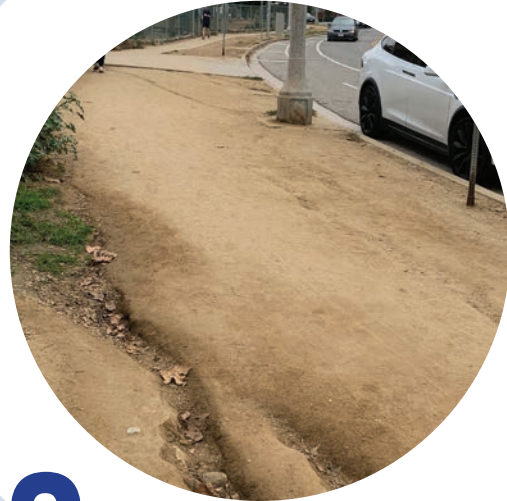
-  Los Angeles River
-  Los Angeles River Watershed
-  Ballona Creek Watershed
-  Silver Lake Reservoir
-  Major Freeway Route
-  Major Route Number

SLOPES



1

1-5% slopes.
Although easy to access but mostly unpaved decomposed granite pathwalks.



2

Slopes that might be seen as dangerous because of the runoffs and lack of paving.

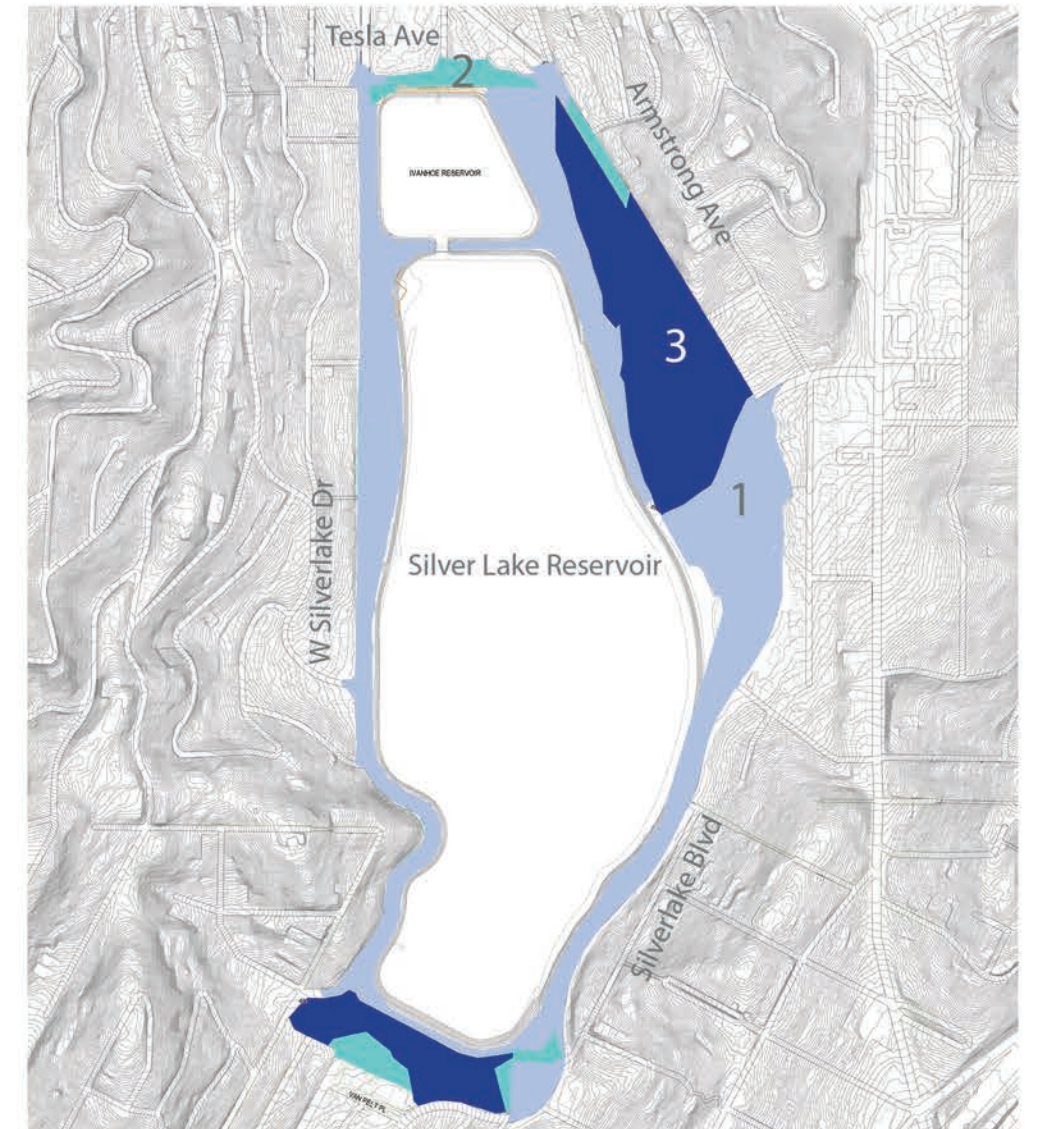


3

Paved slopes,
calculated as steeper than 15%.

To summarize: The majority of surrounding path walks on the slopes of Silver Lake Reservoir, fall into the category of 1-2%. However, some of the slopes on the NE and S sides of the park have more than a 20% incline. Around 20-30% of the current path walks are not approved by park regulations and are not accessible by wheelchairs.

SLOPE MAP



- 1-5 % slopes. Easy to walk, ADA approved slope levels.
- 5-10% slopes. Visible slopes, not so easily accessible by everyone (wheelchairs, elderly).
- >15% slopes. Inaccessible, hard to walk or jog for the majority of Silver Lake Reservoir visitors.

STORMWATER CAPTURE

“The Silver Lake Reservoir Complex (SLRC) loses a combined 418 AF of water per year to evaporation and seepage, creating a demand for ongoing water supply... Due to the ongoing drought and anticipated effects of climate change, alternative supply sources were investigated to offset potable water demand... Capturing stormwater from SLRC’s surrounding neighborhood is expected to yield 159 acre-feet per year... Additionally, the project will reduce first flush and improve the water quality in the Los Angeles River and Ballona Creek.”

—2017 Council Memorandum of Agreement

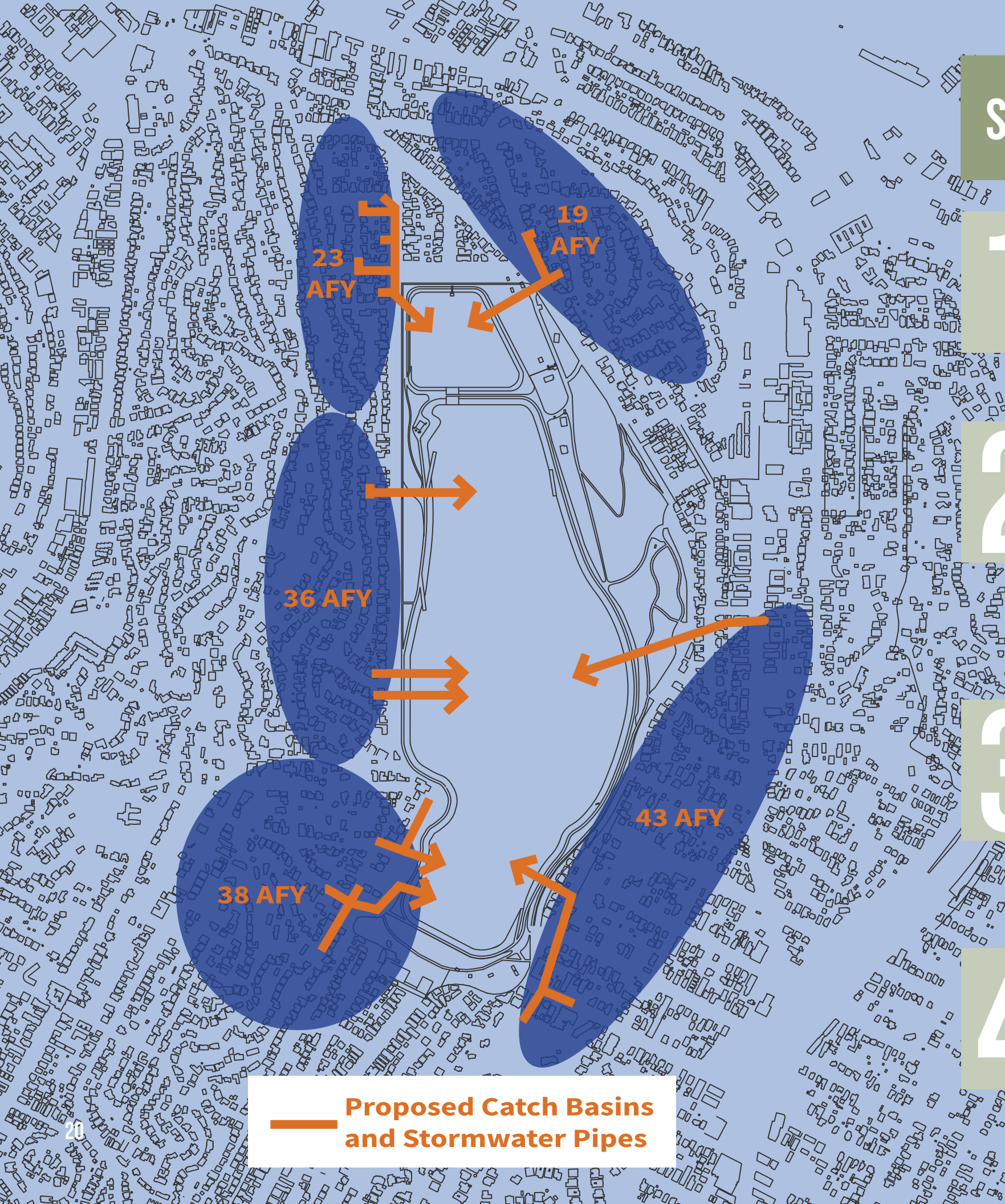
418 Acre Feet Per Year Lost to Evaporation and Leakage

**Additional Groundwater
Input From Pollock Well**

**Total Capacity:
2440 Acre Feet**

**159 Acre Feet Per Year Expected
Gain from Stormwater Capture**

STORMWATER CAPTURE PROJECT CONSTRUCTION



Proposed Catch Basins and Stormwater Pipes

1

AGREEMENT SIGNED NOVEMBER 2017
Council Memorandum of Agreement



2

LADWP AUTHORIZES \$8.129 M
FOR PROJECT CONSTRUCTION



Los Angeles Department of Water and Power (DWP) authorizes the Bureau of Engineering to begin construction

3

BOE COMPLETES CONSTRUCTION



Bureau of Engineering (BOE) is given a 24 month timeline

4

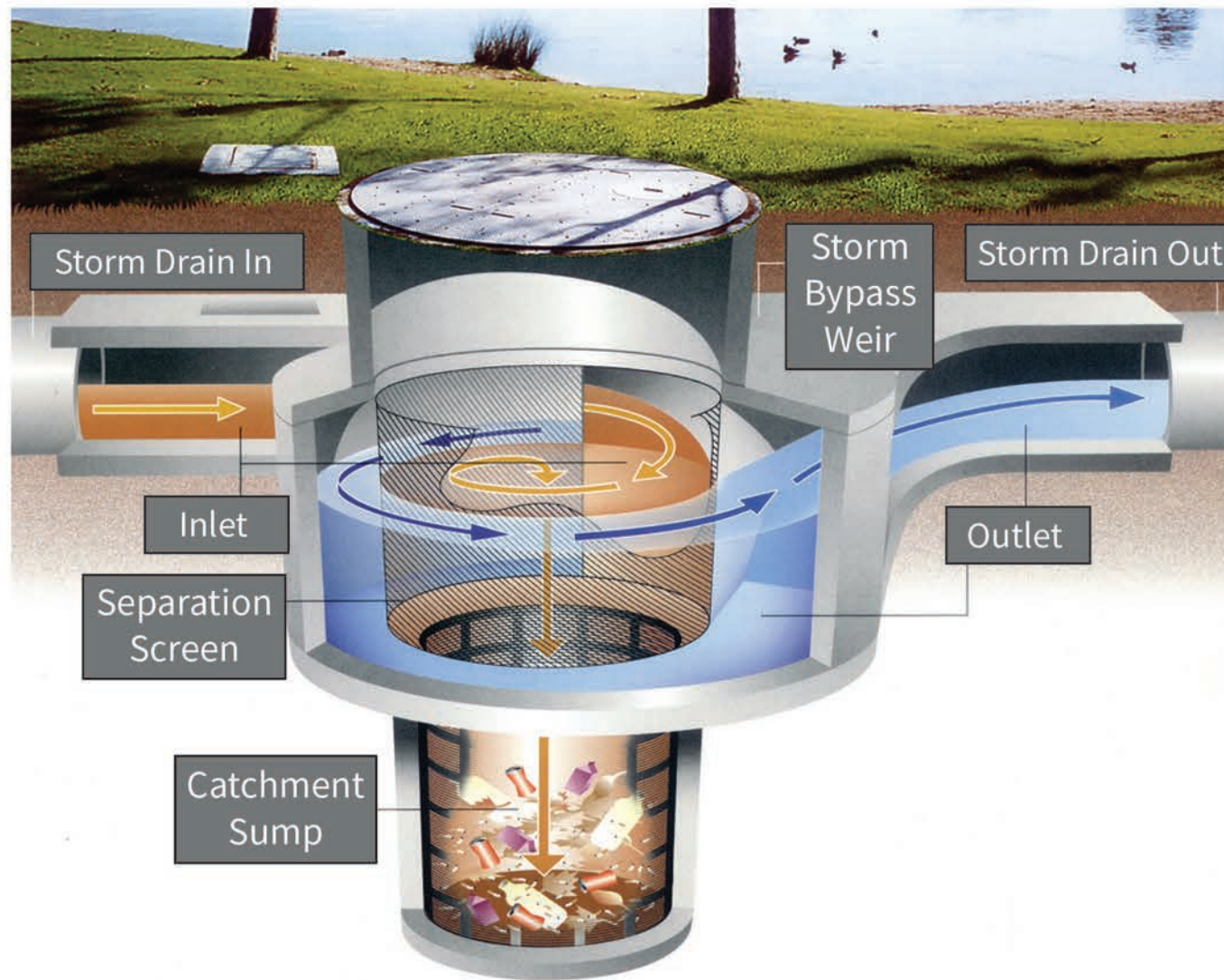
LASAN MAINTAINS INFRASTRUCTURE

After completion of construction Los Angeles Sanitation (LASAN) takes responsibility for maintenance in perpetuity

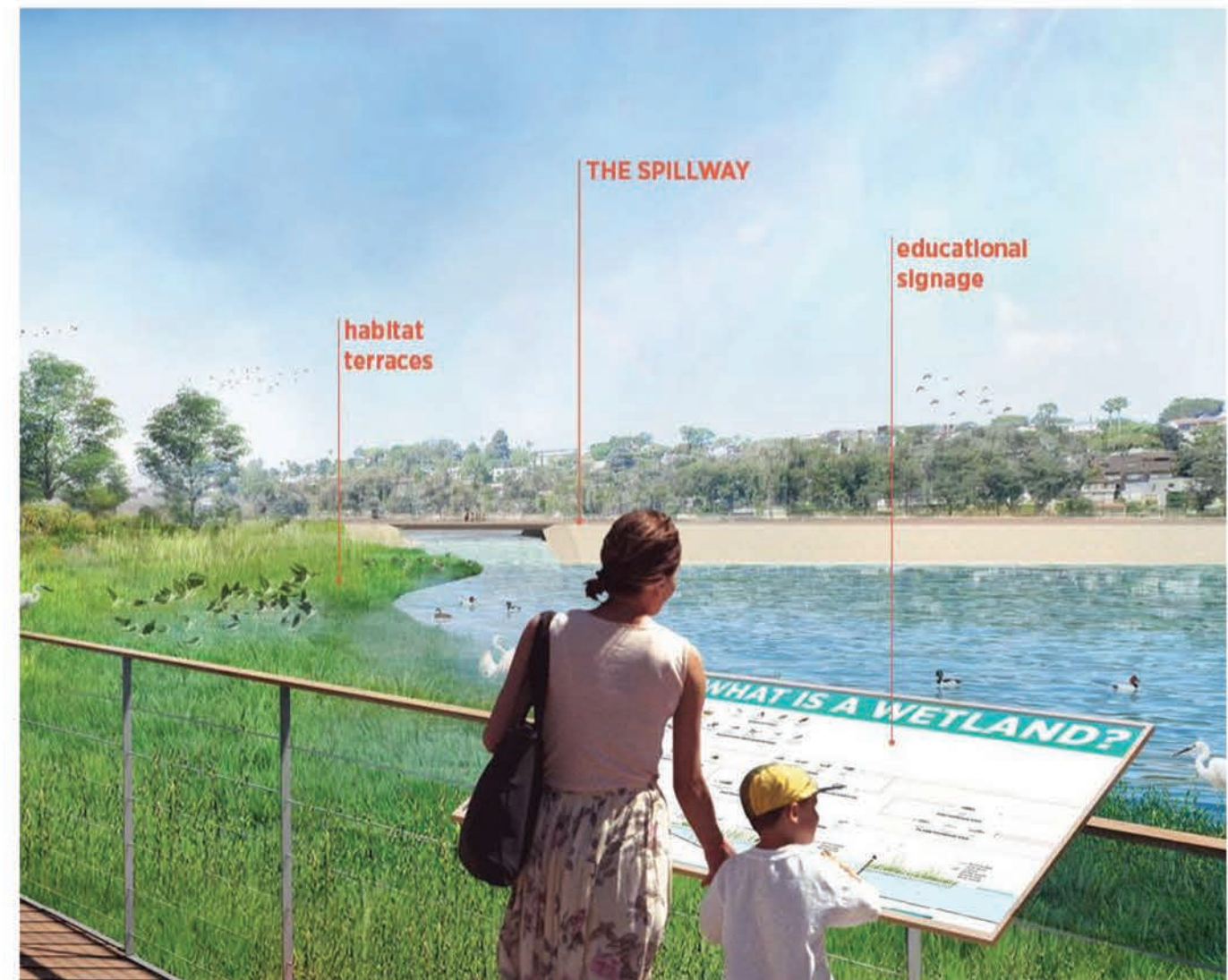


PROPOSED STORMWATER FILTRATION

HYDRODYNAMIC SEPARATOR



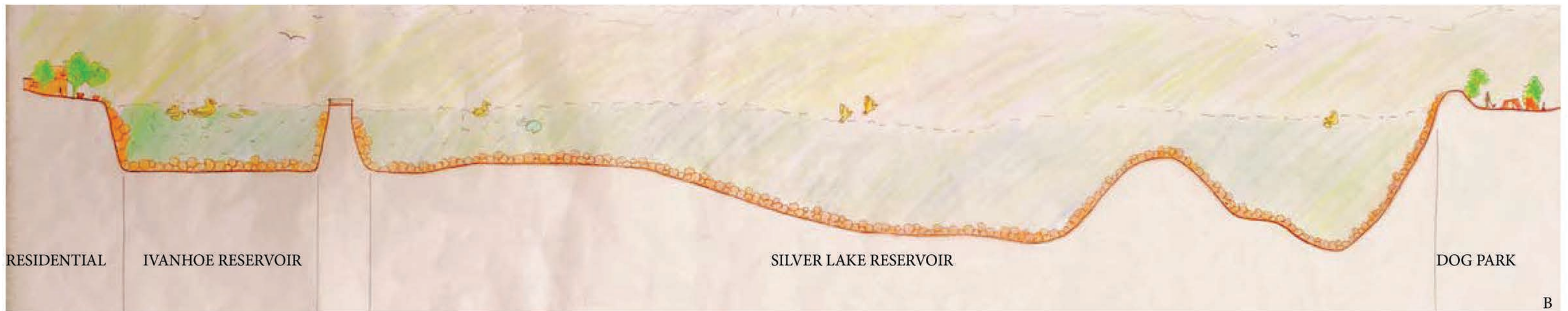
USE OF OF WETLANDS FOR NATURAL BIOREMEDIATION

