

PROPOSED

River Renaissance Strategy

OCTOBER 2004



strategy
guidance
progress
leadership
funding
action



**“ It can be a renaissance that gives
greater meaning to Portland's promise:
to be that unique place on this planet where
a large growing city and nature coexist... ”**

**MAYOR VERA KATZ
STATE OF THE CITY SPEECH, 2001**



October 1, 2004

Mayor Vera Katz, Convener

Commissioner Jim Francesconi

Commissioner Randy Leonard

Commissioner Dan Saltzman

Commissioner Erik Sten

Dear Portlanders,

On behalf of the River Renaissance Directors, I am pleased to present the proposed *River Renaissance Strategy* for your review. It advances our progress to achieve the *River Renaissance Vision*, builds on research to better understand river issues, and is the product of strong partnerships. Thank you to all who helped to strengthen and refine the previous draft with thoughtful comments and suggestions.

Gil Kelley
Bureau of Planning, Chair

Many of you are actively working to improve river conditions, educate the community, and promote the Willamette River as Portland's defining feature. Together we have created innovative approaches to address the challenges and opportunities presented by our urban river systems. This work is powered by unprecedented collaboration among City bureaus, and partnership with agencies, business and industry leaders, community groups, students, and Portlanders of all ages who share a passion for the city's rivers and streams.

Susan Anderson
Office of Sustainable Development

Mort Anoushiravani
Portland Water Bureau

Ray Kerridge
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Environmental Services

Don Mazziotti
Portland Development Commission

Zari Santner
Portland Parks and Recreation

Brant Williams
Office of Transportation

The *River Renaissance Strategy* represents a major step forward in our effort to become a vibrant and prosperous city centered on a healthy Willamette River. It builds on a foundation of knowledge, enhances work currently underway, and sets the course for future actions. The strategy will help guide the City's work, measure and assess progress, engage the community, and focus future investments. Adoption of this influential document will be a significant milestone, but is not an end to the important work ahead to revitalize the rivers, streams and watersheds in Portland.

The Portland City Council will hold a public hearing on November 18, 2004, to consider community perspectives on the *River Renaissance Strategy*. Adoption by the council will signify Portland's commitment to embrace River Renaissance principles and policies as part of the everyday practices of City government.

The *River Renaissance Strategy* renews Mayor Vera Katz's call to action made in her 2001 State of the City speech. We encourage you to get out and explore the many ways Portland relies on the Willamette and Columbia Rivers for our livelihood and livability. Each of us can make a contribution at home, at work, at school, and in the community. Working together, we can realize Portland's promise to be a unique place where a large growing city and nature coexist.

Sincerely,



Gil Kelley



City of Portland, Oregon

Director of Planning, City of Portland
on behalf of the River Renaissance Directors

Note to Readers

You may notice that the proposed *River Renaissance Strategy* looks different from the earlier draft published in July 2004. We have responded to many suggestions to improve the flow of the document and more clearly reflect the *River Renaissance Vision* themes. We have also moved some of the more technical portions of the document to appendices.

The topics covered in the new chapters roughly correspond to those in the previous draft as follows:

Proposed Strategy – October 2004	Draft Strategy – July 2004
Chapter 3: A Clean and Healthy River	Nature in the City (Found in Chapters 1, 2 & 5)
Chapter 4: Prosperous Working Harbor	The Harbor’s Competitive Edge (Found in Chapters 1, 2 & 5)
Chapter 5: Portland’s Front Yard	Connecting to Rivers and Streams (Found in Chapters 1, 2 & 5)
Chapter 6: Vibrant Waterfront Districts and Neighborhoods	Great River, Great City (Found in Chapters 1, 2 & 5)
Chapter 7: Partnerships, Leadership and Education	Building Bridges (Found in Chapters 1, 2 & 5)

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Preface



The waters of the Willamette and Columbia Rivers lap at the edge of our lives and livelihoods. They course amid skyscrapers and parks, docks, port terminals, warehouses and neighborhoods. Linking east and west, the Willamette is Portland's true city center and the Columbia our gateway to the Pacific, and beyond.

These mighty rivers and their tributary streams flow from the Cascades, the Coast Range and Portland's west hills. They meander through the Willamette Valley and trickle through residential and industrial neighborhoods.

Many of the world's great cities are built around rivers. But thriving economies and healthy river systems do not usually exist simultaneously. In Portland we intend to create a harmony between city and nature unmatched anywhere in the world.

Our resources are rich, our ideas bold, our investments thus far admirable. And it shows. There are few cities where office workers can peer out 20th story windows and spot a bald eagle soaring past, or fish for salmon during the lunch hour under the shadow of construction cranes, or where joggers can sprint through a lush, 5,000-acre forest where black bear and elk live, just minutes from museums and theaters.

Yet, there's no denying that our rivers and streams are polluted, that many species of native fish, plants and wildlife are on the decline, and that invasive species are a significant challenge. We aim to improve our natural systems—while helping the city flourish.

Portland is an extraordinary place where business and nature can and do co-exist.



Riverfront land is a finite, valuable asset. Economic health is necessary to retain jobs for longshoremen, river pilots, metal workers, manufacturers and many others who depend on the working harbor. Environmental health is essential for people and for the survival of birds, mammals, fish, reptiles and amphibians that rely on riparian habitats. We can and must be responsible to the health of all of these.

It will be a challenge. One in eight jobs in the city depends on the working harbor, but industry is rife with uncertainty: Superfund sites, channel depth, environmental regulations and competition—globally and close to home. And, riverside property is in high demand for competing residential, commercial and recreational uses.



We must revitalize our neighborhoods for living and doing business, keep our harbor prosperous, and improve our natural environment. Development and redevelopment can serve as powerful economic engines to restore and sustain an ecologically thriving river system.

Shorelines are among Portland's most fascinating places. At the Port's Terminal 6 on the Columbia River, cottonwood trees leaf out above a dock where linemen grab ropes to tie up an immense cargo ship from Japan. Neighbors walking the Springwater Trail along Johnson Creek at dusk stop to watch a beaver scampering onto a log. A warehouse worker, relaxing on a bench at lunch, is entertained by a heron fishing for a meal on the Willamette.

Portland is already renowned as a well-planned city. Now we aim beyond—to integrate development and the natural environment as harmoniously as possible.

A few years ago, a thousand Portlanders spoke of their dreams and demands for the Willamette. We want to touch the river, they said. We want access, to get close enough to the river to get the feel of it.

More access won't be easy. Of more than thirty miles of Willamette riverfront in Portland, there are a mere dozen public parks, half that many motorized boat launch sites and only three of those are public. Boulders, rip-rap, stone walls, brambles and steep slopes today line the shores but that's no deterrent to dreams of better access. People would like to connect to the Willamette through waterside parks, trails, viewpoints, bikeways, river taxis, ferries, docks and marinas.

They appreciate that the river can provide richly textured experiences. Festivals. Parks. Habitat. Playgrounds. Shipyards. Restaurants. Art centers. Urban promenades. And even a wish for "a large, visible artwork to really define the waterfront, like the Statue of Liberty does for New York and the Opera House for Sydney."

Welcome to your river, Portland's Front Yard.



The Renaissance

An unlikely spot, it would seem, for an eagle to build a nest, next to a gravel quarry near downtown. Or that a peregrine falcon would opt for an aerie on the Interstate 405 bridge. We, too, need to think differently.



During the past century, the health of our rivers has been severely compromised. At the same time, significant progress has been made in ending some of the most destructive practices. To continue restoring our rivers, streams and their watersheds, what's needed is continued commitment, an enthusiasm for innovation, an openness to partnerships, an unprecedented level of public education, participation and bridges that forge connections across boundaries.

We have a history that proves we're up to the task. In 1974, Portland closed the Harbor Drive Freeway on the river's west bank. Now, Tom McCall Waterfront Park is a place for concerts, festivals, dog-walking, roller-blading, sweetheart strolling, picnics, poems in stone, maritime history, and is one of the most popular places in town.

In 2003, the Port of Portland and Toyota worked together to integrate fish and wildlife habitat into a state-of-the-art automobile terminal. And at South Waterfront a new neighborhood and employment center with towering views of Ross Island is emerging from the brownfields of yesteryear. Together, we will find new ways to protect, improve and celebrate the river.

The Willamette and Columbia Rivers are the central reason Portland exists. These rivers have shaped us as a place, and as a people. Now it's time for a renaissance, to reclaim the rivers as our centerpiece and gateway to the Pacific, and our streams as neighborhood treasures. That this is even possible is part of what's unique and beautiful about the inspiring city that Portland has become.

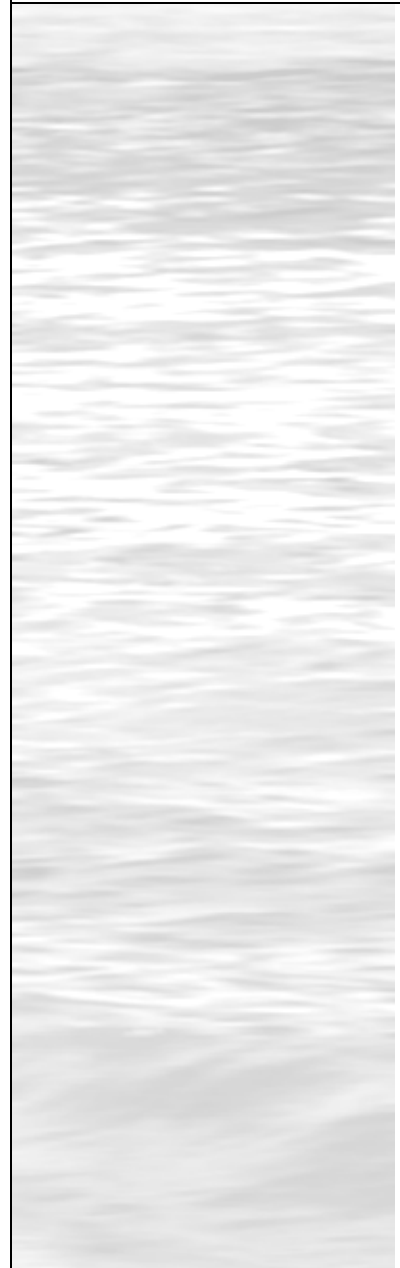
Let's roll up our sleeves—together.



Introduction

C H A P T E R

1





“ Imagine a vibrant city centered on a healthy Willamette River. Look ahead to the future of Portland where a natural river system thrives and links together industry, habitat, business districts and neighborhoods. ”

Mayor Vera Katz
January 2001

WE STARTED WITH A VISION . . .

In the fall of 2000, more than a thousand Portlanders expressed their hopes for the river for the next 50 years and beyond in a series of interactive workshops held around the city. The product of this community dialogue is the *River Renaissance Vision*—a document that articulates a set of goals and aspirations for a revitalized river, and serves as a call to action for City government, other public agencies, community groups, business owners and individuals. The Portland City Council enthusiastically endorsed the vision in March 2001.

The *River Renaissance Vision* includes five mutually supportive and interrelated themes:

- Ensure a clean and healthy river system for fish, wildlife and people.
- Maintain and enhance the city’s prosperous working harbor.
- Embrace the river and its banks as Portland’s front yard.
- Create vibrant waterfront districts and neighborhoods.
- Promote partnerships, leadership, and education.

Bold concepts and ideas are also promoted in the *River Renaissance Vision*: ideas like restoring Ross Island as a natural area in the center of the city, building a world-class monument in a prominent riverfront location, and reconfiguring the I-5 Freeway to bring together both sides of the Central City and revitalize waterfront districts. While not possible today, these bold ideas were proposed to stimulate imagination and prompt a community discussion about what Portland’s riverfront can be in 50 years and beyond.

NEXT, WE SET OUT TO IMPROVE OUR UNDERSTANDING OF THE RIVER AND ITS SYSTEMS. . .

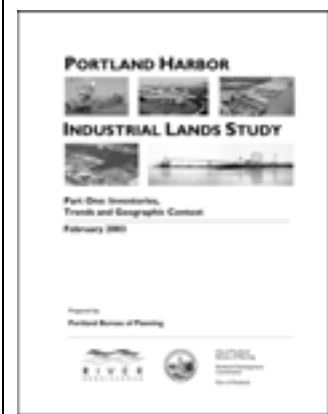
The *Willamette River Conditions Report* (Appendix G) summarizes the existing conditions, trends and opportunities for each of the *River Renaissance Vision's* five themes, examining the ecological, economic, recreational and urban systems that comprise the city and the region. The report examines:

- Watershed health conditions.
- The role of the harbor in the region's economy—present and future.
- The public access and recreational network that connects communities to the river.
- The city's urban development pattern and potential for orienting and connecting districts and neighborhoods to the river.
- The network of people and organizations engaged in river-related activities, and the challenges of funding and sustaining a robust River Renaissance Initiative.

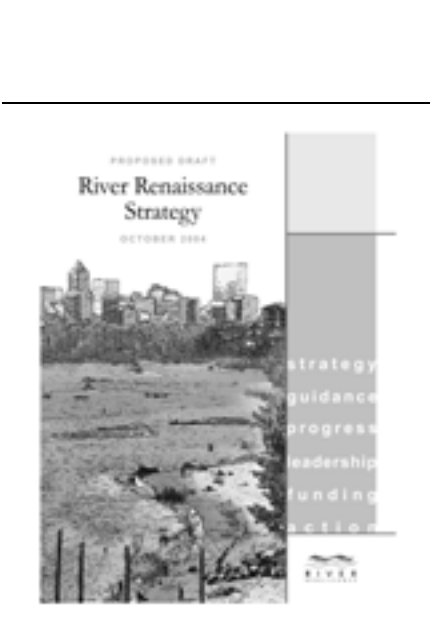
. . . AND EXPLORE WHAT'S POSSIBLE THROUGH STRENGTHENED PARTNERSHIPS.

A growing list of achievements has been powered by partnerships with key civic, community and government partners. Examples of River Renaissance in action include:

- The River Trust, a new and effective relationship between government agencies responsible for the Lower Willamette River, has developed the nation's first Streamlining Agreement between a city and the federal government for permits related to the Endangered Species Act and other laws.
- The *Portland Harbor Industrial Lands Study*, jointly produced by the Portland Development Commission, Port of Portland and the City of Portland, assesses the future land needs of industries in the harbor area.
- More than 4,600 community volunteers helped disconnect 40,000 residential roof drains, removing 900 million gallons of water from city sewers, as part of the City's Downspout Disconnection Program.
- Major redevelopment of the Toyota facility at the Port of Portland's Terminal 4 retained more than 200 family-wage jobs in the working harbor while revegetating the riverbank, treating stormwater on site, and addressing traffic and noise issues in the neighborhood.



The Downspout Disconnection Program helps homeowners redirect rain from their roofs onto lawns and gardens.



NOW, WE NEED A STRATEGY.

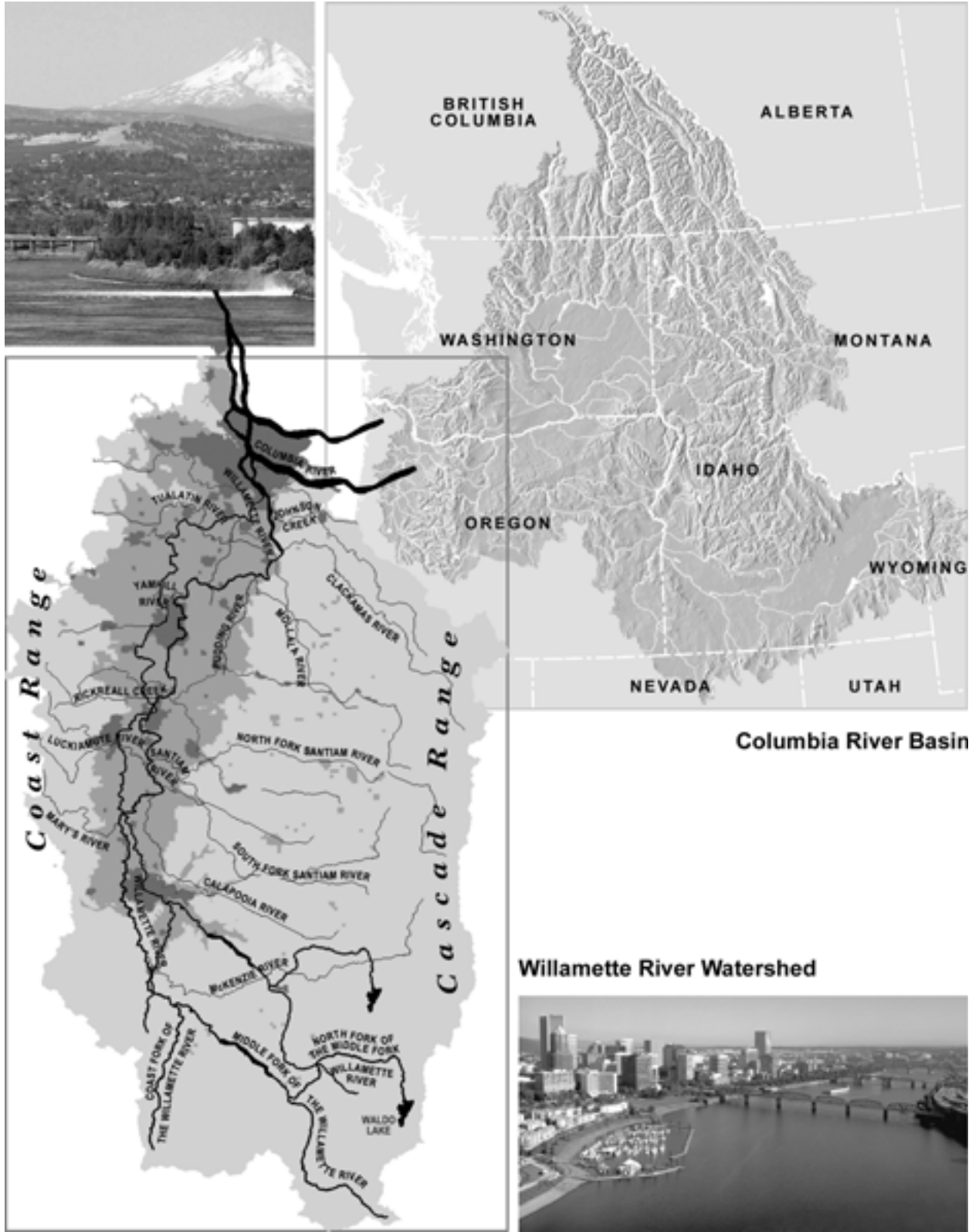
The *River Renaissance Strategy* is intended to move us along the path to achieve the *River Renaissance Vision* by:

- Advancing a new way of thinking about our rivers and streams, expressed through a set of guiding principles and policy direction;
- Proposing a set of measures by which decision-makers and the public can gauge progress towards desired outcomes;
- Inspiring creativity by showcasing examples of integrated solutions to complex problems; and
- Providing the beginning of a blueprint for City and community collaboration and investment to improve the economic, ecological, recreational and cultural functions of our rivers and streams.

This strategy, like the *River Renaissance Vision*, highlights the Willamette River as Portland’s centerpiece. However, the geographic scope of the vision and the strategy extends beyond the Willamette River corridor to provide guidance for actions along the Columbia River within Portland, and for actions in the city’s watersheds and along its tributary streams—all part of a complex and interrelated river system.

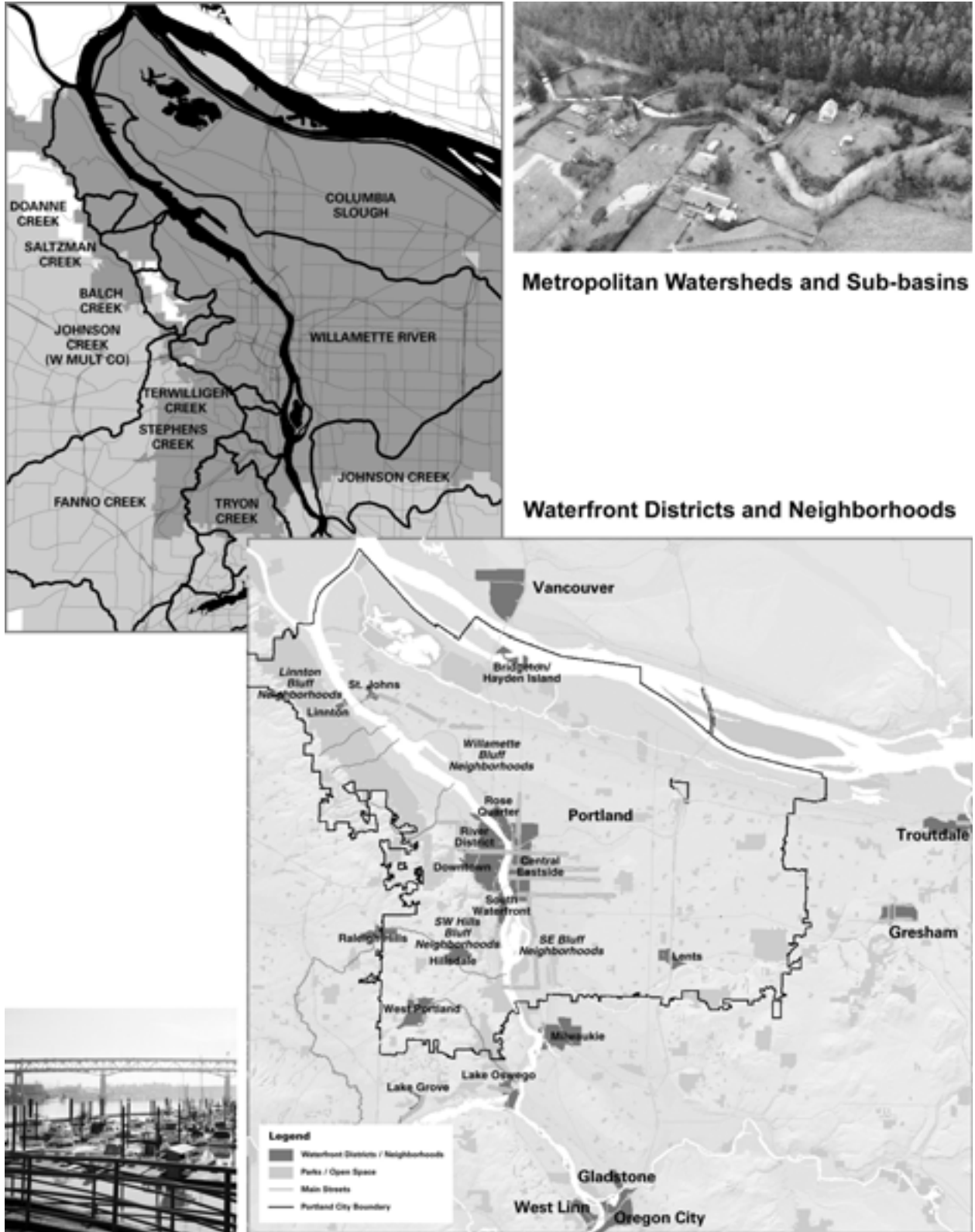
This strategy also recognizes that revitalization of the Willamette River requires looking beyond Portland’s boundaries to understand the many systems in which the river plays a role:

- Portland’s watershed system, which nests within Oregon’s Willamette River basin and the even larger multi-state Columbia River basin;
- The regional industrial system, which includes the confluence of the Willamette and Columbia Rivers as our gateway to global trade; and
- The parks, trails, and open space system that links Portland with the larger metropolitan region, including neighboring cities and counties.

