

Team Report

1. Team Name/ Area

Screaming Orca Vikings / Ballard Ship Canal - Team A

2. All-city Concept

Salmon Super Highway

3. Study Area Concept Name and brief narrative describing your goals and approach.

Ballard in 100 Years

A modern hybrid of city and nature, Ballard will thrive as a walkable, bikeable, Eco-technology hub, bounded by a reinvigorated shoreline that feeds and supports the regions primary salmon highway. The heart of Ballard will become more dense, a center of housing and commerce with rooftop and vertical gardens connecting canopy-covered multi-use green streets. Ballard will celebrate its heritage by preserving elements of the fishing and maritime industry along the Ship Canal, integrated with other green industry, bio-business, and public open space.

Salmon highway

Salmon and ships symbolize Ballard's marine heritage and they come together at the Ballard Locks. The Locks have never served the salmon well because they don't mimic the natural functions of an estuary—mixing salt- and freshwater, protecting seabound fish with shallow water, modulating water temperatures, and providing abundant food. In the next 100 years, the Locks will be replaced with a pair of salmon friendly replacements that together will create an estuary-like mixing chamber for the salmon and other species. The banks of the ship canal will include a daylighted Wolf Creek and be dotted with marshlands at the sites of multiple pristine stream outputs with zero CSO. Present industrial and fishing zones along Shilshole will be infilled with public greenspaces that also serve as green machine filtration units to create an eco-processing buffer zone to preserve the water quality of the canal. In other areas of the Ballard shoreline, sweeping public parks with salmon-friendly frontage will match similar achievements in Magnolia along Commodore Way just across the canal via a reworked, pedestrian- and bike-friendly locks system.

Completing the Hydrological Cycle

As Ballard's core grows taller, greener and denser private vehicles will gradually become more expensive and less necessary, providing the opportunity to reclaim impervious surfaces into into a network of green streets and block-based wetland pocket parks. Consisting of bioswales, bike and pedestrian paths, the green street corridors will provide wildlife habitat and eventually replace the stormwater sewer system eliminating CSO events. Following the natural drainage channels of the area, 14th and 8th avenues will be the first streets transformed laying groundwork for a future network and demonstrating the benefits of the

system. Eventually, parks and schoolyards will integrate into the green streets network, providing wetlands for riparian habitat and people. The project can potentially be financed by instituting a stormwater utility.

Green and Blue Transportation

Getting to Ballard can take time. 100 years ago, its fishing and lumber industries stayed connected to the world by rail and by sea. These two transportation opportunities have languished during the 20th century as roads replaced rails and cheap fuel made commuting a plausible option for everyone. Over the next 100 years, Ballard can improve its connections to other neighborhoods and the region by redeveloping rail and water transportation.

The existing rail right-of-way running along Shilshole avenue can be expanded to allow two green railways. By adding two commuter stops at Golden Gardens and the west end of the Ballard Locks, the neighborhood can attract workers from throughout the Cascadia corridor, activating the waterfront with offices, shops, and open space. The green railway will be raised on a trestle so shallow water habitat can be created for salmon and cobble from the bluffs can feed the beach.

The Puget Sound and Salmon Bay already serve as the portal for boats and ships to pass through Seattle's freshwater lakes on their way to the world. In the future, this connection can be utilized for watertaxis and ferries connecting Ballard to Seattle's downtown, West Seattle, and other coastal communities in the Puget Sound. Watertaxis can offer a fun, fast option for commuting within the city, as well, connecting Ballard's core with South Lake Union and the eastside communities on the shores of Lake Washington. By building a terminal near the Shilshole marina for saltwater service and a freshwater terminal near Ballard avenue, Ballard can sustain its marine heritage while improving its connections within the region.

4. Products

- Team Report
- City Diagram
- Study Area Plan @ 100 years, with 20-year overlay
- Diagram showing connections
- Illustrations
- Near-term priorities and Implementation suggestions
- Other: Flip-book

5. Team Leader (s)

Group Leader: Yes Duffy and Brooke McCurdy

Student Leader: Vanessa Lee

6. Team Members

Ray Berntsen
Rebecca Buttitta
Kelly Collins Early

Craig Hollow
Kate Howe
Richard Joyce

Japhet Koteen
Jill Keller
Kathleen Morris

Ed Schein
Zack Thomas

ACTION PLAN

Short-Term Goals

Transportation

- Encourage biodiesel and other alternative, greener fuels for buses and personal transit
- Establish more transit hubs to connect Ballard via mass transit to neighborhood districts
- Establish a trial, seasonal water taxi service to downtown and West Seattle
- Implement Green Street models within Ballard (2 running East-West, 2 running North-South)
- Create seed park on site of former Azteca restaurant on Shilshole, serviced by water taxi and bus transit to begin alleviating coastline dependence on single-occupancy vehicles.

Habitat

- Daylight Wolfe Creek and other hidden streams
- Strengthen educational outreach
- Create a pilot bioswale along 14th Ave. NW

Neighborhood/Community

- Paint blue strips down streets where buried streams once existed
- Establish a legislative framework for acquisition and development of green infrastructure
- Create a community park stewardship program with incentives for participation
- Encourage more affordable housing intermixed in Ballard
- Extend Burke Gilman trail through Ballard
- Revitalize brownfields in Ballard
- Identify industrial uses that are beneficial to neighborhoods and encourage industrial Best Management Practices (BMPs)
- Strengthen LEEDS Green-built incentives for developers

Mid-Term Goals

Transportation

- Expand and connect Green Street network
- Enhance water taxi system
- Continue to shift from SOV transit towards foot and bike traffic along Green Streets.

Habitat

- "Salmon Bay Shores" implementation
- Achieve zero CSO and low runoff in Ballard
- Further develop and interconnect bioswale network with Green Streets and lowlands
- Preserve bluffs and wild habitat connecting Ballard and Carkeek Park

Neighborhood/Community

- Establish extensive walkability
- Increase waterfront access with mixed use and habitat viewing
- Foster further utilization of greenspace for urban agriculture
- Convert guidelines and incentives to policies and laws to speed greening of city

Long Term Goals

Transportation

- Multi-use rail corridors
- Mass water transit in Salmon Bay and all Seattle shores