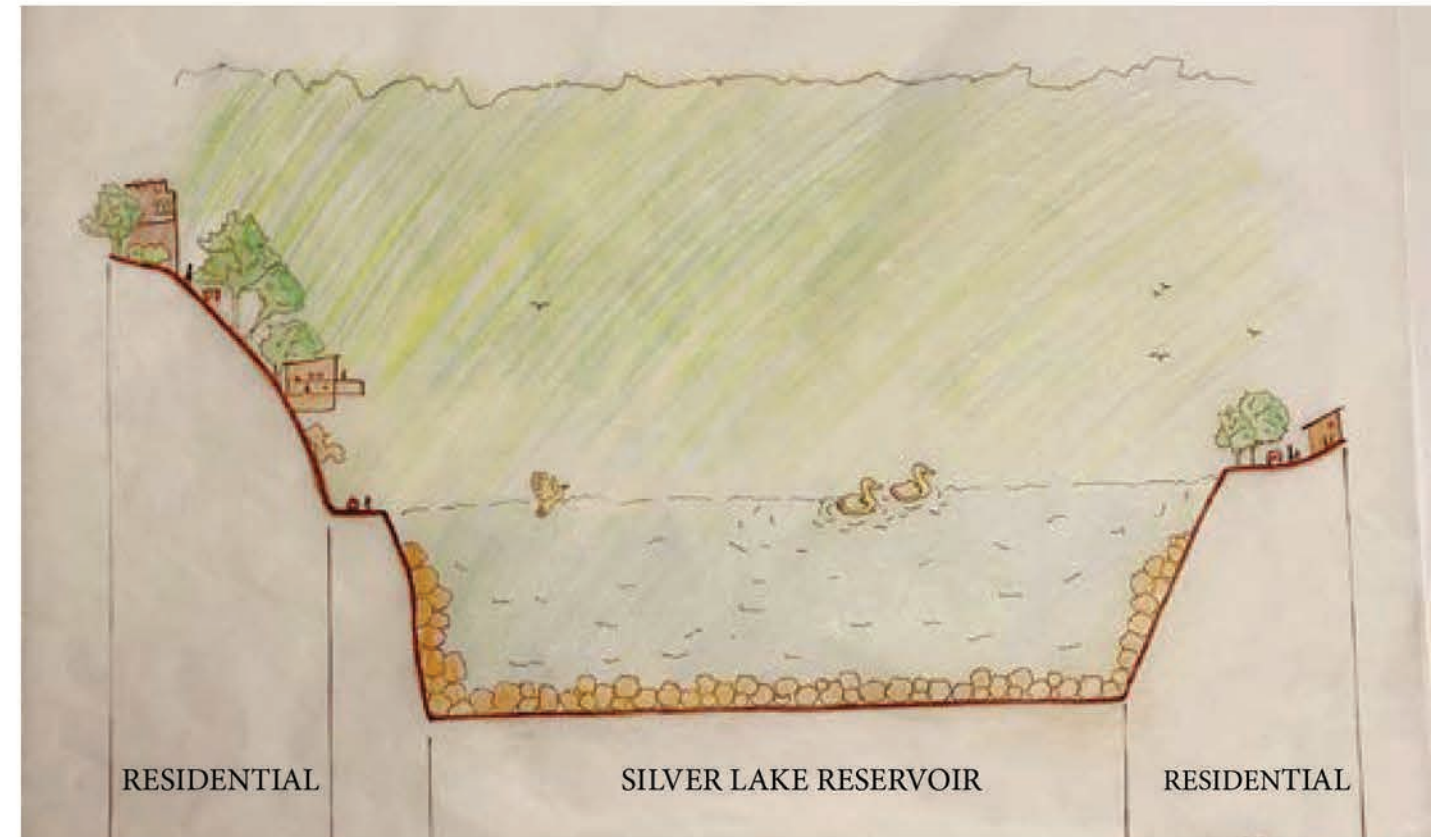
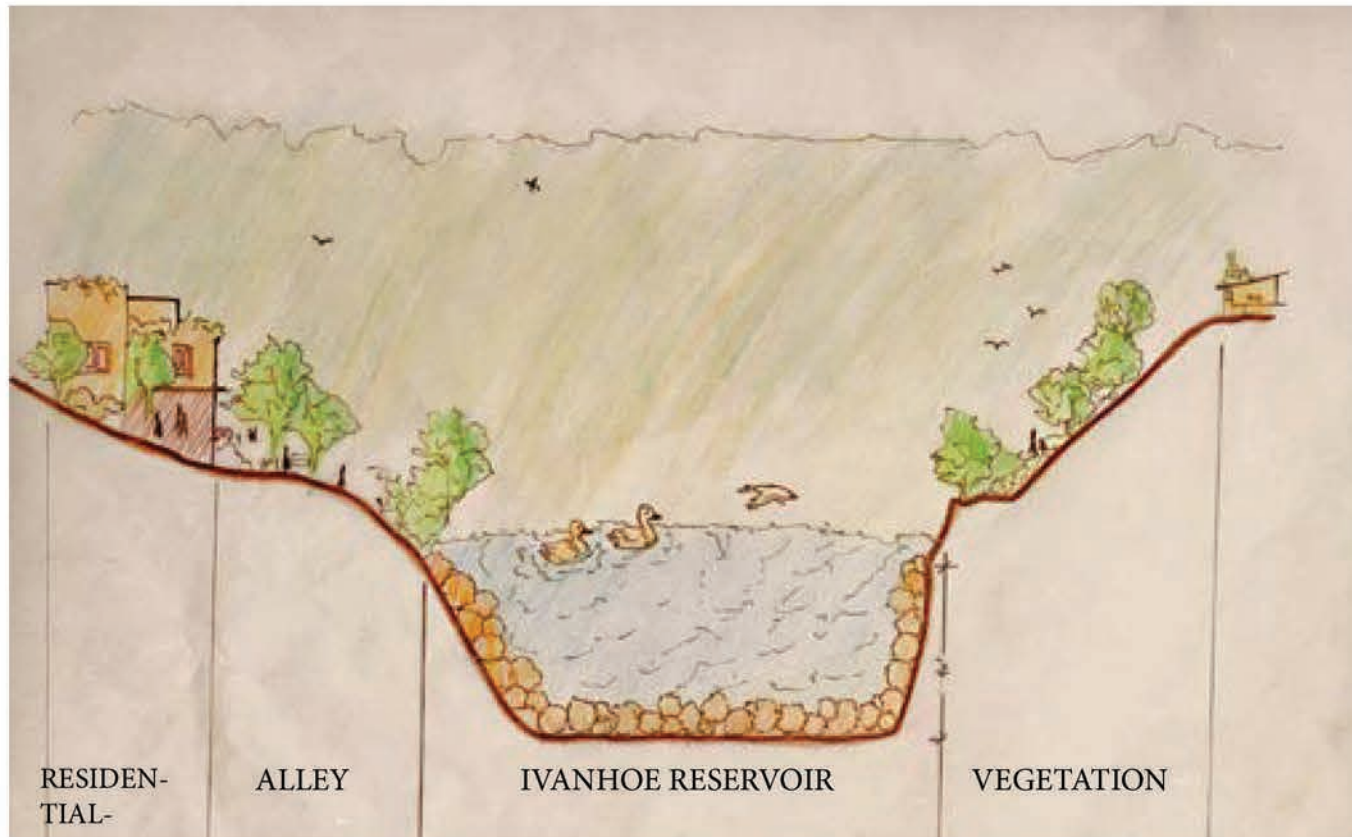


CROSS SECTIONS



SCALE: 1=100'-0"



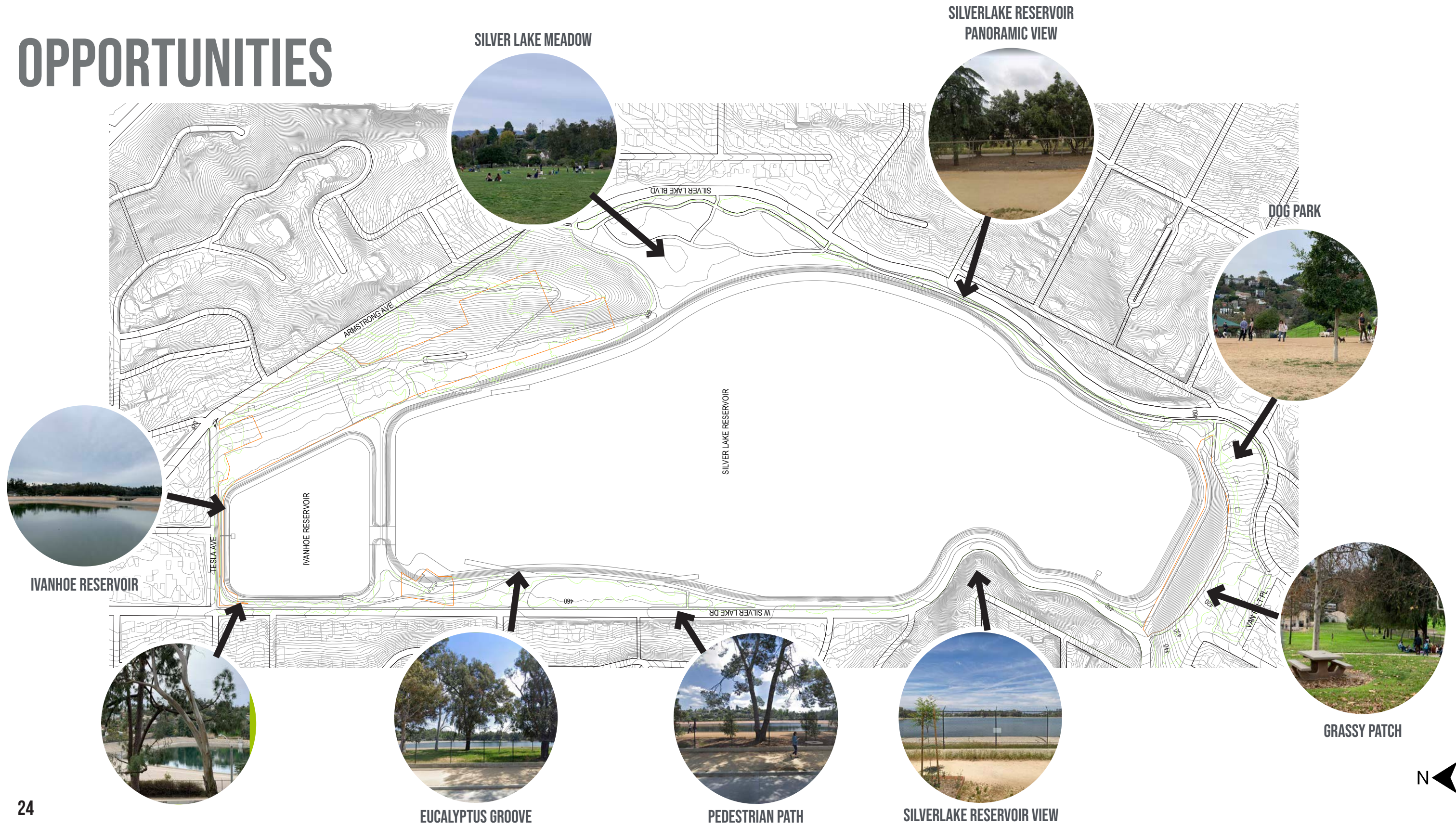


SCALE: 1=100'-0"



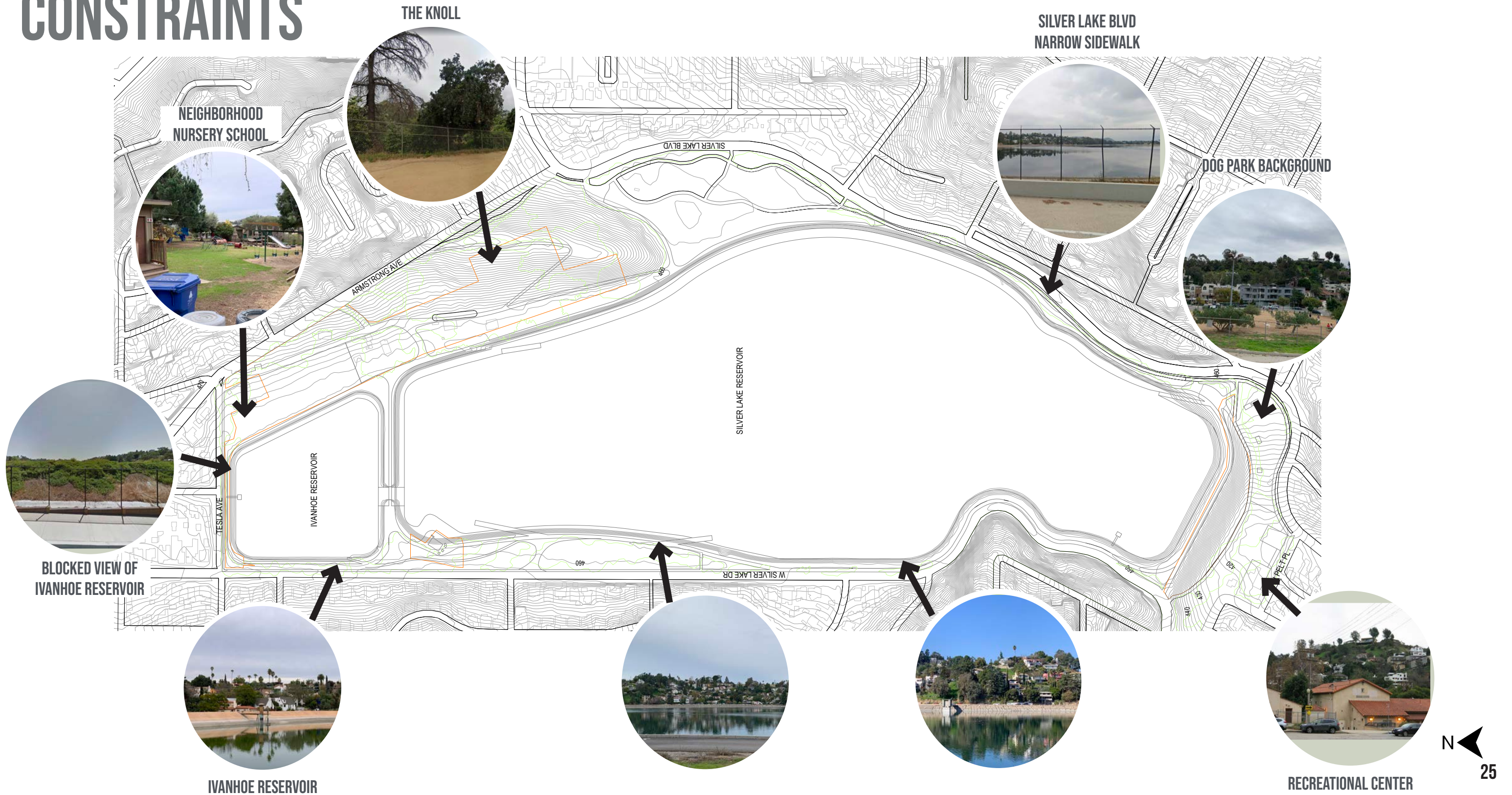
VIEWS INTO THE SITE

OPPORTUNITIES



VIEWS INTO THE SITE

CONSTRAINTS



VIEWS OUT OF THE SITE

OPPORTUNITIES

NEUTRA STUDIO AND RESIDENCE



ANGELES NATIONAL FOREST



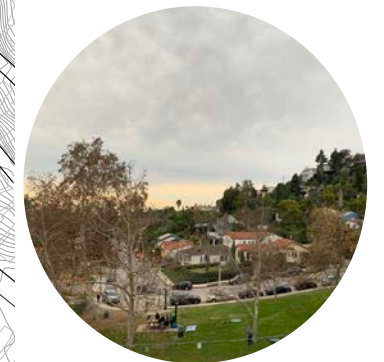
MODERN ARCHITECTURE RESIDENCE



W SILVER LAKE DR



CONNECTION WITH SURROUNDING RESIDENCES



SOUTH FACING VIEW

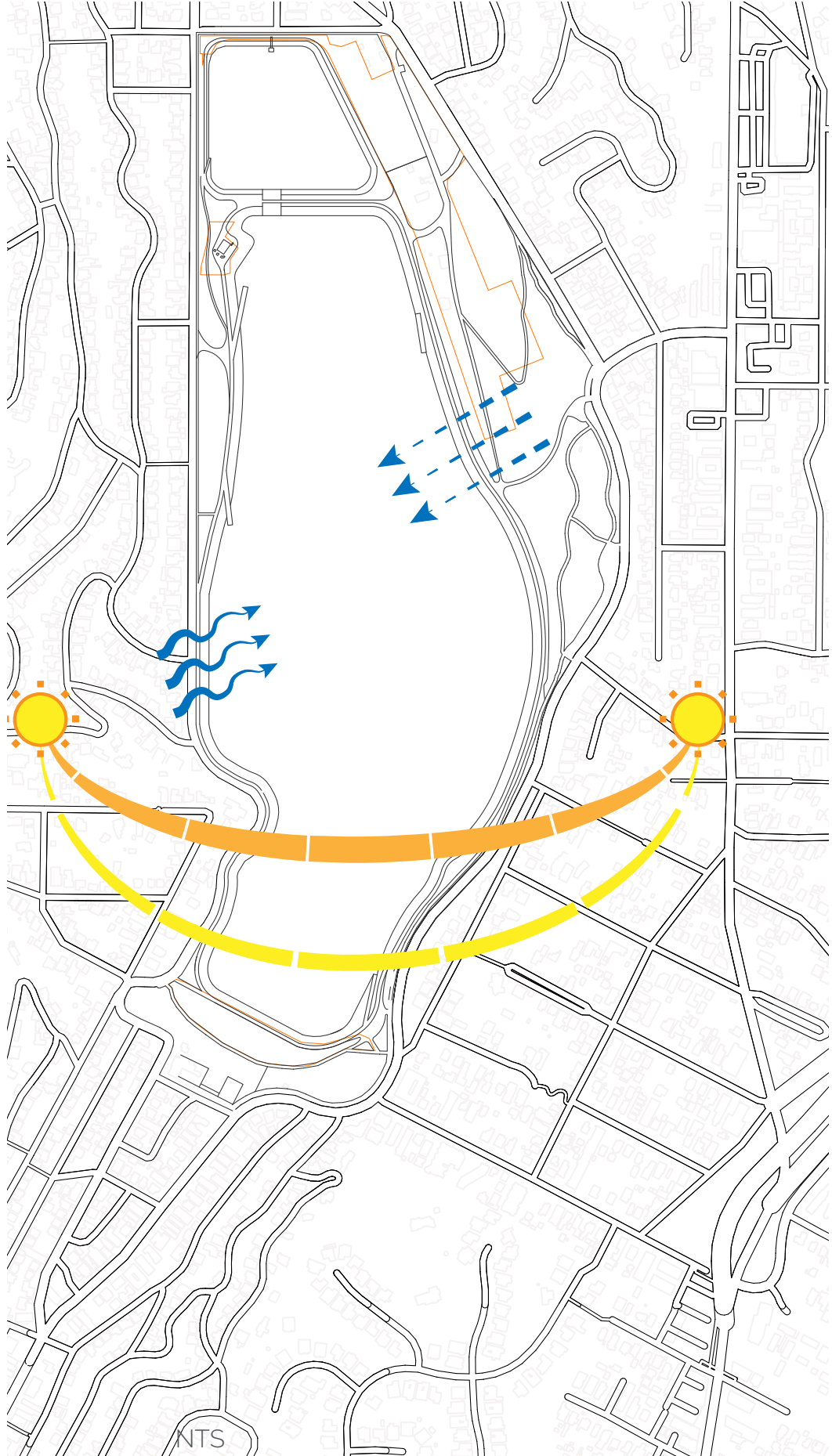







VIEWS OUT OF THE SITE

CONSTRAINTS



SUN AND WIND ANALYSIS



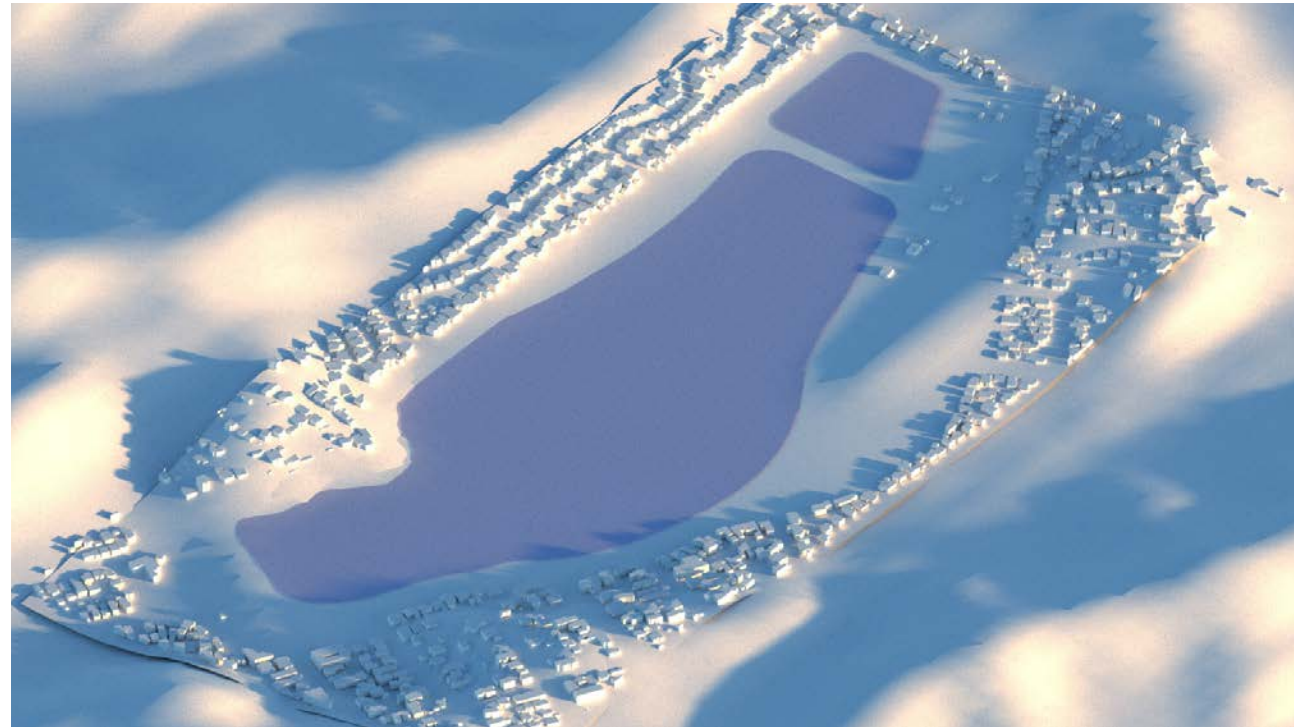
-  Summer Sun
-  Winter Sun
-  Prevailing Winds
-  Santa Ana Winds
-  NTS