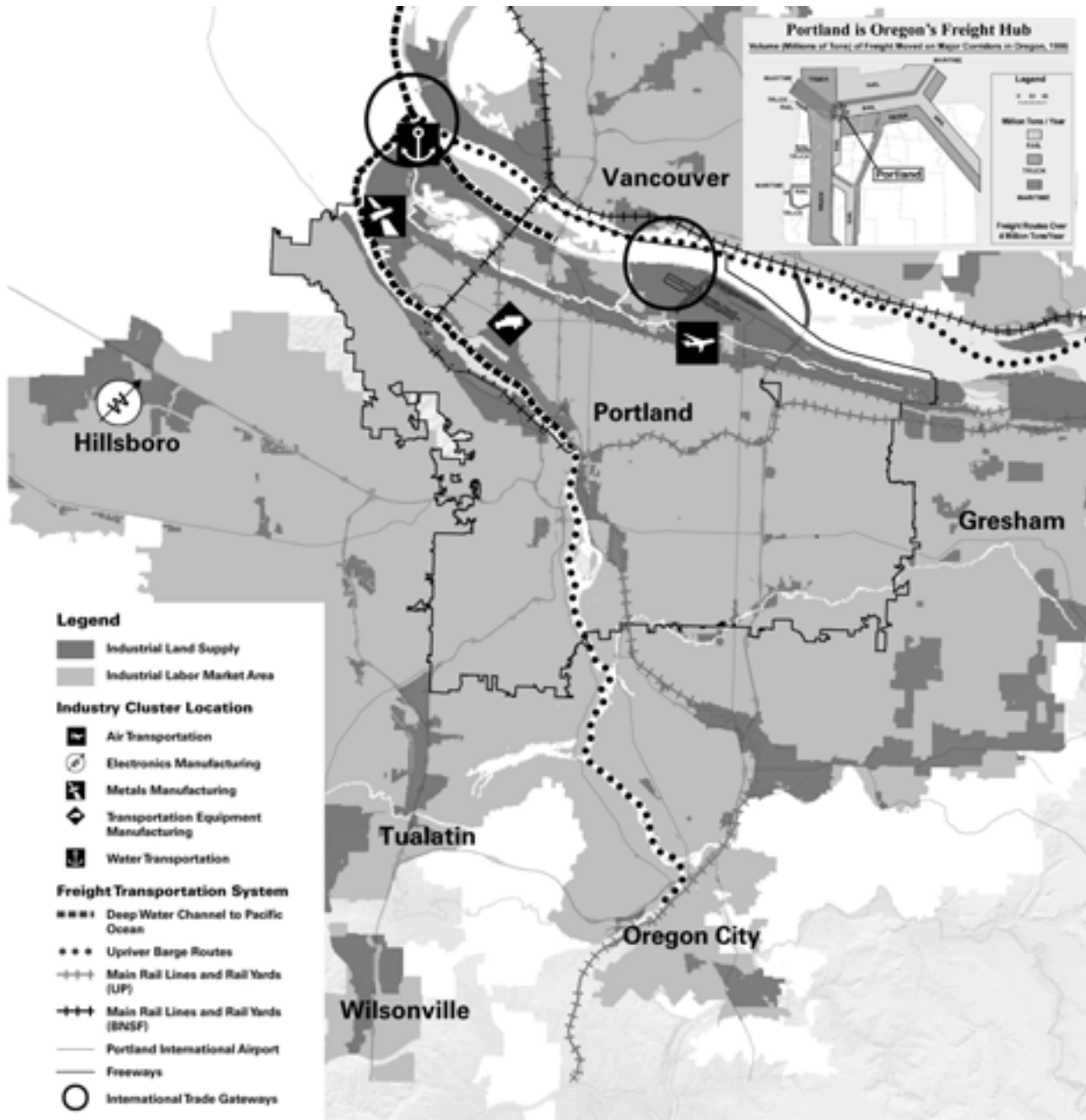


Portland is located at the confluence of the Columbia and Willamette Rivers. The Willamette Valley is home to two thirds of the state's population, highly productive farmland, and runs of salmon, steelhead and other fish and wildlife. The Columbia basin includes territory in Idaho, Montana, Oregon, Washington and British Columbia, with slices of other states and provinces as well. Portland is the Columbia's major seaport and its economic and cultural capital.

PROPOSED RIVER RENAISSANCE STRATEGY



Portland encompasses parts of five separate watersheds (including several sub-basins) that feed into the Willamette River. The City of Portland and partner agencies are studying watershed conditions and developing watershed management strategies. The metropolitan region includes numerous cities, towns, centers, and waterfront districts and neighborhoods located along the Willamette, Columbia, and their tributaries. Some communities have well defined connections with their rivers and streams, while others have unfulfilled potential.



Regional Industrial System

The Portland metropolitan area is the freight/industrial/trade hub of the Columbia region, and is a major west coast port. The geographic location and past investment in transportation infrastructure positions Portland's harbor well for continued prominence if we pay attention to its needs. This map shows the relationship between industrial/warehouse land and the freight infrastructure.

THE CONTENTS OF THIS STRATEGY

This strategy begins with a set of principles that are intended to guide and influence decisions of City leaders and partners. Following these principles, the strategy is organized around the five themes that form the backbone of the *River Renaissance Vision*.

Each theme chapter includes the following elements:

- An **Overview** “paints a picture” of Portland’s setting, opportunities and challenges related to the theme.
- **Policy Guidance** includes a set of policy statements that set the course for future decision-making to carry out the *River Renaissance Vision*.
- **Defining Success** includes a set of outcomes that would indicate that we are on the right track towards fulfilling the *River Renaissance Vision*.
- **Actions** are a sampling of projects and programs that would advance progress toward achieving the *River Renaissance Vision*. Some actions are currently underway, and others are projects that the City, along with a variety of partners, could initiate within the next few years.



A salmon in Johnson Creek



Swan Island and the working harbor



The steps at Salmon Springs Fountain in Waterfront Park

Appendices provide additional detail and technical information to support the strategy.

- **Portfolio of Exemplary Projects** (Appendix A) provides examples of multi-objective projects from which Portland can learn. These local, national and international examples demonstrate the power of pulling together diverse partners and striving to achieve economic, environmental and social goals simultaneously.
- **Leadership** (Appendix B) describes the current River Renaissance leadership structure and discusses the importance of growing and sustaining the River Renaissance Initiative over time.
- **Funding** (Appendix C) provides an overview of potential funding sources for implementing River Renaissance projects and programs, and outlines the City’s next steps to develop sustainable financing mechanisms to carry out an effective River Renaissance agenda.
- **Measuring Progress** (Appendix D) proposes a systematic approach to assess progress towards improving the health, vibrancy and economic prosperity of our rivers, streams and watersheds. With this information, City government and other public agencies—together with community partners—can make informed choices and tailor actions and efforts to ensure long-term success. This appendix also provides a starting point for an annual State of the River Report that will enable the public and decision-makers to track progress towards meeting River Renaissance goals over time.
- **Action Agenda** (Appendix E) provides a longer list of projects, programs and activities to carry out River Renaissance. Actions are either current/committed projects, or are proposed to be initiated in the future. This list is intended to be continuously updated as we learn from monitoring and measuring progress.
- **Efforts Leading to this Strategy** (Appendix F) briefly describes the research, analysis and public discussions that have informed and shaped this strategy.
- ***Willamette River Conditions Report*** (Appendix G) summarizes existing conditions, trends and opportunities for each of the vision’s five themes, and summarizes what each system needs in order to move towards a healthier state.



Riverplace



The Willamette River Ferry demonstration project

Realizing the *River Renaissance Vision* will require a series of near-term and ongoing investments, programs and activities such as those proposed in this strategy, along with bold and visionary long-term projects which—while not possible today—deserve continued discussion and analysis.



NEXT STEPS

The “toolbox” needed to implement River Renaissance includes a complementary package of investments, incentives, education and regulations. This document sets the stage for continued work by the City of Portland and community and agency partners to realize River Renaissance through:

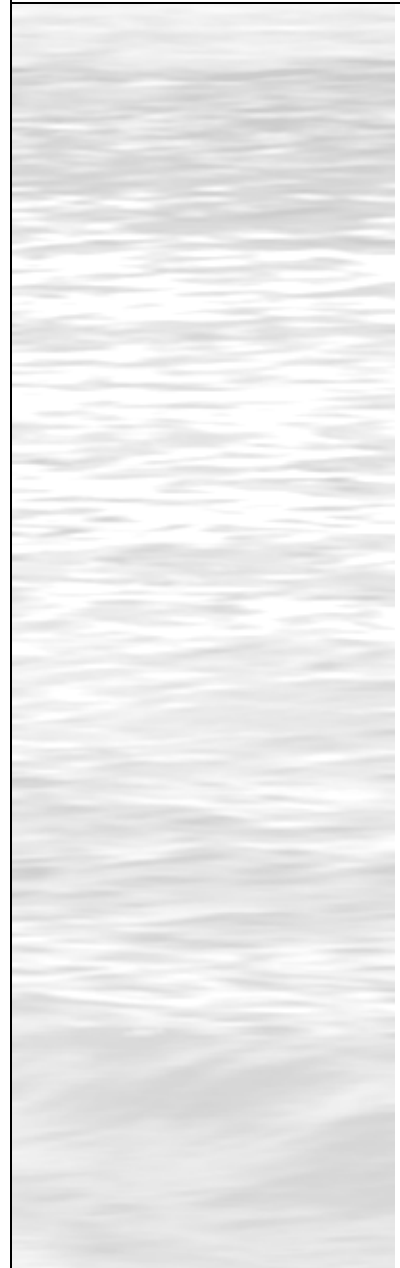
- Investments and pilot projects to enhance our economy and our recreational, urban and natural systems;
- Continued research and analysis;
- Identification of opportunities for development, transportation improvements, recreation and habitat restoration;
- Development of policies, design guidance, incentive packages and safeguards;
- Monitoring and evaluation to test the effectiveness of our collective actions;
- Stewardship and educational efforts; and
- Development of an enduring funding strategy.

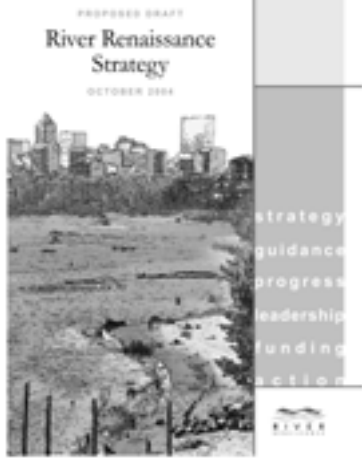
Each year, the City will develop an integrated River Renaissance work plan that includes a package of actions selected to make progress in each vision theme. As each effort is pursued, this strategy can serve as a touchstone to ensure that we stay true to the *River Renaissance Vision* and guiding principles that exemplify River Renaissance thinking.

Guiding Principles

C H A P T E R

2





Adoption of the River Renaissance Strategy by the Portland City Council will signify the City's commitment to embrace River Renaissance principles and policies as part of the everyday practices and decision-making processes of City government.

GUIDING PRINCIPLES

River Renaissance represents more than a set of aspirations for the future of Portland; it embodies a new approach to understanding problems and developing responsive, effective, and enduring solutions.

Paramount to River Renaissance is the notion that revitalizing our rivers and their related systems can only be successful if we strive to achieve multiple goals simultaneously. For example, to have enduring economic health for the working harbor, environmental challenges that led to the Superfund and Endangered Species Act listings must be successfully addressed. Until then, uncertainty will deter critical short-term and long-term investment. Similarly, improvements to fish and wildlife habitat and water quality depend on revenues generated by a prosperous economy, fueled by successful development and thriving businesses.

Rather than pitting goals against each other (environment versus economy, for example), River Renaissance advances a model in which we can improve the health of our natural system and, at the same time, thrive economically—relying on collaborative problem-solving and creative design as potent tools to achieve mutual gains. Solving multiple problems simultaneously can increase the power of each dollar spent, and can attract alliances and partnerships that bring added capacity and brainpower to the tasks at hand.

While each vision theme cannot realistically be fulfilled on every stretch of our rivers, nor in every part of each watershed, River Renaissance thinking means striving to address all five themes at each available opportunity.

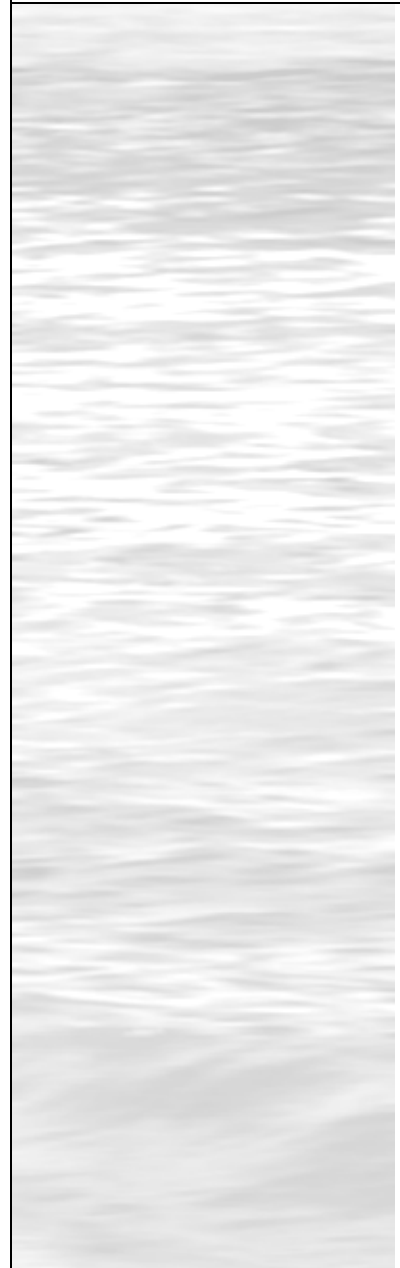
Embracing River Renaissance translates into new decision-making approaches and operational practices for Portland's City government. To advance River Renaissance, the decisions of City leaders about programs and investments should be guided by these principles:

- Consider the interrelated nature of the city and region's economic, natural, social and cultural systems, striving to optimize benefits in each of these areas;
- Allocate the responsibility for the costs and impacts of accomplishing the *River Renaissance Vision* among public and private stakeholders in an equitable way;
- Develop meaningful measures to monitor progress and success;
- Consider the effects of current decisions on future generations, to preserve their choices and opportunities, and to reduce future costs and liabilities;
- Rely on civic leadership to demonstrate the River Renaissance approach through words, actions and public investments; and
- Target investment to maximize benefits and spur innovation.

A Clean and Healthy River

C H A P T E R

3





A salmon jumps in Johnson Creek.

PORTLANDERS SAY:

“ We want our rivers and streams to be clean enough to provide habitat for native fish and wildlife, and to be places of natural beauty for all to enjoy. ”

OVERVIEW

Portland is a city of contrasts: an exciting urban hub of more than a half million residents, with 5,000 acres of a forested park in our midst; condominium towers with roof gardens, walkable districts and nature trails; bald eagles and great blue herons within view from Central City homes and offices.

It is this interplay of urban and natural elements that makes Portland distinctive. Visitors comment equally that Portland is clean and green, and that it has an urban quality that is hard to find, even in much larger or older cities. It is our collective commitment to preserve and capitalize on these contrasts that prompts us to be innovators in the field of urban and sustainable design.

The impacts of our actions reveal themselves in the conditions of our watersheds, in our rivers and tributary streams. Earlier efforts to urbanize and industrialize the city have changed the natural systems. While we cannot return to predevelopment conditions, *how* we develop from now on can make the critical difference in whether we can move towards a healthier natural system. By improving healthy watershed conditions and caring for our urban forest, we ensure clean and ample stream flows, clean air, and healthy places for ourselves and our children to live, work, play and learn.

Stream corridors, wetlands, floodplains, trees, uplands and greenspaces make up the essential “green” infrastructure of our urban environment. Corridors of green from Smith and Bybee Lakes to Oaks Bottom to Powell Butte are oases for resident and migrating wildlife, and provide us with respites in the city. Pond turtles, frogs, bats and other native wildlife depend on intact expanses of habitat for food and cover. Salmon and other fish depend on healthy stream systems, with water cooled and cleaned by trees and other vegetation. These corridors provide people with benefits as well, helping prevent property damage from landslides and flooding, and providing us with clean water and clean air.

To ensure that these benefits continue, we need to identify the most critical elements of our green infrastructure and take special care to ensure its long-term viability. We need to use land wisely, carefully limit and offset the impacts of development, and improve degraded environmental conditions. Through efforts of stream stewards on Fanno Creek, volunteers pulling ivy from Forest Park, and City staff reestablishing habitat in the Columbia Slough, we can improve the ability of natural systems to circulate nutrients and water. Watershed planning now underway will inform these and other efforts, helping target investments where they can yield the greatest benefits.

It's Portland and it rains.

For decades, engineered approaches have treated rainwater as a potential hazard—something to be moved off the land and out of sight. As a result, streams and rivers suffer—they are deprived of vital groundwater and surface runoff needed to maintain their flows. They receive flashes of water from streets, parking lots and buildings. The runoff scours streambeds, erodes stream banks, destabilizes hillsides, and adds dirt and pollutants to streams and rivers. As more rainwater goes into pipes, ratepayers pay higher costs for the additional infrastructure needed to manage it.

Portland is more than halfway through its 20-year program to improve Portland's sewer system. Projects to date have eliminated almost all combined sewer overflows (CSOs) to the Columbia Slough, and have reduced total CSO volume by more than three billion gallons a year. By the scheduled completion in 2011, CSOs will be reduced by nearly 94% over 1990 levels.

Construction is underway on large projects such as stream separations, conduits and treatment plant improvements, that will capture the remaining combined flows to the Willamette for treatment. Some of the combined sewer overflow projects may act as incubators for additional development or community amenities. As the pipelines and treatment facilities to handle sewer overflows are designed and built, the City will look for opportunities for additional community benefits such as improved river access. Reducing sewer overflows will also make recreation at riverfront parks safer.

Newer approaches treat rainwater differently, using nature as a design model. In Portland, volunteers have helped thousands of homeowners disconnect their downspouts from the sewer system. New street designs clean rainwater and allow it to percolate back into the ground. Some architects use rain as a playful and beautiful element of building design, allowing it to cascade from roof scuppers into plantings of Oregon grape, native iris and other native plants.

Redevelopment offers the best opportunities to realize incremental benefits to watershed health. In a constantly changing city like Portland, these opportunities abound. With technical assistance and incentives, property owners and businesses can be encouraged to retrofit underutilized buildings and parking lots into new urban uses, incorporating green roofs and stormwater swales that absorb rainfall. As sidewalks and paved surfaces are repaired and replaced, innovative materials can be selected to increase permeability and reduce the amount of urban pollutants that run off into our streams and rivers.

Each action alone seems small. A snowberry bush planted, an eco-roof or stormwater swale constructed, a patch of trees preserved. But taken together real changes occur. The water and air are cleaner. Our children can swim and play in the river. Birds and fish flourish. Together these actions can add up to healthier communities, each a part of a healthier watershed.



Juvenile salmon

The Framework for Integrated Management for Watershed Health (City of Portland, 2004) sets out the following goals for watershed health:

- **Hydrology:** Move towards normative flow conditions to protect and improve watershed and stream health, channel functions and public health and safety.
- **Physical Habitat:** Protect, enhance and restore habitat conditions for native fish, wildlife and biological communities.
- **Water Quality:** Protect and improve surface water and groundwater quality to protect public health and support native fish, wildlife and other biological communities.
- **Biological Communities:** Protect, enhance and restore native aquatic and terrestrial plant and animal communities to improve and maintain biological diversity in Portland's watersheds.



Waldo Lake—source of the Middle Fork of the Willamette River in the Cascades.

POLICY GUIDANCE

THROUGH THE COLLABORATIVE EFFORTS OF CITY GOVERNMENT AND PARTNERS...

1. Recognize the relationship between upland watershed conditions and river and stream health when planning and designing development.
2. As Portland grows, transform redevelopment and infrastructure projects into opportunities to improve watershed conditions through creative building and site design, and use of innovative materials and techniques.
3. Promote low impact development principles that emulate natural water flow, minimize land disturbance and incorporate natural landscape features into the built environment, through education, incentives, and regulation.
4. Capture and clean stormwater through landscape design, downspout disconnection and other techniques.
5. Address pollution at its source through innovative waste reduction and source control measures.
6. Establish ecologically viable corridors for migratory fish and birds and other wildlife through habitat protection and restoration.
7. Protect and restore a healthy and diverse tree canopy in Portland to enhance neighborhood livability, provide habitat for wildlife, and improve air quality.



View of downtown Portland and Oaks Bottom Wildlife Refuge.

DEFINING SUCCESS

The following set of outcomes would indicate that we are on the right path to achieve a clean and healthy river. Appendix D of this strategy proposes a systematic approach to assessing progress toward fulfilling the *River Renaissance Vision*, and includes measures to chart whether conditions are steady, improving or declining over time.

WE WILL KNOW WE'RE MAKING PROGRESS TOWARD ACHIEVING A CLEAN AND HEALTHY RIVER IF...

1. Healthier populations of native fish and wildlife use the river and streams for rearing, migration and year-round habitat.
2. Water quality in monitored streams improves annually.
3. The volume and concentration of E. coli that Portland contributes to the Willamette River is reduced.
4. The overall quality and quantity of tree canopy increases.
5. More buildings and sites are developed or redeveloped to incorporate functional habitat and sustainable development practices.
6. Community appreciation and satisfaction in the quality and health of local rivers and streams increases.



Fishing at Riverplace



A newly designed intersection improves traffic safety and facilitates fish passage.