Habitats

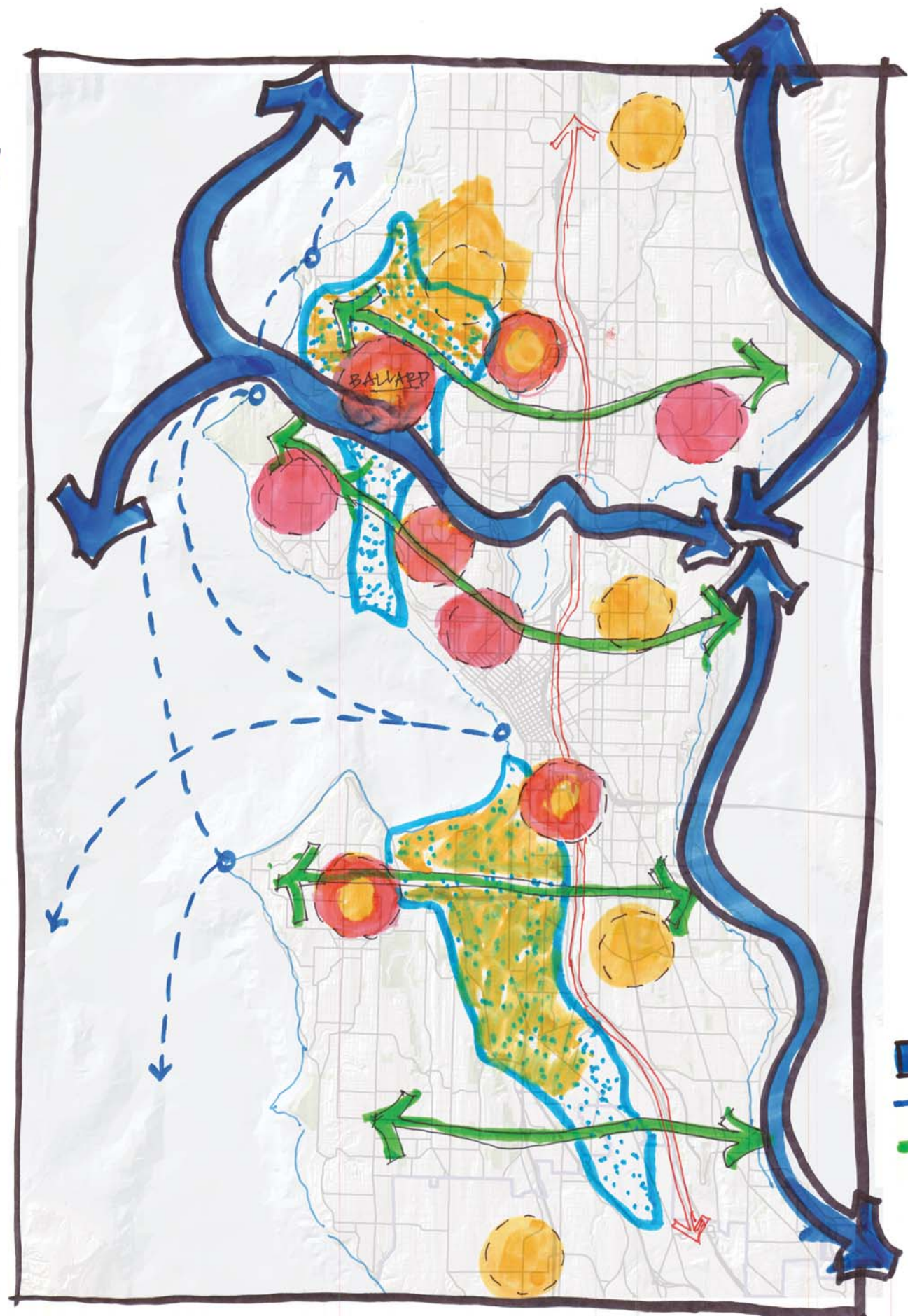
- Buy out of housing in cove Southeast of Locks
- Optimize estuary using a second set of locks
- Complete Salmon Super Highway

Neighborhood/Community

- Daylight all hidden streams
- Finalize comprehensive network of green infrastructure

ballard ship canal [a]
CITY DIAGRAM

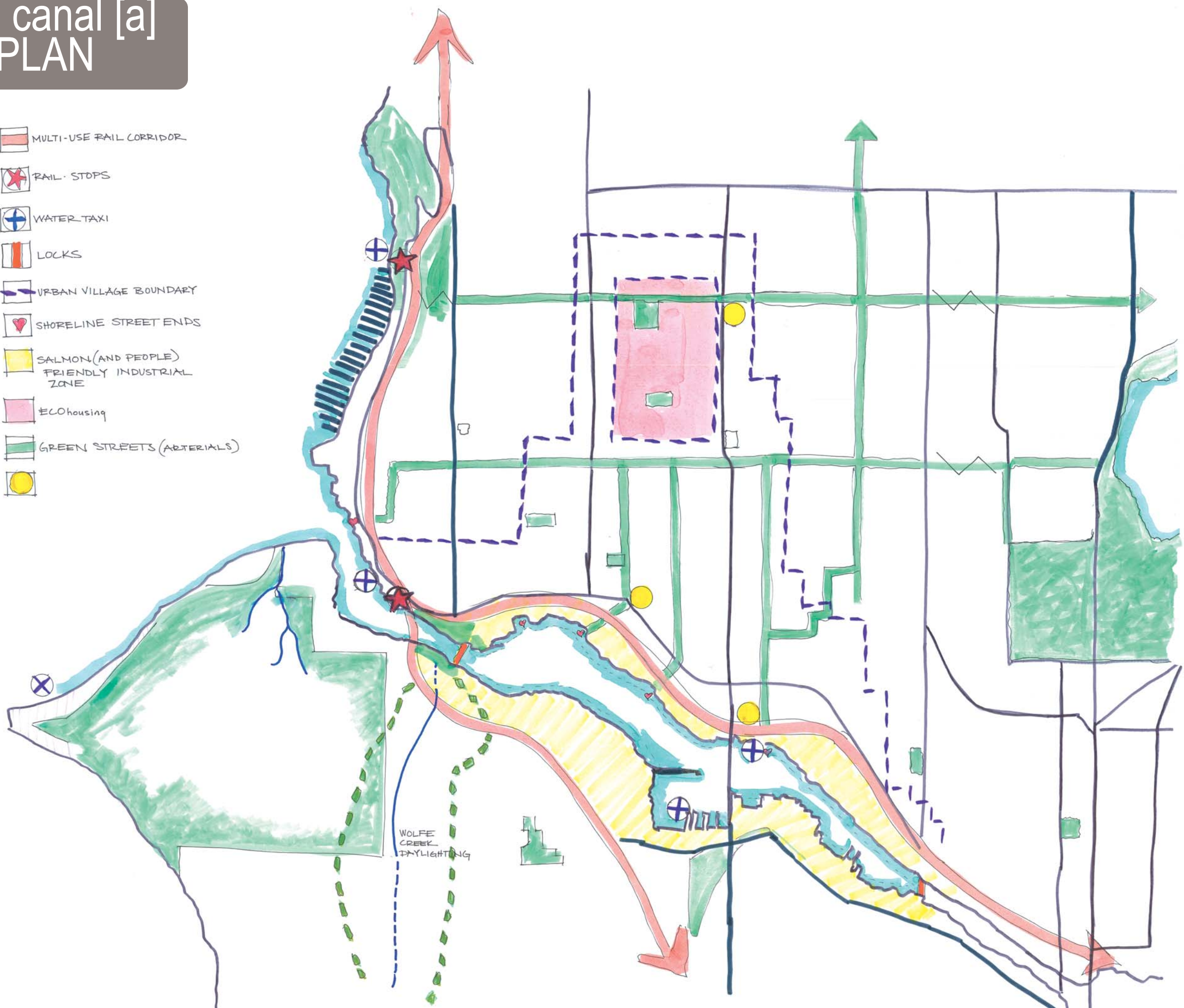
SALMON
SUPER HIGHWAY!