SHADE ANALYSIS

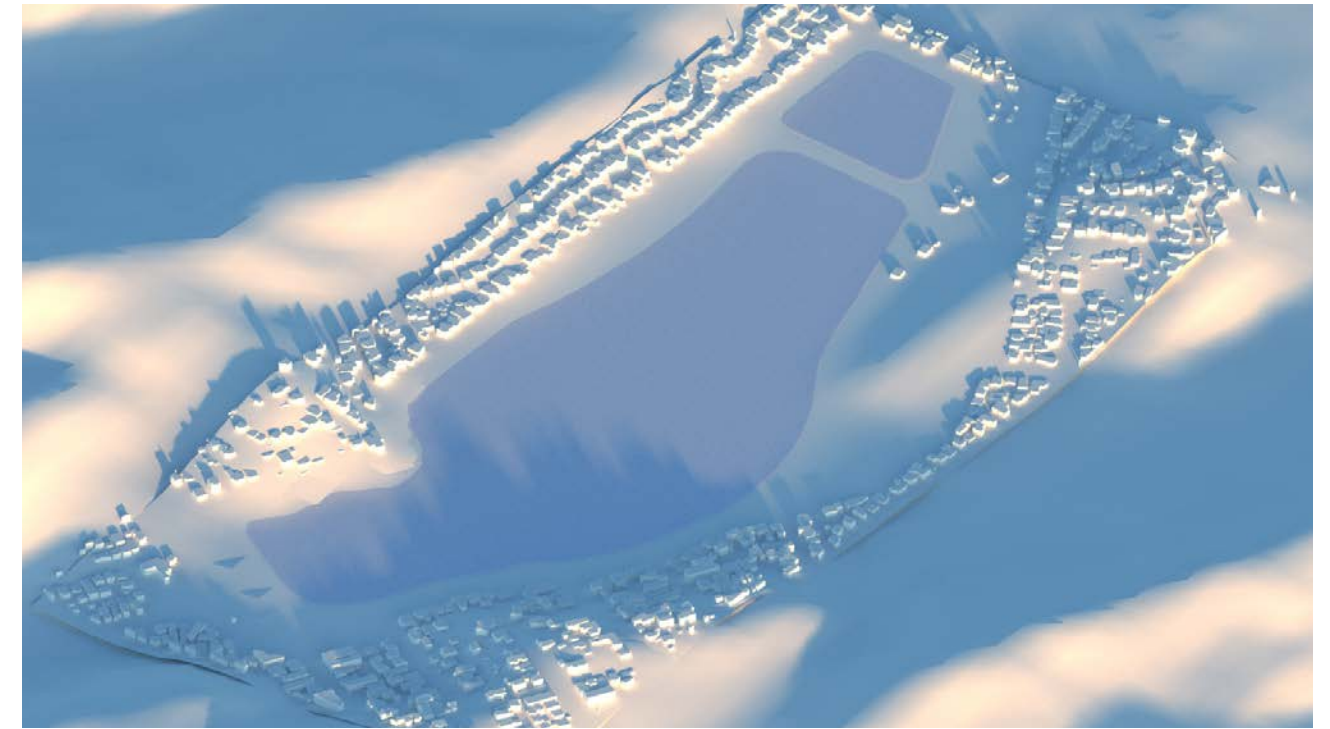
Summer

Winter

Morning Shade

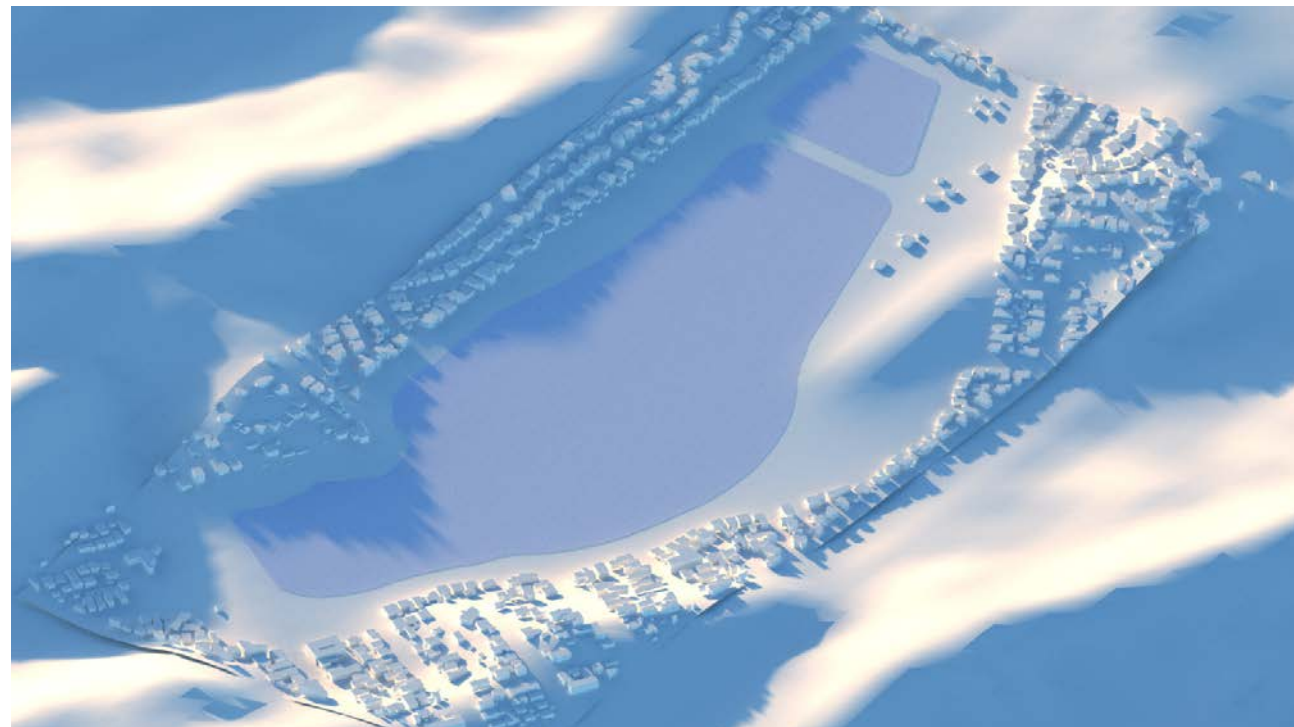


7/21 6:00 AM



12/21 6:30 AM

Evening Shade

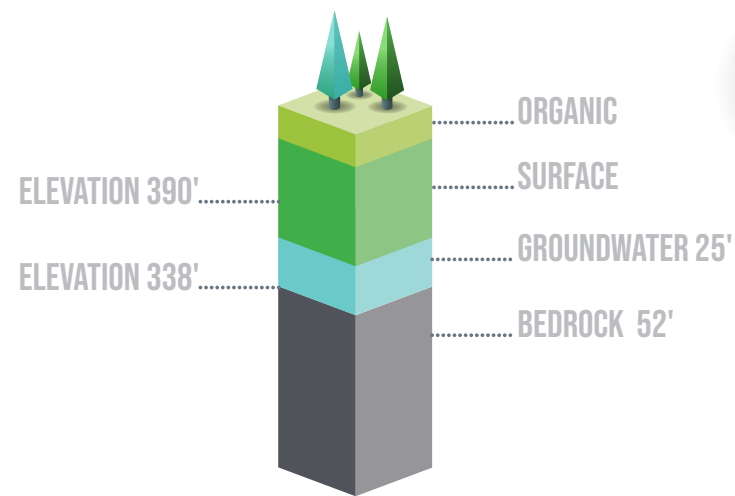
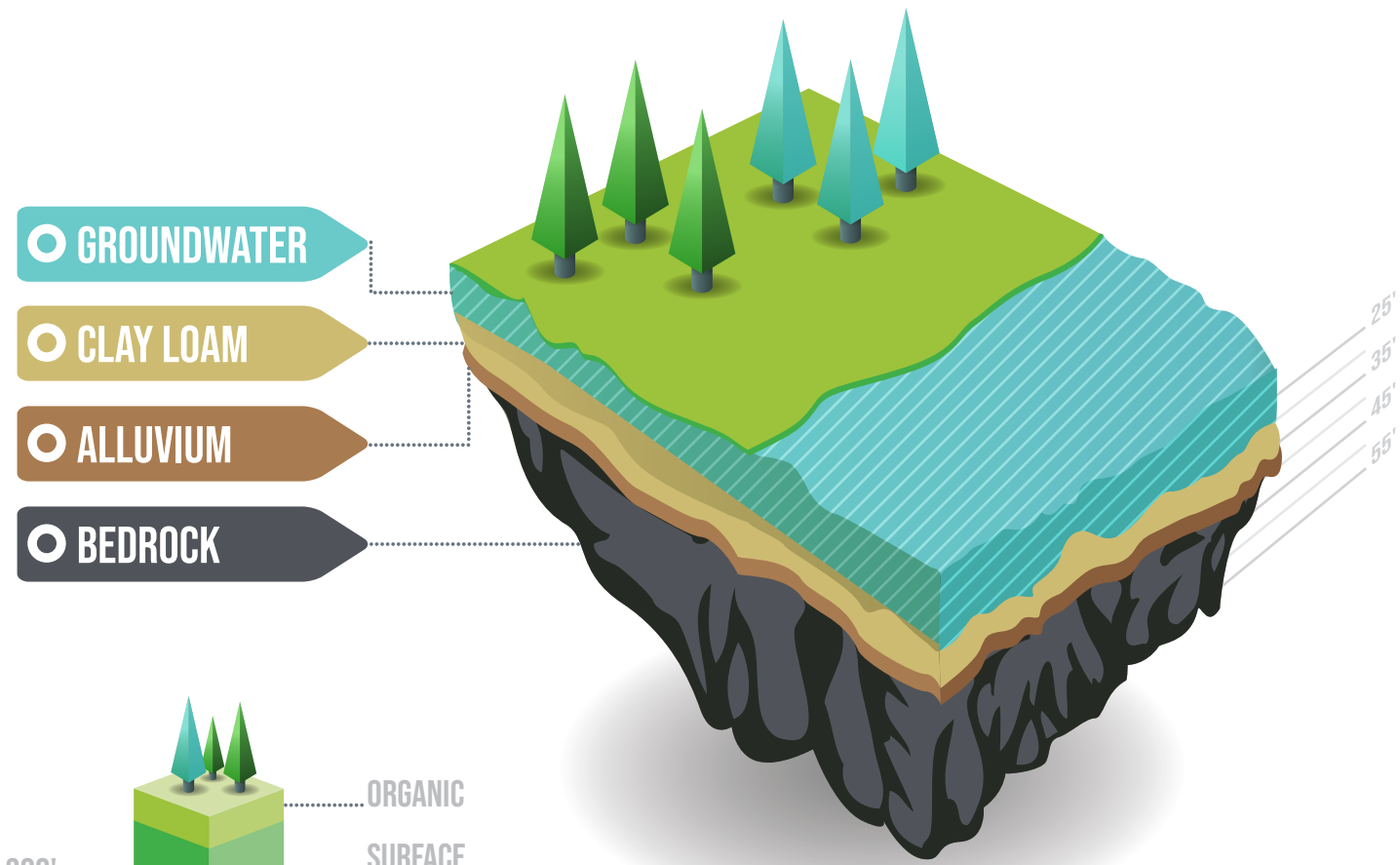


7/21 6:00 PM



12/21 3:00 PM

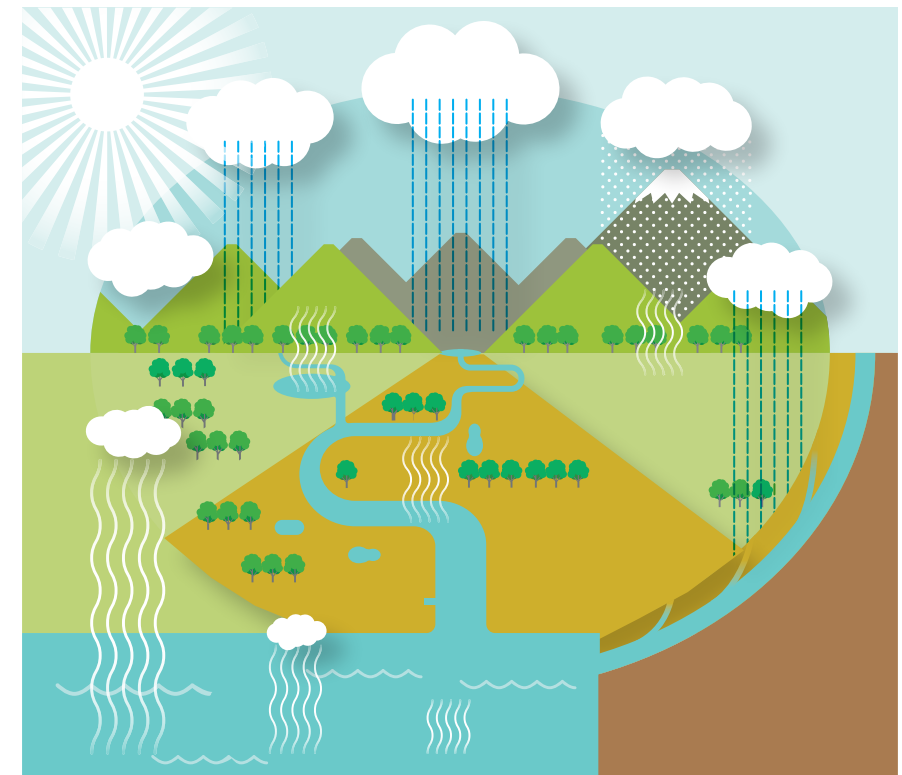
SOILS ANALYSIS



Soils at Silver Lake Reservoir (elevation 433 feet) generally consist of **clay** and **loam** fill materials and **quaternary alluvium** to a depth of approximately 40 to 43 feet below ground surface (elevation 390). Groundwater is encountered at a depth of approximately 25 feet below ground surface. Bedrock elevation starts at 338 feet.

EXISTING SLOPES

Existing slopes are paved with 3 inches of asphaltic concrete. Any modification of the lake slopes will require removal of the existing asphaltic concrete.



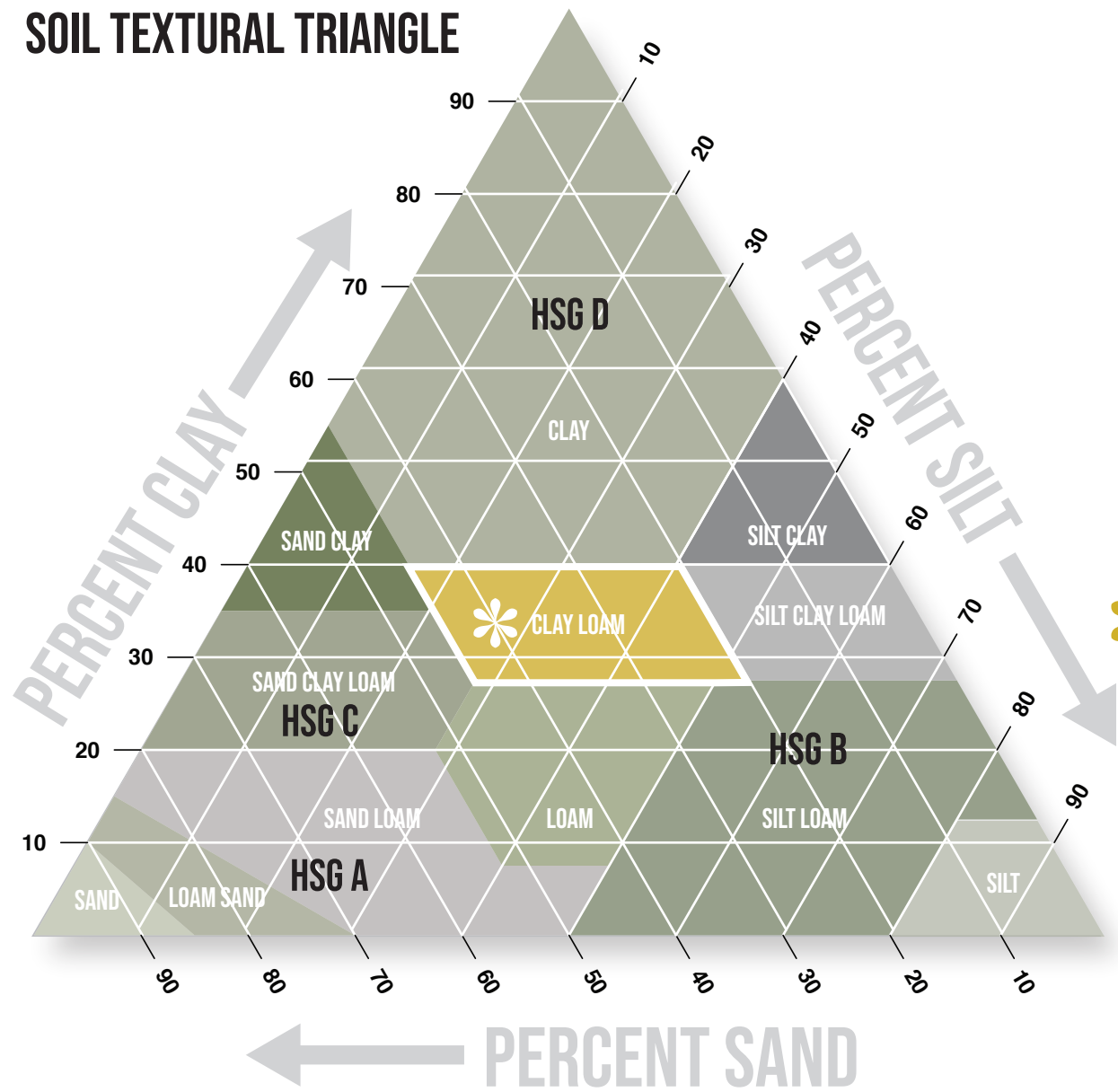
ALLUVIAL FAN SOIL

A fine-grained fertile soil deposited by water flowing over flood plains or in river beds — alluvial deposit, alluvial sediment, alluvium, alluvion — clay or silt or gravel is carried by rushing streams and deposited where the stream slows down. The LA Basin is generally an alluvial fan from the hills to north to the ocean at the south.

Some areas have deeper deposits of sand than others, and several include areas of Hanford gravelly sand, which is medium-textured to fine, resting at about 12 inches on a subsoil of brown or grayish brown strata of fine sand, silt or gravel. These areas, one of which lies along the Los Angeles River just north of Silver Lake Reservoir contain sufficient gravel to cause droughtiness because it is low in organic matter and requires more water for irrigation.

Silver Lake area soil is Altamont Clay Loam, an HSG Group D soil that has a very slow infiltration rate and high runoff potential. This group is composed of clays that have a high shrink-swell potential, soils with a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

SOIL TEXTURAL TRIANGLE



INFILTRATION RATE AND HYDROLOGIC SOIL GROUPS (HSG)

Hydrologic Soil Group	Type	Infiltration Capacity/Permeability	Leaching Potential
A	Deep, well-drained sands and gravels	High	High
B	Moderately-drained moderately fine to moderately coarse texture	Moderate	Moderate
C	Impeding layer, or moderately fine to fine texture	Low	Low
D	Clay soils, soils with high water table	Very Low	Very Low



SOIL pH

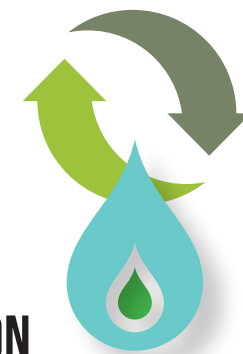
Alluvial soils pH ranges from 6.5 to 8.4, typically around 7. Clay-loamy, mixed, **slightly acid to moderately alkaline**, the Altamont series soil of the Silver Lake area consists of deep, well-drained soils that formed in material weathered from fine-grained sandstone and shale. These soils are on gently sloping to very steep uplands. Drainage and is medium to very high runoff; after cracks swell shut, permeability is slow. The principal vegetation is annual grasses, forbs, and scattered oak trees.



LIQUIFACTION ZONE HAZARD

Liquefaction is a phenomenon where saturated **sand** and **silt** take on the characteristics of a liquid during the intense shaking of an earthquake.

- A** West Silver Lake Drive is mapped as a liquidifaction zone, and there is a landslide zone mapped near the intersection of
- B** West Silver Lake Drive and Resesdale Drive.



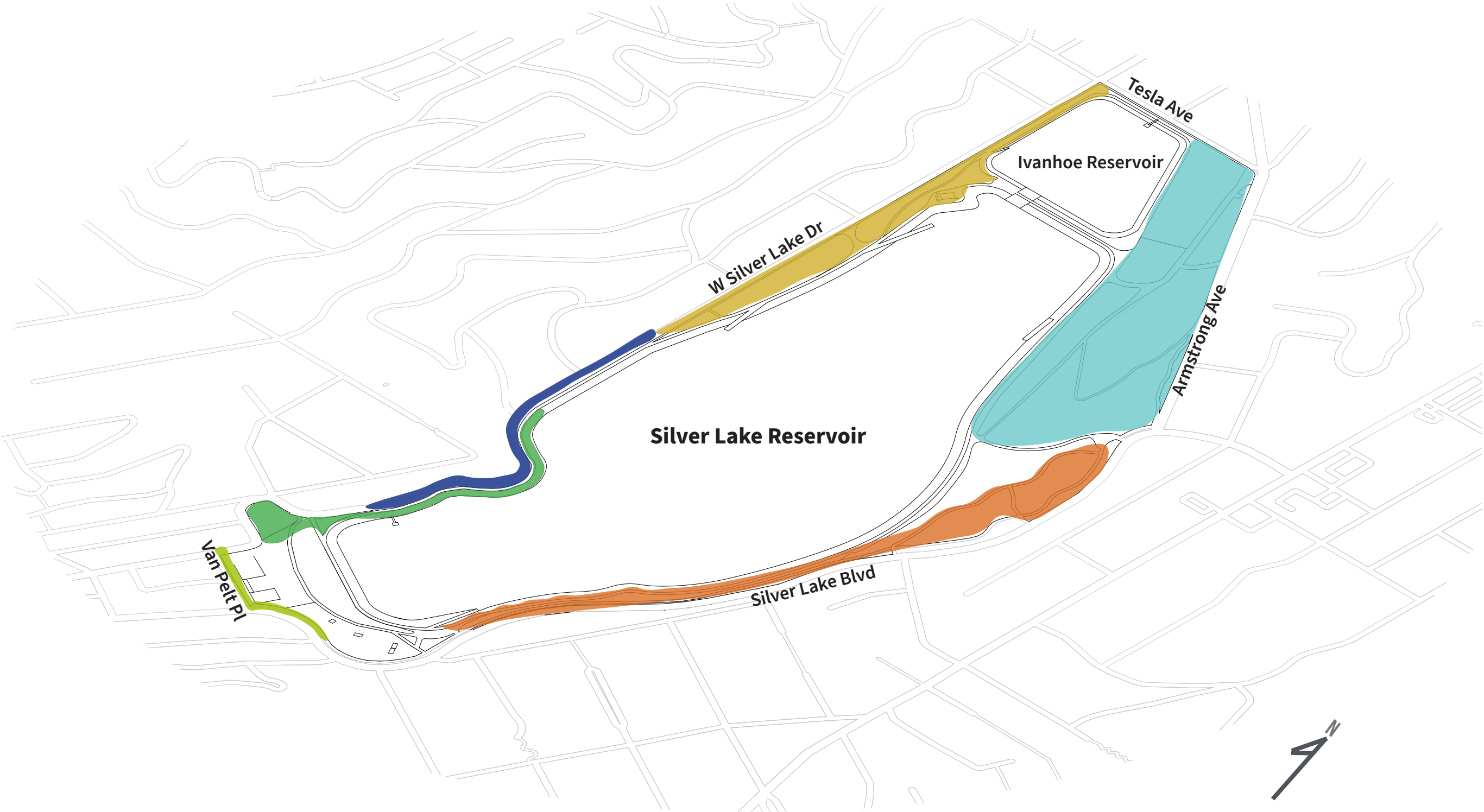
EROSION

Soil erosion area

Two main causes of erosion are wind and water. To prevent erosion: build aggregates in the soil, terrace slopes, cover soil with vegetation, hydroseed with native grasses and plant trees.