Collecting data for the Willamette Fish Study

Watershed management plans for the Johnson Creek, Columbia Slough, Tryon and Fanno Creeks, and Willamette River watersheds will develop objectives, indicators, targets, benchmarks, and actions for each watershed health goal:

- Hydrology
- Habitat
- Water quality
- Biological communities

ACTIONS

The following are a sampling of projects and programs that would advance progress toward achieving the *River Renaissance Vision*. Some actions are currently underway, and others are projects that the City, along with a variety of partners, could initiate within the next few years. Additional projects are included in Appendix E.

- 1. Partner with Rejuvenation Inc. to implement innovative stormwater treatment at their 10,000 sq. ft. warehouse in Northwest Portland. The project will demonstrate creative approaches to stormwater management at highly constrained sites and provide much needed additional capacity for the City's combined sewer system.**

- **Partners:** Rejuvenation Inc., Oregon Department of Environmental Quality, US Environmental Protection Agency
- **Estimated start date:** In progress



Restoration work at Willamette Park



The Bureau of Environmental Services Water Pollution Control Lab captures rainwater and directs it to a bioswale.

2. Update and improve City programs to protect, conserve and restore significant natural resources and habitats as part of a comprehensive watershed management strategy, including education, incentives, regulation and technical assistance.

- **Partners:** watershed councils, property owners, neighborhood and business associations, government agencies, community groups
- **Estimated start date:** In progress

3. Promote the continued implementation of the green streets program that targets streets that contribute the most runoff volume and pollutants to the stormwater system or those that provide the best examples of innovative site design options.

- **Partners:** businesses, DEQ, ODOT, neighborhood associations, watershed councils
- **Estimated start date:** In progress

4. Begin construction of recreation and watershed improvements at Westmoreland Park under the Water Resources Development Act (WRDA). WRDA provides a 50 percent federal cost share for planning and a 65 percent cost share for construction. This project will restore habitat and provide upstream fish passage for juvenile salmon while improving play structures and the aesthetic quality of the park.

- **Partners:** US Army Corps of Engineers, the Westmoreland Neighborhood Association, local landowners, NOAA Fisheries
- **Estimated Start Date:** In progress

5. Complete the evaluation and control of potential upland sources of contamination to the City stormwater conveyance system. The contamination may adversely affect sediment and surface water quality in Portland Harbor. This work will lead to the identification of parties directly responsible for the contamination, and will be key to preventing future recontamination of the sediments.

- **Partners:** Oregon Department of Environmental Quality, US Environmental Protection Agency, federal and state natural resource trustee agencies, tribal governments, Lower Willamette Group, Portland Harbor Citizen Advisory Group
- **Estimated Start Date:** In progress



Stormwater management in the parking strip

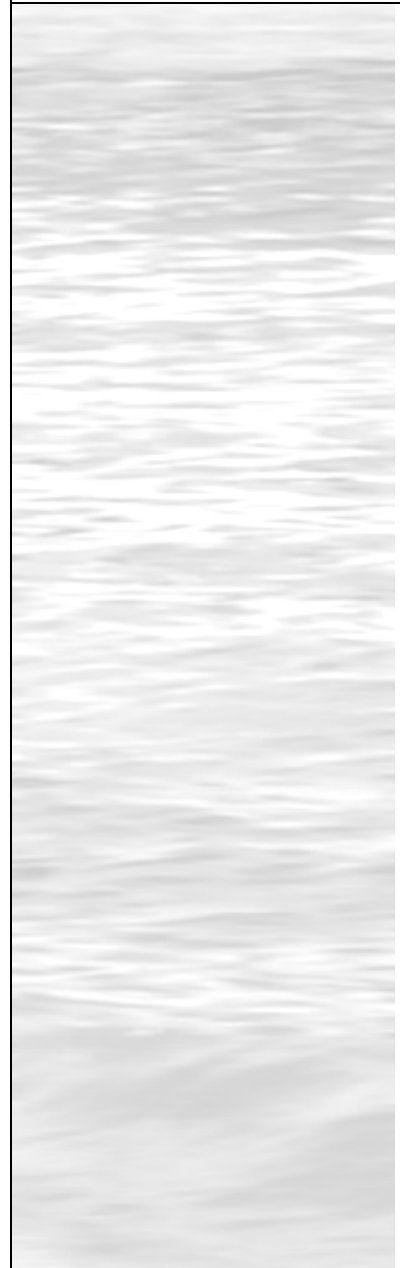


Green Street project at NE Siskiyou and 35th Ave. Street runoff is directed into a landscaped area that filters water and allows it to soak into the ground.

A Prosperous Working Harbor

C H A P T E R

4





A view of Swan Island

PORTLANDERS SAY:

“ We want a thriving industrial economy to support family-wage jobs in Portland. ”



Glacier Northwest



Portland’s harbor includes the lower 12 miles of the Willamette River downstream from the Broadway Bridge and about two miles of the Columbia River adjacent to the Port of Portland’s Terminal 6 at Rivergate.

OVERVIEW

Portland’s working harbor and Columbia Corridor are among the most important contributors to the region’s economy. Since Portland’s beginnings, the harbor—with its connections to the Willamette Valley, Columbia River Basin, and the Pacific Ocean—has been a hub for trade and distribution of goods. As these vital industrial areas grew and prospered, so did the city. Over time, the region’s largest heavy industrial area built up around what is now a junction of national rail, marine, highway, and air transportation networks, constructed and maintained by significant investments by the Port of Portland, city, state and federal agencies, and private companies.

Harbor area industries are such a fundamental part of the local economy that they support approximately one in eight regional jobs, given the “multiplier effects” of their high wages and trade with other regional firms. And while manufacturing is on the decline in many parts of the country, this sector is continuing to grow in the Portland region.



Port of Portland container crane at Terminal 2.

But challenges exist. While regional freight tonnage is projected to double by 2030, current deficiencies in the freight transportation system need to be fixed to maintain Portland’s advantage in multi-modal freight access and meet anticipated demand. Critical projects need to be implemented, including increasing the capacity of the I-5 Freeway and the I-5 Bridge to eliminate bottlenecks, adding railroad grade separations and double tracking to relieve rail congestion, and deepening the Columbia River channel and continuing maintenance dredging to retain marine cargo diversity. Transportation demand and logistics management approaches are also needed to improve freight mobility as the city continues to grow.

For many years Portland's rigorous industrial sanctuary zoning has preserved opportunities for industrial growth in a compatible setting. By land-banking the harbor's industrial riverfront, space is secured for maritime and associated industries that contribute to the long-term economic health of the region and the broader Columbia River Basin.

To ensure the continued health of Portland's industrial economy, we need to use land more efficiently and overcome hurdles to industrial redevelopment. Formerly polluted or brownfield sites can be brought back into use through public/private partnerships that include investment in cleanup and technical assistance. In addition, urban renewal, land assembly, regulatory coordination, orphan site cleanup, and financial incentives are important tools for stimulating industrial redevelopment. And strategies to reduce commuter traffic in the harbor and Columbia Corridor, like those implemented by the Swan Island Transportation Management Association, can expand road capacity for freight, and simultaneously conserve land for productive industrial use by reducing the amount of land devoted to employee parking.

Regulatory complexity is a hurdle for development of available industrial land. While local land use regulations are necessary to ensure predictable development patterns, avoid conflicting uses, and promote environmental quality, permitting has become more complex and time consuming. Complying with the Endangered Species Act and Clean Water Act adds cost, complexity and uncertainty to the development process. With industries driven to meet tight development schedules and reduce exposure to unpredictable costs to remain globally competitive, efforts to streamline regulatory processes can help ensure the region's long-term economic health. The 2002 Streamlining Agreement among federal agencies and the City of Portland, designed to facilitate timely review of projects requiring Endangered Species Act compliance, provides a model for how process improvements can be designed to meet public objectives.

The working harbor and Columbia Corridor comprise most of Portland's riverfront and some important habitat areas. Multidisciplinary thinking and collaborative approaches can bridge perceived conflicts among the unique economic and environmental values of these areas. The zoning code can be updated to provide greater clarity about where development can occur, and what is needed to avoid or mitigate impacts on natural resources. Roadway improvements can incorporate native plants and on-site stormwater facilities. Technical assistance programs can help property owners achieve sensitive and affordable site development. By working together, businesses and public agencies can foster innovative approaches and optimize use of scarce urban land.



The Department of Homeland Security's Maritime Transportation Security Act authorizes the Coast Guard to inspect and require actions on riverfront properties that pose potential security risks.



In the 1990s, the six grain terminals at the Ports of Portland, Vancouver and Kalama shipped about 40 percent of the US wheat exports.



The North Portland-Vancouver segment of the I-5 Freeway is one of the most congested segments along this primary West Coast highway.

POLICY GUIDANCE

THROUGH THE COLLABORATIVE EFFORTS OF CITY GOVERNMENT AND PARTNERS...



Harbor employees



Railroads are critical to freight movement.



Port of Portland employees



Bank stabilization at the Port of Portland's Terminal 4 incorporated environmentally beneficial features.

1. Stimulate Portland's competitiveness and growth as a West Coast distribution hub and industrial center.
2. Invest in maritime, rail, air, and truck infrastructure improvements and demand management measures that improve freight mobility, provide adequate capacity to meet expected growth, and develop seamless connections among these modes.
3. Protect the industrial land supply, economic health and distribution-hub functions of the working harbor and Columbia Corridor industrial districts.
4. Maintain and enhance the buffers (riverine bluffs, major roadways, and mixed employment areas) that frame these industrial districts and separate them from other land uses, in order prevent the loss of industrial land, and to reduce impacts on adjacent neighborhoods and natural resources.
5. Facilitate industrial redevelopment, particularly on brownfield sites, through public investments and collaboration of public and private partners.
6. Improve the transparency, predictability, and timeliness of regulatory systems, while encouraging innovation.
7. Promote environmentally beneficial industrial operations and facility planning through a combination of incentives, technical assistance, and regulations.

DEFINING SUCCESS

The following set of outcomes would indicate that we are on the right path to maintaining and enhancing our prosperous working harbor. Appendix D of this strategy proposes a systematic approach to assessing progress toward fulfilling the *River Renaissance Vision*, and includes measures to chart whether conditions are steady, improving or declining over time.

WE WILL KNOW WE'RE MAKING PROGRESS TOWARD ACHIEVING A PROSPEROUS WORKING HARBOR IF...

1. The number of regional jobs that are supported by industries in the working harbor and Columbia Corridor increases.
2. Portland's established and emerging industries grow.
3. The maritime tonnage and diversity of goods handled in the working harbor increases.
4. The mobility of freight traffic (trucks and rail) improves through the region.
5. Private capital investment increases in the working harbor and Columbia Corridor industrial areas, especially on cleanup sites.
6. Local permitting time and complexity is reduced.



Gunderson, Inc., a railcar and barge manufacturer, employs approximately 1,100 workers in the Guild's Lake area.



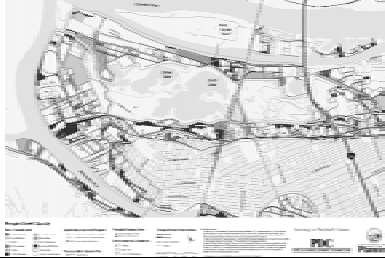
Freightliner Group manufactures trucks on Swan Island.



Shipping and railroads are key to Portland's industrial economy.

ACTIONS

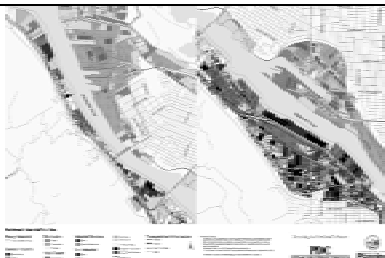
The following are a sampling of projects and programs that would advance progress toward achieving the *River Renaissance Vision*. Some actions are currently underway, and others are projects that the City, along with a variety of partners, could initiate within the next few years. Additional projects are included in Appendix E.



Vacant facilities in Rivergate



Largest employers on Swan Island



Facilities in the Northwest Industrial District

1. Update and improve the clarity and workability of the greenway overlay zones, including refining the definition of river-related and river-dependent uses.

- **Potential partners:** River Industrial and Economic Advisory Group (RIEAG), Port of Portland, property owners, neighborhood and business associations, watershed councils; regional, state, and federal agencies
- **Estimated start date:** January 2005

2. Establish and implement an urban renewal district to assist industrial expansion and redevelopment along the working harbor and achieve other River Renaissance goals.

- **Potential partners:** Port of Portland, RIEAG, US Army Corps of Engineers, property owners, Northwest Industrial Neighborhood Association, Swan Island Business Assoc.
- **Estimated start date:** In progress. (20-year implementation)

3. Expand Portland’s Employment Opportunity Sites Portfolio to additional sites in the working harbor and Columbia Corridor. This portfolio will provide development feasibility analysis, permitting assistance, and infrastructure planning to the property owner or developer.

- **Potential partners:** RIEAG, Portland Business Alliance, Port of Portland
- **Estimated start date:** January 2005

4. Implement the Freight Master Plan recommendations for priority freight transportation improvements in the working harbor and Columbia Corridor.

- **Potential partners:** Port of Portland, Oregon Department of Transportation, Portland Freight Committee
- **Estimated start date:** January 2005

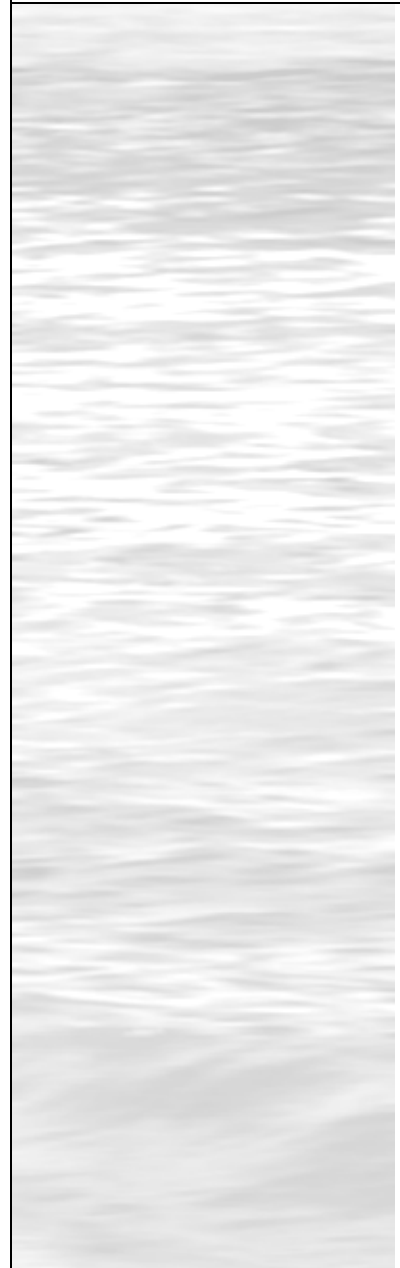
5. Work with the parties involved in the Portland Harbor Superfund cleanup to achieve an efficient and cost effective investigation and cleanup, thus encouraging continued economic investment and development in the Harbor.

- **Potential partners:** Lower Willamette Group, EPA, Oregon DEQ, Portland Harbor Community Advisory Group
- **Estimated start date:** In progress

Portland's Front Yard

C H A P T E R

5





PORTLANDERS SAY:

“ We want to be able to walk and bike to, along, and across our rivers from our neighborhoods. We want to swim and boat in the Willamette and the Columbia. ”



Kayaking on the Willamette



The Springwater on the Willamette Trail provides river access and helps manage stormwater.

OVERVIEW

Portlanders deserve to be proud of recent improvements along the Willamette waterfront. The Eastbank Esplanade creates a riverfront loop in the Central City and the Springwater Trail connects southeast Portland to the river. In some neighborhoods, existing parks and trails offer easy access to the Willamette and Columbia Rivers, while in other places access is challenging. Even where connections to our rivers exist, trail conditions prevent less physically able Portlanders from enjoying the riverfront and it can be difficult for anyone to find a place to launch a boat or kayak.



McCarthy Park offers views of the working harbor from Swan Island.

Portlanders want more access to our rivers. Being near rivers enhances our quality of life by providing opportunities to play, relax and exercise. Bicycling along the Eastbank Esplanade; picnicking in Sellwood Waterfront Park; paddling in Holgate Slough; and strolling along McCarthy Park, on Swan Island, to watch an otter play or a new barge being launched by Gunderson across the river—these experiences allow us to appreciate the riches of the river from new perspectives.

These opportunities yield economic benefits as well. River views and river access increase property values, attract tourists from all over the world, and enhance Portland’s identity and attractiveness as an exceptional place to live, work, study and play. Marinas, boat builders, and other water-based businesses have long added to the character of Portland’s waterscape, and are important contributors to the local economy too.

Waterfront open spaces and trails to, along and across our rivers should be planned, designed and managed as a system so that they are interconnected and accessible to everyone. Missing links need to be assessed and completed so that everyone, including those with impaired mobility, has the opportunity to enjoy a riverfront park or trail loop. Such an assessment can better prepare us to take advantage of opportunities to expand the system as they arise.

Completing the Willamette Greenway Trail through the working harbor is particularly challenging. Trails need to be located away from industrial operations such as ship loading to protect the safety of pedestrians and bicyclists. A continuous trail system can be achieved by routing the trail away from the river's edge to accommodate river-dependent industry. Signage, strategically-located viewing platforms, and educational displays can enhance Portlanders' understanding of the role of the working harbor in the city's economy. Trail spurs in compatible locations can provide public access to the river where a riverfront trail is not feasible.

Portlanders want to be out on the water too. As the city grows and the water gets cleaner (thanks in part to Portlanders' investment in the Combined Sewer Overflow Project and other initiatives), interest in water skiing, canoeing, motor boat rides or cruises, and other water-based recreation is growing. Recent investment in the Portland Boathouse for Rowing and Paddling and the adjacent dock responds in part to this demand.



Governor Tom McCall Waterfront Park and downtown Portland

But our rivers are more than just places to visit and play. For centuries, they have been a way to travel—by canoe, ship, or ferry. Our rivers are also bustling places to work. Stevedores, tugboat captains, tour boat operators, railcar builders, marina sales staff, boat builders, and thousands of others are employed because of the river.

The Willamette River can be an inviting front yard—a place of civic pride where we greet neighbors and visitors from far away, play with our children, earn a living, and show off our home. By creating new ways to get to both the Willamette and Columbia Rivers, and by expanding our system of parks, trails and open space, we support a prosperous, livable city where healthy ecosystems are within view.



The Willamette Greenway Trail is planned as a 41-mile pedestrian and bicycle trail extending along both sides of the river.



According to the Waterfront Organizations of Oregon, Portland tour boats operating day cruises employ 250 people and generate \$10 million annually. Night cruises generate \$40 million a year.



The Peninsula Crossing Trail



The Alluvial Wall, one of four sculptures featured on the Eastbank Esplanade.



The Springwater on the Willamette Trail

POLICY GUIDANCE

THROUGH THE COLLABORATIVE EFFORTS OF CITY GOVERNMENT AND PARTNERS...

1. **Expand, preserve and enhance an interconnected system of parks, trails, and open spaces along the Willamette and Columbia Rivers and in the Fanno, Johnson, Tryon and the Columbia Slough watersheds.**
2. **Provide ample, safe connections for pedestrians and bicyclists between neighborhoods and the water's edge.**
3. **Create a variety of settings to accommodate a diverse range of river-related recreational opportunities.**
4. **Expand opportunities for boating, fishing, swimming, and other in-water recreational activities.**
5. **Incorporate public art, viewpoints, and educational displays about Portland's history, natural environment and harbor economy into the design of the trail and open space system.**
6. **Trail design and alignment in river industrial areas should be based on the following principles:**
 - Continuity of the trail system is fundamental.
 - Within the river corridor, the trail should be located away from the river's edge where needed to enable river-dependent industrial functions (such as ship loading and unloading) to occur unimpeded.
 - Trails should be designed to separate pedestrians and bicyclists from traffic. Off-street locations for the trail are preferred.
 - Access to the river should be accommodated via trail spurs where possible, to provide direct river access to the public where a riverfront trail is not feasible.
 - Safety and security for industry and trail users are critical in the design and alignment of trails and river access points.
 - Trail design should incorporate signage, displays and viewpoints to reinforce connections between industrial districts and the river.

DEFINING SUCCESS

The following set of outcomes would indicate that we are on the right path to achieve an inviting and active “front yard.” Appendix D of this strategy proposes a systematic approach to assessing progress toward fulfilling the *River Renaissance Vision*, and includes measures to chart whether conditions are steady, improving or declining over time.

WE WILL KNOW WE’RE MAKING PROGRESS TOWARD ACHIEVING AN INVITING AND ACTIVE “FRONT YARD” IF...

1. The use of riverfront trails and parks increases.
2. More people can travel conveniently from their neighborhoods to the river.
3. More people experience being out on the water.
4. The number of days when it is unsafe to swim in the Willamette River decreases.
5. Gaps in the Greenway Trail are filled.
6. The number of direct public river access points increases.
7. The amount of riverbank habitat restored on public land increases.



The restored bank at South Waterfront will treat stormwater, provide fish and wildlife habitat, and allow for public access.



Paddle Oregon



Oregon Museum of Science and Industry



The Willamette River Ferry demonstration project



Boat launch at Willamette Park

ACTIONS

The following are a sampling of projects and programs that would advance progress toward achieving the *River Renaissance Vision*. Some actions are currently underway, and others are projects that the City, along with a variety of partners, could initiate within the next few years. Additional projects are included in Appendix E.



South Waterfront District proposal



Tom McCall Waterfront Park



Ross Island

1. Conduct a study of water-based recreation needs and river facilities, from the City of Milwaukie to Portland's boundaries on the Multnomah Channel and the Columbia River.

- **Potential partners:** Oregon State Marine Board, rowing clubs, floating home and boating associations, cruise ship and tour boat owners, environmental organizations, neighborhood associations, marine businesses, yacht clubs, universities
- **Estimated start date:** Summer 2005

2. Design and build the South Waterfront greenway as riverfront properties develop in the district.

- **Potential partners:** property owners/developers, nearby neighborhood associations, environmental organizations, bicycle and pedestrian advocates, arts and culture organizations
- **Estimated start date:** As properties develop.

