

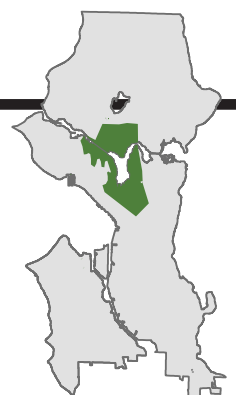
## LAKE UNION

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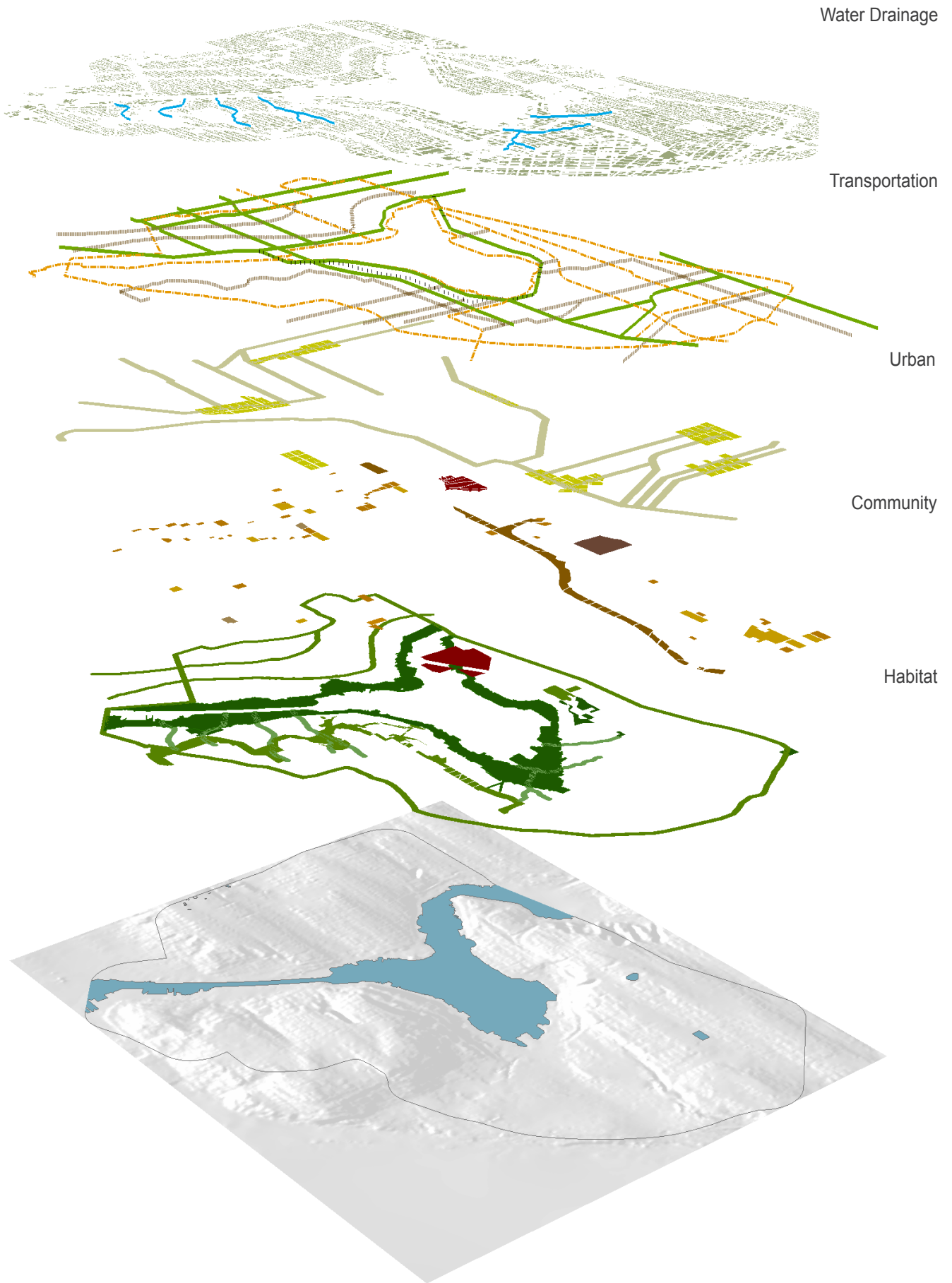
**Team Leaders:** Rachael Watland, Andy Mitton, Jason Henry, John Logan and Kristin Kildall

**Student Team Leaders:** Garrett Devier and Dara O'Byrne

**Team Members:** Linda Frkuska, Jeff Hepinstall, Wes Simmonds, Rich McDonald, Chris Gronbeck, Mike Ruby, Brian O'Sullivan, Susana Musi, Brian Ramey, Art Tuftee, Tom Berger, Gary Zak, Brent Chastain, Genevieve Vayda, David Knight, Karen Bech, Guy Michaelson, Makie Suzuki, Jessie Chou, Kimberly Bowen, Erin Parker, Steve Haluschak, and Chris Towne.









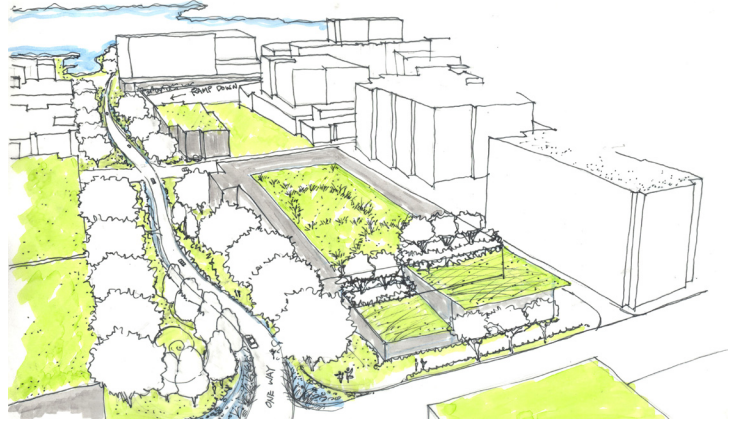
# GOALS FOR LAKE UNION IN 100 YEARS

## Target Growth in Urban Villages

- Increase density in targeted areas throughout the study area
- Continue to provide a variety of housing types

## Improve Awareness of Lake Union Sub-Basin

- Create more physical access to shoreline and provide for public use
- Protect and enhance view corridors