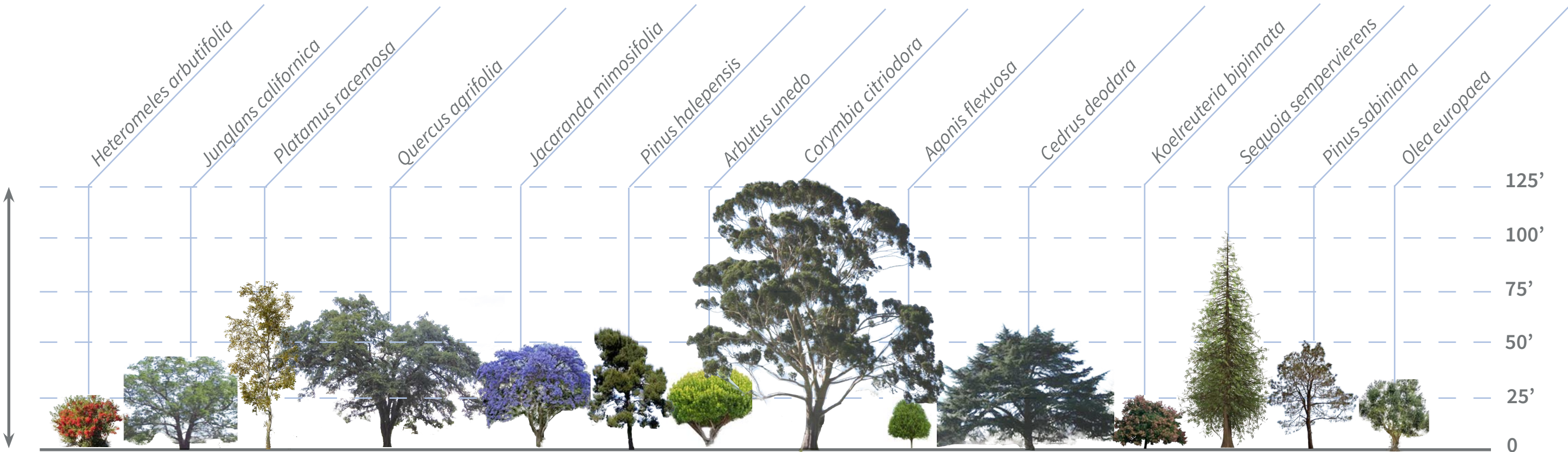


PLANT SPECIES

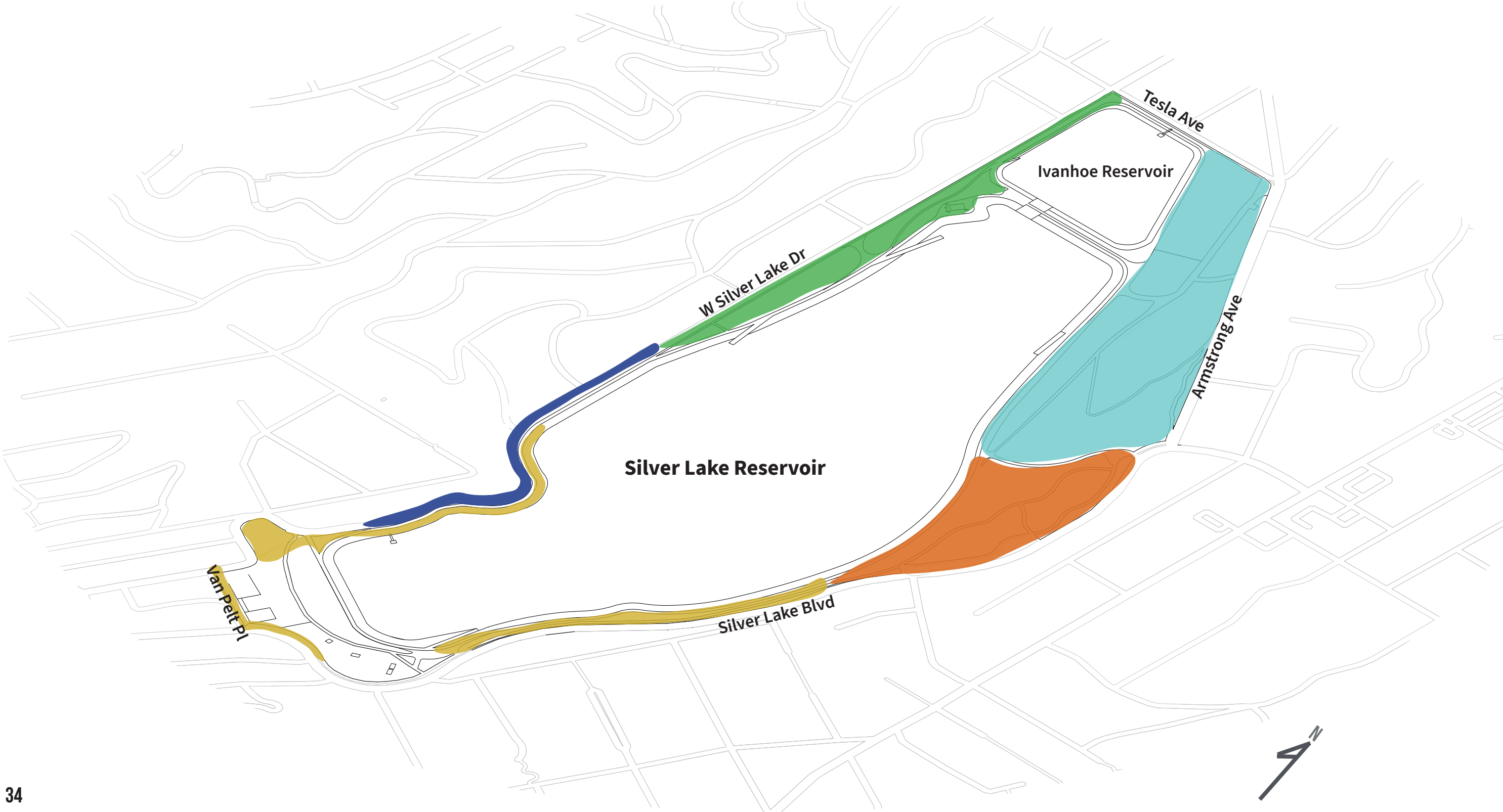


The Silver Lake Reservoir is home to many species of shrubs and trees. Most of the existing planting material is native to California, therefore a beneficial habitat for the local wildlife. Recent efforts have been made by the community and Studio-MLA to plant new trees and update the green spaces.

- Jacaranda mimosifolia*
- Cedrus deodara, Pinus sabiniana, Platanus racemosa, Quercus agrifolia, Sequoia sempervirens*
- Agonis flexuosa, Koelreuteria bipinnata*
- Arbutus unedo, Cedrus deodara, Corymbia citriodora, Pinus halepensis*
- Cedrus deodara, Heteromeles arbutifolia, Junqlans californica, Olea europaea*
- Cedrus deodara, Quercus agrifolia, Pinus halepensis*



TREES AT A GLANCE



The majority of the tree species surrounding the Silver Lake Reservoir are mature or nearing their lifespan.

Conservation groups and community advocates are keen to protect the natural habitats located within the **Eucalyptus Grove** and **California Native Zone** and establish a Bird Sanctuary. Migratory-birds, including many endangered species, utilize these areas as flyover “hot spots” along their seasonal routes.

From 2008 - 2011, Studio-MLA completed two phases of improvement plans to the Reservoir while preserving existing trees. The first phase included an improved permeable pathway mainly along the **Eucalyptus Grove** and other areas of the park. The second phase was completed in 2011 with the **Silver Lake Meadow**, a 2.5 acre “passive park” located on the east side of the Reservoir. This area offers open space, views of the water, and predominately California native/drought-tolerant planting.

In February 2018, Los Angeles City Councilman Mitch O’Farrell and the Los Angeles Conservation Corps improved the **walking path along W Silver Lake Drive** by installing 30 trees to provide shade. 30 Australian Willows (*Agonis Flexuosa*) and Chinese Flame Trees (*Koelrueteria bipinnata*) now alternate around the outer southwest bend of the Reservoir. Unfortunately, inadequate watering has prevented some of the new trees from thriving their first year.



Current Estimated Total Water Use

15,168,695 GAL/YR

total landscaped area

1,150,777 SQ. FT.

831,701 sq. ft. Low Water Use Planting
consumes 7,070,038 gal/yr

119,972 sq. ft. Medium Water Use Planting
consumes 2,005,590 gal/yr

703,499 sq.ft. High water Use Planting
consumes 2,352,926 gal/yr

110,485 sq. ft. Recreation Area Planting
consumes 3,740,141 gal/yr

Thats a lot of water! But for whom?

**Much of the irrigated green space
at SLR is inaccessible to the public
both physically and visually**

WATER USE BY PLANTING TYPE



LOW WATER USE natives, mature trees, un-maintained



MEDIUM WATER USE irrigated grasses, meadow habitat, immature trees



HIGH WATER USE turf, non-native ornamentals

IRRIGATED BUT UNUSED

The majority of vegetated space at the SLRC is currently inaccessible to visitors



SURFACE TYPES

DON'T BREAK THE CYCLE
Supporting the natural cycle of water, air, and nutrients is key to preserving and improving environmental quality



Impervious Surface
paved walkways, hard surfaces, buildings



Water



Pervious Surface
vegetated, non-compacted soil

THE MEADOW



NATIVE PLANTS, MATURE TREES, AND TURF GRASS FILL THE POPULAR RECREATION SPACE KNOWN AS THE MEADOW. IT IS ONE OF FEW AREAS OF SLR CURRENTLY OPEN TO THE PUBLIC.

BIODIVERSITY

The variety of life in the Silver Lake Reservoir

WILDLIFE

Most of the animals that are observed at Silverlake Reservoir are bird species. This is particularly due to the fact that birds tend to flock near large open bodies of water. Many of the birds that have been observed are simply making a stop during their journey on the Pacific Flyway

Open water Wildlife:

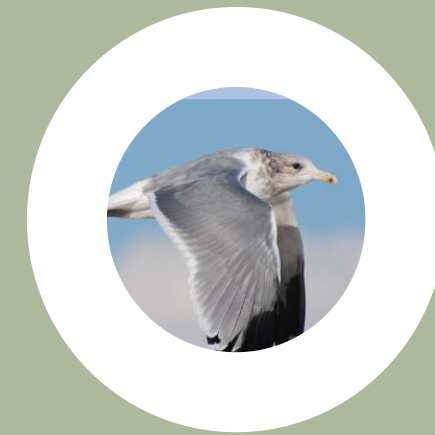
- Mallard, Ruddy Duck, California Gull, Northern Rough-winged Swallow, Cliff Swallow, Western Gull + Migratory Waterfowl.

Special Status Species:

- Canada Goose, Northern Pintail, Ring-Necked Duck, Allen's Hummingbird, Nuttall's Woodpecker, Long-Tailed Duck etc.

Land Mammals:

- Coyotes, Possums, Skunks, Bobcats



WILDLIFE BIRDS OF SLRC

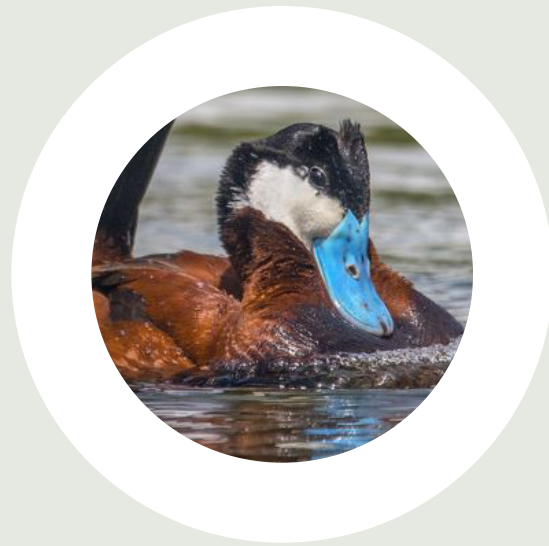
REGIONAL WILDLIFE CORRIDORS PACIFIC FLYWAY



Great Blue Heron

Ardea herodias

Common near open water and wetlands and utilizes the SLRC as nesting grounds.



Ruddy Duck

Oxyura jamaicensis

Utilizes the SLRC as nesting grounds.



House Finch

Haemorhous mexicanus

Common Urban Species that is usually found in or around trees within the area.

Pacific Flyway Route - One out of four major North American migration routes for birds that extends from Alaska to Mexico. The Pacific Flyway is significant because California wetlands provide habitat for many of these birds. Unfortunately, due to lack of resources, the SLRC is currently simply a stopping area for many of these birds as it does not provide basic needs such as food and shelter that is required during their journey.



WILDLIFE MAMMALS OF SLRC



Coyote
Canis latrans

Tend to travel from areas such as Griffith park. Have been spotted by residents near dumpsters and open areas.



Skunk
Mephitis mephitis

Can be seen out in the night time and can often be found nearby making them hard to miss with their release of musk.

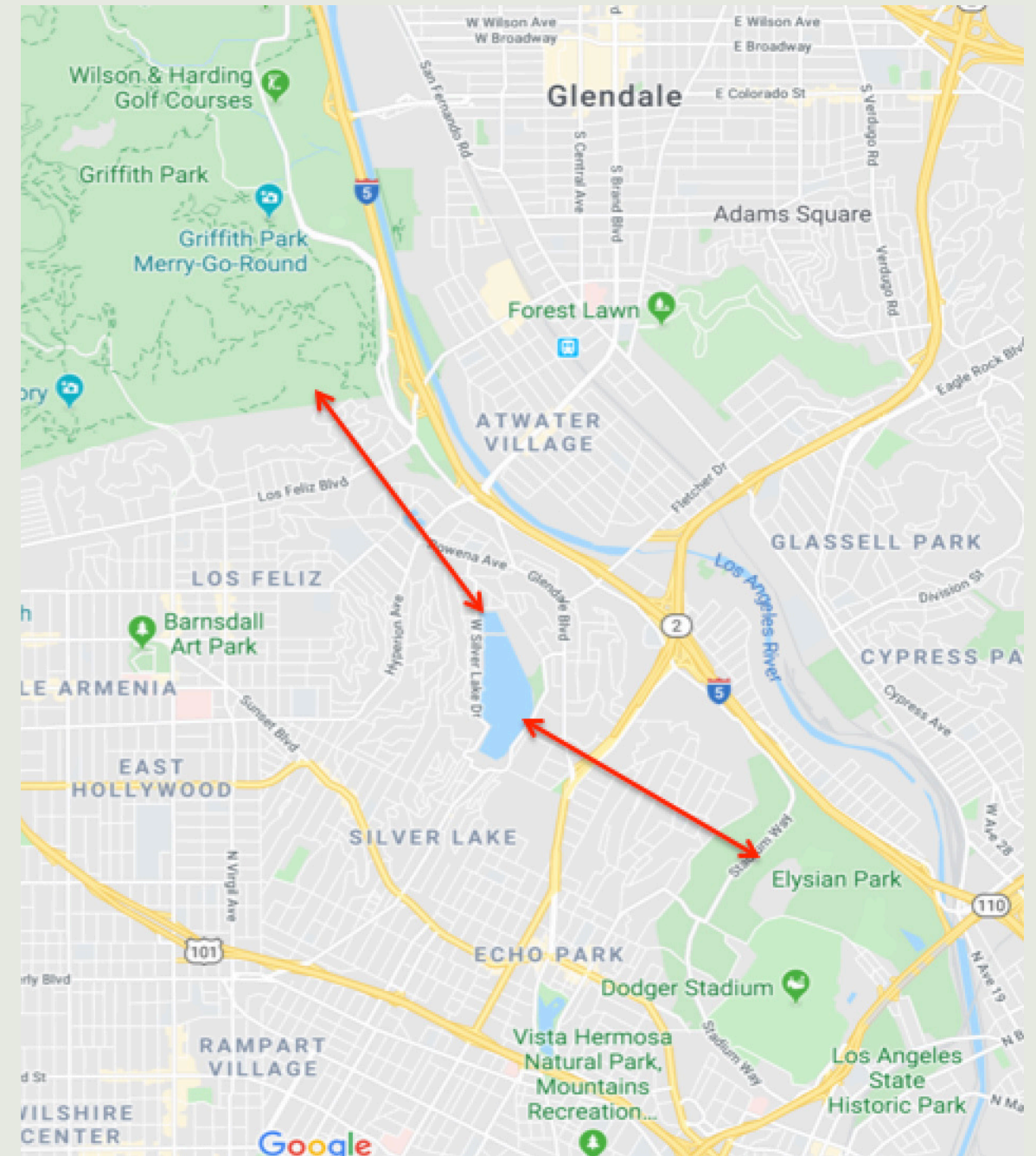


Bobcat
Lynx rufus

There have not been many Bobcat sightings near Silver Lake Reservoir but some residents have seen them usually in the same backyards.

Sights of small to medium sized mammals near the Silver lake Reservoir is not rare considering the fact that it is adjacent and easily connected to several wildlife corridors such as Elysian Park, Griffith Park, and the Los Angeles River. The least common mammal is the Bobcat but they have been studied extensively through out the years in order to keep them and residents safe. These corridors are significant travel areas for many other mammals that form part of the wildlife of the SLRC.

REGIONAL WILDLIFE CORRIDORS



BIODIVERSITY

The variety of life in the Silver Lake Reservoir

VEGETATION

There is a very scarce variety of tree species within the SLRC. However, there are two different species that dominate the majority of the area and they are divided into two communities along with other species that are included in each cluster.

The two communities are listed below:

- Eucalyptus Globulus:

Located on the east and west sides of the Ivanhoe and Silver Lake Reservoir. Some other tree species that form part of this community include Pines. Vegetation is significant in the SLRC because it also caters to different wildlife species. This Particular community of trees attracts wildlife such as the American Crow, Allen's Hummingbird, Northern Mockingbird, and Red Tailed Hawk.

- Eucalyptus Spp:

This Particular tree community is located in the Knoll and it also includes other tree species such as California Black Walnut, Pine, Pepper Tree, and Deodar Cedar. Just like the Eucalyptus Globulus community, this also invites several wildlife species such as Great Horned Owl, American Crow, California Ground Squirrel, and Mourning Dove.



- A - B.** The Silver Lake Recreation Center (A) and Dog Parks (B) are managed by the **Los Angeles Department Parks and Recreation**. Many amenities are offered to the local community within the recreation grounds. Activities include: a basketball court, children’s play areas, youth sports programs, and adult workshops.
- C - E.** The **Los Angeles Department of Water and Power** utilizes buildings and access points (C) located at various locations along the circumference of the site. It is unclear whether some structures are still in use (D). Office buildings and other primary activity occurs in the cluster of buildings near the Eastern bridge separating the Ivanhoe and Silver Lake Reservoirs (E). Most of these buildings will be removed
- F.** **The Neighborhood Nursery School** is a licensed, non-profit, Pre-K that was established in 1952. Programs are based on experiential learning in topics such as: painting, gardening, story-telling, and nature.