3. Redevelop Ankeny Plaza in Waterfront Park upon completion of construction of the Big Pipe Project at Ankeny station.

- **Potential partners:** downtown business associations, historic preservation organizations, park users, recreational boaters and tour boat owners, arts and culture organizations
- **Estimated start date:** 2007

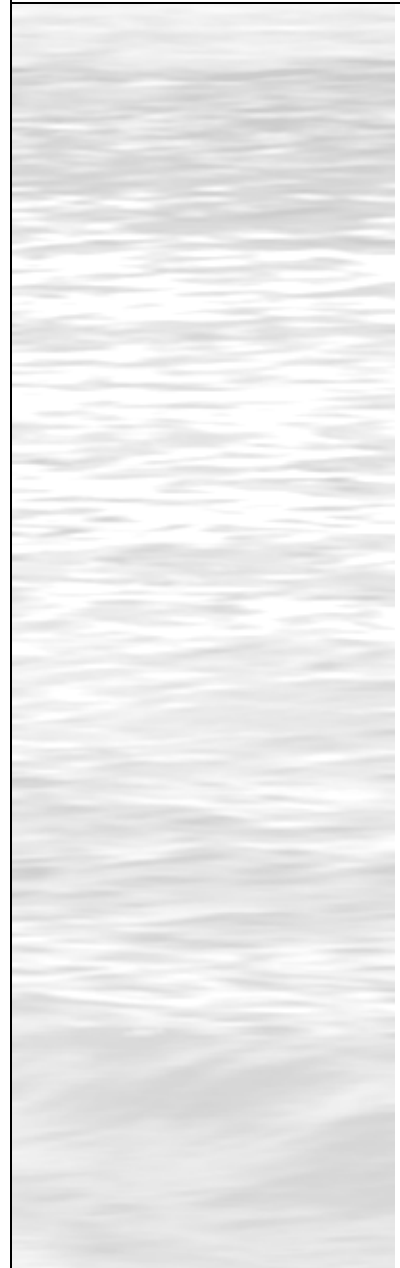
4. Acquire ownership of Ross Island to create a wildlife refuge in the heart of the city. Finalize an agreement to transfer ownership from the current owner to the City of Portland.

- **Potential partners:** Ross Island Sand and Gravel
- **Estimated start date:** Summer 2005

Vibrant Waterfront Districts and Neighborhoods

C H A P T E R

6





Riverplace

PORTLANDERS SAY:

“ We want our riverfront to be vibrant and exciting with attractive places to live, work and play. ”



Downtown Riverfront



Eastbank Esplanade

OVERVIEW

The Willamette River shapes Portland’s economy, environment, social and civic life. While the river serves many important functions, we often see it as a mere backdrop—an obstacle to cross or a pleasant sight to see. If, instead, we celebrate the Willamette as Portland’s centerpiece, we are called to create beautiful, nurturing places to live, work, and play, inspired by the history of the region.

The history of human activity along the Willamette and Columbia is rich. For 10,000 years Native Americans have come to the river to fish, trade, and live. In 1806, Lewis and Clark’s exploration of the Northwest promoted settlement by European Americans. By the late 1800s, maritime businesses jostled along the waterfront, houseboats were common, and ferries shuttled people across the river. Then, in 1904, John Charles Olmsted prepared a park master plan for the city, which featured green corridors along parts of the Willamette River, with connections to neighborhoods.

While the Willamette and Columbia Rivers are Portland’s reason for existence, today the built environment too often turns its back on our rivers. In many riverfront districts along the Willamette, street alignment and building design have no relationship to the river. Highways and the I-5 Freeway, a seawall, rail yards, and other structures separate many neighborhoods and business districts from the river’s edge, limiting easy access. Opportunities to live near the Willamette and Columbia Rivers in Portland are limited to a handful of neighborhoods and floating home communities. And, there are few places in Portland for people to shop or dine in waterfront settings.

There is an alternative. Our rivers can serve as design inspiration for community revitalization. In the Central City, office buildings and condominiums can open to the Willamette riverfront, with lobbies and community spaces offering river views and rooftops plantings that clean and cool rainwater, while providing a green respite in the city’s core. On east Hayden Island, large undeveloped sites may present opportunities for new waterfront living, enhanced with spectacular views of the Columbia and access to moorages. The character of our rivers can be echoed in fountains, rainwater scuppers, and landscapes of native plants. And streets can become green corridors that draw people to riverfront plazas, habitat parks, and docks.

In neighborhoods from Brooklyn to Linnton, from St. Johns to Hosford-Abernethy, connections to the Willamette can be strengthened. Floating home communities and their landward neighbors can come together to clean up the riverfront, plant trees, or celebrate. Trails and signage can show the way to the river, and riverfront improvements, parks, housing, shops and restaurants can establish neighborhood centers near the water’s edge.

The vitality of nature can enliven our communities as well. Places like Ross Island can help us realize our hopes for the future of the Willamette—where osprey, bald eagles and herons nest, fish swim, and people enjoy abundant natural wonders, all while tugs chug along pushing barges.



The stairs at Salmon Springs Fountain in Waterfront Park

In a city known for its innovative transportation system, rediscovering river transport makes sense. Where ferries once shuttled people from Sellwood to the westside, a new Willamette ferry service could stop to take business people downtown, to the eastside industrial area, St. Johns, or to neighboring communities like Lake Oswego. River taxis and ferries can help shape the development of riverfront districts, much like the streetcar was a catalyst for the Pearl District's emergence. And chartered river boats, like those on rivers in Europe, could someday offer tourists a leisurely way to enjoy the beauty of the Willamette through Oregon, stopping along the river's course to visit its many towns and districts.

By remembering the past and opening our imaginations, the vitality of our rivers can energize Portland communities. Public and private investments and financial tools can promote exciting and sensitive waterfront development, and attract investment throughout waterfront districts. And by working together, we can create lively public places that remind us of the past and inspire the future.



The Yamhill and Skidmore Fountain/Old Town Historic Districts in the Central City, known for their large collection of mid-to-late 19th century buildings, are the only historic districts next to the Willamette River.



In Multnomah County, there are over 1600 floating homes, valued at a quarter billion dollars. The 3000 residents support small water-based businesses that build, repair and maintain floating homes, moorages and marinas (Waterfront Organization of Oregon).



Gantry Plaza in New York incorporates the district's industrial history into the plaza design.



The Waterfront Blues Festival



The I-5 Freeway

POLICY GUIDANCE

THROUGH THE COLLABORATIVE EFFORTS OF CITY GOVERNMENT AND PARTNERS...

1. Act to enhance the Willamette River as Portland's centerpiece—shaping the city's urban form, industrial development, environmental health, and public spaces.
2. Consider the history and special qualities of the Willamette and Columbia Rivers when designing buildings, landscaping, streets, parks and public art in waterfront districts.
3. Create and enhance community gathering places near the Willamette and Columbia Rivers, such as parks, residential districts or retail districts.
4. Ensure that any future relocation of the I-5 Freeway through the Central City enables improved access from neighborhoods to the river.



The floating dock of the Eastbank Esplanade allows access next to the I-5 Freeway along the east side of the Willamette River.

DEFINING SUCCESS

The following set of outcomes would indicate that we are on the right path to achieve vibrant waterfront districts and neighborhoods. Appendix D of this strategy proposes a systematic approach to assessing progress toward fulfilling the *River Renaissance Vision*, and includes measures to chart whether conditions are steady, improving or declining over time.

WE WILL KNOW WE'RE MAKING PROGRESS TOWARD ACHIEVING VIBRANT WATERFRONT DISTRICTS AND NEIGHBORHOODS IF...

1. An increasing number of residents, workers and shoppers perceive that waterfront commercial and residential districts are enjoyable places to live, work and visit.
2. More private and public development activities contribute directly and indirectly to the vibrancy of the waterfront as a place for public use and enjoyment as well as development and investment.



Salmon Springs Fountain downtown.



Jamison Square in the River District



Sellwood Riverfront Park



South Waterfront Park



An ecoroof downtown captures rainwater.



An entrance to New York's waterfront.



Newly designed public space on Vancouver BC's waterfront.



One of six concepts developed for the Freeway Loop Study

ACTIONS

The following are a sampling of projects and programs that would advance progress toward achieving the *River Renaissance Vision*. Some actions are currently underway, and others are projects that the City, along with a variety of partners, could initiate within the next few years. Additional projects are included in Appendix E.

1. Develop a comprehensive River Plan package that includes but is not limited to plans for riverfront communities, an update of the *Willamette Greenway Plan*, design guidelines and recommendations for natural resource restoration.

- **Potential partners:** Riverfront landowners, businesses, and residents; industrial stakeholders, business and neighborhood associations, watershed councils, recreation and trail advocates, Port of Portland, arts and culture organizations, design professionals, tribal governments, natural resource agencies, US Army Corps of Engineers, environmental groups
- **Estimated start date:** Winter 2005

2. Conduct a feasibility study for a Willamette River ferry system to expand travel options across and along the Willamette River.

- **Potential partners:** RiversWest Small Craft Center, business groups, Portland Oregon Visitors Association, neighboring cities, boating and transportation groups
- **Estimated start date:** July 2005

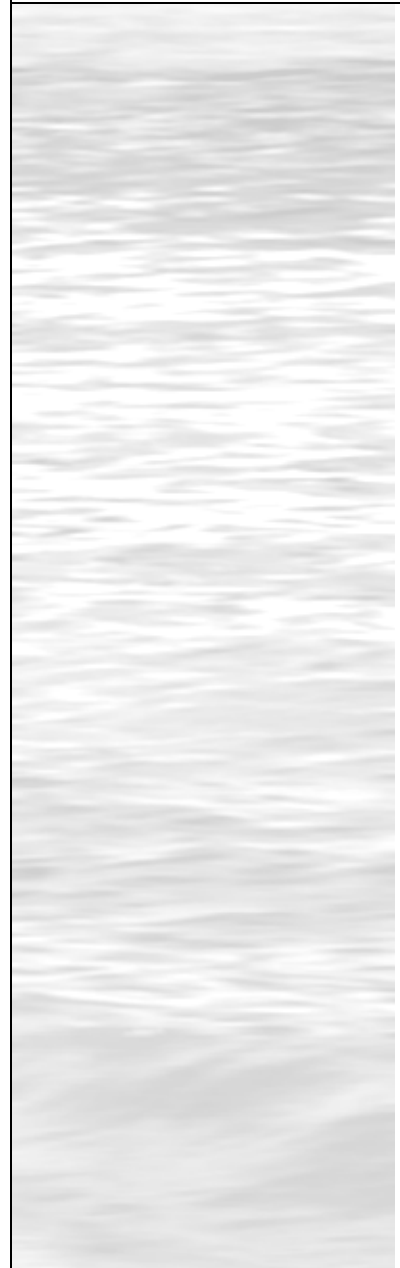
3. Continue with the next phase of the *Freeway Loop Study*, which will be an in-depth evaluation of the options for improving and relocating portions of the I-5 and I-405 freeways through the Central City. The next phase should advance the ideas in the study of how to provide for the needs of freight, rail, and automobile traffic to and through the Central City, the needs of the districts through which they travel, and the potential for reclaiming riverfront lands.

- **Potential partners:** Oregon Department of Transportation, Metro, industry and business associations, neighborhood associations
- **Estimated start date:** 2006

Partnerships, Leadership and Education

C H A P T E R

7





Portlanders take a ride on the Willamette River Ferry Demonstration Project

PORTLANDERS SAY:

“ We want to be involved in reclaiming our rivers and streams, and to know we are making a difference at home, at work and in the community. ”



The Multnomah Youth Commission co-sponsored the “River Roundtable” as part of the River Renaissance “Wade In Workshops”

OVERVIEW

Already nationally acclaimed for leadership in urban development, Portland has recently been recognized by the US Council of Mayors and the American Planning Association for the River Renaissance Initiative. Portland is also recognized as a leader in sustainability and green buildings, with 38 projects that meet the US Green Building Council’s Leadership in Energy and Environmental Design (LEED) standards, more than any city in the nation. And Portland Parks and Recreation has just received the nation’s first Salmon-Safe Certification for creating a system of healthy places for people, fish and wildlife.

Leadership isn’t just a matter of pride—it makes economic sense. The city’s quality of life attracts creative thinkers and innovators who are the cornerstone of growing business sectors. Portland’s livability draws visitors and keeps the city high on national lists of the best places to live, work and play. And, with the Pacific Northwest leading the nation in implementing green building practices, it is an attractive location for green development, design and engineering firms and product manufacturers. These new businesses enhance Portland’s established base of industries (many located in the working harbor) that have outpaced national employment trends with a job growth rate three times the national average.

Leaders change over time, but ideas have a power of their own. As new political and community leaders emerge, River Renaissance will need champions and resilient organizational structures to continue the initiative as an ongoing priority for Portland.

Working in partnership is the River Renaissance way. It means bringing students, business people and neighbors together to create a vision for our rivers. It means developing a strategy to guide and measure the contributions of the many partners committed to revitalizing the Willamette River in Portland. Working together also means crafting innovative solutions with local, state and federal agency partners to streamline permitting for projects requiring review under the Endangered Species Act, Clean Water Act and other laws.

As the River Renaissance Initiative continues, these partnerships will grow and new partnerships will emerge. Working with upstream and downstream jurisdictions can yield greater economic, recreational, and environmental benefits. Research and stewardship efforts will be enhanced by the ongoing contributions of students at local schools, colleges and universities. The connections between river-related groups and organizations will be strengthened through successful joint projects that educate and involve the public.

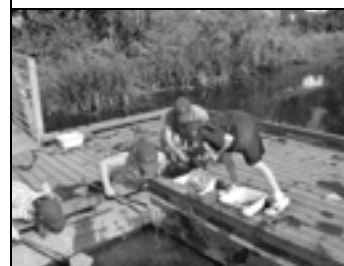
Much is already happening to inform and engage Portlanders in river-related issues. Thousands of schoolchildren and adults learn about clean rivers each year through Environmental Services' programs. Watershed councils and stream stewards organize restoration projects. The Audubon Society hosts the annual Blue Heron Week to celebrate wildlife in our urban environment. Hundreds of people celebrate the Willamette River in kayaks and canoes each summer as part of Willamette Riverkeeper's Paddle Oregon adventure. And, as part of the River Renaissance Initiative, Portlanders gather on Swan Island to watch as newly built Gunderson barges are launched into the Willamette River.

Many new Portlanders come from other countries and almost one-sixth of Portland residents speak a language other than English at home. Yet only a few involvement efforts currently reach these community members. Engaging Portlanders in River Renaissance means increasing efforts to include our immigrant and non-English speaking neighbors in river-related activities.

As we reclaim the Willamette River as the city's centerpiece, history and culture should be the touchstones. Public art, kiosks, and celebrations can highlight maritime commerce, while native dance and storytelling, regattas of historic boats, and community festivals can bring our history to light.

The complicated array of river-related groups, issues and events can make it difficult for people to access information or to find out how to get involved. The River Renaissance Initiative can serve as a centralized resource to promote and connect the array of efforts. Businesses now distribute the River Renaissance Calendar to a network of more than 30,000 local employees to encourage volunteers to take part in community events. The calendar continues to showcase fun and informative activities on the river. And the River Renaissance website can become a central source for river-related information and activities in Portland.

By building on these efforts, more Portlanders can learn how the Willamette River contributes to our health and economic well-being, and become a community of river stewards.



Bureau of Environmental Services' Clean Rivers Education Program reaches more than 13,000 students each year with classroom lessons and field programs.



The Explorando de Columbia Slough is a popular environmental education festival for Spanish speaking families held each year at Whitaker Ponds Environmental Education Center in NE Portland.

POLICY GUIDANCE

THROUGH THE COLLABORATIVE EFFORTS OF CITY GOVERNMENT AND PARTNERS...

1. Lead by example, putting the River Renaissance philosophy into practice through actions and investments.
2. Support ongoing leadership for River Renaissance to promote the vision, showcase successful efforts, sustain progress, and achieve long-term goals.
3. Foster partnerships among the City, public agencies, schools, community organizations and businesses to enhance coordination of river-related efforts and maximize the impact of investments.
4. Expand public awareness of river-related issues through education and outreach, stewardship activities, and community celebrations.
5. Seek funds from other public agencies, foundations, and business sponsors to support River Renaissance projects and programs.



Participants at the River Renaissance Vision workshops



Portland-Kaohsiung Sister City Association Dragon Boat Races, 2004



Participants in the Illuminata Parade of Light carry handmade lanterns along the waterfront



Citizens discuss river issues at the "Wade In" Workshops.



Interpretive sign located at Heron Pointe Wetlands in Southwest Portland.

DEFINING SUCCESS

The following set of outcomes would indicate that we are on the right path to achieve effective and enduring partnerships, leadership and education. Appendix D of this strategy proposes a systematic approach to assessing progress toward fulfilling the *River Renaissance Vision*, and includes measures to chart whether conditions are steady, improving or declining over time.

WE WILL KNOW WE'RE MAKING PROGRESS TOWARD ACHIEVING EFFECTIVE AND ENDURING PARTNERSHIPS, LEADERSHIP AND EDUCATION IF...

- 1. More Portlanders take part in activities at home and in the community that contribute to River Renaissance goals.**
- 2. A growing network of partner businesses, schools, community groups and nonprofit organizations engages the community in river-related activities.**
- 3. An increasing number of Portlanders receive the calendar of River Renaissance events and visit the River Renaissance website.**
- 4. The number of students participating in school assemblies and activities to learn about the economic, environmental and urban roles of the Willamette River increases.**
- 5. Cooperative efforts between upstream and downstream communities are enhanced.**



Observers at McCarthy Park watch a barge launch at Gunderson, Inc.



More than 5000 volunteers have helped reduce runoff from household roof drains through the Downspout Disconnection Program.



Participants share ideas at the River Renaissance Vision Workshops.



River Renaissance Calendar



strategy
guidance
progress
leadership
funding
action

ACTIONS

The following are a sampling of projects and programs that would advance progress toward achieving the *River Renaissance Vision*. Some actions are currently underway, and others are projects that the City, along with a variety of partners, could initiate within the next few years. Additional projects are included in Appendix E.

1. Establish an annual River Renaissance Celebration that recognizes exemplary achievements by community partners and features citywide activities that educate and inspire the public.

- **Potential partners:** Civic and community groups, tribal governments, Port of Portland, neighborhood and business associations, art and culture organizations, public agencies
- **Estimated start date:** Hold first event in fall 2005.

2. Share progress made in advancing River Renaissance through the publication of an annual “State of the River” report.

- **Potential partners:** Neighborhood, businesses, civic, and community groups.
- **Estimated start date:** Publish first report in fall 2005.

3. Develop a funding and partnership strategy to support River Renaissance projects and programs, drawing from a variety of public, private and foundation sources.

- **Potential partners:** Business and civic leaders, Oregon Community Foundation, Governor’s office, federal delegation
- **Estimated start date:** Summer 2005

4. Work with federal, state and local governments to establish a functional network among neighborhoods, property owners, businesses, and other interest groups with a shared goal to restore and enhance the Willamette River watershed in Portland.

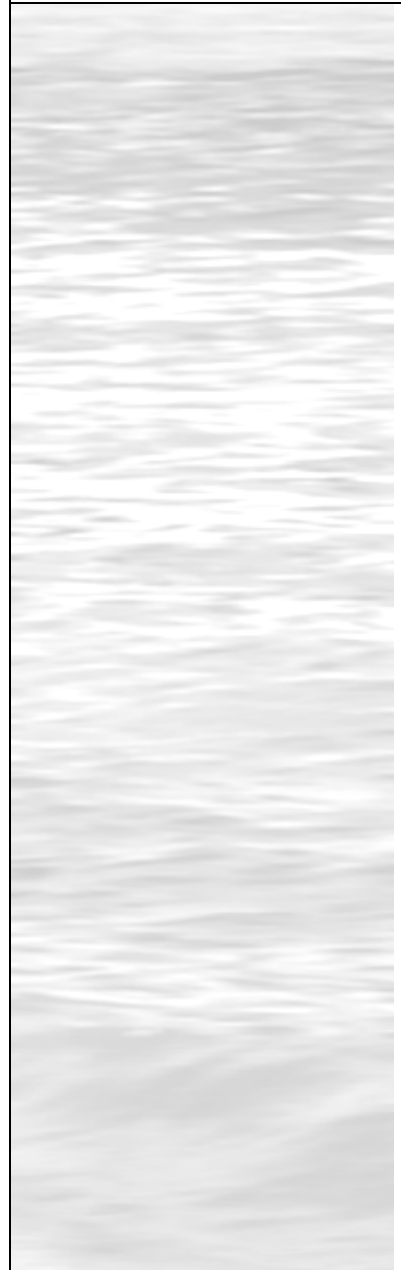
- **Potential partners:** All partners listed in Appendix B
- **Estimated start date:** January 2006

Portfolio of Exemplary Projects

There are many examples locally, nationally and internationally from which Portland can learn and be inspired. The following examples demonstrate what can be accomplished through innovative thinking and an integrated approach to problem-solving. The examples from Portland are just a few of the ways in which Portland is already demonstrating the River Renaissance approach.

A P P E N D I X

A





Riverbank at Terminal 4, Pier 1

PORT OF PORTLAND TERMINAL 4 PORTLAND, OREGON

Terminal 4 at the Port of Portland is a multipurpose, 280-acre facility that features seven ship berths capable of handling grain, autos, forest products, steel, and dry and liquid bulks. In July 1999, Toyota Motor Sales US (Toyota) worked with the Port of Portland to upgrade its outdated facility in order to improve the efficiency of its West Coast operations. Redevelopment of the site resulted in job retention, cost-saving riverbank improvements, cleaner stormwater runoff, and neighborhood friendly design.

Applying the River Renaissance Approach

Several improvements were made during the redevelopment of Terminal 4 for Toyota. Traditionally, Toyota workers drove cars from the ships to a storage area near the dock. Then, they drove the cars to an upland site where employees would add options to the cars and prepare them for distribution across the US. In the redevelopment concept, the Port of Portland combined the functions of Toyota's two existing sites into one larger site where the work is now performed. This has reduced the number of miles the cars on each vessel are driven by 700 miles, a reduction in auto emissions by 30 percent.

The project also needed to respond to the federal Endangered Species Act fish listings on the Willamette River and Metro's *Urban Growth Management Functional Plan*. The potential for conflict between waterfront marine terminal development and environmental preservation of the property presented the opportunity to take a more proactive and comprehensive approach to riverbank management. In redeveloping the site, the Port restored 1700 feet of riverbank. Historically the Port of Portland stabilized its riverbanks using costly riprap. This time they laid back the bank and planted native species which the Port estimates cost less than installing riprap.

The Port also installed a stormwater treatment system to remove pollutants from pavement runoff. Energy efficient buildings and directional yard lighting are also key features of the project. The new yard lighting uses one-third the energy of the current system, produces twice the output and greatly reduces reflection into windows of nearby homes.



