

### Arboretum Waterfront Trail Project #16-1868 Dev

**Aquatic Lands Enhancement Account: Development Seattle Parks and Recreation Department** SEEKING \$475K in funding August 17, 2016













# Constructed in 1972 Rebuilt in 1985





1.2 miles of wetland access







# beautiful





# unique

#### Design focuses on restoring capacity to the overall trail system

- Leverages maximum life cycle out of the asset.
- Aquatic lands lease renewed in 2014 for another 30 year term.
  - Permit the entire trail project in 2016-17.
    - Phase 1 construction in 2017.
  - Phase 2 construction in 2018, dependent on funding.



### FIT WITH ALEA PROGRAM GOALS RESTORE USE , INCREASE CAPACITY , EXPANDS USEFUL LIFE





# INTEGRATING PUBLIC ACCESS COMPATIBLE WITH THE SITE



West Hylebos wetland project

#### ENHANCED ACCESS PROTECTS WETLAND INTEGRITY



**Fit with ALEA Program Goals** 

15

# **EXPERIENCE = AWARENESS**





- Elevate users reduce the overall width, footprint and impact.
- Eliminate wood-chip fill in the wetland
- Follow the existing trail corridor
- Re use over water structure
- Remove abandoned trail sections
- Piles aid wetland function







#### **2: THE NEED TO MAINTAIN HISTORIC USE AND ACCESS**





Need

#### PEDESTRIAN ACCESS IS A PRIORITY OF THE 520 PLAN AND COMMUNITY RAISES CONCERNS ABOUT THE WATERFRONT TRAIL



#### NEED IS IDENTIFIED IN THE PLANNING FOR NEW 520

#### Nature meets City



A conceptual-level diagram of Seattle's 100-year vision as articulated in 1909 Seattle Parks and Boulevards Plan

A conceptual-level diagram of how SR 520 could build upon the 1909 vision to connect Seattle's green spaces, waterways and gateways

#### OVERALL VISION

The SR 520 project corridor will be the premier gateway to the City of Seattle by reconnecting to the early Seattle vision of "Nature meets City"

#### A refined vision: Nature meets City

The new SR 520 project corridor is a critical regional highway facility that will support many modes of travel. WSDOT has the opportunity to build a more vibrant transportation facility through Seattle that could:

- Build upon Seattle's vision set forth 100 years ago to become a premier city by creating infrastructure that embraces our unique natural setting and promotes a vibrant urban environment
- Yield affordable solutions and sustainability practices that support regional and local connectivity as well as ecology with a special focus on shoreline habitat and the use of low-carbon materials
- Provide a memorable experience for all users, including motorists, pedestrians, bicyclists, transit users, recreationists and residents of adjacent neighborhoods



A conceptual-level diagram of the potential natural (east-west) and urban (north-south) axes that define the Seattle corridor

#### What we have achieved:

- Public awareness and community input
- Support of project elements
- A refined vision and a set of design preferences based on the work completed to date

design proferences should be integrated into the I-5 to Medina project design

#### A full version of this document Seattle Community Design Process Report is available here:



Executive Summary = 5

#### COMMUNITY INVOLVEMENT IN DESIGN OF NEW 520

# Seattle Parks Workshops

On the west side of the project corridor, SR 520 passes through or near to an area with some of our region's most significant natural resources and public open spaces, including Lake Washington's Portage and Union Bays, Washington Park Arboretum, historic Lake Washington Boulevard, the Waterfront Trail, and Lake Washington's most extensive system of wetlands. In the spring of 2005, members of the project team met with a stakeholder group that included representatives of the University of Washington, the Washington Park Arboretum, and the City of Seattle's Departments of Transportation and Parks and Recreation.

During the course of two workshops this group discussed ways to minimize effects of the project to natural areas and open spaces, enhance these resources where possible, and incorporate existing planning for these resources into the project design. The workshops represent a collaborative effort to develop design concepts for East Montlake Park, the northern segment of Lake Washington Boulevard, the Arboretum, Foster Island, and WSDOT lands adjacent to the Arboretum that integrate the goals of Seattle Parks, the Arboretum, and the SR 520 Bridge Replacement Project. The discussions held at these workshops, and the ideas generated will be revisited as the design of the preferred alternative progresses, and WSDOT team landscape architects will further develop and refine selected concepts. The activity deliverable includes a series of drawings that may be integrated into the EIS.