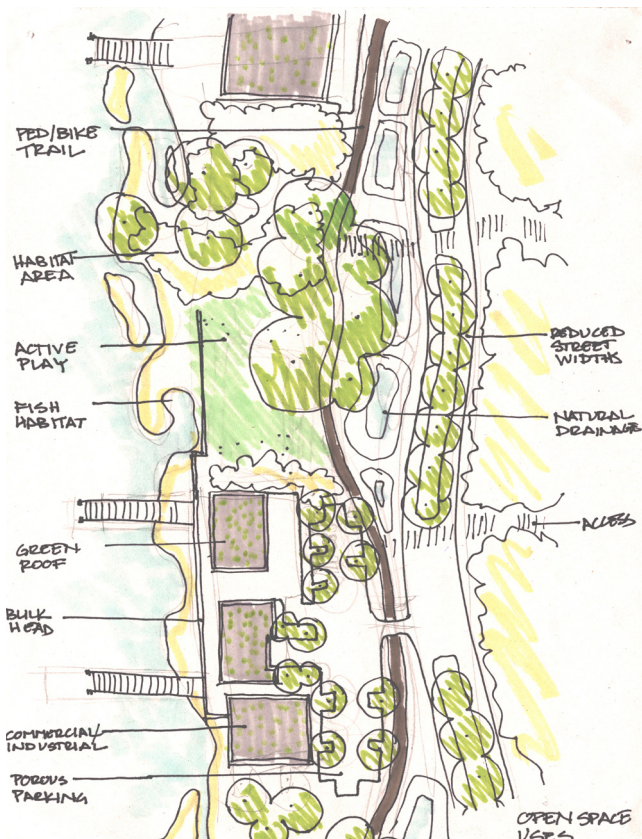
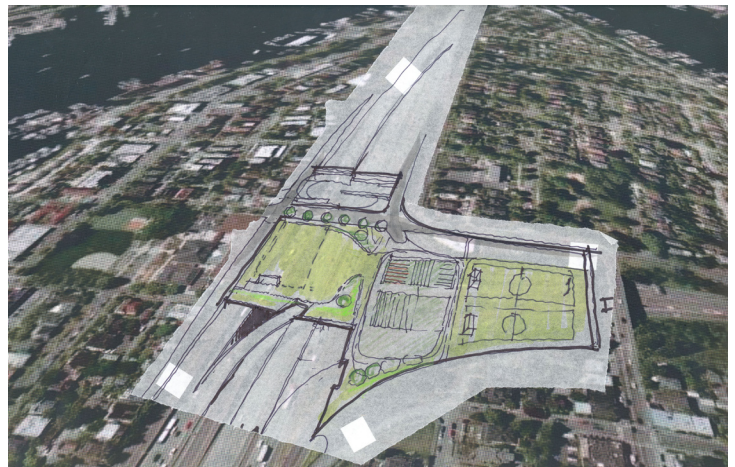


## Create a Citywide Open Space Network

- Develop a system of open space corridors or routes to connect neighborhood, community, and regional open space.
- Create open space rings around the study area – one around the perimeter of the lake and one around the ridge-line of the basin
- Facilitate pedestrian and bicycle travel throughout the open space network
- Use this network to unify cultural and ecological values, economic and natural resources, and recreational opportunities

## Commons for Everyone

- Provide accessible open space in under-served areas
- Distribute green space equitably among communities
- Provide neighborhood level, community level, and regional open spaces
- Reduce acreage consumed by the auto to provide more area for open space



Lake Union

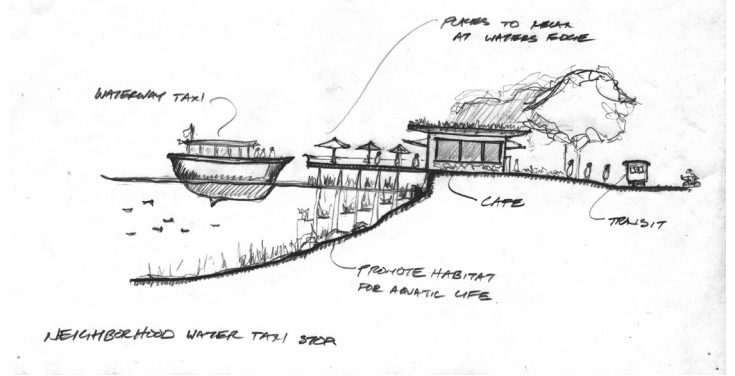
## IMPROVE CONNECTIONS AND ACCESS

- Develop multi-modal transportation systems that increase connections and access to open space
- Improve connections within and between neighborhoods
- Integrate open space with the systems of pedestrian, bicycle, and mass transit routes
- Bury or lid I-5 to connect the communities on both sides and to improve access to Lake Union

## SUPPORT COMMUNITY WITH OPEN SPACE

- Create space for gathering and interaction, such as plazas, pea patches, parks, segments of broad commercial sidewalks, etc.
- Design open space that enhances community identity, serves as landmarks, and reflects local culture.
- Enhance the quality of life by creating a more beautiful environment
- Serve the older population and local demographics with connections to the outdoors

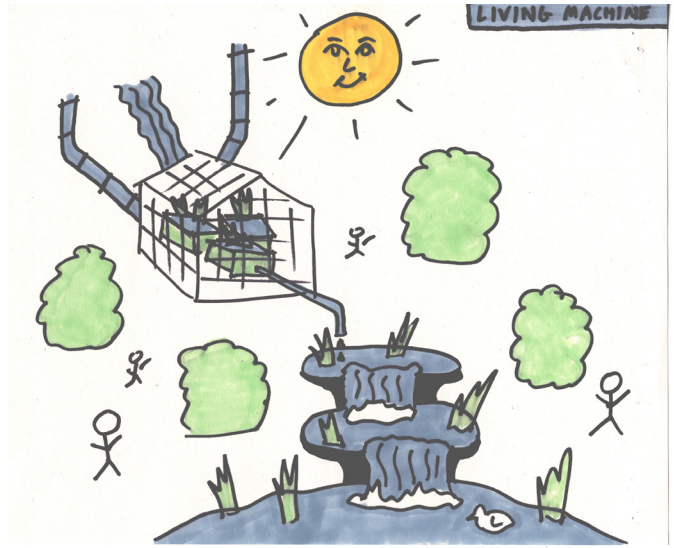
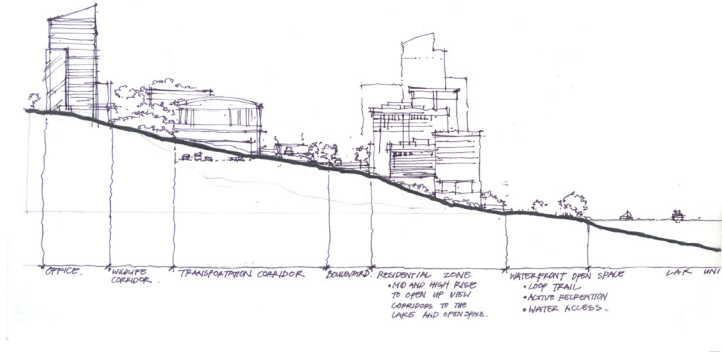
WATER TAXIS TRANSPORT + RECREATION ♡





**Enhance the Local economy**

- Improvements should be attractive to visitors and tourists in appropriate locations
- Open space may be an amenity to local commercial districts, and local customers

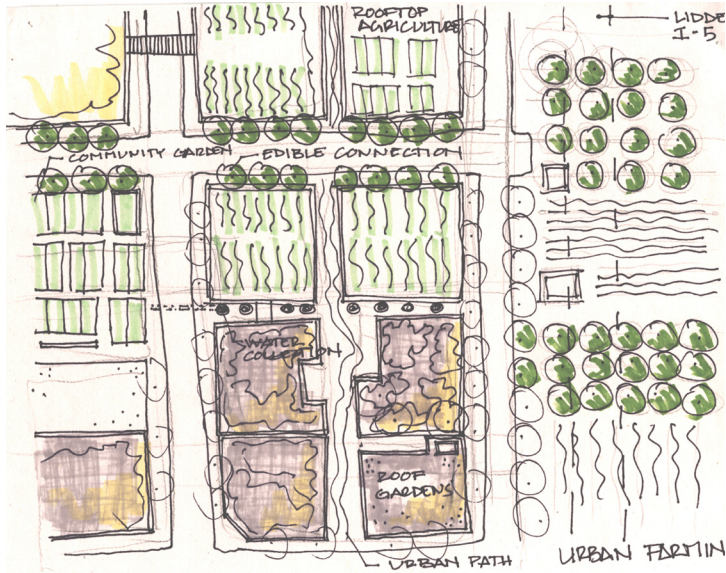


**Design for Environmental Sustainability**

- Convert Lake Union basin into a healthy watershed
- Improve the ecological function of existing and new open space
- Decentralize energy production and move toward resource self sufficiency
- Treat stormwater through natural systems within open space and right-of-ways and increase permeability to soils
- Create an interconnected system of green roofs
- Restore habitat