Before bank stabilization at Terminal 4



After bank stabilization at Terminal 4

Making it Happen

This project was the result of a partnership between the Port of Portland, Toyota, the Bureau of Environmental Services and the upland neighborhood associations. The Urban Forestry Commission recommended the specific tree species to be planted. Toyota financed the majority of the project, with the exception of the riverbank work and dock and perimeter improvements which were paid for by the Port. The Port's contributions, Toyota's willingness to be sustainable, and a riverbank that did not require cleanup made this project feasible. The project has resulted in job retention; a healthier habitat for fish and wildlife; good relations between the Port, Toyota and the adjacent neighborhoods; stormwater management; and other sustainable practices.

“ This program has lots of wins for everyone... fish, people, property and the Port. It is a great example of how we can maintain the integrity of our riverbanks and the natural habitat areas they support. ”

Ben Meyer, a NOAA Fisheries fish biologist with regard to the Port's Riverbank Management Program

Sources

Port of Portland Website
(www.portlandairportpdx.com)

Marine Department Riverbank Management Plan,
Port of Portland, July 2001.

SOUTH WATERFRONT PLAN PORTLAND, OREGON

The South Waterfront Plan development and implementation promotes the redevelopment of a 145-acre riverfront brownfield site into a vibrant mixed-use community.

Transforming Brownfields into a Community

The South Waterfront area first developed in the early 1900s. Maritime industries established a presence in the district during World War II; later on the district was a location for dismantling and salvaging ships, secondary aluminum smelting, and other industrial operations. Today the area is largely vacant, but brownfield conditions occur in portions of the district. By the 1960s the I-5 Freeway created a barrier to the district.

The *Central City Plan*, adopted in 1988, called for the district to transition from an industrial district to an urban mixed-use community, however few changes occurred. The *North Macadam Framework Plan* (1999) was developed as a guide to public and private investment in the urban renewal district. In 2002, the *South Waterfront Plan* was adopted as the land use plan for the area.

South Waterfront's proximity to downtown, Portland State University, and Oregon Health & Sciences' medical and educational facilities on Marquam Hill place it in center of Portland's Science and Technology Quarter. The *South Waterfront Plan* calls for 10,000 jobs and a minimum of 3000 housing units to be added to the district by the year 2019. The area is expected to be a vibrant mix of offices, educational and medical facilities, condominiums and apartments, retail uses, an urban plaza, a neighborhood park and an exemplary riverfront greenway, 100' – 150' in width.

The plan calls for the integration of urban form and natural elements through eco-roofs, landscaped stormwater systems, and water features. The district's urban intensity will be contrasted with habitat enhancements along the river. And while buildings will be tall (up to 325' in some parts of the district), there are limits on the width of building façades facing the river.

Transportation in and through the district features "green streets" (streets with surface stormwater management and enhanced landscaping), streetcar, aerial tram, river taxi, and bicycle trails along the river.

To achieve the highest quality greenway, Portland Parks and Recreation, property owners, other stakeholders, and a multidisciplinary design team are developing the *South Waterfront Greenway Development Plan* to describe desired riverbank design, habitat, trails, artwork, and activity areas.

The first projects proposed under the plan are a clinic/research medical facility for Oregon Health & Science University and riverfront condominiums. Both projects are expected to exceed Leadership in Energy and Environmental Design (LEED) certification.



South Waterfront District Proposal



The restored bank at South Waterfront will treat stormwater, provide fish and wildlife habitat, and allow for public access.

Initial development is focused in a 31-acre area in the heart of the district. This project, known as the Central District, will include an aerial tram linking South Waterfront with Oregon Health Science’s Marquam Hill Campus. The tram will enable OHSU to continue its growth within the city and provide an impetus for the city’s bioscience and research strategies.

The plan responds to the federal Endangered Species Act and Clean Water Act by promoting fish and wildlife habitat and sensitive stormwater management, and to statewide planning goals for the Willamette River Greenway, housing, transportation, and economic development.

While some plan goals are expected to be achieved within the life of the urban renewal district (by 2019), most are intended to guide public and private development for at least 25 to 30 years.

Making It Happen

The *South Waterfront Plan* was developed as a partnership among the Portland Development Commission, Bureau of Environmental Services, Parks and Recreation, Office of Transportation, Bureau of Development Services, and Bureau of Planning. The Office of Sustainable Development and the Endangered Species Act Program were also significantly involved in the project. The project team consulted with Metro, Oregon Department of Transportation, and NOAA Fisheries to get input and advice on the plan provisions.

Development of the plan was challenging given the number of interests involved. The interbureau team met with neighborhood and business associations, and district property owners and Oregon Health & Science University to understand their interests in the district’s redevelopment and to get input on potential plan provisions.

Funding

The expected cost of redevelopment in South Waterfront is about \$1.9 billion in public and private investment by the year 2019. Public funding will come primarily from tax increment financing, supported by increased tax revenues associated with the district’s redevelopment. Federal funds are being sought for transportation and greenway improvements. Private funding will include infrastructure improvements by individual property owners and could potentially include local improvement districts and/or business improvement districts.

Applying the River Renaissance Approach

While development of the South Waterfront District has yet to be realized, the plan exemplifies the River Renaissance approach by striving to achieve multiple goals simultaneously. These include job creation, the development of an exciting urban community, increased riverfront access for Portlanders, innovative stormwater management and enhancing fish and wildlife habitat.



South Waterfront today



“ South Waterfront represents the last great development opportunity for Portland’s Central City and the most critical project for Portland in the coming decades. ”

Mayor Vera Katz



The Willamette River in Portland

THE RIVER TRUST STREAMLINING AGREEMENT PORTLAND, OREGON

River Renaissance achievements are the result of effective working relationships and innovative projects with many public and private partners. For this reason, Mayor Katz convened the River Trust in April 2002, creating a new mechanism to enhance communication and cooperation with federal and state agencies responsible for the Lower Willamette River. The trust consists of a strong partnership of key federal and state agencies working with the City to ultimately create a series of agreements that address river issues more comprehensively and draw on local needs and innovations to meet federal requirements.



The Streamlining Agreement proved very helpful with permitting in the South Waterfront District.

A New Approach to Permitting

The first product of the River Trust was a streamlining agreement to facilitate review of City projects that trigger Endangered Species Act regulations. Portland is the first nonfederal entity to have such an agreement with NOAA Fisheries, US Fish and Wildlife Service and the US Army Corps of Engineers. This innovative partnership has established a clear and accountable process for developing scientifically sound project designs, identifying projects with significant permitting issues and addressing these issues in a timely manner.

Existing regulations from federal, state and local agencies share a common goal—to protect and eventually restore the health of the Willamette River system. These regulatory requirements focus on different aspects of the river system, and were not created or designed to work together. Addressing each individual river-related program or statute with a unique approach is unlikely to achieve broad river health objectives. Distinct efforts commonly address individual symptoms, and are not likely to solve the overall problems of long-term river health and economic stability. A comprehensive approach provides a better return on the investments of city rate payers.

Making it Happen

This cooperative approach to permitting was put to the test in the new South Waterfront development. Project developers supported the use of state-of-the-art stormwater and riverbank treatments but were unwilling to assume the schedule risks associated with obtaining the multiple state and federal permits required. The City of Portland employed the streamlining agreement to assure property owners and developers that all needed permits could be obtained in a timeframe comparable to that of a traditional stormwater facility. The result was more than 200 linear feet of restored riverbank and fish habitat, improved water quality treatment facilities such as vegetated swales, and a total project cost that fell below budget and is expected to be less expensive to maintain over time.

Staff from the City of Portland and state and federal agencies work together as part of the Streamlining Team to reduce the time, cost and uncertainty associated with developed and redeveloped property in the city. The agreement has shortened the time involved in the permitting process while ensuring that City projects take appropriate steps to protect the environment, reduce costs and minimize uncertainties associated with the Endangered Species Act, Clean Water Act and other federal and state environmental laws.

Applying the River Renaissance Approach

The River Trust and its innovative streamlining agreement exemplify the spirit of partnership and leadership. Mayor Katz convened the trust to strengthen relationships with agency partners, and together they developed a coordinated and simplified permitting process for the lower Willamette River.



**US Army Corps
of Engineers** ®



NOAA Fisheries



Port of Rotterdam



PORT OF ROTTERDAM ROTTERDAM, THE NETHERLANDS

The Rotterdam Port is one of the largest and best equipped harbors in the world. It also strives to be one of the cleanest, best organized and well-known. Their goal is to create a harbor that pays particular attention to biodiversity, mobility, space, education, and outreach.

In the Rijnmond Region, tensions between the economy and the environment have existed for many years, as the growing port industry and the Rijnmond urban area often have conflicting interests. A unique cooperative venture between government and the business community is now pursuing economic development of the region that is connected to improvement in the quality of the environment. The implementation of this initiative is being carried out through a number of projects both large and small.

Gateway to Europe

Situated near deep water, easily accessible from both the North Sea and from inland, Rotterdam has always been a port city and gateway to Europe. Today a system of harbor complexes, it is the world's largest Port. In 2002 more than 322 million metric tons of cargo were handled including fluid and dry bulk goods, cars, and containers of just about everything. Between 1996 and 2003, the total throughput in metric tons increased 12 percent. In comparison, the Port of Portland handled approximately 34 million metric tons of cargo in 2000. The Port of Rotterdam owes its size to its good accessibility: the channel is very deep and without locks, allowing even the largest vessels to quickly and easily reach the port. The Port of Rotterdam also has excellent connections to surrounding areas in Europe through trains, barges, coasters, pipelines and trucks that go to varying destinations in Europe. The infrastructure inside of and beyond the port is superb.

Current Initiatives

CREATING MORE SPACE FOR THE PORT THROUGH EFFICIENT USE OF LAND

The Port of Rotterdam needs more space. One answer is to create an entirely new port. Another is to use existing land in the port more effectively. Currently, they are enabling more intensive use of land by improving the layout of tank storage and oil refining. They are also researching opportunities to accelerate the reclamation of polluted brownfield sites.

IMPROVING ACCESS TO THE PORT AND INDUSTRY

Good connections between the Port of Rotterdam and its hinterland are vital for the rapid delivery of cargo passing through the port to their final destination. A number of projects are focusing on improving access to the port by removing existing and expected bottlenecks, using existing roads more effectively instead of building new ones.

IMPROVING AIR QUALITY AND REDUCING NOISE

The port is researching opportunities for and obstacles to the setting of noise-emission limits for entire industrial zones. They are also performing feasibility studies to arrange production processes more sustainably.

THE HARBOR AS TOURIST THEME AND EDUCATIONAL PROJECT

The Port of Rotterdam also realizes the importance of showcasing the Port's activities to the public to gain support. The very nature of the Port's activity (ships from all over the world, enormous cranes, and containers) fascinates people. Outreach efforts consist of working with the Industrial Tourism Agency to organize excursions by bus and boat in Rotterdam's port and industrial area. These excursions offer people a behind-the-scenes look at a certain company. The Port of Rotterdam's website also features several different self-guided walking tours for the public. The Educational Information Center, a center on harbor activity, has been built as a resource for schools. The Port also has an interactive webpage for kids where they can be the captain of a ship and see inside cargo containers.

Making it Happen

The Port of Rotterdam, the Dutch Ministry of Transportation, the Ministry of Spatial Planning and the Environment, the Ministry of Economic Affairs and the Ministry of Nature Management and Fisheries, the Rotterdam Metropolitan Region, the Chamber of Commerce, and several local authorities are partners in a wide range of different projects. These include expanding the port and creating efficient ways to use port land, to building more sustainably and setting aside nature reserves. Their goal is to effectively tackle complex regional problems and thus improve the spatial quality and use of those regions.

What can Portland Learn from this Example?

The Port of Rotterdam is a good example of a port whose focus extends beyond the needs of harbor commerce. They are setting aside land, outside of port operations, for natural resources and recreational amenities. The port also addresses challenges with multiple solutions. Their focus has been on how to grow, and often their solutions result in operating and expanding more effectively. With Willamette riverfront land in short supply, Portland could benefit from developing similar practices. The Port of Rotterdam is also a good case study for Portland because public outreach is a priority. Rotterdam's harbor is an undisputed part of the city and it plays a part in city development as a tourist theme. Portland could gain greater public support for the Portland Harbor through efforts that engage the public in harbor operations.



Tank Storage at the Port of Rotterdam

Sources

Port of Rotterdam Website
(<http://www.portofrotterdam.com/UK/index.asp>)

ROM-Rijnmond Website
(<http://www.rom-rijnmond.nl/english/index.shtml>)



The River Torrens

RIVER TORRENS LINEAR PARK ADELAIDE, SOUTH AUSTRALIA

The River Torrens Linear Park extends from the coast for a distance of 50 km and runs along the River Torrens through the City of Adelaide. The park is 30 square kilometers in size. The river divides, and joins, the business side of town on the south bank and the residential area on the hill to the north of town. The greenway project exemplifies the rediscovery of environmental, recreational, heritage and cultural resources. It integrates a diverse range of needs, including stormwater management, recreation use, habitat functions, flood mitigation, and transportation needs in the form of bicycle and pedestrian paths.



Adelaide, South Australia

From City Sewer to Rediscovered Greenway

Throughout the 19th and 20th centuries, the citizens of Adelaide saw the River Torrens as “left over space” and largely misused the river as a source of water, a sewer, a dump, and as a source of sand, gravel and clay. Throughout the years, flooding of the river had also been an issue and several flood relief measures, such as strengthening and widening the river, were employed that exacerbated the problem rather than mitigating it. Ultimately, the river lost most of its habitat value and there was a widespread infestation of noxious weeds.

During the 1970s, the public attitude toward the river changed when numerous studies and alternatives regarding the alignment of a transportation corridor along the river were proposed. The proposals, including the creation of a freeway or light rail system, promoted community discussion about the value and use of the river corridor. Although a dedicated busway was eventually built that required many river crossings and extensive earthwork, the community rallied together and a concerted effort to restore the river began.

In 1979, planning for rediscovering the greenway began in earnest. Public involvement efforts indicated that people used, and wanted to continue to use, the river and surrounding area for passive recreation. An inventory and analysis of the area showed that the river was more than a series of separate problems, but rather a complex, multi-objective landscape and network of related processes.

The resulting development plan for the river included many priorities including eco-system conservation, protection of cultural landscape values, restoration of degraded resources, identification of development potential, recreation amenities and landscape guidelines. In addition, the 1993 Environmental Protection Act required certain flood mitigation, water quality and waste disposal standards.

After six years of implementation between 1982-1998, the park now includes improved flood capacity and reduced erosion, public access, native plantings, and recreational amenities.

A Park Enjoyed by People and Wildlife

Once polluted, overgrown and poorly accessible, the River Torrens Linear Park is now recognized as a highly valued community resource and premiere recreational facility.

The linear park now includes a public busway, a bikeway and walkway that extends from the coast to hills, heritage items and accommodation of a wide range of passive/unstructured and competitive/organized activities. The park provides a valuable habitat for birds due to its variety of trees and shrubs and the waterway.

The river has been registered on the Australian Heritage Commission's Register of the National Estate in recognition of its historical, cultural and environmental values.

Making it Happen

The reclamation of the River Torrens was primarily a joint planning project between the state and local governments. The state government was involved in flood mitigation, environmental restoration, and improvement of the transportation corridor. The local government constructed the pedestrian and bicycle path, recreational facilities and conducted ongoing routine maintenance. The continued improvements to the park involved many community based organizations.

What can Portland Learn from this Example?

The River Torrens Linear Park planning process looked at each segment of the river separately to address environmental and cultural issues and to identify the best uses for each section of the river. Design was a powerful tool used to integrate transportation functions, natural resources and recreational amenities. The involvement of the community during the creation of the plan has benefited the park by creating a long-term public-private partnership and a sense of community ownership of their riverfront assets.



Sources

"Adelaide's greenway: River Torrens Linear Park" by Damien Mugavin, printed in *Landscape and Urban Planning Journal*, vol. 68, May 2004, pgs. 223-240

www.southernaustraliantrails.com

Torrens Catchment Water Management Plan

www.hassell.com.au/

ANACOSTIA WATERFRONT INITIATIVE WASHINGTON, D.C.



Concepts from the Anacostia Waterfront Initiative

The Anacostia River flows along Washington D.C.'s southern edge into the Potomac River. It is a unique riverfront with a majority of the land in public ownership. After years of neglect, a new movement to recapture the opportunities of the Anacostia River has emerged. The Anacostia Initiative, a partnership that includes the District of Columbia, the federal government and the community, began as a way of coordinating multiple planning efforts to develop a unified plan for the Anacostia waterfront. For the first time, actual decisions and resource allocations made by the district and federal agencies will be connected to a comprehensive planning effort for the Anacostia River.

Local and Federal Agencies Partner with the Community to Create a Vibrant Waterfront

In 2003, the Anacostia partnership completed a collaborative plan for the future of the waterfront and is currently coordinating the land use, development and programmatic actions of the city and federal agencies. The *Anacostia Framework Plan* is founded on five themes: a clean and active river; breaking down barriers and gaining access; a great riverfront park system; cultural destinations of distinct character; and building strong waterfront neighborhoods. The plan, which applies these themes to the ground, includes several maps that lay out the following ideas:

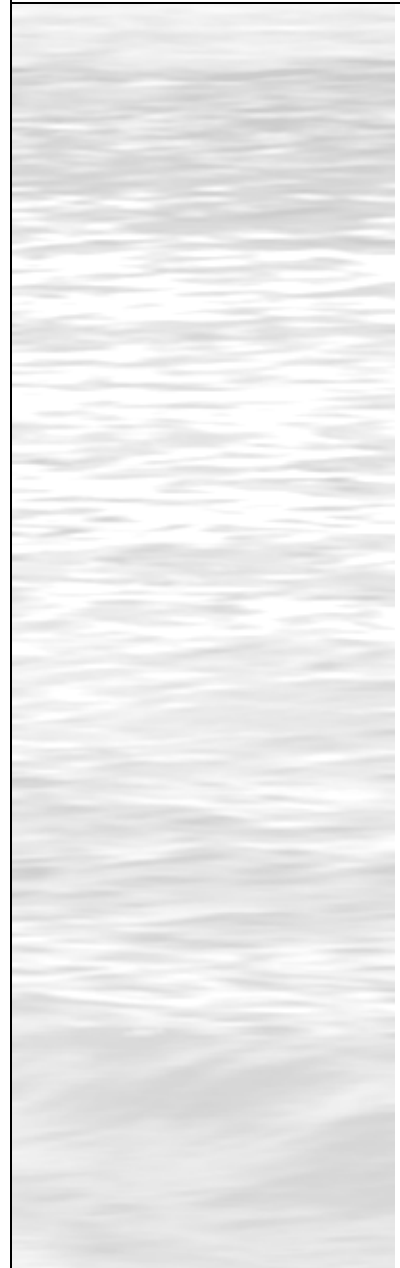
- New waterfront neighborhoods
- Target areas with specific recommendations
- Brownfield redevelopment sites
- New boathouses, landings and marinas
- Streams to be daylighted and specific bank improvements
- Grand boulevards, a new bridge and improved street alignment
- Trail alignment
- Extension of streets to the river
- Water taxi system
- New park acquisition
- Ten new sites for museums
- Network of environmental interpretive centers

In addition to the plan, the partnership is guiding over \$30 million of federal funds proposed for the area. It is also bringing mayoral and federal cabinet level attention to the waterfront to attract new resources that will benefit the community.

Leadership

A P P E N D I X

B





Translating the City of Portland's commitment to river revitalization into action requires a fresh approach to doing business.

New organizational structures need to be considered, as well as new operating practices such as:

- **Coordinating the development of City workplans and budgets for river-related projects to assure necessary participation by partner bureaus.**
- **Scoping river-related projects to simultaneously address economic, environmental and quality of life issues.**
- **Seeking integrated rather than single-objective solutions.**

Sustaining the River Renaissance Initiative will require an ongoing commitment to coordinate efforts within the city and among other agencies, businesses, community groups, universities and philanthropic organizations. Enhanced collaboration will improve the effectiveness of shared projects, research, funding initiatives, and public engagement activities.

An essential first step toward implementing the *River Renaissance Strategy* is to strengthen and expand the City's operational practices to reflect a commitment to long-term river revitalization efforts. While existing management and leadership structures have successfully led to the development of the *River Renaissance Vision*, the *Willamette River Conditions Report*, and *River Renaissance Strategy*, suitable and substantial organizational structures are needed to fully utilize the benefits of this work and to sustain the initiative over the long run.

Governance Structures

Existing River Renaissance Structures

Current internal City River Renaissance structures include:

- Planning and Development Directors' Group (functioning as the "board of directors" of the River Renaissance Initiative)
- River Renaissance Management Team (management or senior staff from various bureaus who manage the River Renaissance Initiative)
- River Renaissance Natural Resources Team (natural resource management from various bureaus who coordinate the City's environmental programs)
- River Renaissance Public Engagement Team (public involvement staff from various bureaus who guide public outreach and involvement efforts)
- River Industrial and Economic Advisory Group (representatives from industrial associations and other business associations along the Willamette River, major regional business associations, and river-related trade associations that advise city bureaus, the Portland Development Commission and the Port of Portland on river economic and industrial research and policy issues)
- River Trust (federal environmental and natural resources agencies, the US Army Corps of Engineers and City staff working together to streamline permitting of City projects requiring review under the Endangered Species Act)
- Watershed Science Advisory Group (a group comprised of representatives of federal and state environmental and natural resource trustee agencies, tribal governments, US Army Corps of Engineers, Port of Portland, Metro, Portland Development Commission, the Columbia Corridor Association, and environmental organizations, charged with reviewing and providing input on watershed approaches, processes, and products)

New Institutional Structures

Transcending traditional boundaries of economy, recreation, environment and development requires working across sectors and across political jurisdictions. It means bringing together leaders from City government, upstream and downstream neighbors, business groups, neighborhood associations, tribal governments, and civic organizations to develop solutions that address overlapping and differing needs.

As political and community leaders change, continuity will be needed to ensure uninterrupted progress. This can be achieved in part through the advocacy of community partners. Sustained progress may be best achieved through the creation of a nonprofit corporation. Viable models and funding strategies used in other cities need to be carefully explored to determine whether and how to create a durable organization to effectively promote the River Renaissance Initiative.

Key Partners

The following list highlights some groups who have already contributed to the River Renaissance effort and others who have not yet taken part. All share an interest in river-related issues and access to resources—staff and volunteer time, technical expertise, funding or research. As the River Renaissance Initiative moves into the implementation phase, these partners can play important advisory roles and be conduits for public participation.