EXISTING STRUCTURES



A



C



F



B



D

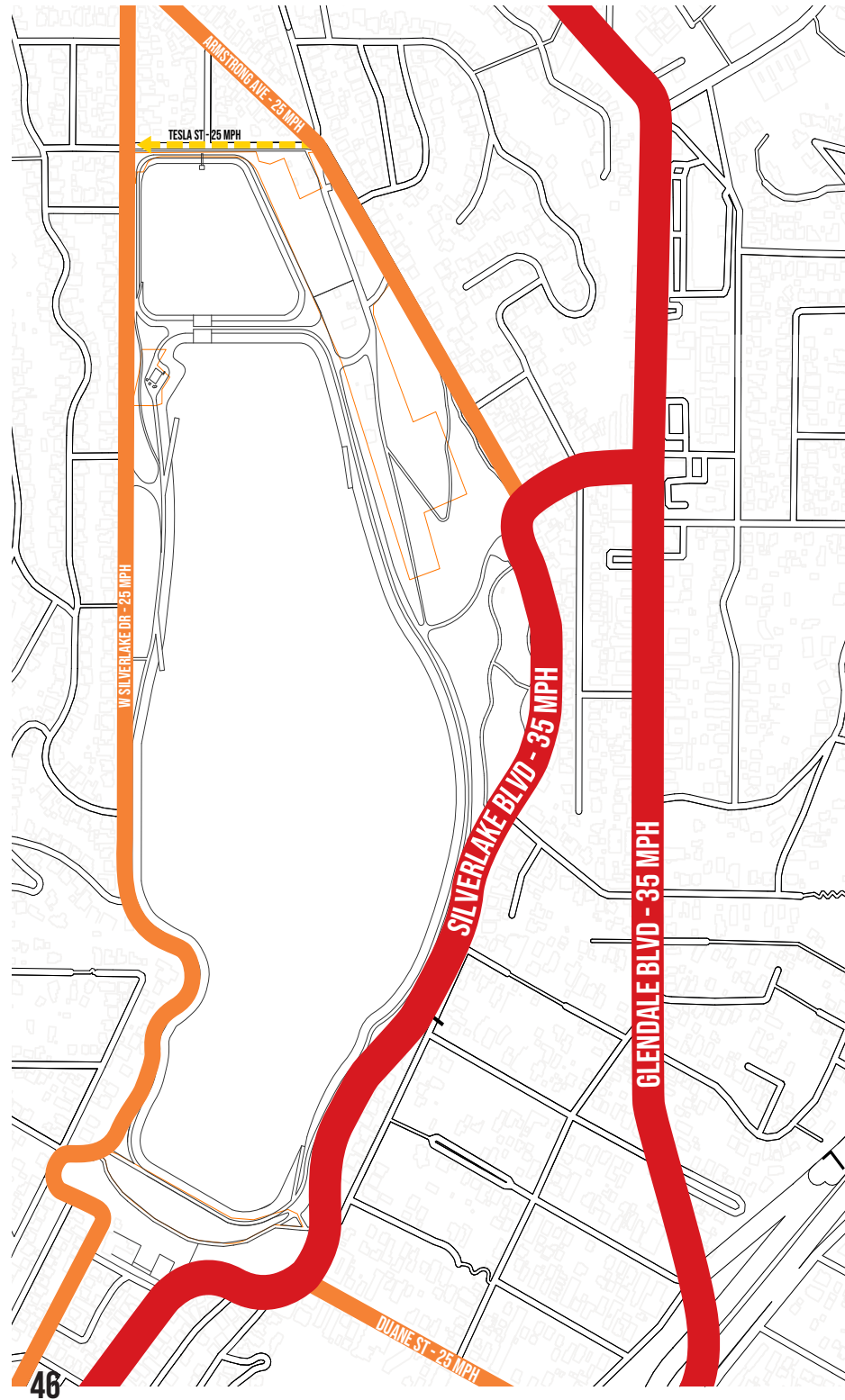


E






TRANSPORTATION CIRCULATION

Vehicular Circulation

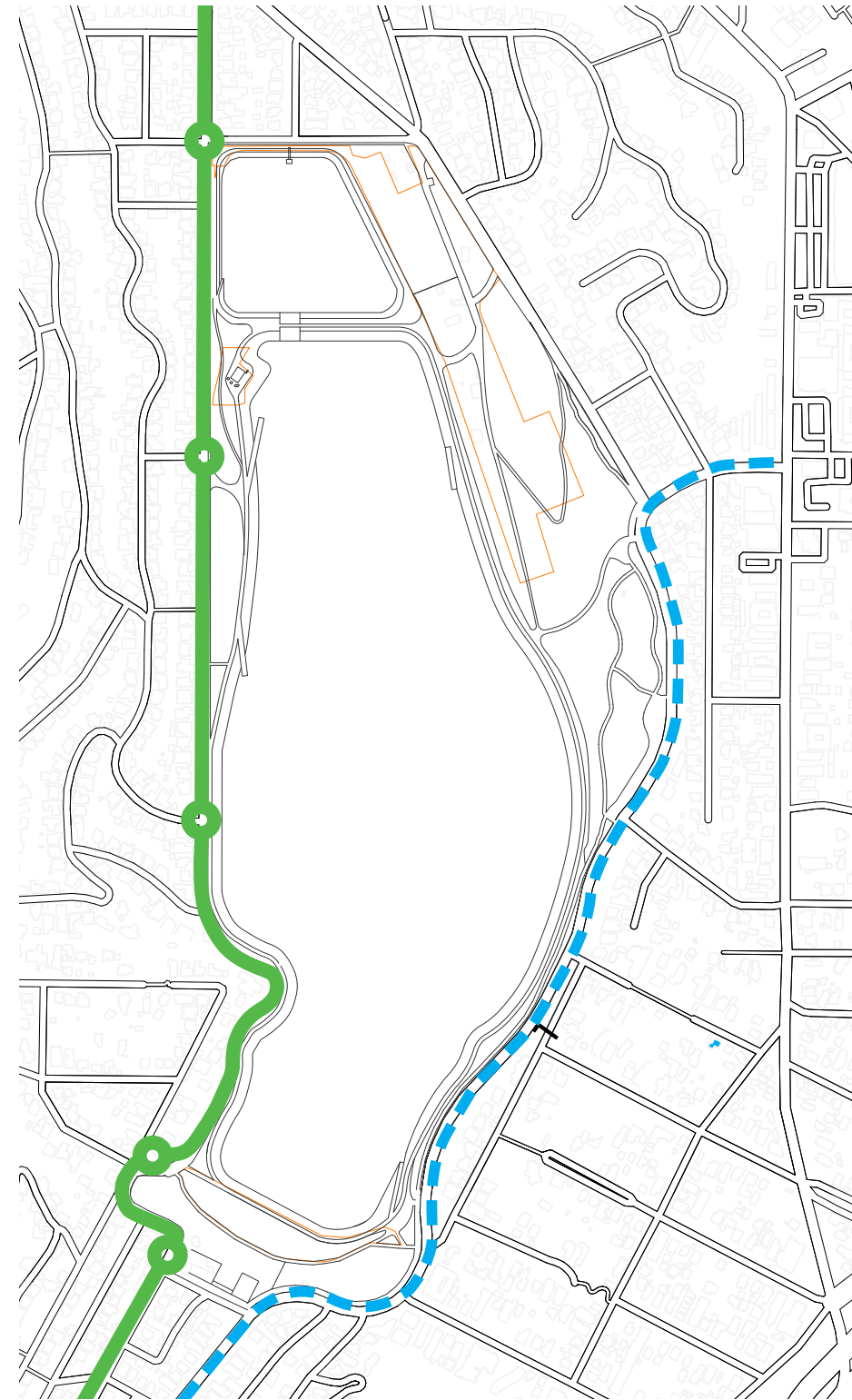


Street Classification




-  Avenue II
-  Collector
-  Local One-Way



Bus and Bicycle Circulation



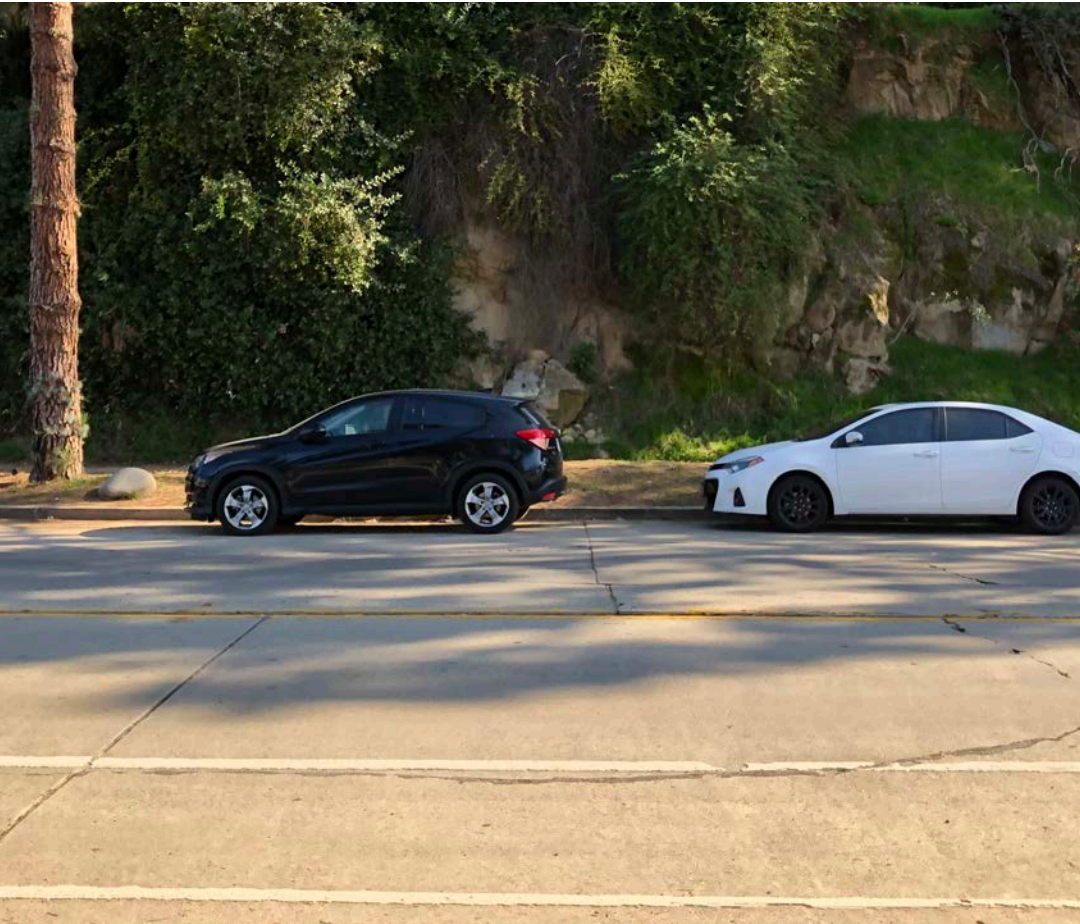
Transit Type

-  Metro Route 201
-  Bus Stop
-  Two-Way Bike Lane



VEHICULAR

Silverlake Blvd is considered a scenic Avenue II and merges into Glendale Blvd east of the reservoir, providing the primary circulation to the park. W Silverlake Dr is designated a scenic collector, and borders the west side of the reservoir.



SILVERLAKE BLVD

PUBLIC TRANSIT

Metro Route 201 connects from the Wilshire-Vermont station to Glendale, and it runs along W Silverlake Dr. There are 5 stops across the west side of the park.



BUS STOP ON W SILVERLAKE DR

BIKING

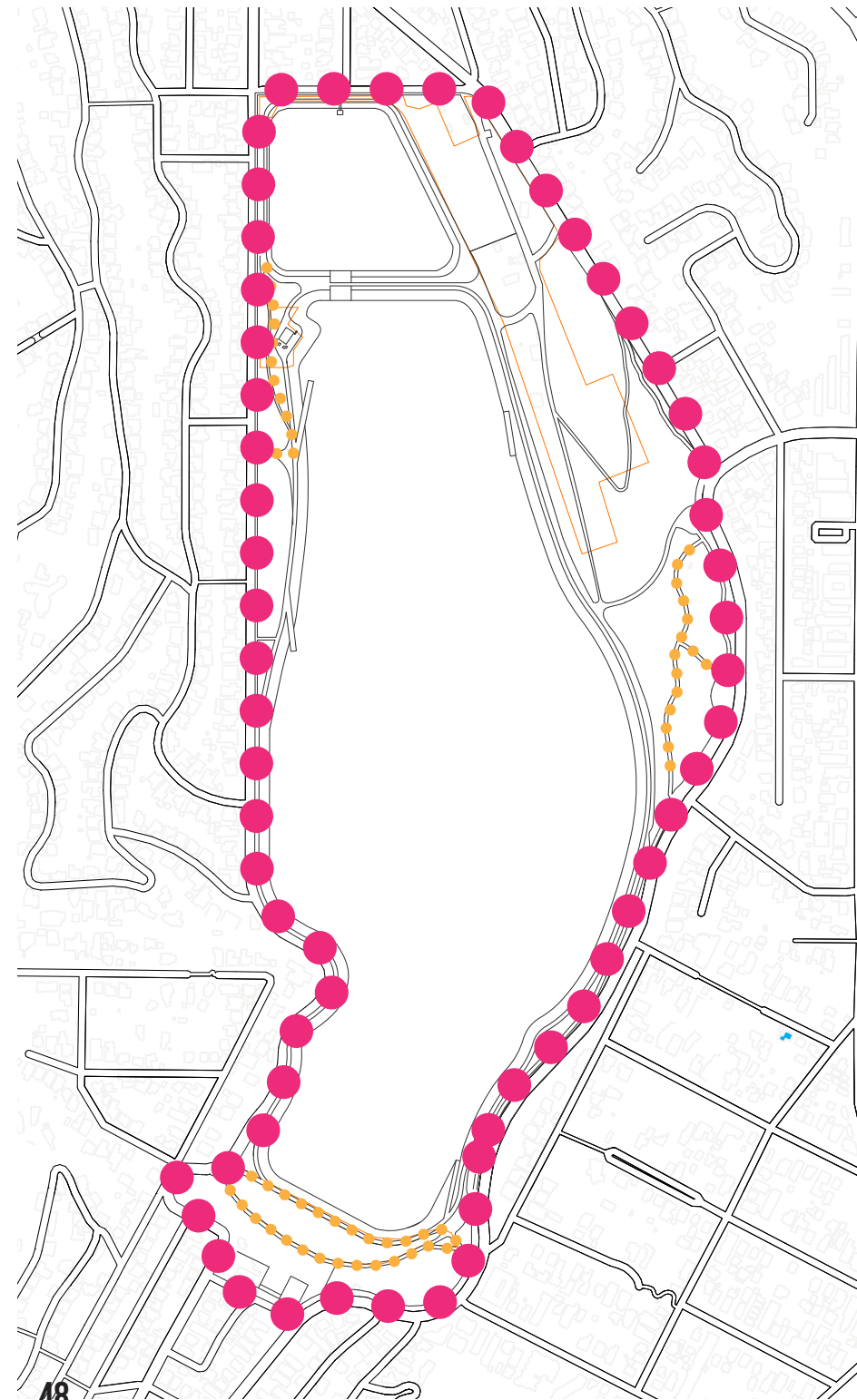
There are unprotected bike lanes on either side of Silverlake Blvd. The bike lanes follow the edge of the reservoir until the Armstrong Ave intersection, where it continues along Silverlake Blvd



BIKE LANE ON SILVERLAKE BLVD

PEDESTRIAN CIRCULATION

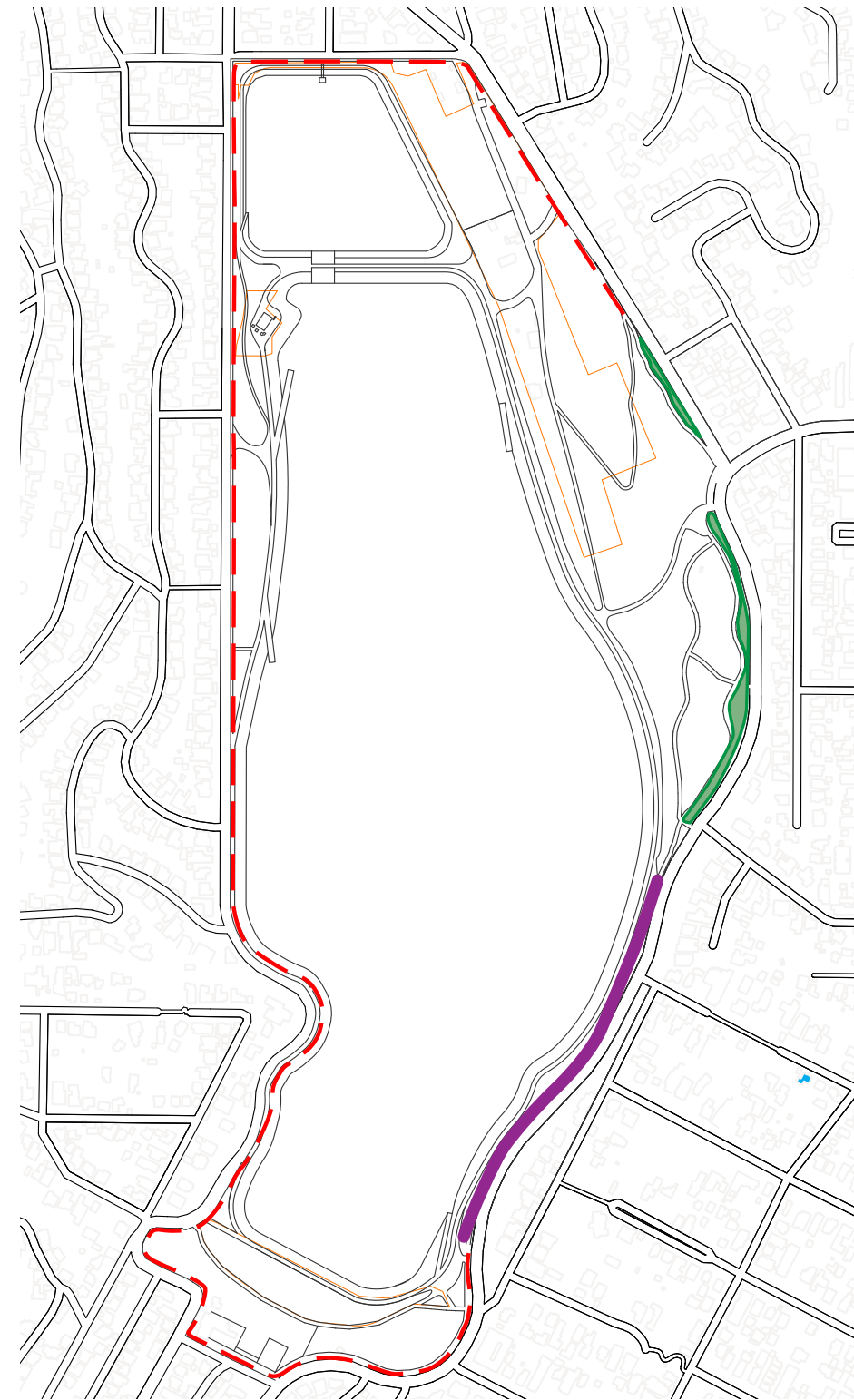
Circulation



- ● ● Primary
- ● ● Secondary



Buffers and Barriers

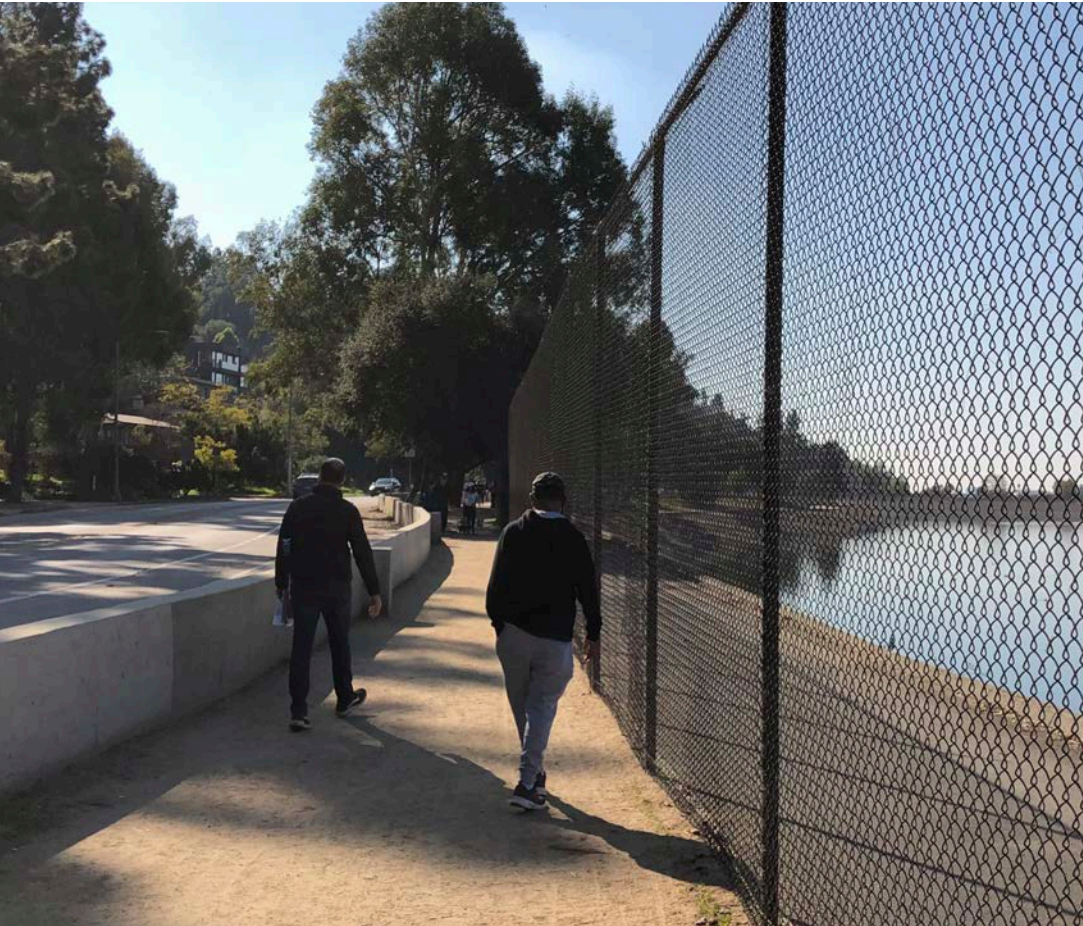


- Concrete Half-Wall
- Vegetative Buffer
- - - Little/No Buffer



CONCRETE HALF-WALL

A stretch of Silverlake Blvd along the southeast side of the reservoir has a concrete half wall running between the decomposed granite path and the road. There is no additional vegetation or elevation difference.



SILVERLAKE BLVD

VEGETATIVE BUFFERS

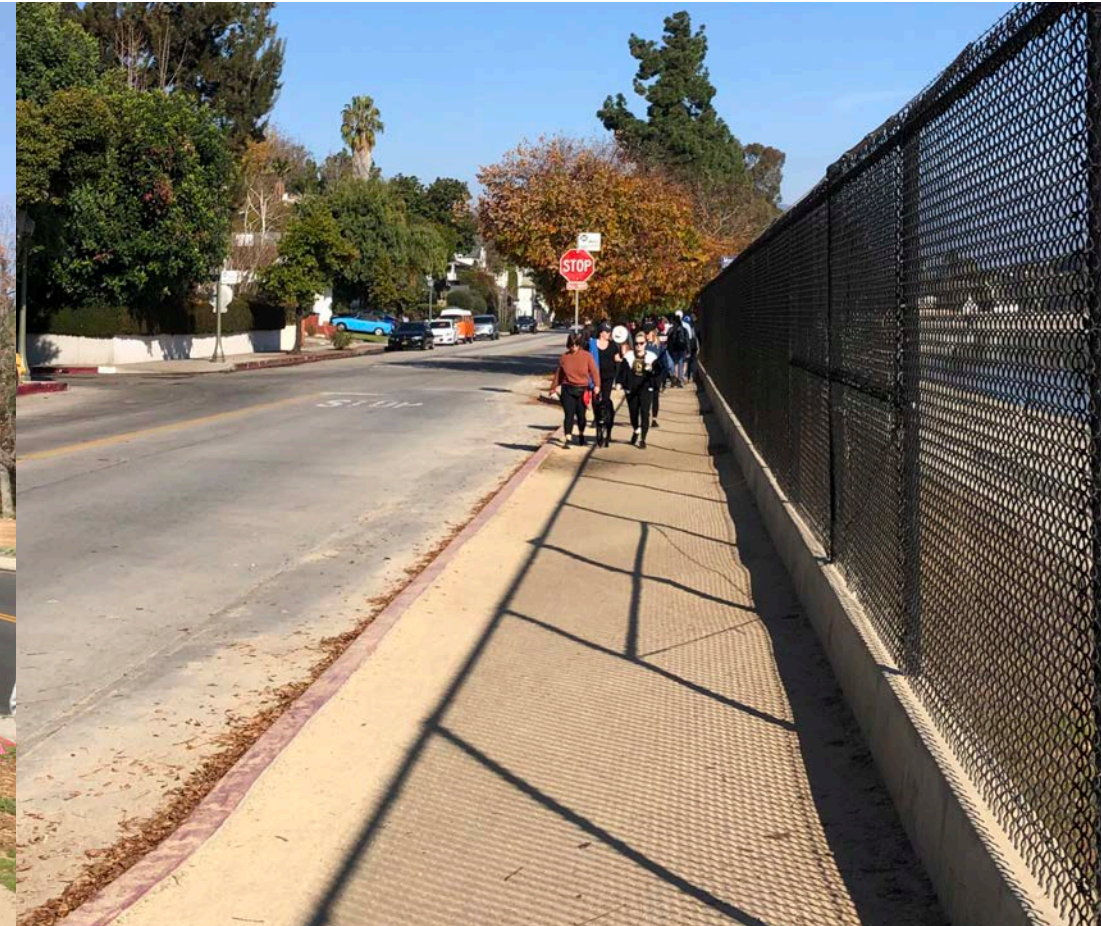
Around the meadow on Silverlake Blvd and part of Armstrong Ave, there are substantial vegetative buffers separating the sidewalk and road. Along Armstrong Ave, the sidewalk is elevated above the road level.



