

# Regional Trail & Bikeway Systems Plan 2006



VANCOUVER-CLARK  
**PARKS &  
Recreation**



Clark County, Washington Territory

MacKay & Sposito, Inc.  
ENGINEERS SURVEYORS  
PLANNERS



Proud Past, Promising Future



# Regional Trail and Bikeway Systems Plan

## Clark County, Washington

Resolution No. 2006-04-05

A RESOLUTION adopting the Clark County Regional Trail and Bikeway Systems Plan 2006 "A Lewis & Clark Bicentennial Legacy Project" to be forwarded to the Clark County Department of Community Development, Long Range Planning for consideration as a part of the Clark County Comprehensive Land Use Plan.

WHEREAS, the Clark County Board of County Commissioners appreciates the efforts of the Bicentennial Committee of the Lewis & Clark Corps of Discovery, the Vancouver-Clark Parks and Recreation Department, the Public Works Department and the Vancouver-Clark Parks Advisory Commission in preparing the Clark County Regional Trail & Bikeway Systems Plan 2006, a unique comprehensive plan that highlights economic development, environmental stewardship, accessibility and social & health benefits of a pedestrian, equestrian and bikeway systems that will complement the Regional Transportation System Plan, and the Clark County Comprehensive Plan and

WHEREAS, the Clark County Commissioners know the value of walking, horseback riding, rowing and bicycling in contributing to the health and welfare of our citizens and are keenly aware that a very alarming percentage of citizens of all ages in our community are not getting adequate physical exercise; and

WHEREAS, hundreds of citizens have stepped up to the inactivity crisis and are volunteering to provide planning and program opportunities for citizens to walk, ride horseback, row, or bicycle, including the Chinook Trail Association, Vancouver Walkersports, Vancouver Bike Club, Clark County Executive Horse Council, STEPS to a Healthier Clark County Program, Discovery Walks and other members of the Southwest Washington Hospital Passport to Wellness Program; and

WHEREAS, the plan gives an overview designed to promote the funding and development of a comprehensive Clark County regional trail and bikeway systems plan; identifies high priority trail partnership projects with the Cities of Vancouver, Battle Ground, Ridgefield, Camas and Washouak; development of the Chehalis Railroad Trail and the continuation of the Salween Creek and Whipple Creek Greenway Trails, now, therefore,

BE IT ORDERED AND RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF CLARK COUNTY, STATE OF WASHINGTON, that the proposed Clark County Regional Trail & Bikeway Systems Plan 2006, "A Lewis & Clark Bicentennial Legacy Project", attached hereto and maps be scheduled for formal adoption, including an advisory recommendation from the planning commission. Such plan represents an opportunity for Clark County citizens. The Board supports the proposed Trail & Bikeway Systems Plan.

ADOPTED on April 4, 2006 and executed two hundred years to the day from when Lewis & Clark's Corps of Discovery left present day Clark County to report to the President and Congress of the United States this 6th day of April, 2006.

Attest:

*Kevin Richards*  
Clerk to the Board

Approved as to Form Only

*Christine Hester*  
Deputy Prosecuting Attorney

BOARD OF COUNTY COMMISSIONERS  
FOR CLARK COUNTY WASHINGTON

*Mark Roth*  
Mark Roth, Chair

*Betty Sue Morris*  
Betty Sue Morris, Commissioner

*Steve Stuart*  
Steve Stuart, Commissioner



Regional Trail and Bikeway System Plan 2006  
Resolution Adoption by the  
Clark County Board of County Commissioners  
Signed on April 6, 2006  
200 years from the day when Lewis & Clark Corps of Discovery  
left present-day Clark County



## FORWARD



This document represents a collaborative effort among the Clark County Transportation Department, the Clark-Vancouver Parks and Recreation Department, the Cities of Vancouver, Ridgefield, Camas, Washougal, LaCenter and Battle Ground, individual citizens, school districts, Clark County Public Health Department, non profit organizations and neighborhood associations. Every effort has been made to present a high-quality document that portrays the hard work performed by this team. Thank you to all who participated in the development of the program. Special thanks to the following people who dedicated many long hours to prepare this plan for the citizens of Clark County:

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Bruce Appleyard, SERA Inc.

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*\*For further updated information regarding trail development, please see Vancouver Clark Parks and Recreation’s Comprehensive Plan*

**CLARK COUNTY PROFILE:**

<b>Clark County fact file from 2000 census</b>		
Population	345,238	
Population in 2005*	383,000	
Projected population in 2010*	432,479	
Percentage Male	49.6	171,330
Percentage Female	50.4	173,908
Percentage under 5	7.8	26,886
Percentage 5-14 years	16.3	56,275
Percentage 15-24 years	13	44,948
Percentage 25-44 years	30.5	106,411
Percentage 45-64 years	22.6	74,920
Percentage over 65 years	9.5	32,808
People with disability	16.1	55,601

# Regional Trail & Bikeway Systems Plan

2006

## VOLUME I

Oregon & Washington Territories

Proud Past, Promising Future



Regional Trail & Bikeway  
Systems Plan  
2006

SECTION I  
INTRODUCTION



Proud Past, Promising Future



## SECTION I. INTRODUCTION

### A) Profile



Clark County is a beautiful place. Providing opportunities to experience this beauty through activities not dulled through a car's window is a goal worth pursuing. A well developed pedestrian and bicycle trail network increases our everyday opportunities to enjoy this spectacular part of the country. Clark County's weather is reasonably mild and these facilities can be utilized almost year round.

The popularity of outdoor recreation activities, such as walking, running, cycling, paddling and horseback riding has grown, and continues to grow in our region. Our trails not only serve as interdependent transportation amenities, but they also enhance accessibility to existing community resources by

linking neighborhoods and schools to parks, waterfronts, recreational centers and other parts of our daily lives. Regional trails also extend to include water trails for paddlers such as kayakers and canoeists. Water trails allow us to explore our local rivers in much the same way as did Lewis & Clark. This is a part of our heritage.

As Clark County commemorates the bicentennial of the Lewis and Clark Corps of Discovery in 2006 and the journey's legacy of nation-building, our county and its communities face important opportunities and critical challenges. At the same time, unprecedented population growth is pushing the urban and suburban landscape further into rural Clark County. And, along with this growth, obesity and other health issues related to sedentary lifestyles are not only being recognized as national problems, but Clark County is being recognized as having the state's highest obesity rate. Of great concern is the obesity rate among our children. Twenty-eight percent of eighth graders in Clark County are either overweight or at risk of overweight compared to 25% in Washington State.

Clark County has the opportunity to create a world-class walking and bicycling network. The League of American Bicyclists has awarded Vancouver a bronze-level designation as a Bicycle Friendly Community. A trails and bikeways network that interconnects our communities, open spaces and employment centers not only provides an obvious opportunity to leverage the accessibility to these areas, but it gives those of

us who drive everywhere an alternative to at least some of our average 10-daily car trips per household. But, more sobering is recognition that our children need these types of facilities in order to make any trips independent of their parents driving them.

This plan is a compass for strengthening and expanding our region's trail and bikeway systems plan. The goal is to develop a comprehensive vision through which Clark County, its leadership and its residents, can convey to the region the environmental, economic and societal values of an alternative transportation and recreational system that is based around two wheels, two feet, four legs, and out of doors, not in.

In order for this goal of a new legacy to be realized, this plan must be more than an elaborate graphic presentation and memorialized document that looks great on the shelf. It must be based in reality, be practical and be feasible. It must generate wide-based support in this community to be implemented. In a word, it must be realistic and ...build-able.

***B) SYSTEM VISION***

The vision for the pedestrian and bicycle trail network is "Connectivity." The system should provide enticing and safe



conversion of short car trips into desirable walking or bike trips, as well as provide opportunities for bicycle commuting of longer distances. A traditional transportation system's primary focus is mobility. A traditional Parks facilities plan's primary focus is recreational. For this to be a successful trail and bikeway systems plan, it must simultaneously be a recreational experience and be functional for mobility. Its burden is to make mobility enjoyable and attractive, while targeting to be an economic asset rather than a liability.

This system must strive to maximize the functional mobility of the network, its recreational opportunities, and the potential positive economic impact of each link. Rather than these three factors competing against one another in the visioning process, they can each be embraced to reach their maximum without compromise in one of the other two. Whether it be the entire system or just one link, it is possible to be functional, to be recreational, and to have a positive economic impact. An investment in one facility that provides alternative modes of transportation and reduces user conflicts increases property values adjacent to it, and is a positive return on investment for any public endeavor.

***C) PLAN OVERVIEW***

The Trail & Bikeway Systems Plan (Plan) is intended to guide the development and design of an interconnected trail and bikeway system within Clark County. This Plan updates the region's first trails plan which was adopted in 1992. This Plan uses the terms 'paths' and 'trails' interchangeably to describe shared off the road facilities designed exclusively for non-

shared off the road facilities designed exclusively for non-motorized usage. These facilities are real transportation alternatives, while in the past trails might have been perceived as solely for recreation use. There is a major difference between this plan and the plans of the past; this Plan will be recognized as a parks and a transportation document. The Plan will be a vital component of the larger Clark County Transportation Improvement Program (TIP). The Trail & Bikeway Systems Plan identifies the need for increased bicycling and walking opportunities which are consistent with the TIP.

This Plan is an integral part of transforming the concept of a bicycle and pedestrian-friendly system into reality. The Trail and Bikeway Systems Plan recognizes that walkways and bikeways bring enormous benefits to all residents by increasing transportation choices for walking and bicycling, as well as improving environmental conditions and the overall health of our residents and our children. The Plan provides a general guideline for developing a network of bikeways and walkways; however, currently it does not establish specific project recommendations for identified paths or trails. Therefore, this Plan provides detailed, recommended improvements to the existing and proposed regional trail corridors and to the bikeway network. The intent of this Plan is not only to offer recommended trail design standards but to ensure successful implementation. *(See Section IIIA)*



Traditional shared-use paths or trails are the foundation of a comprehensive bicycling and walking system. These regional trails obviously offer numerous aesthetic and recreational opportunities for walkers, cyclists, equestrians and paddlers. But they can also provide commuter options for walking, hiking, bicycling, skating or otherwise traveling to and from our daily destinations in Clark County. Our residents desire a safe and convenient comprehensive network in order to bicycle or walk to work or schools, go for a family bicycle ride or walk to the park or library, or simply take pleasure in walking or riding to improve their families' health.

This Plan is designed to facilitate the eventual incorporation of Trail and Bikeway Systems plans for each of the cities within Clark County. Working together with the Cities of Washougal, Camas, Battle Ground, LaCenter, Ridgefield and Vancouver, the separate but coordinated plans can establish transportation linkages in a mosaic....with natural areas, parks and green spaces. Clark County's trail system is also intended to integrate with Portland's greenways, trails, bikeway and open space systems.

#### **D) PLAN GOALS**

An updated, integrated Clark County Trail and Bikeway Systems Plan 2006 will ensure that we continue to have a document that will encourage and promote the growth of a trail system serving the needs of children, community pedestrians, bicyclists, equestrians and paddlers for generations to come. It will be a reference guide to ensure that regional trails are appropriately incorporated into the actively developing urban area, and that new development accommodates that vision in a logical and inclusive manner. The process of updating is a necessary function to keep pace with the many changes that have occurred in our community including preserving desirable trail opportunities through and within the rapid development. The plan will focus on existing trails, planned new trail issues, opportunities and constraints, funding sources, priorities and

*"This is the vision—to create a changed transportation system that offers not only choices among travel modes for specific trips, but more importantly presents these options so they are real choices that meet the needs of individuals and society as a whole. Making the vision a reality must begin now."*

USDOT FEDERAL  
HIGHWAY  
ADMINISTRATION,  
The National Bicycling and  
Walking Study, 1994

goals and standards. The Plan will also be useful and in some

cases required, for the County when applying for funding through local, regional, state, federal and private sources.

While updating a plan is always necessary, similar goals and values stay consistent with time, such as maintaining a strong transportation system, a vibrant health and recreation network, a thriving economy, and environmental sustainability. Goals and values are the framework, the backbone, and engine for a solid, sturdy and working trails plan. For this reason, the goals and values

within this document are similar to a combination of many different plans stated within the appendix. Goals are different from specific implementation strategies. Within this document, specific recommendations and implementation and funding strategies will be provided for individual trails system improvements. The goals of the Trail and Bikeway Systems Plan are categorized under each valued element below.

**Alternative Transportation, Accessibility and Mobility Element**

- A. Provide a comprehensive trail system that will interconnect the regional trail systems and transportation systems of sidewalks and bike lanes.
- B. Provide a system that will support the development of shared-use paths within one mile of every home within the urban area.
- C. Provide a balanced, multi-modal transportation system for Clark County that supports the safe, efficient movement of people and goods.
- D. Facilitate the increased use of pedestrian transportation in Clark County by ensuring that convenient, accessible and safe pedestrian facilities are provided.
- E. Facilitate the increased use of bicycle transportation in Clark County by ensuring that convenient, accessible and safe bicycling facilities are provided
- F. Coordinate with all transportation providing agencies to ensure trails are included within their plans.
- G. Coordinate with surrounding counties and cities to create a connecting system.

**Environment and Natural Resources Element**

- A. Acquire open green space and natural corridors for trail development.
- B. Promote appropriate planning and design solutions to avoid adverse environmental impacts on sensitive areas.
- C. Coordinate the development of trail and bikeway links within Clark County and surrounding jurisdictions (Metro, Columbia River Gorge Commission, US Forest Service, Washington State Dept. of Natural Resources, adjoining counties, etc.) and become a facilitator for other provider and volunteer efforts.
- D. It is the intent for these to be in compliance with the TIP Comprehensive Plan and the Arterial Atlas.
- E. Develop an interpretive, educational program for the historic and environmentally significant sites along the trail and bikeway system.
- F. Celebrate history by recognizing accomplishments made by Lewis and Clark.
- G. Discover and appreciate the area's rich beauty.

**Economic Element**

- A. Increase economic vitality of Clark County by building trails that interconnect homes and businesses.
- B. Develop and maintain a comprehensive trail and bikeway system to link with other providers.
- C. Work closely with corporate business, private developers and public agencies to incorporate trails and bikeways where feasible.
- D. Promote sensitive planning solutions and develop support services to diminish land owner concerns.

**Health and Education Element**

- A. Promote sensitive planning solutions and design, develop support services such as education, enforcement and maintenance to reduce safety hazards
- B. Provide opportunities to encourage good health through physical activity on trails.
- C. Provide a system of shared-use paths within one mile of every school.

**Recreation Element**

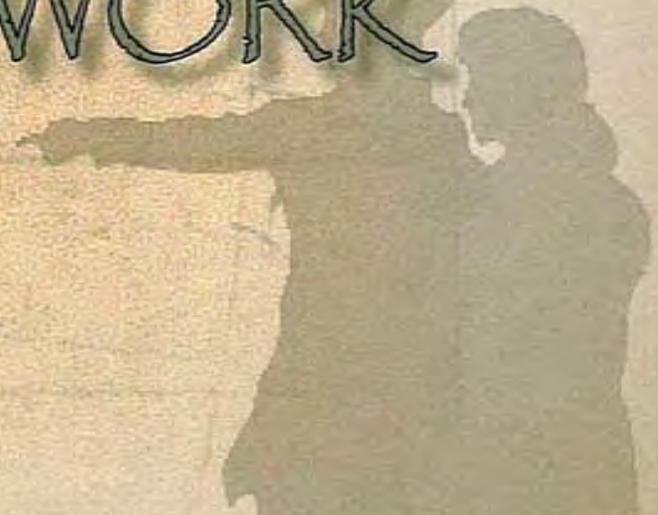
- A. Provide opportunities for walking, biking, horseback riding and running.
- B. Utilize and leverage the recreational opportunities within Clark County's open spaces and parks by connecting citizens to their homes, parks, schools, businesses and work.



- C. Provide youth with ample opportunities to recreate outside.

Regional Trail & Bikeway  
Systems Plan  
2006

SECTION II  
TRAIL NETWORK



Proud Past, Promising Future



## SECTION II. TRAIL NETWORK

### A) Overview

Clark County's new Regional Trail and Bikeway Systems Plan is an updated and comprehensive plan which was originally developed in 1992. The 2006 Regional Trail and Bikeway Systems Plan has grown to encompass 16 regional trails. There are eight other additions to the 1992 Plan; four new regional trails are planned and four previously planned regional trails have been extended. This new trail network envisions nearly 240 miles of regional trails and bikeways in Clark County and is the next step toward providing

our citizens and our visitors transportation alternatives to daily vehicle trips and safer, more accessible opportunities for a healthier lifestyle. This plan has one foot in the transportation system and one foot in the parks system and it needs both feet to work. With each mile of new trail constructed, we will better enjoy the quality of life in Clark County and continue the legacy of trail building in this part of the world bestowed on us by William Clark and Meriweather Lewis 200 years ago.



The Regional Trail and Bikeway Systems Plan is more than facilities for bicyclists and walkers. Trails in this context are a larger umbrella. Yes, this plan includes traditional sidewalks and shared-use bicycle and pedestrian paths; but it also aspires to serve the increasing needs of the very diverse population of trail enthusiasts in Clark County, such as equestrians, water paddlers, bicycle commuters, runners, skaters, recreational bicyclists, organized walkers, users of electric wheelchairs, and the children of Clark County who rely on these facilities as the only alternate travel option to their parent's car.

A well-planned and purposefully-built trail system can be another step forward in the battle against ever-increasing traffic congestion and obesity. It can also be a vehicle to preserve the opportunities to experience the wonderful natural corridors of Clark County. It can also be another economic catalyst that makes Clark County a great place to live and work.

*"the only desired  
situation for a  
settlement... on the west  
side of the Rocky  
Mountains."*

Journal of Lewis and Clark  
Voyage of Discovery

## Regional Trail and Bikeway Systems Plan

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These trails are regional because they connect people with and to the places they want to go – from residential areas to employment and commercial areas, as well as to the rural areas and open spaces we want to enjoy. Of the nearly 240 miles of regional trails and bikeways identified in this plan, 40 miles have already been built and enjoyed by a loyal following of users. These built facilities include portions of the Salmon Creek Greenway, portions of the Lake to Lake trail, the Lacamas Lake Trail, the Padden Parkway Trail and portions of the Lewis and Clark Greenway Trail (along the waterfront and near Vancouver Lake). These trails have become touchstones of our community and are proof of the positive impact of trails.



It is very important to understand that this plan is for the citizens, by the citizens. A systematic, cooperative, and collaborative approach was taken in updating the 1992 Clark County Trail and Bikeway Systems Plan. As such, the planning process included researching neighboring community plans, reaching out to the greater Clark County community through open house workshops, and initiating a Community Advisory Committee (CAC) composed of transportation alternative user groups.



**B) New Regional Trails Planned Since 1992**

In response to the Board of County Commissioners' workshop questions regarding what trails have been added to the County trails network since the 1992 plan, this synopsis of "new trails" was prepared for inclusion in this document.



**1) Livingston Mountain / Dole Valley Trail**

From Lacamas Lake Park heading northeast up to Livingston Mountain into the Yacolt Burn Forest in the D.N.R. lands and north to connect with the East Fork of the Lewis Trail east of Moulton Falls.

**2) Camp Bonneville Trail**

From the Heritage Trail north of Lacamas Lake to Green Mountain, north up to and through Camp Bonneville up to the headwaters of Salmon Creek and the eastern terminus of the Salmon Creek Trail.

**3) Battle Ground/Fisher's Landing Trail**

This follows SE 192<sup>nd</sup> Avenue corridor from the Columbia River north to cross Burnt Bridge Creek and into Hockinson following China Ditch. It crosses Salmon Creek, east of Cedars Golf Course, and traverses the rise up to Battle Ground Lake along the NE 182<sup>nd</sup> Avenue corridor to its end at Battle Ground Lake and intersection with the Chelatchie Prairie Railroad Trail.

**4) Padden Parkway Trail**

This trail that was not part of the 1992 Trail Plan, however, it was built in conjunction with a transportation project along the Padden Parkway and has proven to be a critical link in our trails network.



**5) SR502/NE 219<sup>th</sup> Avenue**

This is not one of the formal 16 regional trails, but SR502 is planning to accommodate a bicycle and pedestrian element from I-5 to Battle Ground and represents a new trail corridor worthy of representation in the plan.

***C) Trails Planned for Extension***

**6) Salmon Creek Trail**

This trail begins from the north side of Hockinson near Cedar's Golf Course along Salmon creek towards Venersburg, through Alderbrook up into the Yacolt Burn Forest on DNR lands.



**7) East Fork of the Lewis River Trail**

This trail runs from Moulton Falls east along the Lewis River corridor out to the east edge of Clark County.



**8) Whipple Creek Trail**

This trail was planned to ensure a connection from Lake River to I-5.



**9) Washougal River Trail**

This trail was planned to ensure a connection from the south end of Lacamas Lake Park over to the Washougal River along NE 3<sup>rd</sup> Avenue to N. Sheppard Road on to Washougal River Road.

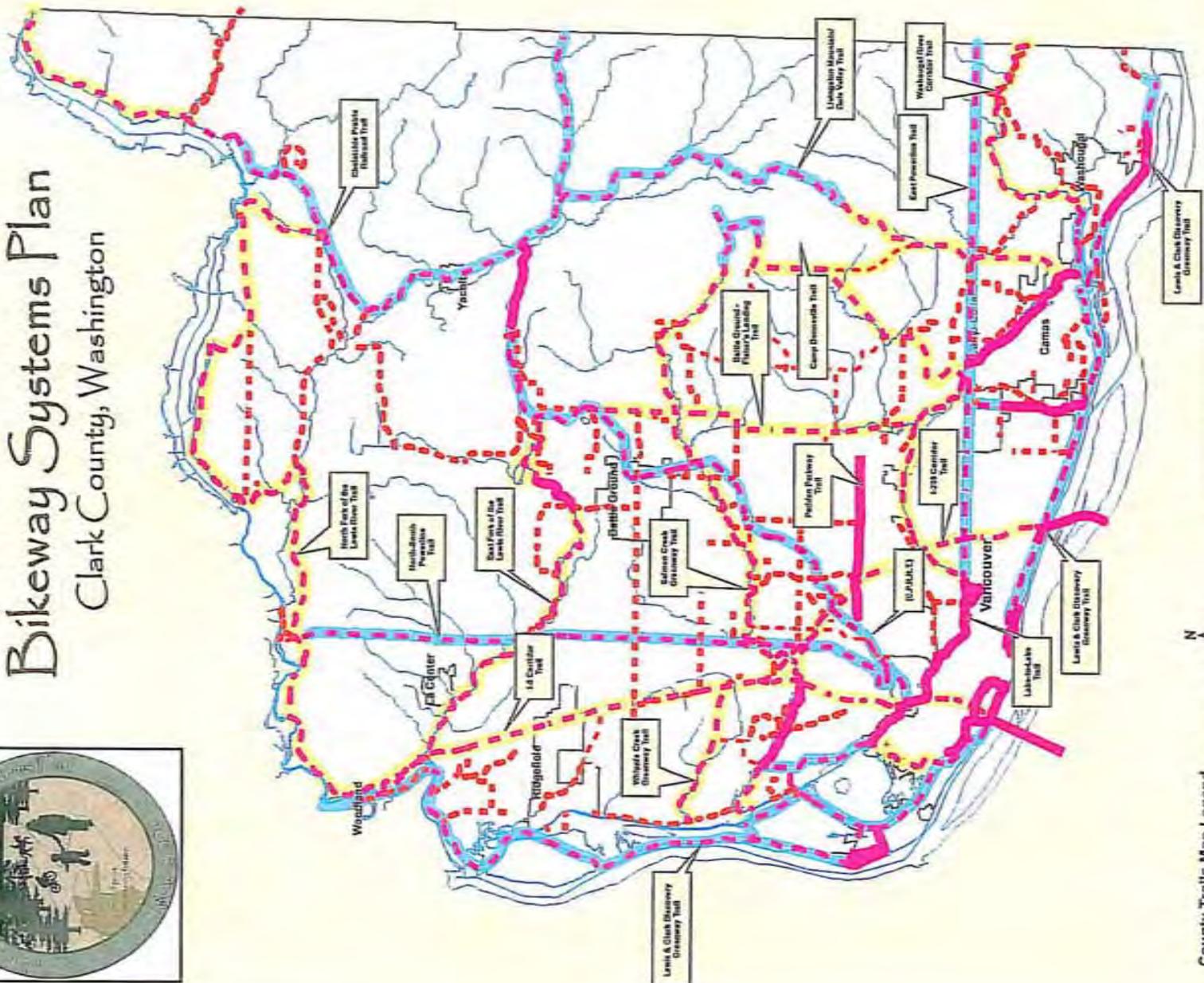






# Regional Trails and Bikeway Systems Plan

## Clark County, Washington



**County Trails Map Legend**

Trail Description	Proposed	Existing
Regional Trails		
Defined Trail Alignment		
Undefined Trail Alignment		



## 2006 Regional Trail & Bikeway Systems Plan Trail Names



1. Lewis & Clark Discovery Greenway
2. Chelatchie Prairie Railroad
3. Lake to Lake
4. Salmon Creek Greenway
5. Padden Parkway
6. I-5 Corridor
7. I-205 Corridor
8. East Fork of the Lewis River
9. Battle Ground / Fisher's Landing
10. Washougal River Corridor
11. North Fork of the Lewis River Greenway
12. Whipple Creek Greenway
13. North/South Powerline
14. East Powerline
15. Livingston Mountain Dole Valley
16. Camp Bonneville
17. Lower Columbia River Water Trail

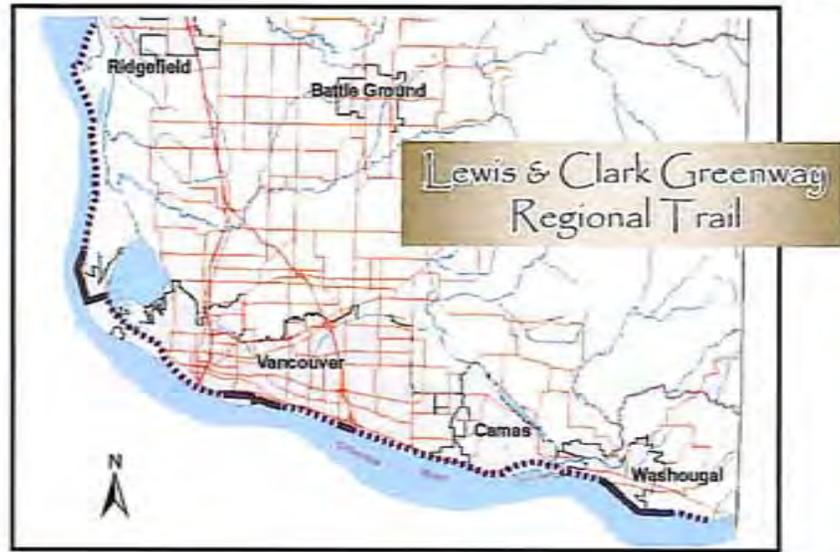


# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: Lewis & Clark Greenway Trail



### Vicinity Map



### Project Summary

**Project Number:**

**Regional Trail Name:** Lewis & Clark Greenway Trail (formerly known as Vancouver Lake Trail, Waterfront Trail, Evergreen Highway Trail)

**User Groups:** Pedestrians, Bicycles, Paddlers  
 \*Equestrian use is not permitted in the City of Vancouver

**Project Length:** 46.1 miles (9.5 miles built)

**Project Description:** This trail corridor extends from Washougal to Vancouver and on to Ridgefield following the Columbia River downstream re-tracing the route of Meriweather Lewis and William Clark 200 years ago. Along the route are several historical markers and parks and stops dedicated to their Corps of Discovery. This trail corridor is a multi-modal facility that accommodates walkers and bicyclists. Some reaches of the greenway accommodate horse riders as well. Sidewalks or bike lanes may be either separated or attached to roadways.

**Environmental Constraints:** Because of this trail's relationship to the Columbia River, some alignment alternatives may present greater shorelines, habitat and wetland permitting that may necessitate extensive preconstruction costs. Alignment alternatives analysis at sensitive areas may be necessary.