Civic and Community Groups

- Property owners—residential, industrial, commercial
- Schools and universities
- Industry and business
- Neighborhood and business associations
- Environmental groups and conservation organizations
- Watershed councils
- Professional associations (arts, design, public involvement, architecture, planning and others)
- Floating homes and marina associations
- Recreation advocates and businesses
- Bicycle and pedestrian advocacy groups
- Recreation and trail advocacy groups
- Nursery, agriculture and ranching associations

Advisory Groups

- Citywide Land Use Chairs
- City of Portland Bicycle Advisory Committee
- City of Portland Freight Advisory Committee
- City of Portland Pedestrian Advisory Committee
- Portland Harbor Community Advisory Group
- River Industrial & Economic Advisory Group
- Stormwater Advisory Committee
- Watershed Science Advisory Group



Mayor Vera Katz, Commissioner Erik Sten, and Planning Director Gil Kelley hold a press event to mark the launch of River Renaissance in 2000.



The Multnomah Youth Commission participated in the River Renaissance “Wade In” Workshops.

Boards & Commissions

- Design Commission
- Landmarks Commission
- Multnomah Youth Commission
- Parks Board
- Planning Commission
- Portland Development Commission
- Sustainable Development Commission
- Urban Forestry Commission

Tribal Leaders

- Columbia River Inter-Tribal Fish Commission
- Confederated Tribes of the Grand Ronde Community of Oregon
- Confederated Tribes of the Siletz Indians
- Confederated Tribes of the Umatilla Indian Reservation
- Confederated Tribes of the Warm Springs Indian Reservation
- Confederated Tribes of the Warm Springs Reservation of Oregon
- Confederated Tribes and Bands of the Yakima Nation
- Nez Perce Tribe

Political Leadership

- Portland City Council
- Upstream and downstream city councils
- Metro Council
- Office of the Governor
- State legislature
- Federal delegation

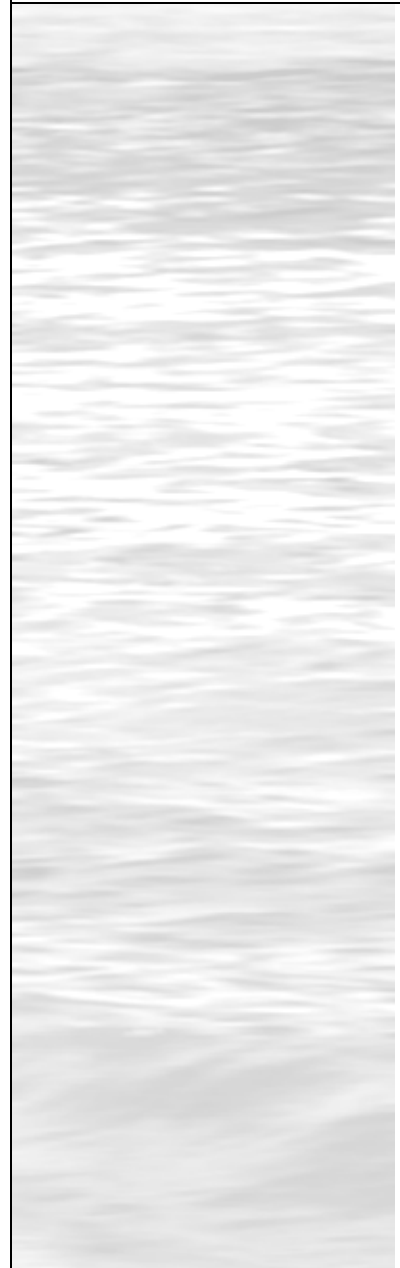
Government Agencies and Groups

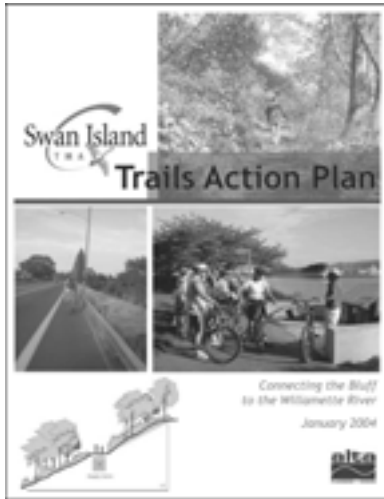
- Bonneville Power Administration
- Department of State Lands
- Governor’s Natural Resource Team
- Metro
- Multnomah County
- Multnomah County Drainage District
- National Oceanic and Atmospheric Administration - Fisheries
- Northwest Power and Conservation Council
- Oregon Department of Environmental Quality
- Oregon Department of Fish and Wildlife
- Oregon Department of Transportation
- Oregon State Marine Board
- Port of Portland
- Soil and Water Conservation Districts
- TriMet
- US Army Corps of Engineers
- US Coast Guard
- US Environmental Protection Agency
- US Fish and Wildlife Service
- Willamette Restoration Initiative

Developing a Funding Strategy

A P P E N D I X

C





River Renaissance contributed funding to the Swan Island Trails Action Plan

Implementation of the *River Renaissance Vision* will require funding for capital improvement projects, planning, research, design, special events, education, outreach, grants, technical assistance, measuring progress, and ongoing maintenance.



Willamette Cove

The actual cost of implementation is not yet clear and will certainly evolve over time. Appendix E outlines the City's current work program and some notions of what projects may be initiated in the future.

A few things are clear:

- A small number of City staff are currently funded to work on River Renaissance planning or projects. As implementation of this initiative advances, more substantial citywide commitment will be essential.
- Bureaus need to work together to prepare the River Renaissance portion of their budgets, so that the overall River Renaissance work program is cohesive and integrated, and so that staff is allocated to optimize collaboration and effectiveness.
- Reallocation of existing resources to better reflect River Renaissance principles is a viable funding option.
- No single funding source will be adequate or appropriate for all of the work.
- The City should leverage funds from regional, state and federal sources, as well as investments from private and nonprofit sectors.
- Long-term financing will require the active commitment of public, nonprofit and private sectors.
- Financing strategies should include the use of private initiatives and market-based incentives, wherever possible.

This chapter is intended to outline the steps that need to be taken to develop a River Renaissance funding strategy over the next year.

TASKS

Develop a detailed River Renaissance work program

This proposed *River Renaissance Strategy* outlines elements of a River Renaissance action agenda. However, a more detailed citywide work program is needed to determine overall financial needs for River Renaissance.

An immediate next step is for the bureau directors to develop a collective River Renaissance work plan for the coming budget year. This task should be repeated annually as part of each year’s budget process.

Participants in this step should include bureau directors, the River Renaissance Management Team and others.

Develop a budget and finance strategy for River Renaissance

Various budgeting tools may need to be tailored to facilitate tracking of River Renaissance revenues, expenses and needs.

Participants in this step should include the River Renaissance Management Team, Office of Management and Finance, bureau budget managers, Budget Reporting and Analysis Support System (BRASS) Implementation Team and others.

Ensure that the new BRASS budgeting system will accommodate the budgeting needs of River Renaissance

The Office of Management and Finance is embarking on a new budgeting system for the City. It will be critical that the cross-bureau budgeting called for by River Renaissance is facilitated by this new process.

Participants in this step should include the Office of Management and Finance, bureau budget managers, Budget Reporting and Analysis Support System (BRASS) Implementation Team and others.

Explore and implement new funding options

There is no single existing or new source of funding that will satisfy the needs of River Renaissance. Each project solves different problems and provides benefits to different populations or stakeholders. Therefore, project funding can be tailored to the specific project in creative ways.

The following table outlines some options that could be explored, but the City should remain open to creative funding options at every juncture.

Participants in this step should include the Office of Management and Finance, bureau budget managers, Budget Reporting and Analysis Support System (BRASS) Implementation Team, and others.



The Bureau of Environmental Services and the Office of Sustainable Development helped fund the Da Vinci Water Garden.



River Renaissance helped fund the Willamette River Ferry Demonstration Project.

POSSIBLE FUNDING SOURCES FOR RIVER RENAISSANCE PROJECTS

River Renaissance projects are currently funded through a variety of sources. The following table describes those and other sources, and some of the opportunities and limitations associated with each.

	SOURCE	USE OF THE FUNDING SOURCE	OPPORTUNITIES AND LIMITATIONS
LOCAL	General Fund <i>Funds collected from property taxes.</i>	<ul style="list-style-type: none"> Planning and capital projects 	<p>General funds are discretionary and allocated by the City Council among competing needs.</p>
	Utility Rates <i>Funds collected from sewer and water bills.</i>	<ul style="list-style-type: none"> Sanitary sewer, stormwater, environmental restoration and pollution control services 	<p>Funds generated from rates can only be used for actions that are directly related to the utility service.</p> <p>Portland's sanitary/stormwater rates are among the highest in the country. Therefore, increasing rates may be difficult.</p> <p>New funds could be generated through voluntary rounding up on utility bills and establishing a donations mechanism through bill payment.</p>
	Urban Renewal Funds <i>Funds generated from tax increment financing in urban renewal areas.</i>	<ul style="list-style-type: none"> Urban renewal planning and projects 	<p>Can only be used in adequately funded urban renewal areas (URA) and only 15% of the city can be in an urban renewal area at any one time. Several URAs are expiring. In addition, the funds available through tax increment financing are diminishing.</p>
	Systems Development Charges (SDCs) <i>Fees that reflect a share of the costs of increased demand on infrastructure from a particular development.</i>	<ul style="list-style-type: none"> Infrastructure planning and projects 	<p>It varies where SDC funds can be spent depending on the type of SDC assessed.</p> <p>SDC funds must address impacts of new growth.</p>
	Local Improvement Districts (LIDs) <i>Voluntary assessment district funds.</i>	<ul style="list-style-type: none"> Infrastructure planning and projects 	<p>LIDs can only be spent in certain areas.</p> <p>LIDs are useful means of combining funding from a variety of sources with contributions (special assessments) from properties that receive special benefits from public improvements – typically abutting properties.</p>
	New Market Tax Credits <i>Emerging program that the Portland Development Commission will use to help fund private, commercial projects that meet City goals.</i>	<ul style="list-style-type: none"> Projects that meet City goals 	<p>Available only to private developers. Availability of funds controlled by a private community investment bank. Must be used within specific geographic areas. Uses are limited to certain types of development: commercial, retail, industrial, owner-occupied housing.</p>
	Transportation Related Funds <i>City street user fees, vehicle registration fees.</i>	<ul style="list-style-type: none"> Transportation projects (could include green streets to manage stormwater) 	<p>Street user fees require City Council approval. Vehicle registration fees require voter approval and may require state authorization.</p>
	Other <i>Taxes, general obligation bonds and local option levies, reallocation of existing resources, transfer of development rights, etc.</i>	<ul style="list-style-type: none"> Can be tailored to needed improvements 	<p>General obligation bonds are not counted as part of the Measure 5 cap. The City has a fixed bonded capacity.</p> <p>Local option levies are counted as part of the Measure 5 cap and are limited to 5 years.</p> <p>Transfer of development rights requires identification of sending and receiving areas.</p>

POSSIBLE FUNDING SOURCES FOR RIVER RENAISSANCE PROJECTS (continued)

	SOURCE	USE OF THE FUNDING SOURCE	OPPORTUNITIES AND LIMITATIONS
REGIONAL	Port of Portland	<ul style="list-style-type: none"> Freight infrastructure and Port property improvements; restoration and cleanup 	
	Multnomah County	<ul style="list-style-type: none"> Willamette bridges 	
	Metropolitan Transportation Improvement Program (MTIP)	<ul style="list-style-type: none"> Regional transportation improvements 	Funding for <i>Regional Transportation Plan</i> priorities
STATE	Transportation <i>Oregon Transportation Improvement Act funds</i> <i>Increases in gas taxes</i>	<ul style="list-style-type: none"> Transportation projects 	Limited to highways and bridges
	Economic Development Grants and Loans	<ul style="list-style-type: none"> Economic development projects 	
	Oregon Watershed Enhancement Board	<ul style="list-style-type: none"> Restoration projects 	
	Taxes <i>Real estate transfer tax</i>		Requires legislative authorization
	State Parks Land and Water Conservation Fund	<ul style="list-style-type: none"> Recreational facilities 	
FEDERAL	Corps of Engineers (COE) <i>Cost sharing grants</i> <i>Water Resources Development Act (WRDA) cost sharing partnership between the federal government and nonfederal entities</i>	<ul style="list-style-type: none"> Ecosystem restoration projects 	WRDA requires a 50% monetary or in-kind match for all federal funds received for restoration projects. Land acquisition is limited to 25% of the total project cost.
	Environmental Protection Agency (EPA)	<ul style="list-style-type: none"> Research and restoration projects, infrastructure and cleanup. 	
	Natural Resource Trustees under Natural Resources Damages Act (NRDA) <i>Under Superfund, the Natural Resource Trustees require polluters to pay for natural resource damages</i>	<ul style="list-style-type: none"> Natural resource restoration projects 	Funds can only be spent on projects that address natural resource damages.
	National Oceanic and Atmospheric Administration (NOAA)	<ul style="list-style-type: none"> Research and restoration projects 	
	Northwest Power and Conservation Council Fish and Wildlife Program	<ul style="list-style-type: none"> Natural resource restoration projects 	
	US Fish and Wildlife Service <i>Multiple funding programs</i>	<ul style="list-style-type: none"> Fish and wildlife habitat improvement projects 	
	Transportation <i>TEA-21</i>	<ul style="list-style-type: none"> Transportation planning and construction projects 	Funds can only be spent on projects that are identified on the Transportation System Plan and meet Metro's regional objectives.

POSSIBLE FUNDING SOURCES FOR RIVER RENAISSANCE PROJECTS (continued)

	SOURCE	USE OF THE FUNDING SOURCE	OPPORTUNITIES AND LIMITATIONS
PRIVATE/NON PROFIT	Property owners	<ul style="list-style-type: none"> ▪ Cost share for restoration and enhancement projects 	
	Business partnerships and sponsorships	<ul style="list-style-type: none"> ▪ Examples include recreational facilities and trails 	
	Foundations <i>Parks Foundation, US Fish and Wildlife Foundation, and other private foundations</i>		

Measuring Progress

"Are we making progress?"

This is an essential question to ask as we collectively move forward with a strategy to improve the health, vibrancy and economic prosperity of our rivers and streams, their corridors and their watersheds. A systematic approach to defining success and assessing progress will help us make informed choices and tailor our actions and efforts to ensure long-term success.

Tasks to Measure Progress

This strategy proposes a set of outcomes that, in combination, define success for each *River Renaissance Vision* theme. For example, we will know that we're making progress toward achieving an inviting and active front yard if the use of riverfront trails and parks increases, and more people experience being out on the water. (See Chapter 5 for additional desired outcomes for the Front Yard and other themes.)

In this appendix, a set of tasks is proposed to measure progress towards these desired outcomes over time. This appendix also provides us with a sense of where we are *now* by including baseline information. Where baseline information isn't currently available, this is noted. It will be an important next step for City staff, with help from agency and community partners, to fill this in.

To measure progress in a meaningful way, some data should be collected and evaluated annually. Other data is more appropriately collected and evaluated less frequently (e.g., every three to five years).

The measurements proposed here should be reviewed and refined over time. Some tasks may start right away, and others may be phased in later, depending on the costs and complexity of the data collection and analysis.

The State of the River

An annual State of the River Report is proposed to inform Portlanders about how the City and its partners are doing in the quest to achieve the *River Renaissance Vision*. Measurements included in this appendix, as refined through follow up discussions will provide the content of this report. The report will also provide an annual showcase of inspiring private and public sector accomplishments that exemplify the spirit of River Renaissance.



Tree canopy captures rainwater and provides habitat.

Water Quality at Select Stream and Willamette River Locations
(see note)

Site	Very Poor	Poor	Fair	Good	Excellent
Columbia Slough (at Landfill Rd)	■				
Johnson Creek at SE 17th	■				
Swan Island Channel midpoint			■		
Willamette River at Hawthorne Bridge			■		
Willamette River at Railroad Bridge		■			

Notes regarding trends

Columbia Slough = Insufficient data to show trend

Johnson Creek at 17th = No trend

Swan Island Channel midpoint = Improving

Willamette River at Hawthorne Bridge = Insufficient data to show trend

Willamette River at Railroad Bridge = No trend

CLEAN AND HEALTHY RIVER

We will know we're making progress towards achieving a clean and healthy river if...

1. Healthier populations of native fish and wildlife use the river and streams for rearing, migration and year-round habitat.

To measure progress, we will track:	Where are we starting from in October 2004?
The percentage of sampled stream sites rated as severely impaired, marginally impaired, or acceptable for fish habitat using an index of biotic integrity every 3-5 years. (See note a).	Stream sites (21 total): 67% = Severely Impaired 33% = Marginally Impaired 0% = Acceptable

2. Water quality in monitored streams improves annually.

To measure progress, we will monitor:	Where are we starting from in October 2004?
The change in water quality at select stream and Willamette River sites which are monitored by DEQ. (See notes b and c).	See side bar for a comparison of water quality at select sites.

3. The volume and concentration of E. coli in the Willamette River is reduced.

To measure progress, we will continue to monitor:	Where are we starting from in October 2004?
The concentration levels of E. Coli in the Willamette River. (See note d).	E. Coli concentrations at Kelly Point Park in the confluence ranged from 1 to 1,300 cfu/100mL in BES samples collected between 1997 to 2000. (See note e).

4. The overall quality and quantity of tree canopy increases.

To measure progress, we will monitor:	Where are we starting from in October 2004?
The tree canopy and vegetation trends, using aerial photographs and multi-spectral imaging and other tools.	The City is updating its maps of tree canopy and vegetation including the classification of vegetation types for significant vegetation patches and Portland Parks natural areas. The first set of information is expected to be available in late fall 2004.

5. More buildings and sites are developed or redeveloped to include functional habitat and sustainable development practices.

To measure progress, we will track:	Where are we starting from in October 2004?
The number of downspouts disconnected	40,000 downspouts have been disconnected to date.
The square footage of GREENROOFS. <i>Greenroofs include both ecoroofs and roof gardens. Ecoroofs consist of thin, light weight soil and special plants that are self sustaining. Roof gardens include shrubs and trees and more human support in the form of irrigation, fertilizers and potential pesticide applications. They also require more maintenance.</i>	<u>Ecoroofs:</u> Large scale (commercial, multi-family) = 50,000 sf completed and 90,000 sf under construction/design. Small scale (mainly residential/retail) = 10,000 sf completed and 20,000 sf under construction/design. <u>Roof Gardens:</u> 140,000 sf TOTAL GREENROOFS = 310,000 sf
The tree canopy and vegetation trends, using aerial photographs and multi-spectral imaging and other tools.	Data will be available in late fall 2004.
The number of affordable housing units (built by the City) that meet PDC's green building standards.	1,600 units have been completed since the criteria were adopted in October 2000.
The number of City buildings that are LEED registered, LEED certified, or incorporate sustainable practices when the LEED certification process is not applicable. (See note f).	The City of Portland has 2 LEED registered public buildings.
The number of LEED registered and certified buildings in Portland.	33 LEED registered buildings and 4 LEED certified buildings.



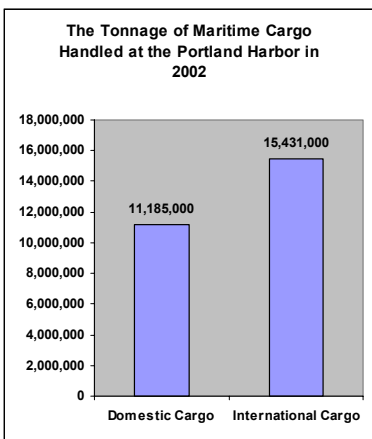
Portland has over 310,000 square feet of greenroofs.

Notes:

- a. *The index of biotic integrity, or IBI, reflects functional aquatic components of an ecosystem; aquatic species richness and composition, number and abundance of indicator species, trophic organization and function, reproductive behavior, and condition of individual organisms. "Biotic integrity" is often used to evaluate the effects of humans on native fish. It is defined as the ability to support and maintain a balanced, integrated, adaptive community of organisms that have a composition, diversity, and functional organization comparable with that of the natural habitat or region. This biotic integrity measure will need to be modified for the lower Willamette River because there are no "natural," or undeveloped examples with which to compare the lower Willamette.*
- b. *Many factors beyond Portland's control influence the quality of water and the quality of fish habitat in the Willamette River. Many sources of pollutants are upriver of Portland. The timing and volume of rainfall influences results as well.*
- c. *The Oregon Water Quality Index (OWQI) analyzes a defined set of water quality parameters and produces a composite score describing general water quality. The water quality parameters included in the OWQI are temperature, dissolved oxygen (percent saturation and concentration), biochemical oxygen demand, pH, total solids, ammonia and nitrate nitrogens, total phosphorous, and fecal coliforms. Index scores range from 10 (worst) to 100 (best). The water quality index has limitations. An index provides only a summary of the data. But, the index allows users to easily interpret data and relate overall water quality variation to specific categories of impairment. The index can identify water quality trends and problem areas. It cannot determine the quality of water for all uses or all health hazards.*
- d. *Portland's Combined Sewer Overflow (CSO) Abatement Program will significantly reduce in bacteria levels by 2006, when the West Side Big Pipe is completed. Another drop in bacteria levels is expected to occur in 2011 when the East Side CSO Tunnel is completed.*
- e. *Willamette Watershed Characterization Report, Bureau of Environmental Services, City of Portland.*
- f. *LEED stands for Leadership in Energy and Environmental Design. LEED registered means that the project has been registered with the United States Green Building Council and aspires to achieve one of four levels of certification. Once a building has achieved certification, the building goes from being LEED "registered" to LEED "certified". In the case of projects where the LEED standards are not applicable, the Office of Sustainable Development is developing Tenant Improvement and Operations and Maintenance guidelines.*



Metals manufacturing company



PROSPEROUS WORKING HARBOR

We will know we're making progress toward achieving a prosperous working harbor if...

- 1. The number of regional jobs that are supported by manufacturing and distribution firms in the working harbor and Columbia Corridor increases.**

To measure progress, we will track:	Where are we starting from in October 2004?
The number of regional jobs supported by manufacturing and distribution firms in the working harbor and Columbia Corridor industrial areas, taking into account the "multiplier effects" of high industrial wages and inter-firm trade. (See notes a and b).	Total covered employment in 2002 of manufacturing and distribution firms in the working harbor and Columbia Corridor industrial districts was 47,537. These firms supported approximately one in seven jobs (125,500) in the six-county metro area, based on US Bureau of Economic Analysis RIMS II regional multipliers for 2000.