- SALMON MIGRATION ROUTES.
- WATER TAXI ROUTES
- TER. ACCESS TO TERRESTRIAL EDGES
- ESTABLISHED NEIGHBORHOODS.
- DEVELOPING NEIGHBORHOODS
- ESTABLISHED/DEVELOPING
- DRAINAGE 'BASINS' / LOW LYING AREAS.

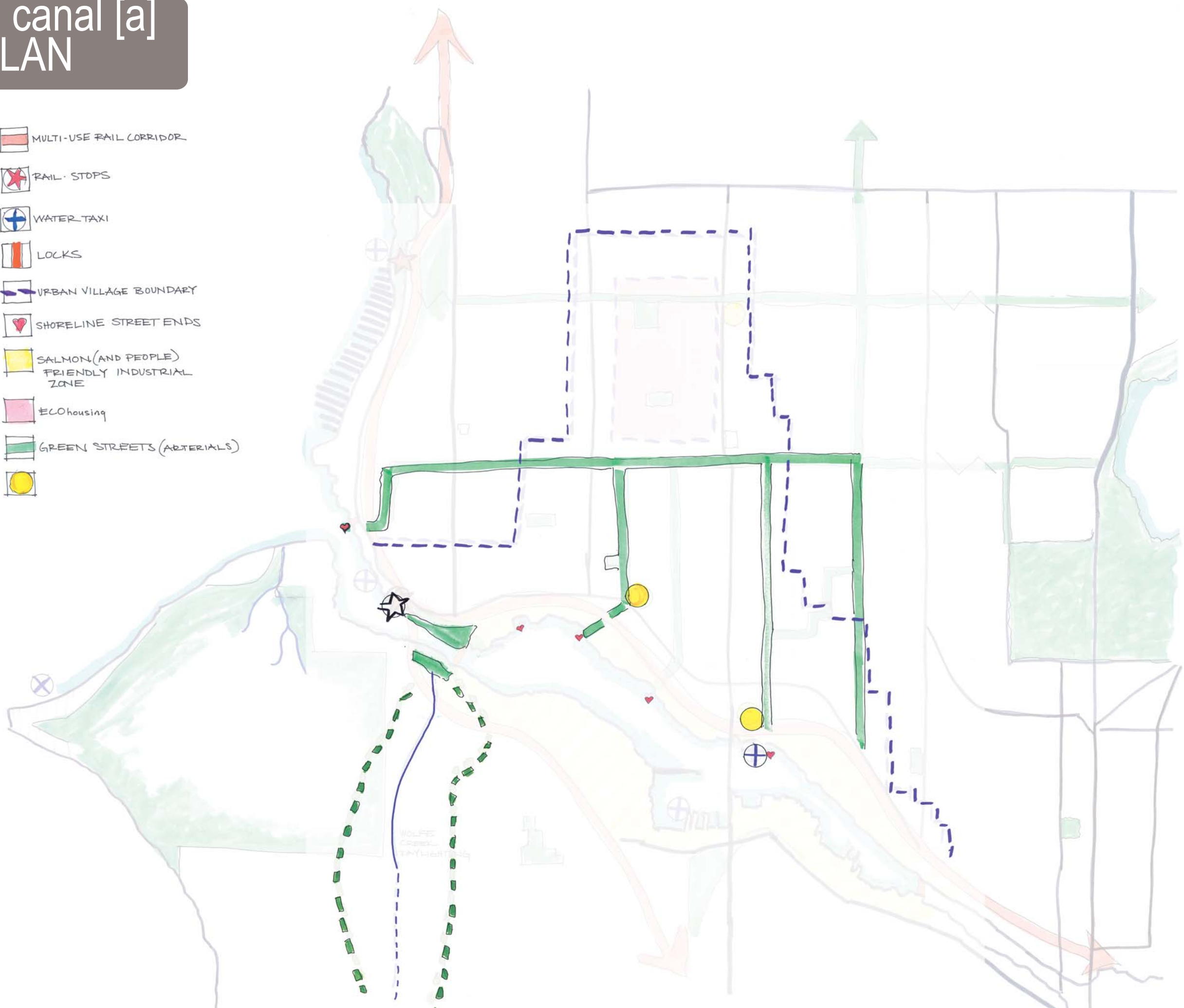
ballard ship canal [a] 100 YEAR PLAN

- MULTI-USE RAIL CORRIDOR
- RAIL STOPS
- WATER TAXI
- LOCKS
- URBAN VILLAGE BOUNDARY
- SHORELINE STREET ENDS
- SALMON (AND PEOPLE) FRIENDLY INDUSTRIAL ZONE
- Ecohousing
- GREEN STREETS (ARTERIALS)
-

