



University of Oregon Riverfront **Vision Plan**

Funded by the Associated Students of the University of Oregon (ASUO)
2012 Draft Report

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Executive Summary

Summary
Purpose of the Report
Report Content

Executive Summary

A vibrant University riverfront has the potential to serve as a social, political, and economic nexus between the Eugene downtown core and the University of Oregon. Additionally, it provides enhancement and protection of the natural features along the Willamette River and the Millrace, and serve as an expression of the University of Oregon's deepest values of environmental stewardship.

Throughout the United States, and around the world, cities are replacing neglected and derelict riverfront infrastructure with socially, economically, and environmentally vibrant openspace inspiring a riverfront revitalization movement. Successful riverfront developments balance a mix of uses that enhance the local economy and sociability, have a clear and defined identity, assimilate with the surrounding community, and protect and restore the quality and function of local ecological systems.

The Willamette River is a magnificent, historical, and ecologically important natural resource that runs through the heart of our community, yet is currently isolated from the social and economic heart of Eugene. Unfortunately, many students in their four years at the University of Oregon do not even go downtown or to the river.

Within the City there are only a few remaining stretches of the Willamette River that are publicly owned. These green jewels along the river offer a potential to create a strong social, economic, and environmental connection between the river and the city. Unfortunately, there has become a trend within the City to allow parking lots and private office buildings dominate our treasured river's banks.

EWEB has recently conducted a public participation process to develop a Riverfront Master Plan for their riverfront property that breaks away from this trend. The University of Oregon has the opportunity to join EWEB

and develop a new master plan for their riverfront that embraces river connections to the UO campus and to downtown Eugene.

The University has the resources, the access to knowledge, and the moral capacity to preserve the Willamette Greenway. This report proposes a future for the UO Riverfront rooted in an ecological paradigm shift focused on preserving the Greenway, strengthening the community, and creating educational opportunities for the future.

Purpose of the Report

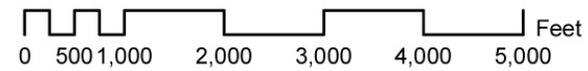
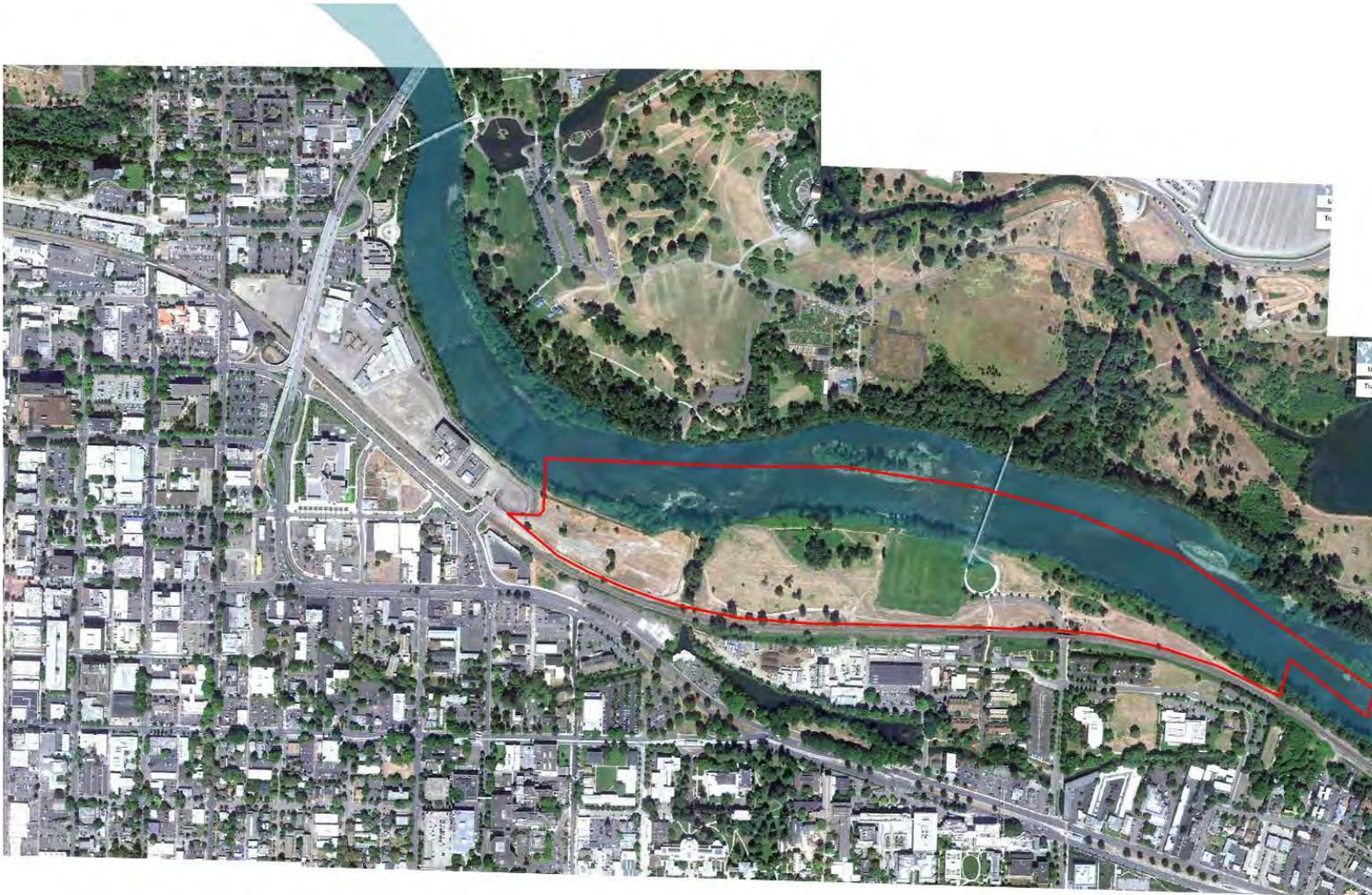
This report was funded by the ASUO and is intended to serve as a resource to inform and guide potential future development plans for the UO Riverfront. The goals of this report are to:

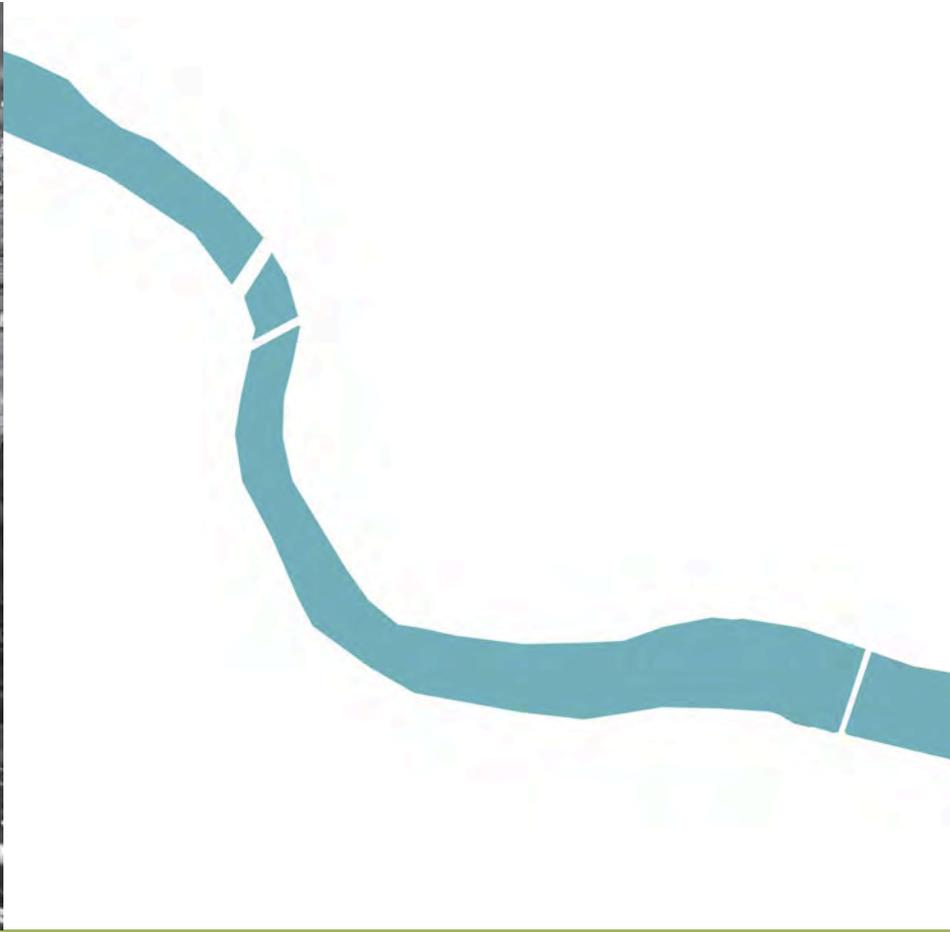
- Present the history of the UO Riverfront property in ecological, economic, and social terms.
- Assess what can be achieved within the current conditions of the site.
- Suggest potential modifications to the site that may restore ecological functions and enhance economic and educational success.
- Showcase UO student work that focuses on an array of development options for the UO Riverfront.
- Provide next step recommendations to create an integrated design gradient of human use and ecological function.

Report Content

This report addresses the University of Oregon Riverfront, its history and development, and its impact to the stakeholders involved within the context of their educational environment. Chapter one gives a history of the University of Oregon Riverfront property and outlines student and administration involvement regarding the property's future development. Chapter two addresses UO Riverfront history. Chapter three addresses current conditions and their importance to the future of the University of Oregon and Eugene. Chapter four reviews the history of UO student work. Chapter five outlines best practices in riverfront development. Chapter six proposes next steps and the long-term beneficial effects for the University of Oregon.

Context Map - The University of Oregon Riverfront property is approximately 15 acres bordered by EWEB on the west, the Willamette River on the north, Moss Street and the river on the east, and the railroad tracks to the south.







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UO Riverfront History

Site Description & Context

Previous Land Uses

The Riverfront Research Park

Student, Faculty, & Eugene Citizen Involvement



Another massive flood causes significant damage to the city of Eugene and changes the course of the Willamette River

1890

Coal carbonization facility constructed at the western edge of the current UO property. Remains in Operation until 1910

1906

1938

University buys property north of the Millrace in order to implement improvements but abandons plans at the outbreak of WWII

University of Oregon opened
1876

1861

The most immense Willamette River flood in recorded history. The "Great Flood" devastates the valley's economy and results in the death of several people. The flood peaks at 635,000 cubic feet per second, more than the flow of the Mississippi River and inundated 353,00 acres of land.



1900

Eugene Sand & Gravel Co. moves from location near Skinner's Butte to what is now the University of Oregon Riverfront property

1937

News reels and coast to coast radio broadcast made of Canoe fete. In order to enhance the event UO begins developing plans for outdoor amphitheater, extending park lands and the relocation of Franklin Blvd. and railroad tracks



The University of Oregon acquires 35 acres along the South side of the river from the Eugene Sand & Gravel Co.

1968

Flooding of the Willamette River causes \$157 million in damage statewide, 20 Oregonians lose their lives

1964

1950's
City of Eugene zones the land between the millrace and the river for industrial use

1964

Eugene Sand & Gravel Co. moves to current site near Delta Highway

1968

Asphalt plant built adjacent to University riverfront property

The University of Oregon files for Willamette Greenway Conditional Use Permit and is approved Eugene citizens and the Land Use Board of Appeals file suit against the city. The Permit is upheld

1989

Senate Bill 100 passes which includes the Willamette Greenway Act

1973

1978
North Campus Master Plan preliminary site plans approved for construction of playing fields on the riverfront. Only one field is completed

200 students protest development north of the railroad calling it the "Road to Nowhere"

1997

1989
Students of the University of Oregon pass the Campus Greenway Initiative to reserve the riverfront for open space and public uses

2006

University of Oregon removes 33 tons of contaminated soil from the University riverfront property

2011

Developer Trammel Crow signs a contract stating they will not build north of the railroad



ConnectingEugene and the ASUO co-produce The Riverfront Celebration. Speakers address various issues and controversy surrounding the RRP

2010



UO Riverfront History

Site Description & Context

The University of Oregon Riverfront property is approximately 15 acres bordered by EWEB on the west, the Willamette River on the north, Moss Street and the river on the east, and the railroad tracks to the south.

Previous Land Uses

Around 1850, during the time of Euro-American settlement in the Eugene area, the UO Riverfront property was covered by riparian floodplain forest and bordered by oak savanna and upland prairie.¹ As the City of Eugene began to form, issues related to population growth and economic development had tremendous impacts on the health, form, and integrity of the Willamette River and the UO Riverfront property.

From the early 1900's to the 1960's, the Eugene Sand & Gravel Company Eugene riverfront operation occupied the UO Riverfront property. During that time, large volumes of fill material were dumped along the riverbank to create a steep, armored bank, which is currently creating "significant constraints on ecological restoration as well as on people's interaction with and aesthetic experience of the river."² Additionally, in the early 1900's, industrial and sanitation wastes were dumped directly into the Willamette River with little or no restriction creating additional pollution issues along the riverfront.

1 Johnson, B., Ferguson, A., & Simms, J. (2010, April 20). *Riverfront Ecological Analysis and Design*. Eugene Water and Electric Board (EWEB). Eugene, OR. p. 3.

2 Johnson, B., Ferguson, A., & Simms, J. (2010, April 20). *Riverfront Ecological Analysis and Design*. Eugene Water and Electric Board (EWEB). Eugene, OR. p. 3.

In 1906 a coal carbonization facility was constructed on the western portion of the Riverfront property and remained in operation until 1910.

In 1936, the railroad tracks moved from along Franklin Boulevard to their current position bordering the UO Riverfront site to the south.

In the 1950's, the City of Eugene zoned the land between the Willamette River and the Millrace for industrial use. In late 1968, the University of Oregon acquired the riverfront property from the Eugene Sand & Gravel Company.

The Riverfront Research Park

In the early 1980's, the concept for a University of Oregon Riverfront Research Park (RRP) was developed by the UO and the City of Eugene.

In 1985, the Eugene City Council created the Riverfront Park Special Development District, a 148-acre tax increment district that includes the Riverfront Park site to fund needed infrastructure projects within the area.³

In 1989, the UO developed the Riverfront Research Park Master Plan with a vision rooted in boosting the economy of Eugene and enhancing research at the University. The RRP was initiated as cooperative effort of the University of Oregon, the City of Eugene, and a private developer to develop a University-related Research Park on a 67-acre site. The site was, and still is, owned by the Oregon State Board of Higher Education adjacent to the University campus on the south bank of the Willamette River." Fifteen acres of the Riverfront Research Park are along the Willamette River north of the railroad

3 Eugene (Or.), Eugene Planning Commission., & University of Oregon. (1988). Master plan and design guidelines, Riverfront research park, Eugene, Oregon. Eugene: The City. p. 8.

tracks. One of the Master Plan’s primary goals is to revitalize lost urban open space along the Willamette River. The Master Plan aims to “enhance the appearance and use of the Riverfront area” by increasing the built environment along the Willamette River.⁴

Unfortunately, the RRP Master Plan failed to take into account the immense body of stakeholders, including UO students, faculty, and Eugene citizens, who view the Willamette River as a precious natural resource that should be cherished rather than dominated and hindered by economic development.

Student, Faculty, & Citizen Involvement

Opposition to development along the UO Riverfront property has been strong since the development of the UO Riverfront Research Park Master Plan.

Conditional Use Permit

At the time of the plan’s adoption in 1989, UO Professor Alvin Urquhart appealed the issuance of a Condition Use Permit (CUP) proposed by the plan. The CUP was requested by the UO to allow development along the river. Urquhart appealed the CUP all the way to the Oregon Supreme Court on the basis of violating principles of the Willamette Greenway Act. During the time of the appeal, at the spring Senate General Election, UO students passed a Campus Greenway Initiative that declared that the UO Riverfront should be reserved for open space and public uses. In October of 1989, the appeal was rejected and the City of Eugene granted the Conditional Use Permit which specified that construction must be completed by October 10, 2009.

⁴ Eugene (Or.), Eugene Planning Commission., & University of Oregon. (1988). Master plan and design guidelines, Riverfront research park, Eugene, Oregon. Eugene: The City. p. 8.



Development North of the Tracks

In 1997 some 200 students rallied at the EMU (Student Union) and the Urban Farm on campus opposing construction of an automobile underpass at the northern terminus of Agate Street, which was intended to open the riverfront to further development. In 1998, after years of contention and student opposition, a review of the Riverfront Research Park was initiated by President Frohnmayer. The review committee received approximately 100 emails and letters from university faculty, students, and Eugene community members and groups. The content of these letters indicate that public opposition to riverfront development was approximately 50:1 at this time.

In 1999, following the issuance of the report, which stated that the riverfront sector must be protected from development until all lands south of the railroad tracks were occupied, the University Senate – the official governing body of the University of Oregon – 13 Jan 1999 (US 98/99-04) that stated: “RESOLVED, that the University Senate hereby urges President Frohnmayer to exclude the University-owned lands in the River View and Gateway Sectors from any future commercial

development and to designate these lands for open space, recreational fields and natural areas’.

CUP Extended

In October 2009, the University applied to the City of Eugene for a 3-year extension to the 20-year Conditional Use Permit to develop the riverfront. The extension was granted, but then appealed by Connecting Eugene on the grounds that the University could not fulfill the conditions of the permit – such as completion of the Research Park within the 20-year timeline established by the original permit. The appeal also charged that surrounding conditions had changed significantly since the issuance of the permit in 1989. The appeal files contained over 600 public comments in opposition, while only 11 were in favor of the extension.