- 2. Portland's established and emerging industries grow.**

To measure progress, we will track:	Where are we starting from in October 2004?														
The job growth in target industries and the manufacturing sector generally within the working harbor and Columbia Corridor industrial areas. (See note b).	Covered Employment in 2002 in the Portland Harbor and Columbia Corridor districts: <table border="0" style="margin-left: 20px;"> <tr> <td></td> <td style="text-align: right;"><u>Jobs</u></td> </tr> <tr> <td>Manufacturing</td> <td style="text-align: right;">20,468</td> </tr> <tr> <td>Target Industries</td> <td></td> </tr> <tr> <td> Metals Mfg.</td> <td style="text-align: right;">6,908</td> </tr> <tr> <td> Transp. Equipment Mfg.</td> <td style="text-align: right;">3,221</td> </tr> <tr> <td> High Tech Mfg.</td> <td style="text-align: right;">2,086</td> </tr> <tr> <td> Distribution & Logistics</td> <td style="text-align: right;">27,069</td> </tr> </table>		<u>Jobs</u>	Manufacturing	20,468	Target Industries		Metals Mfg.	6,908	Transp. Equipment Mfg.	3,221	High Tech Mfg.	2,086	Distribution & Logistics	27,069
	<u>Jobs</u>														
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- 3. The maritime tonnage of goods handled in the working harbor increases.**

To measure progress, we will track:	Where are we starting from in October 2004?
The tonnage of international and domestic cargo that moves through the harbor, using US Army Corps of Engineers data. (See notes c and d).	International cargo (imports and exports) handled in the working harbor in 2002 was 15,431,000 short tons and domestic cargo was 11,185,000 short tons (US Army Corps of Engineers).

4. The mobility of freight traffic (trucks and rail) improves through the region.

To measure progress, we will track:	Where are we starting from in October 2004?
The change in hours of truck and rail delay for the Metro area. <i>(See note b).</i>	This measure will be developed in coordination with the Freight Master Plan process underway in 2004-2005.



Freightliner has expansion plans for Swan Island.

5. Private capital investment increases in the working harbor and Columbia Corridor industrial areas, especially on cleanup sites.

To measure progress, we will track:	Where are we starting from in October 2004?
The increase in assessed improvements value and the square footage of new development (tracked by new building permits) on sites in the working harbor and Columbia Corridor industrial areas.	The market value of improvements on all properties in the working harbor and Columbia Corridor industrial districts was \$5,605,376,000 in March-July 2004 (Multnomah County Assessment & Taxation, all real value accounts).
DEQ cleanup and investigation sites specifically. <i>(See note e)</i>	The market value of improvements on the 205 cleanup and investigation sites tracked by Oregon Department of Environmental Quality in these districts was \$1,989,330,000 in March-July 2004.

6. Local permitting time and complexity is reduced.

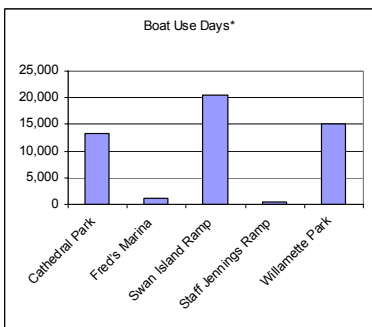
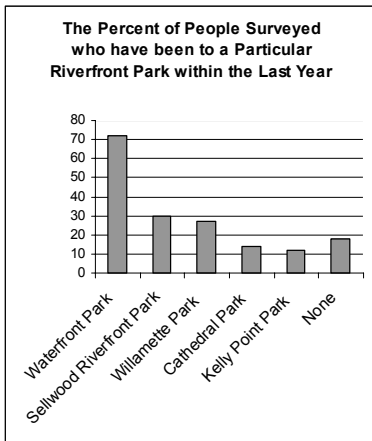
To measure progress, we will track:	Where are we starting from in October 2004?
The decrease in the average number of days it takes to process permits. <i>(See note f).</i>	This has not been measured before.

Notes:

- a. *There are two reasons why high wages create high multipliers. First, "indirect" jobs are created because employees of the harbor firm spend much of their income locally, and if they are paid more, that supports more jobs. Second, "induced" jobs are created from business purchases (supplies and contractors) from other local firms, and if the industry buys more locally, they support more jobs.*
- b. *All of the listed indicators are heavily influenced by conditions beyond the control of the City. Changes in global and national economic conditions beyond local control could significantly affect these measures, especially as a result of business cycles. Other indicators that can be more closely attributed to the City's performance should be considered in addition to or as alternatives to these indicators.*
- c. *Industrial and cargo diversity have been selected as indicators because it has been recognized that, given Portland's relatively small market population, a range of competitive niche markets improves local industrial and maritime vitality and resilience in economic downturns. Manufacturing growth is also an indicator of global competitiveness.*
- d. *Weight is a more useful measure of maritime cargo, while value is more useful for measuring air cargo (high value, low weight). In addition, available data on maritime cargo value is less complete.*
- e. *Increases in assessed improvement value are also an indicator of property tax benefits and regional employment impacts are an indicator of income tax benefits.*
- f. *Permitting time varies by multiple types of permits that are not comparable. This measure will need more discussion.*



A boat launch at Willamette Park



*Use days equal the number of boats that used a site each day of the year.

OMSB 200 Triennial Survey

PORTLAND'S FRONT YARD

We will know we're making progress toward achieving an inviting and active "front yard" if...

1. The use of riverfront trails and parks increases.

To measure progress, we will survey:	Where are we starting from in October 2004?
Riverfront trail usage (seasonally, every 3-5 years).	Eastbank Esplanade statistics 2002-2003: Bike use increased 61% from 5,019 to 8,078. Pedestrian use decreased 2% from 10,939 to 10,728. A public survey has not been conducted before.
Riverfront park usage (seasonally, every 3-5 years).	See side bar for percentage of people interviewed about riverfront park use.
User satisfaction (seasonally, every 3-5 years). (See note a and c)	This has not been measured before.

2. More people can travel conveniently from their neighborhoods to the river.

To measure progress, we will survey:	Where are we starting from in October 2004?
Whether people feel they have convenient, continuous access to the riverfront (via public transit, bike, car, or on-foot) from their neighborhoods. (See note b)	This has not been measured before.

3. More people experience being out on the water.

To measure progress, we will survey:	Where are we starting from in October 2004?
How often people have been out on the river in the last year.	48% of people interviewed in a 1999 survey had been out on a boat on the Willamette River in Portland during the last five years (see note c).
About the boating facilities people use. We will also use Oregon State Marine Board (OMSB) statistics for boat ramps.	A telephone survey on which facilities people use has not been conducted before. See side bar for the results of the OMSB 2002 Triennial Survey on motorized boat launch usage.

4. The number of days when it is unsafe to swim in the Willamette River decreases.

To measure progress, we will continue to monitor:	Where are we starting from in October 2004?
Concentration levels of E. Coli in the river. (See note e).	E. Coli concentrations at Kelly Point Park in the confluence ranged from 1 to 1,300 cfu/100mL in BES samples collected between 1997 to 2000

5. Gaps in the greenway trail are filled.

To measure progress, we will track:	Where are we starting from in October 2004?
The increase in the miles of trail completed based on the Greenway Trail alignment in the Willamette Greenway Plan.	As of September 2003, approximately 31 miles (76%) of the trail network had been implemented in accordance with the plan. Two miles (5%) are in the planning stages. The remaining trail gaps represent approximately eight miles (19%) of the total network.

6. Public river access increases.

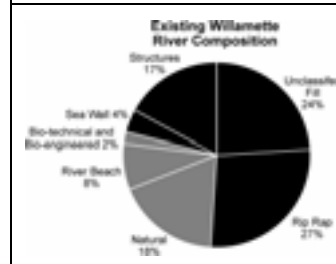
To measure progress, we will track:	Where are we starting from in October 2004?
The number of acres of riverfront parks	276
The number of public streets that allow access to a public space on the river.	This has not been measured before.
Off-street Greenway Trail miles along the river.	10.9 miles
The number of accessible riverfront beaches	3 (McCarthy Park, South Waterfront Park, Sellwood Riverfront Park)

7. The amount of riverbank habitat restored on public and private land increases.

To measure progress, we will track:	Where are we starting from in October 2004?
The increase in riverbank that is restored or in a natural state on both public and private land.	28% of the riverbank is either natural, a river beach, or bio-technically engineered. (See note d and side bar.)



The newly completed McCormick Pier Walkway.



Notes:

- A seasonal survey could include observational data as well as data related to demographics, mode of transportation, purpose of visit, satisfaction levels, activities, duration of visit, etc. The content, methodology and timing of the proposed survey have not yet been developed. Similarly, the cost of performing this survey has not yet been calculated.
- The City proposes to conduct a telephone survey of approximately 20-30 questions every three to five years to gauge public perceptions related to River Renaissance. The content, cost, methodology and timing of the proposed telephone survey have not yet been developed.
- Gilmore Research Group conducted the survey called "Portland Citizens and Individual Efforts To Improve Local Water Quality" in September 1999.
- Natural riverbank = relatively undisturbed banks composed of rock outcrops or native earth material. River beach = shallow shoreline (grade of 20 percent or flatter) that consists of sand, silt, fine gravel, or other sedimentary deposits.
- Portland's Combined Sewer Overflow (CSO) Abatement Program will result in a significant reduction in bacteria levels in 2006, when the West Side Big Pipe is completed. Another drop in bacteria is expected to occur in 2011 when the East Side CSO Tunnel is completed.

VIBRANT WATERFRONT DISTRICTS

We will know we're making progress towards achieving vibrant waterfront districts and neighborhoods if...

- 1. An increasing number of district residents, workers and shoppers perceive that waterfront commercial and residential districts are enjoyable places to live, work and visit.**



Sidney, Australia

To measure progress, we will track:

Where are we starting from in October 2004?

The perceptions of Portland residents about the quality of development, amenities and public spaces in waterfront areas through a periodic telephone survey. (See notes a and b).

This has not been measured before

- 2. More private and public development activities contribute directly and indirectly to the vibrancy of the waterfront as a place for public use and enjoyment as well as development and investment.**



Vancouver, BC

To measure progress, we will track:

Where are we starting from in October 2004?

The quantity, nature and quality of new development projects along the river.

This has not been measured before

Notes:

- To know we are making progress towards achieving greater vitality in waterfront residential and commercial areas, we need indicators that get at the quality of development and redevelopment, in addition to indicators of production (e.g., number of new amenities or access points added). Surveying public perceptions of quality is an effective means of measuring this.*
- The City proposes to conduct a telephone survey of approximately 20-30 questions every three to five years to gauge public perceptions related to River Renaissance. The content, methodology and timing of the proposed telephone survey have not yet been developed. Similarly, the cost of performing such a survey has not yet been calculated.*



Charles River, Boston, MA

PARTNERSHIPS, LEADERSHIP AND EDUCATION

We will know we're making progress toward achieving effective and enduring partnerships, leaderships and education if...

1. More Portlanders take part in activities at home and in the community that contribute to River Renaissance goals.

To measure progress, we will track:	Where are we starting from in October 2004?
The number of downspouts disconnected	40,000 downspouts have been disconnected to date.
The number of people who have signed up for River Renaissance Calendar activities (by topic and type of activity). (See notes a and b.)	Since people sign up for these events through different organizations, we will need to track a selection of the activities such as Paddle Oregon, Know Ivy Day, etc.

2. A growing network of partner businesses, schools, community groups and nonprofit organizations engages the community in river-related activities.

To measure progress, we will track:	Where are we starting from in October 2004?
The number of organizations that are featured in the River Renaissance Calendar.	58 to date.

3. An increasing number of Portlanders receive the River Renaissance Calendar and visit the River Renaissance website.

To measure progress, we will track:	Where are we starting from in October 2004?
The number of calendars sent by mail and email.	For 2004: the calendar has been mailed to 1500 people for each production. There are approximately 65 business partners and they share the calendar to 30,000 people via email.
The number of visitors to the River Renaissance website. (See note a).	For 2004: Unique Visitors = 9,487 Visitors who visited once = 8,028 Visitors who visited more than once = 1,459



River Renaissance Calendar



The Clean Rivers Education Program

4. The number of students participating in school assemblies and activities to learn about the economic, environmental and urban roles of the Willamette River increases.

To measure progress, we will track:	Where are we starting from in October 2004?
The number of students that hear presentations or are involved in fieldwork through BES' Clean River Program. (See note b).	The Clean Rivers Education Program reached 10,000 students in 2003.

5. Cooperative efforts between upstream and downstream communities are enhanced.

To measure progress, we will track:	Where are we starting from in October 2004?
The number of times Portland engages in discussion, exchanges information or plans joint projects (trail connections, freight projects, clean water projects) with upstream and downstream jurisdictions.	This has not been measured before.

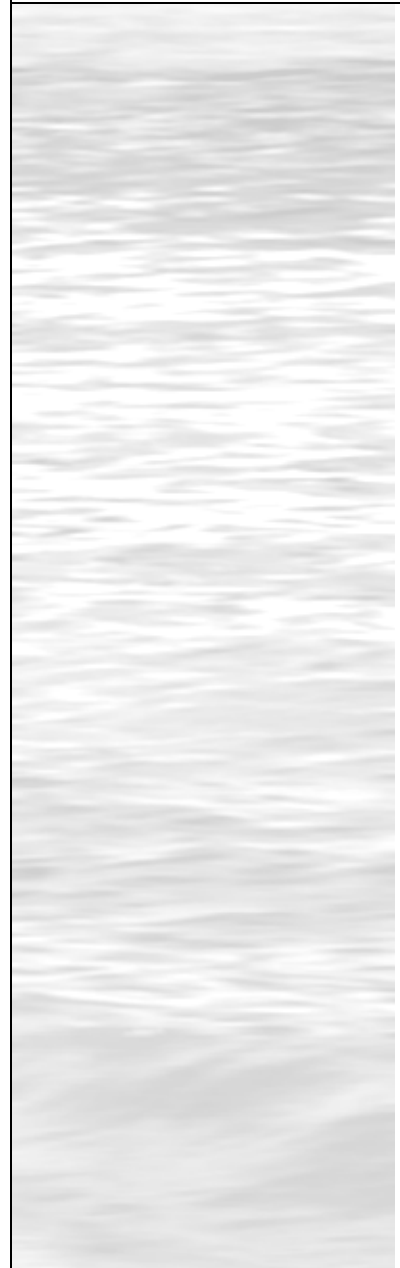
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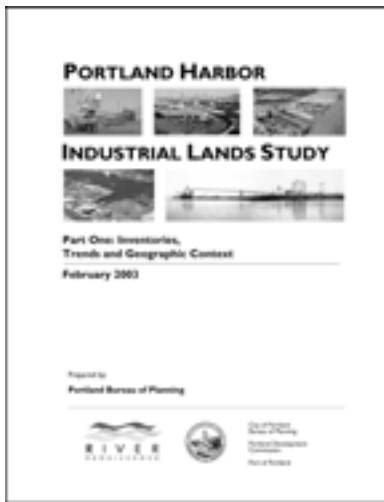
- a. *Unique Visitors – the number of people who visited the River Renaissance website. This number equals the number of visitors who visited once plus the number of visitors who visited more than once.*
- b. *Downspout disconnect data provided by the Bureau of Environmental Services.*

Action Agenda

A P P E N D I X

E





The PHILS study has provided valuable information on the Portland Harbor.



The Downspout Disconnection Program is an innovative and non-regulatory solution to managing stormwater.



A commitment by City leaders to sustained action is key to the long-term success of River Renaissance. This proposed action agenda outlines the City’s current and committed work program and some future actions, organized by *River Renaissance Vision* theme.

Current/committed projects are those that are underway or are funded (at least partially) through June 2005. Future actions are projects the City knows are important to do to achieve the *River Renaissance Vision*, but are not yet scoped, prioritized or funded.

This action agenda has emerged from previous planning projects, conclusions from the *Willamette River Conditions Report* (Appendix G), comments on the July 2004 draft *River Renaissance Strategy*, and discussions among City staff and with the community. The list will continue to be revisited and refined as the understanding of River Renaissance issues and aspirations become clearer.

Although many projects are, by design, integrated across two or more *River Renaissance Vision* themes, most projects are only listed under the theme that it addresses most significantly. Following each action are check marks that indicate all of the themes that the project addresses.

Many of these actions will clearly address the multiple *River Renaissance Vision* theme areas of river health; harbor economy; river access and recreation; vibrancy of waterfront communities; and partnerships, leadership and education. All involve community members and/or other agency partners. Some of the projects may need further scoping to ensure that multiple themes are addressed. In many cases the actions will leverage the City’s investments in previous work and provide useful lessons that can be applied to other projects in the future.

Numerous types of actions are included in this action agenda: research and analysis; capital improvement; on-the-ground restoration; design; regulatory development, simplification or clarification; internal capacity building; regulatory compliance; planning; land acquisition; watershed management; advocacy; partnerships; and, public education and engagement. Achieving River Renaissance will require the full complement of actions to be successful.

A number of these actions are highlighted in the body of this *River Renaissance Strategy*. Each year, the City will develop an integrated River Renaissance work plan that includes a package of actions selected to make progress in each vision theme. As each effort is pursued, this strategy can serve as a touchstone to ensure that we stay true to the *River Renaissance Vision* and guiding principles that exemplify River Renaissance thinking.



The Springwater on the Willamette Trail provides river access and manages stormwater.



The River Renaissance Initiative worked with the nonprofit group “Headwaters to Ocean” to take people out on the Willamette River.



**Clean and Healthy River
Current/Committed (2004-2005)**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Research and Analysis					
Develop an integrated data collection and monitoring program to improve the effectiveness of watershed protection actions and track progress towards watershed health.	✓				✓
Complete a study to better estimate the true cost of managing urban stormwater.	✓				✓
Complete the update of Portland's inventory of significant natural resources. Address streams and drainages, wetlands and riparian resources, and upland wildlife habitat for the Willamette and Columbia River corridors and tributary watersheds.	✓		✓		✓
Continue to study the value of the ecosystem services provided by trees, streams, and natural areas compared to the costs of using mechanized approaches to provide those same services.	✓				✓
Continue to document sub-yearling salmon, cutthroat, and lamprey habitat use and travel time.	✓				✓
Complete the evaluation and control of potential upland sources of contamination to the City stormwater conveyance system. The contamination may adversely affect sediment and surface water quality in Portland Harbor. This work will lead to the identification of parties directly responsible for the contamination, and will be key to preventing future recontamination of the sediments.	✓	✓			✓
Watershed Management					
Complete and adopt the City's watershed management plans.	✓				✓
Clarify and streamline the environmental regulations of the Portland Zoning Code and related procedures to improve understanding, implementation, and enforcement for property owners and city staff.	✓	✓	✓	✓	✓
Building Capacity					
Develop pilot projects to remove stormwater from the sewer system in the Taggart area of southeast Portland through the use of on-site stormwater management strategies.	✓				✓



**Clean and Healthy River
Current/Committed (2004-2005)**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Capital, Restoration and Acquisition					
* Promote the continued implementation of the green streets program that target streets that contribute the most runoff volume and pollutants to the stormwater system or those that provide the examples of innovative site design options.	✓			✓	✓
Expand programs to promote the planting of appropriate trees and native vegetation to intercept and filter stormwater, moderate air temperature and provide habitat.	✓		✓	✓	✓
Purchase property through the willing seller acquisition and other programs to reconnect streams with their floodplains, avoid property damage and provide habitat for fish, birds and other wildlife.	✓		✓	✓	✓
Implement stream channel and riverbank restoration projects, as called for in the Watershed Management Plans, to improve water quality, reduce erosion, create fish and wildlife habitat, and, where appropriate, provide public access to rivers and streams.	✓		✓	✓	✓
Continue work on the Combined Sewer Overflow Project to significantly reduce sewer overflows into the Willamette River by 2011.	✓		✓		✓
Advance the cleanup of Portland Harbor and the agreement with the federal, state and tribal Natural Resource Trustees on natural resource damages in the area.	✓	✓	✓		✓
* Partner with Rejuvenation Inc. to implement innovative stormwater treatment at their 10,000 sq. ft. warehouse in Northwest Portland. The project will demonstrate creative approaches to stormwater management at highly constrained sites and provide much needed additional capacity for the City's combined sewer system.	✓	✓			✓
* Begin construction of recreation and watershed improvements at Westmoreland Park under the Water Resources Development Act (WRDA). WRDA provides a 50 percent federal cost share for planning and a 65 percent cost share for construction. This project will restore habitat and provide upstream fish passage for juvenile salmon while improving play structures and the aesthetic quality of the park.	✓		✓		✓

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**Clean and Healthy River
Future Actions**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Research and Analysis					
Develop and adopt methodologies to factor in the long-term watershed health costs and benefits of urban development, redevelopment, and infrastructure in public decision-making.	✓				✓
Study the ways that wildlife use the river corridor and provide recommendations for improving habitat and nature-based recreation opportunities along the river.	✓		✓		✓
Develop a better understanding of the pathways of groundwater flow, how much flow it contributes to the Willamette River and the quality of the water.	✓				✓
Identify the point and nonpoint sources of elevated temperatures and sediment levels in streams and the Willamette River.	✓				
Identify the ecological risks posed by toxic substances and sediments in Portland Harbor.	✓	✓			✓
Amend the Greenway Design Guidelines using bank treatment examples from the 2001 Willamette Riverbank Design Notebook.	✓	✓	✓	✓	✓
Watershed Management					
*Update and improve City programs to protect, conserve and restore significant natural resources and habitats as part of a comprehensive watershed management strategy, including education, incentives, regulation and technical assistance.	✓				✓
Develop a street-tree system plan to provide guidance to the selection, planting and preservation of trees within rights-of-way.	✓		✓	✓	✓
Revise the <i>Stormwater Management Manual</i> to incorporate protection measures identified in watershed management plans.	✓				✓
Determine if the <i>Stormwater Management Manual</i> can be submitted as an element of compliance with the Endangered Species Act requirements.	✓				✓
* Provide additional funding to educational, technical assistance and incentive programs to help property owners adopt resource efficient, low impact development approaches and innovative stormwater management.	✓	✓		✓	✓