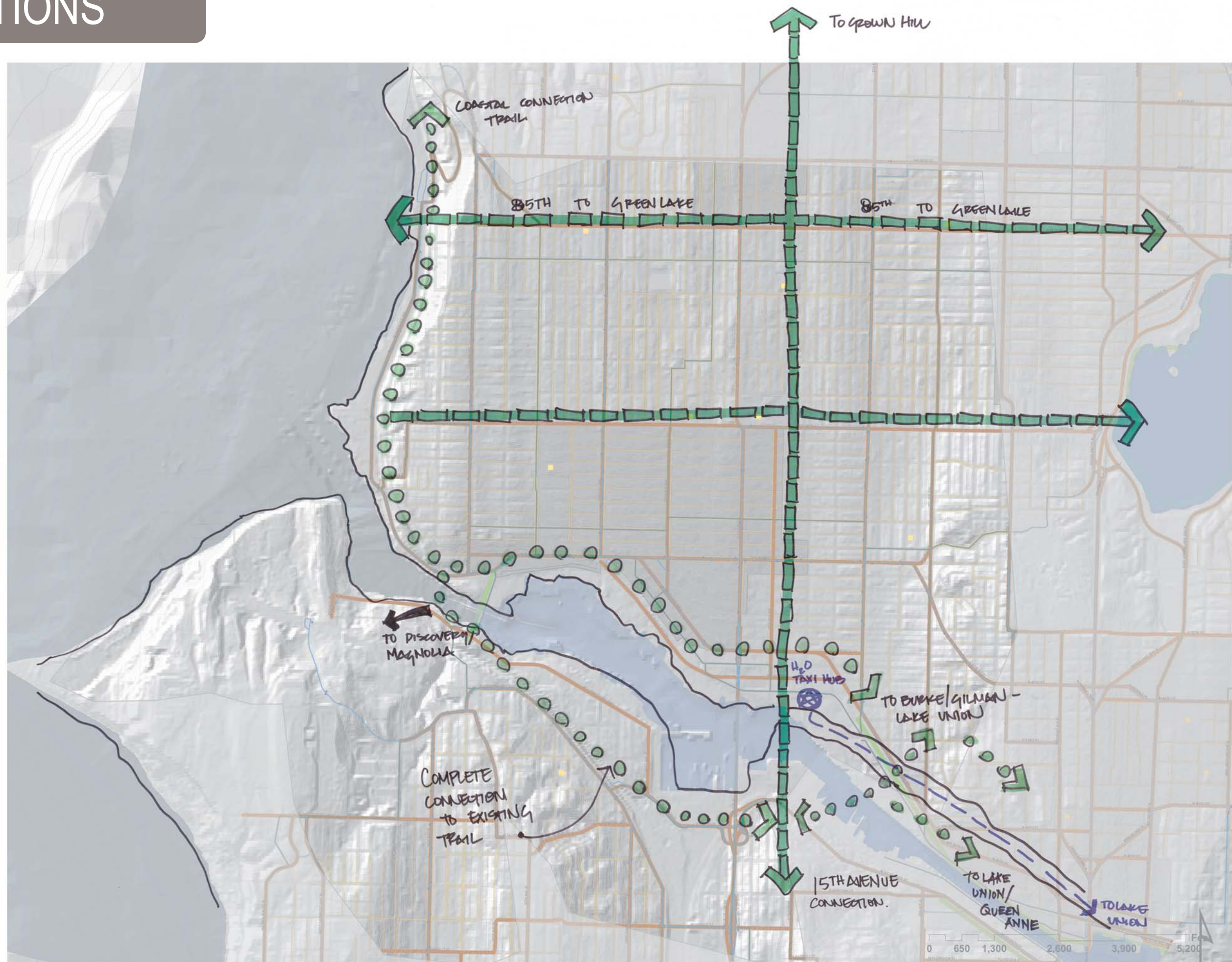


ballard ship canal [a] 20 YEAR PLAN

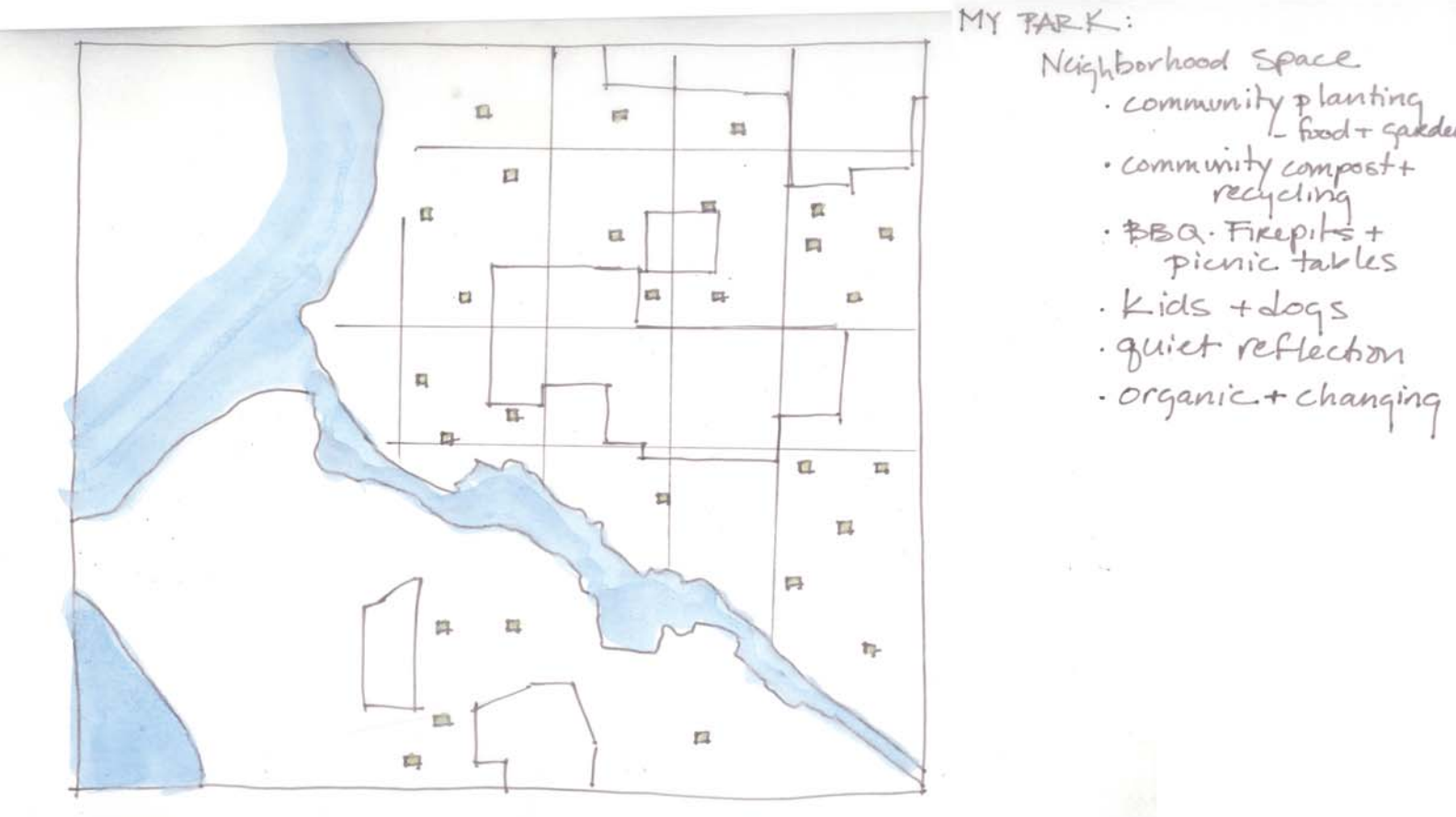
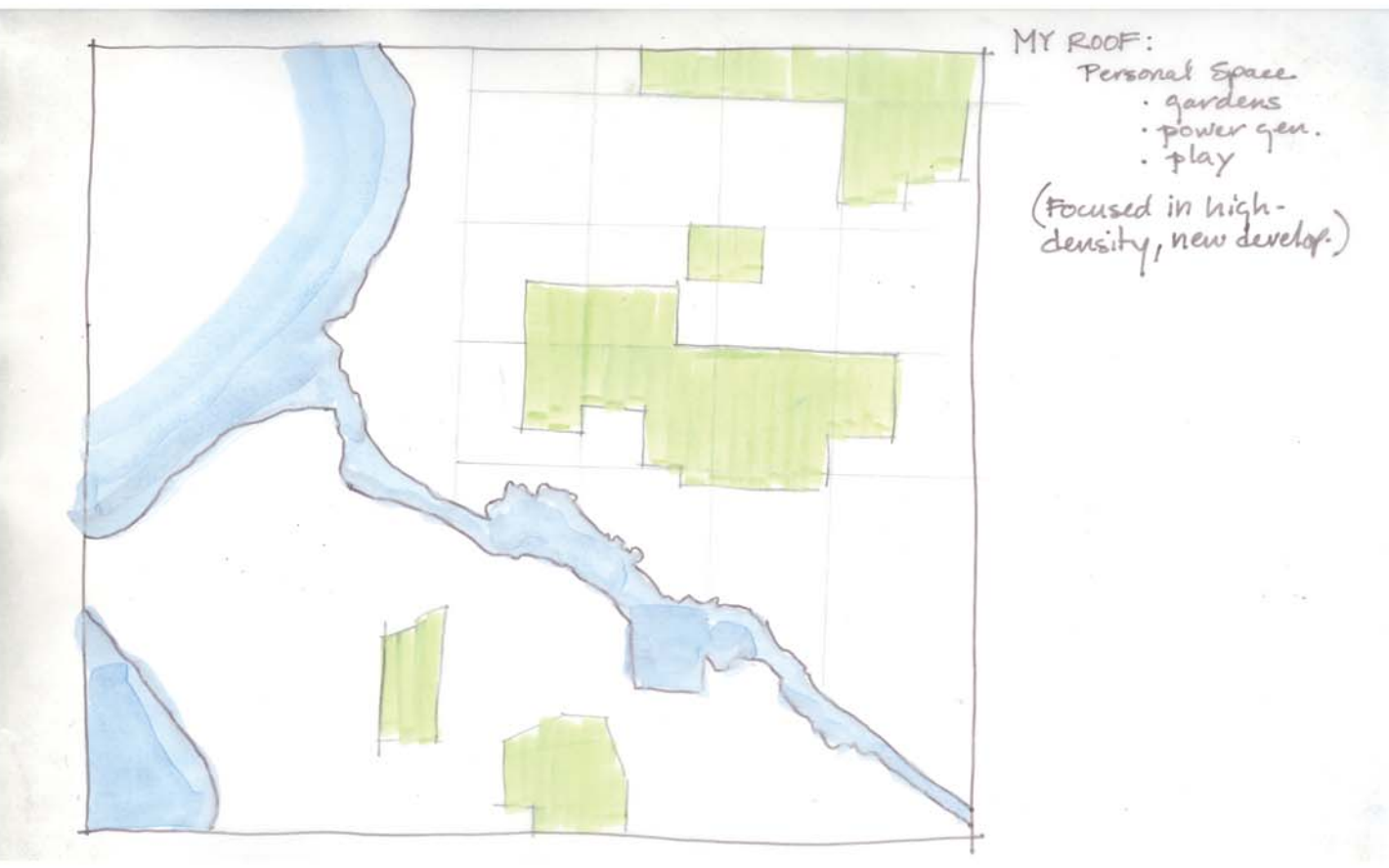
- MULTI-USE RAIL CORRIDOR
- RAIL STOPS
- WATER TAXI
- LOCKS
- URBAN VILLAGE BOUNDARY
- SHORELINE STREET ENDS
- SALMON (AND PEOPLE) FRIENDLY INDUSTRIAL ZONE
- Ecohousing
- GREEN STREETS (ARTERIALS)
- Yellow circle icon