### Cross-Section Detail

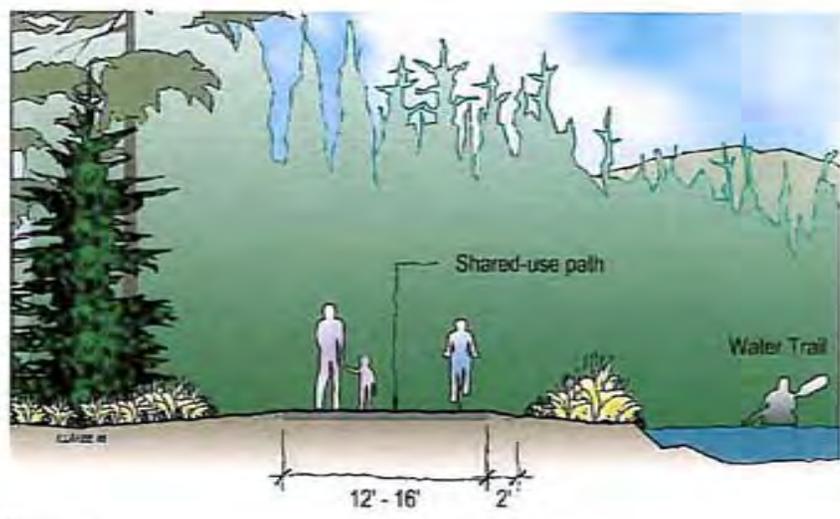
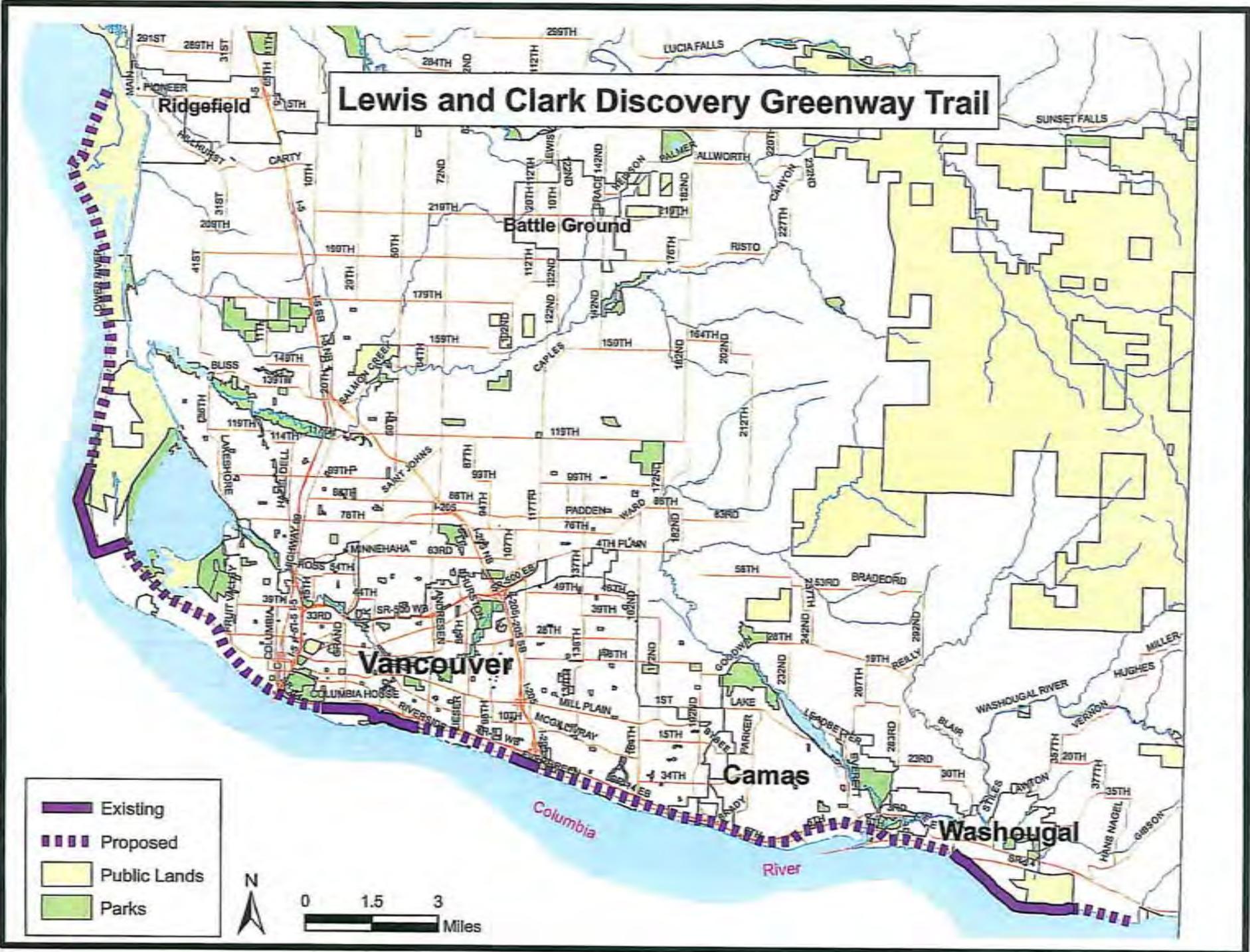


Figure 1



# Lewis and Clark Discovery Greenway Trail



## Lewis and Clark Discovery Greenway Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Capt. William Clark Park (Washougal) to Camas		8.2	3.2	A1	U					
Camas to Vancouver at the 164th Fisher's Outlook		7.4		A1	COC					
Fisher's Outlook to the Fish Hatchery (I-205)		2.4		A1	COV					
Fish Hatchery to Ellsworth trail head		0.6	0.6	A1	COV					
Ellsworth to Wintler Park		2.2		A1	COV					
Wintler Park to Marine Park (Tidewater Cove)		1.0	1.0	A1	COV					
Marine Park to Columbia Shores		1.5	1.5	A1	COV					
Columbia Shores to Esther Short Park		1.5	0.5	A1	COV					
Esther Short Park to Mill Plain		0.6		A1	COV					
Mill Plain to Fruit Valley Road		0.9		A1	COV					
Fruit Valley Road to Port of Vancouver Trail Head		3.6		A1	COV					
Port of Vancouver Trail Head to Vancouver Lake Park		3.5		A1	COV					
Vancouver Lake Park to Frenchman's Bar Park		2.7	2.7	A1	COV					
Frenchmen's Bar Park to Ridgefield Wildlife Refuge		10.0		A1	COV					
	Total	46.1	9.5							



# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: Chelatchie Prairie Railroad Trail



### Vicinity Map

Chelatchie Prairie Railroad  
Regional Trail



### Project Summary

**Project Number:**

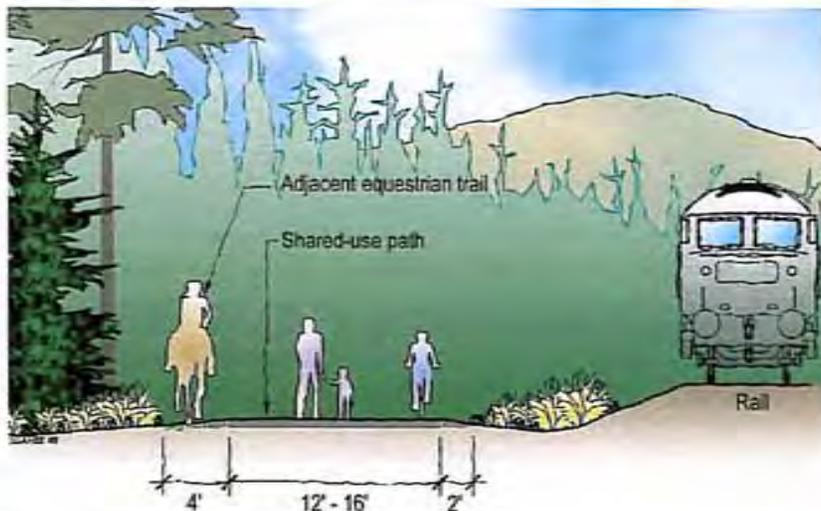
**Regional Trail Name:** Chelatchie Prairie Railroad Trail

**Project Length:** 34.2 miles (2.7 miles built, 30 miles to be built)

**User Groups:** Pedestrians, Bicycles, Paddlers, Equestrians  
\*Equestrian use is not permitted in the City of Vancouver

**Project Description:** This trail follows the historic rail line along a serpentine route at a slight grade of the historic Chelatchie Prairie railroad. It curves its way from corner to corner in Clark County starting near its urban core where Burnt Bridge Creek flows into Vancouver Lake. It traverses northeast through Hazel Dell, Orchards, Brush Prairie, Battle Ground Lake and along the East Fork of the Lewis River past Moulton Falls into Amboy and Chelatchie Prairie terminating just a few miles from Yale Reservoir at the original site of the paper mill it used to serve in Chelatchie Prairie. This trail follows the historic rail line. It provides a complete picture of Clark County, its watersheds, its historic communities, and its abundant natural beauty. Portions of the trail are completely enclosed by a tree canopy in the northern reaches.

### Cross-Section Detail



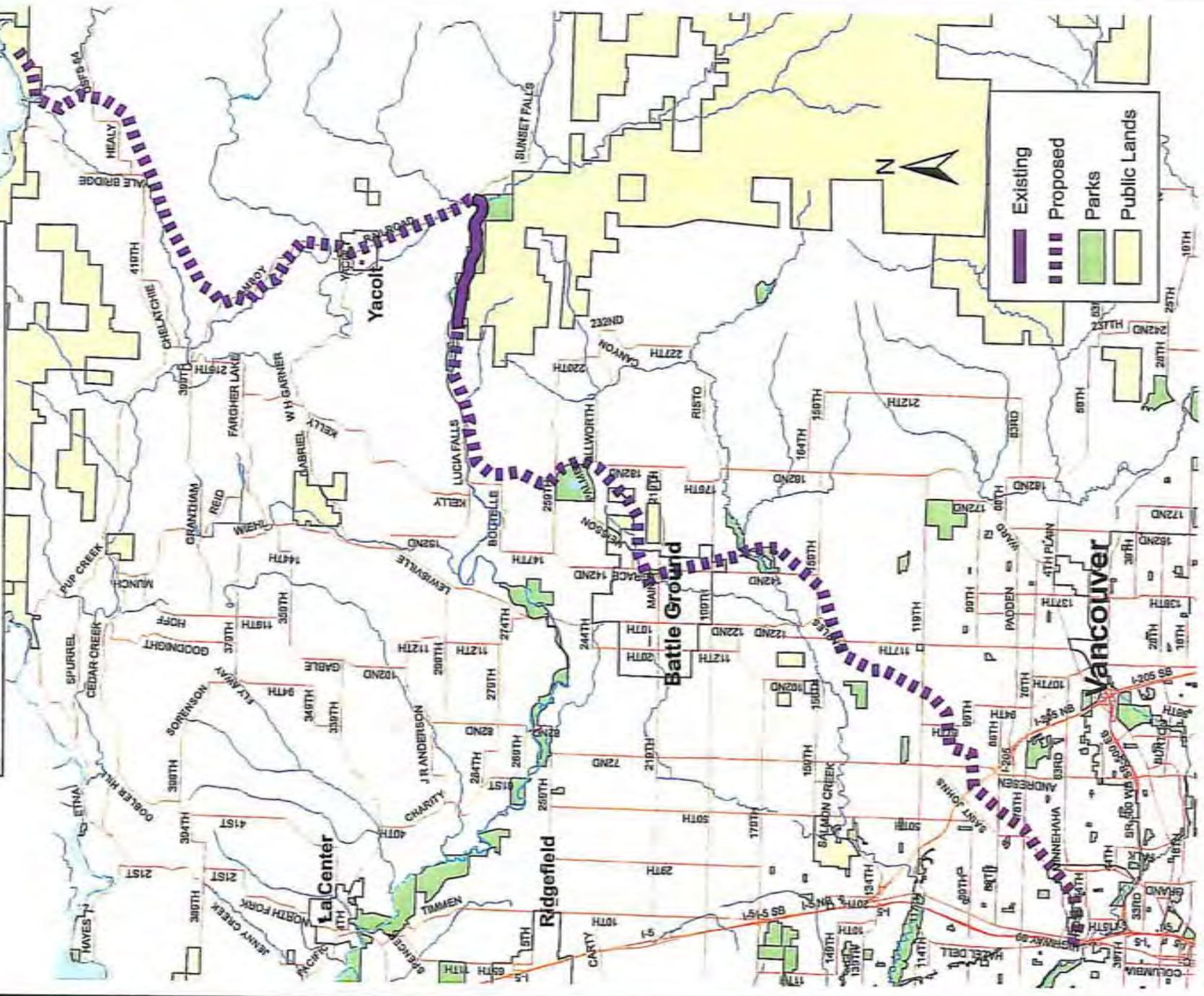
**Environmental Constraints:** Most of this trail follows the railroad sharing its right of way, so environmental constraints should be minimized, excepting any of the multiple creeks and river crossings.



Figure 2



# Chelatchie Prairie Railroad Trail



## Chelatchie Prairie Railroad Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Vancouver Lake to the Ross Complex		2.0		A4	COV					
Ross Complex to St. Johns		2.0		A4	UUA					
St. Johns to 119th		5.8		A4	UUA					
119th to 199th - Brush Prairie		5.5		A5	RURAL/COBG					
199th to City Limits of Battle Ground		1.7		A4	COBG					
Battle Ground Lake to Heison		1.6		A4	R					
Heison to Basket Flats		2.0		A4	R					
Basket Flats to Moulton Falls		3.7	2.7	A4	R					
Moulton Falls to Yacolt		2.7		A4	R					
Yacolt to Amboy		2.2		A4	R					
Amboy to Chelatchie Prairie		5.0		A4	R					
	Total	34.2	2.7							



# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: Lake to Lake Trail

VANCOUVER-CLARK  
**PARKS & Recreation**

### Vicinity Map



### Project Summary

**Project Number:**

**Regional Trail Name:** Lake to Lake Trail (formerly Discovery Trail, Burnt Bridge Creek, LaCamas Trail, Heritage Trail)

**Project Length:** 22.3 miles (11.4 miles built)

**User Groups:** Pedestrians, Bicycles, Paddlers, Equestrians

\*Equestrian use is not permitted in the City of Vancouver

\*Paddle opportunities may exist at LaCamas Lake

**Project Description:** This trail corridor highlights the remaining preserved open spaces within our urban area along the Burnt Bridge Creek and LaCamas Creek watersheds. It starts at the Port of Vancouver and travels the lowlands along the eastern edge of Vancouver Lake up to the mouth of Burnt Bridge Creek at Vancouver Lake and parallel the creek up to Leverich Park, going under I-5 and traversing its way under SR500 to the base of the north slope of Vancouver's "Heights" area at the Devine Road trailhead. This portion of the trail provides a front row seat to the ongoing rehabilitation of the Burnt Bridge Creek watershed, with creek rechanneling, shade plantings and side ponds. This trail displays the reclaiming of wildlife habitat to its historic state back from the agricultural uses of the 20th century. Extending from Devine Road, the trail hugs the base of the slope below the "Heights Neighborhood" and David Douglas Park, crossing Andresen Road and Burton Road. It reaches to the Meadow Creek Marsh extending to the joint headwaters of Burnt Bridge Creek and LaCamas Creek watersheds then down to the LaCamas Heritage Trail, along LaCamas Lake connecting to the 600+ acre LaCamas Lake park system.

**Environmental Constraints:** Due to the desire for the trail to interact with the natural amenities of the watersheds and their creeks and lakes, shorelines, habitat and wetland permitting will necessitate extensive preconstruction costs. Alignment alternatives at sensitive areas may be necessary.



### Cross-Section Detail

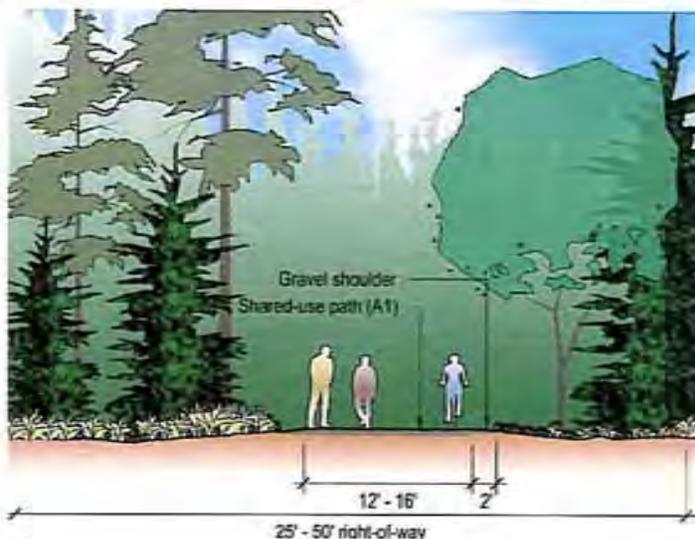


Figure 3





## Lake to Lake Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Lower River Road to West End of Burnt Bridge Greenway		2.7	2.0	A0	COV					
West End of Burnt Bridge Greenway to I-5		2.0	2.0	A1	COV					
I-5 to St. John's Road		1.5	1.5	A1	COV					
St. John's Rd to 4th Pln & Devine		1.0	1.0	A1	COV					
Devine Road to Andresen		1.4	1.4	A1	COV					
Andresen to 87th Avenue		0.8	0.8	A1	COV					
NE 87th Avenue to NE 98th Avenue		1.3		A1	COV					
NE 98th Avenue to 112th Avenue		0.9		A1	COV					
112th Avenue to 137th Avenue		1.3		A1	COV					
137th Avenue to 162nd Avenue		1.3		A1	UUA					
162nd Avenue to 192nd Avenue		2.0		A1	UUA					
192nd Avenue to Heritage Trail Head		1.4		A3	UUA					
Heritage Trail Head to Lacamas Lake Park		4.7	4.7	A3	CAMAS					
	Total	22.3	11.4							



# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: Salmon Creek Greenway Trail

VANCOUVER-CLARK  
**PARKS & Recreation**

### Vicinity Map



### Project Summary

**Project Number:**

**Regional Trail Name:** Salmon Creek Greenway Trail

**Project Length:** 24.9 miles (3 miles built)

**User Groups:** Pedestrians, Bicycles, Paddlers\*, Equestrians  
\*Paddle opportunities at the mouth of Salmon Creek

**Project Description:** This trail corridor extends from the mouth of Salmon Creek at Lake River and is planned for extension to the headwaters of Salmon Creek on Bells Mountain. The Salmon Creek watershed drains most of the northern Vancouver urban growth area. From the Columbia River to the Salmon Creek Treatment Facility, the trail parallels an underground utility easement for the Salmon Creek Interceptor up to Seward Bridge in Felida at 36th Avenue. The trail then winds its way out along the Salmon Creek lowlands to the Kline Park Ponds near I-5. Native fish still run in Salmon Creek and preservation of this open space corridor, with a low-impact trail, will further this vision. From Kline Park, the trail extends on to the WSU campus, north to Brush Prairie through the open meadows south of Battle Ground. The trail then aims toward the historic enclave of Venersborg at the base of Bells Mountain.

**Environmental Constraints:** Due to the desire for the trail to interact with the natural amenities of the watersheds and their creeks and lakes, shorelines, habitat and wetland permitting will necessitate extensive preconstruction costs. Alignment alternatives at sensitive areas may be necessary.



### Cross-Section Detail

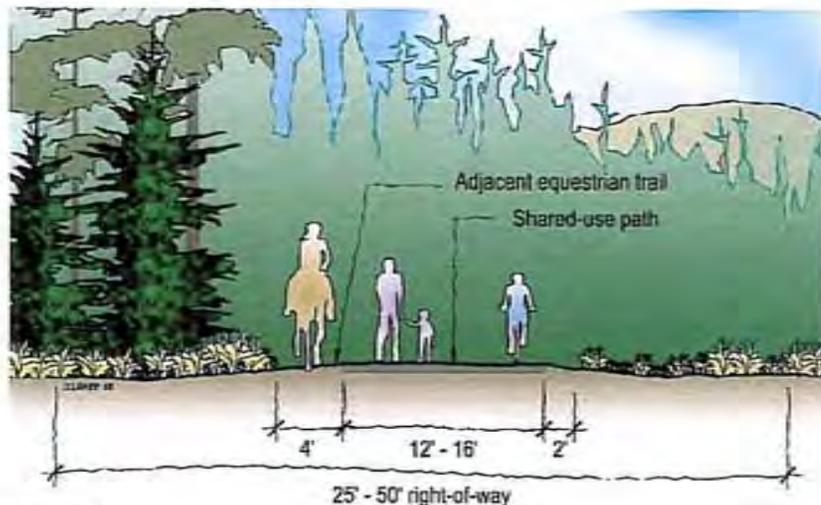


Figure 4





## Salmon Creek Greenway Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Columbia River to Lake River		1.3		A1	R					
Lake River to Ashley Heights		0.6		A1	R					
Ashley Heights to Seward Bridge		0.9		A1	R					
Seward Bridge to Cougar Creek		1.3	1.3	A1	UUA					
Cougar Creek to Klinline Ponds		1.8	1.8	A1	UUA					
Klinline Ponds to WSU Campus		2.6		A1	UUA					
WSU Campus to Andresen Road		1.7		A1	R					
Andresen Road to SR 503 (Brush Prairie)		3.0		A1	R					
SR 503 to Cedars		2.0		A1	R					
Cedars to Hockinson		2.5		A1	R					
Hockinson to mouth of Rock Creek		1.7		A2	R					
Rock Creek to Alderbook		2.2		A2	R					
Alderbook to Bells Mountain		3.3		A3	R					
	Total	24.9	3.1							



# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: Padden Parkway Trail



### Vicinity Map



### Project Summary

**Project Number:**

**Regional Trail Name:** Padden Parkway Trail

**Project Length:** 10 miles (9.7 miles built)

**User Groups:** Pedestrians, Bicycles

**Project Description:** The Padden Trail begins at Vancouver Lake just north of the "Lake to Lake" trails. This trail is a very urban trail. From its trailhead at Vancouver Lake, the trail is on-road bike lanes with attached sidewalks from Fruit Valley Road up 78th Street, crossing Hazel Dell Avenue through heavy traffic @ I-5 & Hwy 99 extending out to the St. John's area on NE 78th Street crossing the Chelatchie Prairie Railroad trail. From the Chelatchie Prairie Railroad trail intersection, this facility becomes a shared-use paved trail leaving the 78th Street alignment and following the new Padden Parkway. This section of the trail is adjacent to the regional wetlands area that is the headwaters of Curtin Creek near NE Andresen Road. From the Andresen commercial area, the trail utilizes the pedestrian-and bike-only freeway overpass, and continues to parallel the Padden Parkway out to Heritage High School near NE 136th Avenue. The Padden Parkway trail terminates out China Ditch of its intersection with the Battle Ground Lake / Fisher's Landing trail near NE 172nd Avenue.

### Cross-Section Detail

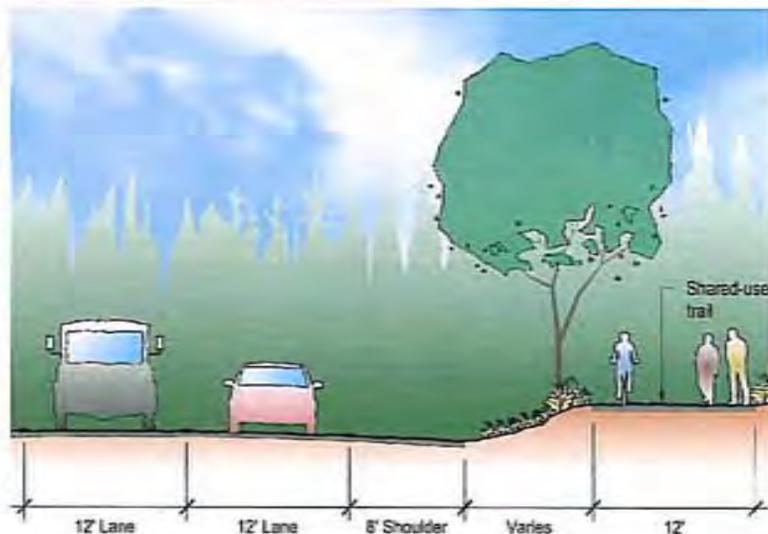


Figure 5

**Environmental Constraints:** None







## Padden Parkway Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Lakeshore Road to Hazel Dell Avenue		1.1	1.1	A3	U					
Hazel Dell Avenue to I-5		0.2		A3	UUA					
I-5 to Hwy 99		0.1		A3	UUA					
Hwy 99 to the Chelatchie Prairie Railroad trail		1.9	1.9	A3	U					
Chelatchie Prairie Railroad Trail to Andresen Road		1.0	1.0	A3	U					
I-205 to NE 94th avenue		1.3	1.3	A3	U					
NE 94th Avenue to NE 117th Avenue (SR 503)		1.3	1.3	A3	U					
SR 503 to NE 137th Avenue		1.0	1.0	A3	U					
NE 137th Avenue to NE 152nd Avenue		0.8	0.8	A3	U					
NE 152nd Avenue to China Ditch and the BG-Fisher's Landing trail		1.3	1.3	A3	U					
	<b>Total</b>	<b>10.0</b>	<b>9.7</b>							



# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: I-5 Corridor Trail

VANCOUVER-CLARK  
**PARKS & Recreation**

### Vicinity Map



### Project Summary

**Project Number:**

**Regional Trail Name:** I-5 Corridor Trail

**Project Length:** 22 miles (1 miles built)

**User Groups:** Pedestrians, Bicycles, Equestrians\*  
\*Equestrian use is not permitted in the City of Vancouver

**Project Description:** This trail is not so much of a trail as it is a combination of linkages for semi-continuous, safe, predictable pedestrian and bike routes that parallel the I-5 corridor. This trail is directly suited to commuters. It is aimed at alternative modes of commuting.

**Environmental Constraints:** None

### Cross-Section Detail

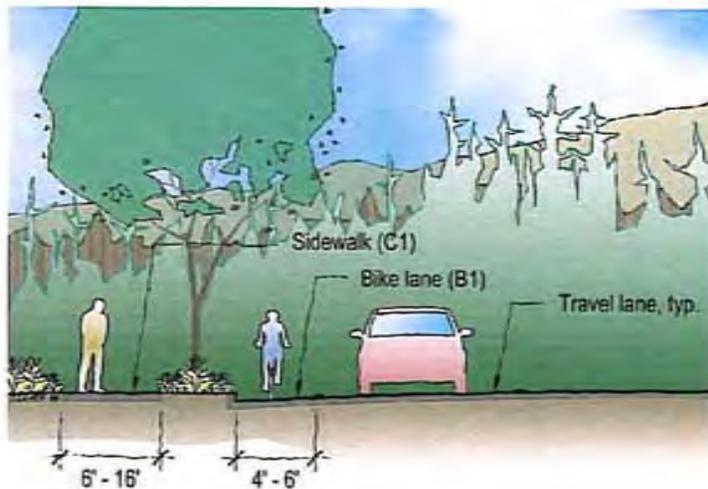
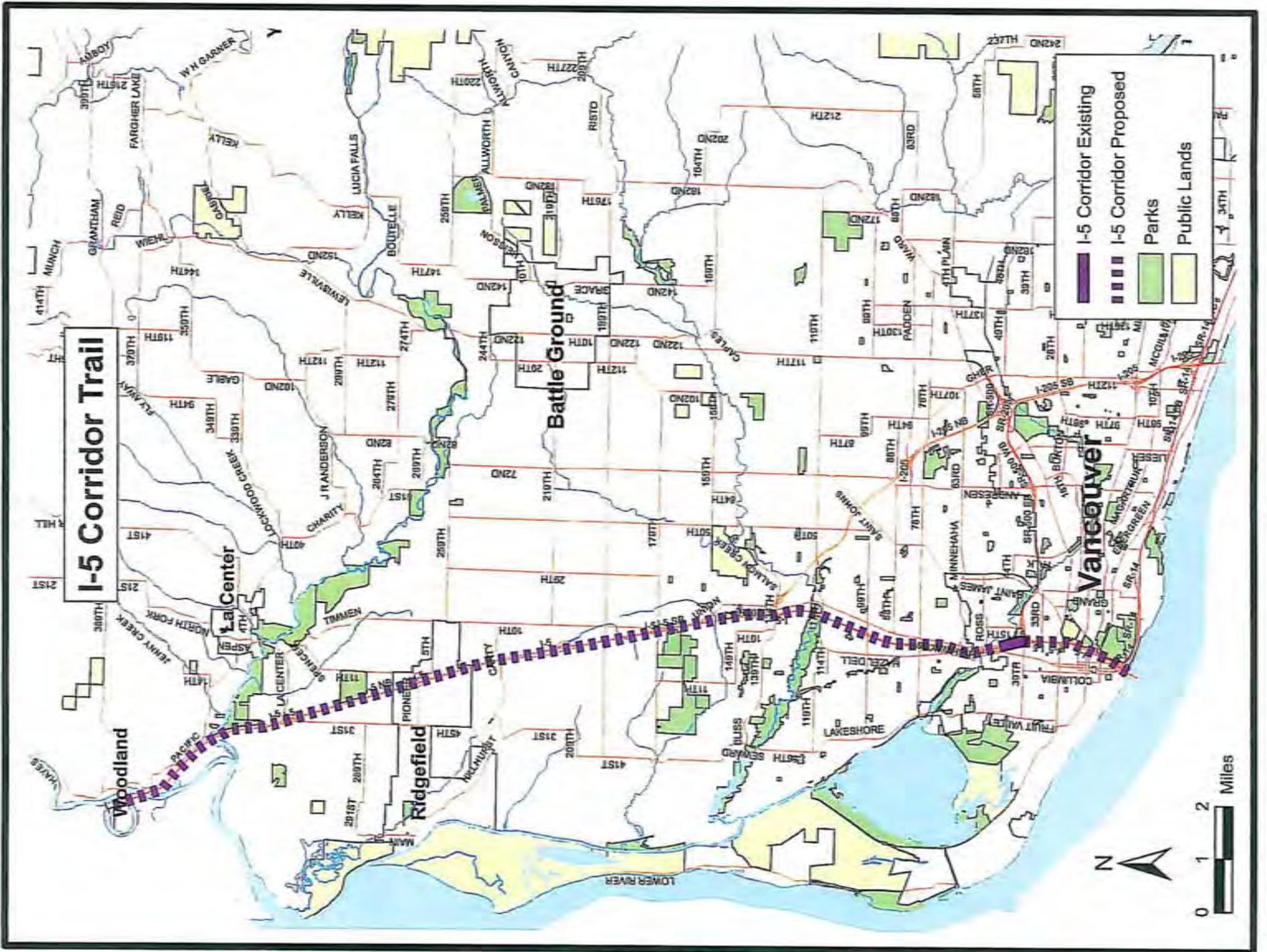


Figure 6











# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: I-205 Corridor Trail

VANCOUVER-CLARK  
**PARKS & Recreation**

### Vicinity Map



### Project Summary

**Project Number:**

**Regional Trail Name:** I-205 Corridor Trail

**Project Length:** 13 miles (2 miles built)

**User Groups:** Pedestrians, Bicycles, Equestrians\*  
\*Equestrian use is not permitted in the City of Vancouver

**Project Description:** This trail is not so much of a trail as it is a combination of linkages for semi-continuous, safe, predictable pedestrian and bike routes that parallel the I-5 corridor. This trail is directly suited to commuters. It is aimed at alternative modes of commuting.

**Environmental Constraints:** None

### Cross-Section Detail

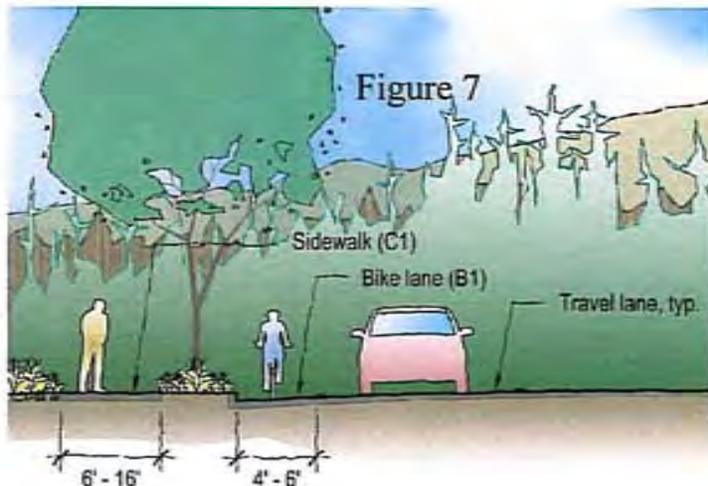


Figure 7











# 2006 Trail & Bikeway Systems Plan

Regional Trail Name: East Fork of the Lewis River Greenway Trail



## Vicinity Map



## Project Summary

**Project Number:**

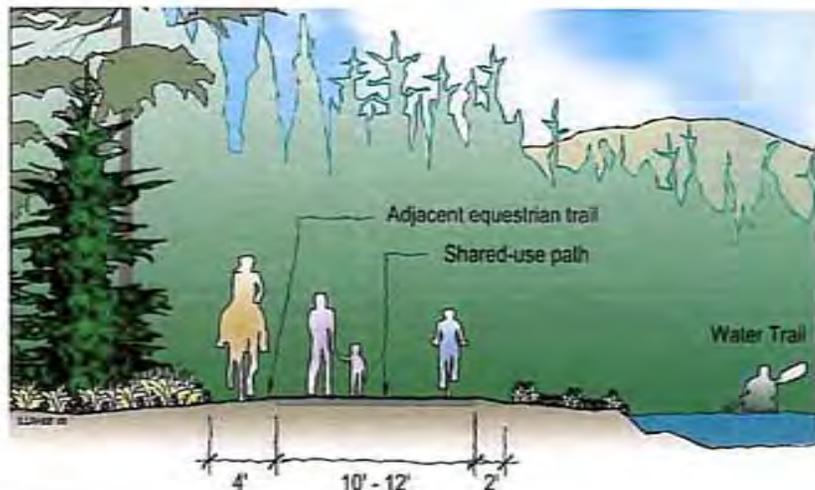
**Regional Trail Name:** East Fork of the Lewis River Greenway Trail

**Project Length:** 28.4 miles (4.1 miles built)

**User Groups:** Pedestrians, Bicycles, Paddlers, Equestrians

**Project Description:** This trail corridor will extend from the confluence of the East and the North Fork of the Lewis River near the LaCenter Bottoms. It will chase the East Fork of the Lewis River through LaCenter, with its rural charm, out to Daybreak Park and its direct river access opportunities, up to Lewisville Regional County Park with its picnic areas and well developed network of forest trails. From Lewisville Park, the trail will travel up to the historic enclave of Heisson and pass over the old Heisson Bridge, now preserved for pedestrians and bicyclists only. The view of the water worn and polished bedrock that form the river channel here are unique. Beyond Heisson, the trail will join the Chelatchie Railroad Trail corridor up to Moulton Falls Park, passing the Bells Mountain Trail head. At this point the Chelatchie Prairie Railroad turns North and this trail continues east to extend to the county line from this point ending at Sunset Campground. Halfway to Sunset Campground will be the future trail head for the north end of the Livingston Mountain / Dole Valley Trail.