**Prosperous Working Harbor
Current/Committed (2004-2005)**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Research and Analysis					
* Establish and implement an urban renewal district to assist industrial expansion and redevelopment along the working harbor and achieve other River Renaissance goals.	✓	✓	✓		✓
Conduct a study to compare the public and private costs associated with brownfield and greenfield development.		✓			✓
Develop an industrial lands atlas that analyzes the industry mix, land use patterns, development ready land, and performance of Portland's industrial districts.		✓			✓
Planning, Design and Code Improvement					
Improve regulatory effectiveness through the City's Regulatory Improvement Project, the Streamlining Agreement and related efforts.	✓	✓			✓
* Update and improve the clarity and workability of the greenway overlay zones, including refining the definition of river-related and river-dependent uses.	✓	✓	✓	✓	✓
Complete Portland's <i>Freight Master Plan</i> to improve the truck capacity and mobility of the street and highway system.		✓			✓
Amend Portland's zoning code to comply with Title 4 of Metro's Urban Growth Management Functional Plan for regionally significant industrial areas.		✓			
Building Capacity					
Seek federal appropriations and other program funding to support freight improvements and pollution cleanup where the source is unknown.	✓	✓			✓
* Work with the parties involved in the Portland Harbor Superfund cleanup to achieve an efficient and cost effective investigation and cleanup, thus encouraging continued economic investment and development in the Harbor.	✓	✓			✓

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**Prosperous Working Harbor
Current/Committed (2004-2005)**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Advocacy					
Advocate for continued state emphasis on freight mode improvements through the Oregon Transportation Investment Act and passenger and freight-rail initiatives.		✓			✓
Support implementation of the I-5 Freeway and rail system improvements recommended by the Portland/Vancouver I-5 Transportation and Trade Corridor Partnership.		✓			✓
Develop public/private partnerships to support increased truck and rail freight transportation improvements such as ongoing I-5 Freeway improvements.		✓			✓
Capital Improvements					
Continue implementing the industrial development strategies outlined in the 2002 Strategy for Economic Vitality.		✓			✓
* Expand Portland's employment opportunity sites portfolio in the working harbor and Columbia Corridor, including development feasibility analysis, permitting assistance, and infrastructure planning.		✓			✓



**Prosperous Working Harbor
Future Actions**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Research and Analysis					
Develop a systematic approach to consider short- and long-term economic costs and benefits of environmental regulations and capital improvements.	✓	✓			✓
Develop and implement strategies to promote target industries, including distribution and logistics, metals and transportation equipment, technology and silicon, and sustainable industries.		✓			✓
Planning, Design and Code Improvement					
Revise floodplain regulations and balanced-cut-and-fill rules to facilitate environmental clean up, habitat protection and restoration, redevelopment projects and improve floodplain management.	✓	✓	✓	✓	✓
Develop an area-specific approach to coordinate and integrate natural resource conservation planning with the unique characteristics of the Columbia Corridor, such as regionally significant industrial development, freight distribution, and hydrology/managed floodplain.	✓	✓			✓
Partnerships					
Create and implement approaches to improve education, training, and job placement programs to develop and sustain a skilled industrial labor force.		✓			✓
Capital and Restoration					
* Implement the Freight Master Plan recommendations for priority freight transportation improvements in the working harbor and Columbia Corridor.		✓			

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**Portland's Front Yard
Current/Committed (2004-2005)**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Research and Analysis					
Finish the feasibility study for the Red Electric Trail to connect Willamette Park on the river to neighborhoods in Washington County.			✓		✓
Capital and Restoration					
Build the Holman Building boathouse and dock near OMSI.			✓	✓	✓
Connect neighborhoods to the river by building pedestrian bridges over Johnson Creek, McLoughlin Blvd. and the Union Pacific Railroad			✓	✓	
Build a canoe launch on the Columbia Slough at Kelley Point Park.			✓		
Develop watershed preservation and trail development strategies for the recently donated Lakeman-Orkeny property.	✓		✓		✓
Partnerships					
Coordinate with neighboring jurisdictions and Metro to fill gaps in the 40 Mile Loop Trail and related trail segments, such as the Greenway Trail and the Willamette Shore Trolley Trail.			✓	✓	✓
Planning, Design and Code Improvement					
Complete planning and preliminary design for the South Waterfront greenway setback area.			✓	✓	✓
Acknowledge and continue to build on planning efforts for the Centennial Mills site to develop a riverfront open space that recognizes the historic relationship of Centennial Mills to the working river, connects the River District with the existing trail system, enhances fish habitat, and incorporates the site's river location as a defining design element.	✓	✓	✓	✓	✓
Complete the Lents floodplain recreational and trails study.	✓		✓		✓



**Portland's Front Yard
Future Actions**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Research and Analysis					
* Conduct a study of water-based recreation needs and river facilities, from the City of Milwaukie to Portland's boundaries on the Multnomah Channel and the Columbia River.			✓	✓	✓
Capital, Restoration and Acquisition					
Upgrade existing river trail segments to meet current trail standards and user needs.			✓		
Seek funding for trails identified in the Swan Island Trails Action Plan.		✓	✓		✓
* Redevelop Ankeny Plaza in Waterfront Park upon completion of construction of the Big Pipe Project at Ankeny station	✓		✓	✓	✓
Build Crescent Park as the final component of the Eastbank Esplanade.	✓		✓	✓	✓
Complete habitat restoration projects in Westmoreland Park, Crystal Springs Park and the Oaks Bottom Wildlife Refuge.	✓		✓		✓
Build a river trail from Willamette Cove to University of Portland.			✓	✓	✓
Acquire property in Sellwood to connect the riverside Springwater-on-the-Willamette Trail to the existing Springwater Trail.			✓	✓	✓
* Design and build the South Waterfront greenway as riverfront properties develop in the district.	✓		✓	✓	✓
* Acquire ownership of Ross Island to create a wildlife refuge in the heart of the city. Finalize an agreement to transfer ownership from the current owner to the City of Portland.	✓		✓		✓
Planning and Design					
Develop a strategy to identify the highest priority land for expansion of the riverfront parks, trail, natural resource and open space system.	✓		✓		✓

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**Vibrant Waterfront Districts
Current/Committed (2004-2005)**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Research and Analysis					
* Conduct a feasibility study for a Willamette River ferry system to expand travel options across and along the river.			✓	✓	✓
Building Capacity					
Identify new financial tools to use in waterfront districts.				✓	✓
Planning, Design and Code Development					
Develop and implement a plan for Linnton that builds on the community's plan for the neighborhood and embodies River Renaissance principles and policy guidance.	✓	✓	✓	✓	✓



**Vibrant Waterfront Districts
Future Actions**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Research and Analysis					
Identify the most critical and opportune locations for river-related development and protection and restoration of natural resources on underutilized sites in waterfront districts and neighborhoods.	✓			✓	✓
Planning, Design and Code Development					
* Develop a comprehensive River Plan package that includes but is not limited to plans for riverfront communities, a update of the Willamette Greenway Plan, design guidelines and recommendations for natural resource restoration.	✓	✓	✓	✓	✓
Develop design concepts that elevate the rivers and streams as defining features, and integrate habitat and stormwater management for development in the Central City and in waterfront neighborhoods like St. Johns, North Beach, Sellwood, Johns Landing, Bridgeton/Hayden Island, Central Eastside and Lents.	✓		✓	✓	✓
* Continue with the next phase of the <i>Freeway Loop Study</i> , which will be an in-depth evaluation of the options for improving and relocating portions of the I-5 and I-405 freeways through the Central City. The next phase should advance the ideas in the study of how to provide for the needs of freight, rail, and automobile traffic to and through the Central City, the needs of the districts through which they travel, and the potential for reclaiming riverfront lands.	✓	✓	✓	✓	✓

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**Partnerships, Leadership and Education
Current/Committed (2004-2005)**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Partnerships					
Sustain the River Trust and continue implementing the Streamlining Agreement as an effective means to address issues among local, state and federal agencies.	✓	✓	✓	✓	✓
Build and sustain cooperative relationships with upstream and downstream jurisdictions to achieve mutual economic, environmental and recreational goals.	✓	✓	✓	✓	✓
Continue to participate in regional, basin-wide and statewide river efforts.	✓	✓	✓	✓	✓
Public Education and Engagement					
Continue community outreach and education strategies to engage Portland's diverse and changing communities.	✓	✓	✓	✓	✓
Continue to provide green building training and assistance through Fix-It Fairs and other means, and showcase green techniques and technologies through the Green Show of Homes.	✓			✓	✓
Building Capacity					
Coordinate programs to promote the <i>River Renaissance Vision</i> themes, provide citizens with river experiences, and increase public understanding of the breadth of river issues.	✓	✓	✓	✓	✓
* Develop a funding and partnership strategy to support River Renaissance projects and programs, drawing from a variety of public, private and foundation sources.	✓	✓	✓	✓	✓
Develop criteria for prioritizing projects within River Renaissance.	✓	✓	✓	✓	✓



**Partnerships, Leadership and Education
Future Actions**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Public Education and Engagement					
Develop analytical methods and conduct research to evaluate the effectiveness of the City's education and outreach activities related to River Renaissance.	✓	✓	✓	✓	✓
Develop a package of systematic problem-solving and prioritization tools that City staff can use in their planning processes.	✓	✓	✓	✓	✓
Refine the set of progress measures included in this strategy.	✓	✓	✓	✓	✓
Provide additional funding to educational, technical assistance and incentive programs to help residents and property owners adopt resource efficient, low impact, and innovative stormwater management practices at home.	✓				✓
Research and Analysis					
* Share progress made in advancing River Renaissance through the publication of an annual "State of the River" report.	✓	✓	✓	✓	✓
* Establish an annual River Renaissance Celebration that recognizes exemplary achievements by community partners and features citywide activities that educate and inspire the public.	✓	✓	✓	✓	✓
Create and publicize a new feature on the River Renaissance web site that expands on the River Renaissance Calendar and serves as a central information source for people wanting to get involved in river-related activities.	✓	✓	✓	✓	✓
Establish a River Renaissance Advisory Group to advise on multi-objective River Renaissance programs and projects.	✓	✓	✓	✓	✓
Establish a River Renaissance award program to acknowledge and reward innovation, partnership, and examples of projects that optimize multiple benefits.	✓	✓	✓	✓	✓

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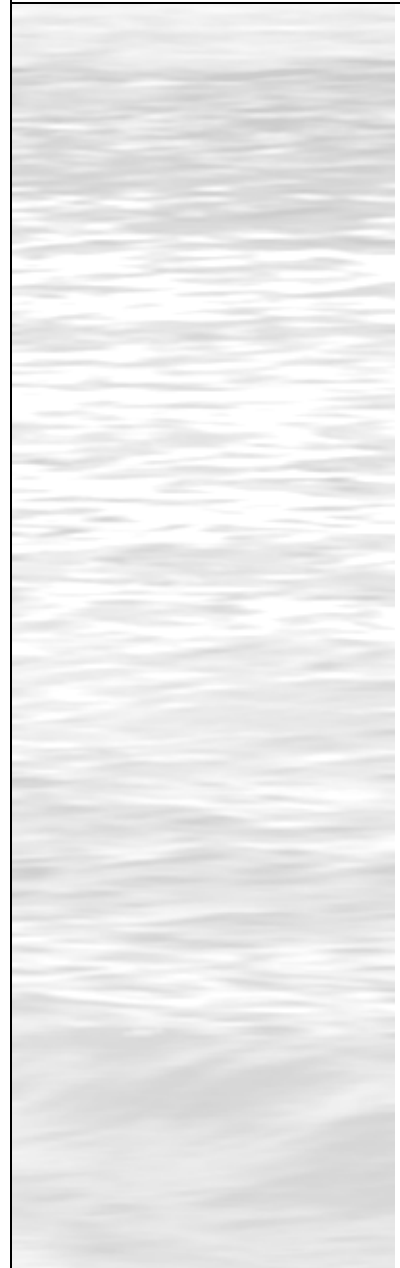
**Partnerships, Leadership and Education
Future Actions**

	Clean And Healthy River	Prosperous Working Harbor	Portland's Front Yard	Vibrant Waterfront Districts	Partnerships Leadership and Education
Building Capacity					
Coordinate the City's land acquisition programs to strategically address the five <i>River Renaissance Vision</i> themes.	✓	✓	✓	✓	✓
* Work with federal, state and local governments to establish a functional network among neighborhoods, property owners, businesses, and other interest groups with a shared goal to restore and enhance the Willamette River watershed in Portland.	✓	✓	✓	✓	✓
Evaluate and refine River Renaissance organizational structures to optimize work across bureaus and create coordinated City solutions to river- and watershed- related problems.	✓	✓	✓	✓	✓

Efforts Leading to this Strategy

A P P E N D I X

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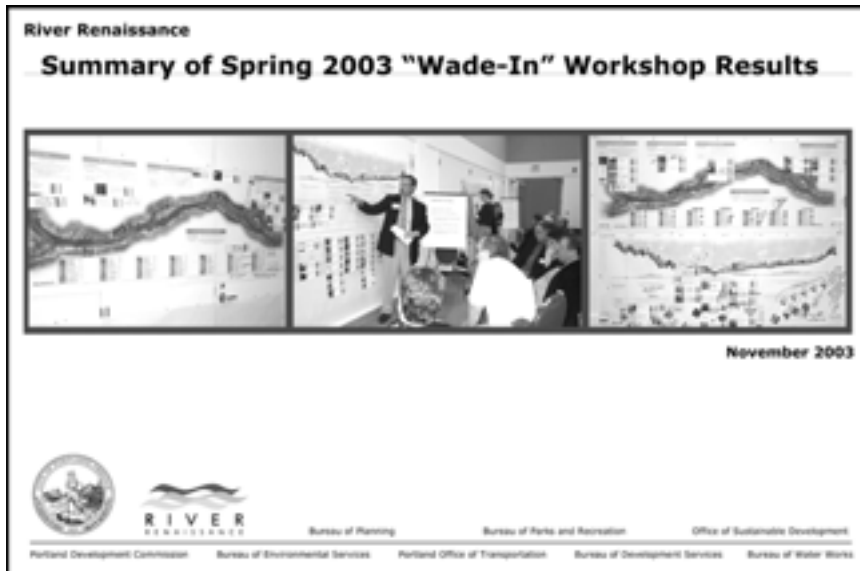


Willamette River Conditions Report

Following endorsement of the *River Renaissance Vision* by City Council in 2001, City staff embarked on research and analysis of river-related ecological, economic, recreational, and urban systems that comprise the city and the larger region. The *Willamette River Conditions Report* (Appendix G) summarizes the results of some of that work. It provides information about the existing conditions, trends and opportunities for each of the vision’s five themes, and summarizes what each system needs in order to move towards a healthier state.

The system needs identified in the conditions report present a set of challenges to be addressed over time through this *River Renaissance Strategy* and through related City programs, projects and activities. Determining how these needs are met is the task at hand: while each need cannot realistically be met everywhere, they can all be addressed in some way through a range of creative and integrated approaches, using a state-of-the-art toolkit that looks beyond traditional single-purpose solutions.

While the analysis for the conditions report was underway, the City also called upon Portlanders to share their thoughts about the river. In the spring of 2003, the public was invited to participate in a series of “Wade-In” workshops. High school students, business and industrial representatives, community advocates and Portland residents provided ideas, comments and reactions to a range of possible approaches to carry out elements of the *River Renaissance Vision*. Public input from these workshops has been valuable in helping to shape the policies and actions proposed in this strategy.

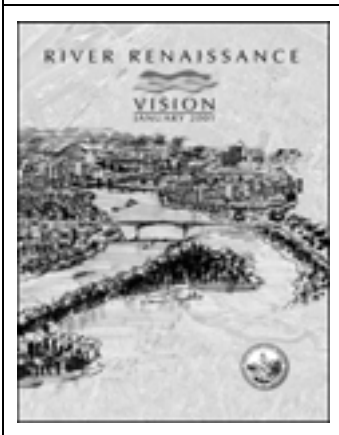


River Renaissance “Wade-In” Workshops Results

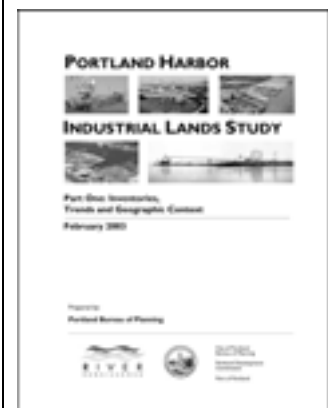
Specific Documents leading up to the River Renaissance Strategy

- River Renaissance Vision (2001) *
- Portland’s Willamette River Atlas (2001) *
- Willamette Riverbank Design Notebook (2001) *
- Portland Harbor Industrial Land Study – Parts I and II (2003) *
- Framework for Integrated Management of Watershed Health (2004)*
- River Renaissance “Wade-In” Workshop Results (2004) *
- Various Natural Resource Inventories/Studies *
- Draft Watershed Characterization Reports (2004) **
 - Willamette River
 - Columbia Slough
 - Johnson Creek
 - Tryon Creek
 - Fanno Creek

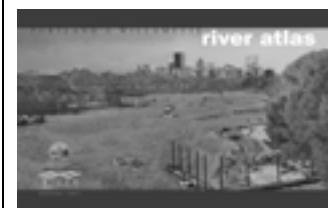
* Available online at www.river.ci.portland.or.us
 ** Available online at www.portlandonline.com/bes



River Renaissance Vision



Portland Harbor Industrial Lands Study



Portland’s Willamette River Atlas

Efforts Leading to this Strategy

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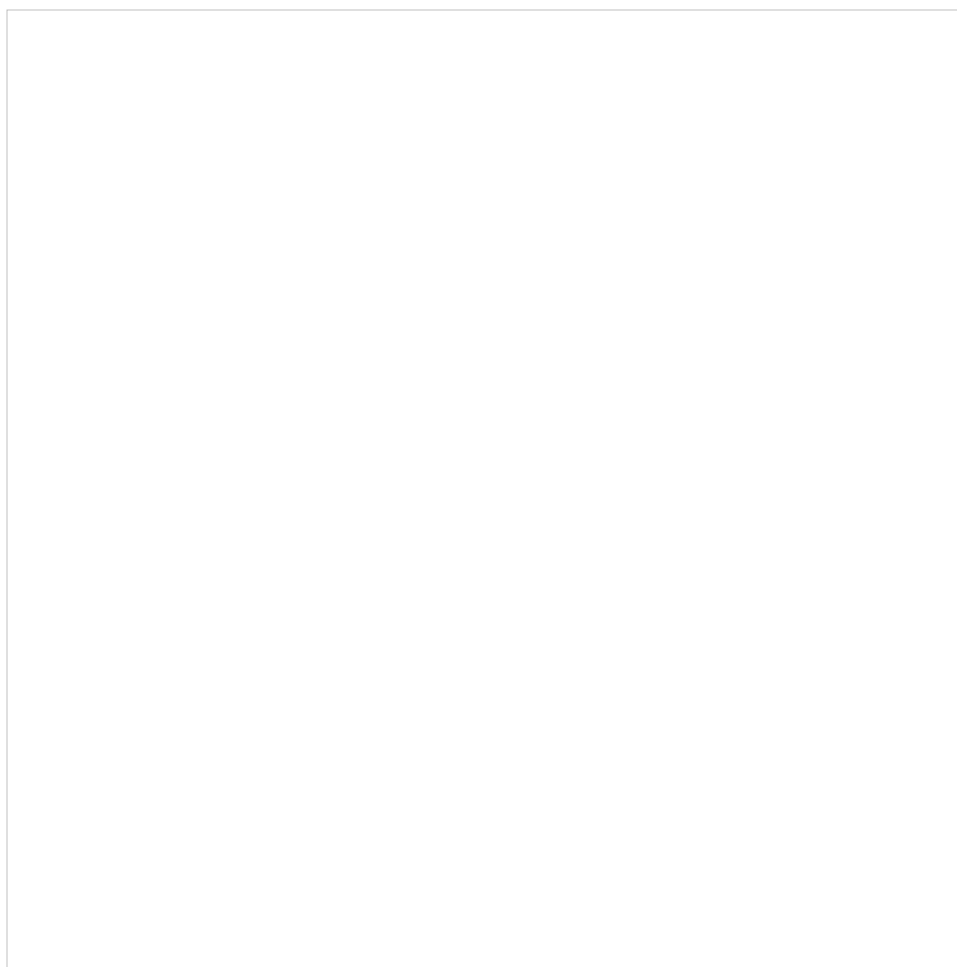
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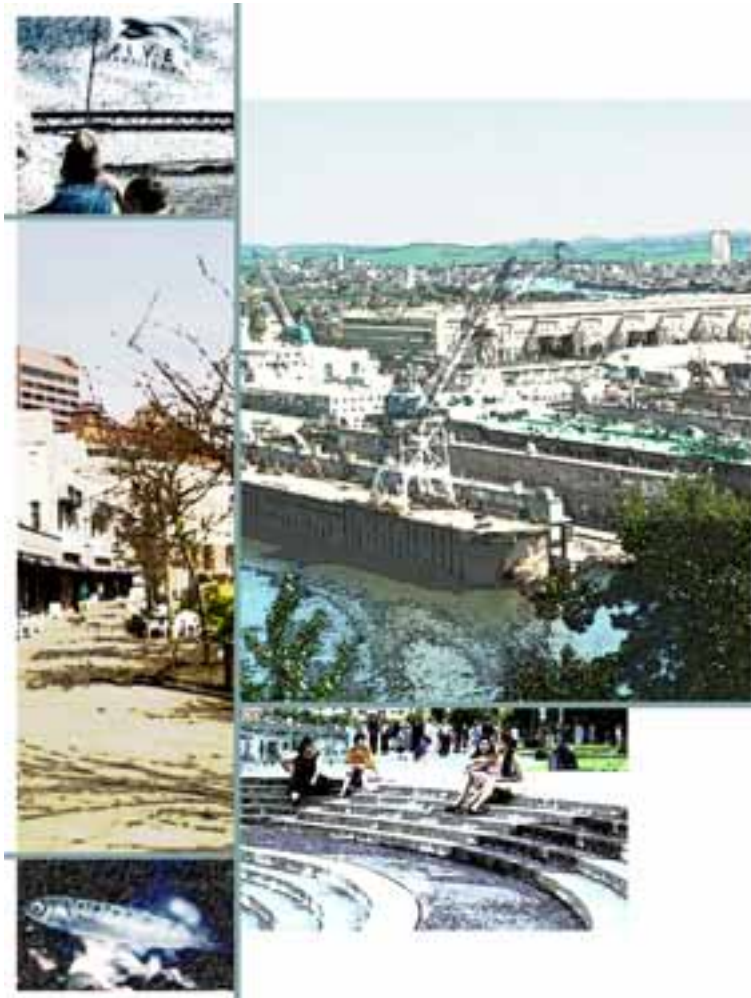
Willamette River Conditions Report



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