Oregon Research Institute Building

In June 2009, a ground lease was signed for the development of a 4.3 acre site on the Poleyard section of the UO Riverfront Property. The site was to be developed with a 200 spot parking lot and an 80,000 sf 3-story office building just 100 feet from the Willamette River. The Oregon Research Institute secured a \$17 million investment from national real estate and development firm Trammel Crow Company to construct the office building. The University planned to lease the public land to Trammel Crow Company for at least 55 years. Trammel Crow would be responsible for constructing and owning the building. The Oregon Research Institute would then lease space within the building to house their operations. At the time, Oregon Research Institute had also found funding from a governmental organization and hoped to buy in to a portion of the building to the tune of approximately \$5 million.

In 2009, the ASUO Student Senate unanimously supported a motion

to oppose development on the Riverfront under the current Master Plan, and a similar resolution was passed in January 2010 in the University Senate. During faculty meetings of the Architecture and Landscape Architecture departments in winter term of 2010, each of these groups voted unanimously to oppose the proposed first development on the riverfront.

In April 2010, both the Graduate Teaching Fellows Federation (GTFF) and the Graduate students in Ecology and Evolutionary Biology (GrEBES) voted unanimously in opposition to development on the riverfront under the current Master Plan.

On April 15, 2010, the faculty of the School of Architecture and Allied Arts voted unanimously to support a resolution opposing riverfront development under the current plan. Among many other issues, the faculty found fault with the use of a 20-year old plan for development, citing the changes in community values and design principles within this time.

In May 2010, faculty members of the Center for Ecology and Evolutionary Biology signed a letter to UO President Lariviere and other stakeholders stating their opposition to development North of the tracks without an updated and community-inclusive master plan. By December 2010, over 1100 signatures from students and community members have been collected on various petitions opposing development on the Willamette riverfront under the current Master Plan.⁵

In 2011, Trammell Crow signed a contract stating that they would not develop north of the railroad tracks on the UO Riverfront Property.

⁵ History of Opposition. (2012). Connecting Eugene. Retrieved July 2, 2012, from <http://www.connectingeugene.org/front-page/a-greater-vision/>



<http://www.flickr.com/people/wolframburner>

Resolutions and Statements

UNIVERSITY SENATE

Senate Resolution US98/99-4 – 13 Jan 1999

RESOLVED, that the University Senate hereby urges President Frohnmayer to exclude the University-owned lands in the River View and Gateway Sectors from any future commercial development and to designate these lands for open space, recreational fields and natural areas.

Passed: 20 in favor, 10 opposed

Senate Resolution US09/10-11 – 13 Jan 2010

RESOLVED: (1) the University Senate declares opposition to the planned development of the first 4.3-acre increment of the Riverfront Research Park North of the railroad tracks on the South bank of the Willamette River until the University undergoes a student and faculty inclusive, open process for revising the RRP Master Plan; and (2) that the Senate President be directed to write and send a letter to the University President and the City of Eugene expressing the Senate's opposition to the planned development North of the railroad tracks along the South bank of the Willamette River.

Passed: 29 in favor, 8 opposed

SCHOOL OF ARCHITECTURE AND ALLIED ARTS

School-wide Faculty Meeting – Spring Term 2010

RESOLVED: The standards of best practice in planning and design have profoundly changed in the last 20 years, due in large part to the environmental challenges that face us. In light of these changes, the faculty of the School of Architecture and Allied Arts urge that development north of the railroad tracks in the University of Oregon's Riverfront Research Park be halted until the now obsolete, twenty-year old master plan and permits for this area are replaced with new thinking that better represents present community and ecological values.

Passed: Unanimous

DEPARTMENTS OF ARCHITECTURE AND LANDSCAPE ARCHITECTURE

Department Faculty Meetings – Winter Term 2010

Statements of opposition to proposed first development

(Text of these resolutions is available from the departments)

Passed: Unanimous support from 100% of regular faculty in each department

CENTER FOR ECOLOGY AND EVOLUTIONARY BIOLOGY

Letter – May 2010

We the undersigned faculty of the University of Oregon's Center for Ecology and Evolutionary Biology (CEEB) request that the planning process for the Riverfront Research Park be reopened for public input before any new riverfront development occurs North of the tracks. The master plan is dated, and the University of Oregon has a large number of professionals, including designers, ecologists, and urban planners, who have not been included in the process.

Scott Bridgham, Bitty Roy, Brendan Bohannon, Patrick Phillips, Alan Dickman, Jessica Green, Matthew Streisfeld, Joseph Thornton, Peter Wetherwax, Richard W. Castenholz, William A. Cresko, John Conery, George C. Carroll
(13 of 14)

UO Riverfront Vision Plan

ASUO STUDENT SENATE

ASUO Resolution – 19 Nov 2009

RESOLVED: The ASUO Student Senate declares strong opposition to the renewal of the conditional use permit extension for the planned development of the first 4.2-acre increment of the Riverfront Research Park north of the railroad tracks on the south bank of the Willamette River until the University undergoes a student inclusive, open process for revising the RRP Master Plan; and that the ASUO Student Senate encourages the University Senate to voice their solidarity with students on the issue and pass a similar resolution.

Passed: Unanimous

GRADUATE STUDENTS

Graduate Teaching Fellows Federation (GTFF) of the University of Oregon – 2 April, 2010

RESOLVED: The Graduate Teaching Fellows Federation of the University of Oregon declares opposition to development within the Riverfront Research Park north of the railroad tracks until the University undergoes a student and faculty inclusive, open process for revising the Riverfront Research Park Master Plan and (2) that the GTFF Executive Board be directed to write and send a letter to the University President declaring this position and requesting his support and a formal response regarding this issue.

Passed: Unanimous

GrEBES (Graduate Evolutionary Biology and Ecology Students) Resolution 2010-01 –Mar 31, 2010

RESOLVED: (1) The ASUO-recognized group of graduate students in Ecology and Evolutionary Biology (GrEBES) declare opposition to development within the Riverfront Research Park north of the railroad tracks until (a) the University undergoes a student and faculty inclusive, open process for revising the Riverfront Research Park Master Plan and (b) takes into account modern scientifically-sound ecological principles as they apply to riparian habitat, water quality, and wildlife corridor in riverfront development; and (2) that the GrEBES President and Vice President be directed to write and send a letter to the University President declaring this position; and (3) That

the President and Vice President present a letter to Center for Ecology and Evolutionary Biology (CEEB) faculty members stating GrEBES' position on riverfront development and requesting their support in order to ensure that student opinions and values are heard and respected in planning the long-term vision for the University of Oregon.

Passed: Unanimous

LiveMove (Transportation and Livability and UO Sustainable Cities Initiative student group) – Nov. 19, 2009

We are deeply troubled by the University's plans to construct a parking lot and private office building fronting the Willamette River at the western edge of the Riverfront Research Park. As the University of Oregon's transportation and livability student group, we advocate for multimodal transportation options and ecologically responsible land use. As such, we assert that the riverfront properties, owned by the State of Oregon, are of a public character and its development significantly affects our community. We believe that the University needs a new master plan to govern development on our important riverfront; Conditional Use Permit 88-16, approved in 1989, is clearly outdated. We urge you to deny the University's request to extend CU 88-16, and to encourage the University to develop a new master plan that is ecologically and socially responsible, governed by current development laws and best practices, and that protects our previous riverfront. We are not against development, but assert that the University's extension application does NOT meet the approval criteria in Eugene Code 9.8110 because the development and planning in the surrounding area is very different now than it was in 1989, and because the new physical design for the ORI building and parking lot, which fronts the bike path and river, are a significant change from the approved 1989 master plan.

Approved: Unanimous

CAMPUS-WIDE

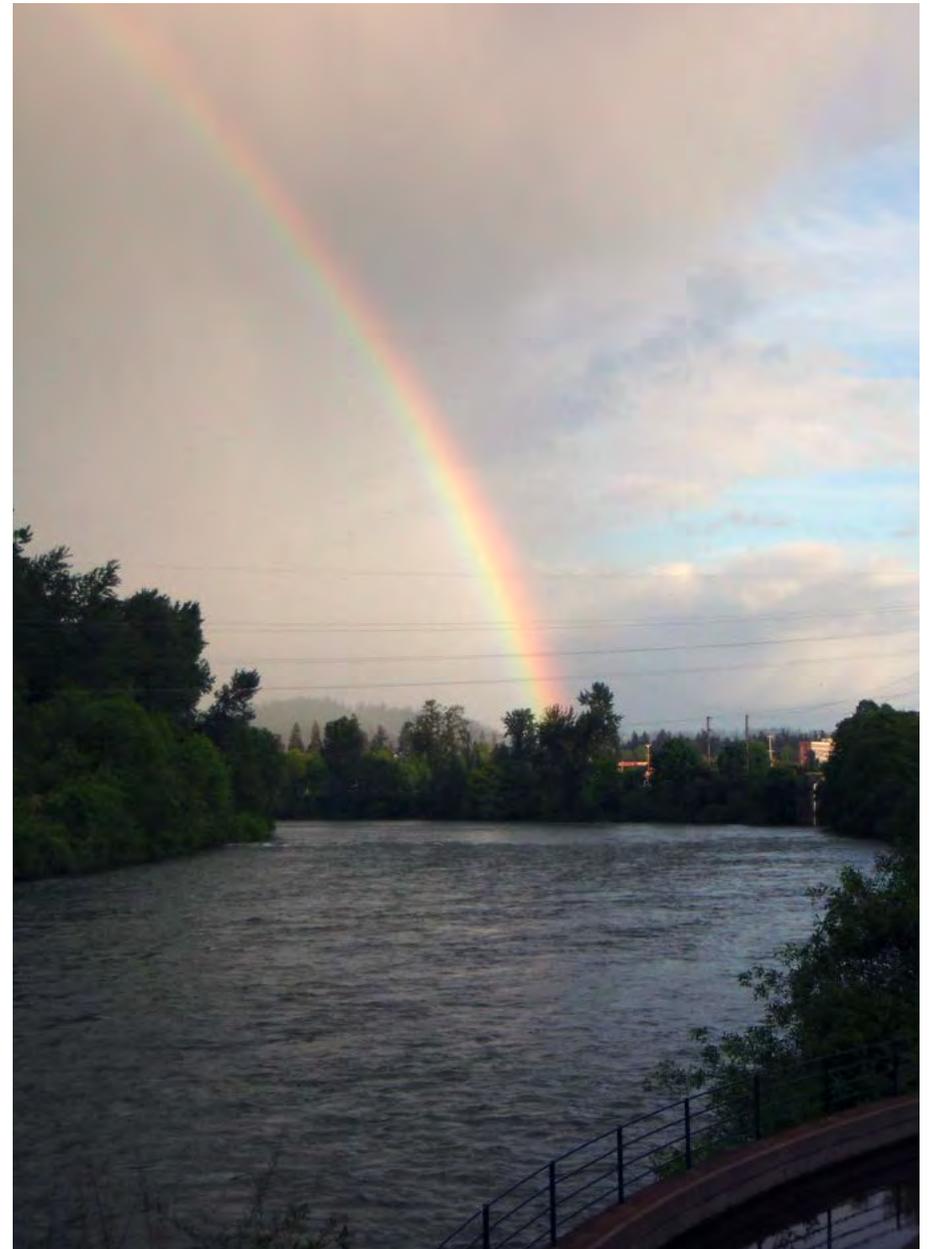
Campus Greenway Initiative, Ballot Measure 90

1989 ASUO General Election – In response to the development of the Riverfront Research Park Plan

"It shall be the official policy of the ASUO to encourage the University of Oregon to protect and preserve its riverfront open space as 'campus

greenway'. The ASUO President shall write to the President of the University of Oregon and to the Eugene City Council expressing this student position and shall appoint a liaison to meet with the planners."

Passed: 1452 in favor, 394 opposed







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Existing Conditions

- Environmental Conditions
- Social Conditions
- Economic Conditions
- Surrounding Context
- Biophysical Capacity
- Relevant Plans & Policy

Existing Conditions

Environmental Conditions

A portion of the Plan area is within the boundaries of the Willamette Greenway and will be subject to policies protecting the riparian strip along the southern bank of the Willamette River. The Millrace is a significant environmental and historical feature which is currently not maintained and portions are not accessible for public recreation.

Flood Conditions

Flood-prone areas--Some parts of the Plan area are subject to flooding from the 100-year flood.¹

Wetlands

The Poleyard site contains 12 or more wetlands/vernal pools of approximately 100- to 500-sf in area scattered throughout the 4.2 acres (Site Photos May 2010).

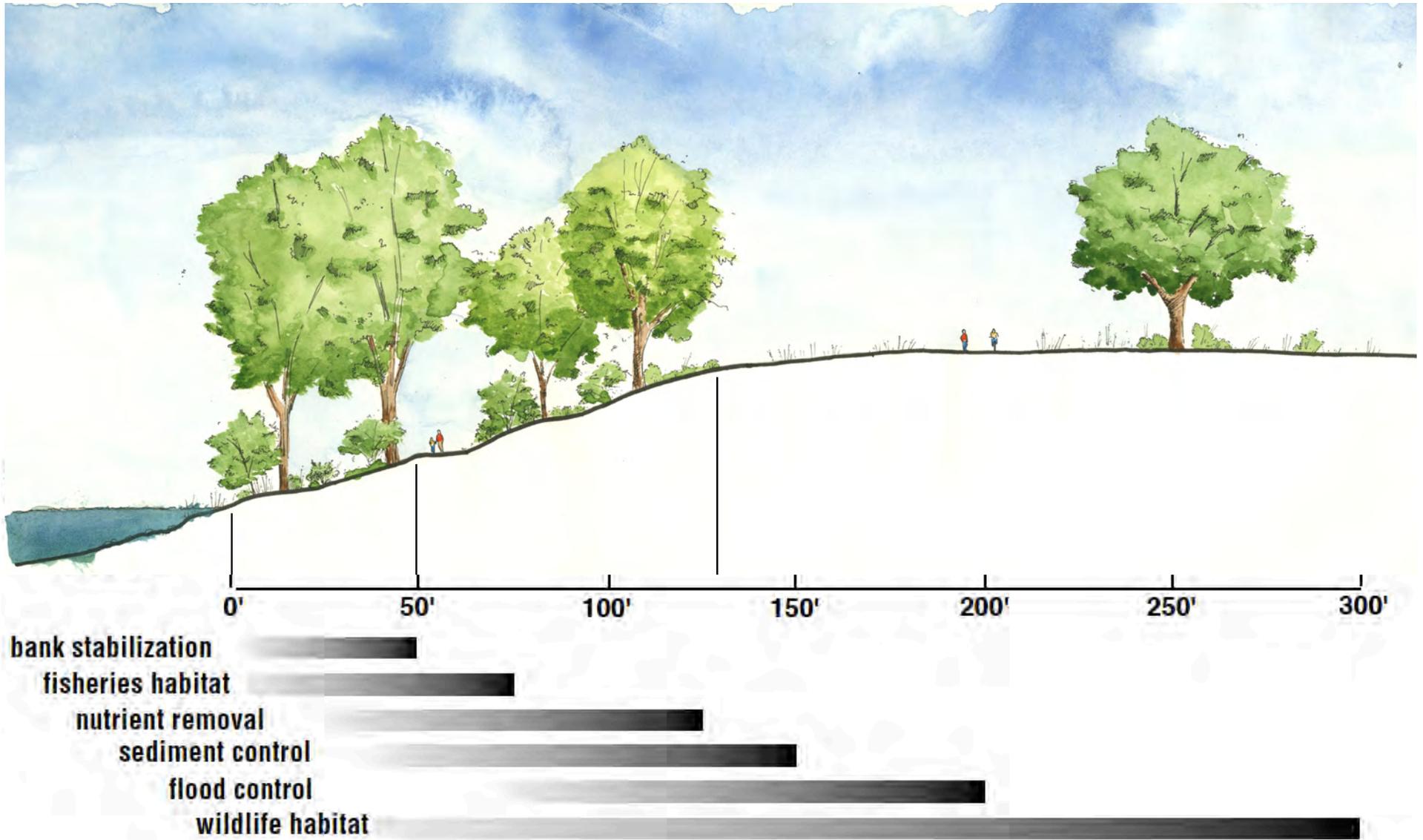
On-site hydrology data was also collected in May/June of 2010 that indicates that for more than 10 days of the growing season standing water and/or saturated soils are present within a few inches of the soil surface in the vegetated pools (Hydrologic Data). These pools may be recharged by the Millrace pool to the east, or may constitute a perched water table with hydrologic connectivity with the adjacent wetlands and the Willamette River.