## Cross-Section Detail



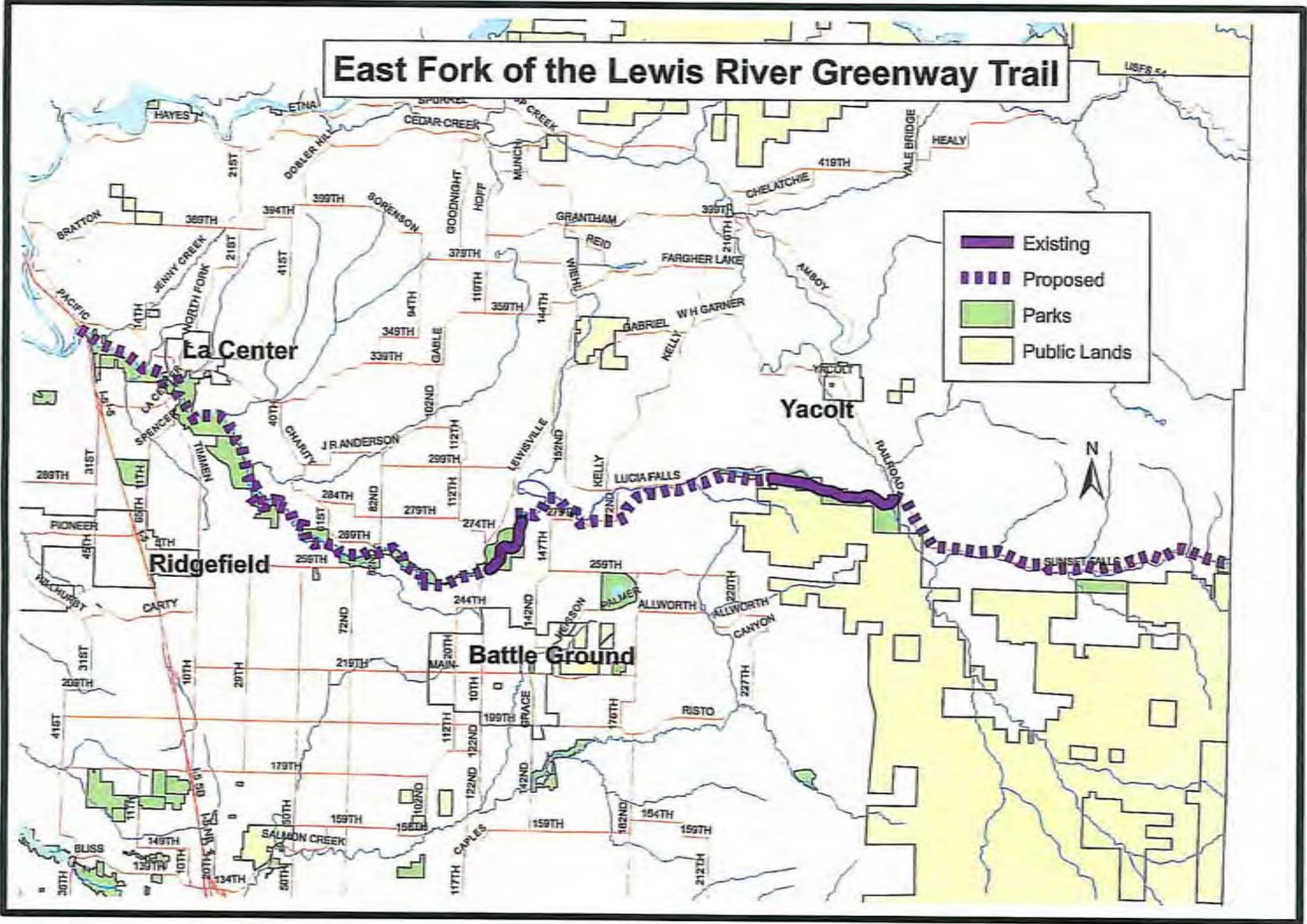
**Environmental Constraints:** This trail will face several environmental constraints as it trail intends to follow the river as closely as possible. Shorelines, habitat and wetland permitting will necessitate extensive preconstruction costs. Alignment alternatives analysis at sensitive areas may be necessary.



Figure 8



# East Fork of the Lewis River Greenway Trail



## East Fork of the Lewis River Greenway Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Lewis River confluence to W LaCenter		1.9		A1	R					
W LaCenter to E La Center		6.9		A1	UUA					
E La Center to Lewisville Park		2.6		A1	R					
Lewisville Park to Heison		4.4	1.4	A1	R					
Heison to Basket Flats		1.4		A1	R					
Basket Flats to Moulton Falls		3.9	2.7	A1	R					
Moulton Falls to Sunset Campground		7.3		A1	R					
	Total	28.4	4.1							



# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: Battle Ground / Fisher's Landing Trail



### Vicinity Map

#### Battle Ground / Fisher's Landing Regional Trail



### Project Summary

**Project Number:**

**Regional Trail Name:** Battle Ground / Fisher's Landing Trail (formerly known as Hockinson, 192nd Avenue, China Ditch trail)

**Project Length:** 16.1 miles (2.8 miles built)

**User Groups:** Pedestrians, Bicycles

**Project Description:** This trail begins on the Columbia River, along the Lewis & Clark Greenway Trail. This shared-use, concrete trail parallels SE 192nd Avenue in the Fisher's Landing area of Vancouver. From State Route 14 up to SE 18th Street, it leaves the roadside to navigate the open space along the Lacamas and Fifth Plain Creeks up to the meadows south of Hockinson near the China Ditch. As the trail meanders the west side of Hockinson, it climbs up towards NE 219th Avenue near the SE 182nd Avenue alignment. Then, on top of the foothills, east of Battle Ground, the trail extends to Battle Ground Lake State Park intersecting with the Chelatchie Prairie Railroad trail.

**Environmental Constraints:** Due to the desire for the trail to interact with the natural amenities of the watersheds and their creeks and lakes, shorelines, habitat and wetland permitting will necessitate extensive preconstruction costs. Alignment alternatives at sensitive areas may be necessary.

### Cross-Section Detail

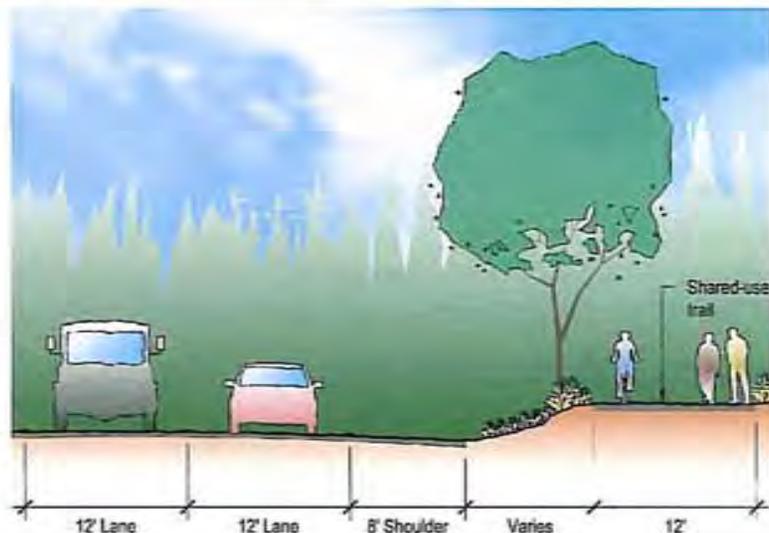
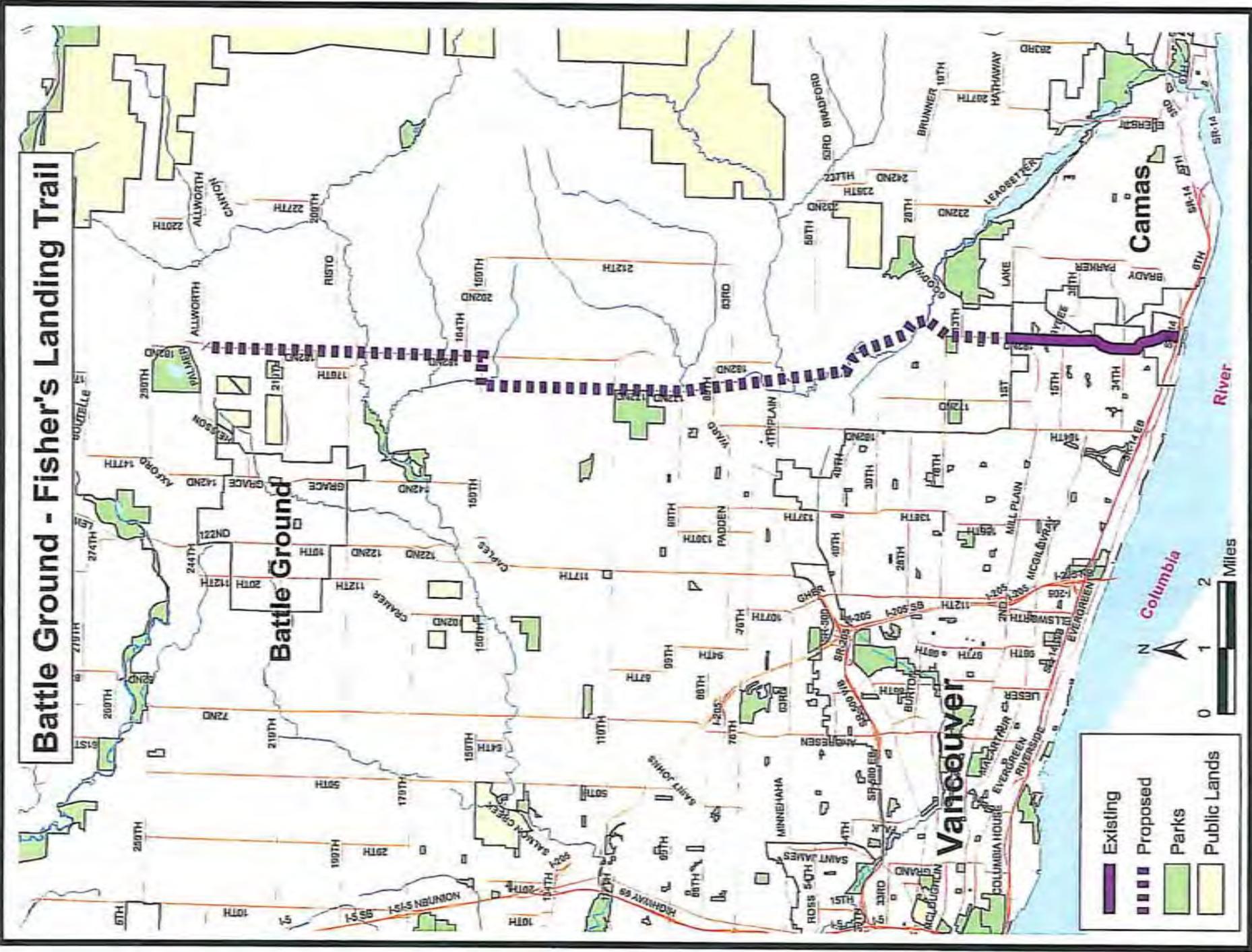


Figure 9





# Battle Ground - Fisher's Landing Trail



## Battle Ground / Fisher's Landing Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Columbia River and SR-14 @ 192nd Avenue to SE 34th Street		1.0	1.0	A2	COV					
SE 34th Street to Fisher's Swale @ SE 15th Street		1.0	1.0	A2	COV					
Fisher's Swale to 1st St. @ SE 15th Street (Mill Plain)		0.5	0.5	A2	COV					
1st St. to Harmony Sports Complex @ NE 18th Street		1.2	0.3	A2	UUA					
Harmony Sports Complex to Lacamas Creek		0.5		A1	R					
Lacamas Creek to the Padden Trail @ China Ditch		4.0		A2	R					
Padden Trail @ China ditch trail to Hockinson		3.2		A2	R					
Hockinson to NE 199th Street		2.5		A2	R					
NE 199th Street to NE 219th Street		1.0		A2	R					
NE 219th Street to the Chelatchie Prairie Railroad trail @ Battle Ground Lake		1.2		A1	R					
	<b>Total</b>	<b>16.1</b>	<b>2.8</b>							



# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: Washougal River Corridor Trail



### Vicinity Map

#### Washougal River Corridor Regional Trail



### Project Summary

**Project Number:**

**Regional Trail Name:** Washougal River Corridor Trail (formerly known as China Ditch, Fisher's Landing Trail)

**Project Length:** 10.4 miles (0 miles built)

**User Groups:** Pedestrians, Bicycles, Paddlers, Equestrians

**Project Description:** The Washougal River Corridor Trail begins in the City of Camas - following the Washougal River Greenway to the Washougal River Road and follows the river along its north and west shores up to Cowlitz County and towards Dugan Falls and Three Corner Rock in Cowlitz County.

**Environmental Constraints:** Because of this trail's relationship to the Washougal River, some alignment alternatives may present greater shorelines, habitat and wetland permitting which will necessitate extensive preconstruction costs. Alignment alternatives at sensitive areas may be necessary.

### Cross-Section Detail

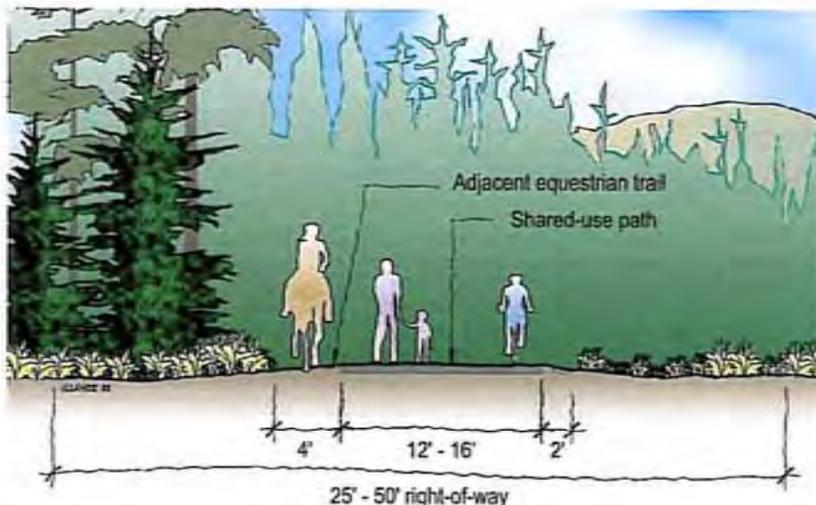
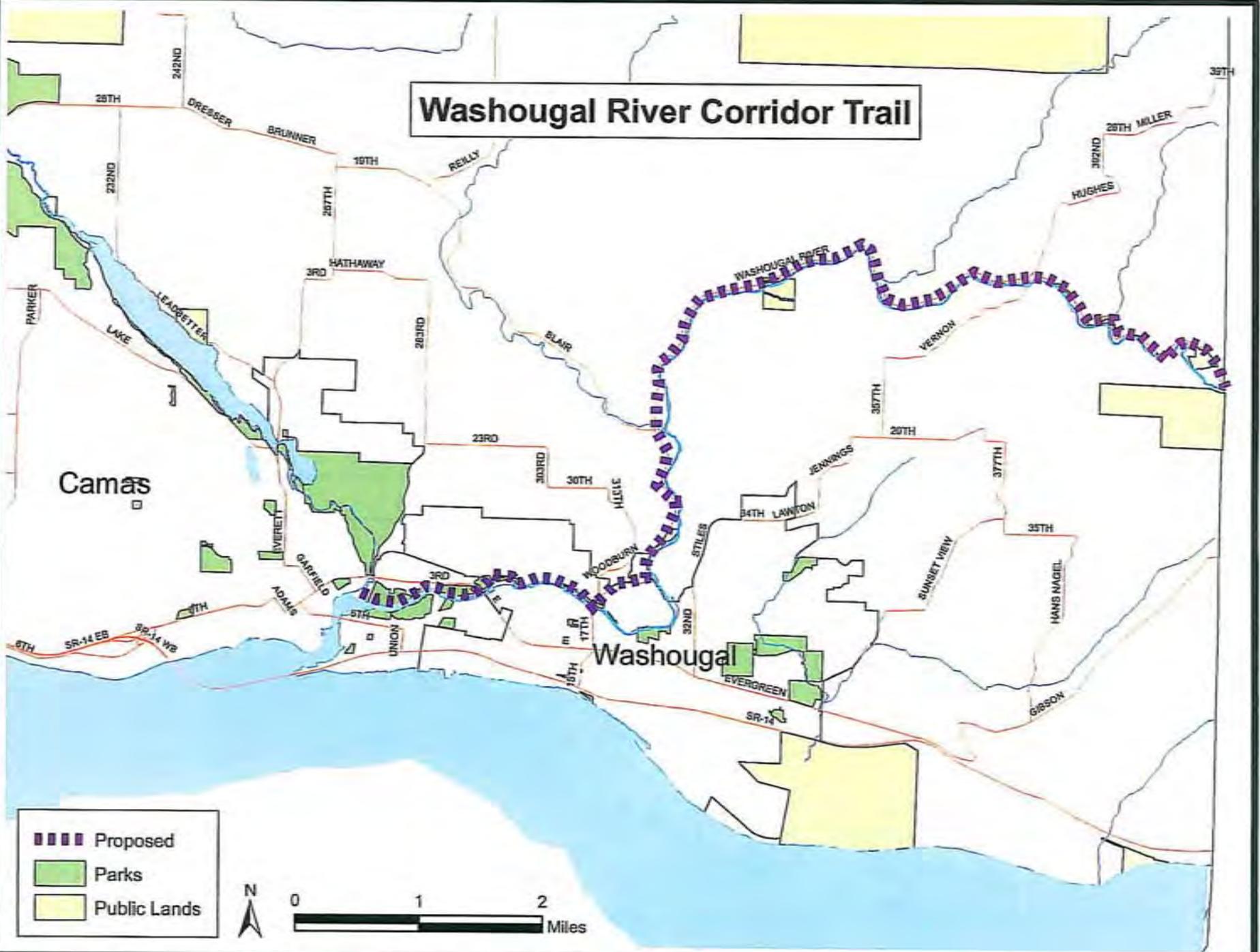


Figure 10



# Washougal River Corridor Trail



## Washougal River Corridor Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
South Entry of Lacamas Lake Park to Sheppard Road		0.8		A2	COC					
Sheppard Road to Washougal River Road		1.0		A2	COW					
Washougal River Road to BPA Powerline		1.0		A2	R					
BPA Power Lines to the Little Washougal River		0.9		A2	R					
Little Washougal River to Cougar Creek		3.0		A3	R					
Cougar Creek to Vernon Road		1.5		A3	R					
Vernon Road to Winkler Creek		0.9		A3	R					
Winkler Creek to Clark County Line		1.3		A3	R					
	<b>Total</b>	<b>10.4</b>	<b>0.0</b>							

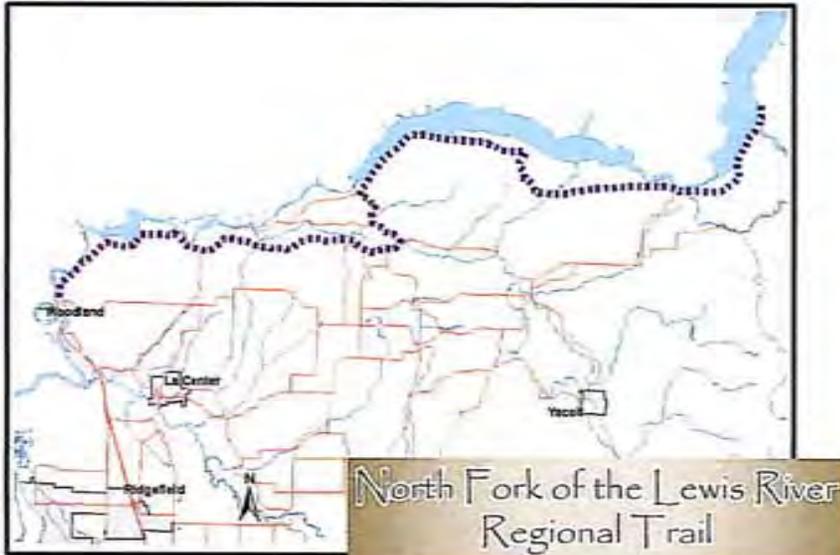


# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: North Fork of the Lewis River Trail



### Vicinity Map



### Project Summary

**Project Number:**

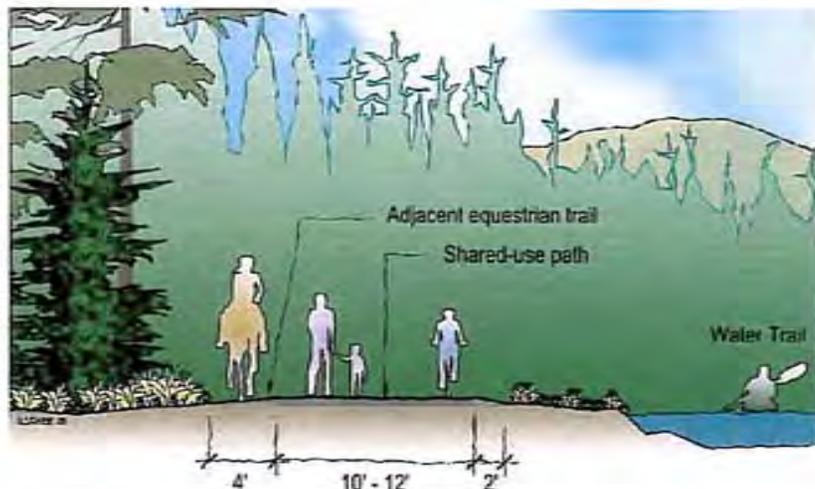
**Regional Trail Name:** North Fork of the Lewis River Trail

**Project Length:** 31.5 miles (0 miles built)

**User Groups:** Pedestrians, Bicycles, Paddlers, Equestrians

**Project Description:** The North Fork Trail will trace Clark County's northern rim going upstream along the Lewis River's north fork, paralleling a path between the river's edge where possible and the Pacific Highway. In Woodland, along Hayes Road, it becomes Cedar Creek Road, the turning off onto Etna Road which extends east up to Ariel Dam crossing under the power lines and towards NE Buncombe Hollow Road. It follows along Lake Merwin's south shore and over Green Mountain along the south shores steep slopes and cliffs in Camper's Hideaway. From Camper's Hideaway, the trail extends to cross State Route 503 near the Lake Merwin Bridge and Canyon Creek at NE Belvins Road, arriving at Yale Dam on the south side. The trail will eventually follow Yale Reservoir's south shore extending northeast, crossing the scenic Siouxon Creek with horizon-filling views of Mt. St. Helens.

### Cross-Section Detail



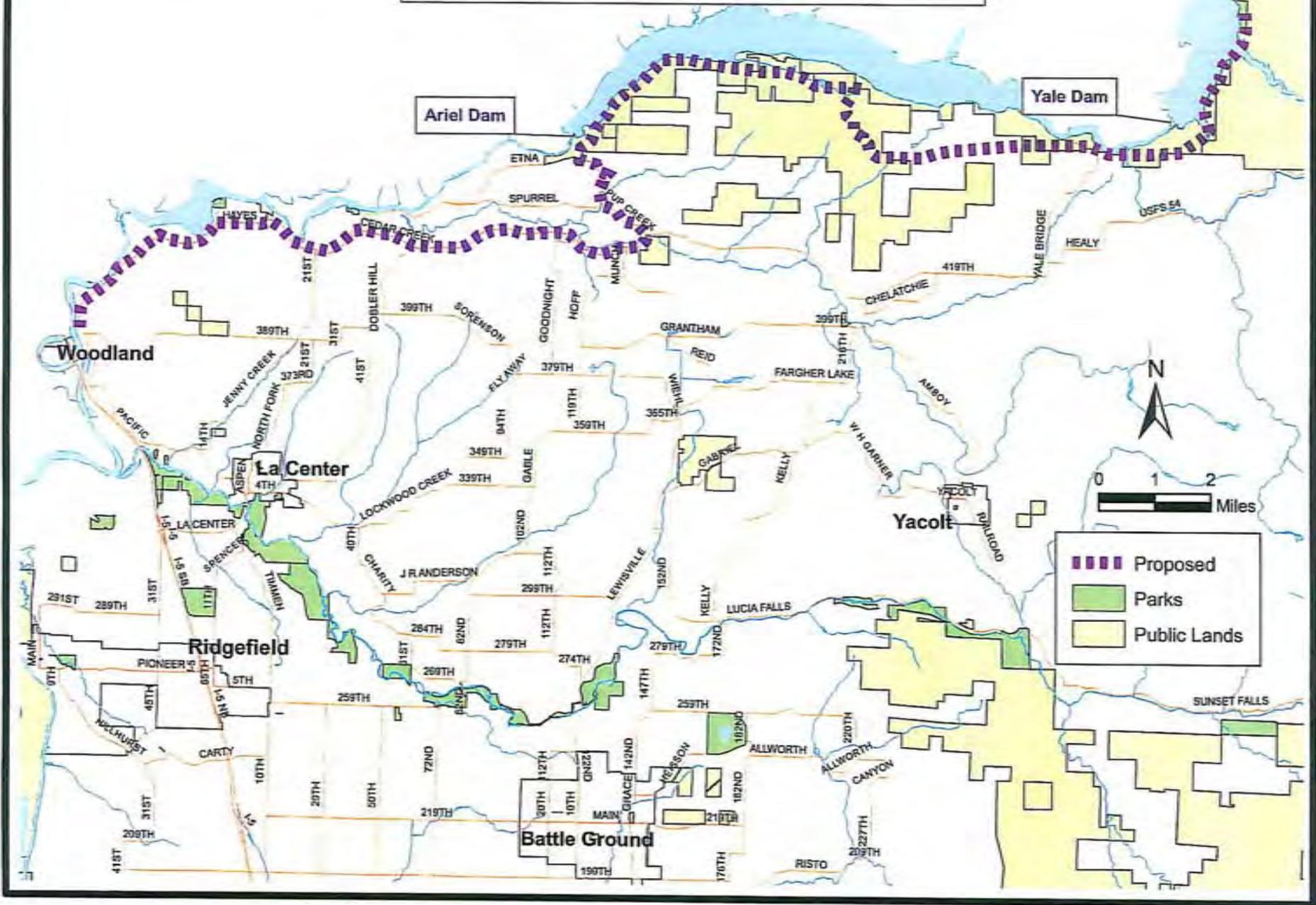
**Environmental Constraints:** This trail will face several environmental constraints as it intends to follow the river as closely as possible. Shorelines, habitat and wetland permitting will necessitate extensive preconstruction costs. Alignment alternatives analysis at sensitive areas may be necessary.



Figure 11



# North Fork of the Lewis River Trail



## North Fork of the Lewis River Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Woodland to Eagle Island		3.2		A2	R					
Eagle Island to Hayes Cemetary		0.9		A2	R					
Hayes Cemetary to Cedar Creek Road		1.5		A2	R					
Cedar Creek Road to Happa Boat Ramp		0.9		A2	R					
Happa Boat Ramp to the Grist Mill		2.5		A2	R					
Grist Mill to Arie Dam		6.1		A3	R					
Ariel Dam to Green Mountain		2.6		A3	R					
Green Mountain to Camper's Hideaway		5.8		A3	R					
Camper's Hideaway to Merwin Bridge @SR 503		2.3		A3	R					
Canyon Creek to Yale Dam		2.0		A3	R					
Yale Dam to Siouxon Creek Park		3.7		A3	R					
	<b>Total</b>	<b>31.5</b>	<b>0.0</b>							



# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: Whipple Creek Greenway Trail



### Vicinity Map



### Project Summary

**Project Number:**

**Regional Trail Name:** Whipple Creek Greenway Trail

**Project Length:** 4.8 miles (0 miles built)

**User Groups:** Pedestrians, Bicycles, Paddlers\*, Equestrians  
 \*Paddle opportunities may be possible at the mouth of Whipple Creek, but have not been explored.

**Project Description:** The Whipple Creek Trail will extend the entire length of Whipple Creek from its mouth at Lake River near the Ridgefield National Wildlife Refuge and Kriegler Road. Following the creek where possible up to NE 41st Street Ave. in the SARA area. From SARA, the trail will extend into and through Whipple Creek Park near the Clark County Fairgrounds and up to I-5.

**Environmental Constraints:** Due to the desire for the trail to interact with the natural amenities of the watersheds and their creeks and lakes, shorelines, habitat and wetland permitting will necessitate extensive preconstruction costs. Alignment alternatives at sensitive areas may be necessary.