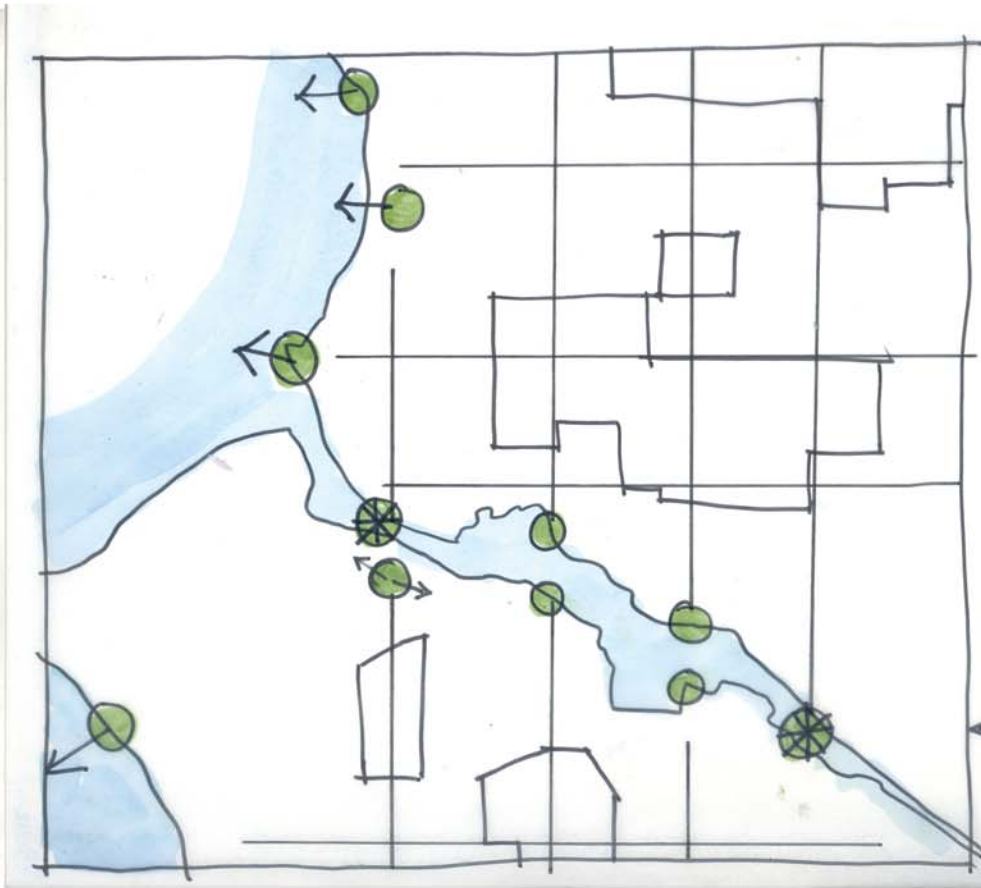
ballard ship canal [a] CONNECTIONS



ballard ship canal [a] DIAGRAMS I



ballard ship canal [a] DIAGRAMS II



VIEWS:

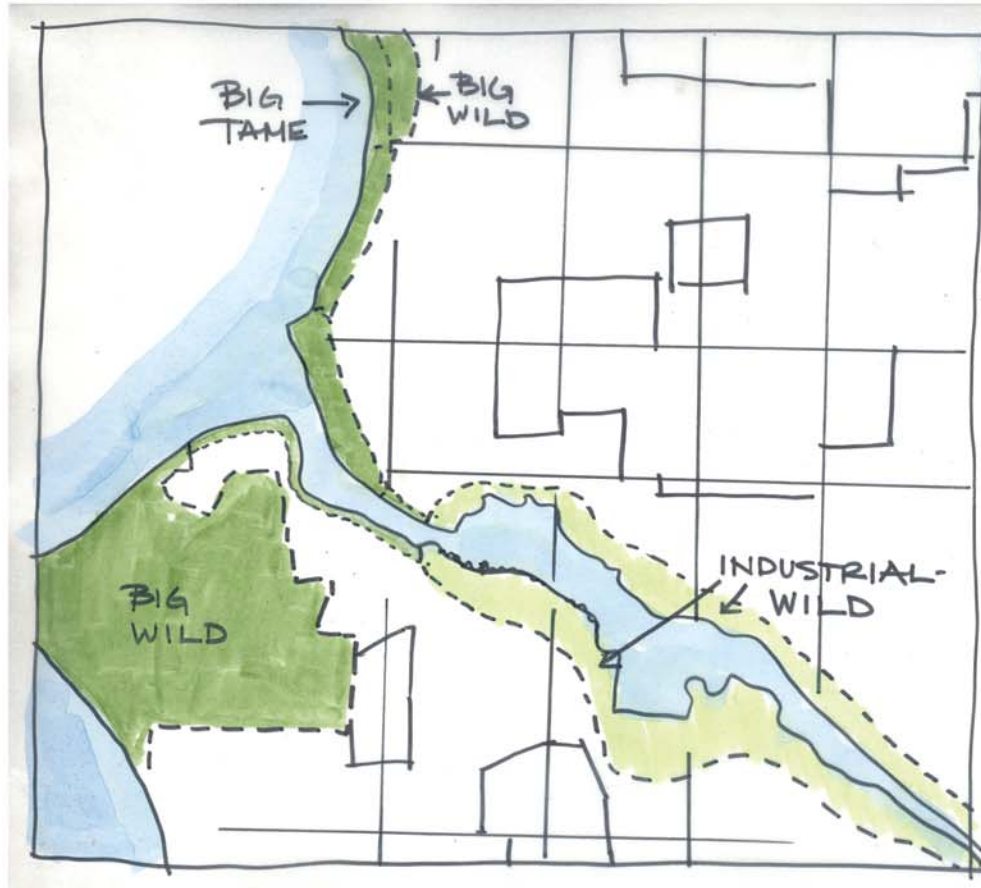
- Areas to get up high to see area
- Areas to get down low + close to water to see small grain
- New pedestrian bridges

○ DOWN-LOW VIEWS
 ←○ UP-HIGH VIEWS
 ⊗ PEDESTRIAN DRAW BRIDGES



EDGE PARKS:

- PUBLIC ACCESS along shore
- Resting place
- Touch water
- Kayak + canoe



INDUSTRIAL WILD:

- Industrial (esp. maritime related) use + ecological fingers
- green roofs
- swales
- public access
- messy edges + inter

BIG TAME:

- shore
- beaches
- firepits/picnic
- commerce
- shoreline habitat

BIG WILD:

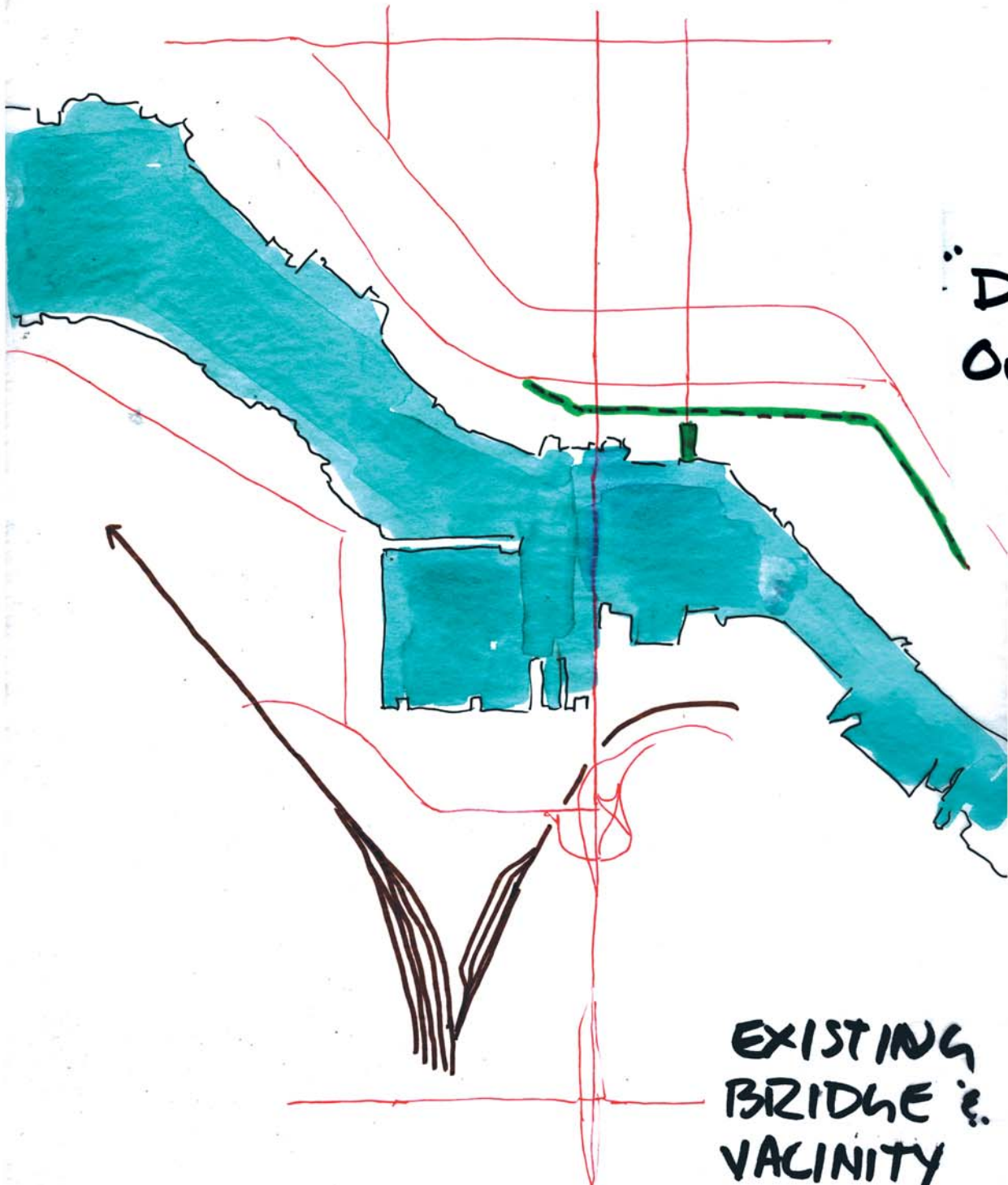
- habitat
- wild trails
- wildlife



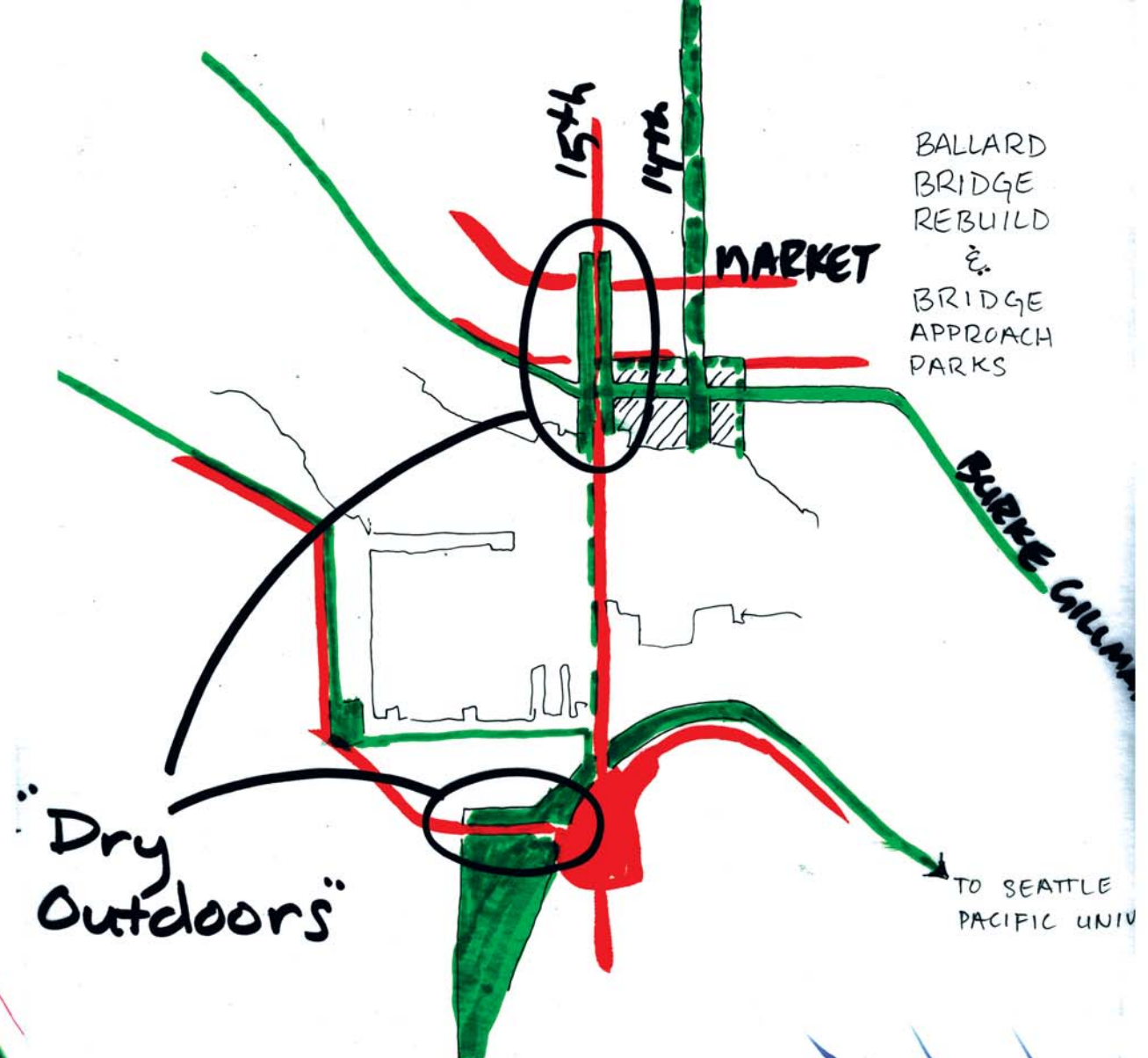
RECREATIONAL LOOP

- connecting urban green
- providing space for walking, running, bird watching, kayaking

ballard ship canal [a]
under BRIDGE SPACE



EXISTING
BRIDGE &
VICINITY



"Dry
Outdoors"