Federally listed wetlands have been identified along the Willamette River and in the Millrace nearby. Potential developmental impacts to these wetlands have not been evaluated. These wetlands include NWI code PSSC

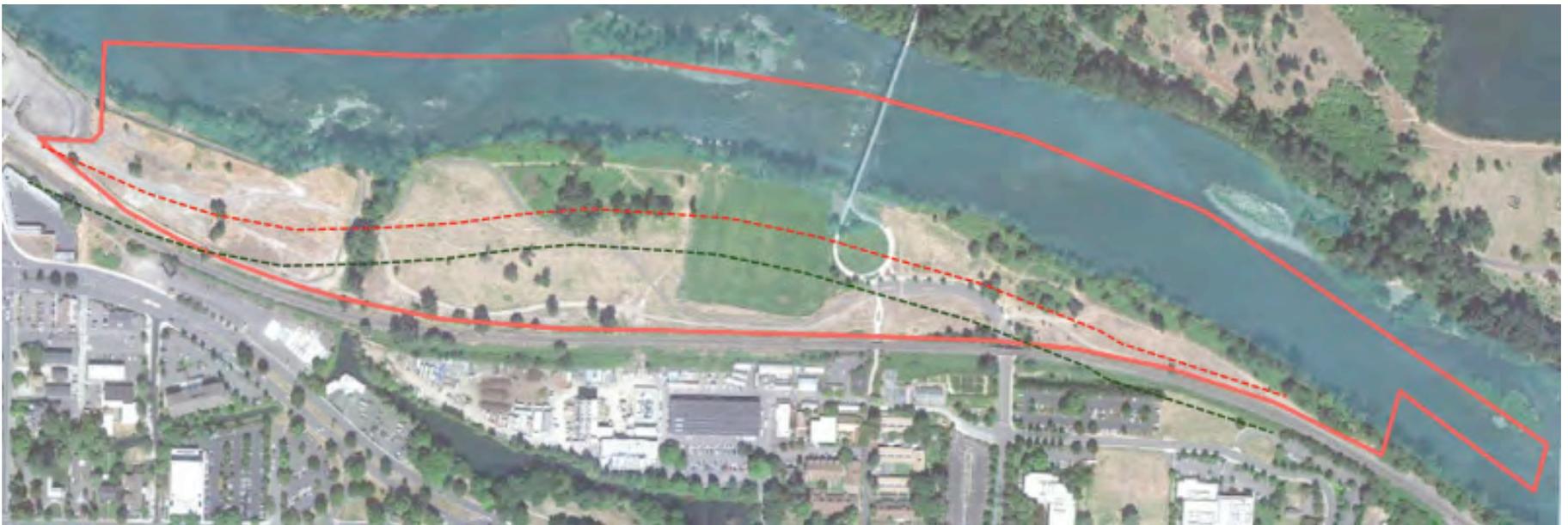
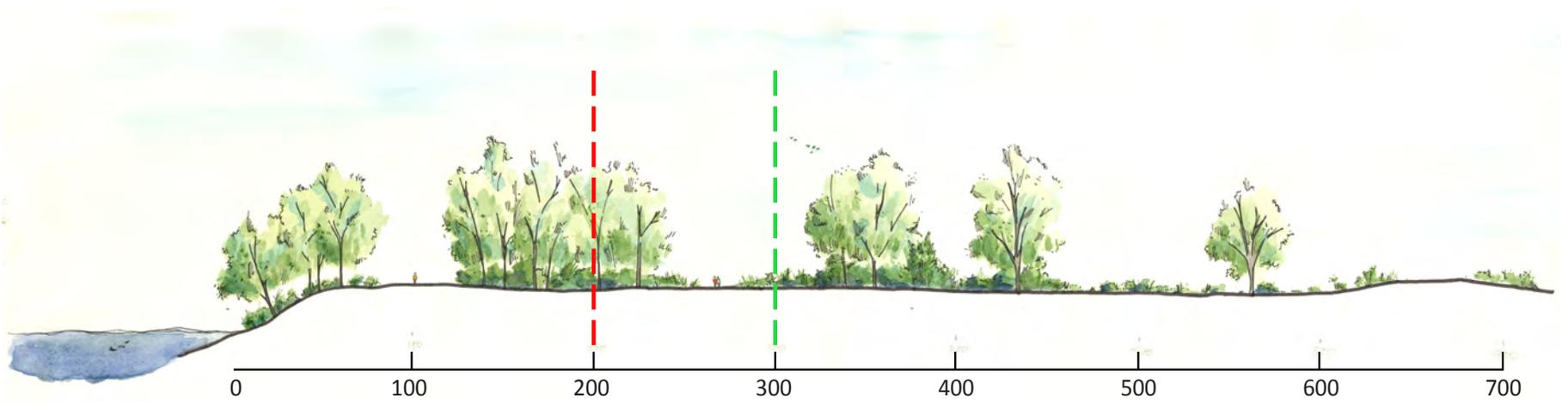
1 The Riverfront Urban Renewal District Plan. (2003). City of Eugene, OR.



Wetland slough located along the banks of UO Riverfront provides excellent wildlife habitat



Optimal Riverfront setbacks based on habitat preservation.



along the Willamette River to the north and NWI code PUBhx in the Millrace and Millrace outflow nearby to the east (NWI and site layout). The only wetland with on-site determination or delineation are those in the Millrace outflow (Adjacent Delineated Wetlands). It appears that the adjoining wetlands along the Willamette River to the north have not been professionally determined. Since the wetlands were identified within the local, state or federal wetlands indices sometime after the issuance of the CUP (1989), the impact of the currently proposed development on these NWI-listed wetlands or the wetlands values, has never been considered by any city, state or federal agency, and no public hearing related to this issue have ever been held. To develop on or near these wetlands required permits need to be obtained under section 404 of the Clean Water Act prior to removal or fill activities or other disturbances on the site so that mitigation measures may be appropriately employed if necessary to prevent the loss of important wetlands or endangered or listed species habitat.

Soil

Soil conditions on the site are variable. Depth to bedrock varies from 15.5 feet to 24.5 feet according to an analysis done by the Pittsburgh Testing Laboratory in 1984. Significant excavation and fill has occurred on the UO Riverfront when Eugene Sand and Gravel was in operation on the site.²

Ecology

The Willamette River network supports a wide variety of native and exotic fish species. Several species of salmon native to the Pacific Northwest are listed under the Endangered Species Act.³ These

2 Eugene (Or.), Eugene Planning Commission., & University of Oregon. (1988). Master plan and design guidelines, Riverfront research park, Eugene, Oregon. Eugene: The City. p. 24.

3 Endangered Species Act [online]. www.nwr.noaa.gov/ESA-Salmon-Listings.

cold-water species are particularly sensitive to human activities—for example, stream channelization and removal of streamside trees—that can increase water temperatures above biological limits for survival.

Efforts to mitigate excessive stream temperatures include restoration of riparian forests and wetlands that provide shade and inflow of cooling groundwater. Such actions also provide additional services such as improved aquatic habitat, flood control, and carbon sequestration.^{4 5}

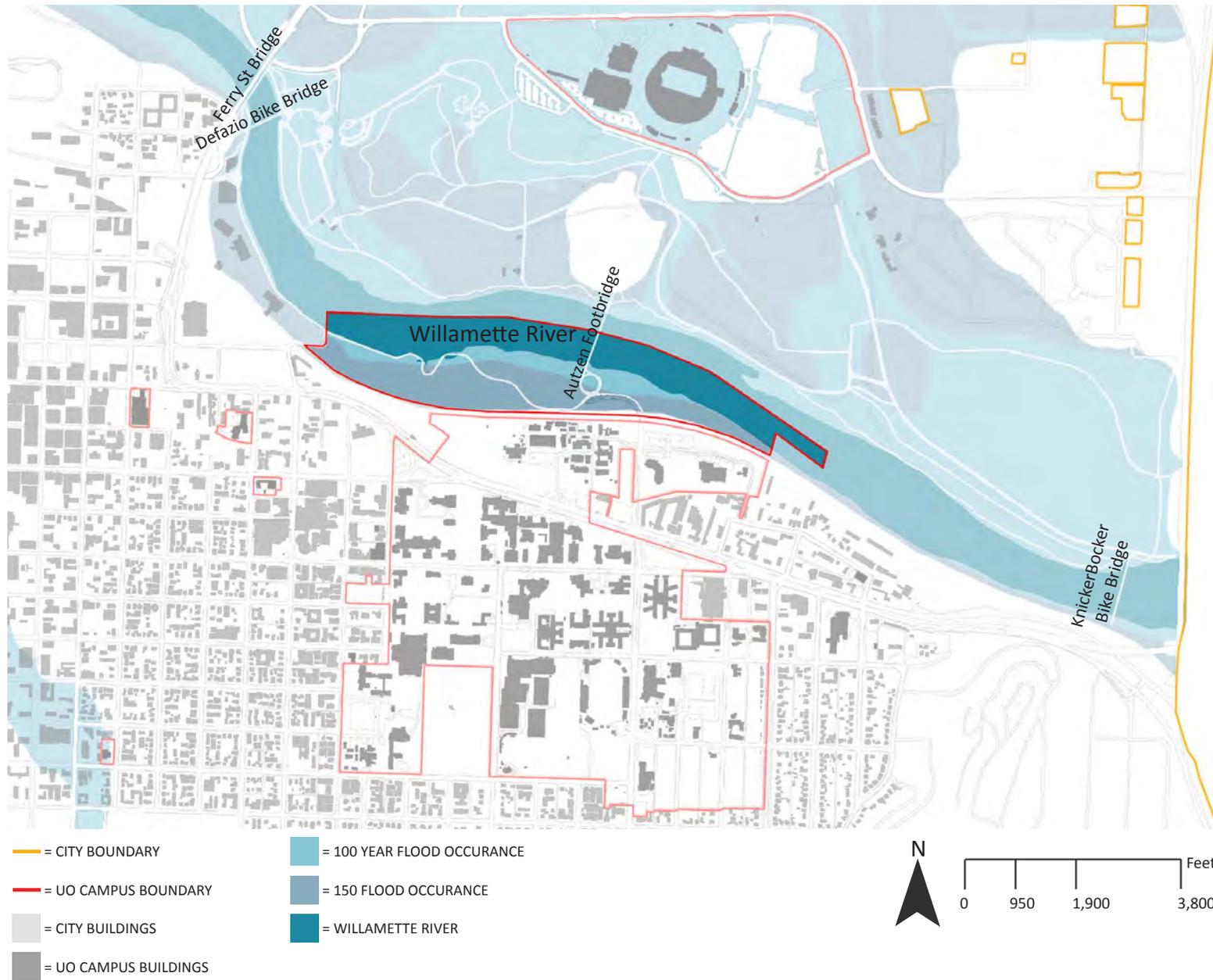
Social Conditions

Situated in the nexus between the downtown, the proposed EWEB development, the riverfront serves as physical, ecological, as well as social hinge in these primarily urban landscape settings. Critical to the riverfront is its capacity to serve as a primary bicycle and pedestrian link within the Willamette Greenway. Intrinsic to this connection is the capacity of the University to project itself into the 21st century as a beacon of environmental sustainability. The UO Riverfront is an intellectual, spiritual, and physical gateway to the academic ideals intrinsic to our connection to the city, the state, they country, and the world. Just as the waters of the Willamette swirl and flow so does the University spread its waters to the far corners of the planet.

The street and circulation system in the area of the Courthouse is inadequate to service this major public facility. Sidewalk widths on heavily traveled Franklin Boulevard are quite narrow and broken by

4 Willamette Partnership: Ecosystem Services Markets [online]. willamettepartnership.org/about-markets.

5 Bolte, J., McKane, R., Phillips, D., Schumaker, N., White, D., Brookes, A., & Olszyk, D. (2011). In Oregon, the EPA calculates nature's worth now and in the future. *Solutions* 2(6):35-41. Available from: <http://www.thesolutionsjournal.com/node/1019>

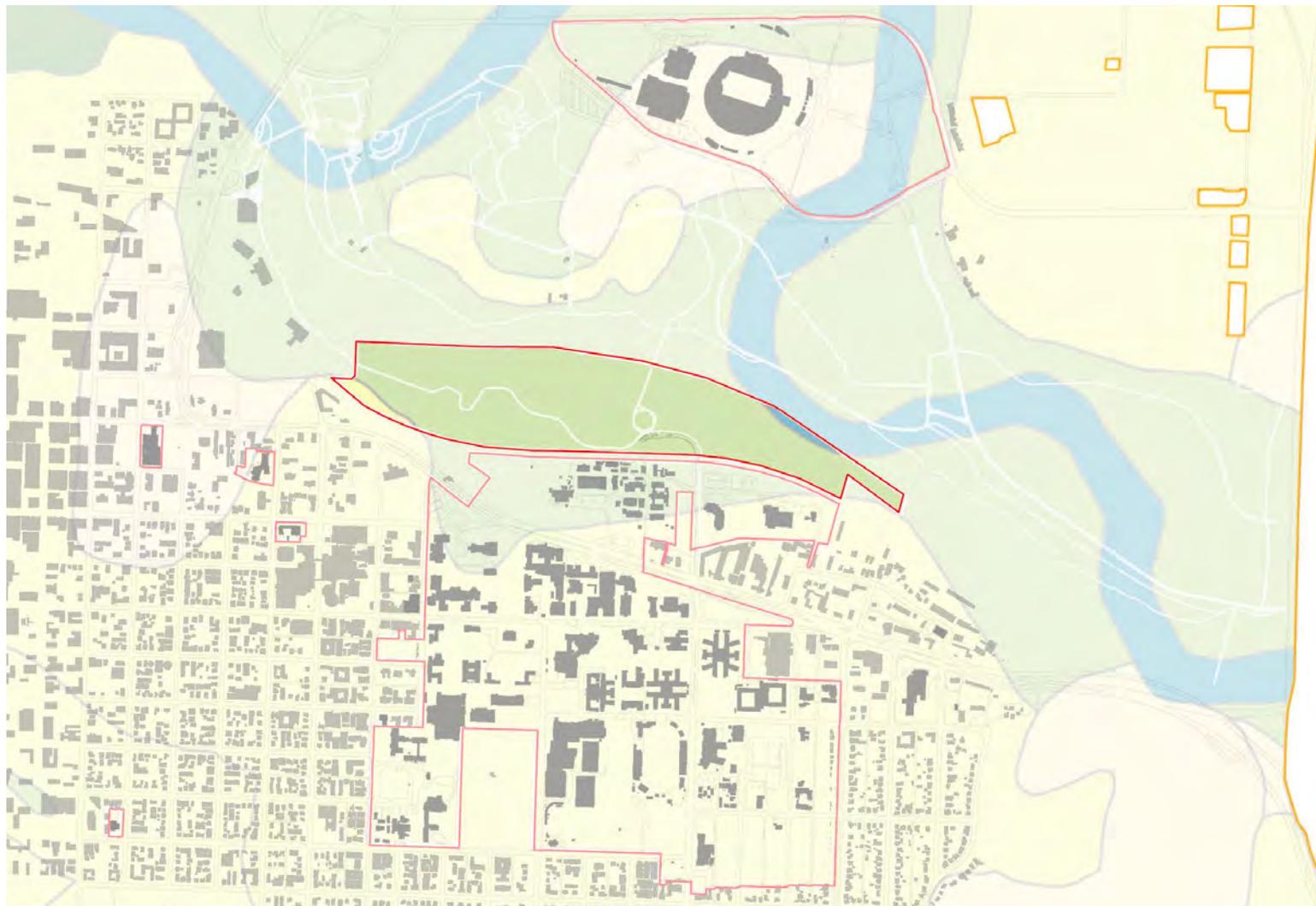


Flood Map showing the 100 and 150 year floodplain adjoined along the Willamette River. The floodplain would be submerged in water in the event of one of these floods.

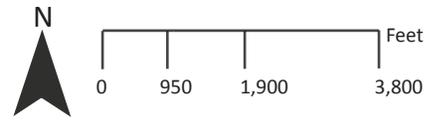
For example the 100-year flooding event is the flood having a 1 percent chance of being equaled or exceeded in magnitude in any given year. Contrary to popular belief, it is not a flood occurring once every 100 years.

Historic Vegetation and River Paths

General habitats found in Eugene during the 1850's. Prior to European settlement, Kalapuya Indians routinely burned back the vegetation resulting in a change in habitat from forested, wetlands to wet prairie grasslands. While the native wetland habitat may have changed by burning practices, the amount of wetland acreage is thought to have remained the same as hydrologic conditions for the most part were not affected.



- = CITY BOUNDARY
- = UO CAMPUS BOUNDARY
- = CITY BUILDINGS
- = UO CAMPUS BUILDINGS
- = PRAIRIE
- = SAVANNA
- = CLOSED FOREST - RIPARIAN WETLAND
- = CLOSED FOREST - UPLAND
- = HISTORIC CHANNEL



frequent curb cuts. These sidewalk widths do not meet current city standards, and create a hazardous environment for pedestrian use and access.⁶

Economic Conditions

Open space greatly enhances the property values of any urban area. A connection from downtown to the UO Riverfront would provide an opportunity for the University and the City of Eugene to jointly appreciate and foster the Riverfront.

Currently, the UO Riverfront resides in the City of Eugene's Riverfront Urban Renewal Area, which is one of the City's two urban renewal areas, the other being the Downtown Renewal Area. The total frozen base assessed value of the Riverfront urban renewal area is estimated at 56 million dollars. The assessed value within the frozen base of the Downtown Renewal Plan is 31 million dollars. Together they represent almost 1% of the City's total assessed value of almost 9 billion dollars.⁷ Open space development opportunities would greatly enhance the value of the Riverfront economically as well as ecologically and socially.

Surrounding Context

The riverfront's surrounding context is multifaceted; the UO Riverfront is academically and recreationally tied to the University, sits alongside EWEB and the commercial area of Franklin Boulevard, and is adjacent to Alton Baker Park, Eugene's premier open space. The riverfront and Alton Baker Park are joined together by the Frohnmayer Footbridge, all together serving as the pedestrian gateway to Autzen Stadium.

6 The Riverfront Urban Renewal District Plan. (2003). City of Eugene, OR.

7 The Riverfront Urban Renewal District Plan. (2003). City of Eugene, OR.

The Willamette River & Greenway

A portion of the UO Riverfront Property is within the boundaries of the Willamette Greenway and is subject to policies protecting the riparian strip along the southern bank of the Willamette River.

EWEB Riverfront Property

The Riverfront Master Plan, unanimously approved by Eugene Water & Electric Board commissioners in June 2010, envisions a mixed-use riverfront neighborhood that is easily accessible to downtown with restaurants, housing, cycling and walking paths, retail shops, and public open space. The plan is the result of more than two years of public meetings and open houses designed to gather citizen input to on how to redevelop the 27-acre of riverfront property now occupied by EWEB.