ARMSTRONG AVE

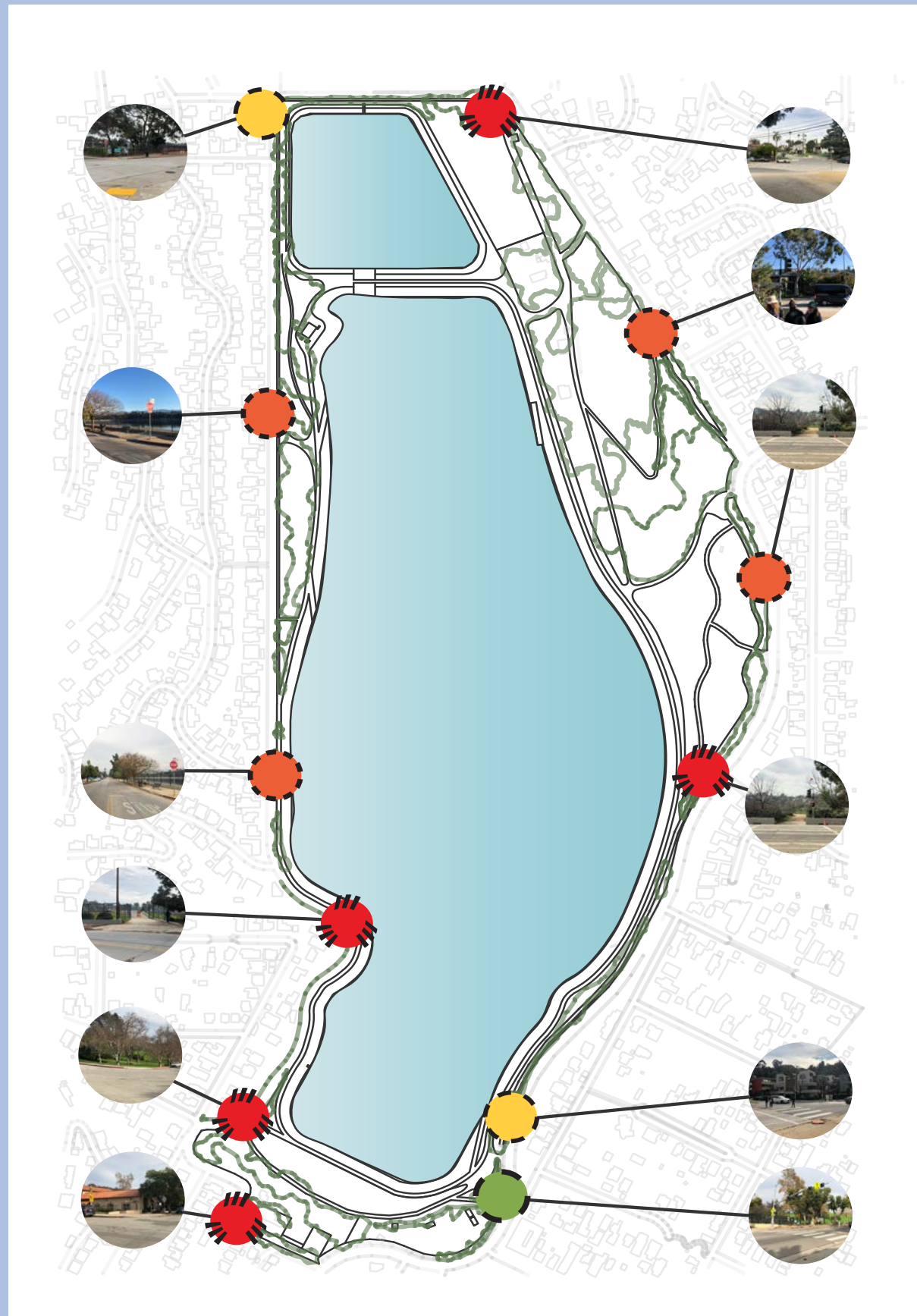
LITTLE/NO BUFFER

Large parts of the loop around the reservoir feature little to no buffer between pedestrians and automobiles. Some stretches of W Silverlake Dr have immature street trees, but others are completely baren up to the curb.



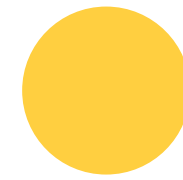
W SILVERLAKE DR

PEDESTRIAN ACCESS



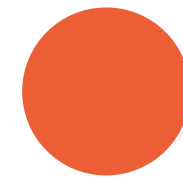
HIGH SAFETY

Clearly marked pedestrian cross walks with pedestrian right of way signals.



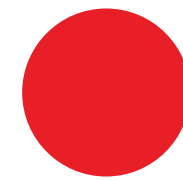
MEDIUM SAFETY

Low automobile traffic and marked pedestrian crosswalks.



LOW SAFETY

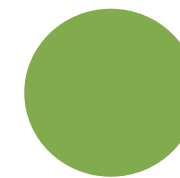
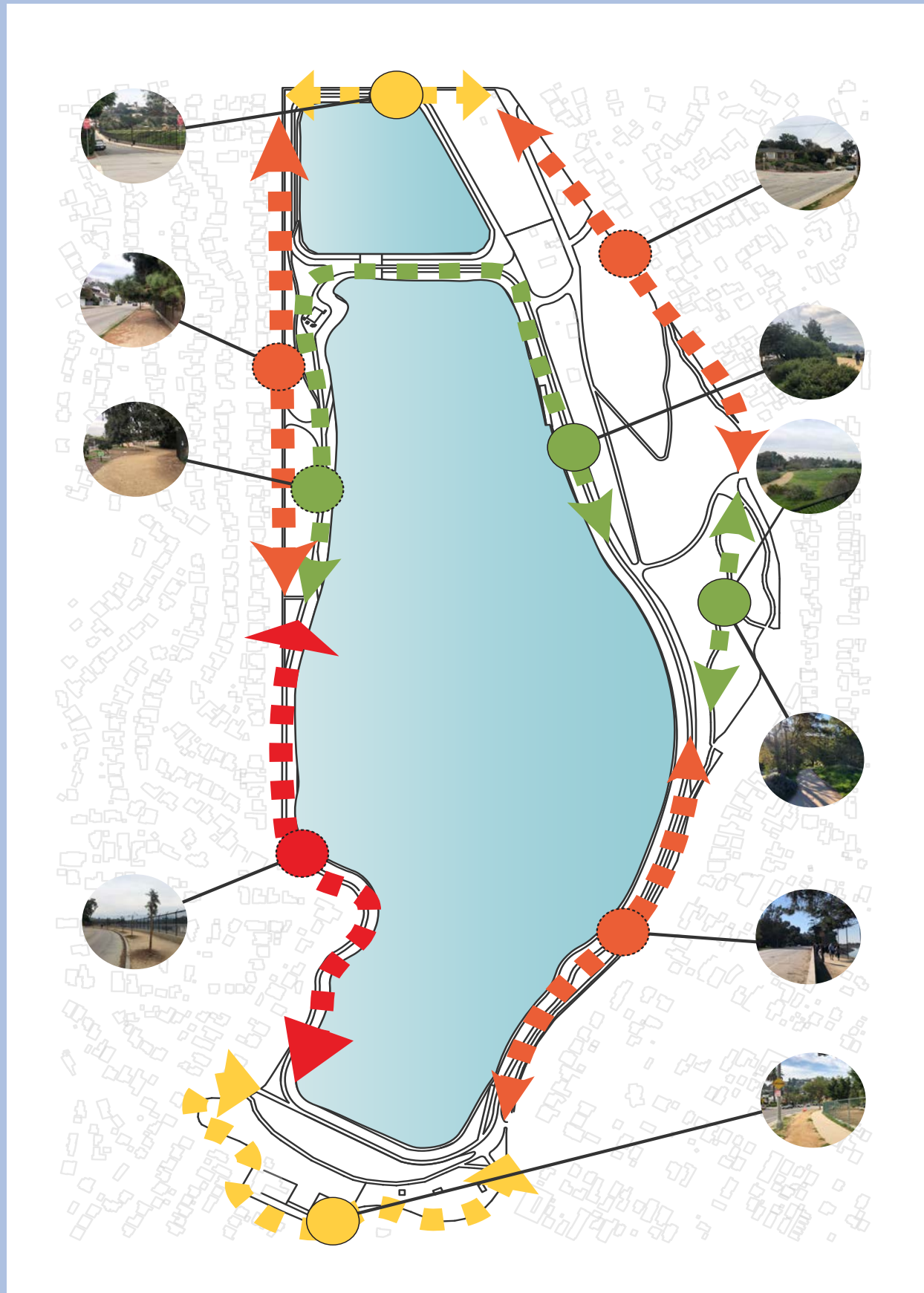
Medium automobile traffic with unmarked pedestrian crossings.



DANGEROUS

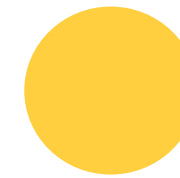
High automobile traffic and unmarked pedestrian crossings.

PEDESTRIAN SAFETY



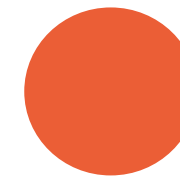
HIGH SAFETY

Boarders of vegetation on both sides of pedestrian paths and right of way signals.



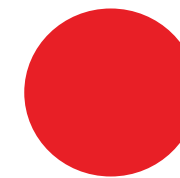
MEDIUM SAFETY

Wide pedestrian paths next to one way or slow automobile lanes.



LOW SAFETY

Pedestrian paths protected from fast and crowded automobile lane by 3' concrete border..

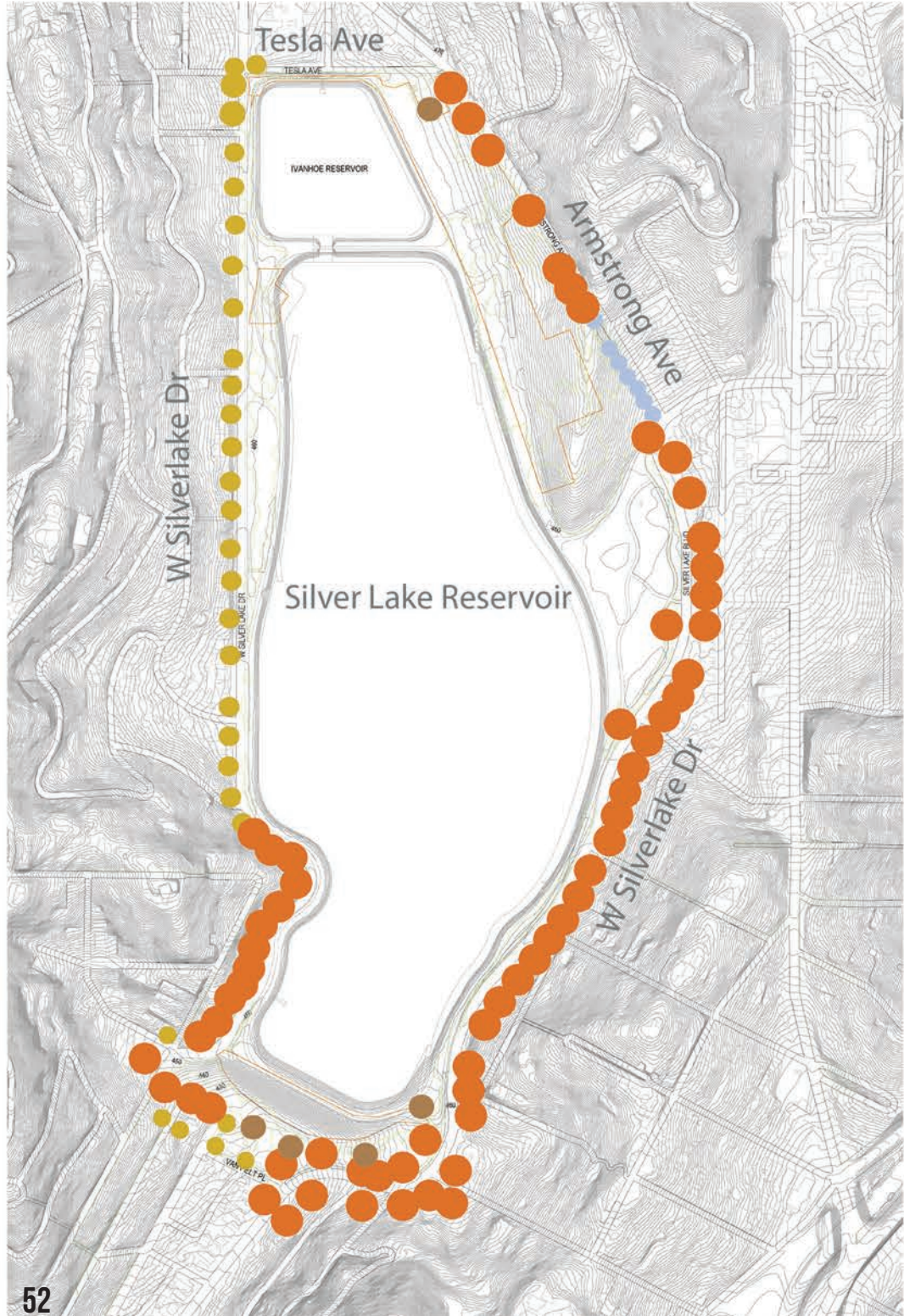


DANGEROUS

Pedestrian path had minimal protection from automobile traffic.

LIGHTING

There are different types of lights used in the park and surrounding areas/ streets at night. This factor plays a big role in the safety of the visitors and surrounding residents.



Tall street light pole
approx 70-90W



Residential area light pole
approx. 35W



Inside the park small light
pole
approx. 70 W

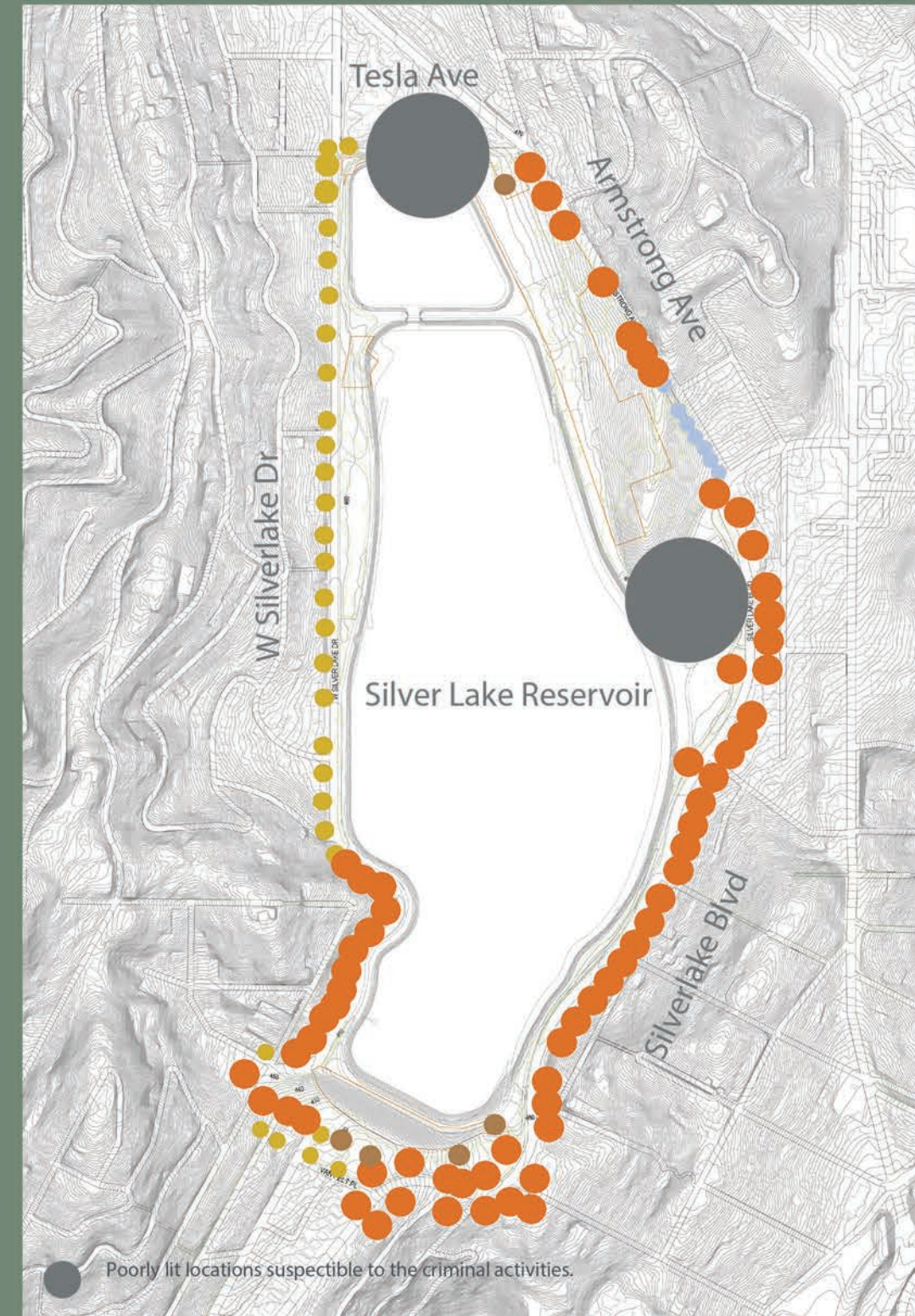


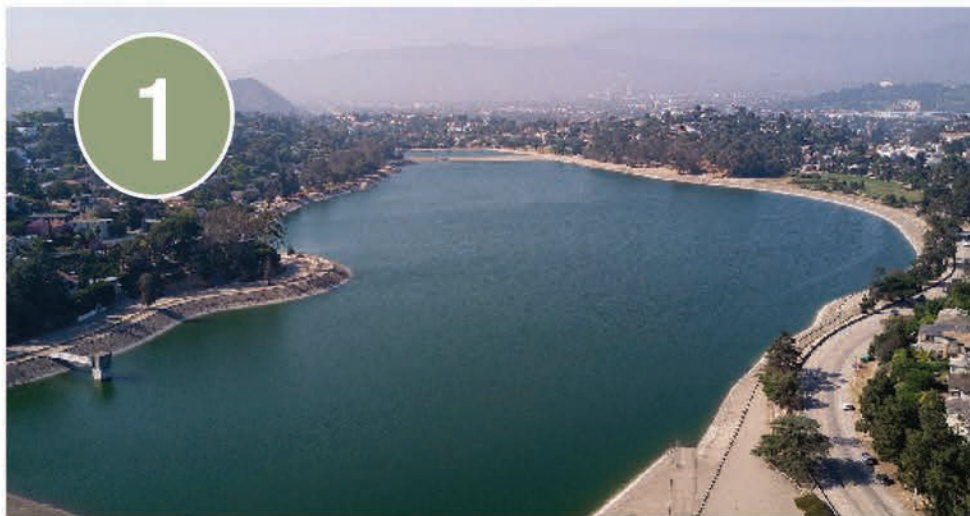
Inside the park tall light LED
approx. 150W



SAFETY

Silver Lake Reservoir is located in the heart of Silver Lake district, where most of the lights are placed and owned around the park by the city of Los Angeles. Tesla street that borders with the Reservoir on the North side does not have any lighting making that part dangerous for visitors after sunset. Also the meadow area on the East side of the park by the Silverlake Blvd has no lights and is a potential location for criminal activities.





**Silver Lake Reservoir - Built in 1906
HCM 1997**

The City of Los Angeles has designated roughly 1,100 historic places as Historic Cultural Monuments. “An Historic-Cultural Monument (HCM) may be a building, site, structure, or resource — including, trees and plant life — recognized for its historic significance; an HCM can identify with important events; notable figures of national, state, or local importance; and/or distinctive architectural styles.” - (Los Angeles City Planning)

The Silver Lake and Ivanhoe Reservoir is itself a Historic Cultural Landmark, it was constructed in 1906 and named an HCM in the year of 1997.



**Neutra DVL Research House - Built in 1950
HCM - 1997**

The Silver Lake region has a long history of attracting creative minded individuals. It was a breeding ground for mid century architects, including the likes of Richard Neutra, Rudolf Schindler, Gregory Ain, John Lautner, and Frank Lloyd Wright just to name a few.

Most notably Neutra’s VDL Research House, built in 1950 and named after Neutra’s benefactor the Dutch philanthropist Dr CH Van Der Leeuw. Over the course of thirty years, hundreds of buildings were designed out of VDL, including the first modern school, numerous distinguished residences,



**Neutra Office Building - Built in 1950
HCM - 2000**

HISTORICAL LANDMARKS

and important public buildings. VDL is currently under the stewardship of the College of Environmental Design (ENV) and Department of Architecture (CPP ARC) at Cal Poly Pomona. With their primary goal of using the space to further educate student and faculty, and welcoming visitors.

With the rich architectural history surrounding the Silver Lake Reservoir, the re-design should ideally incorporate a note of respect to its built environment.