**Create and Support Opportunities for Personal Food Growing**

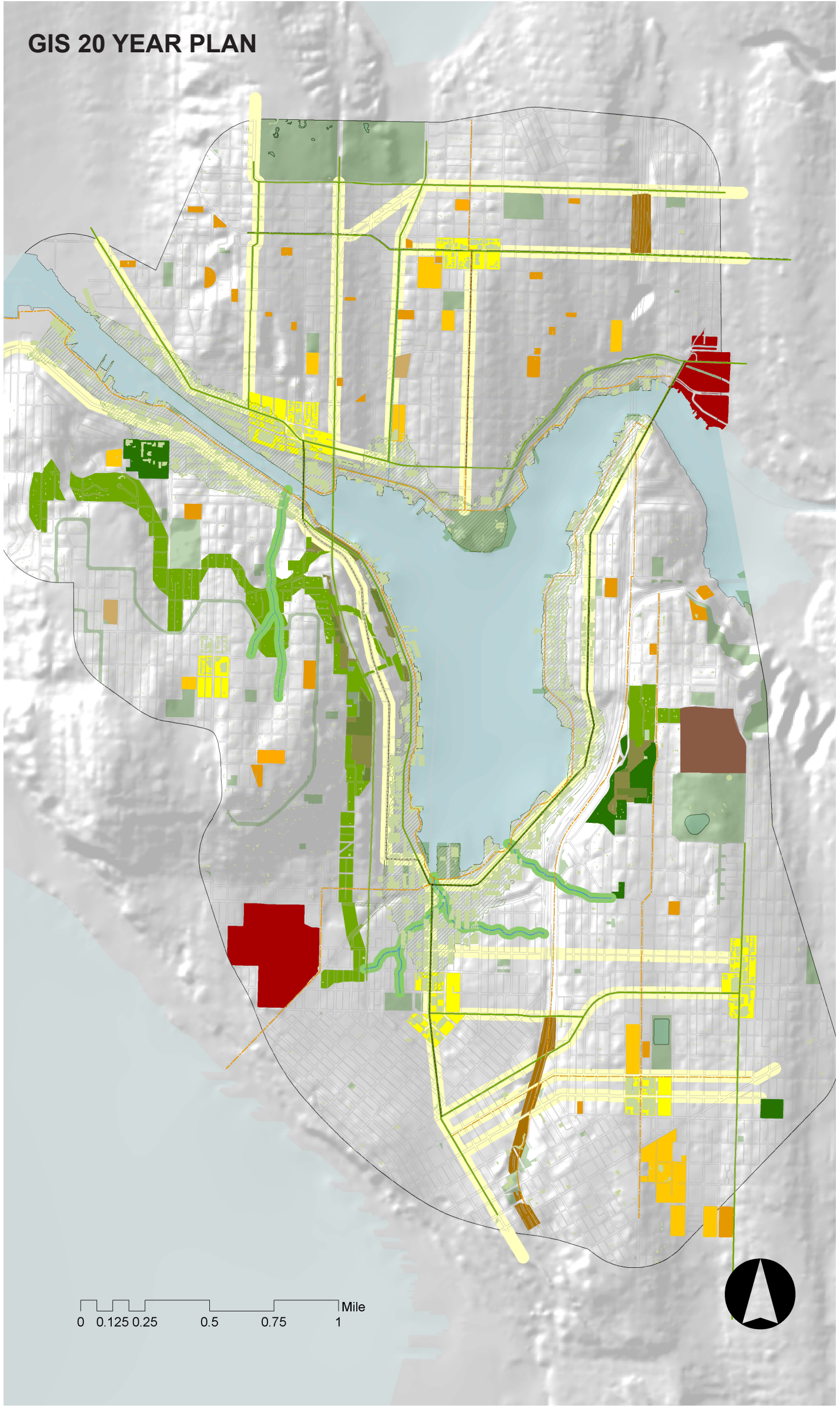
- Support private and public urban agriculture
- Increase area dedicated to pea patches and other urban agriculture







# GIS 20 YEAR PLAN

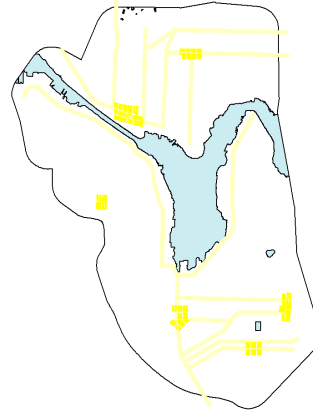
Lake Union













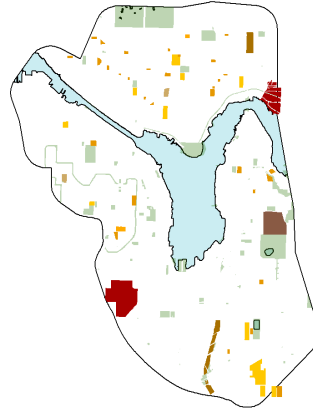
**Urban**

-  Community Nodes
-  Urban Corridors



**Community**

-  Active Parks
-  Playfields
-  Passive Parks
-  Farmers Markets
-  Lidded Open Space
-  Cemetary
-  Civic Space
-  Existing Parks






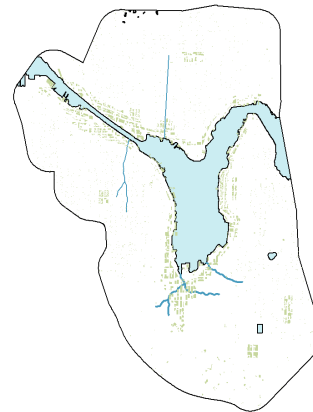
**Habitat**

-  Stream Riparian Area
-  Habitat Corridor
-  Mini Woodlot
-  Urban Waterfront Habitat
-  Existing Green Belts