The completed master plan envisions an urban, active "people place" that connects downtown Eugene to an enhanced riverfront environment. The plan outlines a mix of retail, housing and public open space through a combination of infill, adaptive reuse of existing buildings and redevelopment.

A number of public meetings and hearing are anticipated as part of the land use process. Check back for meeting announcements and process updates.

Next steps

Following the land use application process, the third major phase of the riverfront master plan project will be a "Make Ready/ Redevelopment" phase, which includes various activities and decisions needed for redevelopment to occur.⁸

8 Riverfront master plan process. (2012). EWEB. Retrieved July 2, 2012, from <http://www.eweb.org/riverfront/process>



EWEB Master Plan 2013

Eugene Millrace

The Millrace can be separated into two distinct parts—the upper Millrace and the lower Millrace. The upper Millrace runs between the Willamette River on the North and Franklin Blvd. to the south. The lower Millrace runs through between Franklin Blvd. on the east and approximately Ferry St. on the west.

Considered the oldest human-made structure in the city of Eugene the Millrace’s identity has changed and grown alongside that of the city. It was once the nucleus for the city’s industrial birth and later one of its most cherished playgrounds, today the Millrace is neglected and largely unnoticed.

“What was to become the Millrace was originally composed of two sloughs, old river bed scars that had been abandoned by the river as it changed its course.”⁹ In 1851 Hilyard Shaw dug a canal connecting these two muddy sloughs in order to divert water from the Willamette River and power his sawmill, located just east of the present day Ferry St. Bridge. Thus the Millrace was born. Within the next 20 years the millrace became the locus of Eugene’s explosive industrial growth. Early industries included flour and lumber mills, woolen mills, furniture factories, a brewery, quarries, brickyards, iron foundries, planing mills, and the cannery (later known as Agripac).

In the early twentieth century as electricity became more available several of the mills began to convert, diminishing the Millrace’s importance as a power source while simultaneously increasing its recreational use. Boathouses were established along the race’s banks renting canoes and rowboats to UO student and city residents. The Millrace began to be seen as a pleasant amenity and Eugene citizens began building homes along the race orienting their backyards

9 Helphand, Ken. (1979) *Eugene Millrace: A History* p. 1



The railroad forms the southern border of the riverfront site



University of Oregon Power Plant viewed from the riverfront

towards it. The race became a favorite spot of UO students who utilized it for “romantic rowboat and comical canoe excursions.”¹⁰ In 1915 the race’s recreational canoe use was embellished into the Canoe Fete, a nighttime parade of decorated canoes, part of the University’s Junior Weekend.

In 1937 the University received national attention when newsreel and coast to coast radio broadcast the annual Canoe Fete. The following year UO bought the land north of the Millrace in order to enhance the canoe fete by building an outdoor amphitheater and extending park lands. Larger development plans called for moving the Pacific Highway

¹⁰ Bishop, B. (2001, December 8) Millrace Played Important role in Eugene’s history. *The Register Guard*

(now Franklin Boulevard) and the railroad tracks. However the project was abandoned with the outbreak World War II.¹¹

Autzen Stadium

Autzen Stadium is the University’s outdoor football stadium. It was opened in 1967 on the north side of the Willamette River and Alton Baker Park and just south of Martin Luther King Boulevard. It has held crowds of up to 59,000 people. On Duck game days, thousands of fans walk to the stadium taking the route through the UO Riverfront Property, over Frohnmayer Footbridge, and through Alton Baker Park.

¹¹ Helphand, Ken. (1979) *Eugene Millrace: A History*

Courthouse Gardens

The Courthouse Gardens is a two acre food garden located east of the Federal Building on 8th ave. in an once unused and marginalized vacant lot. The garden was constructed corroboratively between the University of Oregon, the City of Eugene, and the Federal Re-entry Program. The City of Eugene has leased the land to the UO for 3 years.

The Courthouse Garden is dedicated to transforming lives through working together to grow food for those in need. The social mission of the garden continues with re-entry clients and at-risk youth. This year the Courthouse Garden teamed with CPY, Network Charter School and New Roads / Looking Glass to bring UO students and youth together in the garden.

The garden's two principle purposes are:

- To serve as a teaching/skills building vegetable garden through a hands on approach to implementing, constructing, and maintaining a community garden.
- To produce fresh organic food for the those in need through service learning at the University of Oregon in partnership with community organizations.¹²

The garden has been designed and built by volunteers and students, and designed by Landscape Architecture Professor Ann Bettman and Adjunct Faculty Members Lorri Nelson and Robin Selover. Classes are held through the UO Department of Landscape Architecture.

Oregon Research Institute

The Oregon Research Institute (ORI) is a nonprofit behavioral

¹² Courthouse Garden. (2010). *University of Oregon*. Retrieved July 6, 2012, <http://courthousegarden.uoregon.edu/about>

sciences research center. ORI's research includes behavioral problems in children, teen substance abuse, chronic physical illness, and adolescent depression.¹³

Railroad

In 1871 the California & Oregon Railroad reached Eugene linking it with other cities outside the Willamette Valley. The train brought an influx of new settlers and visitors increasing Eugene's population dramatically. Today a portion of the railroad forms the southern border of the UO riverfront site.

University of Oregon Power Plant

In the 1940's the UO power plant was rebuilt in its current site, north of the Millrace. The Central Power Station is the distribution point for the UO campus utilities sending power throughout five miles of tunnels which supply heating, cooling, and electricity to the campus. The power station also oversees the Millrace waterway, and its intake and output operation from the Willamette River.¹⁴

Alton Baker Park

The 610 acre park is Eugene's largest developed park located on the north side of the Willamette River opposite the UO Riverfront Property. Alton Baker Park consists of two major areas: West Alton Baker Park, and the Whilamut Natural Area.

West Alton Baker, just east of the Ferry Street Bridge and south of Autzen Stadium, is the more developed of the two areas. West Alton

¹³ About ORI. *Oregon Research Institute*. Retrieved August 15, 2012, <http://www.ori.org/About/about.html>

¹⁴ Central Power Station. *University of Oregon*. Retrieved August 15, 2012, <http://campusops.uoregon.edu/utilities-services/central-power-station>

Baker encompasses a wide range of activities including: duck ponds, running and biking trails, a dog park, picnic areas, a small scale model of the solar system, and the Cuthbert Amphitheater for outdoor performances.¹⁵

The Whilamut Natural Area encompasses 237-acres and provides opportunities for education, passive recreation and habitat restoration. In addition, the park serves as a connection between Eugene and Springfield via bike trails and open space. The easternmost portion of the Whilamut Natural Area, just east of Interstate 5, is owned and managed by the Willamalane Park and Recreation District.¹⁶

Biophysical Capacity

On a calm day, the Willamette River exudes a bucolic character that belies its power and area of influence. On average, this waterway carries 32,000 cubic feet of water per second (cfs); during the 1996 flood, that rate was 460,000 cfs, or 14 times its average flow. The Willamette watershed encompasses nearly 12,000 square miles and the river itself is 187 miles long, flowing north from the southern end of the Willamette Valley to its confluence with the Columbia River in Portland. Life teams in its waters and along its banks. More than 70% of Oregon's population lives within this watershed. River overlooks provide the opportunity for interpretative sites addressing hydrology, river systems and water quality.¹⁷

15 Alton Baker Park. *City of Eugene*. Retrieved August 15, 2012, <http://www.eugene-or.gov/Facilities.aspx?Page=detail&RID=29>

16 Whilamut Natural Area. *City of Eugene*. Retrieved August 15, 2012, <http://www.eugene-or.gov/index.aspx?NID=1728>

17 *EWEB Riverfront Master Plan*. (2010, June). Eugene Water and Electric Board. Eugene, Oregon. Prepared by the Associated Students of the University of Oregon (ASUO)

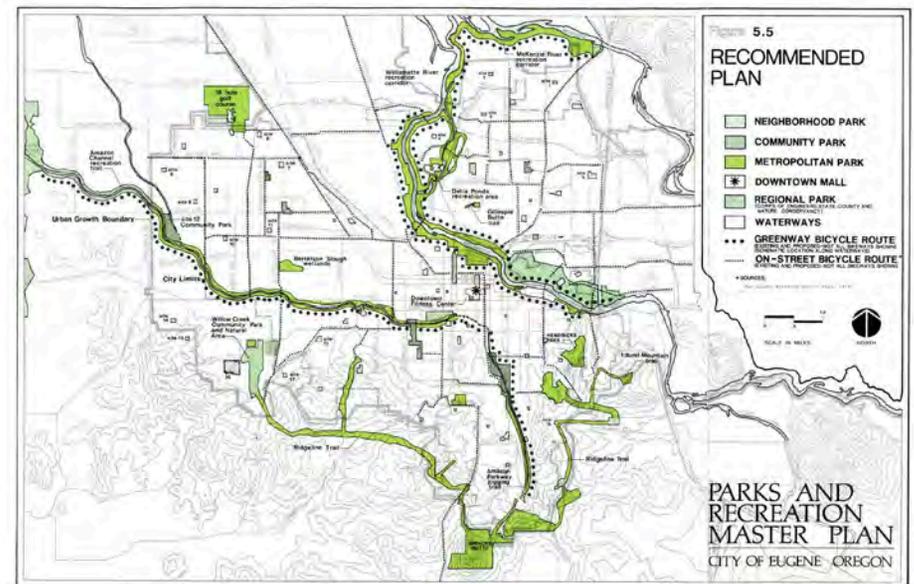
Relevant Plans & Policy

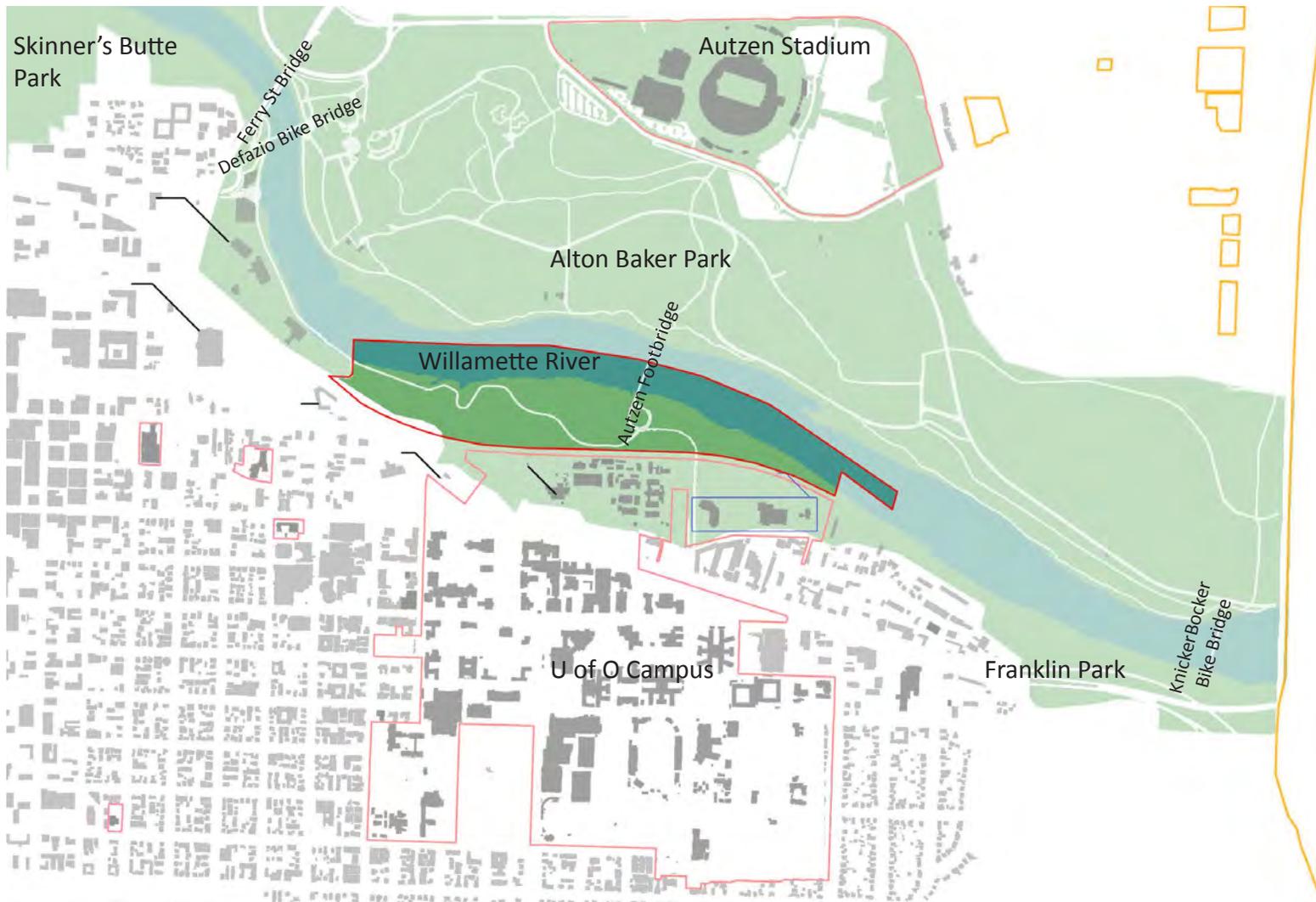
Mckenzie/Willamette Master Plan

Part of the 1983 Eugene Parks and Recreation Plan, the Mckenzie/Willamette Master Plan, drafted in 1983, proposed the development of recreational facilities and opportunities to promote access and use two rivers. These facilities would be developed in a manner that would maintain habitat areas and “preserve the river’s character.” The plan included the extension and completion of the bicycle path along the river’s edge, and the acquisition of additional river front land along the Willamette River, including land along the south bank from the Autzen Footbridge to the Knickerbocker Footbridge near the eastern edge of Alton Baker Park.

1983 Parks + Recreation Master Plan

The main purpose of the 1983 Eugene Parks and Recreation Master Plan (see image below) was to develop guides and recommendations for the City of Eugene and the Eugene Parks and Recreation Department (EPRD) for the next 20 years. The UO Riverfront is included as a Metropolitan Park within this plan.



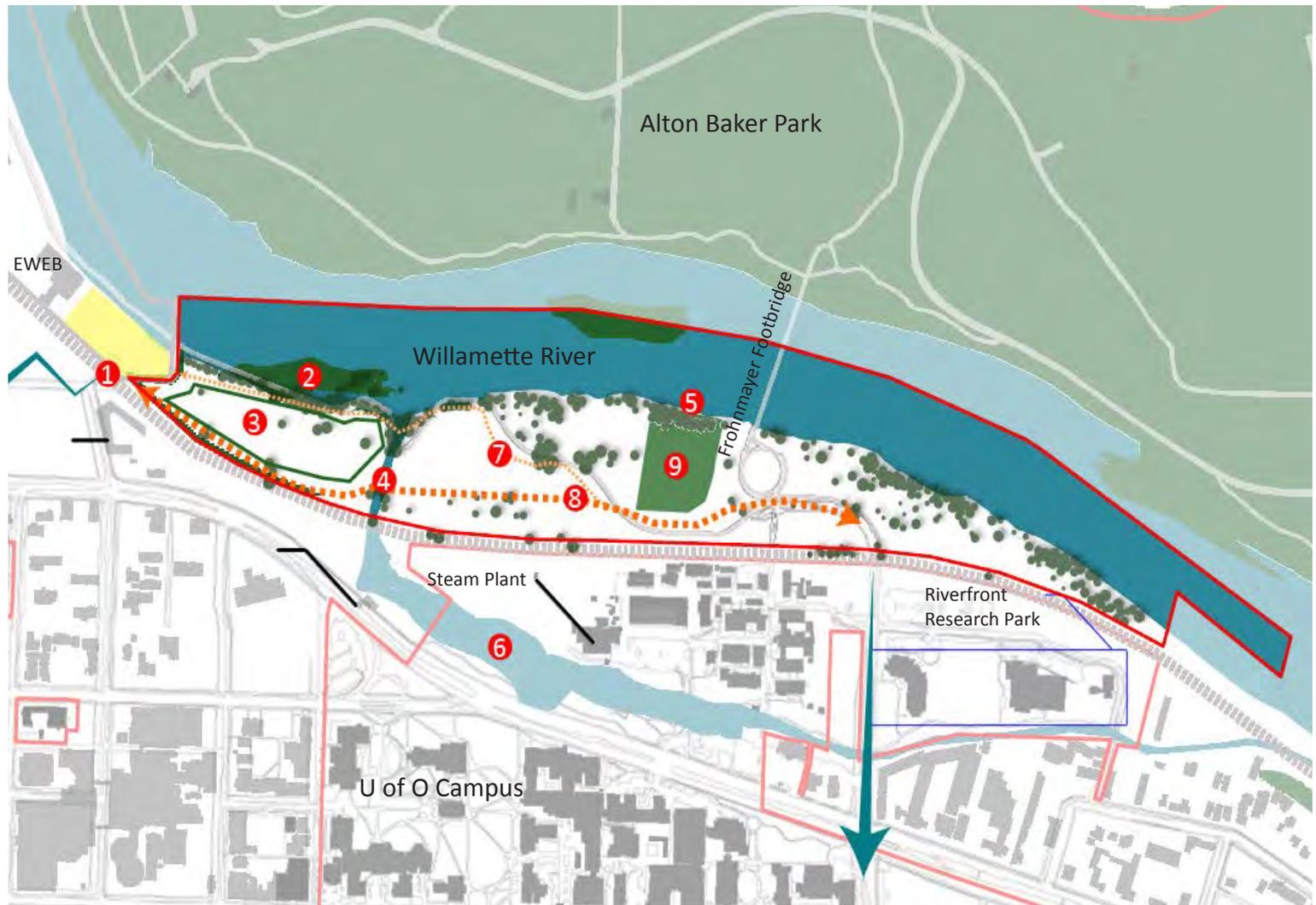


Willamette Greenway indicates areas defined by the Willamette river green way program to be maintained in order to enhance the scenic, recreational, and natural qualities of the Willamette river.