Wilson House - Built in 1938 HCM 2001
Architect- R.M. Schindler



John R. Hunt House - Built in 1930
HCM - 2001



Tierman House - Built in 1940, HCM 1974
Architect- Gregory Ain



O'Neill Duplex - Built in 1953, HMC 2007
Architect - Rodney Walker

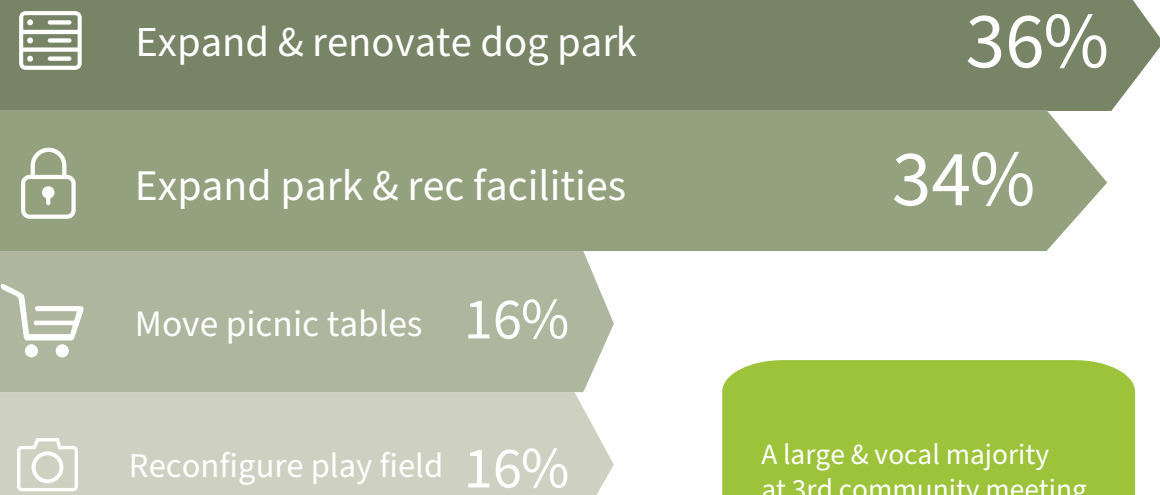


Edward A "Tink" Adams House - Built in 1966, HCM - 1997

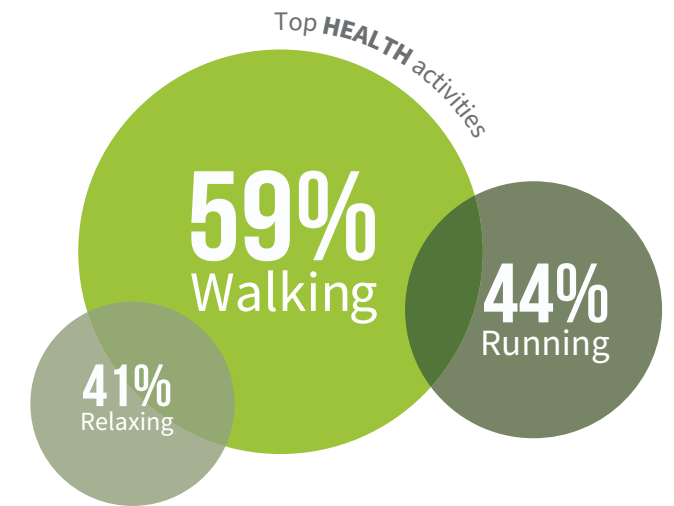
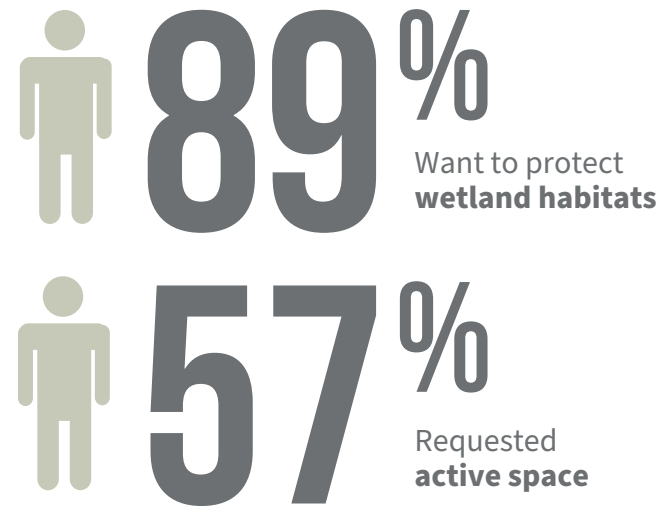
COMMUNITY INPUT

Data based on survey responses of 2990 area residents to survey created & distributed by City of Los Angeles Bureau of Engineering

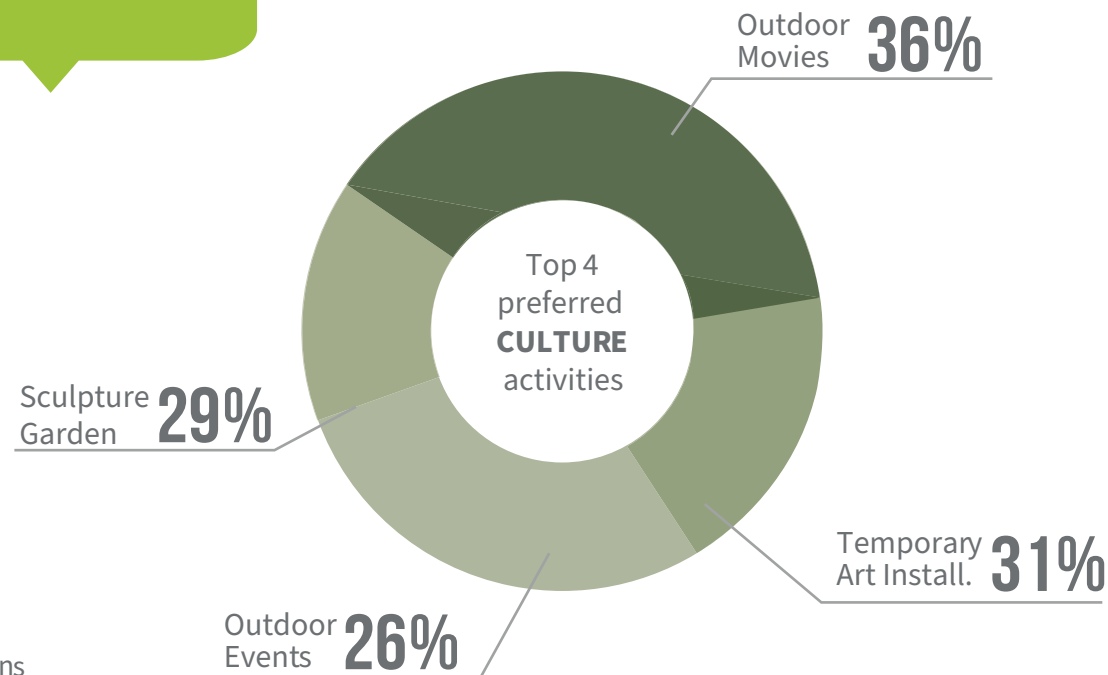
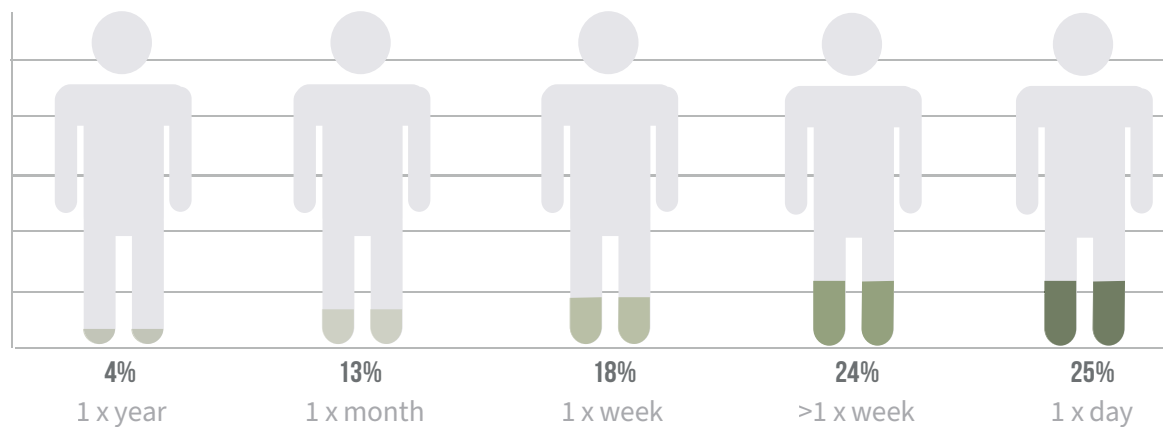
TOP REQUESTED UPGRADES



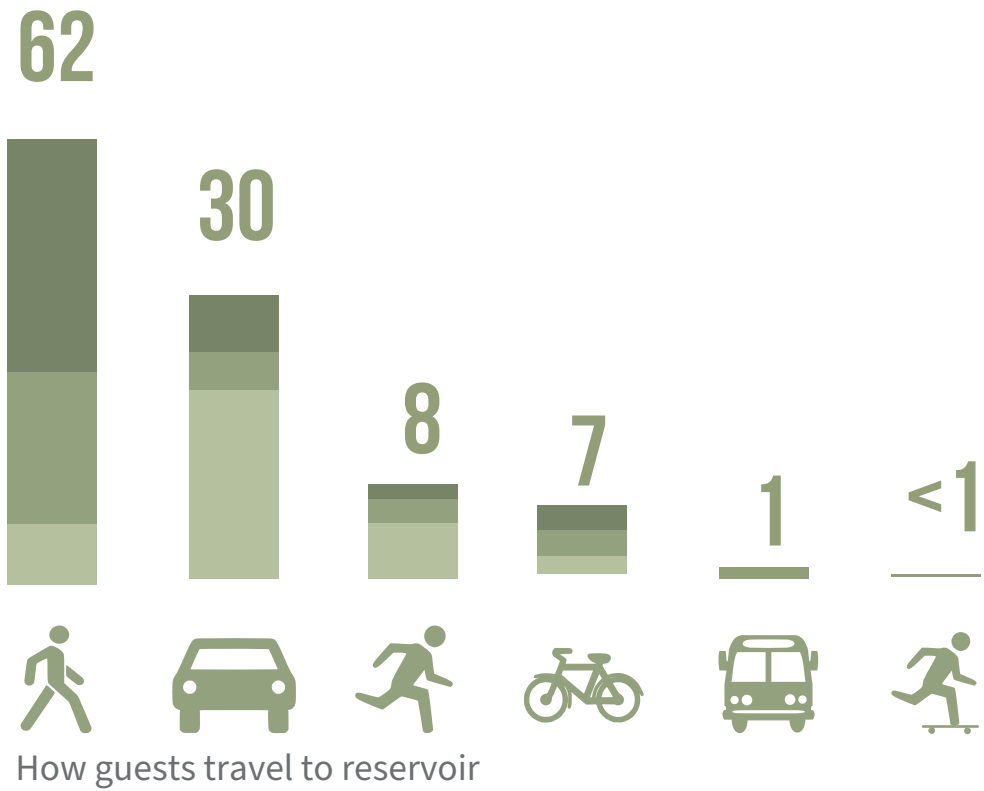
A large & vocal majority at 3rd community meeting **STRONGLY OPPOSED** cafes or commercial venues



How often do you visit SLRC?



*statistical errors are present in data - participants likely skipped and/or provided repeat submissions

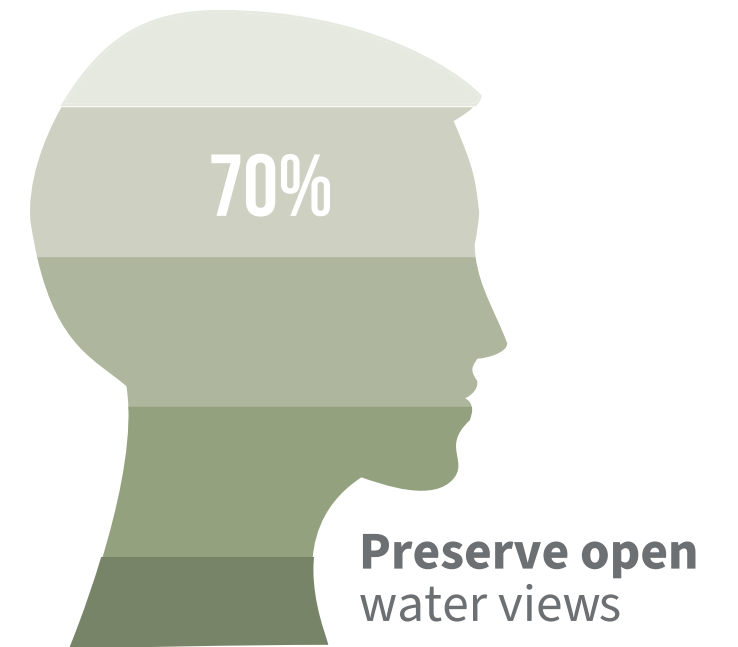
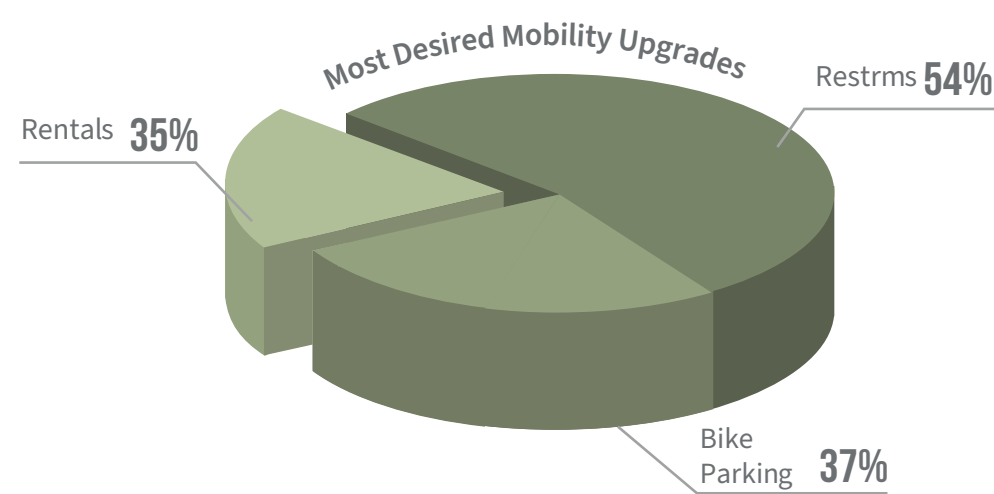
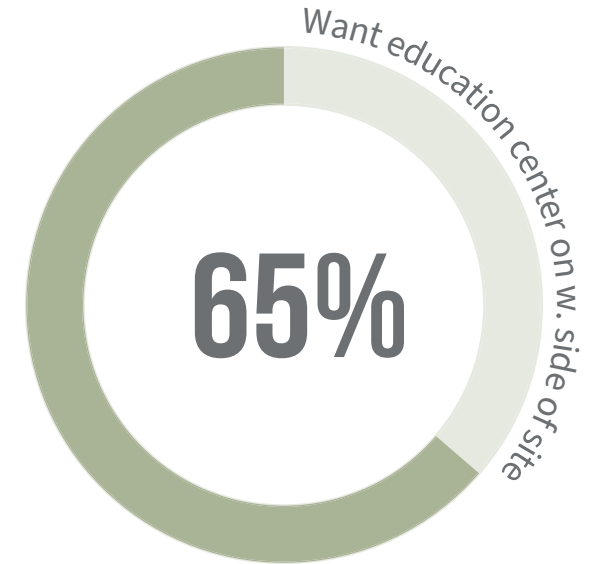


● ● ● ● ● ● ● ● ● ●

58% OBJECT TO SWIMMING



NO BOATING
Human-powered is specified in survey but meeting attendees indicated strong opposition to all



NEIGHBORHOOD ADVOCACY

A SHORT HISTORY OF SILVER LAKE RESERVOIR'S 4 ADVOCACY GROUPS

Reservoir decommissioned by DWP	1988	SILVER LAKE RESERVOIRS CONSERVANCY	
	2006		Formed to oppose the construction of a water filtration plant. Helps develop the 2000 master plan and meadow. Over time, involved with numerous projects including walking paths, native garden and other improvements.
Reservoir drained	2015	SWIM SILVER LAKE	Formed to open up access to Ivanhoe Reservoir and create center for water recreation. Ambitious and well- connected group ruffles feathers in neighborhood and stokes concerns about development. Although unsuccessful with swim center, lays groundwork for future advocacy.
	2016	REFILL SILVER LAKE NOW	Formed after reservoir drained in 2015 out of concern that ideas for alternative uses for the empty space might begin to proliferate.
Reservoir refilled	2017	SILVER LAKE FORWARD + SILVER LAKE NOW	Groups change names. SSL becomes SLF, RSLN becomes SLN. Both groups have differing ideas about future for newly-refilled reservoir. SLF has ambitious plans to create a destination while SLN wants modest changes.
City Bureau of Engineering takes over from DWP	2018	SILVER LAKE WILDLIFE SANCTUARY	Forms in response to SLF and SLN. Opposes any new development around reservoir at all. Claims wildlife as primary factor, but without data, and opposes habitat restoration or wetlands creation. Charges fly of NIMBYism cloaked behind wildlife concerns. Circulates petition on change.org with 4,806 signatures to date.
Hargreaves chosen as Landscape Architect	2019	SILVER LAKE RESERVOIRS CONSERVANCY + SILVER LAKE FORWARD + SILVER LAKE NOW + SILVER LAKE WILDLIFE SANCTUARY	All 4 advocacy groups invited to take part in city's stakeholder working group with Hargreaves. SLF advocates for bolder plans, SLWS looks to limit development wherever possible, SLRC and SLN fall somewhere in between.
	2020	SILVER LAKE RESERVOIRS CONSERVANCY + SILVER LAKE FORWARD + SILVER LAKE NOW	3 groups that advocate for some kind of change join together to create a survey guide based on shared values for the LA City survey and encourage community to attend community workshop meetings. Together, they agree on opening up reservoir to wetlands and habitat creation, terraced slopes, green space, floating islands and other improvements, but continue to disagree on extent of development.



SILVER LAKE RESERVOIR: IN THE NEWS

DEBATE OVER WHAT TO DO ABOUT THE SILVER LAKE RESERVOIR

“they’re going to be adding shade and improving the dog park and creating new access to the waterfront. And those are all fantastic things. So I don’t think it requires all this controversy.”



KCRW DECEMBER 2019

THREE DESIGN APPROACHES CONSIDERED FOR THE SILVER LAKE RESERVOIR MASTER PLAN

The City of Los Angeles is taking steps to reuse the decommissioned reservoir as public open space. A presentation given at a community meeting on November 2 offers a look at three design approaches for that plan.



URBANIZE LA NOVEMBER 2019

Congrats
MHS & THHS
Senators!

Los Feliz Ledger

Vol. 3, No. 12 Serving the Greater Los Feliz, Silver Lake & Hollywood Hills Area | Distribution 34,500 June 2008

Three Years Later: Group's Park Plan Nearly Complete

By Rachel Heller
Ledger Contributing Writer

GRIFFITH PARK—A milestone in Griffith Park's aerial tramway? Multi-story parking structure?

Three years after such controversial ideas were proposed in a city-commissioned new master plan for Griffith Park, a working group of local residents and park advocates are in the last stages of finalizing a streamlined master plan they believe would better guide and govern the park over the next 25 years.

Meeting monthly since July 2005, the Griffith Park Master Plan Working Group is now only left with finalizing their plan's introduction and appendices before handing their work back to the city's Dept. of Recreation and Parks for review.

"We wanted to write a manuscript that could be submitted and read very simply," said working group member and Honorary Mayor of Griffith Park Louis Alonzo. "We're trying to present Griffith Park for present use and future use."

The city recently allocated \$75,000 to hire an overall consultant to edit and format the revised plan, and Griffith Park superintendent Mackin White, who has co-chaired the working group's meetings with Dept. of Recreation and Parks assistant general manager Vicki Israel for the past year.

See Master Plan page 24



SUNNERS ON ITS WAY The former family, from Los Angeles, came off recently at the Mulholland Freeway. Temperatures have ranged from near record breaking heat to downright "cold" for spring. At least more consistent temps are expected after summer arrives June 2008.

Silver Lake Reservoir Refilled

By Kimberly Gomez
Ledger Contributing Writer

SILVER LAKE—The Los Angeles Department of Water and Power (DWP) began refilling Silver Lake Reservoir last month.

Los Angeles City Council President Gene Burnett, DWP Council member Tom LaBonge, DWP General Manager David Nishi and community members were on hand May 16 as the valves opened and the first water rushed into the empty reservoir.

The DWP drained the Silver Lake Reservoir in January after discovering bacteria, which forms when bacteria—which retain naturally in ground water—combines with chlorine and sunlight. When water allowed levels higher than bacteria's safe limit, officials decided to drain and clean the reservoir. Bacteria is a known carcinogen.

Now drinking water will be treated with chlorine after it leaves the reservoir, officials said. This way, the water will not be exposed to sunlight during chlorination eliminating the possibility of a microcystin.

LaBonge made a couple of guest appearances during the draining of the empty reservoir. Workers additionally repaired some valves. EPWP officials also determined an major draining would be necessary.

At 661 acres, the Silver Lake Reservoir holds 701 million gallons of water and serves about 600,000 people in central, downtown and north Los Angeles and the Woodland area.

Missing Herons Renew Meadow Debate

By Catherine Wiley, Ledger Contributing Writer

SILVER LAKE—After eventually charged input from a dozen stakeholders, one motion presented by the Silver Lake Neighborhood Council's Friends of Silver Lake Animals Committee about the future of the grass meadow is set at the Silver Lake reservoir this spring was added at the May 7th general board meeting for procedural reasons.

According to SLNC, the motion—which asks the city to maintain the lawn's existing size and restore the condition of the nearby aging meadow grass—was incorrectly written, not passed to the public and contained inaccuracies.



Previously, the Audubon Society has maintained the site. According to Gary Adams, executive director of Los Angeles Audubon, the future of the meadow is not in the

See Meadow page 8

Self Discovery in Black and White

LACC Photographic Student Work Exhibited

By Kathy A. McDonald, Ledger Contributing Writer

LOS ANGELES—"Viewing (L) S" at the Gallery at the Creative Center for Photography at Sunset Boulevard's Freestyle Photographic Supplies, features works by emerging photographers including several Los Angeles City College (LACC) students—and one whose life has been transformed by art.

"As far as you'll go into the work that takes time and devotion," said Los Feliz resident and LACC stu-



LACC student Yanni Li's "Young Woman in a Laundry Room" from the recent "Viewing (L) S"

See Photography page 8

THE SILVER LAKE RESERVOIR IS LOOKING A LITTLE GREEN, BUT LADWP SAYS IT'S FINE

LADWP says it is monitoring the reservoir and that data collected from water-quality testing did not indicate "unfavorable water quality such as an algae bloom."