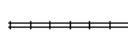






**Water Drainage**

-  Green Roofs
-  Created Streams
-  Daylighted Streams

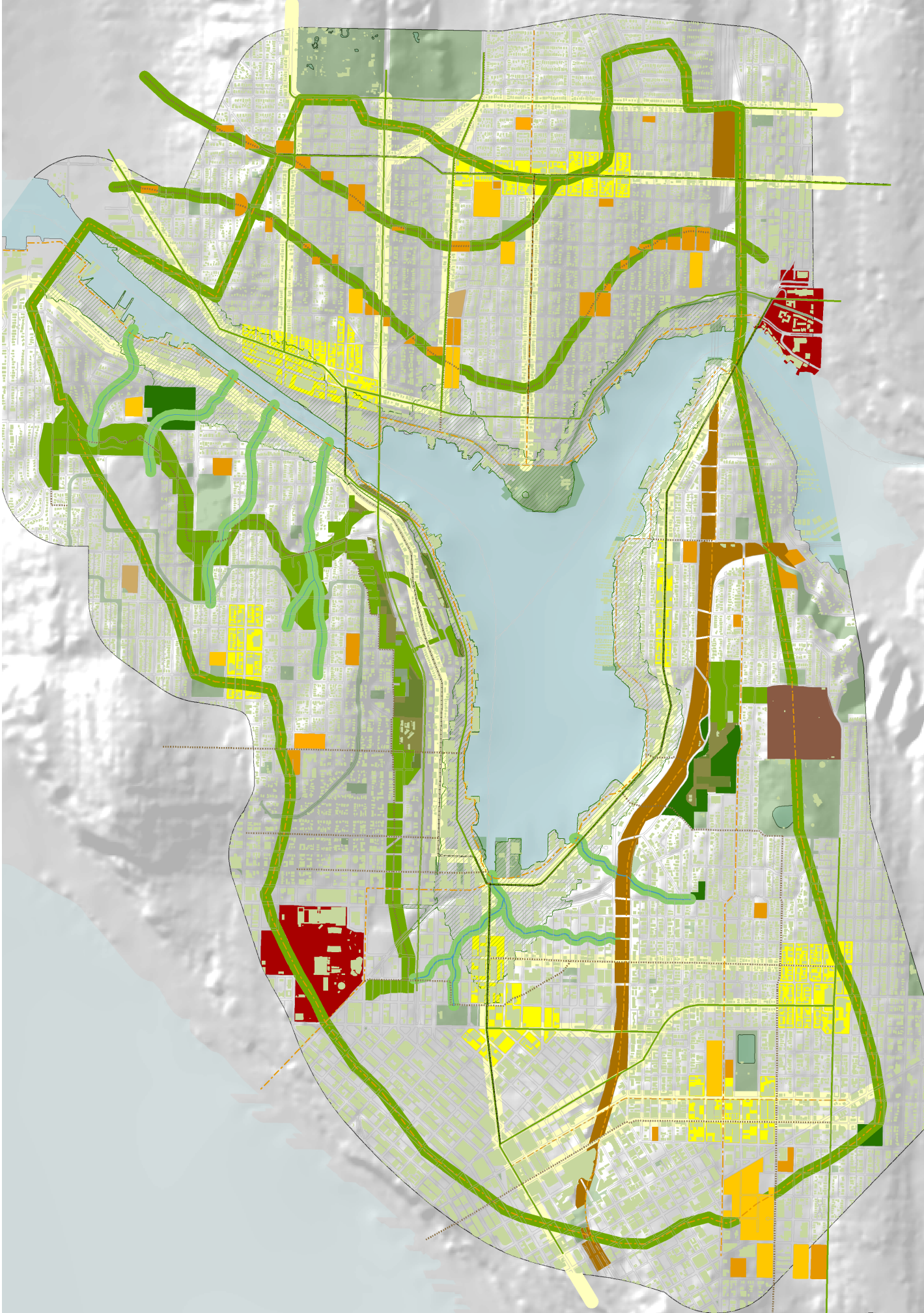


**Transportation**

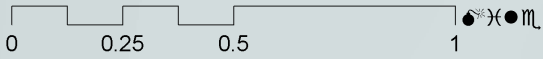
-  Street Car
-  Water Taxi
-  Pedestrian Corridor
-  Designated Bicycle Corrid" data-bbox="169 895 247 910"/>
-  Green Streets



# GIS 100 YEAR PLAN



Lake Union





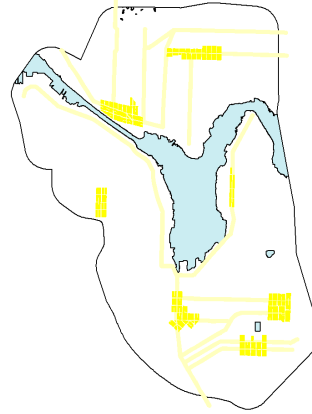
**Urban**



Community Nodes



Urban Corridors



**Community**



Active Parks



Playfields



Passive Parks



Farmers Markets



Lidded Open Space



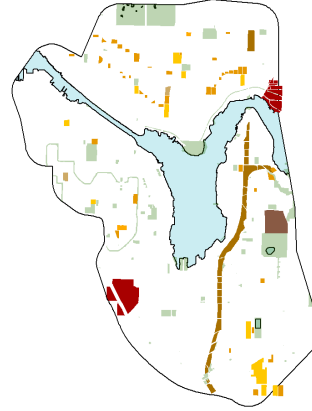
Cemetary



Civic Space



Existing Parks



**Habitat**



Stream Riparian Area



Habitat Corridor



Mini Woodlot



Urban Waterfront Habitat



Existing Green Belts



**Water Drainage**



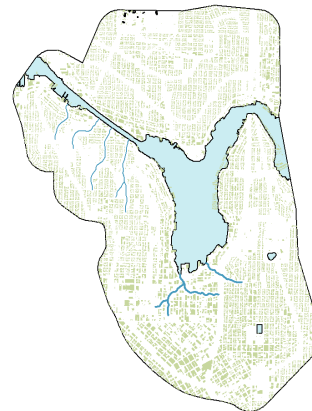
Green Roofs



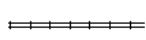
Created Streams



Daylighted Streams



**Transportation**



Street Car



Water Taxi



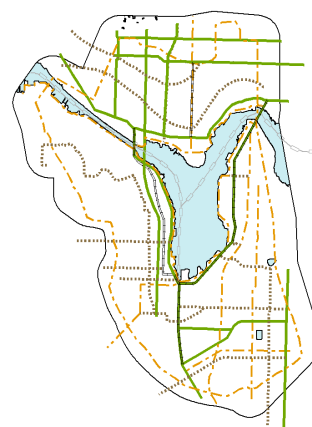
Pedestrian Corridor



Designated Bicycle Corridor



Green Streets



## THE GREEN ZONE: 100% IN 100 YEARS!

The goal is to have 100% contiguous green space within 100 years around the shoreline of Lake Union. This area will be a mixed use zone that combines public and private uses. An equal mix of uses that are economically robust, ecologically sustainable and also provide equitable access to zone amenities by the community will be promoted and eventually required.

In order to implement the green zone in 100 years, this zone could be given a unique designation by the city. The zone could have its own tax base and guiding body that helps makes decisions about the area. An incentive program could be started to help ensure that new developments will contribute to the visions of this unique area.

In order to keep the Green Zone a mix of public and private use, acquisition strategies will focus on two objectives:

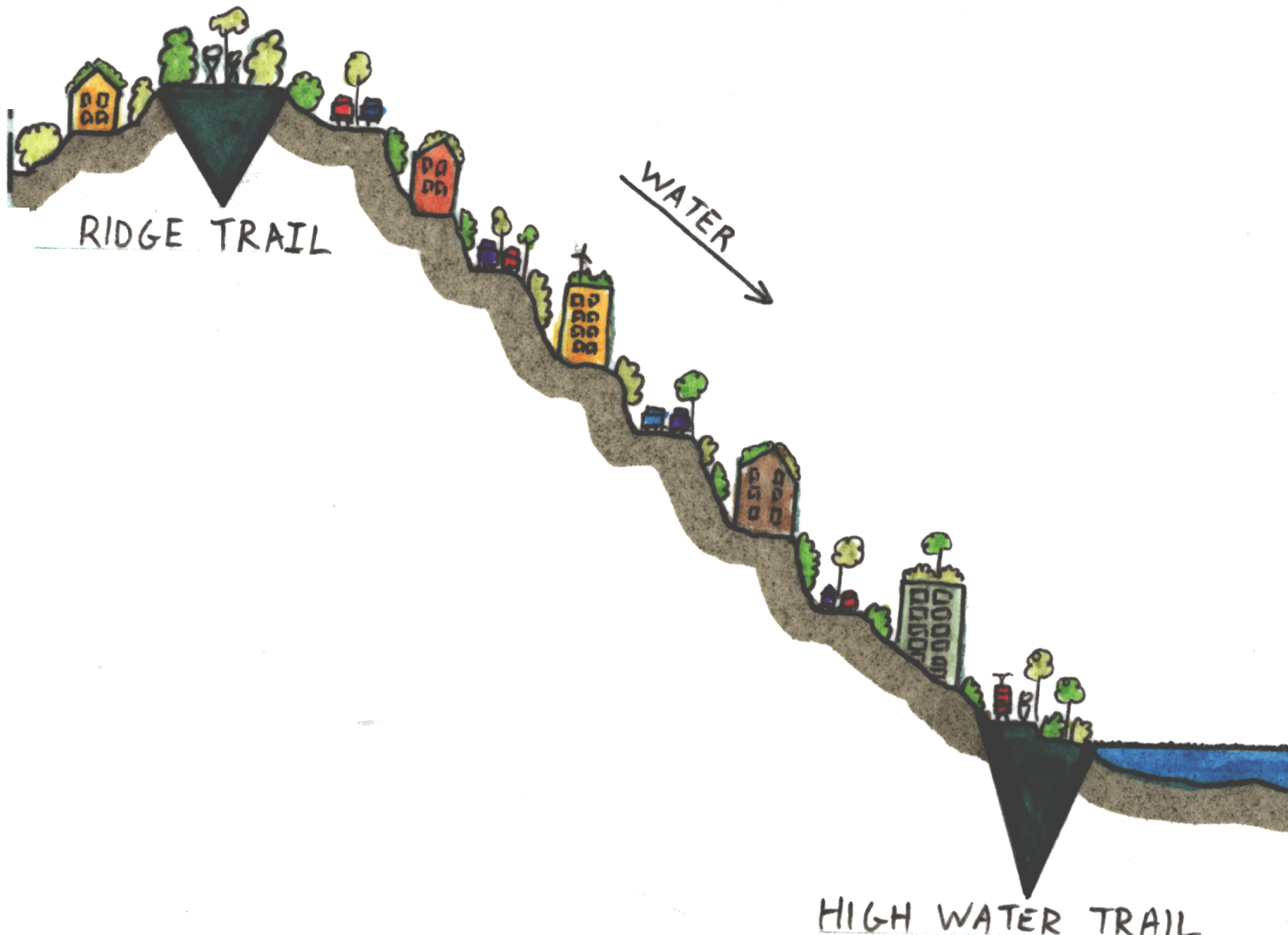
1. Address DNRs current land management of Lake Union shoreline
2. Build a list of properties of interest for public acquisition and continue targeting over 100 years and list should be reviewed and updated every 5 years