- = CITY BOUNDARY
- = UO CAMPUS BOUNDARY
- = CITY BUILDINGS
- = UO CAMPUS BUILDINGS

= GREENWAY





Constraints

Demonstrates the limiting factors to the riverfront. The areas numbered are not necessarily a negative aspect but that can't be easily ignored in any redesign.



1
Railroad



2
Wetland slough habitat



3
Barbed-wire fence



4
On-site pollution



5
Fossil beds



6
Millrace



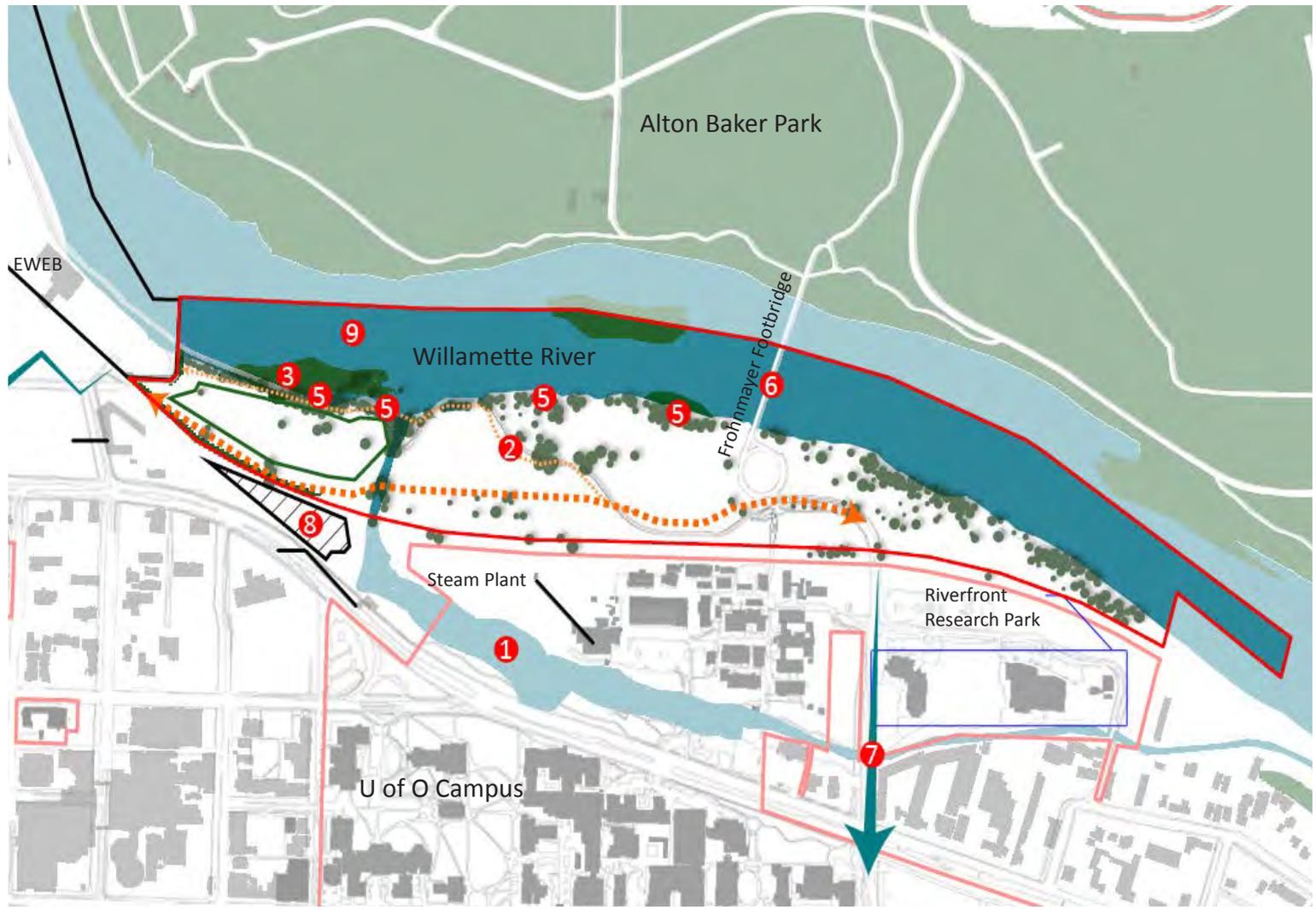
7
Ruth Bascom Bike Path



8
Proposed road



9
UO Riverfront Ball Field



- = CITY BOUNDARY
- = UO CAMPUS BOUNDARY
- = CITY BUILDINGS
- = UO CAMPUS BUILDINGS
- ▨ = PROPERTY FOR SALE
- = EWEB
- = FOSSIL BED
- = PARK ACCESS
- = BIKE PATH
- = PROPOSED ROAD

Opportunities

Exhibits the advantageous favorable conditions within the riverfront.

Currently some of these areas may seem desolate and negative but have the potential of adding to the pastoral beauty of the riverfront.



1
Millrace



2
Ruth Bascom Bike Path



3
Wetland slough habitat



4
EWEB poleyard



5
River access



6
Autzen footbridge



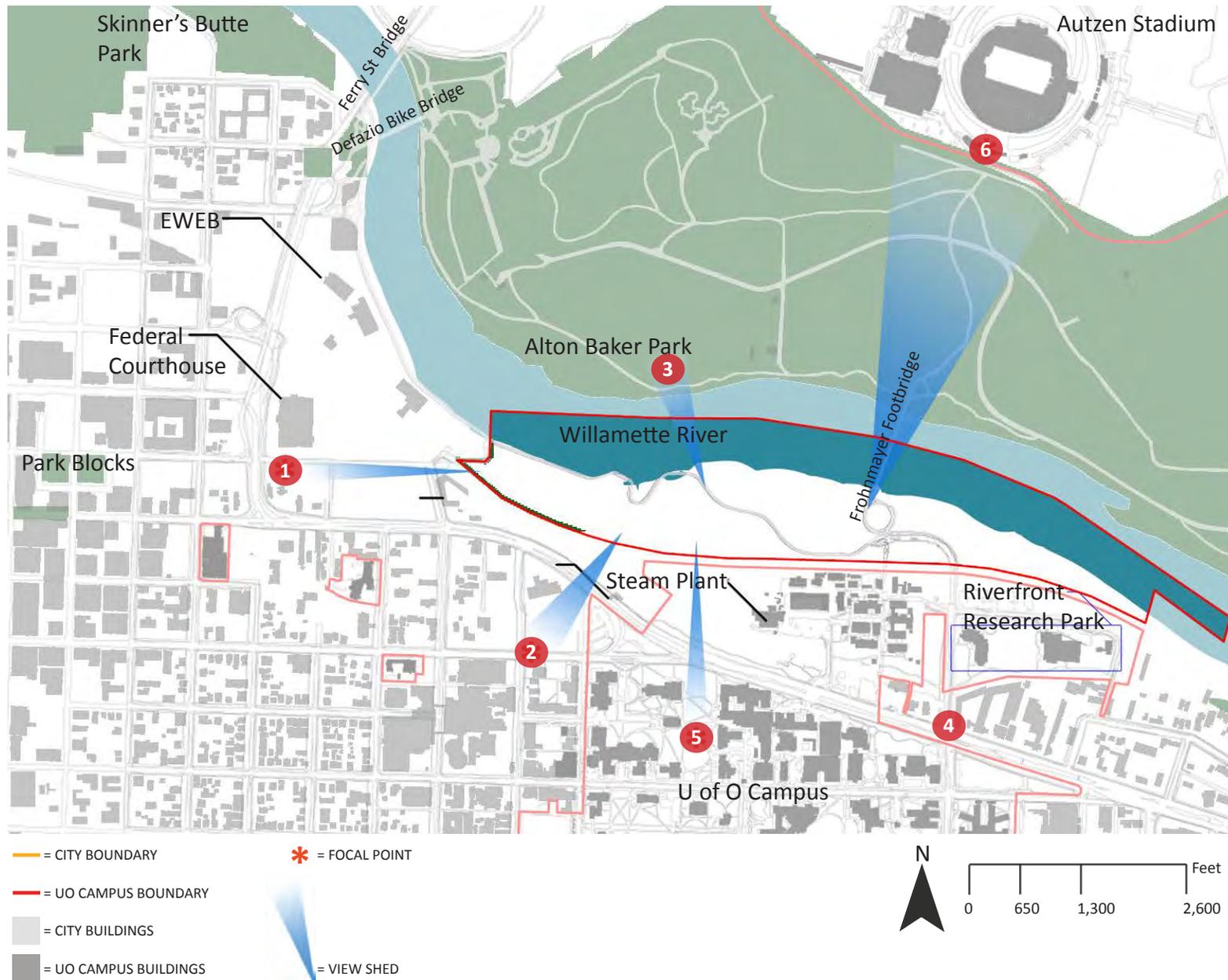
7
Connections to downtown + UO campus



8
Diamond Parking lot



9
Willamette River



Viewsheds

Indicates prominent viewsheds of particular scenic value to be preserved or enhanced. Important views look out across Alton Baker Park downtown Eugene and back towards the UO campus.



Views to downtown and park blocks



View down Alder Street



Views toward Alton Baker Park



Views toward UO campus



Views of Autzen foot bridge



Views of Agate Street



Willamette River

Slough

Franklin Boulevard

Alder Street Underpass

Multi-Use Frisbee Golf



4

Educational Use

Past Educational Use
Future Educational Opportunities

Educational Use

Past Educational Use

The UO Riverfront has served as an invaluable educational resource for the University for decades. The riverfront's diverse riparian habitat along with its great open space potential have made it the focus of many courses and course projects.

Landscape Architecture & Architecture Design Studios

Since the 1960's, design studios in the University's college of Architecture and Allied Arts have focused on the development potential of the UO Riverfront. In 1965, a studio taught by Landscape Architecture professor Ron Lovinger, focused on demonstrating the value of the riverfront as a university openspace in order to convince the UO to purchase the property. Recognizing the potential for the riverfront to serve as a premier recreation space, the UO purchase the property from Eugene Sand & Gravel Co. in 1968.

Plants Class (LA 326, LA 327, & LA 328)

For over thirty years, Ann Bettman has led plant walks along the UO Riverfront focusing on its rich riparian habitat.

Intro to Evolution (Bi 131)

Since 2000, hundreds of students each year hunt for fossils along the banks of the Willamette River on the UO Riverfront property.

Systematic Botany (Bi 4/542)

Since 2006, dozens of students each year utilize the UO Riverfront for identification walks and graduate student projects.



UO student conducting field research on the riverfront site

Natural & Cultural History of Oregon (Geo 1308, Hist 473, & ES 4/577)

Since Spring 2012, dozens of students have used the UO Riverfront to learn the history of the Mill Race, to take riparian habitat field trips (specifically focusing on Cottonwood regeneration and river modifications). Student projects have focused on water quality measurements and issues related to wetlands delineation.

Future Educational Opportunities

There are numerous educational opportunities for the UO Riverfront. In addition to the current classes that already use the riverfront, many faculty members have expressed interest in using the Riverfront as a learning laboratory. A few are mentioned here.

ELP Project

Taught by Peg Boulay on restoration, this would include all aspects from planning, to hands on, to monitoring. Understanding the techniques and challenges of restoration combined with the scientific underpinnings of ecology. Partner with Wilama, or another organization with expertise and tools.

Once restoration efforts begin, it will be possible to incorporate restoration into many other classes.

Landscape Architecture Ecology Studio

A studio on planning taught by Bart Johnson in collaboration with one of us from ENVS or the Biology Department.



CONNECTING EUGENE...



Past UO Landscape Architecture Studio presentation board on vision for the UO Riverfront



Alumnae Valley, Wellesley College



University of South Florida St. Petersburg bayfront



Evergreen State College's campus reserve



Hakone Botanical Garden of Wetlands

5

Best Practices Best Practices

- Restoration of a Contaminated Site
- Waterfront Recreation Campus
- Waterfront Learning Campus
- Wetland Botanical Garden

Best Practices

Restoring a Contaminated Site

Wellesley College, Alumnae Valley

The Alumnae Valley rests in the heart of Wellesley College campus in Wellesley, Massachusetts and is immediately adjacent to Lake Waban. Previously a neglected part of the campus, the valley was at various times the site of the college's physical plant, industrialized natural gas pumping, and a parking lot over a toxic brownfield.

The restored Alumnae Valley, designed by landscape architect Michael Van Valkenberg, is once again an intermittent wetland combining different aspects of environmental remediation and sustainable stormwater management while fitting seamlessly within the larger campus. "A series of sedimentation forebays and basins hold and treat the site runoff water, which mingles with forbs, sedges, and cattails before trickling back into Lake Waban. A geosynthetic clay liner simultaneously seals contaminated soils and prevents water from prematurely returning to the original water table."¹ The restoration again makes the Alumnae Valley part of the hydrological system while also providing a physical and visual link between Lake Waban and the rest of campus.

Waterfront Recreation Campus

University of South Florida St. Petersburg

The University of South Florida St Petersburg (USFSP) is a an

¹ From Brownfield to Greenfield: A New Working Landscape for Wellesley College Wrenched from its Toxic Past. ASLA. Retrieved August 28, 2012, <http://www.asla.org/awards/2006/06winners/309.html>



Alumnae Valley, Wellesley College

autonomous campus within the University of Florida system. the USFSP campus is located in downtown St Petersburg on Bayboro bay which is designated as an outstanding Florida Water Area as well as a recognized manatee habitat area. Students, faculty and staff have access to sailing, swimming, canoeing, kayaking, paddle-boarding, and scuba diving.

Waterfront Learning Campus

Evergreen State College, Campus Reserve

The Evergreen State College campus is nestled within 1,000 acres of forest which includes 3,330 ft. of unspoiled waterfront along Eld Inlet of the Puget Sound. This area, the Campus Reserve, serves as a natural laboratory for scientific field research as well as providing recreation in the form of boating, swimming, and hiking. The Campus



University of South Florida St. Petersburg bayfront

Reserve represents key habitat and plant communities that are vitally important ecological assets for the area. Strict limits are set on the development of these areas.

In addition to the Campus Reserve the college contains 14 teaching gardens and edible landscaping areas around campus with various themes (i.e. pollinator garden, medicinal herb garden, native plant demonstration gardens, post-glacial forest, prairie roof garden, rain roof garden, Longhouse ethnobotanical garden, deer garden, basket garden, primitive plant garden, etc.) and are used to further educate the community on native and biogeographic landscaping. In the future Evergreen is looking to increase the number of teaching gardens.²

Wetland Botanical Garden

Hakone Botanical Garden of Wetlands

Situated in the highlands of the Fuji-Hakone-Izu National Park, Japan the Hakone Botanical Garden of Wetlands is home to an rich and abundant diversity of flora. The garden consists of over 1700 species of marsh and alpine plants native to Japan and contains a network of boardwalks that meander through the various marshlands, representative of all the different marshland habitats found in Japan. Interpretive signs along the boardwalk provide information on all species of plants including where they grow naturally and when they bloom.³



Evergreen State College's campus reserve

² The Evergreen State College Master Plan. *Evergreen State College*. Retrieved August 29, 2012, <http://www.sustainablesites.org/cases/show.php?id=20>

³ Full of Flowers and Dreams. *National Park HAKONE*. Retrieved August 29, 2012, <http://www.hakone.or.jp/english/midokoro/shokubutsuen.html>



View of Federal Courthouse with collage of future wetland botanical garden, new bike path, walkways, boardwalks over the wetland, pedestrian underpass at 8th Street and view west to the Western Red Cedars in the historic Park Blocks.



6

Recommendations Capacity for the Future

Recommendations

Recommendations

The following design concepts are recommended as a guide for future riverfront development efforts. They have been developed from lessons learned from the best practices and are intended to illuminate a greater vision for the riverfront and its potential landscape experiences.

Our goal is to create a landscape infrastructure which simultaneously mitigates flooding and periodic inundation, remediates on-site toxins, cultivates the aesthetic appeal of the University's Willamette Riverfront, and engages the essence of the Oregon environment.

Twelve Riverfront Design Recommendations:

1. Provide Safe Bike and Pedestrian Connections to the Riverfront
2. Articulate Riverfront Gateways & Entrances
3. Orchestrate meandering Riverside Walks and Access
4. Foster Learning Gardens
5. Construct a Wetlands Bioswale
6. Connect to the Urban Core of Eugene
7. Establish Educational and Recreational Pathways and Trails
8. Extended Campus View Corridors and Connections
9. Restore the Native Fauna and Flora
10. Enhance Views of the Willamette River
11. Add an Outdoor University Cafe with Riverside Terraces
12. Integrate University Education Programs - create recreational and healthful opportunities



1. Provide Safe Bike and Pedestrian Connections to the Riverfront: At the Alder Street connection create a safe and beautiful pedestrian underpass/threshold that will provide direct access to the Willamette River and the Ruth Bascom bike path. Additionally, this connection will extend the Alter Street cycletrack providing a safe and convenient connection to the UO campus and the downtown area.