### Cross-Section Detail

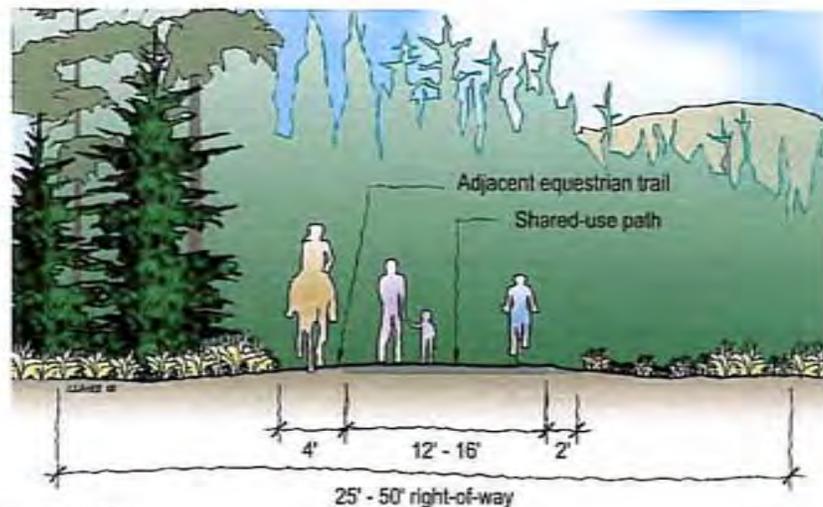


Figure 12







## Whipple Creek Greenway Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Wildlife Refuge/Lake River to NE 51st Avenue		1.3		A3	R		PUUA			
NE 51st Ave to SARA at NE 41st Avenue		0.6		A3	R		PUUA			
Sara to Whipple Creek Park		1.2		A3	R		PUUA			
Whipple Creek Park to Clark County Fairgrounds		1.1		A3	R		PUUA			
Fairgrounds to I-5		0.6		A3	R		PUUA			
	<b>Total</b>	<b>4.8</b>	<b>0.0</b>							



# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: North / South Powerline Trail



### Vicinity Map



North / South Powerline  
Regional Trail

### Project Summary

**Project Number:**

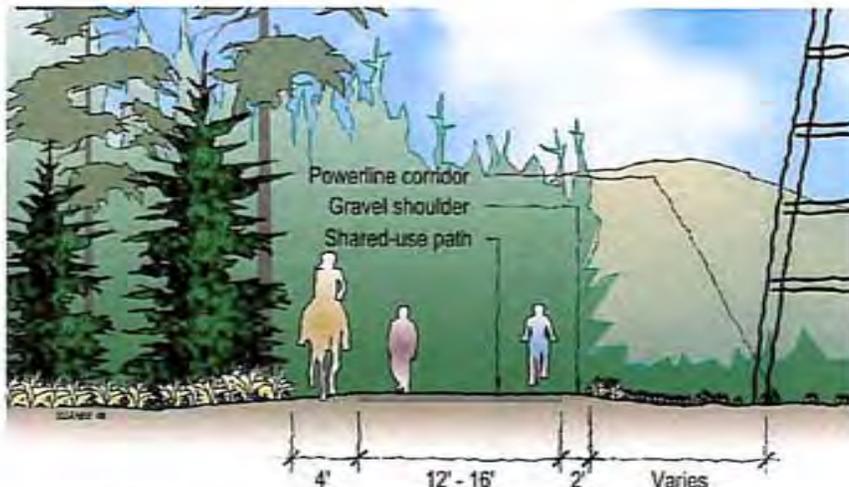
**Regional Trail Name:** North / South Powerline Trail

**Project Length:** 20.6 miles (0 miles built)

**User Groups:** Pedestrians, Bicycles, Equestrians

**Project Description:** The North/South Powerline Trail extends due north bisecting Clark County from the BPA Ross Complex north to the North Fork of the Lewis River along the 3900 block. Starting at the Ross Complex, the trail extends to a crossing with the Chelatchie Prairie Railroad trail and turns north, crossing I-205, the Salmon Creek Trail, and the creek itself before extending on to the WSU campus and its elaborate campus trail network. From the campus, the trail crosses Mill Creek and up to NE 199th Street and on to the historic Pioneer area of NW Clark County. From the Pioneer area, the trail extends north to a crossing of the East Fork of the Lewis and the East Fork trail, just south and east of LaCenter in the LaCenter Bottoms area. The trail then goes up the hill into the Pine Grove area that straddles the two Lewis River watersheds before descending down to Cedar Creek Road overlooking the North Fork and eventually ending at the Happa Boat launch.

### Cross-Section Detail



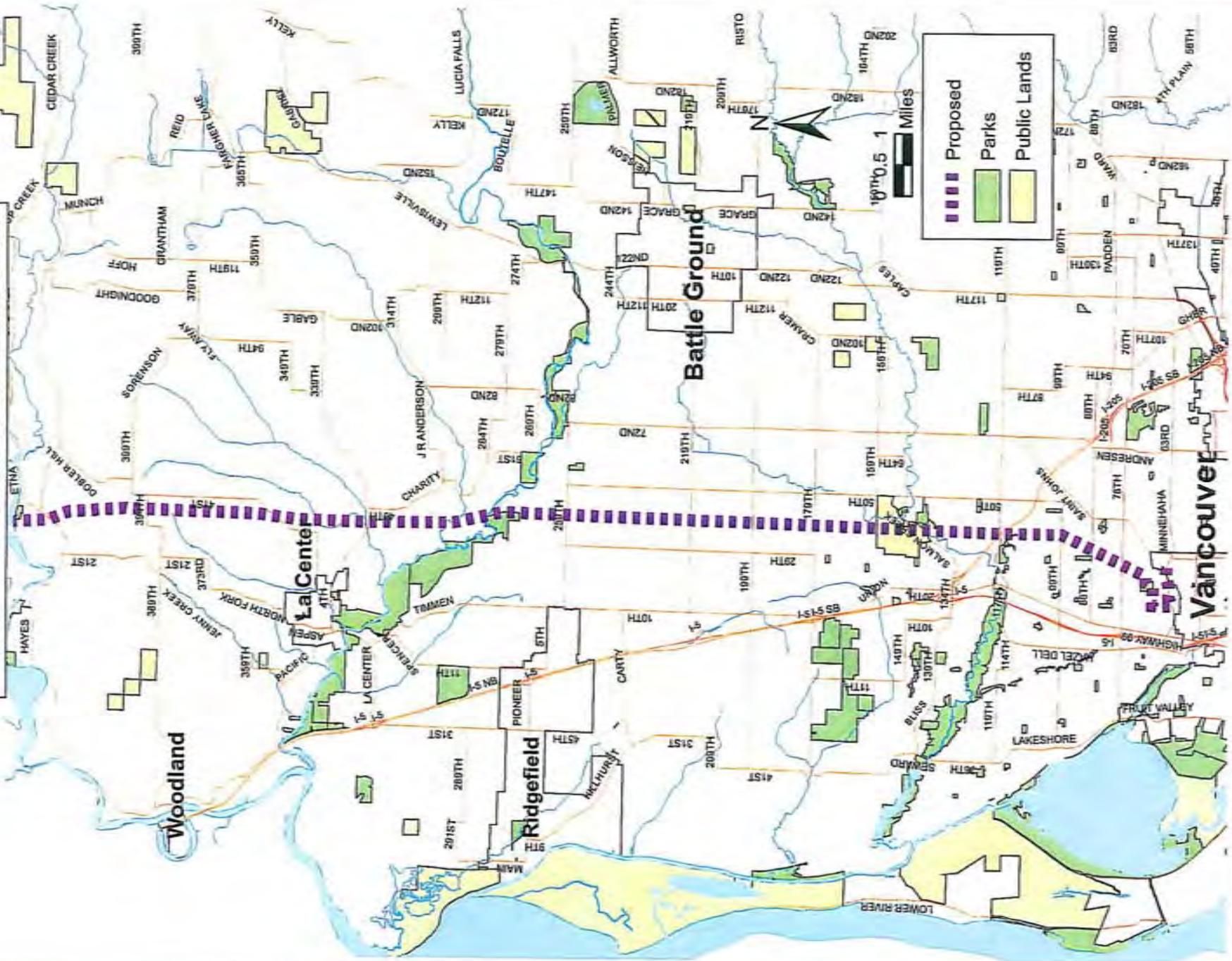
**Environmental Constraints:** This trail follows the north / south powerline so environmental constraints should be minimized except where the trail crosses creeks. Shorelines, habitat and wetland permitting will necessitate extensive preconstruction costs. Alignment alternatives analysis at sensitive areas may be necessary.



Figure 13



# North - South Powerline Trail



## North / South Powerline Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Ross Complex to Chelatchie Prairie Railroad		1.0		A3	UUA					
Chelatchie Prairie Railroad to Salmon Creek		5.2		A3	UUA					
Salmon Creek to WSU		0.5		A3	UUA					
WSU to NE 199th Street		2.0		A3	R					
NE 199th Street to Pioneer @ NE 259th Street		3.0		A3	R					
Pioneer to the East Fork of the Lewis River		1.3		A3	R					
East Fork of the Lewis River to LaCenter @ NE 339th Street		2.6		A3	R					
LaCenter to Pine Grove at NE 389th Street		2.4		A3	R					
Pine Grove to Cedar Creek Road		1.9		A3	R					
Cedar Creek Road to the North Fork of the Lewis at the Happa Boat Launch		0.5		A3	R					
	<b>Total</b>	20.6	0.0							

### Vicinity Map



### Project Summary

**Project Number:**

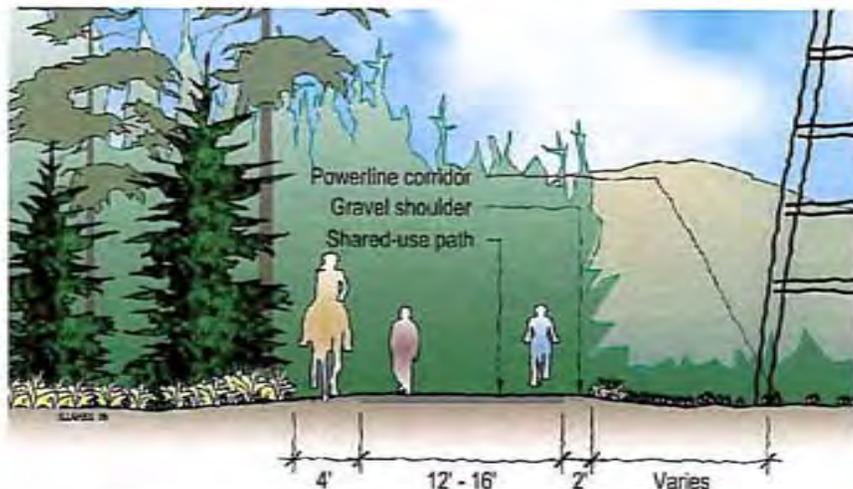
**Regional Trail Name:** East Powerline Trail

**Project Length:** 16.5 miles (0 miles built)

**User Groups:** Pedestrians, Bicycles, Equestrians\*  
 \*Equestrian use is not permitted within the City of Vancouver

**Project Description:** The East County Powerline Trail follows the BPA Powerline from where the "Lake to Lake" trail and Burnt Bridge Creek enter Meadowbrook Marsh at NE 86th Avenue, then extends under the power lines due east over I-205 alongside NE 18th Street past Evergreen High School. The trail then extends to the Harmony Sports Complex, crossing the Lake to Lake Trail again at Lacamas Creek through Fern Prairie. After Fern Prairie, the trail follows the slope over the Washougal River on to Bear Prairie in the Skye area of Clark County as it crosses Hughes Road ending at the Skamania County Line.

### Cross-Section Detail



**Environmental Constraints:** This trail follows the east powerline so environmental constraints should be minimized except where the trail crosses creeks. Shorelines, habitat and wetland permitting will necessitate extensive preconstruction costs. Alignment alternatives analysis at sensitive areas may be necessary.



Figure 14





## East Powerline Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Meadowbrook Marsh to I-205		1.1		A2	COV					
I-205 to Evergreen transit Center @ NE 138th Avenue		1.4		A2	COV					
Evergreen Transit Center to SE 162nd Avenue		1.2		A2	COV					
SE 162nd Avenue to Harmony Sports Complex		1.3		A2	UUA					
Harmony Sports Complex to Lacamas Creek (Lake to Lake Trail)		1.4		C2	R					
Lacamas Creek to Fern Prairie (SR500 /NE 26th Avenue)		2.5		C2	R					
Fern Prairie to the Little Washougal River		1.1		C2	R					
Little Washougal River to Brown Road		0.8		C2	R					
Brown Road to NE Ammeter Road		1.3		C2	R					
NE Ammeter Road to Cougar Creek		2.3		C2	R					
Cougar Creek to Hughes Road		0.9		C2	R					
Hughes Road to Winkler Creek		0.6		C2	R					
Winkler Creek to County Line		0.6		C2	R					
	<b>Total</b>	<b>16.5</b>	<b>0.0</b>							



# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: Livingston Mountain / Dole Valley Trail



### Vicinity Map

#### Livingston Mountain / Dole Valley Regional Trail



### Cross-Section Detail

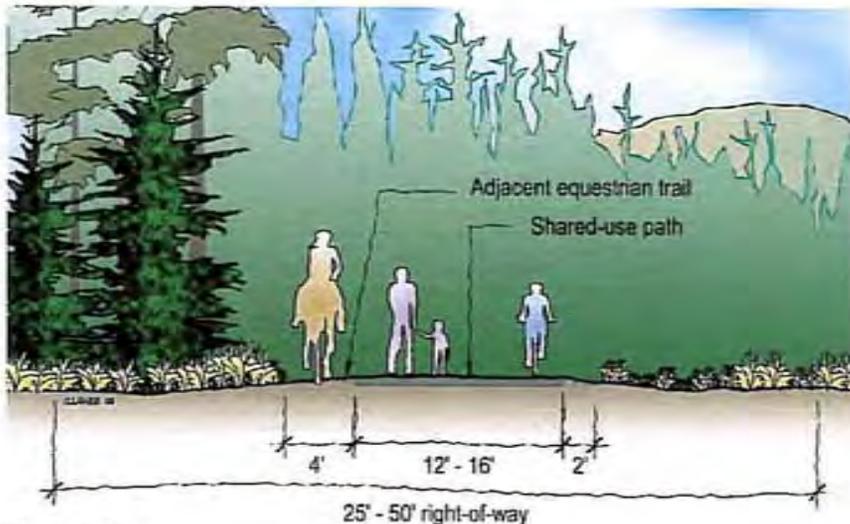


Figure 15

### Project Summary

**Project Number:**

**Regional Trail Name:** Livingston Mountain / Dole Valley Trail

**Project Length:** 21.0 miles (0 miles built)

**User Groups:** Pedestrians, Bicycles, Equestrians

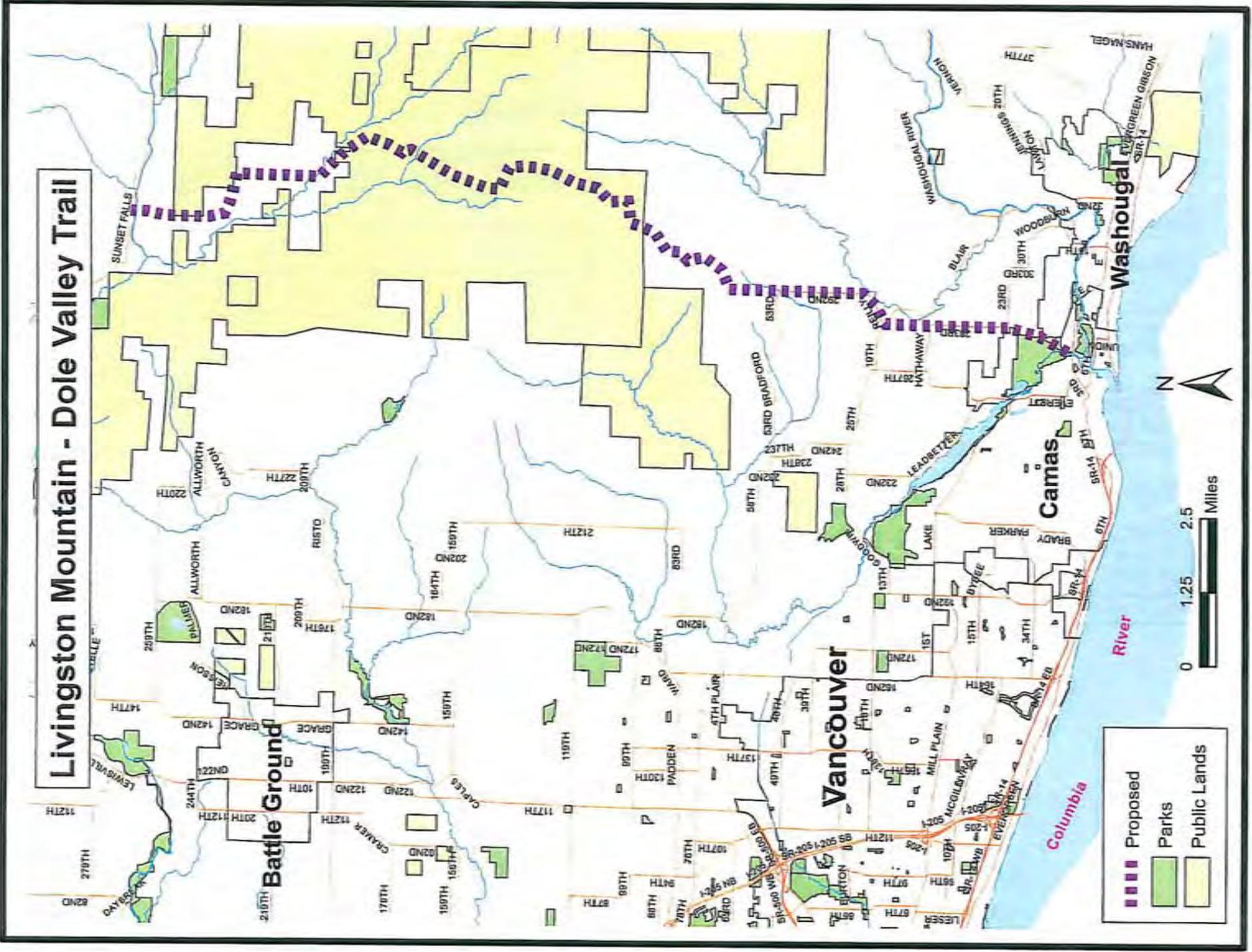
**Project Description:** The Livingston Mountain / Dole Valley Trail navigates from the Ireland area north and east of Fern Prairie through Clark County's Yacolt Burn State Forest into Dole Valley nestled between dells and Larch Mountains to the Sunset Falls area south of Yacolt into the East Fork of the Lewis River Watershed, crossing some of Clark County's steepest terrain over Livingston Mountain. The trail crosses the East Fork of the Lewis, Rock Creek, (and Rock Creek Campground), Cold Creek, and the headwaters of Lacamas Creek's East Fork.

**Environmental Constraints:** This trail will face several environmental constraints as this trail intends to intersect several creek crossing. Shorelines, habitat and wetland permitting will necessitate extensive preconstruction costs. Alignment alternatives analysis at sensitive areas may be necessary.





# Livingston Mountain - Dole Valley Trail



## Livingston Mountain/Dole Valley Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Lacamas Lake Park to Hathaway Rd.		3.0		A3	R					
Hathaway Rd to Reilly Rd.		1.0		A3	R					
Reilly Rd. to Livingston Mountain Rd.		2.8		A3	R					
Ireland (NE 292nd Ave and NE 53rd St) to Livingston Mtn.		1.8		A3	R					
Livingston Mtn to Spud Mtn		1.2		A3	R					
Spud Mountain to the Bells Mountain triangle (L-1400, L-1000 & L-1500 intersection)		2.0		A3	R					
Bells Mountain triangle to Cold Creek		3.3		A3	R					
Cold Creek to Rock Creek Campground		1.0		A3	R					
Rock Creek Campground to DNR Road L-1100 intersection		2.6		A3	R					
DNR Road L-1100 to Sunset Road (East for of the Lewis River Trail)		2.3		A3	R					
	<b>Total</b>	<b>21.0</b>	<b>0.0</b>							



# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: Camp Bonneville Trail

VANCOUVER-CLARK  
**PARKS & Recreation**

### Vicinity Map

#### Camp Bonneville Regional Trail



### Project Summary

**Project Number:**

**Regional Trail Name:** Camp Bonneville Trail

**Project Length:** 12.1 miles (0 miles built)

**User Groups:** Pedestrians, Bicycles, Equestrians

**Project Description:** The Camp Bonneville Trail starts at the 600-acre Lacamas Lake Park system at the east end of the "Lake to Lake" trail. From Lacamas Lake, this trail will traverse through Fern Prairie towards the Little Washougal River and along NE 242nd Avenue where State Route 500 turns west to Proebstel up and into Camp Bonneville, the former military reservation. After winding its way through the Camp Bonneville site, the trail will skirt the west side of the DNR lands, terminating at the east end of the Salmon Creek Trail.

**Environmental Constraints:** Most of the environmental constraints on this trail should be minimized except any of the multiple creek and river crossings. Shorelines, habitat and wetland permitting will necessitate extensive preconstruction costs. Alignment alternatives analysis at sensitive areas may be necessary.

### Cross-Section Detail

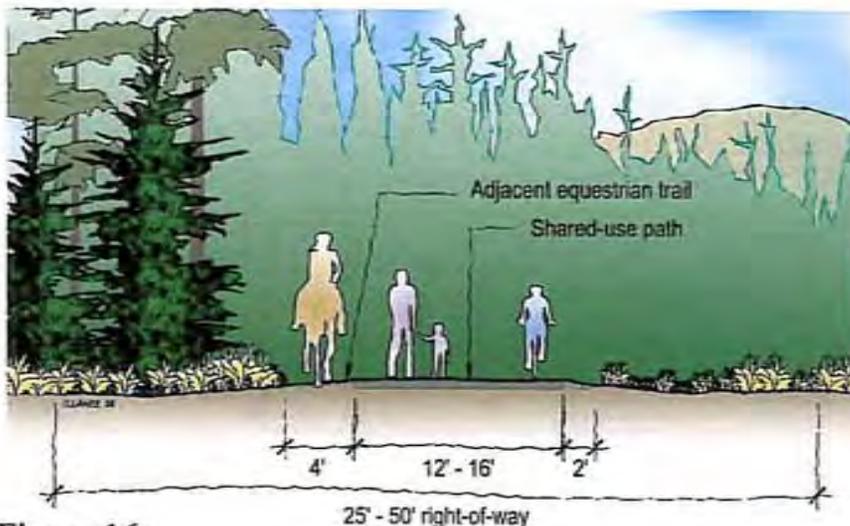
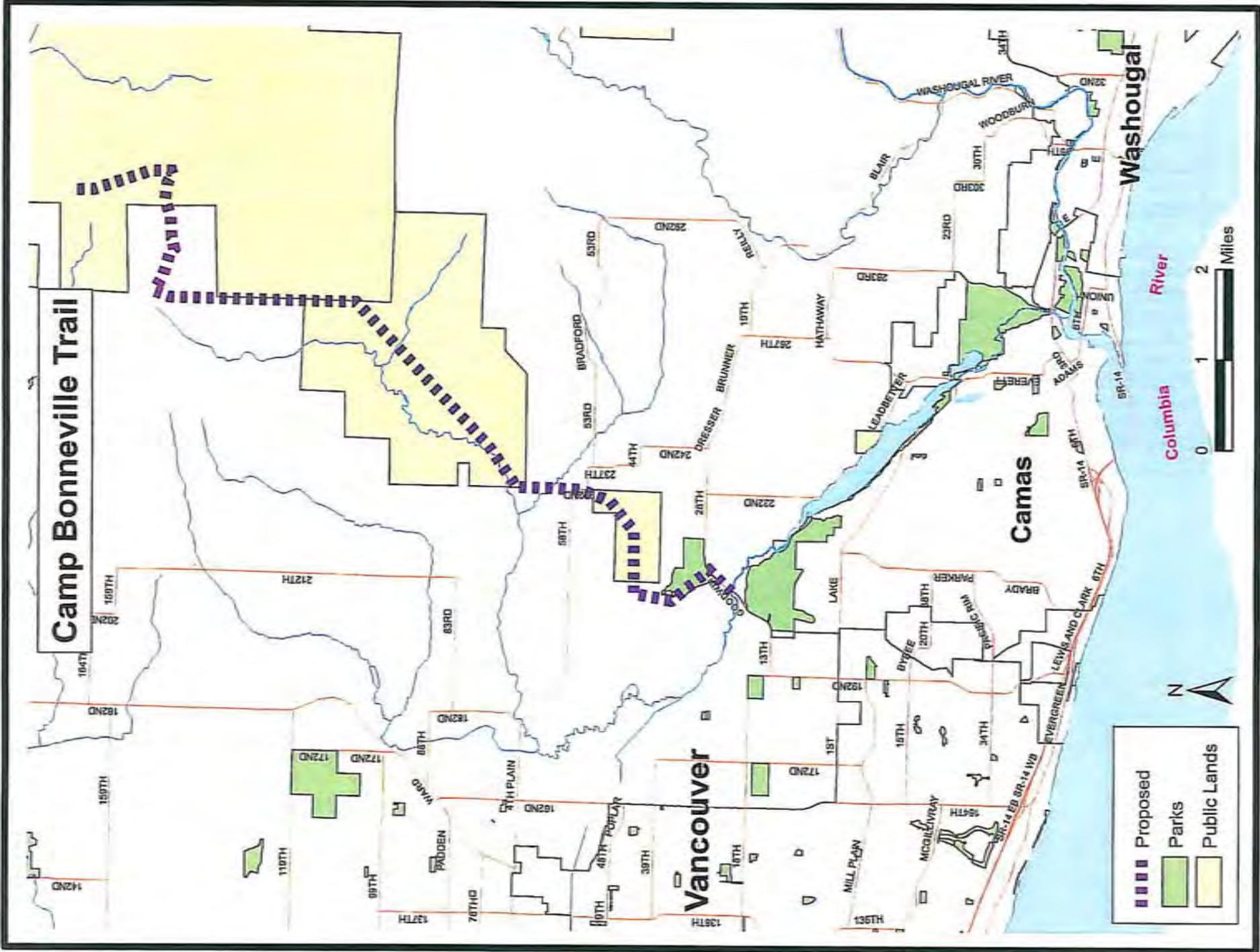


Figure 16







	Proposed
	Parks
	Public Lands



## Camp Bonneville Trail

Description	Name of Reach	Length	Built	Trail Classification	Jurisdiction	Available Funding	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Heritage Trail to Green Mountain Golf Course		0.75		A2	R		PUUA			
Green Mountain Golf Course to 54th St.		2.4		A2	R		PUUA			
54th St. to Lacamas Creek (Camp Bonneville)		0.9		A2	R		PUUA			
Lacamas Creek to Western edge of DNR Lands		3		A3	R		PUUA			
Western Edge of DNR Lands to Road L-1400/NE 271st Ave		2.3		A3	R		PUUA			
Road L-1400/NE 271st Ave to Elkhorn Mountain Road		1.5		A3	R		PUUA			
Elkhorn Mountain Road to Salmon Creek Trail		1.2		A3	R		PUUA			
	<b>Total</b>	<b>12.1</b>	<b>0.0</b>							



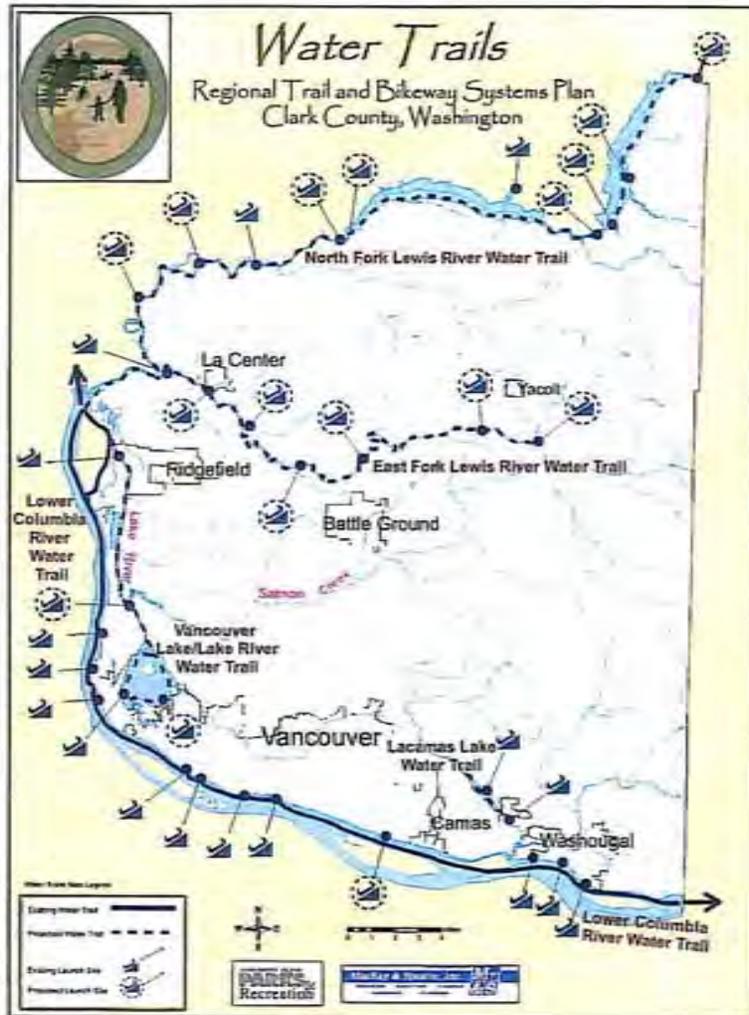
# 2006 Trail & Bikeway Systems Plan

## Regional Trail Name: Lower Columbia River Water Trail

VANCOUVER-CLARK  
**PARKS & Recreation**

### Vicinity Map

#### Lower Columbia River Water Trail



### Project Summary

**Project Number:**

**Regional Trail Name:** Lower Columbia River Water Trail

**Project Length:** 146 river miles (Clark County segment - 40 river miles)

**User Groups:** Human wind-powered, beachable water craft. Non-motorized boaters such as sea kayakers, canoeists, and rowers.

**Project Description:** The Lower Columbia River Water Trail stretches 146 river miles from Bonneville Dam to the Pacific Ocean. The trail links existing launch and landing sites, camp sites, lodging, restaurants and groceries, and sites of interest in Oregon and Washington. Within Clark County, the trail extends from upstream of Washougal to downstream of Ridgefield, and includes sites ranging from Reed Island State Park, Captain William Clark Park at Cottonwood Beach, Vancouver Marine Park, the Ft. Vancouver Beach, Frenchman's Bar Park, and the non-motorized boat launch in Ridgefield. The trail can be used for day, multi-day, or multi-week trips. Rather than a specific line on a map, the river is the trail and users have an extensive range of trip options, including following Lewis and Clark's journey down the lower Columbia River. The Lower Columbia River Water Trail is coordinated by the Lower Columbia River Estuary Partnership and guided by the Partnership's Lower Columbia River Water Trail Committee. An interactive trail web site is available at [www.columbiawatertrail.org](http://www.columbiawatertrail.org).

**Environmental Constraints:** The lower Columbia River is home to many sensitive, threatened and endangered species and habitats. Trail users are strongly encouraged to practice "leave no trace" principles. In addition, the trail directs people to appropriate camp site locations and away from sensitive habitats and private property. Each year, a number of stewardship activities take place along the trail. New sites should only be located in suitable locations and should be designed to minimize environmental impacts.