<http://walkermacy.com/images/projects/landscape/swaterfront2.jpg>



<http://www.what-means.com/encyclopedia/Tram>





## FUNDING STRATEGIES

Funding strategies will be driven by the key idea that funding mechanisms that encourage and create opportunities for change or that create long term revenue streams, will be utilized most actively.

### 1. Creative use of small neighborhood L.I.D.s

Example: cul-de-sac could apply for an LID, but to be eligible it would need to agree to implement 1 - 3 projects that would support or connect them to the Green Zone such as using green roofs or creating a public access trail

2. T.I.F.s
3. Ecological compensation measures
4. Tax revenues
5. Levy's from long-term capitol campaign

## IMPLEMENTATION STRATEGIES

### 1. Create developer incentives to build city infrastructure as part of developments.

(Height for open space, green roofs, low income, etc.)

### 2. Rewrite cistern versus water-take legal definition to match runoff volume of natural conditions.

(coordinate with WA DOE and State legislators)

### 3. Generate cash (taxes) by quit claim deeding unused ROW and/or selling unused properties to purchase key parcels.

(open space, other key systems, or land in trust for open space)

### 4. Develop public/private joint venture partnerships.

### 5. Pursue private open space/uses.

(Toll roads, toll sites, etc).

### 6. Inventory all public lands and identify multiple use opportunities.

### 7. Perform a hard surface audit and identify which surfaces can be eliminated or resurfaced.

(Grey to green)

### 8. Coordinate with Seattle School District to identify which properties have open space potential/value, including surplus properties.

### 9. Emphasize the water in zoning, ordinances, codes, and all plans.

### 10. Create zoning overlay of open space needs based on Dept. of Parks and Recreation Gap Analysis.

- Include public and private open space in the overlay.
- Include physical and visual access to Lake Union as an open space selection criterion.



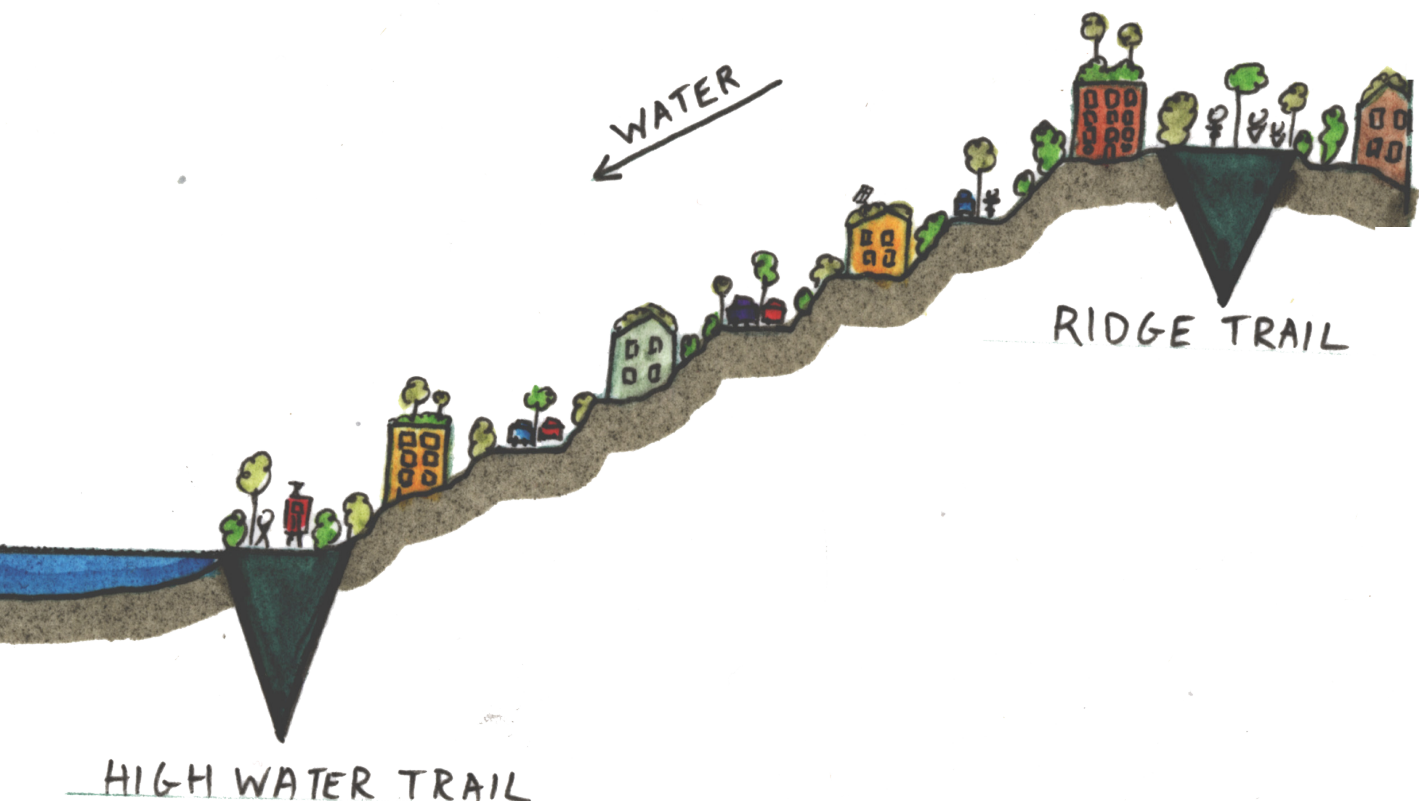
[www.futurehi.net/archives/000084.html](http://www.futurehi.net/archives/000084.html)



[www.asla.org/.../awds02/chicagocityhall.html](http://www.asla.org/.../awds02/chicagocityhall.html)



<http://radio.weblogs.com/0119080/stories/2003/08/22/galleryOnTheWaterfront.html>



# STONE WAY: CONNECT RESTORE CELEBRATE

By 2106, Stone Way will serve as a commercial, mixed-use corridor connecting neighborhoods and open spaces. The right-of-way currently dedicated to automobiles will be dedicated to a daylighted stream, pedestrians, and bicycles. Vegetated swales will line the streets intersecting Stone Way, allowing clean water to flow into the stream. A street-end park will provide residents access to the lake where the stream will terminate and flow into Lake Union.