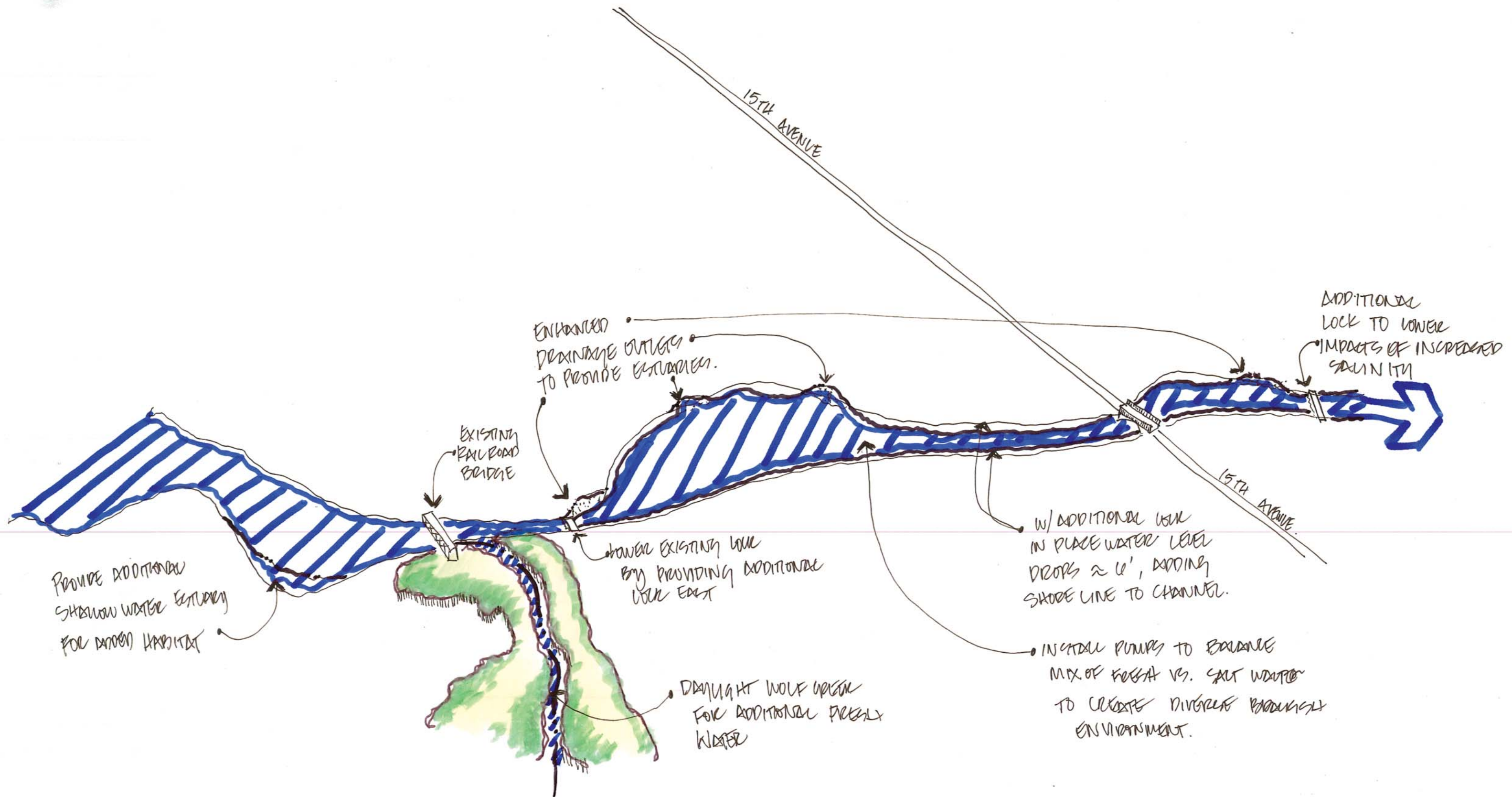


"Dry outdoors"
BALLARD
BRIDGE
APPROACHES

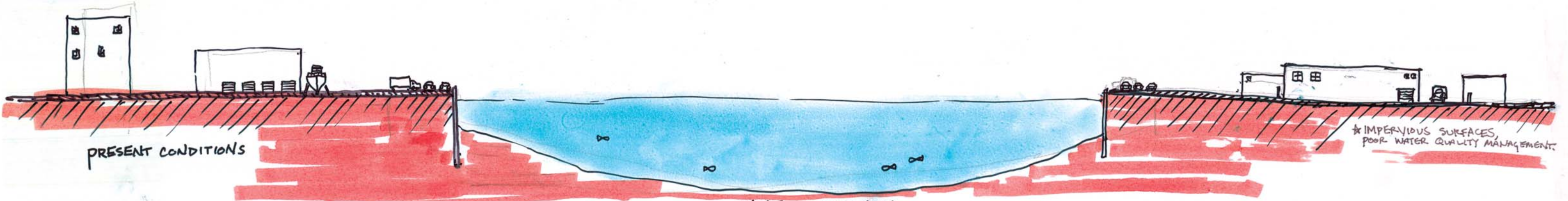
BURKE GILLMAN

Ballard ship canal [a] LOCKS PLAN

SALMON HIGHWAY



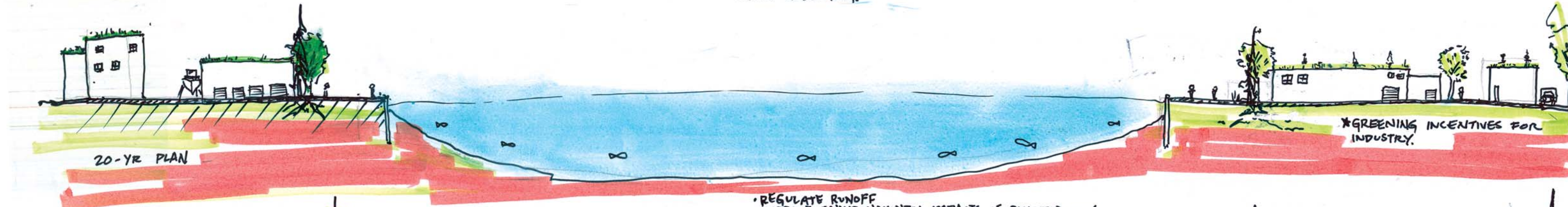
Ballard ship canal [a] LOCKS SECTION



PRESENT CONDITIONS

* IMPERVIOUS SURFACES,
POOR WATER QUALITY MANAGEMENT

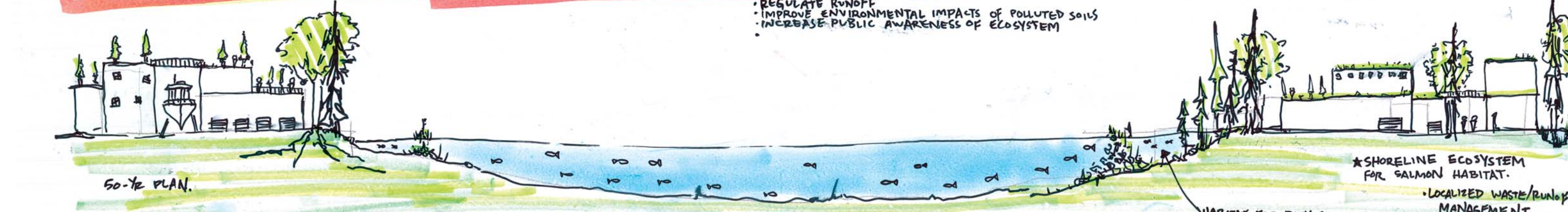
- WATER QUALITY LOW.
- SALINITY MIX POOR
- TEMP TOO HIGH
- VERY PREDATORY.



20-YR PLAN

* GREENING INCENTIVES FOR
INDUSTRY.

- REGULATE RUNOFF
- IMPROVE ENVIRONMENTAL IMPACTS OF POLLUTED SOILS
- INCREASE PUBLIC AWARENESS OF ECOSYSTEM



50-YR PLAN.

* SHORELINE ECOSYSTEM
FOR SALMON HABITAT.

• LOCALIZED WASTE/RUNOFF
MANAGEMENT

HABITAT FOR BABY SALMON.

- HEALTHY SOILS
- 'NATURAL' BIO-FILTERING OF CONTAMINANTS IN RUNOFF
- INCREASED PUBLIC EDUCATION/ACCESS.
- INCREASE DENSITY/MINIMIZE LOCAL IMPACTS
- LOCAL WASTE-PROCESSING,
- HAPPY FISH, HAPPY PEOPLE, HAPPY ENVIRONMENT, HAPPY ECONOMY.

Ballard ship canal [a] LOCKS AXON