2. Articulate Riverfront Gateways & Entrances: The railroad underpasses serve as “gateways” to the UO riverfront site, inviting entrances which emphasize entering a uniquely special place. This may be done through thoughtful design that frame the gateways and entrances and their connections between the University, The City of Eugene, and the Willamette River. Design elements such as tunnels of native stone, and arrays of rhododendron’s and azalea’s punctuated by magnolia’s, native cherries, and drifts of native wildflowers can be used to announce these thresholds of time and space.



3. Provide a Riverwalk and River Access: Provide a braided necklace of riverwalks with easy access to the water and river’s edge. Areas for swimming and fishing should be established adjacent to the restoration and establishment of native habitat plantings enhanced by horticultural specimens.

UO Riverfront Vision Plan



4. Foster a Learning Garden: Create a unique University of Oregon landscape experience with a learning garden that derives its meaning from artistic, salubrious, and experiential dimensions. Provide outdoor sites for UO classes and provide a destination for community members who wish to learn about plants and their role in the environment, or just want to picnic in a beautiful area. Integrate orchard plantings and other Urban Farm activities.



5. Construct a Wetlands Bioswale: Construction of the park blocks that include a bioswale along 8th Ave. planted with Oregon native plants to collect and filter runoff, arresting pollutants while offering habitat and a sense of place. The bioswale would lead runoff into the proposed wetlands on the UO riverfront site, further filtering the water before it is returned to the Willamette River.



6. Connect to the Urban Core: Extending the green fabric of the UO Riverfront into downtown via a bioswale/promenade/jogging trail and park blocks will help transform the downtown into a vibrant and green part of Eugene. The bioswale and park blocks provide a direct and active link to the river and green recreational areas while also providing a strong sense of identity.



7. Establish Recreation Trails and Fields: Create a diverse ensemble of trail and field sports including an ultimate frisbee course, informal softball fields, jogging paths, family exercise, picnic areas, etc.



8. Extended Campus View Corridors and Connections

On an increasingly densified campus the riverfront offers the University a visual threshold to the borrowed scenery of the Coburg Hills, the Cascade Range, and open river vistas.

A campus bridge could extend over Franklin Boulevard and the railroad tracks to Autzen Stadium and Alton Baker Park serving as a visual and physical connection to the Riverfront.



9. Habitat Restoration: Reflect regional vernacular landscape types through an ecological approach to planting design. Remove invasive plant species in order to create a sense of place which embraces the personality of the Oregon riverine landscape.



10. Extended Campus View Corridors and Connections: Create new and enhance existing scenic views of the Willamette River in order to define the character and sense of place of Eugene and its presence in the Willamette Valley region.



11. Add an Outdoor University Cafe: Serves as a place to gather and eat along the river next to the Autzen footbridge, providing sustenance to football fans on their way to the game. The draw of food and the amiable atmosphere provided by the cafe will keep the park active and lively.



12. Integrate University Educational Programs: Foster current educational uses of the Riverfront and accommodate future uses. Additionally, facilitate the addition of agrarian uses including orchard plantings, flower and vegetable cultivation, and the integration of the culinary arts with the Urban Farm in order to create a holistic edible campus opportunity for students and faculty.



University of Oregon Landscape Architecture 2012 studio rendering of the UO Riverfront's potential employing this reports 12 recommendations. The current EWEB Master Plan is included in this rendering.

Conclusion

The future of the UO Riverfront may employ the twelve recommendations through phasing. Based on economic obstacles the following is a phased list of recommended projects:

Short-Term Projects (within the next 2-3 years)

1) Create a new Riverfront Master Plan and determine cost estimates for all proposed projects. Include a Regulating Plan that determines where varying degrees of development are allowed.

2) Removal of the chain-link fence and barbed wire around the riverfront property – this will require very minor site rehabilitation such as filling in small sink holes and cleaning up debris.

3) Make minor riverbank improvements including slope rehabilitation, erosion control plantings, and habitat restoration (invasive species removal).

4) Integrate University Educational Programs – Foster current educational uses of the Riverfront and accommodate future uses.

Mid-Term Projects (within the next 4-6 years)

1) Restore the sense of a natural floodplain – Remove contaminated fill removal and recycle all materials in anticipation of being integrated into a system of berms, and elaborated contouring which simultaneously creates a sound barrier to the railroad undulating as a landscape echo of the South Hills punctuated with native plantings reminiscent of the Oregon vernacular. The reshaping of this contaminated site will include the creation of the wetland botanical garden.

2) Make Riverfront path system improvements

Repair current trail system and add additional paths to create a braided necklace of riverwalks with easy access to the water and river's edge. Areas for swimming and fishing should be established adjacent to the restoration and establishment of native habitat plantings enhanced by horticultural specimens.

3) Restore and enhance the natural flora and fauna - Enhancement, restoration and management of riparian native plant communities along the river's edge that are guided by specific attention to the needs of valued native wildlife species, as well as the experiential values provided for people. These restoration efforts could be led and monitored by students.

4) Provide Safe Bike and Pedestrian Connections to the Riverfront At the Alder Street connection create a safe and beautiful pedestrian underpass/threshold that will provide direct access to the Willamette River and the Ruth Bascom bike path. Additionally, this connection will extend the Alter Street cycletrack providing a safe and convenient connection to the UO campus and the downtown area.

5) Articulate Riverfront Gateways & Entrances - The railroad underpasses serve as "gateways" to the UO riverfront site, inviting entrances which emphasize entering a uniquely special place. This may be done through thoughtful design that frame the gateways and entrances and their connections between the University, The City of Eugene, and the Willamette River. Design elements such as tunnels of native stone, and arrays of rhododendron's and azalea's punctuated by magnolia's, native cherries, and drifts of native wildflowers can be used to announce these thresholds of time and space.

6) Foster a Learning Garden - Create a unique University of Oregon landscape experience with a learning garden that derives its meaning from artistic, salubrious, and experiential dimensions.

Provide outdoor sites for UO classes and provide a destination for community members who wish to learn about plants and their role in the environment, or just want to picnic in a beautiful area. Integrate orchard plantings and other Urban Farm activities.

Long-Term Projects (within the next 6-15 years)

1) Restore Connections to Campus

On an increasingly densified campus the riverfront offers the A campus bridge could extend over Franklin Boulevard and the railroad tracks to Autzen Stadium and Alton Baker Park serving as a visual and physical connection to the Riverfront.

2) Restoration and integration of the Millrace into the campus landscape experience.

3) Create a Riverfront Learning Garden & Community Gardens along the railroad tracks

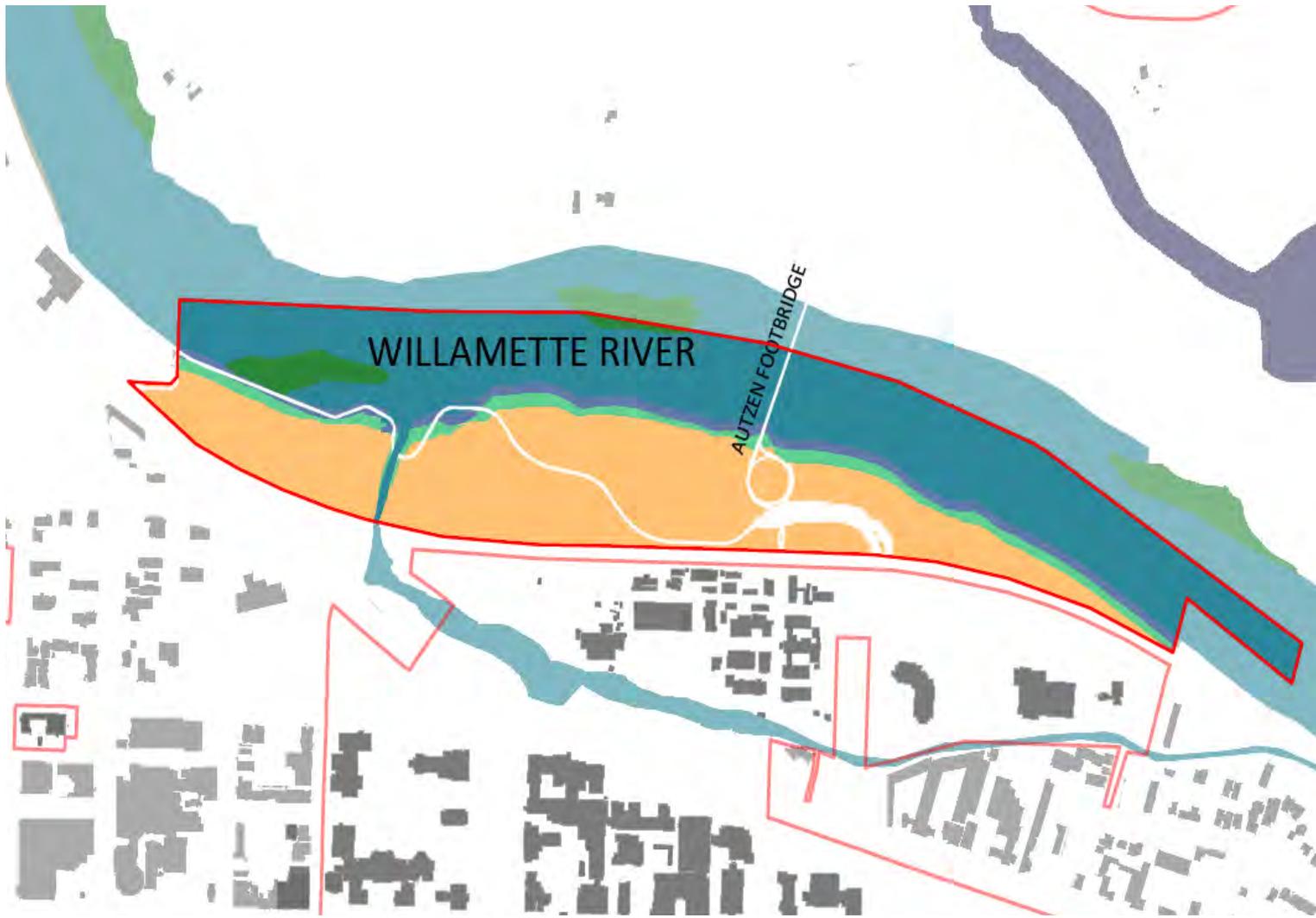
4) Construct a Wetlands Bioswale - Construction of the park blocks that include a bioswale along 8th Ave. planted with Oregon native plants to collect and filter runoff, arresting pollutants while offering habitat and a sense of place. The bioswale would lead runoff into the proposed wetlands on the UO riverfront site, further filtering the water before it is returned to the Willamette River.

5) Add an Outdoor University Cafe - Serves as a place to gather and eat along the river next to the Autzen footbridge, providing sustenance to football fans on their way to the game. The draw of food and the amiable atmosphere provided by the cafe will keep the park active and lively.



Appendix

UO Riverfront Species List

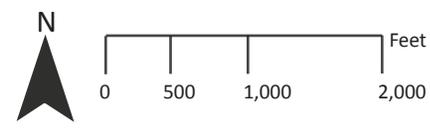


Habitat Map

I non parclibus as eici consequo volo cum alique maiore, voluptas renis alignam quibus, iligendaesto dignitiam, sinciet eos int etur molensdam latiunt officia-tur? Ditam eossit omnis dolores ecerspe rsp

- = Proposed
- = Existing
- = Invasive
- = Existing and proposed

- = CITY BOUNDARY
- = UO CAMPUS BOUNDARY
- = CITY BUILDINGS
- = UO CAMPUS BUILDINGS
- = Wetlands
- = Riparian
- = Upper/Midbank
- = Prairie



UPPERBANK + MIDBANK



crawford.tardigrade.net



wikipedia.org



- Acer circinatum* - Vine Maple
Acer macrophyllum - Big Leaf Maple
Achillea millefolium - Yarrow
Amelanchier alnifolia - Service Berry
Anaphalis margaritacea - Pearly Everlasting
Aquilegia formosa - Red Columbine
Artemisia douglasiana - Mugwort
Aruncus dioicus - Goat's Beard
Asclepias speciosa - Showy Milkweed
Baccharis pilularis - Coyote Brush
Berberis aquifolium - Tall Oregon Grape
Bromus sitchensis - Sitka Brome
Carex hendersonii - Henderson's Sedge
Carex leptopoda - Slenderfoot Sedge
Ceanothus sanguineus - Red Stem Ceanothus
Ceanothus velutinus - Snowbrush
Claytonia sibirica - Siberian Springbeauty
Cornus nutallii - Pacific Dogwood
Corylus cornuta var. *californica* - California Hazelnut
Delphinium trolliifolium - Poison Larkspur
Dicentra formosa - Bleeding Heart
Elymus glaucus - Blue Wildrye
Festuca californica - California Fescue
Festuca roemeri - Romer's Fescue
Fragaria vesca - Wood Strawberry
Fragaria virginiana var. *platypetala* - Wild Strawberry
Fraxinus latifolia - Oregon Ash
Gilia capitata - Globe Gilia
Heracleum lanatum - Cow Parsnip
Heuchera micrantha - Small-flowered Alumroot
Holodiscus discolor - Oceanspray
Hydrophyllum tenuipes - Pacific Waterleaf
Lomatium dissectum - Fernleaf Lomatium
Lomatium nudicaule - Barestem Lomatium
Lomatium utriculatum - Common Lomatium
Lupinus rivularis - Riverbank Lupine
Malus fusca - Western Crabapple
Oemleria cerasiformis - Osoberry
Philadelphus lewisii - Mock Orange
Physocarpus capitatus - Ninebark
Prunella vulgaris ssp. *lanceolata* - Self Heal
Prunus emarginata var. *mollis* - Bitter Cherry
Prunus virginiana - Chokecherry
Quercus garryana - Oregon White Oak
Quercus kelloggii - California Black Oak
Rhamnus purshiana - Cascara
Ribes sanguineum - Red Flowering Currant
Rubus parviflorus - Thimbleberry
Salix sessilifolia - Narrowleaf Willow
Sambucus racemosa var. *arborescens* - Red Elderberry
Scutellaria lateriflora - Blue Skullcap
Sidalcea campestris - Meadow Sidalcea
Solidago canadensis - Canada Goldenrod
Symphoricarpos albus var. *laevigatus* - Snowberry
Symphyotrichum hallii - Hall's Aster
Symphyotrichum subspicatum - Douglas Aster
Tellima grandiflora - Fringecup
Thalictrum occidentale - Western Meadowrue
Thalictrum polycarpum - Many Fruited Meadowrue
Trillium albidum - Sessile Trillium
Triteleia hyacinthina - Hyacinth Brodiaea
Viburnum ellipticum - Oval-leaf Viburnum
Viola glabella - Stream Violet

PRAIRIE



portland.indymedia.org



www.califlora.net



www.genesisseeds.com

- Lolium perenne* - Perennial Rye Grass
- Lomatium dissectum* - Fernleaf Lomatium
- Lomatium nudicaule* - Barestem Lomatium
- Lomatium utriculatum* - Common Lomatium
- Lupinus bicolor* - Miniature Lupine
- Lupinus polyphyllus* - Large Leaved Lupine
- Marah oregana* - Man-root
- Medicago arabica* -Burclover
- Mertensia platyphylla* - Western Bluebells
- Myosotis arvensis* - Field Forget-me-not
- Myosotis discolor* - Common Forget-me-not
- Phalaris arundinacea* - Reed Canarygrass
- Plantago lanceolata* - English Plantain
- Plectritis congesta* - Rosy Plectritis
- Poa annua* - Annual Bluegrass
- Poa trivialis* - Roughstalk Bluegrass
- Polygonum cuspidatum* - Japanese Knot-weed
- Polystichum munitum* - Western Sword Fern
- Populus trichocarpa* - Black Cottonwood
- Potentilla gracilis* var. *gracilis* - Slender Cinquefoil
- Prunella vulgaris* ssp. *lanceolata* - Self Heal
- Pseudotsuga menziesii* - Douglas Fir
- Pteridium aquilinum* - Sword Fern
- Quercus garryana* - Oregon White Oak
- Ranunculus occidentalis* - Western Buttercup
- Robinia pseudoacacia* - Black Locust
- Rubus bifrons* - Himalayan Blackberry
- Rumex crispus* - Curly Dock
- Sanicula crassicaulis* - Pacific sanicle
- Schedonorus arundinaceas* - Tall Fescue
- Senecio jacobaea* - Tansy Ragwort
- Sidalcea malviflora* var. *virgata* - Rosy Checkermallow

- Silybum marianam* - Milk Thistle
- Sisyrinchium idahoense* - Idaho Tiny-iris, Blue-eyed Grass
- Solanum dulcamara* - Climbing Nightshade
- Solidago canadensis* - Canada Goldenrod
- Symphotrichum hallii* - Hall's Aster
- Symphotrichum subspicatum* - Douglas Aster
- Taeniatherum caput-medusae* - Medusahead
- Taraxacum officinale* - Common dandelion
- Tellima grandiflora* - Fringeclip
- Toxicodendron diversilobum* - Poison Oak
- Tragopogon dubius* - Yellow Salsify
- Trifolium dubium* - Least Hop Clover
- Trifolium pratense* - Red Clover
- Trifolium repens* - White Clover
- Trifolium subterraneum* - Subterranean Clover
- Triteleia hyacinthina* - Hyacinth Brodiaea
- Urtica dioica* ssp. *gracilis* - Stinging Nettle
- Valerianella locusta* - European Corn Salad
- Veronica arvensis* - Common Speedwell
- Vicia hirsuta* - Tiny Hair Vetch
- Vicia sativa* - Common Vetch
- Vinca minor* - Common Periwinkle
- Viola adunca* - Early Blue Violet
- Vulpia myuros* - Rat's-tail Fescue
- Wyethia angustifolia* - Wyethia