## Connect

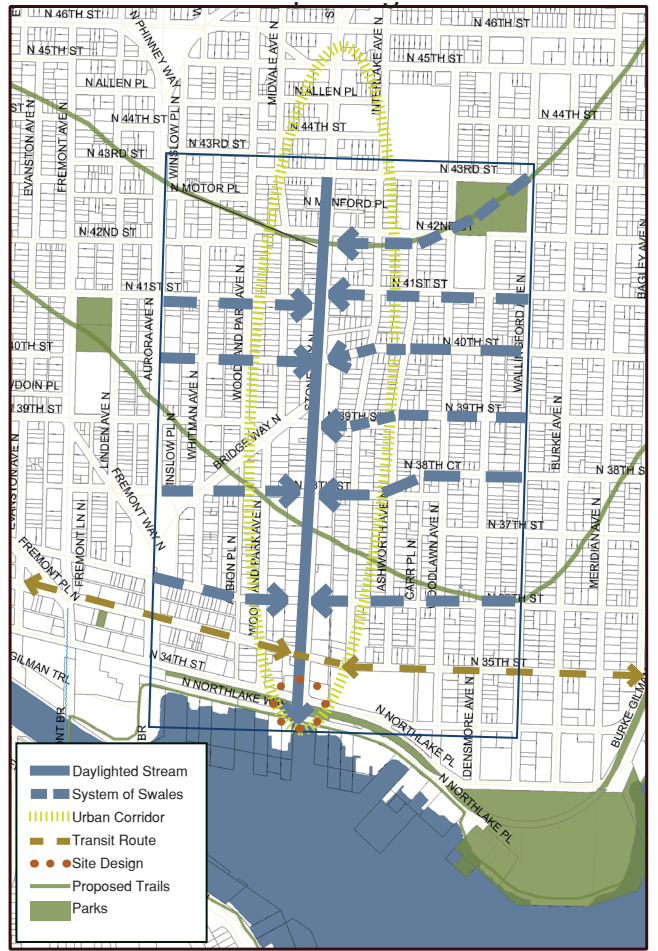
- Urban villages* Wallingford to Fremont
- Parks* Woodland Park to Waterfall Park and Gas Works Park
- Water* filtering swales to Stoneway Creek to Lake Union

## Restore

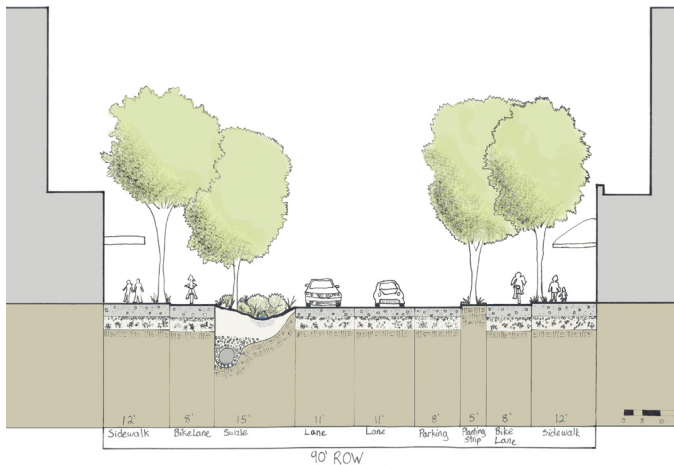
- Stream* ecological function and natural habitat
- Lake Union* green shoreline and clean runoff

## Celebrate

- Water* visual celebration of scarce resource
- People* linear park creates community gathering space



## Twenty years: 2026



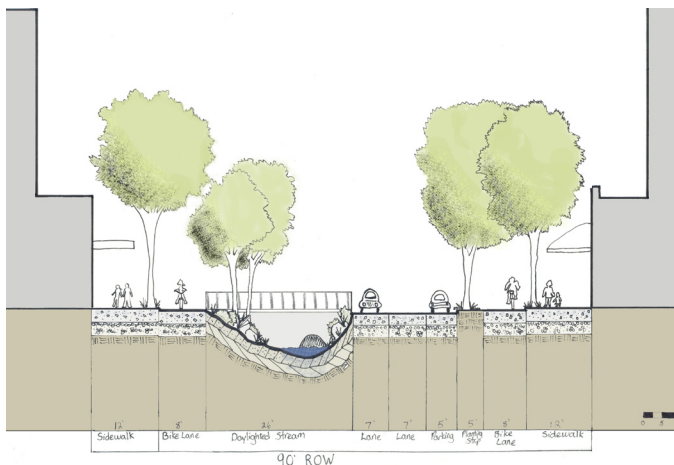
## Assumptions

- People travel by automobile for a majority of trips but insignificant mode shifts have occurred.
- Fuel used for automobiles is non-polluting and is increasingly expensive.
- Densities in Wallingford and Fremont are increasing.

## Scenario

- The amount of road space designated for automobiles is reduced to two lanes of traffic and one lane for parking
- Two grade-separated bike lanes allow Stone Way to become a key north/south bicycle route
- Vegetated swales filter and treat stormwater going to Lake Union
- All surfaces are permeable including permeable pavement on sidewalks and roads

## Fifty years: 2056



## Assumptions

- Automobiles are used less frequently because of improved transit like the streetcar and light rail
- Automobiles are significantly smaller due to increasing fuel prices
- More attention is paid to water quality as the scarcity of this resource is beginning to be realized
- Stone Way is a main commercial corridor with high density mixed-use development

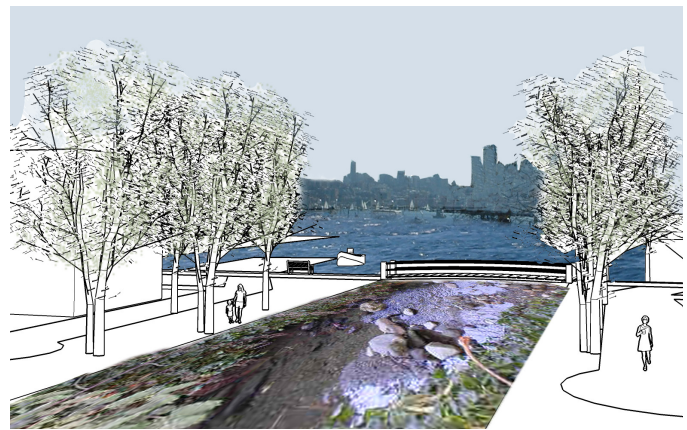
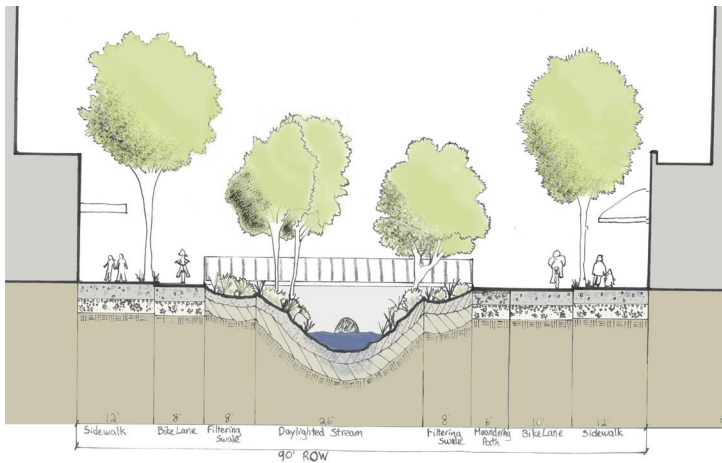
## Scenario