Figure 17

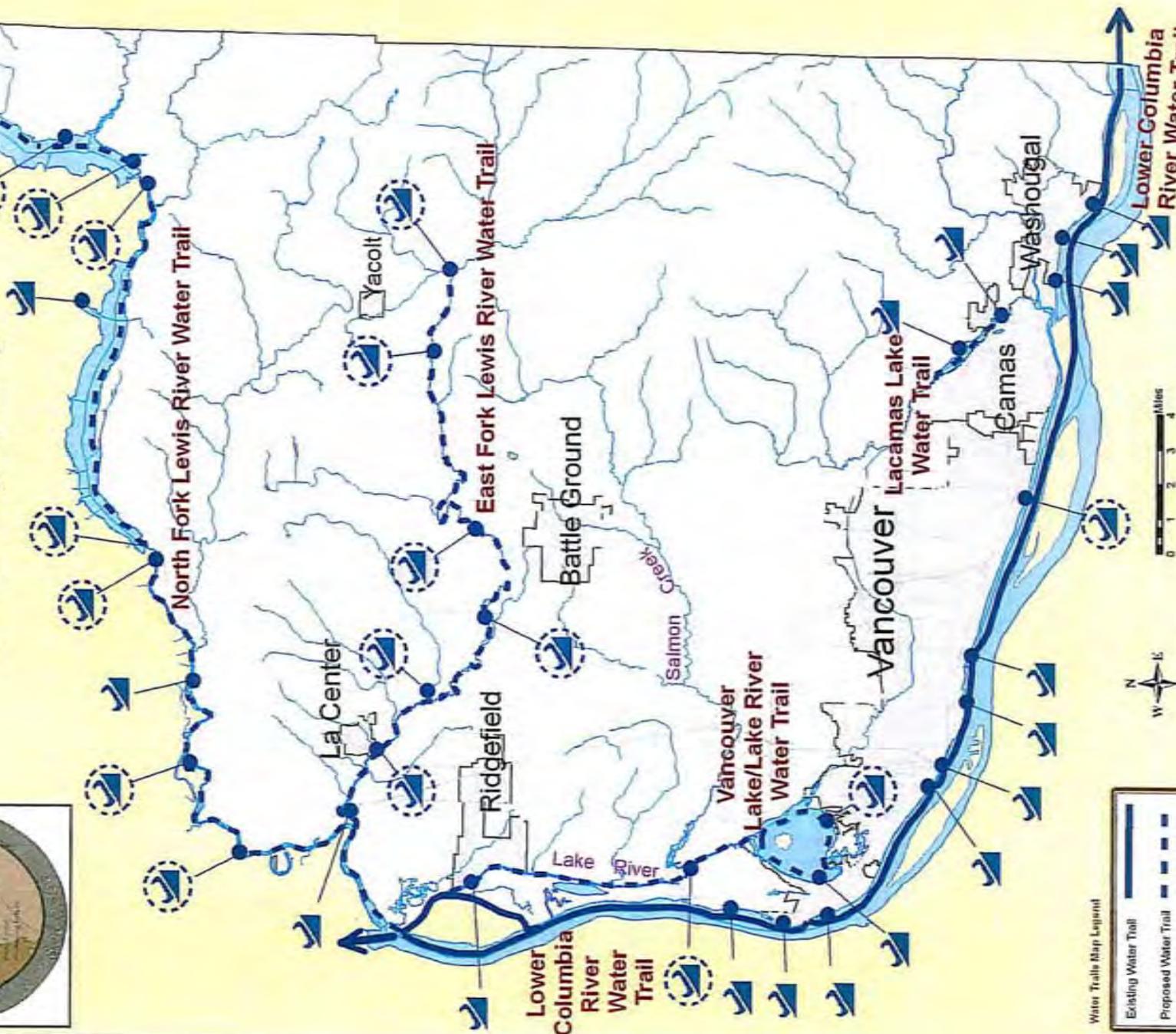
\* Special acknowledgement in authoring this sheet to Chris Hathaway, Lower Columbia River Estuary Partnership, Lower Columbia River Water Trail





# Water Trails

Regional Trail and Bikeway Systems Plan  
Clark County, Washington



Water Trails Map Legend

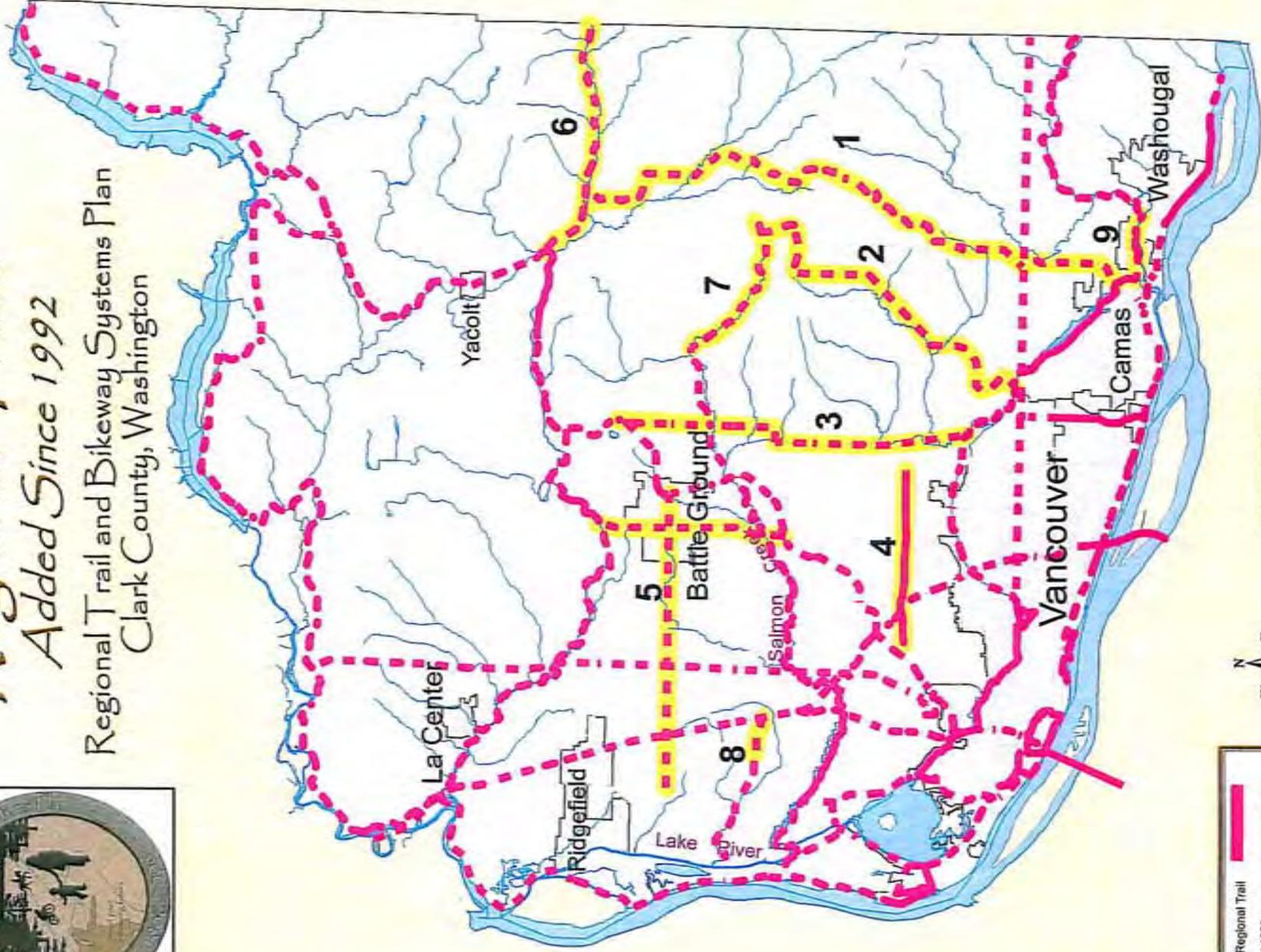
	Existing Water Trail
	Proposed Water Trail
	Existing Launch Site
	Proposed Launch Site





# Regional Trails Added Since 1992

Regional Trail and Bikeway Systems Plan  
Clark County, Washington



Legend

- Existing Regional Trail
- Proposed 1992 Regional Trails
- New Proposed Trails (Not on 1992 Plan)



Regional Trail & Bikeway  
Systems Plan  
2006

SECTION III  
IMPLEMENTATION





## SECTION III. IMPLEMENTATION

Implementation of the plan requires a strategy that will transform this plan from a long paper trail to actual paved trails. This strategy must also reinforce the claims that these facilities are positive economic investments for the communities they serve.

### *A) Recommendations*

#### **R1. PUBLIC OUTREACH (Citizen Involvement)**

A. Clark County Trail Advisory Committee should be formalized with a representative from of each of the user and interest groups associated with trails such as: The Bicycle Advisory Committee, The Executive Horse Council, Discovery Walk, etc.

The Trails Advisory Committee should be under the shared management of the Transportation Department and Parks & Recreation Department. Representatives from the Trails Committee would meet regularly with the Transportation and

Parks & Recreation Department and send a couple of representatives to greater Clark County meetings to serve as advocates for this trails system.

#### **R2. PUBLIC EDUCATION (Marketing the System)**

Educate the public as to where the current “connected” systems are and where the proposed extensions will be. Our open houses highlighted how “unknown” many of the existing trails are to our current residents who want to use trails and they just don’t know what they already have available to them. Effective and consistent trail naming and signage will help the public understand where each trail goes and where it connects. Some of these ideas may include:

- A) Education about trail benefits
- B) Maps and brochures that indicate trail routes which lead to public parks and shopping access.
- C) Published maps that are printable trail by trail via Parks Department website for various users.
- D) Signs that let users know they are on an identified route.
- E) Market the trails in Clark County through signage viewable to the public

### **R3. PROJECT PRIORITIZATION**

Clark County would convene:

- A) To develop a scoring system for the weighted criteria
- B) Bi-annually with a community-based group to validate the criteria and its weighting.
- C) Bi-annually prioritize the list of projects.
- D) Bi-annually to define projects by referencing the Clark County Comprehensive Plan, City Park and Recreation Plans, Capital Facilities Plan, TIP, and any other necessary plan.

### **R4. FUNDING FOR TRAIL CONSTRUCTION & MAINTENANCE**

The following brief list represents potential funding sources for trail construction and maintenance such as:

- A. Formalize some trails as part of the Arterial Atlas, Road Standards and Development codes.
- B. "Adopt a trail" programs for volunteers to construct and/or maintain trails.
- C. Autonomous tax measure.
- D. Pursue private grant funding.
- E. Pursue partnerships with other agencies and private entities.

### **R5. TRAIL SIGNAGE**

Appropriate, consistent and evident signage identifying regional trails is necessary to promote future trail development. The following recommendations for implementation are suggested:

- A) Develop a trail bollard / signpost standard that can be used for demarcation of trailheads and interim mileage marks or points of interest. This could be the current square concrete bollards that have been installed on previous projects or a new style could be based on the old City of Vancouver City Limits posts that were tapered concrete. Either style could be fitted with a standard brass survey monument that could be stamped with the trail name, mileage, or other pertinent information, as well as an emblem or icon that is representative of the specific area or stream basin that the trail is located within.
- B) Way-finding monuments directing users across difficult crossings and missing links
- C) "You are Here" trailhead signage
- D) Signs that let users know they are on an identified route
- E) Develop appropriate trail markers to serve the identified purpose
- F) Develop a graphic or icon representing Lewis & Clark that could be included on all trail signage throughout the county

and tie into the theme for the Lewis & Clark Centennial celebration, the confluence project, and the Discovery Greenway project.

- G. Consider opportunities to recognize partners.
- H. Develop kiosks that host a large map of the trails systems in key locations. The kiosk may also contain small maps users can take with them.

**R6. DEVELOP A PUBLIC INVOLVEMENT PROGRAM**

A public involvement plan should be designed for each project. Based on the complexity of the project, the plan should identify the appropriate level of public involvement for the project, stakeholders, project decisions and timeline, a public involvement budget and public involvement tools to be implemented. Each plan will be unique and may need to use different and creative approaches tailored to a specific project.

As individual projects within the 2006 Trail and Bikeway Systems Plan are implemented, stakeholders in each project should be involved in planning.

**R7. TRACK PLAN PERFORMANCE/SUCCESS**

It is important to track and evaluate the success of the trail network system in meeting the plan goals regularly. This may be accomplished by:

- A) Look for opportunities to partner with Community Choices 2010 in reporting on community health

- B) Tracking user groups and trail usage within the county.
- C) Tracking proportionality of trails against the increased population in the county and amongst user groups.
- D) Supporting cities in developing their own plans and modifying the county plan to each city's plan as it is developed/adapted.

**R8. TRANSPORTATION IMPROVEMENT PROGRAM UPDATE**

Clark County will revise the criteria for the 2007-2012 TIP giving points toward current transportation projects for connectivity to trails listed in the adopted Trail & Bikeway Plan.

**R9. ARTERIAL ATLAS ANNUAL UPDATE**

The 2006 Trail and Bikeway systems plan projects should be included within the annual arterial atlas update and be included in the new development packet.

**R10. PARKS COMPREHENSIVE PLAN UPDATE**

The Vancouver-Clark Parks and Recreation Department will update the Parks Comprehensive Plan in late 2006. The Trail and Bikeway Systems plan should be included within this plan update.

- A) Tracking miles of trail per year that are planned, designed, permitted, built and maintained by trail type.

B) Track volunteer hours and number of volunteers used

C) Perform user counts and surveys

**R11. PARKS IMPROVEMENT PROGRAM**

The Clark County Six-Year Transportation Improvement Program (TIP) uses objective criteria to evaluate and prioritize road improvements from the list of recommended projects. This program assigns available revenue to the highest-ranked projects to achieve the goals of the Capital Facilities, Comprehensive Plan, the community and the Board of County Commissioners. The TIP is reviewed and adopted annually. The Parks and Recreation Department should establish a similar improvement program utilizing the criteria established within this planning document to rank projects. This Parks Improvement Program (PIP) can be incorporated into the TIP document annually.

***B) PROJECT IDENTIFICATION***

Steps of identifying an actual project will vary, but may typically include the following:

A) Completion of a feasibility study, which typically includes preliminary design, environmental analysis, alternatives analysis, and related agency coordination. The final product should yield a preferred design alternative, environmental clearance, and an accurate cost estimate that includes acquisition, design, construction, and operation and maintenance costs.

B) Scoring of the project through the Project Prioritization Criteria (Section IV of this plan)

C) Approval of the preferred project by Clark County, the C.T.A.C. and other local governing boards, including acceptance of any environmental documentation. Necessary permits should be obtained. Project funding may come from local, state and federal grants as well as local and private sources. The county will typically assume maintenance responsibility for the completed project.

D) Funding applied for and obtained for the project. Typically, all environmental work must be completed, local approval obtained, and the right-of-way in public control.

E) Completion of final Plans, Specifications and Estimates (P,S&E). Once completed, bids for construction services can be obtained.

F) Construction of the project.

***C) Estimated Costs***

This section identifies costs for the proposed path improvements, plus strategies on funding and financing.

The county's Pedestrian & Bicycle Advisory Committee (recommended to be established as part of the Transportation System Plan) should help monitor the projects identified in this Plan and subsequent updates, and keep a year-to-year list of projects and funding opportunities.

**Cost Breakdown**

The cost per mile can be broken down based on the following assumptions. The market value for a trail right-of-way acquisition is assumed to be not-prime developable at \$200,000 per acre. The approximate width for a trail right-of-way is 25 feet. The cost per mile would then equate to approximately \$600,000.00. The soft costs would include engineering, planning, environmental, soils, architectural, landscaping, and appropriate permitting fees.

Funding	Cost
Right-of-way acquisition	\$600,000
Construction costs	\$200,000
Bridges, trailheads, parking lots, restrooms, signage, intersections	\$50,000
Environmental Mitigation	\$100,000
Soft costs	\$150,000
<b>Total Cost</b>	<b>\$1,100,000 per mile</b>

Many of the potential funding sources are highly competitive, so it is impossible to determine exactly which projects will be funded by which sources. It is important to note that while many of the projects can be funded with federal, state, and regional transportation, safety, and/or air quality grants, others are recreational in nature and must be funded by local or private sources. Timing of projects is also difficult to pinpoint exactly, due to dependence on competitive funding sources, timing of roadway and development projects, and the overall economy.

Potential sources of project funding are identified later in this section.

**Maintenance**

Trail systems should be affordable to develop and constructed from durable materials that provide long term value. Thoughtful planning and design will provide efficient layouts that take advantage of existing facilities, natural land features, and interface with significant regional transportation projects. A multi-jurisdictional awareness will integrate the efforts of Clark County's smaller communities into the larger trails plan.

Sustainable trail planning seeks to *balance* the needs of human users with the natural functions and health of the site. Sustainability needs to be engaged early in the planning process and implemented during subsequent engineering efforts.

One of the most overlooked aspects in sustainable design is creating projects with significant long-term value and low maintenance. The planning, design, and construction of a facility affect its operation and maintenance. Efficient and economical designs, use of durable materials from natural, renewable, or recyclable sources, and the early consideration of maintenance in the planning process can reduce potential financial burdens and environmental costs.

The total annual maintenance cost of the trail system of 240 miles is estimated to be \$2,400,000 when the system is fully implemented.

Most maintenance costs are associated with the shared-use paths, and are based on an estimated cost of \$10,000 per mile, covering labor, supplies, and amortized equipment costs for:

- A) Weekly trash removal
- B) Monthly sweeping
- C) And biannual resurfacing and repair patrols, the costs for which include:
  - o Cleaning, resurfacing and re-striping the asphalt path
  - o Repairs to crossings
  - o Cleaning drainage systems
  - o Trash removal
  - o Landscaping
  - o Underbrush and weed abatement (performed in mid- and late summer)
  - o Removal of noxious weeds

Bicycle lanes account for a small proportion of overall maintenance costs. A figure of \$2,000 per mile of bike lane annually is used based on experience in other cities. This includes costs like sweeping, replacing signs and markings, and street repair.

Maintenance access on the trails will be achieved using standard pick-up trucks on the pathway itself. Sections with narrow widths or other clearance restrictions should be clearly marked.

### Security

Well designed green residential spaces such as trails work to foster safer and stronger communities by providing gathering spaces where neighbors form social ties. The presence of families and trail users on Clark County's trails further promotes safety by providing surveillance that deters criminals. And in addition, the trail network provides police officers excellent access to potential problem areas.

Adjacent residents are often concerned about security on shared-use paths such as those proposed in this plan. Fortunately, the security experience with trails nationwide and locally has been extremely positive. A survey conducted within Clark County in December 2000 suggests that 26% of those participating believed the overall safety and security of the trails was "good" to "excellent," while one in five believed the trails to be "fair" to "poor." One in five was unable to evaluate the overall safety and security. These statistics suggest that there is a positive safety security plan in place, but there are some necessary improvements that must be undertaken.

The following security strategy should be employed to prevent problems from happening:

- A) Applying “Crime Prevention through Environmental Design” and “Trespass Prevention through Environmental Design” concepts, which recognize that proper design and effective use of space to reduce conflicts and improve overall safety.
- B) Continuing support and development of the Clark County-Clark Parks & Recreation “Trailwatch” program that provides volunteers to meet the information and safety needs of trails users. Specifically, Trailwatch volunteers report safety and security concerns to the appropriate officials.
- C) Employing strong, secure and damage-resistant construction materials, landscaping and a parks maintenance plant.
- D) Providing secured access areas (parking lots, storage areas), and barrier systems where needed (gates, fences, access control).
- E) Providing coordinated and responsive patrol service.
- F) Designating and enforcing rules and regulations (park rules and hours, exclusion provisions, and emergency closure provision).

- G) Employing crime prevention and problem solving strategies, such as park user education, informational signage, a problem reporting system, incident management and follow-up, and broad-based problem solving groups.
- H) Holding programmed uses and events, such as regularly scheduled activities, permitted events, and vendors.
- I) Facilitating positive presence, including staff, vendors, volunteers, public buildings and other public facilities.

Enforcement of applicable laws on trails will be performed by the local police department, using both bicycles and vehicles. Enforcement of vehicle statutes relating to bicycle operation will be enforced on the on-street connector bikeways as part of the department’s normal operations. It is not projected that additional worker hours or equipment will be needed for on-street segments.

#### ***D) Support Programs & Events***

Once the trail system is in place, it is crucial to develop and manage support programs to ensure safe and increasing levels of trail usage. It is also critical for the development of the trail system be coordinated with on-street transportation facilities,

including bikeways, walkways, and street improvements. Finally, existing initiatives and organizations present an opportunity to learn from and expand on established programs and their resources.

Programs that can support the installation and use of bikeway and walkways in Clark County are outlined below under the following areas:

- A) Advocacy Organizations
- B) Events
- C) Community Involvement
- D) Trail Maintenance
- E) Bicycle End-of-Trip Facilities
- F) Signing
- G) Education
- H) Enforcement

**Advocacy Organizations**

Sponsoring Parties: *Non-governmental Organizations, Clark County*

Non-profit organizations and extra-governmental initiatives present an especially valuable opportunity to share resources

with people who are already working on related issues. An advisory committee should be established to ensure the continued presence of community members in city and county trails' planning efforts.

**Community Choices 2010**

Community Choices 2010 is a non-profit organization dedicated to improving the health of Clark County residents by focusing on early prevention strategies. In 2003, Community Choices 2010 convened stakeholders to develop strategies to increase physical activity and improve food choices in order to address the alarming increase in overweight and obesity and the associated health risks such as diabetes and heart disease. In addition, Community Choices 2010 was chosen to participate in a five-year, \$5.9 million STEPS grant from Health and Human Services to reduce the burden of chronic disease including:

- A) Reducing and preventing overweight and obesity
- B) Preventing diabetes among populations with pre-diabetes
- C) Increasing the likelihood that person with undiagnosed diabetes are diagnosed
- D) Reducing complications of diabetes
- E) Reducing the complications of asthma

In partnership with Clark County Clark Parks & Recreation Department, the local health department, schools, business,

healthcare, the faith community, parks and more. Community Choices 2010 is working to define strategies to significantly improve the health of Clark County citizens. The provision of paths and trails is essential to achieving goals of preventing and reducing overweight and obesity problems through increased physical activity.

### **Lewis & Clark Discovery Greenway Project**

The Lewis & Clark Discovery Greenway Project is a regional effort of multiple agencies and organizations to complete riverside trails that will provide access to the historical landing sites of the Lewis & Clark Expedition. The Greenway Project includes such bodies as Vancouver-Clark Parks & Recreation, the Clark County Transportation Department and Metro Parks & Greenspaces. Trail connections are projected to be completed in time for the 2005-2006 bicentennial of the expedition, and the resulting increased tourism.

Although the Greenway Project's focus is to make trail connections rather than to focus on individual sites, its scope does include trail amenities and site-specific improvements.

### **Parks & Recreation Foundation of Clark County**

The Foundation is a non-profit organization established in 1999 to accept and administer such donations, gifts, and bequests for the enrichment and enhancement of the community's parks, recreation and cultural services.

The Foundation provides a stable source of funding for the Clark County Parks Department, particularly during tight city and county budget periods. It will fund acquisition and

enhancement of trails, as well as open space, interpretive centers and other park amenities. As a citizen-based organization, it also creates a valuable relationship between the park/trail system and the public.

### **Events**

Sponsoring Parties: *Community groups, Clark County and their departments, Health Organizations, City of Vancouver, Vancouver-Clark Parks & Recreation, Law enforcement*

Special events simultaneously attract large numbers of users and advertise the trail network. They present an opportunity to encourage citizens to both use the trail system and value it as a real community asset and source of civic pride. Bicycle and pedestrian interest groups are well-positioned to capitalize on the growing interest in on-road and off-road bicycle races and criteriums (races on closed courses over public roads closed to normal traffic).

The City of Vancouver Mayor's Bike Rides and rides sponsored by the Vancouver Bicycle Club and Portland Wheelmen Touring Club are all very popular, as are walks sponsored by American Volkspporters Association, the International Walking Association and Passport to Wellness. The potential for walks and rides to draw enormous crowds in Clark County exists in addition to the annual 100-mile "Ride Around Clark County" (R.A.C.C.) bicycling event, which draws about 1,000 riders annually; the Portland Bridge Pedal and Bridge Walk, for example, have over 15,000 participants

annually. Other annual walks include: Diabetes Walk, Walk for Animals (Humane Society) and the Clark College Fun Walk.

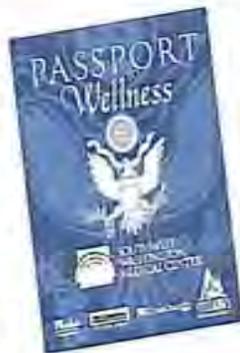
### Discovery Walk Festival

The annual Discovery Walk Festival, sponsored each April by the City of Vancouver and the International Walk Fest, is an example of a successful Clark County event that attracts both trail users and tourists. Centered around Esther Short Park, the Festival annually attracts over 1,000 participants from the region and beyond. In addition to promoting use of Clark County's trails, the Festival also presents an opportunity to both showcase and build public support for a high quality trail network.



### Passport to Wellness

Southwest Washington Medical Center, together with other corporate supporters, has sponsored the "Passport to Wellness" program since 2001 to promote local walking events. The program encourages participants to walk in such events as the March of Dimes *WalkAmerica* and The Columbian's *Morning River Walk* by entering walkers in drawings for prizes.



Most walking events take place in spring and summer, and the Westfield Shopping Town Clark County Mall-Walking program runs regularly year-round.

### Event Ideas

Additional events could attract even more people to Clark County and its trail system. Ideas include:

- A) Columbia Bridge Pedal. As the Columbia Waterfront Trail is completed and connected to Portland's developing Marine Drive system, a route drawing riders and walkers over both the I-5 and I-205 bridges would be popular.
- B) Vancouver Lake/Frenchman's Bar Ride
- C) Lewis and Clark Discovery Ride, following the Lewis and Clark Trail into the Vancouver-Portland area

Events are usually sponsored by local businesses and involve some promotion, insurance, and development of adequate circuits for all levels of riders. Cities, Parks Department and Clark County can help assist in developing these events by acting as a co-sponsor, and expediting and possibly underwriting some expenses (for example, police time). Clark County should also encourage these events to have races, walks, and tours that appeal to the less experienced cyclist and walker.

### ***E) Community Involvement Programs***

Sponsoring Parties: *Clark County, City of Vancouver, Parks Community Participants*

Community involvement programs can effectively invest citizens in their community resource by involving them in its planning, care, and maintenance. Clark County is fortunate to already have successful examples of this.

#### **Public Participation in Planning**

The City of Vancouver and Clark-Parks & Recreation departments have many years of experience involving the community in planning processes. In addition to soliciting public comments on master and strategic plans, the departments have also administered citizen visioning sessions for more specific undertakings such as the recent “Blazing New Trails 2005” open space symposium. These opportunities for citizen input in specific planning process are valuable and should be encouraged.

#### **Trail Maintenance Program**

Sponsoring Parties: *Clark County, City of Vancouver, Parks, Cities and Potential Volunteers*

Keeping shared use path facilities in good condition is critical to the success of the trail system. Key trail maintenance activities include sweeping debris, repairing and resurfacing pavement, replacing signs and markings, emptying trash cans, trimming vegetation, ensuring good drainage, re-grading

shoulders, and other activities. Poor trail maintenance can contribute to accidents and deter potential cyclists and pedestrians unwilling to risk flat tires and conflicts.

The County recommends development, over time, of a comprehensive, integrated approach to bikeway and walkway maintenance. This effort would include the following items related to trail maintenance:

- A) A “quick response” mechanism for routine items like sweeping, filling potholes, trimming vegetation, signing/stripping, and drainage repair
- B) Enhancement of routine maintenance activities. Examples include:
  - o Encouraging private property owners with gravel driveways along a path to pave the driveway 5-10 feet (1.5-3 m) back from the edge of pavement, or to right-of-way, to prevent gravel from spilling onto the path;
  - o Working to trim vegetation from shared-use paths; replacing or repairing shared-use paths broken by tree roots;
  - o Inspecting and maintaining bikeway signs, lines, and legends regularly; and
  - o Modifying or replacing drainage as needed.

- o Community adoption program to allow local businesses and organizations to ‘adopt’ a shared-use path. This would be similar to the program allowing adoption of segments of the Interstate Highway system. Small signs located along the pathway would identify supporters, acknowledging their contribution. Support would be in the form of an annual commitment to pay for the routine maintenance of the pathway, which, in general, costs about \$8,500 per mile. The Parks & Recreation Department, the Parks Foundation or other advocacy groups may administer this program.

### **Bicycle End-of-Trip Facilities Installation Program**

Sponsoring Parties: *Local Businesses, Clark County*

End-of-trip facilities (bicycle parking, showers, and lockers) for bicycle riders are as important to bicycling as motor vehicle parking is to auto drivers. The end-of-trip facilities program is proposed as part of the Transportation System Plan. From the perspective of the trail system, the program should focus on the installation of bike racks at parks, public buildings and trailheads. This would be publicly and privately funded and managed.

### **Signing Program**

Sponsoring Parties: *Clark County, Cities, Towns*

Signs help bicyclists and pedestrians find and travel appropriate routes. They also provide a safety measure for bicyclists, pedestrians and motorists. Signage can be

implemented as part of new bikeway creation, and added to existing on and off-street bikeways. This program consists of trail signs, safety signs (including etiquette signs on shared-use paths) and informational kiosks. Again, it will be part of a comprehensive bicycling and walking improvement effort for Clark County.

1. Trail identification signs should be posted along the primary north-south and east-west corridors. This type of sign helps direct travel by having a consistent symbology. Currently, Clark County uses the standard AASHTO “bike route” sign. However, this sign has been used inconsistently around the county, and does not assist cyclists in identifying appropriate bikeway routes.



Signs may include a destination place to direct cyclists and pedestrians to transit stations, bridges, schools, parks, and other key locations. The county should work with the appropriate Pedestrian and Bicycle Advisory Committees to develop a signage system with a common identifying theme (such as Ft. Vancouver).

2. Safety signs, such as trail etiquette, can help improve user behavior on shared-use paths and in specific roadway situations.

3. Informational kiosks help lay out a specific route with supplemental information. An example is the Discovery Trail Historic Walking Loop. An informational kiosk with a map of the route should be placed in two to three locations along the loop, such as Esther Short Park.
4. The implementation phasing of a signing program would:
  - Develop a protocol for trail signing, including sign design, locations, destination plates, and potential items such as mileage.
  - Improve or replace signs on existing trails.
  - Develop and install safety signs on shared-use paths and other locations as needed.
  - Develop and install informational kiosks as part of Discovery Trail implementation.

### ***F) Education***

Sponsoring Parties: *Clark County, Schools, Parents, Teachers, Community Groups*

An important program is the “Safe Walk To School” program which is a Washington State regulation requiring school districts to have suggested walk routes for every elementary school. The plan must cover a one-mile radius from the school wherein it considers existing traffic patterns, crosswalks, traffic lights, or school safety patrol posts. It is suggested that the

routes provide the greatest physical separation between walking children and traffic, expose children to the lowest speeds and volumes of moving vehicles, and have the fewest number of road or rail crossings.

The lack of education for bicyclists, especially among younger students, continues to be a leading cause of accidents. For example, Clark County’s accident history includes a number of wrong-way and sidewalk riding crashes. Motorist education on the rights of bicyclists and pedestrians is virtually non-existent. Many motorists mistakenly believe, for example, that bicyclists do not have a right to ride in travel lanes and that they should be riding on sidewalks. Many motorists do not understand the concept of ‘sharing the road’ with bicyclists, or why a bicyclist may need to ride in a travel lane if there is not a shoulder or is full of gravel or potholes.

Bicycle education programs in a few schools are typically taught once a year to sixth, seventh and eighth graders. Curriculum is derived from established programs developed by groups such as the League of American Bicyclists, Community Cycling Center and Oregon’s Bicycle Transportation Alliance. In Clark County, bicycle education is taught at selected schools annually, but the program is far from comprehensive. Formal adult bicycle education is virtually non-existent in Clark County.

Pedestrian education programs are rare, but important as well. School children need to understand how to safely cross the road (e.g. scanning for cars), where the best places to cross are, never to cross behind a bus or car, seatbelt safety, etc. . . .

Pedestrian education should be taught as early as first grade and continue through third grade.

#### **Expand Current Education Programs**

Existing educational programs at Clark County schools should be made more commonly available in a cooperative effort between the city and the school district, and supported by a secure, regular funding source. A Safety Committee should be formed consisting of appointed parents, teachers, administrators, police, active bicyclists, and public works staff whose task it is to identify problems and solutions, ensure implementation, and submit recommendations to the school board or city council.