PRAIRIE

Achillea millefolium - Yarrow
Agrostis stolonifera - Creeping Bent Grass
Aira caryophylla - Hairgrass
Alopecurus pratensis - Meadow Foxtail
Anaphalis margaritacea - Pearly Everlasting
Arrhenatherum elatius - Tall Oatgrass
Asclepias speciosa - Showy Milkweed
Avena barbata - Slender Oat
Avena fatua - Wild Oat
Bellis perennis - English Lawn Daisy
Brassica nigra - Black Mustard
Brassica rapa - Field Mustard
Brodiaea coronaria ssp. *Coronaria* - Harvest Brodiaea
Bromus diandrus - Rippgut Brome
Bromus hordeaceus - Soft Brome
Calocedrus decurrens - Incense Cedar
Carex tumulicola - Foothill Sedge
Cerastium glomeratum - Sticky Chickweed
Cichorium intybus - Chicory
Cirsium arvense - Canada Thistle
Clarkia amoena - Farewell-to-spring
Clarkia purpurea var. *purpurea* - Purple Godetia
Collinsia grandiflor - Large-flowered Blue-eyed Mary
Collomia grandiflora - Large-flowered Collomia
Conium maculatum - Poison Hemlock
Convolvulus arvensis - Field Bindweed
Crataegus monogyna - English Hawthorn
Cytisus scoparius - Scot's Broom
Dactylis glomerata - Orchard Grass
Danthonia californica - California Oatgrass
Daucus carota - Queen Anne's Lace
Delphinium menziesii - Menzie's Larkspur

Dipsacus sylvestris - Teasel
Dodecatheon hendersonii - Shooting Star
Epilobium ciliatum var. *glandulosum* - Glandular Willow-herb
Epilobium densiflorum - Boisduval's willow-herb
Eriophyllum lanatum - Oregon sunshine
Erysimum capitatum var. *capitatum* - Western Wallflower
Escholtzia californica - California Poppy
Festuca roemerii - Romer's Fescue
Festuca rubra - Red Fescue
Festuca trachyphylla - Hard Fescue
Foeniculum vulgare - Sweet Fennel
Fragaria virginiana var. *platypetala* - Wild Strawberry
Galium aparine - Cleavers
Geranium lucidum - Shining Geranium
Geranium molle - Dovefoot Geranium
Geranium oreganum - Oregon Geranium
Gilia capitata - Globe Gilia
Hedera helix - English Ivy
Hordeum jubatum - Foxtail Barley
Hordeum murinum ssp. *Lepornium* - Mouse Barley
Humulus lupulus - Common Hop
Hyacinthoides scilla - English Wood Hyacinth
Hypericum perforatum - Klamathweed
Hypochaeris radicata - Flase Dandelion
Iris tenax - Oregon Iris
Juglans nigra - Black Walnut
Juncus tenuis - Poverty Rush
Koeleria macrantha - Junegrass
Lamium purpureum - Red Dead-nettle
Lapsana communis - Nipplewort
Lathyrus latifolius - Perennial Pea
Leucanthemum vulgare - Ox-eye Daisy



tryonfarm-org.cftvgy.org



whatcom.wsu.edu



tryonfarm-org.cftvgy.org

RIPARIAN ZONE



wikipedia.org



whatcom.wsu.edu



wikipedia.org

Aira caryophyllea - Hairgrass

Alisma triviale - American Water Plantain

Alnus rhombifolia - White Alder

Alnus rubra - Red Alder

Alopecurus pratensis - Meadow Foxtail

Amelanchier alnifolia - Serviceberry

Anthoxanthum odoratum - Sweet Vernal Grass

Anthriscus scandicina - Bur Chervil

Bellis perennis - English Lawn Daisy

Brachypodium sylvaticum - False-brome

Brassica rapa - Field Mustard

Bromus diandrus - Rippgut Brome

Bromus hordeaceus - Soft Brome

Camassia leichtlinii - Large Camus

Cardamine hirsuta - Euopean Hairy Bittercrest

Carex hendersonii - Henderson's Sedge

Carex interrupta - Green Fruited Sedge

Carex leptopoda - Slenderfoot Sedge

Carex obnupta - Slough Sedge

Cerastium glomeratum - Sticky Chickweed

Cirsium arvense - Canada Thistle

Conium maculatum - Poison Hemlock

Convolvulus arvensis - Field Bindweed

Cornus sericea - Red Osier Dogwood

Crataegus monogyna - English Hawthorn

Crategus suksdorfi - Black Hawthorn

Cynosurus echinatus - Hedgehog Dogtail

Cystopteris fragilis - Brittle Bladderfern

Cytisus scoparius - Scot's Broom

Dactylis glomerata - Orchard Grass

Daucus carota - Queen Anne's Lace

Delphinium trolliifolium - Poison Larkspur

Deschampsia cespitosa - Tufted Hairgrass

Dicentra formosa - Bleeding Heart

Dipsacus sylvestris - Teasel

Equisetum arvense - Field Horsetail

Festuca rubra - Red Fescue

Fraxinus latifolia - Oregon Ash

Galium aparine - Cleavers

Geranium lucidum - Shining Geranium

Geranium molle - Dovefoot Geranium

Geranium robertianum - Stinky Bob

Geum macrophyllum - Largeleaf Avens

Glyceria striata - Tall Mannagrass

Hedera helix - English Ivy

Hesperis matronalis - Dame's Rocket

Holcus lanatus - Velvet Grass

Hordeum jubatum - Foxtail Barley

Hordeum murinum ssp. *leporinum* - Mouse Barley

Hypericum perforatum - Klamathweed

Ilex aquifolium - English Holly

Iris pseudacorus - Yellow Flag

Juglans nigra - Black Walnut

Juncus occidentalis - Prairie Rush

Lapsana communis - Nipplewort

Lathyrus latifolius - Perennial Pea

Leucanthemum vulgare - Ox-eye Daisy

Lotus corniculatus - Bird's Foot Trefoil

Lupinus polyphyllus - Large Leaved Lupine

Lupinus rivularis - Riverbank Lupine

Lysichiton americanum - Yellow Skunk Cabbage

Malus fusca - Western Crabapple

Marah oregana - Man-root

Melissa officinalis - Lemon Balm

RIPARIAN ZONE

Mimulus guttatus - Seep Monkey Flower
Myosotis arvensis - Field Forget-me-not
Myosotis discolor - Common Forget-me-not
Phalaris arundinacea - Reed Canarygrass
Physocarpus capitatus - Ninebark
Plantago lanceolata - English Plantain
Poa annua - Annual Bluegrass
Poa pratensis - Kentucky Bluegrass
Poa trivialis - Roughstalk Bluegrass
Polypodium glycyrrhiza - Licorice-fern
Polystichum munitum - Western Sword Fern
Populus trichocarpa - Black Cottonwood
Potentilla gracilis - Slender Cinquefoil
Quercus garryana - Oregon White Oak
Quercus rubra - Northern Red Oak
Ranunculus orthorhyncus - Straight Beak Buttercup
Ranunculus repens - Creeping Buttercup
Robinia pseudoacacia - Black Locust
Rubus bifrons - Himalayan Blackberry
Rubus laciniatus - Cut-leaf Blackberry
Rubus ursinus - Pacific Dewberry
Rumex crispus - Curly Dock
Salix hookeriana - Willow
Salix hookeriana ssp. *lasiandra* - Willow
Salix scouleriana - Scouler's willow
Salix sitchensis - Sitka Willow
Salix sitchensis - Willow
Satureja douglasii - Yerba buena
Schedonorus arundinaceas - Tall Fescue
Schoenoplectus acutus - Tule
Schoenoplectus tabernaemontani - Softstem Bulrush
Scirpus microcarpus - Small Fruited Bulrush

Scutellaria lateriflora - Blue Skullcap
Senecio jacobaea - Tansy Ragwort
Shoenoplectus americanus - Chairmaker's Bulrush
Sidalcea cusickii - Cusick's Checkermallow
Sisyrinchium idahoense - Idaho Tiny-iris, Blue-eyed Grass
Solanum dulcamara - Climbing Nightshade
Sparganium emersum - Simple-stem Bur-reed
Spirea douglasii - Douglas Spirea
Stachys cooleyae - Cooley's Hedgenettle
Taraxacum officinale - Common dandelion
Toxicodendron diversilobum - Poison Oak
Trifolium dubium - Least Hop Clover
Trifolium repens - White Clover
Triteleia hyacinthina - Hyacinth Brodiaea
Typha latifolia - Broadleaf Cattail
Urtica dioica - Stinging Nettle
Urtica dioica ssp. *gracilis* - Stinging Nettle
Veronica arvensis - Common Speedwell
Veronica filiformis - Thread-stalk Speedwell
Veronica scutellata - Speedwell
Viburnum ellipticum - Oval-leaf Viburnum
Viburnum opulus - American Cranberry Bush
Vicia hirsuta - Tiny Hair Vetch
Vicia sativa - Common Vetch



deciduous-trees.com



wikipedia.org

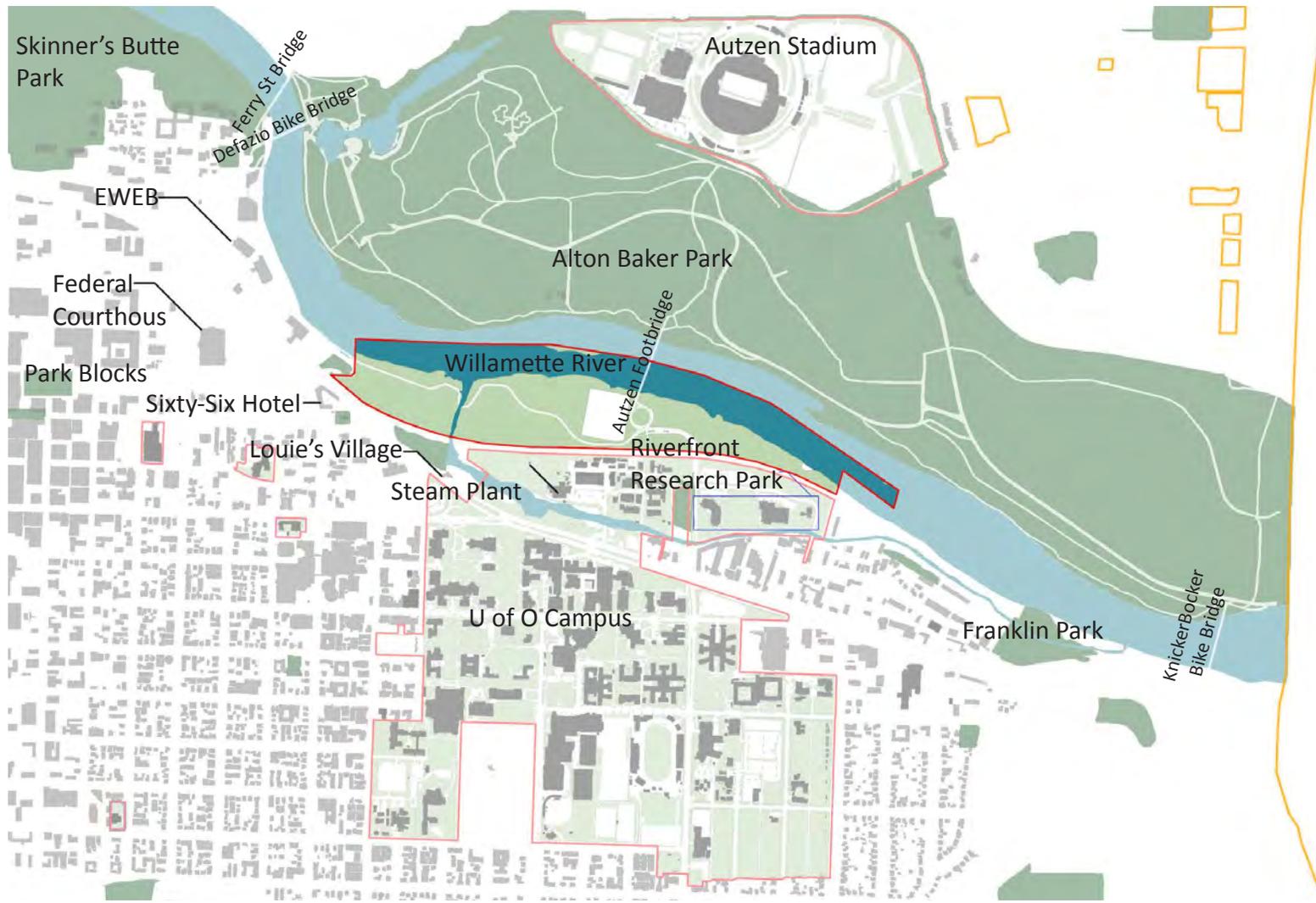


wikipedia.org

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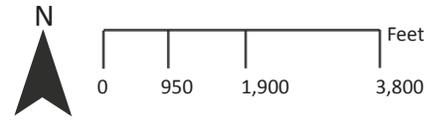
Appendix

Surrounding Context



Surrounding Context displays important buildings, parks, and bridges in the surrounding the riverfront.

- = CITY BOUNDARY
- = UO CAMPUS BOUNDARY
- = CITY BUILDINGS
- = UO CAMPUS BUILDINGS
- = CITY OPEN SPACE
- = CAMPUS OPEN SPACE