- The use of skinny cars allows lanes to become narrower so less right-of-way is designated for automobile use
- The historic stream is daylighted and habitat restoration has begun



# STONE WAY: CELEBRATE! A STREAM RESTORED, A NEIGHBORHOOD CONNECTED

one hundred years: 2106



Stone Way street-end: Waterfall Park

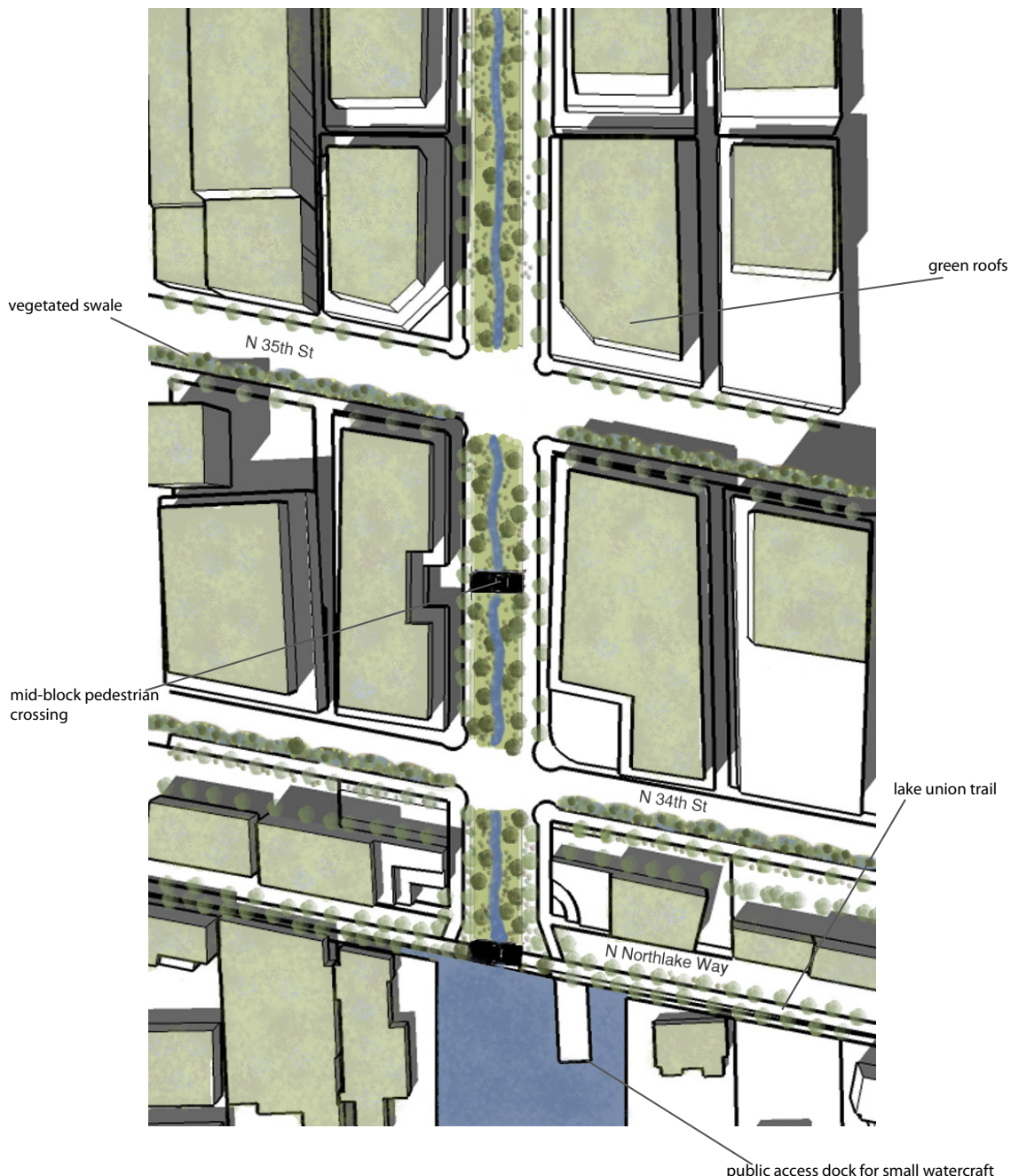
## Assumptions

- Automobiles are used sparingly due to high fuel costs and efficient alternatives
- Public transit, biking, and walking are the primary form of transportation
- Increased densities create a high demand for open space and connections to nature
- Extreme weather events are more common due to global warming

## Scenario

- All lanes for automobile traffic are removed from Stone Way
- The restored stream has improved habitat
- Filtering swales are added to both sides of the stream to filter sediment and prevent negative environmental impacts of extreme storm events

## Stoneway Daylighted Stream Corridor



Lake Union

# SHORELINE TO RIDGELINE

## *Open Space Armada*

On the Eastlake shoreline barges anchored offshore can be used to provide seasonal open space opportunities. Like a naval convoy these barges will be escorted by forested buffer ships to buffer sight lines and noise. Different uses can include; urban agriculture, sports fields, concert venues, and light marine industrial uses. These floating open spaces can be used at large or small street end parks along the shores of Lake Union and Lake Washington.

## *Fairview and Eastlake*

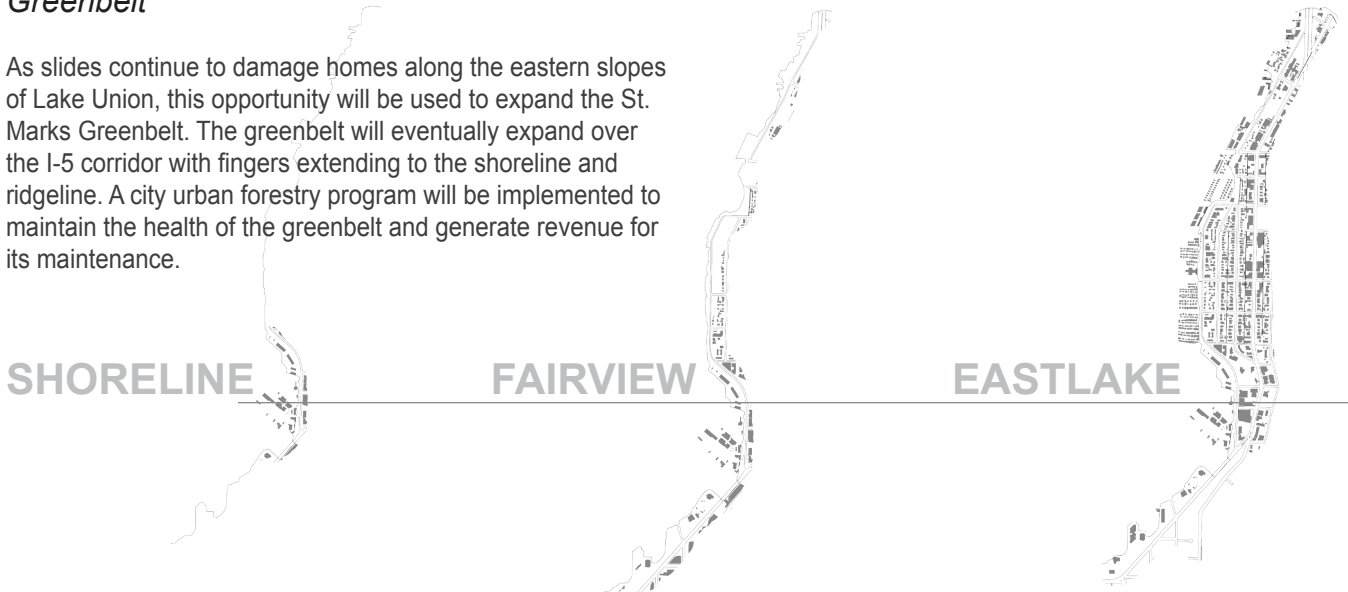
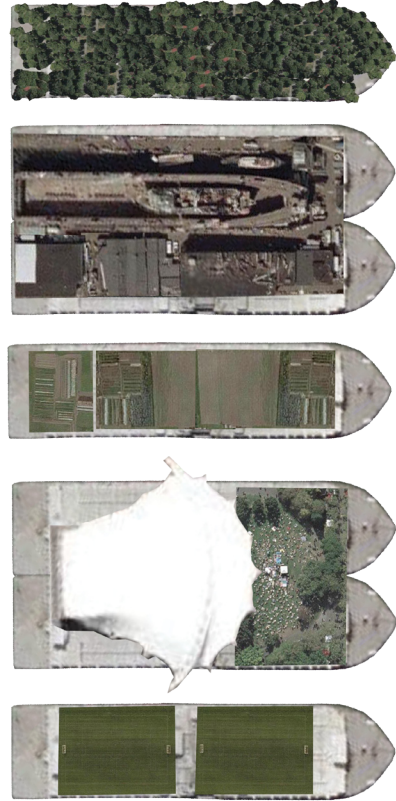
Fairview along the shoreline will serve as a pedestrian and bicycle priority street, with car use for local residents. Eastlake will serve as the main transportation route and include a light rail system. In order to prevent the further widening of Eastlake, the use of smaller "smart" cars will be encouraged.