#### **Develop New Educational Program Materials and Curriculum**

Education materials should be expanded to promote the benefits of bicycling and walking, the need for education and safety improvements, the most recent educational tools available in the country (including the use of low-cost safety videos), and directives to parents on the proper school drop-off procedure for their children. Educational pamphlets for children should be developed. Educational programs, and especially on-bike and on-street pedestrian training, should be expanded to more schools. Education curriculum should, at a minimum, cover the following lessons:

- A) On-bike training or bicycle 'rodeos'
- B) Use and importance of bicycle helmets

- C) How to adjust and maintain a bicycle
- D) Night riding (clothes, lights)
- E) Rules of the road
- F) Riding on sidewalks
- G) How to negotiate intersections
- H) Riding and walking defensively
- I) Use of hand signals

A standard safety handbook format should be developed incorporating the best elements of those currently in use and made available to each school on disk so they may be customized as needed. Clark County schools should develop a circulation map of the campus and immediate environs to include in the handbooks, clearly showing the preferred circulation and parking patterns and explaining in text the reason behind the recommendations. This circulation map should also be a permanent feature in all school newsletters. Bicycle helmet subsidy-programs are available already in Clark County, and should be used to provide low-cost approved helmets for all schoolchildren bicyclists.

#### **Develop an Adult Education Program**

An adult bicycle education program should be established through organizations such as the Community Cycling Center, in cooperation with the Parks and Recreation Department

and/or other city departments. This program should (a) teach adults how to ride defensively, (b) teach adults how to ride on a variety of city streets, and (c) encourage adults to feel more confident to ride to work or for utilitarian and recreational trips. The program should coordinate with local bicycling groups who could provide the training expertise, and possibly lead organized bicycle-training sessions, tours and rides. Likewise, educational walks could teach appropriate pedestrian behavior on city streets.

The city should also partner with local, state, and national health organizations to promote walking and bicycling. Examples of possible partnering organizations include: the Robert Wood Johnson Foundation, The Center for Disease Control, and other organizations that focus on public health issues. Through these partnerships, Clark County residents could be educated about the health benefits of incorporating walking and bicycling into their daily lives.

#### **Educate Motorists**

Educate motorists about the rights and characteristics of bicyclists and pedestrians through a variety of means including:

- A) Making pedestrian and bicycle safety a part of traffic school curriculum in Clark County.
- B) Producing a brochure on pedestrian and bicycle safety and laws for public distribution.
- C) Enforcing existing traffic laws for motorists, bicyclists and pedestrians.

- D) Working to improve the DMV manual's treatment of bicyclists and pedestrians.
- E) Sending an official letter to the Department of Motor Vehicles recommending the inclusion of bicycle and pedestrian laws in the driver's license exam.

#### **G) Enforcement**

Sponsoring Parties: *Police/Sheriff's Department, Clark County*

Bicyclists, pedestrians, and motorists all must behave consistently and according to established laws in order for all to enjoy a safe system. The County should work with the Sheriff's office and city police departments to develop a consistent enforcement program for pedestrian and bicycle-related laws. Such programs have been very effective, in combination with increased bikeway and walkway facilities, at increasing public awareness of bicycle and pedestrian safety issues. Suggested components of a program for Clark County include:

- A) Police training: work with the police department to ensure officers are trained in Washington State laws and local ordinances related to safe motoring, walking, and bicycling. Invite a police department liaison to participate in the BPAC. Hold regular meetings with traffic enforcement officers to discuss issues and solutions.

- B) Develop and distribute informational brochures to bicyclists, pedestrians and motorists.
- C) Design periodic traffic enforcement “sting” operations targeting violations like failing to yield to pedestrians in crosswalks, speeding in school zones, driving in bicycle lanes, and bicyclists and motorists running red lights. Publicize to ensure maximum benefit.
- D) Consider increased enforcement and fees for traffic violations that endanger pedestrians and bicyclists.
- E) Develop and continue a Police-on-Bikes program where appropriate to establish police presence at a community level.

**H) Volunteerism**

Clark County Parks & Recreation’s “Trail Watch” program recruits, trains and supports volunteers to help meet the information and safety needs of other trail users and park staff

**Trailwatch**

Vancouver-Clark Parks and Recreation Services.

Trail Watchers” provide trail users with information on rules and points of interest, report safety and security concerns to appropriate officials and also assist with light trail maintenance. Volunteers are assigned to the following trails:

- o Discovery Trail
- o Burnt Bridge Creek Trail
- o Ellen Davis Trail
- o Waterfront Renaissance Trail
- o Discovery Historic Loop



# Regional Trail & Bikeway Systems Plan 2006

## VOLUME II

Oregon & Washington Territory

Proud Past, Promising Future



Regional Trail & Bikeway  
Systems Plan  
2006

SECTION IV  
APPROACH



Proud Past, Promising Future





## SECTION IV. APPROACH

How did this plan come about? This answer to this question is very important to relay to the citizens of Clark County that this plan is for the citizens by the citizens. A systematic, cooperative, and collaborative approach was taken represented in two major approaches, the plan approach and the public involvement approach.

### ***A) PLAN APPROACH***

The 2006 Clark County Trail & Bikeway Systems Plan was undertaken as an update to the 1992 Clark County Trail & Bikeway Systems Plan. As such, the planning process followed a series of research and public process activities, and a workshop with the Park Commission, Planning Commission and City Council in late 2005 and early 2006. These activities included:

- Assessment of current bicycling and walking conditions and facilities in Clark County.
- Evaluation of bicycle and pedestrian needs, such as safety problems, demographic and geographic population and employment demands and facility deficiencies.
- Development of comprehensive and connected systems of bikeways and walkways.

- Development of bicycling and walking support programs.
- Public outreach

In addition, park and transportation planners reviewed other relevant documents produced in and around the county, to understand established goals. The primary plans that were reviewed are summarized below and include various brochures and materials related to parks, open spaces, the Columbia River Renaissance, Lewis and Clark 2005-2006 Bicentennial activities, and trail projects:

- A. 2005-2010 Clark County Transportation Improvement Program
- B. 2004 City of Vancouver Paths & Trails Element
- C. 2003 Vancouver Transportation System Plan
- D. 2002 "Rediscovery of the Rivers – Lewis & Clark Discovery Greenway"
- E. 2002 Urban Parks, Recreation and Open Space Plan
- F. 2001 Clark County Parks, Recreation, and Open Space Plan, Draft Report
- G. 2000 Vision Symposium
- H. 2000 Clark County Transportation System Plan – Vision for the Future
- I. 2000 Clark County Transportation Vision Research Report

- J. 2000 Clark County Transportation Improvement Program
- K. 2000 Clark County Recreation Program & Cost Recovery Plan
- L. 2000 Clark County Regional Parks, Recreation and Open Space Plan
- M. 2000 Ridgefield National Wildlife Refuge Report
- N. 2000 Recommended Bicycle Facility Design Implementation Practices
- O. 1999 Clark County-Clark Facilities & Services Strategic Plan
- P. 1999 Metropolitan Transportation Plan for Clark County
- Q. 1999 Downtown Transportation System Plan
- R. 1999 C-TRAN Pedestrian Accessibility Program Report
- S. 1998 Clark County Comprehensive Sports Fields Master Plan
- T. 1995 Clark County Parks, Recreation, and Open Space Plan
- U. 1994 Clark County Parks, Recreation, and Open Space Plan
- V. 1994 Clark County Growth Management Plan
- W. 1992 Columbia River Renaissance Project
- X. 1992 Clark County Open Space Commission Report
- Y. 1992 Clark County Trail and Bikeway System Plan
- Z. 1991 Columbia River/Evergreen Highway Trail Study
- AA. 1990 Washington State Growth Management Act (GMA)



***B) PUBLIC INVOLVEMENT APPROACH***

The community's investment in this legacy project is crucial to the success of a buildable systems plan. The overall purpose of the project is to develop a Trail and Bikeway Systems Plan through a comprehensive public outreach process that also serves as a platform to develop viable funding options, while at the same time honoring and celebrating the Lewis and Clark legacy.

To successfully achieve this objective, the program focused on accomplishing several goals.

- A. Reaching a broad spectrum of people to ensure that all critical issues are considered and addressed in the outcome
- B. Engaging key stakeholders at a level that elicits their active ownership of the outcomes of the project
- C. Building a more informed base of public participants who can actively contribute to the public conversation
- D. Generating trust in the process and the outcomes by the general public, key stakeholders and leaders
- E. Capturing the interest of the news media, to increase the reach of public education
- F. Demonstrating broad citizen support for the outcomes
- G. Providing policy makers with confidence in the process and the outcomes

One major component of the public outreach plan was to direct interested citizens to the project web page and online survey. Participants were also able to learn more about the program, register their preferences and opinions through an online survey, sign up to be in the project mailing list, and learn about project updates and special events. The project website was predominantly featured throughout the outreach materials and connected to the Lewis and Clark event activities and planning. The following items served as an educational role for the program:

- **Project website:** An interactive project website was posted on the Vancouver/Clark Parks and Recreation home page.
- **Web survey:** Linked to the project website and used to determine public preferences for parks program priorities and funding options, an online survey was developed. The survey functions much like an online public meeting by providing information and asking for a response.
- **Project database:** A project database – including email contacts – was constructed from existing sources and then added to throughout the duration of the program.
- **Articles for local magazines and newsletters –** Three articles were profiled as feature articles in the Lacamas Life magazine, Walkabout magazine, Greater Vancouver Chamber of Commerce and the Columbian.

In order to maximize the exposure for this Trail and Bikeway Systems Plan, it is essential the plan is considered a legacy project and incorporated into our community's Lewis & Clark Bicentennial celebration activities. In addition, careful thought and strategic alliances in the health community was also essential. A few of these community partnerships could potentially include, but are not limited to:

- A. Lewis & Clark Expedition Bicentennial Committee
- B. The Confluence Project

- C. Washington State Parks Department
- D. Cottonwood Beach Improvements
- E. The Historic Reserve
- F. Fort Vancouver
- G. Lewis & Clark Landscapes Project
- H. Discovery Walk
- I. Community Choices 2010
- J. Health and Human Services
- K. Southwest Washington Medical Center, Passport to Wellness
- L. School districts
- M. Native American tribes

Overall, community members have been involved at each step of developing the 2006 update to the Clark County Trail and Bikeway Systems Plan. The public involvement effort sought to engage community members early in the planning effort and offer opportunities for public input throughout the process. Key public involvement activities included a series of open houses, community advisory committee (CAC) meetings, and an on-line survey. Public information included postcard notice of the open houses, a web page, a project display and fact sheets.

### **Public Involvement Tools**

The Trail and Bikeway Systems Plan CAC met seven times between June 2005 and February 2006. Twenty-four members representing a range of user groups and other advocacy groups met to discuss goals for the plan, where new trails were needed and what criteria should be used to compare trails in the plan. At their final meeting, the CAC reviewed public input,

suggested revisions and endorsed the plan. The CAC also made additional recommendations about funding and plan implementation that will be forwarded to the Parks Commission. In June 2005, the public was invited to review the county's current trail and bikeway plan and provide input



on changes and updates that should be included in the next plan. Comments, questions, and ideas were gathered on maps, flip charts, and feedback forms. An on-line survey was posted on the Vancouver-Clark Parks and Recreation web site from June through August 2005. The survey was taken by 96 people and was advertised by a link on the site and with cards distributed to interested people. In addition to the on-line survey, the web site included information about meetings and the development of the plan.

### Trails Symposium



**BLAZING NEW TRAILS** – 2005, a community symposium held at the Hilton Hotel on November 4, 2005, provided valuable input to the evolving Clark County Trail and Bikeway Systems Plan. The event brought together 302 people

including many business and community leaders, planners and engineers, trail and bike advocates, neighborhood representatives and interested citizens to focus on future trail planning efforts. The date was significant because it was the 200th anniversary of the very day on which Lewis and Clark set up camp on the Columbia River in what is now Clark County.

The primary event sponsor was the Vancouver-Clark County Lewis & Clark Planning Committee, bringing years of preparation for the Lewis and Clark Bicentennial commemoration. The opening presentation provided an opportunity to reflect on the lasting legacy of the Corps of Discovery and its nation-building journey. Re-enactors who traveled down the Columbia River earlier that day in dugout canoes were introduced to a warm applause.

Then attention turned to issues of present and future concern. Where do we want to be able to walk, hike and ride a bike in

years to come? What trails and other facilities are needed to make this a more active and connected community? What needs to be done to make these trails a reality sooner rather than later?

With a mandate to “make history,” participants took advantage of the chance to begin shaping a strong, verifiable trails vision for Clark County and the region. Large county trail maps were provided, allowing participants to envision and sketch ideas for future trail extensions and connecting routes.



Table discussions – with up to eight people per table, they looked at many aspects of the current trails system - the wants and needs of residents and ideas for future development. Key concerns included accessibility of trails to neighborhoods, trail safety and funding mechanisms. Many participants expressed the need for shared-use trails and more “soft” paths for bikers and walkers. “Connectedness” was a word heard frequently, with full linkage suggested from north to south and east to west



for bicyclists, pedestrians and equestrians. Strong support was voiced for a “rail trail” using the Chelatchie Prairie Railroad to develop a trail stretching from urban Vancouver to far-reaching rural areas. Others proposed utilizing available natural gas line and electric utility corridors for trails.



The evening concluded with a brief summary of table discussions. Lists of suggestions were long and varied, providing fresh thinking about trails from people who use them on a regular basis or are curious and want to know more. In all, over 200 pages of notes were generated that night. These and the large county trail maps are part of the event record.



### **C) TRAIL PROJECT CRITERIA**

Developing the criteria for establishing the project prioritization and the phasing of the plan is a fundamental cornerstone of the successful future of this plan. Selecting the perfect criteria and the perfect weighting of said criteria to each will ensure successful completion of the plan, but if this element is poorly done, it could cripple the plan's future.

Below is a draft list of criteria by which trail projects can be prioritized. The term "trail project" will be used to refer to the individual sections or "reaches" of a proposed trail, as well as amenities that improve the quality of the trail use experience such as trailhead access projects that could include such elements such as restrooms, parking facilities, and access to bodies of water through docks, trails, etc.

#### **Trail Accessibility**

How well does the project improve overall access to the trail system? This can include consideration of overall improvements to the quality of the trailhead access point such as construction of restroom, parking facilities, parking, docks for water access, etc.

#### **Trail Connectivity and Linkage**

How well does the trail project complete the overall trail network? Consider the land uses that are made accessible by the trail project. Does it improve access to employment centers, schools, residences, other important activity centers? Are there any historic, cultural or natural resources or significant scenic areas associated with this proposed trail?

#### **Diversity of User Groups**

How many user groups is this trail designed to serve?

- Adult bicyclists
- Children bicyclists
- Walkers
- Equestrians
- Paddlers
- Runners

How diverse a proportion of users within a group could this trail serve? Are there any obstacles with it becoming fully ADA compliant?

#### **Maximize Volume of Users**

Is the trail located in places that is accessible to users who live, work or go to school nearby? How dense are the surrounding residential, institutional or commercial land uses?

#### **Vulnerability: Risk of Lost Opportunity**

Is the opportunity to build this trail project at risk of being lost due to purchase of the right of way by a private entity, development or rising land prices?

#### **Cost**

"Costs" may include hard fiscal outlays for right of way and/or construction, unacceptable harm to the environment.

- A. **Cost of right of way acquisition:** (Does the project require the purchase of private property, or expensive

land or can this trail be built on railroad, public road or utility right of way?)

- B. Cost of Opportunity:** (Are there many hurdles to acquiring the right of way to get it built?)
- C. Cost of construction for the project:** (Is the cost of construction anticipated to be higher or lower than the per-mile higher or lower than average in Clark County?)
- D. Cost of Maintenance:** (Are the long term maintenance costs likely to be higher than average for Clark County?)
- E. Cost of Alternatives:** (What alternatives to the project were considered and why were they rejected in favor of the current proposal?)

#### **Funding Opportunity**

Are there special funding opportunities available for the trail project? Is it eligible for federal, state, local or private grants? What is the current budget? . . . Some grants require local matches.

#### **Environmental Constraints and Opportunities**

- A. Environmental Constraints**  
(What are the environmental constraints related to the natural settings of the project that may lead to disturbance, fill and/or bridging, etc. of sensitive environmental areas. These may require permitting.)

#### **B. Environmental Opportunities**

(What are the opportunities for environmental restoration and rehabilitation. For example, the trail project may allow for the restoration of native species and the elimination of non-native species. What are the opportunities for increasing environmental education?)

#### **Trail Ambiance and Environmental Context**

##### **A. Quality of Trail Experience**

What is the quality of the experience provided by the trail project? Does the trail provide an opportunity to view wildlife, a natural area or attractive views?

##### **B. Trail Surroundings**

Does the trail project pass through?

- Natural environment
- Wetlands, lakes, rivers, streams
- Woodlands, old growth
- Meadows, valleys
- Parklands
- Railway
- Urban Places
- Industrial
- Roadway
- Historical Features/sites (L&C, Old RR, etc.)

##### **C. Continuity: Uninterrupted Flow**

How many stops and/or interruptions (road crossings, etc) are there along the trail project?

### Community Safety

- A. Does the project help users avoid hazardous locations?
- B. Does the project provide children safer access to school, parks, libraries, etc.?

### Project Partners/Community Support

- A. Are there special partnerships that can help realize the trail project?
  - o Neighborhood
  - o Multiple Jurisdictions
  - o Corporate support
  - o Other community groups (Scouts, Charities, trail advocacies)
- B. Can this trail be placed on an existing railroad, public road or utility right of way?
- C. Is there neighborhood association support for the project?
- D. Is there greater community support for the project?

### Maintenance

- A. To what degree will the trail project increase recreational trail maintenance work? Ask such things as:
  - Typically, how often do the connecting trail(s) require maintenance work?
  - When was the last time maintenance work was performed on connecting trail(s)?

### Redundancy

Is there another trail project that offers a similar transportation option (travels along a parallel alignment, is within a reasonable distance of this proposed trail project, etc.) How would this trail be unique within the system?





Regional Trail & Bikeway  
Systems Plan  
2006

SECTION V  
ECONOMIC ADVANTAGES



## SECTION V. ECONOMIC ADVANTAGES



### *A) The Health Benefits of Trails*

Our community is facing a serious health crisis associated with obesity due in part to physical inactivity. According to the Clark County Health Department, over 60% of the adult population of our county is either overweight or obese. Providing people with easy access to trails can provide the necessary opportunity to change one's life for the better.

Obesity is associated with many serious health problems: heart disease, certain types of cancer, Type 2 Diabetes, stroke,

arthritis, breathing problems, and psychological disorders, such as depression.

Here are some additional sobering statistics:

- Excess weight and physical inactivity account for more than 300,000 premature deaths per year in the U.S., second only to deaths related to smoking.
- The percentage of overweight adolescents has nearly tripled in the past two decades.<sup>1</sup> Safe trails allow children to develop habits for their health that can last a lifetime.

One reason people don't exercise enough is lack of time and convenience. By providing convenient, safe and inviting trails that link to work, school, shopping, etc. trails can allow people to combine exercise with necessary trips. Instead of driving to the gym to use a treadmill, for example, trails can provide convenient opportunities for people to get the exercise they need.

John Knapp, Clark County Resident, at one point weighed 450 pounds and was diagnosed with Type 2 Diabetes and at risk of losing his eyesight. He became a trail enthusiast when he was able to lose 200 lbs regularly by walking and bicycling on the Padden Parkway trail. "The trail saved my life," he says. Knapp struggled with managing his weight and disease through

diet and medication, but he knew he must add exercise in order to improve his condition. Then one day, the Padden trail opened up next to his home. He started to use it regularly to run errands, drop off movies at the local video store, and enjoy the fresh air and natural beauty of Clark County. Within six months, he was able to cut back on his medication, and within one year he was able to go off of it altogether. Within 18 months, he was able to get his weight down to 180 pounds and save his vision!

#### **Recommended Amount of Physical Activity**

According to the US Dept of Health and Human Services and the CDC, to be beneficial, physical activity doesn't need to be strenuous or time consuming. People of all ages can benefit from moderate amounts of physical activity, such as 30 minutes of brisk walking five or more times a week.<sup>ii</sup>

#### **Seniors Can Benefit Most**



According to the US Dept of Health and Human Services and the CDC, Americans age 65 and older are the least active age group in the United States: approximately 35% of those aged 65-74 years and 46% of those aged

75 or older report no leisure time physical activity at all! Most seniors (80%) have at least one chronic condition, and 50% have at least two.

Research has shown that seniors who have healthy lifestyles that include regular physical activity reduce their risk for chronic diseases and have half the rate of disability of those who do not.<sup>iii</sup>

#### **Studies Show that Trails Lead to Greater Physical Fitness**

Through comprehensive analysis and public involvement, the trail system proposed in this plan will provide the opportunity for community members to improve their overall health. Additionally, this opportunity is supported by empirical research. According to the Guide to Community Preventive Services, a review of relevant studies found that providing access to places for physical activity, such as trails, definitely increases the level of physical activity in a community. The median estimates from the reviewed studies suggest that creating or improving access to places for physical activity can result in a 25% increase in the percent of persons who exercise at least three times a week.<sup>iv</sup>

#### **Healthy Lifestyles Benefit to our Economy**

According to the state of Washington, it is estimated that the cost for physical inactivity in Washington State was more than \$5 billion in 2002.<sup>v</sup> In the year 2000, the cost of health problems associated with obesity was estimated to be as high as \$117 billion in the United States. Not only does increasing opportunities for physical fitness improve our waistline, but also our economic bottom line.

Research shows that providing the opportunity for community members to improve their overall physical health through

trails, will provide important economic advantages to our region.

For example, a 2004 empirical study of the relationship between the use of bike/pedestrian trails in Lincoln, NE, and the reduction of health care costs associated with inactivity, quantifies that for every dollar invested in trail development, nearly three dollars (\$2.94) of public health benefits are produced.<sup>vi</sup> The study also found that the cost of increasing physical activity by providing and maintaining trails comes to about \$98 annually per newly-active trail user.<sup>vii</sup> In addition to the health costs, there are serious economic ramifications of our physical inactivity. The proposed trail system while promoting healthy living can also provides economic advantages to our region.

**"Every \$1 investment in trails for physical activity led to \$2.94 in direct medical benefit."**

A 2004 study of using bike/pedestrian trails in Lincoln, Nebraska, to reduce health care costs associated with inactivity, quantifies the benefits of money spent on trail development from a health standpoint. The conclusion

is that for every dollar spent on trails nearly three dollars (\$2.94) of public health benefits are produced.[2][3]

[2][3] The study is Cost-Benefit Analysis of Physical Activity Using Bike/Pedestrian Trails by Guijing Wang, PhD, Caroline A. Macera, PhD, Barbara Scudder-Soude, Med, Tom Schmid, PhD, Michael Pratt, MD, MPH, David Buchner, MD, MPH. It appeared in Journal: Health Promotion Practice; April 2005 Vol. 6, No. 2, 174-179

Scientific evidence from the Guide to Community Preventive Services shows that providing access to places for physical activity, such as trails, increases the level of physical activity in a community. The median estimates from the reviewed studies suggest that creating or improving access to places for physical activity can result in a 25% increase in the percent of persons who exercise at least 3 times a week. [4][5]

### ***B) Economic Benefits of trails***

#### **Case Study: The Waterfront Renaissance Trail Vancouver, WA**

To appreciate how trails can benefit the Clark County economy, one need only visit the Vancouver water front via the Waterfront Renaissance Trail (WRT). The WRT is a 14-foot-wide, shared-use concrete trail that connects Vancouver's downtown area to the city's long-neglected Columbia River shoreline.

The trail was a key component to helping the city's Columbia riverfront area come alive with new investments in condos, hotels and restaurants, giving it a renewed vitality as one of the regions great places for gathering, socializing and experiencing the area's majesty and natural beauty. While the 4-mile trail cost about \$1 million per mile, it has seen private sector investment about ten-times this amount to the tune of about \$350 million dollars.

[4][5] <http://www.thecommunityguide.org/pa/pa-int-create-access.pdf>

The trail follows the Columbia River, passing Vancouver Landing, the Captain Vancouver Monument and the plaza dedicated to Ilchee, a Native Indian chief's daughter.



The Water Resources Education Center lies along the trail, as does the Old Apple Tree, Marine Park, Kaiser Viewing Tower and Shipyards, and Tidewater Cove. Along the way are shops, restaurants and great places to picnic, play, or just enjoy the view. The trail will continue east with the future Wintler Park extension.

### **Trails Benefit Real Estate Investments**

One resident of the new condominiums along the Waterfront Renaissance trail said, "The trail gives everyone a sense of certainty that they will always have access to the waterfront".

Such certainty can serve as a strong motivating factor for people to buy into such a newly accessible, revitalizing area.

According to a 2002 study by the National Association of Realtors, and the national Association of Home Builders, trails ranked as the second most important community amenity out of a list of 18 choices.

A study of real estate agents found that 70% of real estate agents use trails as a selling feature when selling homes near trails. 80.5% of them feel the trail would make it easier to sell. In Minnesota, 87% of home owners believe trails either increased the value of their homes or had no impact. On Seattle's most popular trail, homeowners with properties nearby but not adjacent sold for about 6% more than comparable properties elsewhere. Additionally, the U.S. National Parks Service notes that increases in property values range from 5 to 32% when adjacent to trails and greenways.<sup>viii</sup>

As well as helping raise the value of real estate, a comprehensive trail system helps improve a community's overall bottom line in many ways, from creating great public spaces that attract tourists and locals alike, to facilitating safe and healthy trips to work, school, etc.

The below sample of studies show how trails have brought direct economic benefits to commercial areas:

- A. According to the Federal Highway Administration, the Mineral Wells to Weatherford Rail-Trail near Dallas, Texas, attracts approximately 300,000 people annually and generates local revenues of \$2 Million.
- B. In the months following the opening of the Mineral Belt Trail in Leadville, Colorado, the city reported a 19% increase in sales tax revenue.
- C. A rigorous 2004 survey of trail use conducted for the City of Eugene, OR found that city businesses and stores benefited directly from biking and walking trails. The study showed that a significant portion of people were primarily attracted from out of town just to use the bike trails. Furthermore, the study showed that they often went to stores and restaurants in Eugene immediately before and/or after their bike rides.<sup>ix</sup>



### **Calculating Economic Benefits of Bicycle Facilities and Trails**

At the website <http://www.bicyclinginfo.org/bikecost/>, there is a calculating tool that one can use to estimate various costs and benefits associated with a particular new trail project, calculating such things as the number of new cyclists that may start using the trail, the measured economic benefits, time savings, decreased health costs, etc.

One of the primary resources for this tool is the National Cooperative Highway Research Program's Project 7-14 report entitled *Guidelines for Analysis of Investments in Bicycle Facilities*. This report is designed to provide guidelines to evaluate the projected costs and benefits of bicycle-facility investments. The guidelines are designed to evaluate when facilities are warranted, which particular facility is most appropriate, and how to integrate bicycle-facility cost-benefit analysis into the overall transportation planning process. More information on the report can be found at: <http://www4.trb.org/trb/crp.nsf/All+Projects/NCHRP+7-14>

### ***C) Environmental Benefits of Trails***

#### **Benefits to Transportation Choice and Air Quality**

According to the National Household Transportation Survey, half of all trips in urbanized areas are three miles or less, easy distances for walking and bicycling.<sup>x</sup> Additionally, two recent polls found that a majority of Americans would like to bike and walk more.<sup>xi</sup> All of these statistics show the importance of providing safe and attractive bike paths and trails in our communities.

By increasing the attractiveness to walk or bicycle instead of to drive, there are benefits to our air quality, as well as to our communities. Studies have found strong correlations between bicycling and the percentage of arterial miles with bike lanes.<sup>xii</sup>

Providing safe and attractive trails encourages bicycling and walking. One study found a 23% increase in bicycle traffic after the installation of a bicycle lane;<sup>xiii</sup> another found that residents were 65% more likely to walk in a neighborhood with sidewalks.<sup>xiv</sup> Streets that provide travel choices give people the option to avoid traffic jams, and increase the overall capacity of the transportation network.

### **Air Quality Benefits**

It has been estimated that, in 1991 alone, bicycling and walking trips in the U.S. replaced nearly 28.8 billion motor vehicle kilometers (18 billion miles). These non-motorized trips saved about 3.2 billion liters (850 million gallons) of gasoline which would have added 10.4 million metric tons of exhaust emission air pollution into the atmosphere (NBWS Final Report).

### **Tools for Conservation, Habitat Restoration and Environmental Education**

As tools for conservation, trails and greenways preserve important natural landscapes; provide needed links between fragmented habitats and offer tremendous opportunities for protecting plant and animal species. Partially due to sprawl, "islands" of habitat dot the landscape, isolating wildlife and plant species and reducing habitat necessary for their survival. Trails and greenways provide important links between these

island populations and habitat and increase the land available to many species.

\* The preserved Pinhook Swamp between Florida's Osceola National Forest and Georgia's Okefenokee National Wildlife Refuge protects a vital wildlife corridor. This greenway keeps intact an important swampland ecosystem that sustains numerous wildlife species including the Florida black bear, timber rattlesnake and the Florida sandhill crane.

Greenways and other off-road trails also provide environmental benefits by linking existing parks, open spaces, and undeveloped lands while allowing for the preservation of the natural landscape. Such facilities are havens for flora and fauna, whether they are endangered, threatened, rare, or abundant.