EWEB



Federal Courthouse Building



Eugene Park Blocks



Sixty-Six Hotel



Louie's Restaurant



UO Steam Plant



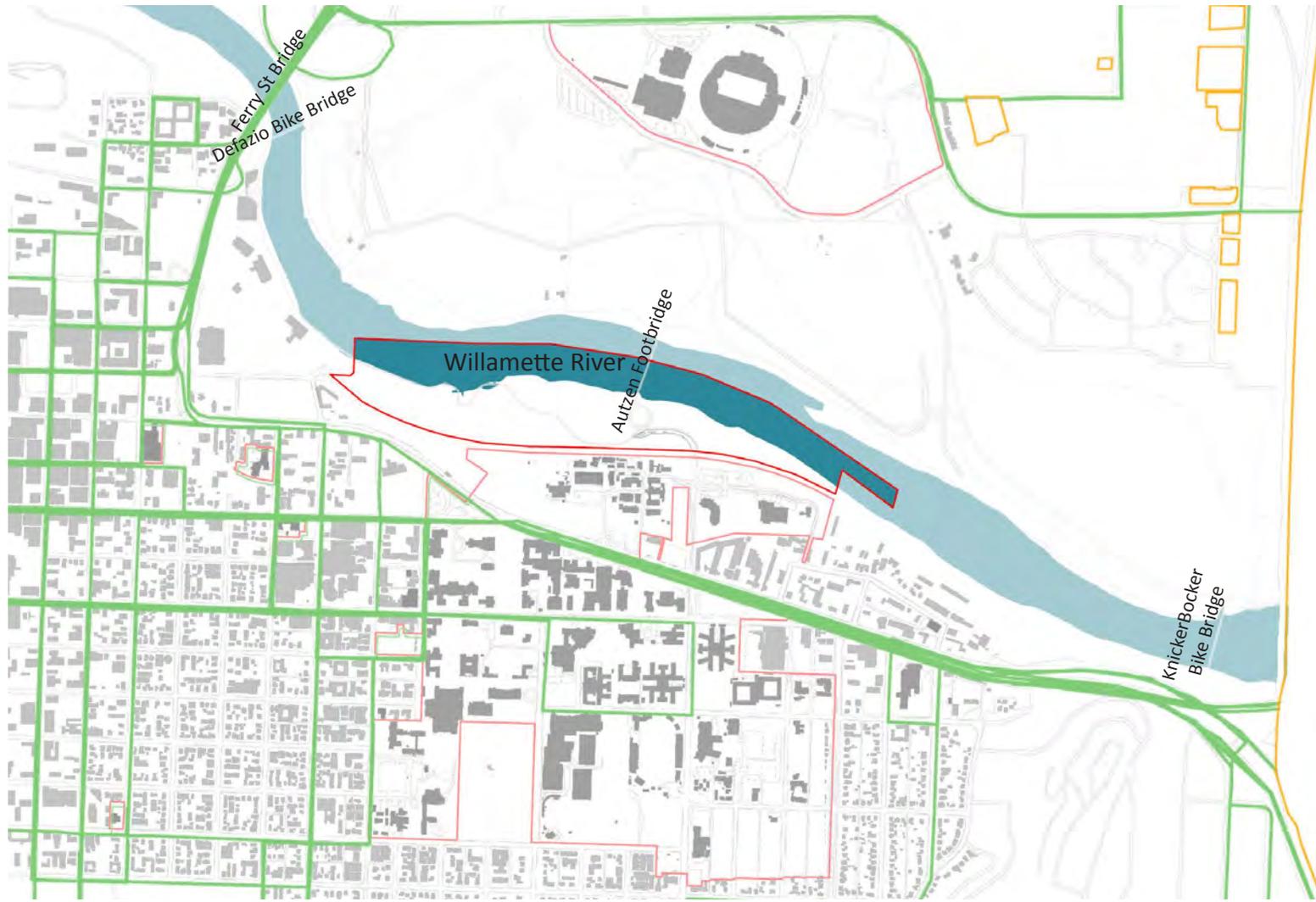
Willamette River



Riverfront Research Park



UO Campus

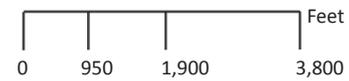


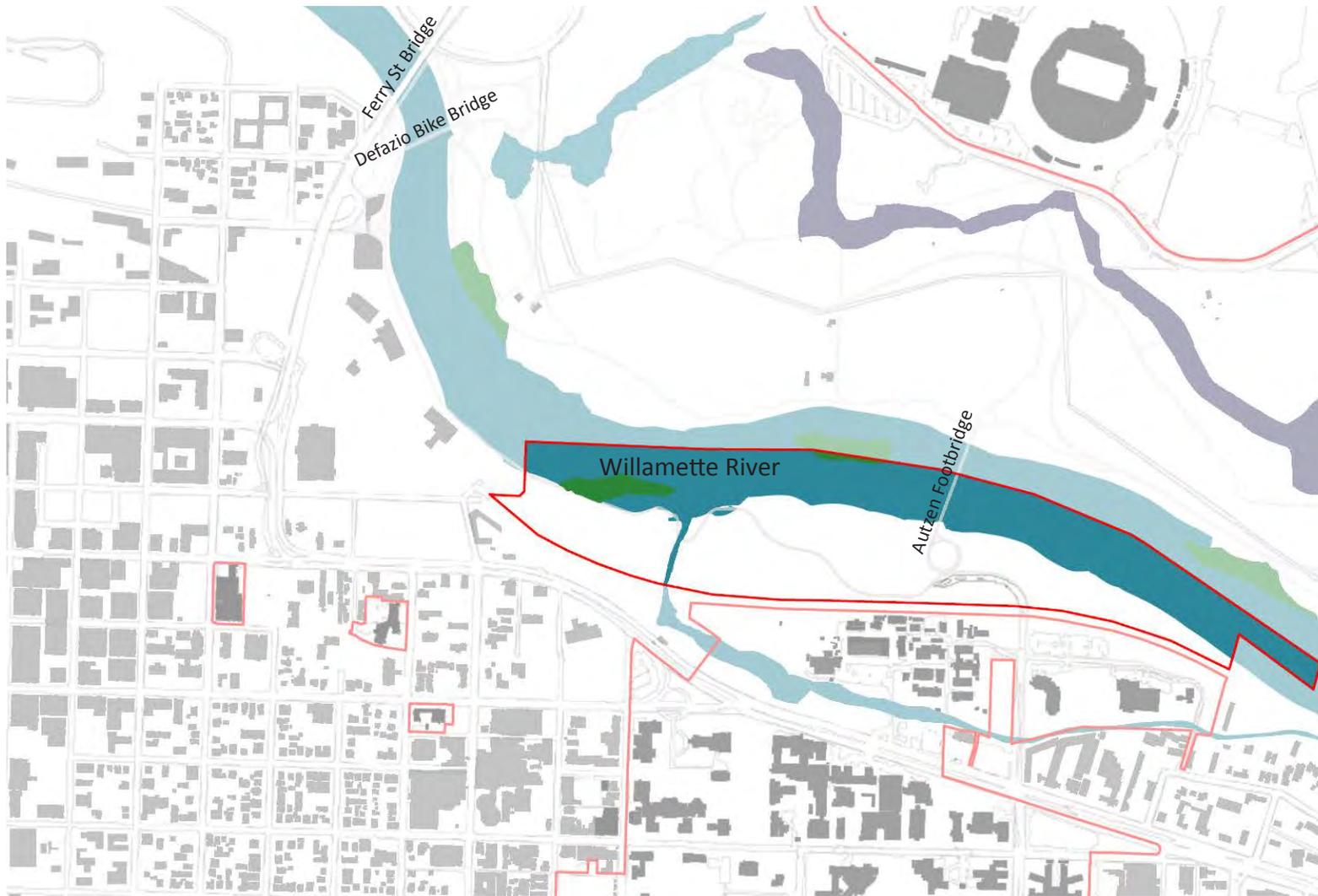
Bus Line Denotes the roads serviced by the Lane Transit District (LTD).

Since 1970, Lane Transit District has provided transportation services to Eugene-Springfield and surrounding communities.

- = CITY BOUNDARY
- = UO CAMPUS BOUNDARY
- = CITY BUILDINGS
- = UO CAMPUS BUILDINGS

— = BUS LINE

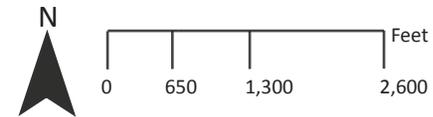


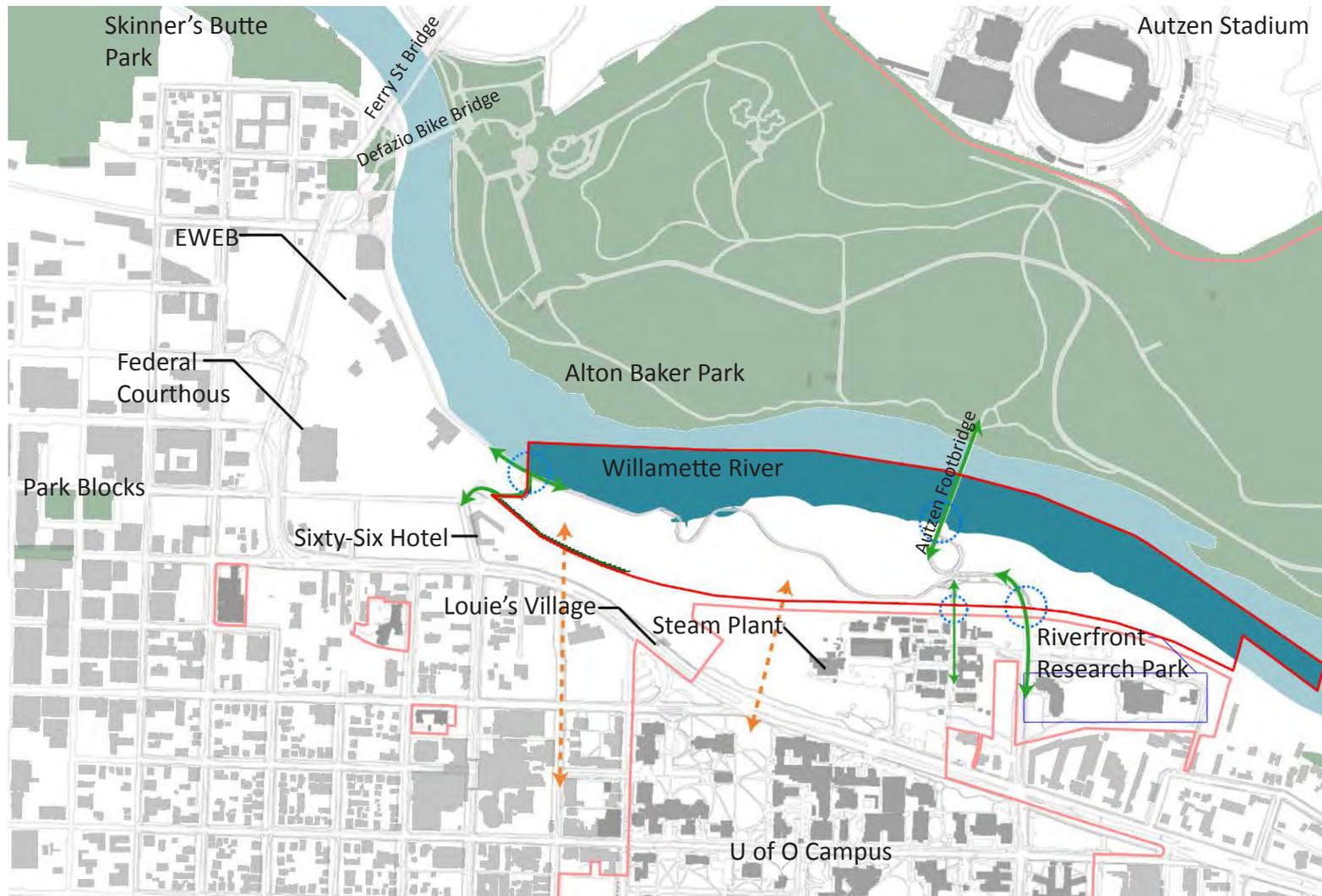


Wetlands Displays locations of Wetland habitats in Eugene.

These areas are home to numerous rare and unusual animal species and more than 350 species of plants, some of which exist only in the Willamette Valley.

- = CITY BOUNDARY
- = UO CAMPUS BOUNDARY
- = CITY BUILDINGS
- = UO CAMPUS BUILDINGS
- = FRESHWATER EMERGENT
- = FRESHWATER FORESTED SHRUB
- = LAKE

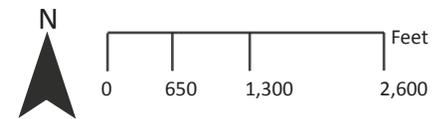




Physical Connections

Shows the existing and proposed connections of the UO riverfront site to the campus and downtown Eugene.

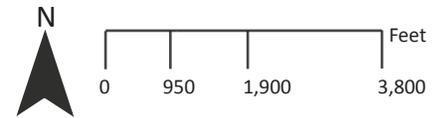
- = CITY BOUNDARY
- = UO CAMPUS BOUNDARY
- = CITY BUILDINGS
- = UO CAMPUS BUILDINGS
- ↕ = EXISTING CONNECTION
- - - ↕ = PROPOSED CONNECTION

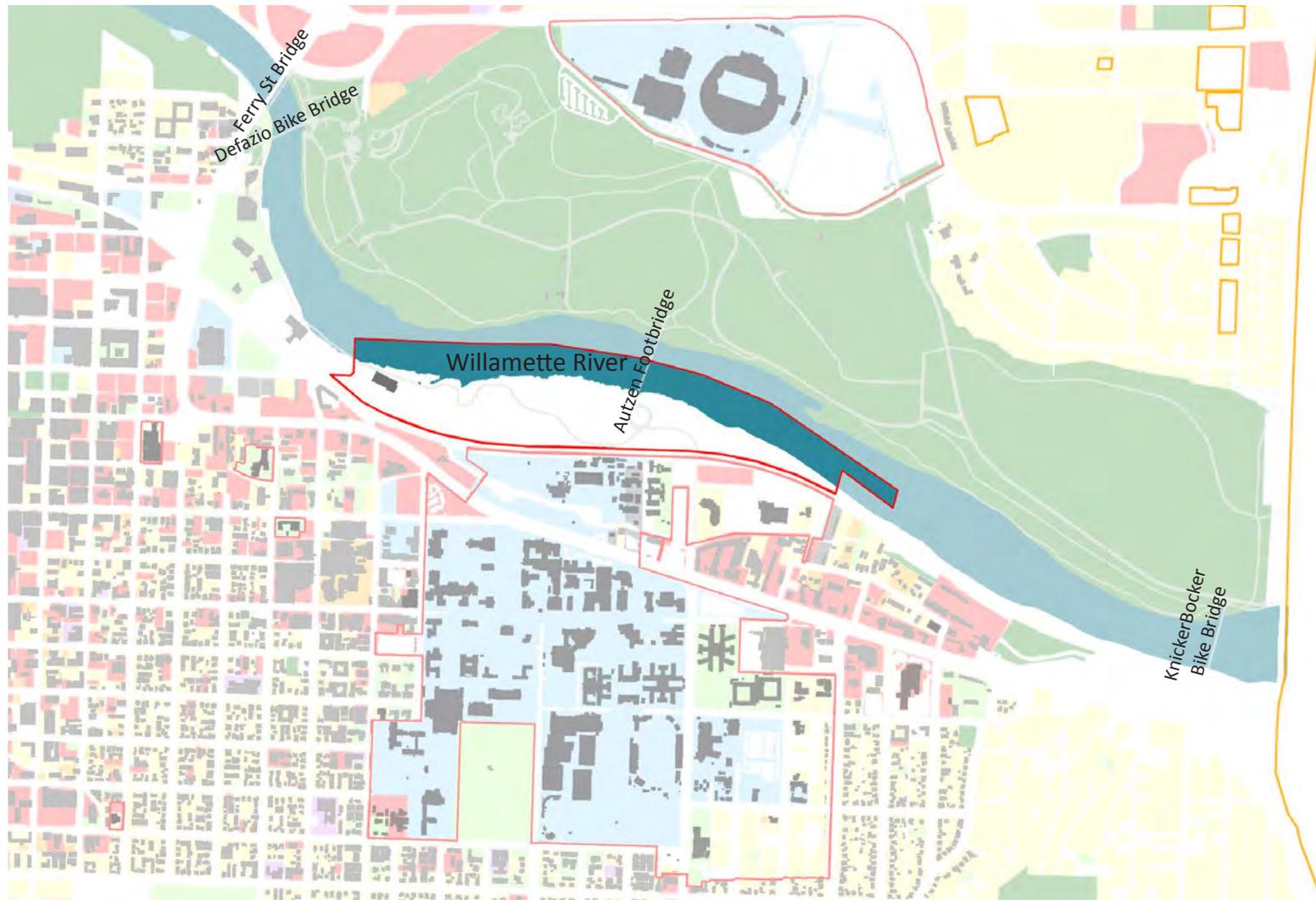


Night Lighting II-
illustrates the lighting in
Eugene of the Surrounding
area.



- = CITY BOUNDARY
- - - = UO CAMPUS BOUNDARY
- = CITY BUILDINGS
- = UO CAMPUS BUILDINGS
- = LIGHTING

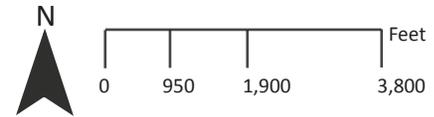




Existing Infrastructure

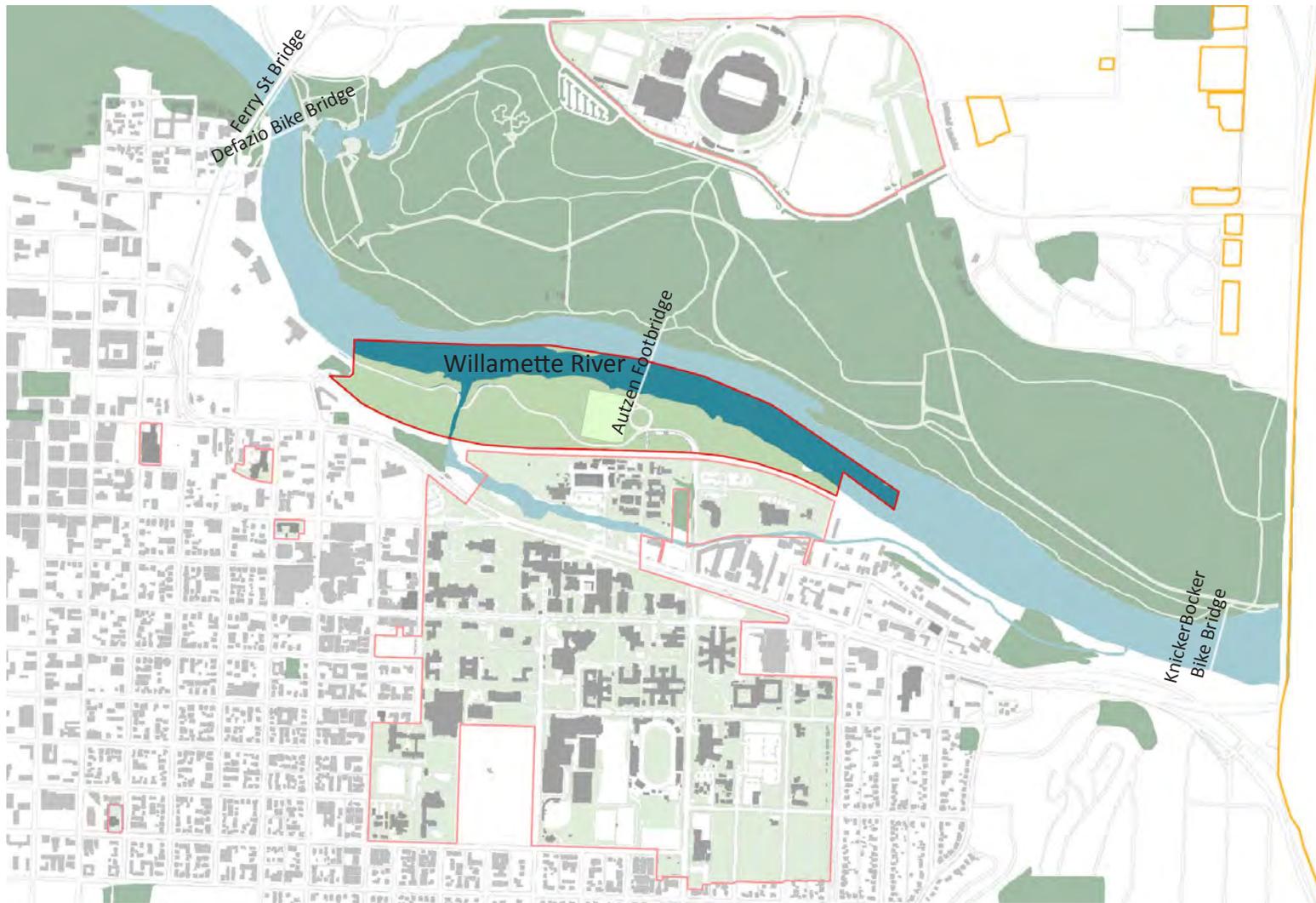
Indicates the surrounding infrastructure zones

- = CITY BOUNDARY
- = UO CAMPUS BOUNDARY
- = CITY BUILDINGS
- = UO CAMPUS BUILDINGS
- = COMMERCIAL
- = OFFICE
- = RESIDENTIAL
- = CITY PARKS
- = GREEN SPACE - CEMETARY
- = PUBLIC LAND
- = HOSPITAL - CHURCH
- = INDUSTRIAL



Parks/Open Space

Shows the parks and open space along the Willamette river.



- = CITY BOUNDARY
- = UO CAMPUS BOUNDARY
- = CITY BUILDINGS
- = UO CAMPUS BUILDINGS
- = CITY OPEN SPACE
- = CAMPUS OPEN SPACE



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