NEED: MITIGATION AND MASTER PLAN WORK COORDINATED



Need











#### Foster Island Bridge (WPA)

Period Analyzed: Tuesday 01 July 2014 to Wednesday 30 July 2014





## **Key Figures** Total Traffic for the Period Analyzed: 24,252 Daily Average : 808 · Busiest Day of the Week : Sunday · Busiest Days of the Period Analyzed: 1. Sunday 06 July 2014 (1,470) 2. Friday 04 July 2014 (1,267) 3. Sunday 27 July 2014 (1,213) Distribution by Direction: South (off Foster Is...: 49% North (onto Foster I... : 51% 49% 51%

#### Need



Period Analyzed: Tuesday 01 July 2014 to Wednesday 30 July 2014





#### Need

# Q5: What area of the park do you use the most?

• Answered: 231 Skipped: 0





Project provides wetland recreational and educational opportunities to low-income neighborhoods





# Interpretive and Educational Elements




- Trail incorporates viewing platforms and enhanced access that supports environmental learning **IN THE WETLAND**
- Arboretum AND Parks host **thousands** of annual participants in their educational programs (i.e. school fieldtrips, summer camps, kayak tours, pre-k programs)



Need

### 2016 ACTION AGENDA TO PROTECT AND RESTORE HABITAT

• Water Resource Inventory Area (WRIA) 8 identifies the Union Bay area of the project site as a restoration priority for Chinook rearing and migration.



Need



#### SITE SUITABILITY



## Ecological functions of the site

- Marsh and riparian areas that support priority species (e.g., western pond turtle, bald eagle, Bull trout, and Chinook salmon)
- Supports over 80 bird species, as well as many species of small mammals, amphibians and reptiles, and fish





## Similar local sites and access

This property provides a unique opportunity to introduce people to the largest wetland complex (Union Bay wetlands) in Seattle. By addressing deficiencies in public access while enhancing the wetland and riparian systems; the project can better connect users with the habitats they are experiencing.



## This is a special link within an existing network of pedestrian trails



#### LINKAGE BETWEEN TRAIL SYSTEMS

## PEDESTRIAN LINK BETWEEN EXISTING HEAVILY USED REGIONAL TRAIL SYSTEMS

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Future Phases					7	202 1.4	
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NWI Wetlands							(FE)



#### SITE SUITABILITY



### NEW DESIGN SUPPORTS CURRENT AND FUTURE USE

- Reduced maintenance
- Enhanced access





## SUPPORT FOR THE TYPE AND QUANTITY OF USE

- Highly utilized facility.
- Programmed Parent-child nature programs, school group field trips, summer environmental education day camps, Audubon and self-guided tours.
- Providing a safe and fully accessible route through the wetland and riparian habitat areas would better support these dynamic and popular education programs.



Photo credits: Arboretum Foundation

- Provide new opportunities for public access
  - Renovate and re-use existing access





## Existing condition studies and analyses



**PHOTO No. 2:** Dock D, Looking Northwest - Note the Floating Walkway and Dock D in the background. Also note the misalignment of the approach structure and the shoreward erosion.



**PHOTO No. 7:** Walkway, Float Anchor Piles No. 16 and 16 Batter - Note the float anchor hoop is not aligned with the piles and has been cut off. Also note the pontoons are floating unevenly due to the weight of the interconnecting ramp.

East Bridge, Floats No. 2 and 3 - Note the intact, sharply defined corners and the good condition of the concrete. This was condition was found to be typical.





- Elevated trail segments minimize disturbance to wetland areas
- Simplified design allows for accurate cost estimating





## • RENOVATION within the existing footprint







CANOE CROSSING ELEVATION NOT TO SCALE

Limited number of durable components required to construct













# SAVE THIS AND RECREATION NEEDS YOUR HELP

Seattle Parks and Recreation is working to secure grants to enhance and preserve the **Arboretum Waterfront Trail** and waterfront access. We plan to share information about the trail users with grantors so they can better understand who you are, how you use the trail and why you love it!