THE SILVER LAKE DROUGHT IS OVER: RESERVOIR WILL FINALLY BE REFILLED

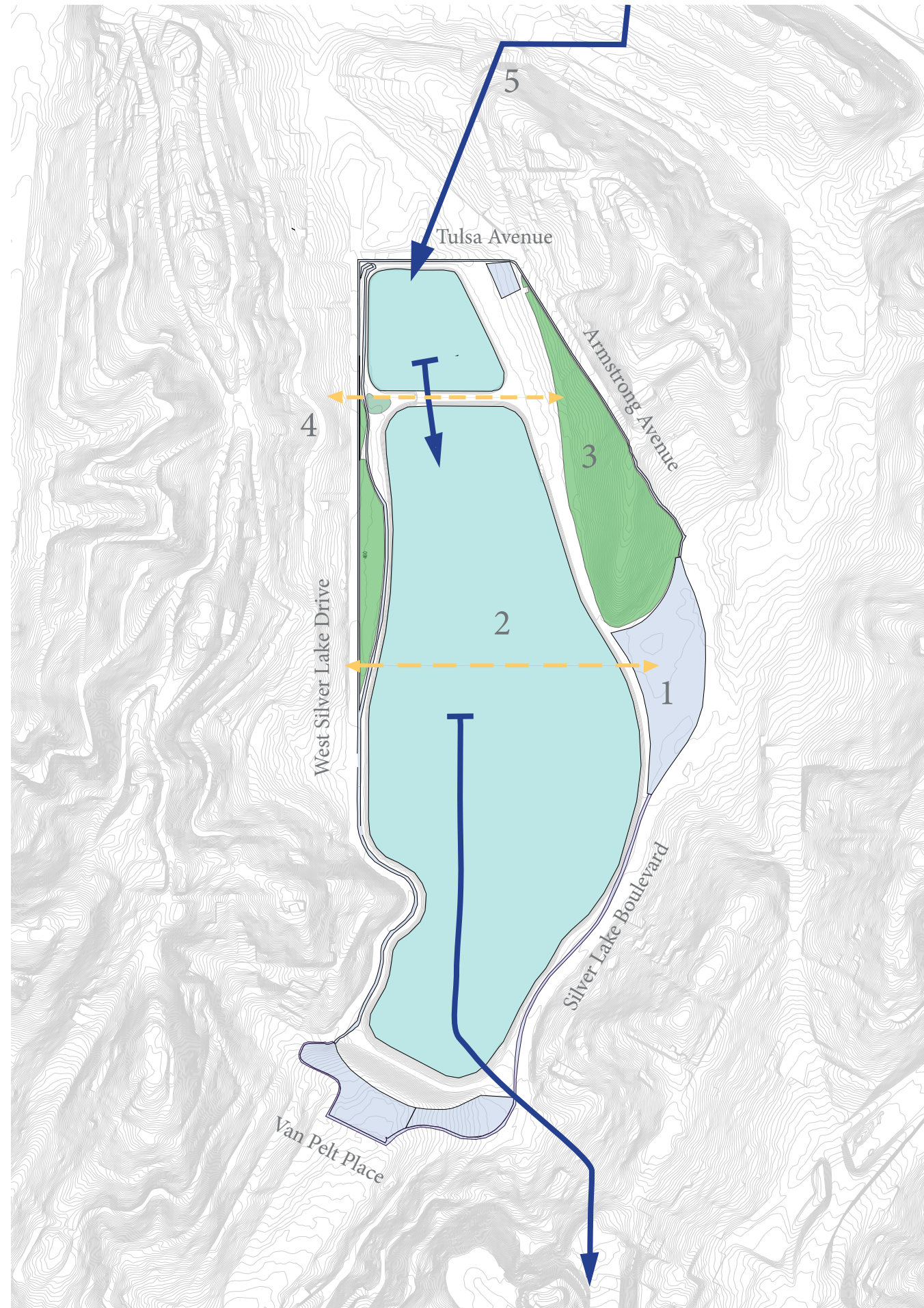
"With the above-average snowpack, we have a surplus of water in the L.A. Aqueduct system and with it the opportunity to refill Silver Lake Reservoir ahead of schedule"



LA TIMES APRIL 2018

LA TIMES MARCH 2016

OPPORTUNITIES



LEGEND



Existing Amenities



Silver Lake Reservoir



Green Space



Proposed Mid-Lake Crossing



Legacy Pipeline System



1

COMMUNITY

Strong community involvement provides existing data on what types of amenities already appeal to the neighborhood.

2

WATER

Capturing and cleaning stormwater will reduce first flush and improve water quality in the Los Angeles River and Ballona Creek.

3

NATURE

There is a real opportunity to enhance the green space surrounding the reservoir. Determining which of the existing trees should be removed and identifying appropriate replacement species would be a great start in creating an inviting and continuing habitat for the resident wildlife.

4

MID-LAKE CROSSING

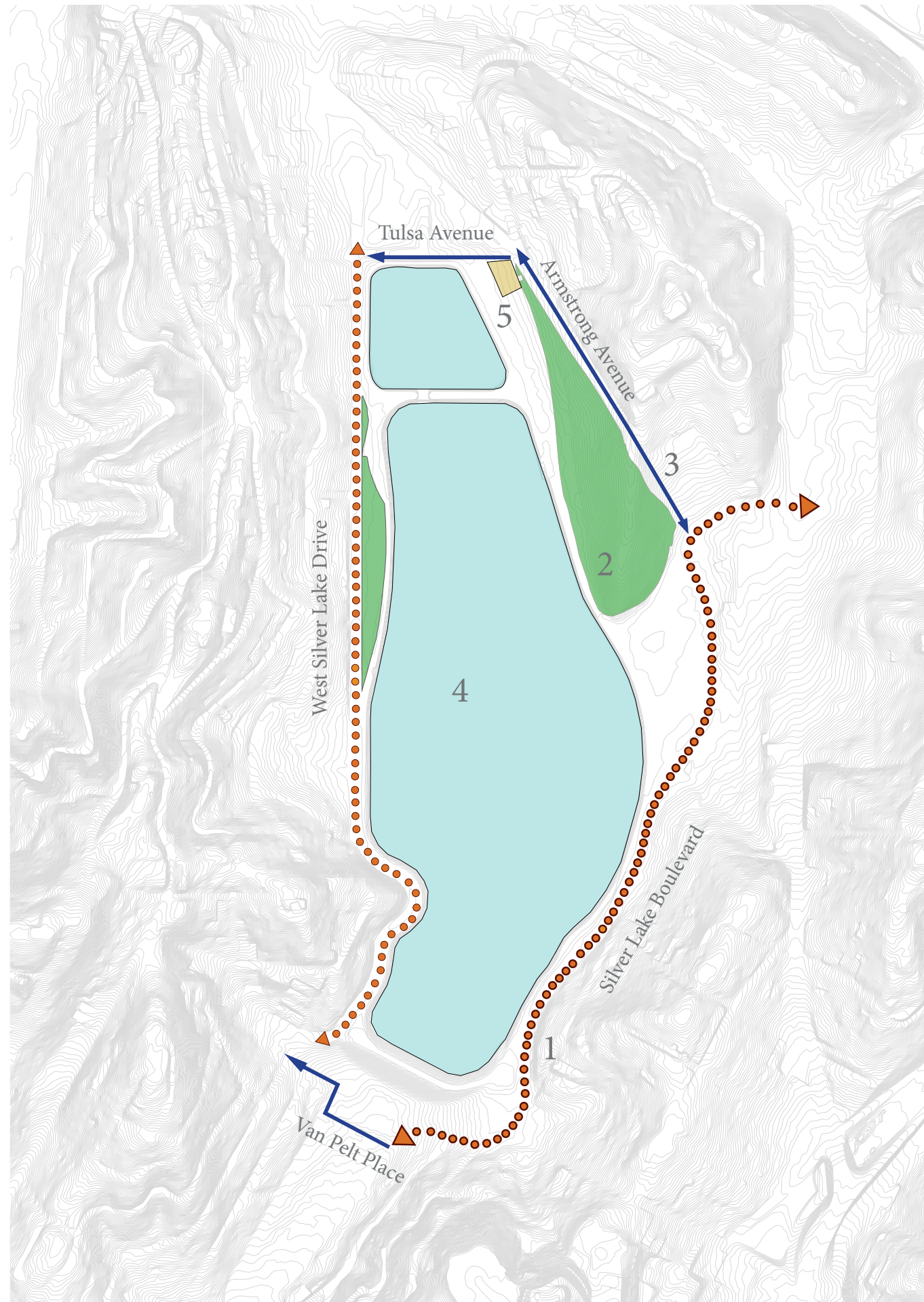
Adding pedestrian access across the reservoir could create better connections throughout the community.

5

LEGACY PIPELINE SYSTEM

The existing network of pipes could be reworked into a mutually beneficial system between the reservoir and LADWP. Excess recycled water that LADWP produces could flow into the reservoir instead of being flushed out to the ocean. During dry seasons, water from the reservoir could feed into the Los Angeles River, helping it maintain its wetland environment.

CONSTRAINTS



LEGEND

- Primary Vehicular Circulation
- Secondary Vehicular Circulation
- Downhill Arrows showing changes in elevation
- Green Space
- Silver Lake Reservoir
- Neighborhood Nursery School



1

HEAVY TRAFFIC

Both Silver Lake Boulevard & West Silver Lake Drive are very busy streets.

2

PROTECTED TREES

There are a lot of protected trees on both the east and west side of the reservoir, including *Quercus agrifolia* and *Planatus racemosa*.

3

ELEVATION

Dramatic elevation changes on Tesla Avenue, Armstrong Avenue and Van Pelt Place must be taken into consideration.

4

HISTORIC-CULTURAL MONUMENT

The reservoir is on the protected list of Los Angeles Historic-Cultural Monuments.

5

NEIGHBORHOOD NURSERY SCHOOL

Neighborhood Nursery School is currently on the premises.

PAST PROPOSALS MAP

Public use and ecology, the nature of past proposals for Silver Lake Reservoir.



PAST PROPOSALS ARE BROKEN DOWN INTO THREE GROUPS

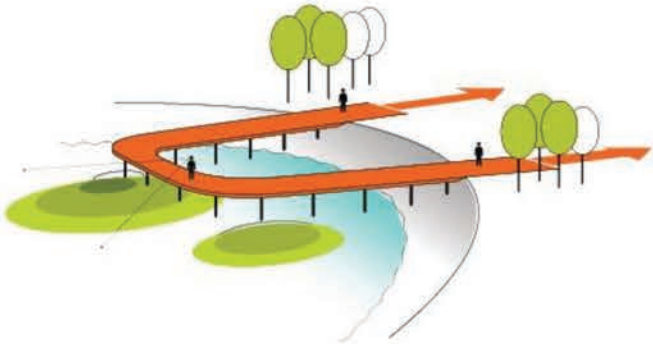
- Reconnecting the linkage between the LA River and the reservoir was an early proposal.
- Swimming lanes and a sandy beach was proposed for the northern Ivanhoe Reservoir.
- Public park space in and around the reservoir gained the most traction as a proposal.
- The park proposal ultimately led to the next steps of a master plan for Silver Lake reuse.

THE MASTER PLAN

THE DESIGN TEAM ASKED FOR
THE PUBLIC'S RESPONSE
 TO THE THREE DESIGN CONCEPTS

Hargreaves Associates plans to reuse the decommissioned reservoir as a public open space with the main focus on "natural features".

ISLAND OVERLOOKS



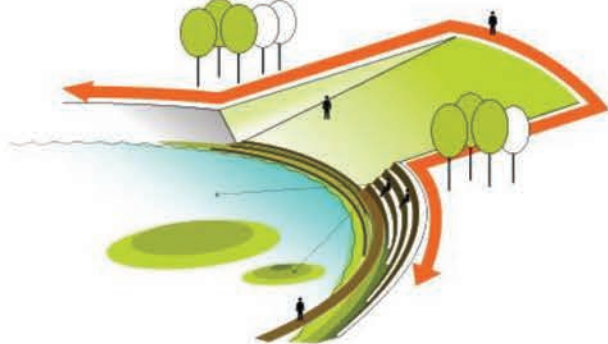
- Maintains existing embankment
- Maximizes protected wetland habitat
- Less active spaces
- Least open water

ACTIVE EDGES



- Engages edges
- Most active spaces
- Most open water
- Least new habitat

BLENDED SPACE



- Balances spaces
- Most ecologically immersive
- Most new habitat
- Medium open water



**INTEGRATIVE BUILDINGS
 ENVIRONMENTAL EDUCATION
 WATER VIEWS**

**FLEXIBLE LAWN
 WATER ACCESS
 HABITAT**



**SWIMMING
 HUMAN POWERED BOATING**

MASTER PLAN

BLENDED SPACES

- Blends spaces (habitat / people)
- Most ecologically diverse (wetland terraces / islands)
- Multiple levels of open lawn and trees

THE PROPOSAL

- **Ivanhoe Overlook**
Shade pavillion and accesible habitat terraces
- **The Knoll**
Accessible nature trails with protected habitat fencing and an environmental education center
- **The Meadow**
Habitat seating terraces with large sloped lawns, native gardens and picnic groves
- **The Eucalyptus Grove**
Restored habitat with a promenade overlook
- **The East and West Narrows**
Features long strip for running and walking with a large promenade overlooking the water

SPACES BREAKDOWN

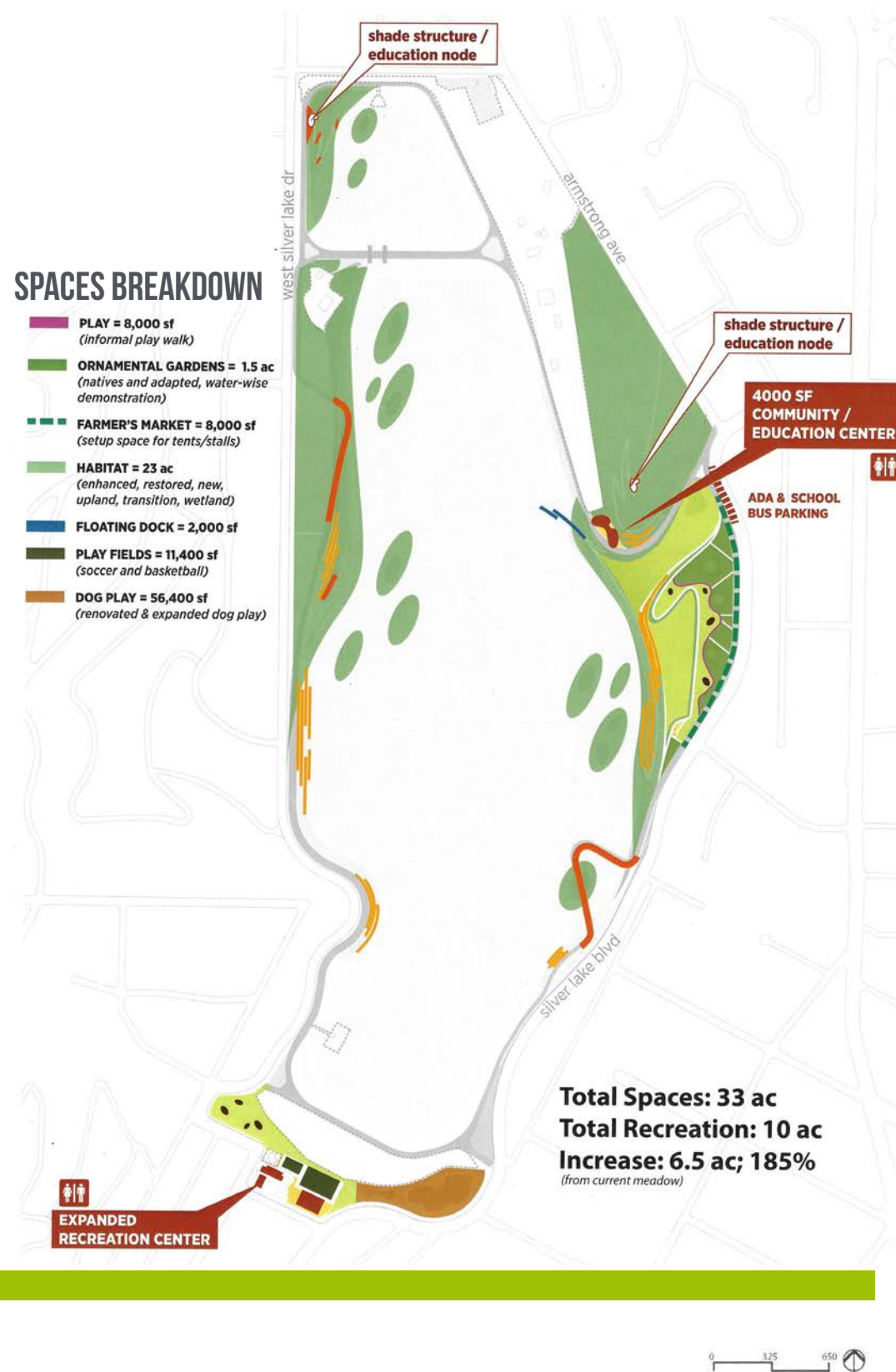
- FACILITIES = 12,000 sf**
(conditioned space, shade structures)
- PLAZAS = 10,000 sf**
(open seating, trees, planting)
- OVERLOOKS = 28,000 sf**
(platforms/decks, bridges, flyovers)
- SEATING TERRACES = 26,000 sf**
(stepped seating/platforms)
- GREAT/FLEX LAWN = 5.5 ac**
(open lawn with shade trees)
- PICNIC GROVE = 12,000 sf**
(tables + chairs, grills, shade trees)



THE PLAN

RENOVATIONS

- Expanded and renovated dog play area
- New multi-purpose / community center structure
- Reconfiguration of playfield
- Relocation of full sized basketball court
- New plaza connecting existing recreation center to new multi-purpose room
- Relocated picnic area



- **Resurfacing**
Repairs to existing concrete embankment and replacement of hardscape materials where needed



- **Planting**
Removal of asphalt and provide a plant edge buffer over geoweb

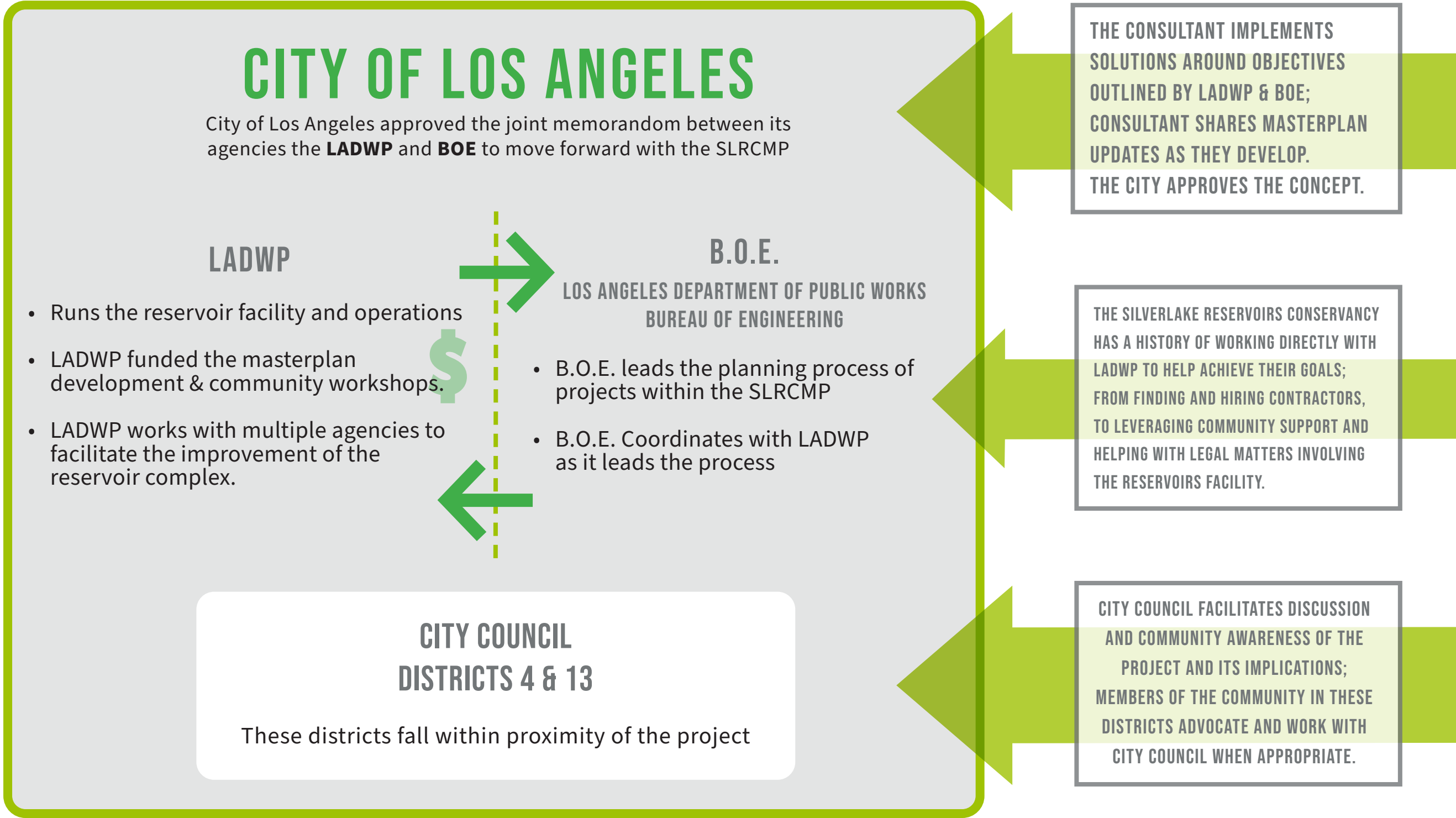


- **Boulders / Rip Rap**
Add boulders or rip rap to transitional areas between concrete and planting and can act as seating

EDGES

PLANNING & COLLABORATION

KEY CONTRIBUTORS & HOW THEY WORK TOGETHER...

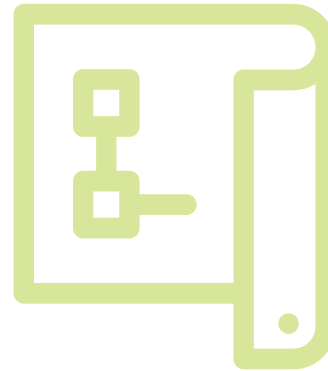


CONSULTANTS

HARGREAVES & ASSOCIATES

PRIMARY CONSULTANT

- Produces concepts for the final vision and amenities of the SLRCMP
- Hires additional consultants that work on specific portions of the project implementation



SLRCMP = SILVERLAKE RESERVOIR COMPLEX MASTERPLAN

There are three main entities involved in the planning and implementation of the SLRCMP: The City of Los Angeles, outside consultants to the city, and the community of Silverlake. Each of these main groups are comprised of smaller offices, teams, and sub-committees. These entities work together in various ways, both formal and informal relationships that shape the process and outcomes of the project. It is important to understand these critical relationships and the separate responsibilities therein, both in reference to the SLRCMP itself and the practice of Urban Design, today. This project is a great example and case study for how the most important public spaces in a major international city such as Los Angeles are treated, and how they evolve.

CONSULTANT PRESENTS CONCEPTS TO THE COMMUNITY; THE COMMUNITY SHARES FEEDBACK. CONSULTANT COLLECTS THE FEEDBACK TO REFINE THE MASTER PLAN.

COMMUNITY

ORGANIZED GROUPS WITHIN THE COMMUNITY INCLUDE (BUT ARE NOT LIMITED TO):

- | | |
|------------------------------------|--|
| Silver Lake Neighborhood Council | Silver Lake Now |
| Silver Lake Reservoirs Conservancy | Silver Lake Wildlife Sanctuary |
| Silver Lake Forward | • Additional non-organized community members |



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ENVIRONMENTAL SITE ANALYSIS

LANDSCAPE DESIGN 4

WINTER 2020

INSTRUCTOR: MATTHEW SHIMER