## *I-5 Corridor*

The I-5 corridor will eventually be tunneled and capped. In the bowl below the St. Marks Greenbelt the tunnel will remain exposed. Over time the slide potential slopes of the St. Marks Greenbelt will sluff over the tunnel enhancing connections over the I-5 corridor.

## *Greenbelt*

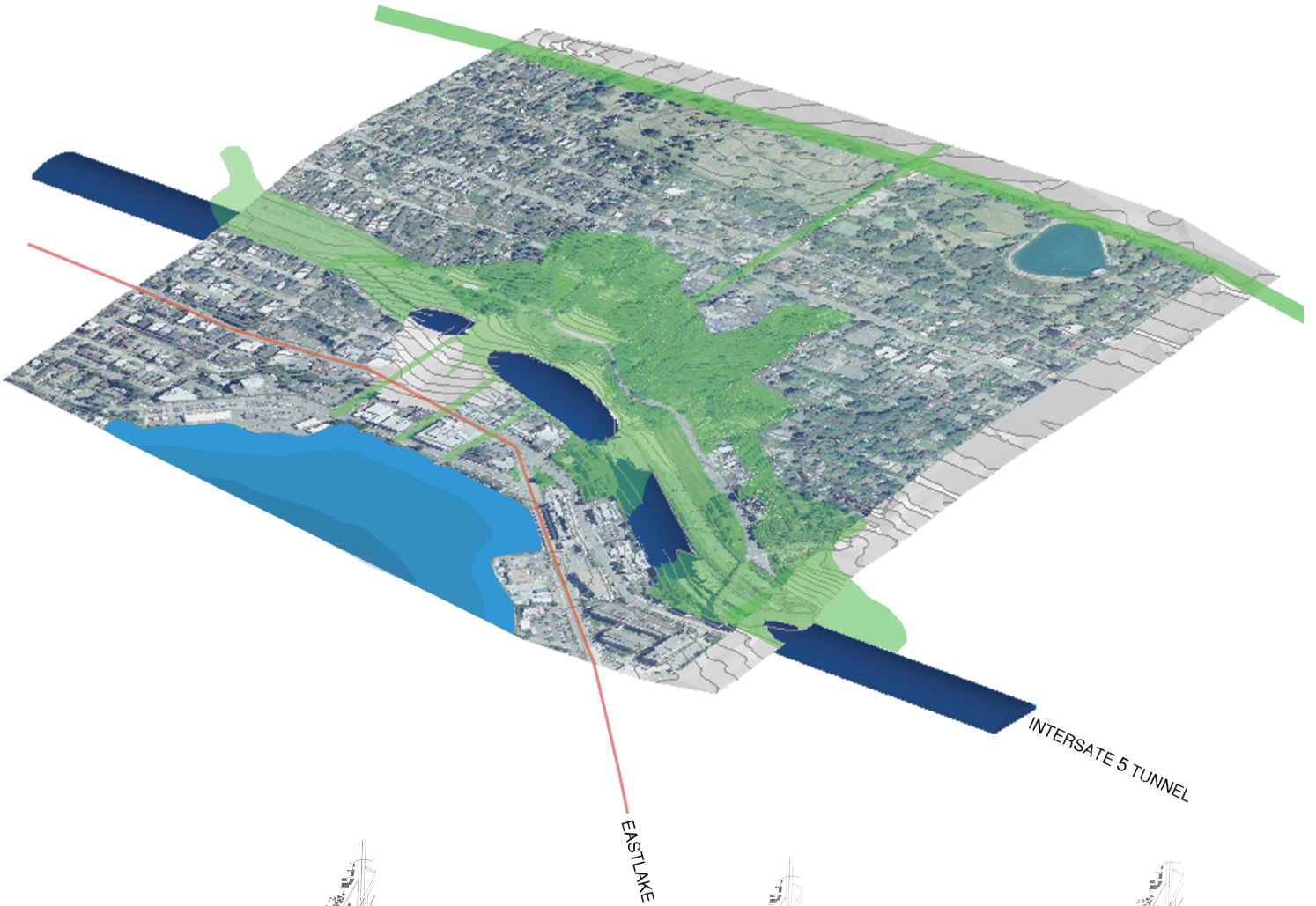
As slides continue to damage homes along the eastern slopes of Lake Union, this opportunity will be used to expand the St. Marks Greenbelt. The greenbelt will eventually expand over the I-5 corridor with fingers extending to the shoreline and ridgeline. A city urban forestry program will be implemented to maintain the health of the greenbelt and generate revenue for its maintenance.



Lake Union







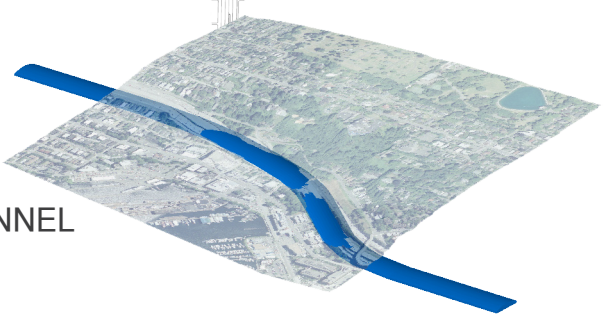
I-5 CORRIDOR



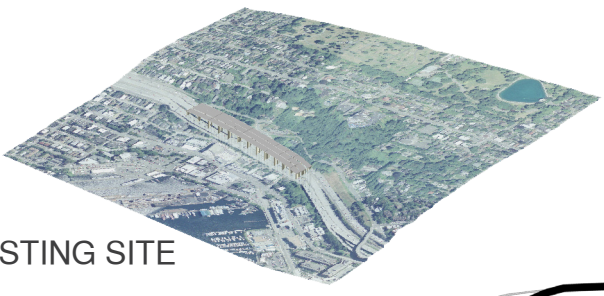
GREENBELT



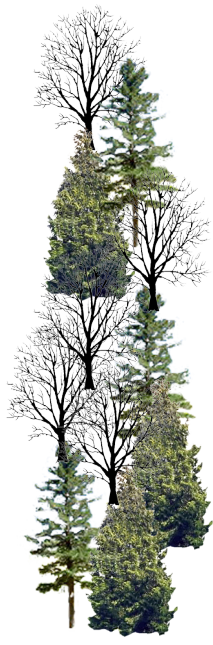
RIDGELINE



TUNNEL



EXISTING SITE



Lake Union