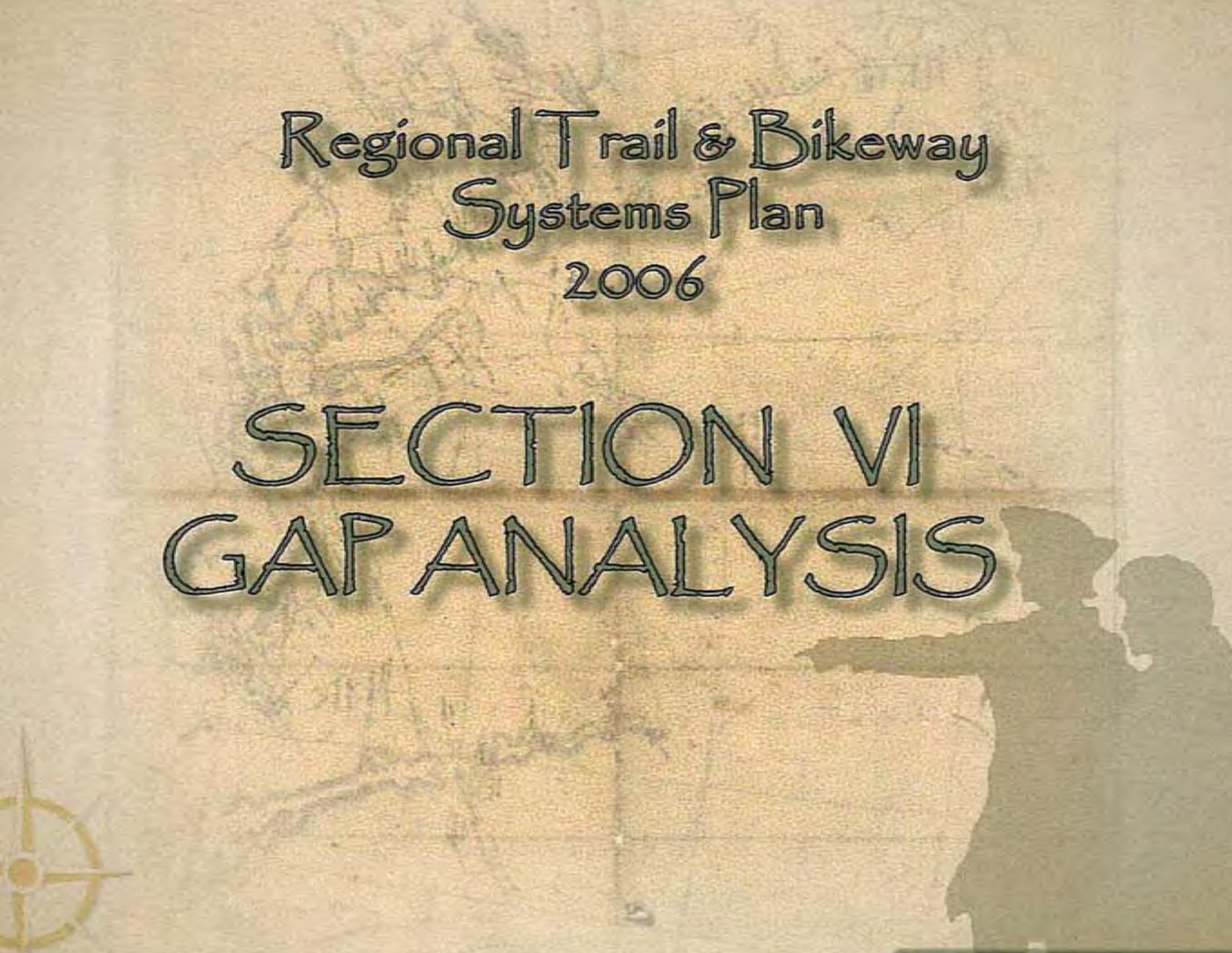
- A. In March 1999, 12,638 acres of critical wetland habitat along the Rio Grande in Cameron, Texas were added to the National Wildlife Refuge system, creating a larger ecological system needed by migratory birds.
- B. The endangered black-crowned night heron have found homes along the Fox River Trail in Illinois. Trail Manager John Carlson stated, "The habitat for wildlife such as these rare birds has been dramatically improved by the rail-trail. The wildlife along the rail-trail is abundant compared to other sections of the river where there are private homes and manicured lawns abutting the river's edge."<sup>xv</sup>





Regional Trail & Bikeway  
Systems Plan  
2006

SECTION VI  
GAP ANALYSIS



Proud Past, Promising Future



## SECTION VI. GAP ANALYSIS

The Clark County Trail and Bikeway Systems Plan seeks to develop a seamless trail and bikeway system throughout the region providing essential recreation and regional transportation amenities benefiting the community today and generations to come. This well defined system will link public facilities, housing, retail, and employment centers extending throughout the county and into the larger metropolitan region. Implementation of this plan will reap enormous economic health benefits by reducing health care costs and infrastructure costs while providing environmental and social benefits for all residents.

Early in the planning process, a thorough review of the developed and planned trail and bikeway facilities was performed. This preliminary review, in combination with public input and other planning studies, became the foundation for the formal trail and bikeway gap analysis. The completed gap analysis will highlight the deficiencies in the existing system and help guide the planning and funding for future improvements.

The gap analysis for the Clark County System can be divided into the following categories:

### Trail System Plans

A review of the trail corridors, routes, and projects identified during previous planning studies that have not been constructed where alternative routes have been developed. The focus of this analysis included review of the county's 1992 plan and the recently completed Vancouver Walking and Bicycle Master Plan.



### Public Involvement

Throughout the current trails plan update, the public and user groups were engaged in a series of public open houses, stakeholder meetings and a Citizen Advisory Committee (CAC). This public involvement provided information on existing trails currently not mapped, highly desired trail linkages to be developed, and insight on frequency and utilization of the current system. Interaction with the trail users provided the planning team with first-hand input on system deficiencies.



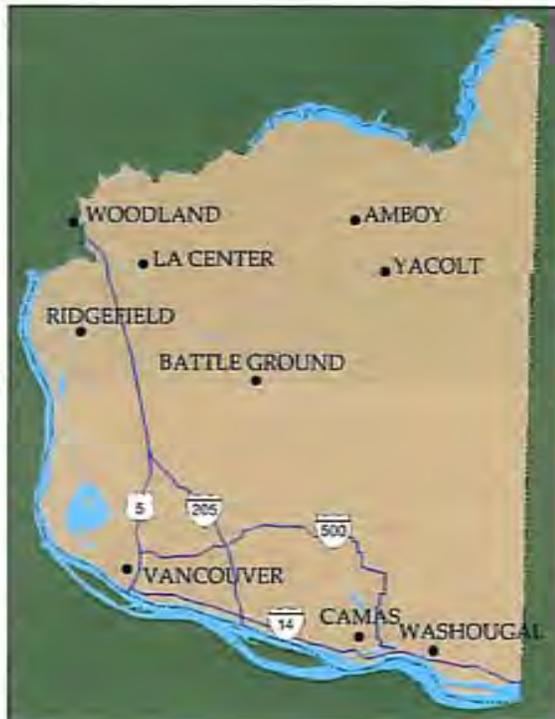
### Connectivity and Accessibility

The existing system was analyzed for the level of connectivity between trails and bikeways *AND* likely destinations served. Locations evaluated include public facilities, open space, existing trails, schools, recreation facilities, housing, commercial nodes, employment centers, etc. For both recreational trail and alternative transportation users, corridors that were well connected to multiple facilities were more desirable. Likewise, trails and bikeways that were located close to places of employment and neighborhoods were more likely to be used and utilized more frequently.



### Regional Network

Linking Clark County's Trail and bikeway Plan to the larger regional network will provide higher benefit for local communities and neighbors within the Portland metropolitan area. Similarly, the current and future planning efforts of the county's smaller cities and towns must be accommodated in the county's trails plan document, providing the opportunity for connectivity between the maximum numbers of places within the community. Many corridors extend beyond jurisdictional boundaries and will necessitate the cooperation of many entities.



### Environmental Constraints

The ease of securing development permits and the feasibility of construction was considered with the analysis of system gaps. Avoiding limited right-of-ways, steep topography, sensitive natural resources, and other constraints, when possible, will make future trail and bikeway projects financially feasible and demonstrate responsible land stewardship.



### History, Natural and Cultural Resources

The Gap analysis should acknowledge the rich, cultural and natural resources of Clark County. Thoughtful placement of trail corridors can highlight the unique attributes of the county, turning trails into linear laboratories and living classrooms. The resources of Clark County help shape the identity of the community and make this place more desirable to live and visit.



### Trail Users and Trends

The trail and bikeway system needs to reflect current trends in walking and non-motorized transportation. Walking on paths continues to be the most desired form of recreation and exercise by the broadest segment of our community. Bicycling, both on and off-road, rollerblading, skating and other wheeled transportation can utilize the county's trails and bikeways. Equestrians and non-motorized boaters continue to utilize land and water corridors of Clark County. The Trails and Bikeway Plan needs to be flexible enough to adapt to the future trends of recreation and transportation.



### **Funding and Grant Eligibility**

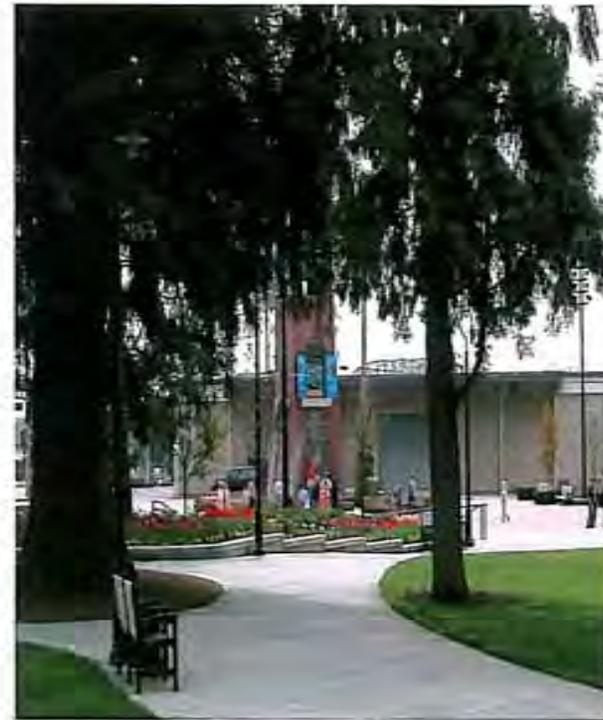
The gap analysis must consider all potential funding opportunities available. Grant funds administered by the state's Interagency Committee for Outdoor Recreation are evaluated on selection criteria that include; need "close to home" utilization, connectivity, etc. Considering these evaluation criteria into corridor planning will increase the opportunities for grant-funded development. Trail and bikeway alignments need to consider additional funding opportunities including inclusion or partnerships with road projects listed in the Transportation Improvement Plan, and opportunities with other public agencies and partnerships.

High priority projects are those that can be built along with other transportation projects within the Clark County's Transportation Improvement Program (TIP) to assure efficiency in costs and increase possibility of funding. Several regional trails are planned on the same alignment as several of the upcoming (TIP) projects. The current TIP list is available on Clark County's website at [www.clark.wa.gov/TIP.html](http://www.clark.wa.gov/TIP.html).



**FEASIBILITY / REGULATORY COMPLIANCE**

Many of the existing and currently proposed trail corridors coincide with stream corridors. This coexistence creates the natural experience that many trail users seek. It also creates the need for careful planning and some creativity to navigate the permitting requirements due to sensitive lands, habitat areas, and flood plains. Development review approval must also be obtained from the governing jurisdiction.



Regional Trail & Bikeway  
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SECTION VII  
DESIGN GUIDELINES



Proud Past, Promising Future



## SECTION VII. DESIGN GUIDELINES

### A) Terminology: Trail and Path Design Types

Clark County's walking and bicycling network is organized into ten standard design types. This Paths & Trails Plan proposes primarily two design types including the shared-use path and walking path, which are also referred to as trails throughout this plan. The overarching Walking & Bicycling Master Plan considers more specifically pedestrian and bicycling connections including sidewalks, bicycle lanes and bicycle routes. Although, the Regional Trails & Bikeway Systems Plan recommends primarily shared-use and walking paths, each of the design types is outlined below to provide understanding of the entire network. The table on Page 7-11 provides a brief explanation of each design type's dimensions, surface material, treatment and function.

A successful trail and bikeway plan will include a full range of trail types designed to the human scale. A trail designed to the human scale focuses on the human senses, sight, smells, and sounds. The typical trail hierarchy will range from sidewalks and on-street bikeways, to soft surface neighborhood pathways and regional shared-use trails, to boardwalks and equestrian routes. The planning team recognizes that the science of trail construction and transportation engineering changes over time and that design standards will continue to evolve. As the popularity of specific recreational activities shift and as new modes of travel develop, trail standards will need to adapt. Figure 7A on Page 7-2 is a matrix of trail design parameters.

### Design Type A1: Regional Shared-use Paths

The 1999 American Association of State Highway and Transportation Officials' (AASHTO) *Guide for the Development of Bicycle Facilities* uses the term "new, shared-use path" to refer to facilities on exclusive rights-of-way and with minimal cross-flow by motor vehicles. Shared-use paths are distinctly different from on-street striped bicycle lanes and signed, shared roadways described above, which serve useful and complementary facilities.

Shared-use paths provide opportunities for a wide range of users that AASHTO notes, includes but is not limited to: bicyclists, in-line skaters, roller skater, wheelchair users (both non-motorized and motorized) and pedestrians, including walkers, runner, people with baby strollers, people walking dogs, etc. . . "Shared-use paths are sometimes



referred to as trails. In many states, however, the term "trail" means an unimproved recreational facility. AASHTO notes, "When shared-use paths are called trails, they should meet all design criteria for shared-use paths to be designated as bicycle facilities." Additionally, shared-use paths should meet or exceed the Americans with Disabilities Act standards.

Shared-use paths represent the majority of recommended improvements in the Clark County Bikeway Systems Trails Plan as they serve as major connections in the regional trail system linking important features, land uses and areas of interest. They can provide recreational opportunities, learning ground for new cyclists, and utilitarian routes, depending on their locations. Shared-use paths can take on a variety of different treatments that both enhance the surrounding landscape and meet the needs of users. The following trail cross sections illustrate shared-use path treatments for trail design opportunities in Clark County. These treatments include designs for a standard shared-use trail, a power line trail, and a waterside trail.

### **Design Type A2: Local Shared-use Paths**

Local shared use paths are similar to regional but differing by providing local connections to areas of special interest and to regional trails, and providing shared use trail loops within parks and neighborhoods.

### **Design Type A3: Primitive Trail**

The primitive trail usually is a dedicated pathway through parks, natural areas, or rustic sites. The users may include pedestrians, mountain bikers and equestrians.



### **Design Type A4: Rails and Trails**

Rails and trails are shared use linear routes adjacent to active rail lines with safety measures to protect trail user.

### **Design Type B1: Bike Lanes**

A bicycle lane is the portion of the roadway designated by striping and bicycle pavement markings for the one-way, exclusive or preferential use of bicycles. Per the arterial atlas, classification bike lanes should be provided on most collectors and arterials with traffic greater than 3,000 vehicles per day. Bike lanes can help increase the total capacity of the roadway by removing bicycles from the vehicle lanes, provide for more predictable movements, and encourage



cycling. Clark County is committed to providing bicycle lanes to create an interconnected system of facilities available to the widest possible variety of users.

### **Design Type B2: Bike Route Shared Roadway**

When designated by appropriate signing and stenciling, shared roadways provide for new, shared-use path with pedestrian or motor vehicle traffic, preferably on lower volume roadways. On higher volume roadways, an extra wide (12 to 14 feet) curb lane is recommended.

### **Design Type C1: Sidewalks**

The existing pedestrian system in Clark County consists of on-again/off-again sidewalk networks. The city has no specified pedestrian districts or designated pedestrian malls. In several Clark County locations, the pedestrian system is comprehensive, such as in some areas of downtown Vancouver and the Fort Vancouver area. However, some areas of Clark County are characterized by a relatively piecemeal system, with high-quality sidewalks and pedestrian crossings adjacent to new developments connecting to inadequate or nonexistent systems adjacent to older developments. It should be noted that, in most cases, a traditional sidewalk is not an ideal substitute for either bicycle lanes or a separated path, as sidewalk bicycle riding has been found to be a significant



safety hazard nationwide. In fact, 26 percent of reported bicycle-motor vehicle related crashes in Clark County involve sidewalk bicycle riding. These sidewalk/paths are intended to be primarily used by pedestrians, with the corresponding bike lanes intended for bicycle use.

### **Design Type C2: Walking Trails**



The design of walking trails is highly dependent on the intended use. When building walking paths, there are several design elements to take into account like drainage, erosion, slope, presence of waterways, vegetation, riparian and habitat areas, environmental requirements and regulations, and others. Trails can vary in width from 4'-12 feet. In addition, walking trails can also accommodate bicyclists if there is adequate space and safety concerns are met.

### **Design Type D1: Equestrian Trail**

Equestrian trails are dedicated to equestrian use only and consist of an earthen surface.



### Design Type E1: Water trails

Trails in rivers and other waterways offer a unique view of the nature of the region. Developing water trails means providing access points for canoes, kayaks, boats and rafts. Paddling and rowing are great ways to get exercise and experience and appreciate the natural and urban areas along waterfronts.



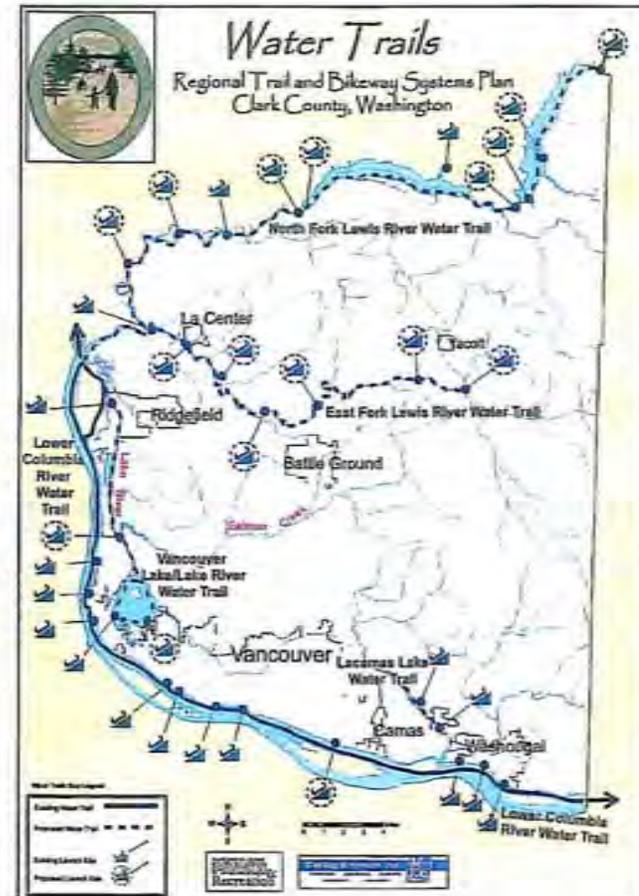
Some design guidelines for water trails include:

- A. Water access points every five miles along navigable rivers
- B. Average of three miles per hour
- C. Boat racks can help facilitate a visit to a restaurant or store at a landing site.
- D. Camping is an amenity that's useful along water trails

A good source of information: *Logical Lasting Launches* by National Park Service Rivers & Trails Program, 2004.

[http://www.nps.gov/nrcr/programs/rtca/helpfultools/ht\\_launch\\_guide.html](http://www.nps.gov/nrcr/programs/rtca/helpfultools/ht_launch_guide.html)

### Columbia River / Clark County Launch and Landing Sites



<u>Name</u>	<u>River Mile</u>
Capt. William Clark Park at Cottonwood Beach	124
Steamboat Landing Park	123
Port of Camas-Washougal Boat Ramp & Marina	122
Fisher's Landing	115
Wintler Community Park	110
Vancouver Marine Park	108
Fort Vancouver Beach Launch	106.5
Vancouver Public Dock	106
Frenchman's Bar Park Beach Launch	99
Blurock Landing	100
Langsdorf Landing Boat Ramp	98
Ridgefield Boat Ramp	91
Ridgefield Kayak Launch	90
Paradise Point State Park	84

### ***B) Trail-Roadway Crossings***

Like most trails in built urban areas, Clark County's trails must cross roadways at certain points. These roadway crossings may be designed at-grade or below-grade. At-grade crossings create a potentially high level of conflict between trail users and motorists. However, well-designed crossings have not historically posed a safety problem, as evidenced by the thousands of successful trails around the United States with at-grade crossings. Designing safe grade crossings is a key component of the safe implementation of this plan.

When considering a proposed separated trail and its required crossings of roadways, it is important to remember two items: (1) trail users will enjoy a largely auto-free experience and may

enter into an intersection unexpectedly, and (2) motorists will not expect to see bicyclists shooting out from an unmarked intersection into the roadway. In some cases, a required trail crossing may be unable to meet safety standards or will be expensive (e.g., to build an undercrossing or overcrossing) as to affect the feasibility of the entire alignment. In most cases, trail crossings at-grade can be properly designed to an acceptable degree of safety and to meet existing traffic and safety standards.

Evaluation of trail crossings involves analysis of traffic patterns of vehicles as well as trail users. This includes traffic speeds, street width, traffic volumes (average daily traffic, peak hour traffic), line of sight, and trail user profile (age, distribution, destinations). This study identifies the most appropriate crossing options given available information, which must be verified and/or refined through the actual engineering and construction document stage.

### **Basic Crossing Prototypes**

The proposed intersection approach in this report is based on established standards, published technical reports, and the experiences on existing facilities. Virtually all crossings fit into one of four basic categories, described below.

Type 1:           Marked Crossings – Marked crossings include mid-block crossings of residential, collector, and sometimes major arterial streets.

- Type 2: Divert Users to Existing Intersection – Bikeways which emerge near existing intersections may be routed to these locations.
- Type 3: Signalized/Controlled – Bikeway crossings which require signals or other control measures due to traffic volumes, speeds, and trail usage.
- Type 4: Grade-separated – Bridges or under crossings provide the maximum level of safety but also generally are the most expensive and have right of way, maintenance, and other public safety considerations.

other safety issues such as the proximity of schools. The following general thresholds outline where unmarked crossings may be acceptable. Install crosswalks at all locations.

- A. Maximum Traffic Volumes:
  - 10,000-15,000 average daily traffic (ADT)
  - 1,000-1,500 peak hours
- B. Maximum 85<sup>th</sup> percentile speeds:
  - 35-45 mph
- C. Maximum street width:
  - 60 feet (no median)
- D. Minimum line of sight:
  - 25 mph zone: 100 feet
  - 35 mph zone: 200 feet
  - 45 mph zone: 300 feet

**Type 1 and 1+ Unmarked/Marked Crossings**



A Type 1 crossing consists of a crosswalk, signing, and often no other controls to slow or stop traffic. The approach to designing crossings as mid-block locations depends on an evaluation of vehicular traffic,

line of sight, trail traffic, use patterns, road type and width, and

On residential and collector streets below 10,000 ADT, crosswalks and warning signs (“Bike Xing”) should be provided for motorists, and STOP signs and slowing techniques (bollards/geometry) used on the trail approach. Care should be taken to keep vegetation and other obstacles out of the view line for motorists and trail users. Collector streets up to 15,000 ADT require a higher level of treatment for crossings than residential streets. These are referred to as “Type 1+” in the recommended treatments. In addition to the features described for residential streets, signing locations may need to be moved further upstream and made more visible for

motorists. A flashing yellow beacon costing between \$15,000 and \$30,000, may be used, preferable one that is activated by the trail user rather than operating continuously. Some jurisdictions have successfully used a flashing beacon activated by motion detectors on the trail, triggering the beacon as trail users approach the intersection. This equipment, while slightly more expensive, helps keep motorists alert.

Crossings of higher volume arterials over 15,000 ADT may be unmarked in some circumstances – for example, if they are located near a signalized intersection, a median island is present, and there are substantial gaps in traffic. Such crossings would not be appropriate; however, if a significant number of school children used the trail.

### Type 2: Divert Users to Existing Intersection



Crossings within 250 feet of an existing signalized intersection with pedestrian crosswalks are typically diverted to the signalized intersection for safety purposes. For this option to be effective, barriers and signing would be needed to direct trail users to the signalized crossings. In many cases the intersections are directly adjacent to the crossings and are not a significant problem for trail users. Several crossings do fall into this category in Clark County.

### Type 3: Signalized/Controlled Crossings

New signalized crossings are recommended for crossings more than 250 feet from an existing signalized intersection and where 85<sup>th</sup>

percentile travels speeds are 45 mph and above and/or ADT's exceed 15,000 vehicles.

Each crossing, regardless of traffic speed or volume, requires additional review by a registered engineer to identify sight lines, potential impacts on traffic progression, timing with adjacent signals, capacity, and safety.



Trail signals are normally activated by push buttons, but also may be triggered by motion detectors. The maximum delay for activation of the signal should be two minutes, with minimum crossing times determined by the width of the street and trail volumes. The signals may rest on flashing yellow or green for motorists when not activated, and should be supplemented by standard advanced warning signs. Typical costs for a signalized crossing range from \$75,000 to \$150,000.

#### Type 4: Grade-separated Crossings

Grade-separated crossings are needed where ADT's exceed 25,000 vehicles, and 85<sup>th</sup> percentile speeds exceed 45 mph. Safety is a major concern with both over crossings and under crossings. In both cases, trail users may be temporarily out of sight from public view and may have poor visibility themselves.

Under crossings, like parking garages, have the reputation of being places where crimes occur. Most crime on trails, however, appears to have more in common with the general crime rate of the community and the overall usage of the trail than any specific design feature.



Design and operation measures are available which can address trail user concerns. For, example, an under crossing can be designed to be spacious, well-lit, equipped with emergency cell phones at each end, and completely visible for its entire length prior to entering.

Other potential problems with under crossings include conflicts with utilities, drainage, flood control, and maintenance requirements. Over crossings pose potential concerns about visual impact and functional appeal.

#### Signing and Striping



Crossing features for all roadways including warning signs for both vehicles for all roadways include warning signs both for vehicles and trail users. The type, location, and other criteria are identified in the Manual for Uniform Traffic Control Devices (MUTCD).

Consideration must be given for adequate warning distance based on vehicle speeds and line of sight, with visibility of any signing absolutely critical. Catching the attention of motorists jaded to roadway signs may require additional alerting devices such as a flashing light, roadway striping, or changes in pavement texture. Signing for trail users must include a standard "STOP" sign and pavement marking, sometimes combined with other features such as bollards or a kink in the trail to slow bicyclists. Care must be taken not to place too many signs at crossings lest they begin to lose their impact.



Directional signing may be useful for trail users and motorists alike. For motorists, a sign reading "Trail Xing" along with a Clark County trail emblem or logo helps both warn and promote use of the trail itself. For trail users, directional signs and street names at crossings help direct people to their destinations. For equestrians, striping may not be useful but signing will provide sufficient direction.

**C) Trailheads**

Clark County's share-use paths attract pedestrians, cyclists and equestrians. Trailheads and trailhead amenities must therefore be designed to meet the needs of this diverse set of users.

**Trail Amenities Photo Gallery**



Clark County has already established distinctive designs for certain trail amenities and design details. Use of this common aesthetic in developing Clark County's trails will



be a valuable tool in creating a cohesive trail network, although for certain trails an individually distinctive design aesthetic may be more appropriate.

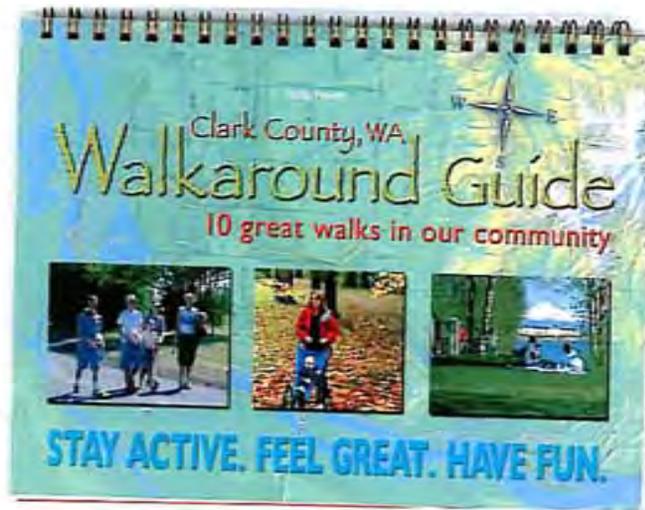
- A. Develop a trail bollard / signpost standard that can be used for demarcation of trailheads and interim mileage marks or points of interest. This could be the current square concrete bollards that have been installed on previous projects or a new style could be based on the old City of Vancouver City Limits posts that were tapered concrete. Either style could be fitted with a standard brass survey monument that could be stamped with the trail name, mileage,

or other pertinent information as well as an emblem or icon that is representative of the specific area of stream basin that the trail is located within.

- B. Develop a graphic or icon representing Lewis & Clark that could be included on all trail signage throughout the county and tie into the theme for the Lewis & Clark Centennial celebration, the Confluence project, and the Discovery Greenway project.



- C. Develop kiosks that host a large map of the trails system in key locations. The kiosk may also contain small maps users can take with them.



## Regional Trail and Bikeway Systems Plan

### Regional Trail & Bikeway Systems Plan

Clark County Trail Classifications  
Standard Design Types

Classification	Trail Type	Trail Width	Surface	Const. Cost Per Mile	Users	Function	R.O.W.	Clearances	Treatment	Amenities
A1	Regional Shared-use Path	12'-16'	Asphalt or Concrete	\$220,000	Pedestrians, bicycles, etc. Equestrians where feasible, parallel and separate.	Provides major connections between other regional trails, land uses, and areas of special interest, including schools, parks, employment centers, etc. Optional adjacent 4' equestrian trail	25' to 50'	Side 2'-0" Vertical 10'-0"	Separated right of way from motor vehicles with exclusive use for pedestrians and bicycles. Includes grade separated and signalized crossing points.	Trailhead, parking, comfort amenities, furnishings, lighting, and signage.
A2	Local Shared-use Path	10'-12'	Asphalt, concrete, or gravel	\$190,000	Pedestrians, bicycles, etc. Equestrians where feasible	Provides local connections to areas of special interest and regional trails, and provides shared use trail loops within parks and neighborhoods. Optional adjacent 4' equestrian trail (D1). Includes community feeder trails	25'	Side 2'-0" Vertical 10'-0"	Separated right of way from motor vehicles, includes internal circulation within park, recreation sites, and residential areas.	Site furnishings, lighting, and signage. May include additional amenities adjacent to trail corridor.
A3	Primitive Trail	2'-5' (Ded.) 5'-12' (Shared)	Earthen, gravel, or wood chips	\$5,000	Varies, may include pedestrians, mountain bikes, and equestrians	Primarily dedicated and shared-use trails through parks, natural areas, or rustic sites.	N/A	N/A	Vary in width depending on site and use, typically exceed ADA design guidelines.	Minimal signage and amenities
A4	Rails and Trails	12'-16'	Asphalt, concrete, or gravel	\$220,000	Pedestrians, bicycles, etc. Equestrians where feasible	Provides shared use linear routes adjacent to active rail lines. Optional adjacent 4' equestrian trail (D1)	Varies	Side 2'-0" Vertical 10'-0"	Located adjacent to existing rail lines with safety measures to protect trail user. May include full rolls to trails.	Trailhead, parking, comfort amenities, furnishings, and signage.
B1	On Street Bike Lane	4'-6'	Roadway		Bicyclist	Bicyclists on roadways	N/A	N/A	Striped for one-way bike travel on street or highway	Signage and striping
B2	Bike Route on Roadway	N/A	Roadway		Bicyclist	Accommodates bicyclists typically on lower volume roadways	N/A	N/A	Proper signage allows for shared use between bicyclists and motor vehicles.	Signage
C1	Sidewalk	6'-18'	Concrete	\$182,000	Pedestrians	Provides local access to homes, businesses, and other local features for pedestrians.	N/A	Per County Codes	Located along streets and are separated by curb and/or planting strip	Signage, striping, and curb ramps
C2	Walking Path	4'-10'	Asphalt, concrete, or gravel	\$110,000	Pedestrians	Provides less intensive connections or routes within parks and natural areas. May include bicyclists.		Side 2'-0" Vertical 6'-0"	Vary in width depending on intended users. Careful considerations to topographic and environmental considerations.	Site furnishings and signage. May include additional amenities adjacent to trail.
D1	Equestrian Trail	4'	Earthen		Equestrians	Point to point travel and local challenged course elements	N/A	Side 2'-0" Vertical 10'-0"	Stand alone trail elements or secondary to other trail classification.	Equestrian trailer parking, comfort amenities, and signage
E1	Water Trail	N/A	Water	NA	Non-motorized boaters	Routes along water bodies for people using small beachable boats like kayaks, canoes, day sailers or rowboats.	N/A	N/A	Water trails are most often identified by the land facilities that support water travel.	Launch and landing sites, campsites, rest areas, and other points of interest







## SECTION VIII. CULTURAL & HISTORIC RESOURCES

Clark County possesses a rich cultural and environmental heritage. The area was abundant in plants and wildlife for the Chinook and Klickitat Indians to hunt, fish and gather. Lewis and Clark made their famous expedition and camped and traded with the Native Americans along the Columbia River in the Ridgefield Wildlife Refuge area.