WHY ARE YOU HERE? Take our one-minute survey: \_\_\_\_ www.surveymonkey.com/r/ArboretumWaterfrontTrail or e-mail garrett.farrell@seattle.gov









#### **COMMUNITY INVOLVEMENT AND SUPPORT**

*	Responses	Date	
1	If it wasn't covered with water	5/8/2016 5:26 PM	
2	More picnic tables	5/8/2016 4:24 PM	
3	repaired trail	5/8/2016 4:22 PM	
4	Repair the waterfront trail	5/8/2016 3:52 PM	
5	Unflooded trail	5/6/2016 7:56 PM	
6	not flooded	5/6/2016 1:20 PM	
7	Bird watching oportuities	5/4/2016 11:22 AM	
8	If the trails weren't under water or muddy	5/3/2016 9:41 PM	
9	Not flooded	5/2/2016 10:52 AM	
10	Nice days like today!	5/2/2016 10:49 AM	
11	It gets very waterloged. I was just there on May 1st and had to walk the trail barefoot, due to the deep mud and water over floating trail. At one point I actually sunk up to my knee where the trail was flooded. In the future it would be nice to have a more reliable (raised) trail so I don't get covered in muck. Thank you. I	5/2/2016 12:22 AM	
12	Strict enforcement of no-dog rules.	5/1/2016 8:06 PM	
13	Less muddy path - parts get pretty submerged at times	5/1/2016 10:43 AM	
14	less mucky trails during springtime	4/30/2016 1:22 PM	
15	More-plant/bird informational signs	4/28/2016 12:22 PM	
16	The 520 construction being completed. Drier Foster and Marsh Islands for footing.	4/26/2016 1:30 PM	
17	not sure	4/24/2016 10:10 PM	
18	Nothing	4/24/2016 2:35 PM	
19	Nature guide	4/24/2016 9:58 AM	
20	good bird habitat and low human (and pet) disturbance	4/23/2016 8:49 PM	
21	If SR-520 had noise reducing / quieter pavement.	4/23/2016 6:13 PM	
22	Tables/lounging areas	4/23/2016 4:03 PM	
23	more parking	4/23/2016 5:34 AM	
24	Nothing	4/22/2016 6:29 PM	
25	less mud on the trails in the spring.	4/22/2016 8:55 AM	
26	Would like the waterfront boardwalk and the trail fixed so that they are not ankle deep in water/mud-love love livethe waterfront trail, especially the boardwalk-the views are to die for!	4/22/2016 6:50 AM	
27	Less mud, handrails on bridges	4/21/2016 10:15 PM	
28	Less mud, handrails on bridges	4/21/2016 10:15 PM	
29	If it wasn't so muddy.	4/21/2016 12:09 PM	
30	I would use the trial much more often if it wasn't always so muddy and wet. Makes it challenging to use without heavy duty shoes and troublesome walking the dog.	4/19/2016 2:32 PM	
31	Dryness	4/19/2016 B:34 AM	



#### PUBLIC INVOLVEMENT in The Arboretum Master Plan & SR 520 VOTER APPROVED 2008 Pro Parks Levy VOTER APPROVED Metropolitan Park District creation Extensive public support and feedback (FIX OUR TRAIL!!!) year round use, responding to public need, enhanced access for the future



"Thank you for your advocacy on behalf of those of us who use this trail. And for those who would like to, but because of its condition, cannot."

"Dear Mr. Farrell, I am retired. The waterfront trail is a precious part of my day-to-day life. I walk from Marsh Island, across Foster Island, and back home through the arboretum three or more times a week-sift the trail isn't floaded. Please do what you can to make the trail accessible again. "

" my family and I have walked the trail between the now-gone MOHAI and Arboretum for 30 years. We are a birding family, and the habitat along that trail is superb for riparian birds. It's also a great lookout for the waterbirds on Lake Washington. It is where we saw our first Pied-billed Grebe and thought it was a very odd-looking duck! Now that I am almost 70, I need better surfaces to walk on than I used to. Soggy chips, underwater trails, and uneven surfaces often stop me before I even get started. I would love to take my grandchild along the same trail where I used to take her dad when he was small, but for much of the year, this is impossible for me. *More than ever, we residents of urban areas need \*easy\* access to nature within the city. We need it for our own peace and quiet and restful restoration of the soul, but our children and grandchildren need it even more, to connect themselves to the planet, to ground themselves in a place, to love nature so they will preserve it. "* 

"My husband and I have lived in Montlake for 20+ years. We used to run the trail when younger and in recent year walk it but are often hesitant to travel to the trail (on foot) because we never know if its passable or not, whether its too muddy or not. Funding to improve this trail is so very needed. It needs to be a reliable trail. It's a beautiful region to foot travel. Just needs to be safe and reliable. Of course there have been numerous times over the years when we have had to turn back as the trail was unpassable."



## **Conclusion and Questions**