From approximately, 1840 to 1860, the Hudson's Bay Co. operated Fort Vancouver, cultivating the land, trading with the Native Americans and attracting hunters and trappers from a wide range of cultural backgrounds. Settlers came to Clark County to build farms and to later develop the logging industry.



Thousands of waterfowl continue to winter in Clark County's wetland areas, thriving on the mild climate and abundant food sources. Historians, archaeologists and environmentalists are finding rich sources of cultural and environmental information to study, preserve and enhance the area.

Many rewarding learning opportunities are available as the proposed trails pass through or within close proximity to some of the Country's historically and environmentally significant sites.

Bicyclists and hikers will be able to take day, overnight or week long cultural and environmental tours of different sections of the trail system. Clark County's historical and environmental significance will come to life to school children, who will be able to visit specific areas along the trail as they study history and ecology in school. Many of the historical and ecologically significant places are within Vancouver, Ridgefield, Camas and Cattle Ground city jurisdictions. The trails plan does not include these city jurisdictions, but provides trails to the cities enabling trail users to take advantage of each area.



## A) THE PLACES

### *Fort Vancouver National Historic Site*

Fort Vancouver was the Northwest base of operations for the



London-based Hudson's Bay Company, controlling 700,000 square miles stretching from Russian Alaska to Mexican California, and from the Rocky Mountains to the Pacific Ocean. As a center of activity and influence, the Fort had a profound effect on the development of this region and remained an active post until 1860. Today, costumed interpreters re-enact the past in ten reconstructed buildings, providing an authentic slice of life from Fort Vancouver's heyday.

### *Officers Row National Historic District*

Officers Row is one of the oldest neighborhoods in the Northwest and one of Vancouver's great historic treasures. The 21 exquisitely preserved Victorian-era homes built for U.S. officers represent the architecture style common to the Army, while reflecting unique Pacific Northwest



modifications. Over the years the Row has been home to such military notables as Ulysses S. Grant, George C. Marshall and Omar Bradley. Historic markers tell the story of the area.



### ***Downtown Vancouver***



Rich in history and full of surprises, downtown Vancouver is a great place to live, work . . . and walk. The influence of the city's founding pioneers is felt in prominent downtown structures, monuments, and the oldest public square in the Pacific Northwest. Public art, fountains, plazas and parks add to the appeal. Your tour takes you past historic attractions such as Providence Academy, built in 1873, as well as exciting examples of urban redevelopment, including Vancouver Center and Esther Short Park Plaza.



### ***Columbia River Waterfront***

Since 1991, Vancouver's waterfront has undergone an amazing renaissance with the development of a four-mile scenic trail connecting the downtown area to the city's long-neglected shoreline. Discovery Historic Loop links to the trail at the foot of Columbia Street and takes you past the waterfront's many historic, cultural and scenic attractions, plus shops, restaurants, and great places to picnic, play or just enjoy the view.



### ***City of Vancouver***

The City of Vancouver's Columbia River Renaissance Project has developed a plan, integrated with the trails plan for a 12-mile trail extending along the Columbia River corridor from Frenchman's Bar to I-205. The Renaissance Project has identified a number of significant natural, cultural, and historic resources within the study area including



Vancouver Lake, Fort Vancouver National Historic Site and Officer's Row.

### ***Vancouver Lake***

Vancouver Lake's dominant feature is the adjacent Columbia River lowlands. The wetland areas at the lake have a number of points where a trail could allow observation of the unique wildlife and plant species without disturbing their environment. A public park which provides picnic, swimming and wing sailing opportunities is also located at the lake.



### ***Fort Vancouver National Historic Site***

The Fort Vancouver National Historic Site is a reproduction of the Hudson's Bay Co. operation that was located in the Vancouver vicinity from approximately 1840 to 1860. It provides a view into the life and operation of the Fort at that time. On special days, life at



the Fort is reenacted in full costume. Volunteers and National Park staff members dress in authentic costumes depicting the varied cultures from which its occupants and visitor came.

Some of the special events that occur each year include:

- Queen Victoria's Birthday Celebration
- 4<sup>th</sup> of July Celebration
- The Encampment
- The Candle Light Tour
- Christmas at the Fort Re-enactment

The National Parks Service is engaged in an ongoing program of improvements to the site. Presently the fur trapper's warehouse is nearing completion. Existing buildings include the chief factor's house, the bakery, the blacksmith shop, the infirmary, the trading post and store and the lookout tower. A garden fashioned after gardens of that time containing arbors, benches, a sundial and historic plants is located at the entrance, outside the Fort walls.



***The Clark County Historic Museum***

The Clark County Historic Museum, in the old Carnegie Library, exhibits many artifacts that are historically significant to life in the Clark County area and provides information on the history of the area. Along with a visit to the museum, history buffs and school children can take walking tours of the historically significant buildings located in the Vancouver downtown area.



**COLUMBIA WAY/COLUMBIA RIVER/EVERGREEN HIGHWAY TRAIL**

***Old Apple Tree Park***

The Old Apple Tree Park along the Columbia River Renaissance Project Trail is a city park which both honors and preserves the Northwest's oldest apple tree, planted in 1826 by the founder of Ft. Vancouver. Now surrounded on the north by SR 14 and the south by the railroad tracks, the park presents a strong contrast between the cultivated landscape of the past and the hard-edge landscape of the present. Each Fall, an Old Apple Tree Park Festival takes place where a piece of apple pie (and sometimes apple tree seedlings) may be purchased.



### ***COLUMBIA RIVER/EVERGREEN HIGHWAY TRAIL STUDY PROJECT***

The Evergreen Highway Trail Project will provide a rewarding trip east, near the Columbia River on an old residential highway to the City of Camas.

Several historic sites date back to British control from Fort Vancouver and early American settlement. The river area was important to Native American activities and settlement as well, but development and “pot hunting” has disturbed these sites leaving no specific resource to visit. Historic markers at a selected area along the bikeway could be installed to provide awareness of the importance of this area to the Native Americans. The Lewis and Clark Expedition campsites are also not accessible, but could be referred to by marker.

The following is a brief description of each of the historic and environmental points of interest along the trail.

#### ***Stranger House***

“The Stranger House” is historically significant for its close association with the earliest period of settlement in Clark County and serves as a rare example of pioneer plan construction.”



Stranger worked for the Hudson’s Bay Company in England

and came to Fort Vancouver in 1838 to tear down the temporary sawmill and replace it with a larger mill. He supervised the mill for 12 years.

#### ***Fisher’s Cemetery***

Several remnants of the old community can still be found near present day 164<sup>th</sup> Avenue, including the building which once housed the community store and the pilings in the Columbia River at the end of 164<sup>th</sup>. “The cemetery, one of the few remaining remnants of the community, is well preserved and is thought to be the oldest settlers’ burial ground in Clark County”.



### ***WPA Era Fish Hatchery***

Directly across from the sawmill site, on the north side of the highway, is the Vancouver Trout Hatchery, which is operated by the Washington Dept. of Wildlife. The attractive hatchery buildings and grounds were constructed in 1936 as a WPA (Works Projects Administration) project as part of President Roosevelt's "New Deal".

Prior to the construction of this fish hatchery, Henry Biddle's son, Spencer Biddle built a small hatchery in the same vicinity and raised rainbow trout which were sold to the Union Pacific Railroad dining car service, Henry Thiele's restaurant in Portland and large hotels in Chicago.



## **CITY OF CAMAS**

### ***Lacamas Lake Park***

Lacamas Lake Park is located at Round Lake north Camas. Donated to the citizens of Clark County by Crown Zellerback (now James River Corporation), Lacamas Lake Park provides a picnic area, play center, hiking trails and excellent fishing for trout, bass, bluegill and perch. South of the lake, below the dam, Lacamas Creek becomes a rushing stream cascading across a unique rock formation called "Pot Holes". Huge old growth trees set off a wilderness area where a nest of ospreys and other native birds attract birdwatchers. Wildflowers, including the camas lily, which blooms in mid-April, abound. Hiking trails cover the 312 acres, providing a ringside view of the natural habitat with its wide variety of wildlife.



### ***Pittock-Leadbetter House***

The Pittock-Leadbetter house located on Lacamas Lake is a fine example of Victorian Architecture. It was commissioned by Henry Pittock, founder of the Oregonian Newspaper as a wedding gift to his son and daughter-in-law.



As a member of the construction crew, John Roffler got his first home building experience and his inspiration to pursue a building career.

### ***Roffler Houses***

Several houses build by John Roffler can be seen in the City of Camas. Some include: the Alves-Roffler House which was Roffler's first home built for his bride, the Ulrich House built between 1913 and 1914 for his brother Ulrich, the Charles Farrell House, Roffler's grandest house



built for his sister and her husband, who were prominent Camas business people, and several other houses.

### ***Steigerwald Wildlife Refuge and Proposed Interpretive Center***

East of Camas, the Steigerwald Wildlife Refuge and proposed Interpretive Center, with construction scheduled for 1994 which will serve as the Gateway to Columbia River National Scenic Area on the Washington side, and will provide wetland



refuge education in this area of the county. The center will be located in the northeast corner of the refuge with convenient access from the rail and bikeway along the

Columbia River Dike, providing linkage to Cottonwood Beach and the proposed Washington State Park.

### ***Point Vancouver to Cape Horn Trail***

The trails plan provides for connection to the Vancouver to Cape Horn Trail at Lawton Creek in the Columbia Gorge Scenic Area. The Pt. Vancouver to Cape Horn Trail leads to the cliffs and scenic views of Cape Horn. Although Clark County enters only a small portion of the



Columbia Gorge Scenic Area, the trail plan provides access to explore trails located in the Gorge.



### **VANCOUVER/LAKE FELIDA/ RIDGEFIELD AREA**

The Vancouver Lake/Felida/Ridgefield Area provides the environmentalists and historian with an opportunity to study the abundant wildlife that inhabits the Vancouver Lake and Ridgefield Wildlife Refuge. Additionally, a historic prune farm and dryer are located at the Anderson/Beletski Prune Farm.

### ***Vancouver Lake***

As described earlier, Vancouver provides opportunities to explore the lake and adjacent Columbia River lowlands as well as to picnic at Vancouver Lake Park.



### ***Ridgefield Wildlife Refuge and Interpretive Center***

The Ridgefield National Wildlife Refuge, one of the most important nesting grounds for migratory birds (including ducks, swans, sandhill cranes and several subspecies of Canada geese) in the Pacific Northwest provides the individual the opportunity to study the wildlife unique to this



area. The refuge area is historically significant, as well, being "...the site of a major village of Cathlapotle Indians, a band of the Chinook tribe with whom Lewis and Clark traded and spent several nights on their 1804 expedition." A basalt quarry used to obtain cobblestones to pave the streets of Portland is also located on the site.

An interpretive center fashioned after Chinook-style longhouse and a replica of the Lewis and Clark campsite is proposed to be built. Chinook-style art is proposed to be used on both the interior and exterior of the center. The main floor will have a reception area, exhibit hall, auditorium (which can be divided into three classrooms) and an archaeological lab and curation/storage facility.

The camp site will focus on Lewis and Clark and observations made during the expedition.

### ***The Lancaster House/Columbia House***

The Lancaster House/Columbia House, which is possibly the oldest frame mansion in the state of Washington, is located north of the Wildlife refuge and visible from the boat launch road north of the Refuge.



## **BATTLE GROUND/ LEWISVILLE PARK AREA**

### ***The Lewisville Park***

Lewisville Park is the county's oldest regional park. Built by



WPA (Work Projects Administration) workers during the Depression era, its picnic shelters and historic caretaker's residence are excellent examples of 1930's Rustic Architecture.

### ***Pomeroy Living History Farm***

The Pomeroy Living History Farm provides visitors a view into one of Clark County's pre-electric farms. E.C. Pomeroy settled in Clark



County in 1910. The existing farm was built in the 1920's after the first one was destroyed by fire. It was electrified in the 1930's. During the first full weekend of each month from June through October, visitors can learn how the farm operated. There is a tea room where a plowman's lunch or afternoon tea can be purchased on Fridays and Saturdays and special teas and events area featured throughout the year. A gift shop which sells British imports is open all year during the weekend and on certain days during the week.

### ***Moulton Falls Park***

Moulton Falls Park, located on the East Fork of the Lewis River, provides historic and environmental experiences from hiking on the Murphy Grade which was built in the 1920's for logging,



visiting volcanic rock formations including pools and low waterfalls cut from the dense lava rock, to studying stands of Douglas Fir, Alder, Dogwood, Hemlock and Willow.

### ***C.A.S.E.E. (Center of Agriculture, Science, and Environmental Education)***

The C.A.S.E.E. Salmon Creek Center will provide a full day experience in wetland development, fish management, agriculture studies and environmental design. Part of the Battle Ground School District educational program, C.A.S.E.E. Salmon Creek Centers is an 80-acre site currently in the developmental stages. "The site will include a central structure housing classroom facilities, science laboratories and related facilities for learners of all ages, as well as support staff. Several agencies with a scientific, agricultural and environmental mission will also be allocated space. Other features will include a conference center with breakup rooms designed to accommodate 150 people and a demonstration/food preparation kitchen. An arboretum, nature trail, and organic farming site are being designed in conjunction with demonstrations of the use of recycled plastics, woods, tires, and organic materials. A wildlife and animal habitat area exists and will be complemented by a series of ponds which will demonstrate aquatic habitat, fisheries, and ornamental uses of water.

### ***Cedar Creek Grist Mill***

Built in 1876, the Cedar Creek Grist Mill has been restored and is open on a regular basis on weekends. Tour groups, school children and other organizations can tour the mill during the week



by appointment. The Grist Mill is the only grain grinding mill in Washington that has maintained its original structural integrity, grinds with stone and is water powered.

## **YACOLT/AMBOY/ CHELATCHIE PRAIRIE AREA**

The Yacolt/Amboy/Chelatchie Prairie Area is rich in the history of the Klickitat Indians, the McClellan Trail and early pioneer settlement. The original pioneer home where new pioneers stopped before they settled and several Indian food gathering locations can be visited in this area. The Historic Chelatchie Prairie Cemetery and Yale Bridge provide additional insight into the history and ecology of the area.



Although the Amboy/Chelatchie Prairie Area has a rich historic background, (except for the historic homes) a proposed historic museum, bridge and cemetery, much of the history is not easily detected on casual observance. This study, therefore, suggests that this area be given extra support in marking its historically significant sites. The approach suggested below, in addition to pointing out historically significant sites will add a distinct character that should provide added tourist interest. This may

serve as a pilot program for marking other historic places in the county.

### ***North Clark County Historic Museum***

The North Clark County Historic Museum will be housed in the old United Brethren Church building, which was built in 1910. The building is presently being restored and will display Native American, pioneer and logging exhibits.

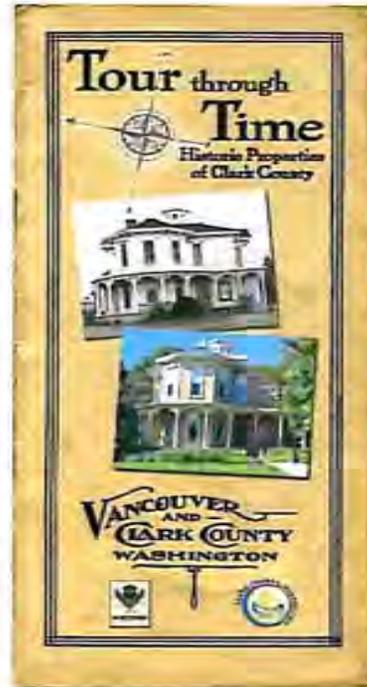


### ***Amboy School***

The Amboy School is located up the road from the Museum. It has been remodeled and is presently used as a residence. The outside of the building still shows how the old school looked. A marker telling when the school was in session and illustrating how it was used could be placed near the front gate. It could depict the children playing outside on the school ground, ringing the school bell (which will be exhibited in the museum) and showing how the children dressed and worked in the classroom. Additional information could tell how long they went to school and what they studied.

### ***Historic Homes***

Many of the first pioneer homes dotting the landscape in the Amboy area provides the visitor a view of what life was like at the turn of the century. These homes are used as present day residences and the owners have somewhat maintained the original appearance. Some of the houses have been restored while others show the wear of time, providing a pleasant view into the home life of this small rural area. Markers could be placed at each home showing the name of the original family and the date the house was built. A map showing the location of each house and telling the history of the area would provide an interesting self guided tour for bicyclists, walkers and motorists.



### ***Chelatchie Prairie/Tumtum Mountain***

The Chelatchie Prairie, quickly disappearing to suburban development, was an important food gathering area for the Klickitat Indians, who traveled from the Yakima area to Mt. St. Helens and Mt. Adams to gather berries, to the Chelatchie Prairie and surrounding area to gather and process camas root and bracken fern and to Fort Vancouver to trade. Located in the prairie near the Mt. St. Helens National Monument Headquarters, is a field where camas lily blooms.

This field is also the site of one of the Indian camas root food processing locations. From the field, is a view of Tumtum Mountain, a distinctive landmark and a special place to the Indians. A small bicycle and pedestrian rest stop could be provided in this general location. A special historic marker could be placed which would include a paved central area with information imbedded into the pavement telling about the significance of the area and which would show



a map of the area as it was used by the Native Americans. The rest stop could be located to provide a view of Tumtum Mountain and a sculpture of Indian women and children digging camas root could be placed in the foreground. Camas lilies could be planted en masse around the sculpture for visitors to see bloom. A description of the native plants important to the Klickitat with pictures or relief sculptures

showing what the plants look like can be included in a sitting wall near the sculpture. Rocks or benches can be provided upon which visitors can quietly sit, eat their lunch and experience what the area was like when the Indians came to gather and process the food. A description of how the food was processed and, if feasible, a replica of the root processing ovens could be located off to the side of the central part of the area.



Regional Trail & Bikeway  
Systems Plan  
2006

SECTION IX  
FUNDING



Proud Past, Promising Future



## SECTION IX. FUNDING FOR TRAIL PROJECTS



Regional trail and greenway projects can take years to grow from concept to reality. They are often quite complex, involving many land owners and the help of hundreds – or thousands – of citizens. Determining a workable alignment, securing the trail right of way and finding the resources for trail construction all take time, energy and money.

Regional trails are typically built in phases as funding becomes available and trail alignments are secured. Some projects have received big boosts from special dedicated funding sources – such as Metro’s 1995 open spaces, parks and streams bond measure. Other projects are built one section at a time, a new stretch of asphalt added year after year after year.

State and federal support has been instrumental in planning and building the regional trails system. In 1998, the Transportation Equity Act for the 21<sup>st</sup> Century authorized federal transportation dollars for trail projects. In recent years, a number of regional trail projects have been funded through the Metropolitan Transportation Improvement Program, which disburses federal and state transportation money in the Clark County metropolitan region.

For each project, different strategies are used. Pieces of trails are built, gaps are filled, key acquisitions are made and local land owners agree to participate. Each step moves us along the path to our goal of regional trail network linking together our communities.

A variety of potential funding sources are available to construct the proposed bicycle and pedestrian improvements; these include local, state, regional, federal and private programs. Most funding programs are competitive, and involve the completion of extensive applications with clear documentation of the project need, costs, and benefits.

Local funding for these projects would typically come from Clark County or potential future bond or other local revenues. Funding at the state level is available through resources such as the Interagency Committee for Outdoor Recreation (IAC).

The primary federal funding source is U.S. Department of Transportation (USDOT), through the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). Private funding may be found through foundations, advocacy organizations and businesses.

### Federal Funding – Other Programs



Federal resources are available through programs concerned with conservation, community development, and public health.

The following is a partial list of potential grants and their federal sources:

1. Land and Water Conservation Fund Grants, US Forest Service
2. Community Development Block Grants, US Department of Housing and Urban Development
3. Conservation Reserve Program, US Department of Agriculture
4. Wetlands Reserve Program, US Department of Agriculture
5. Watershed Protection and Flood Prevention Grants, US Department of Agriculture
6. Urban and Community Forestry Assistance Program, US Department of Agriculture
7. Small Business Tree Planting Program, Small Business Administration
8. Public Works and Facilities Development Economic Development Grants, US Department of Commerce
9. Design Arts Program, National Endowment for the Arts

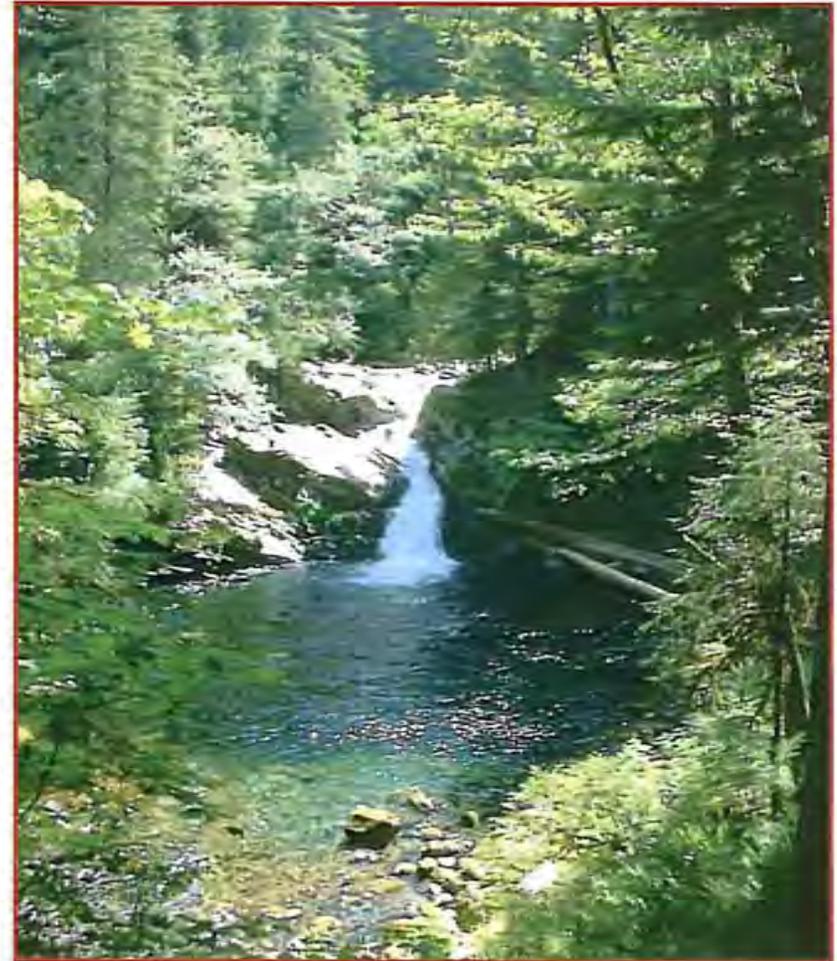


### State and Local Funding

The Interagency Committee for Outdoor Recreation (IAC) is a main source for funding at the state level. IAC administers several grant programs for recreation and habitat conservation purposes. Depending on the program, eligible project applicants can include municipal subdivisions of the state (cities, towns, and counties, or port, utility, park and recreation, and school districts), Native American tribes, state agencies, and in some cases, federal agencies and nonprofit organizations.

### Other Funding Sources

A funding strategy for trail development should seek resources nationally as well as locally, and from the private bodies as well as government agencies. Many foundations and corporations offer grant programs targeting such general area as conservation, recreation and transportation alternatives, and such specific areas as bicycling, habitat preservation, and trail development. Some valuable sources for researching such funds are referenced in the appendix per the example below.



<b>Controlling Agency</b>	<b>Washington State Interagency Committee for Outdoor Recreation</b>
<b>Program/Source</b>	<b>National Recreation Trails Program</b>
<b>Purpose</b>	<ul style="list-style-type: none"> <li>To rehabilitate and maintain motorized and non-motorized recreational trails that provide/support a backcountry experience.</li> </ul>
<b>Eligible Projects</b>	<ul style="list-style-type: none"> <li>Rehabilitation</li> <li>Maintenance</li> <li>Education</li> <li>Development of trailhead facilities or new trails if closely linked to existing trails (acquisition and most new development projects not eligible)</li> </ul>
<b>Geographical Restrictions</b>	<ul style="list-style-type: none"> <li>Program focuses on projects that support backcountry experiences</li> </ul>
<b>Funds Available</b>	<ul style="list-style-type: none"> <li>Since 1994, \$7.25 million for 245 projects.</li> <li>In fiscal 2005, \$1.23 million was awarded.</li> </ul>
<b>Availability for Trails</b>	<ul style="list-style-type: none"> <li>Specific allocation for trails (30% motorized; 30% non-motorized; 40% "diverse" use required ratio.)</li> <li>Grant cycles occur on annual basis</li> </ul>
<b>Revenue/Tax Base</b>	<ul style="list-style-type: none"> <li>Federal gasoline taxes attributed to recreational, non-highway uses.</li> </ul>
<b>Eligible Recipients</b>	<ul style="list-style-type: none"> <li>Local governments (towns, cities, etc.), nonprofits, state agencies, tribes, federal agencies.</li> </ul>
<b>Grant Limits</b>	<ul style="list-style-type: none"> <li>Minimum \$5,000</li> <li>Maximum \$50,000</li> <li>Education project limits \$5,000 - \$10,000</li> </ul>
<b>Sponsor Match</b>	<ul style="list-style-type: none"> <li>Minimum 20% of total project cost</li> </ul>
<b>Comments</b>	<ul style="list-style-type: none"> <li>Project review criteria focus on need, project support, readiness to proceed, etc.</li> </ul>
<b>Contact</b>	Interagency Committee for Outdoor Recreation 1111 Washington Street SE P.O. Box 40917 Olympia, WA 98504-0917 Kammie Bunes – Project Manager for Clark County (306) 902-3019

1. Urban Parks Institute (Project for Public Spaces)  
[http://urbanparks.pps.org/topics/funding/greenway\\_sources](http://urbanparks.pps.org/topics/funding/greenway_sources)
2. Trails and Greenways Clearinghouse (Rails-to-Trails Conservancy)  
<http://www.trailsandgreenways.org>
3. The Washington Foundation Data Book  
<http://www.foundationdatabook.com/walinks.html>  
 C&D Publishing, 1017 SW Morrison #500  
 Portland, OR 97205  
 (503) 274-8780, info@foundationdatabook.com  
<http://www.fdncenter.org>
4. The Foundation Center  
<http://www.fdncenter.org>

As some funders will not accept unsolicited grant requests, or will only give grants to other non-governmental organizations, a fundraising strategy should attempt to identify and make use of intra-organizational relationships and partnerships, in addition to simply identifying potential funders. Below are several examples of the many non-governmental funding sources available nationwide.

The IAC's Washington Wildlife Recreation Program has a specific trail component.

A variety of other creative funding options should also be considered for funding trail development. Grant funding can be a component of a larger comprehensive funding strategy that includes:

- A. Local bond referenda
- B. Annual appropriations through a capital improvement plan
- C. Creation of a new trust fund for land acquisition and facility development specific to a trails and pedestrian system
- D. Private-public partnerships – creating relationships with businesses and developers that would benefit from trail construction
- E. Private sponsorship programs (“Adopt-a-Trail”, “Buy-a-Foot”)
- F. Provide encouragement and support of a “Friends of . . .” group – such a volunteer organization could raise funds from the private sector.



## Regional Trail and Bikeway Systems Plan

### PROPOSED 2006-2007 PROJECTS

Description	Project Estimate	Length	Built	Trail Classification	Jurisdiction	Available Funding Source	Cost (\$ / Mile)			Key Reaches
							Right of Way	Construction	Amenities	
Lewis and Clark Discovery Trail Elsworth to Leiser/Winter Park	10 million	2.2		A1	COV	TEA				KEY
Lewis and Clark Discovery Trail Esther Short Park to Mill Plain and Boise Waterfront Trail	.72 million	0.6		A1	COV	-				KEY
Chelatchie Railroad Trail St. Johns to 119th	6.96 million	5.8		A4	UUA	IAC				KEY
Chelatchie Railroad Trail 199th through City of Battle Ground	2.04 million	1.7		A4	COBG	IAC				KEY
Chelatchie Railroad Trail Moulton Falls to Yacoll	3.24 million	2.7		A4	R	TEA				KEY
Salmon Creek Greenway Trail Kinsline Ponds to WSU Campus	3.12 million	2.6		A1	UUA	IAC				KEY
North Fork Lewis River Trail Yale Dam to Stouxon Creek Park	2.22 million	3.7		A3	R	IAC				KEY
Whipple Creek Trail Fairgrounds to Whipple Creek	1.2 million	1.0		A3	R	PUIUA				KEY
Whipple Creek Trail Whipple Creek to Salmon Creek	1.6 million	1.5		A1	RUIUA	IAC				KEY
East Power Line Trail Evergreen Transit Center to SE 162nd Avenue	1.44 million	1.2		A2	COV	TEA				KEY
East Power Line Trail Firstenburg Community Center to NE 18th Street	.5 million	0.5		A2	COV	TEA				KEY
Washugal River Regional Trail Bridge over Washugal River	1.5 million	0.6		A1	COC	IAC				KEY
Camp Bonneville Trail Heritage Trail to Green Mountain Golf Course	.9 million	0.75		A2	R	PUIUA				KEY
Camp Bonneville Trail Mountain Golf Course to 54th St.	1.44 million	2.4		A2	R	PUIUA				KEY

Jurisdiction Legend: R= Rural, UUA= Urban Unincorporated,  
COBG= City of Battle Ground,  
PUIUA= Proposed Urban Unincorporated, COV= City of  
Vancouver, COC= City of Camas  
IAC= Interagency Committee for Outdoor Recreation, TEA=  
Transportation Enhancement

### **EDUCATION STRATEGY**

Effective trail and bikeway programs should include several areas of education including bicycle and walking safety and conduct, way finding, and environmental and cultural education.

A thoughtfully designed trail and bikeway system will connect our community through geography, cultural history, and the diverse environment of Clark County. Through the trail experience, the landscape can be interpreted and the user can learn while in motion or at rest. Connecting and signing points of special interests by trail linkages allows trail users to learn about their community through self guided exploration or organized education programs.

Trail and bicycle safety education is paramount in the implementation of a trails plan. Site lines, visibility, topographic grade, and road crossings will present themselves as challenges during the implementation of this plan. Adhering to trail design standards outlined by AASHTO and the State of Washington can provide a safe and rewarding recreational experience for users. In addition, bicycling clubs and walking advocates promote safety education to all skill levels through local school programs and by organizing volunteer events. A successful trails plan will promote safe recreation and seek to improve the relationship between motorists and all forms of non-motorized users.

Clear and effective signage can promote appropriate trail conduct and facilitate travel between destinations. As identified in the 2004 City of Vancouver Paths and Trails Plan

and trail watch program, establishing volunteer “trail stewards” can facilitate enforcement of trail rules while fostering stewardship of our trail system. Encouraging individual respect for public facilities and private property are important elements of effective trail programs.

### ***Get Involved***

Local jurisdictions, park and trail advocates, property owners and citizens are all involved in planning the regional trails and greenways system. Committees and working groups focus in on individual trail projects and help design and support the vision for an interconnected system

### **PUBLIC CONTACT INFORMATION:**

Vancouver Clark-Parks & Recreation Website -

[www.vanclarkparks-rec.org](http://www.vanclarkparks-rec.org)

360-619-1111

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