# Appendix E

Riparian Assessment Forms



## **Riparian Characterization Form**



## City of Molalla Riparian Inventory

GENERAL INFORMAT	TION					
Date:	6/7/01	Riparian Code:	R-CC-1			
On-site:	Off-Site: ⊠	Reach Length:	2900'			
Investigators:	SE	Hydrologic Basin:	Creamery Creek			
WATER RESOURCE IT	NFORMATION					
Water Resource:	Lake/Pond: Wetland:	Width: Width:	5' feet feet feet			
LWI Wetland Code:						
Water present year-	round: Yes 🗵 N	lo □				
Are salmonids prese	Are salmonids present in the adjacent water resource? Yes □ No ⊠					
Is the water resource	e listed for temperature on D	DEQ's 303(d) list:	Yes 🗆	No ⊠		
Within FEMA-mapp	oed 100-year floodplain:	Yes $\square$	No 🗵			
Mapped soil series:		Dayton silt loam				
· ·	? (Check as many as needed)					
Agriculture:						
Commercial/Indus.: Residential:						
Woo	ody vegetation	Her	baceous vegetation			
(trees, sh	rubs, vines >1 meter)		ees, shrubs, vines <1 meter	r)		
Sorbus scopulina		Phalaris arundinacea				
Rubus discolor		Conium maculatum				
Cytisus scoparius		Ranunculus repens				
Crataegus monogyna		Rubus discolor				
Rosa sp.			· · · · · · · · · · · · · · · · · · ·			
		1				

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% × 10% - 25% × >25% ×
Is the reach constricted by man-made features? (Question 8)
Yes ⊠ No □
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes □ No ⊠
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ☐ Herbaceous vegetation ☒ Bare ground ☐
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes □ No ⊠
Large woody debris in riparian area? (Question 15)
Yes □ No ⊠
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40%
Degree of development or human caused disturbance. (Question 19)
<25% □ 25% - 75% □ >75% 区
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate □ high, very high, severe ⊠
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)
Woody vegetation ☐ Herbaceous vegetation ☒ Bare ground ☐
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes □ No ⊠
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes □ No or no flood prone area present ⊠
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 □ 2 layers □ 1 layer or unvegetated ⊠

# **Riparian Width Determination**



## City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-1

Date:	6/7/	01	Investigators:		SE	3	
Dominant tree spec	ies:		Fraxinus latifolia	(see	other side	e for list of speci	es)
Potential tree heigh	t (PTI	6.	h of riparian area:	lge of water	75' / 10		_ feet
PTH determined by On-site veget			Reference site	⊠ Co	ode	R-CC-2	
Village Drive and W	edgew	ood Dri	s performed using aerial ve. South of Creamery C e agricultural fields with	reek is re	cent and	d ongoing resi	dential
Typical Cross Section	on:						
Bave ground/ sparse vegeto	رتي	W. K.	5-8'	2 )	<u>-e leanns</u>	ig. field	
Sca	2° Fe	broom	blackberry along sm. trees/should	bara b	anks;	occasional	



#### City of Molalla Riparian Inventory

#### **WATER QUALITY**

RIPARIAN CODE

R-CC-1

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
h Datween 10.1 (100/) and 5.1 (200/)	2 pts	3
c. Greater than 5:1 (20%)	4 }	
2. What is the dominant vegetation cover in the riparian area?	l l	
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3	3.2 feet) high 3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter	(3.2 feet) high 2 pts	2
c. Bare ground	1 pt	
3. What is the dominant vegetation at the top of bank (if defined)	,	
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3	3.2 feet) high 3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (	(3.2 feet) high 2 pts	2
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian a	irea?	
a. Less than 10%	3 pts	
b. Between 10% and 25%	0 -4-	3
c. Greater than 25%	44	
***************************************		
5. How does the Natural Resources Conservation Service (former	rly	
Soil Conservation Service) soil survey rank the water erosion h	nazard	
of the dominant mapped unit in the riparian area? Select the h	ighest	
water erosion hazard description if more than one is listed.	· 1	
a. Low, slight, moderate	2 pts	1
b. High, severe, very high	1 nto	
	Total Points:	11

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

MEDIUM



# City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-CC-1

6. Are there	e flood prone areas (	adjacent flat areas, d	epressions, swales, FEMA		Score
mapped	100-year floodplain,	etc.) beyond the top of	of bank or edge of the		
water res	source?				
a. Yes				3 pts	1
b. No					
	********				
7. Is woody	vegetation (trees, sh	rubs, vines) greater t	han 1 meter (3.2 feet) high		
dominan	t in the flood prone	riparian area?			
a. Yes				3 pts	· 1
b. No or	no flood prone area p			11	
8. Is the str	eam or water resour	ce constricted by ma	n-made features		
(e.g. chan	nelization, riprap, co	oncrete wall)?			
a. No				3 pts	1,
b. Yes					
				Total Points:	3
Function:	High (8-9 pts)	Medium (5-7 pts)	Low (3-4 pts)		
					i
			יו זיבו	VCTION IS:	TOW



#### City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-CC-1

9. I	oes the aspect or orientation of the riparian area allow for shading of water	Score
a	t midday in the summer?	
a	ı. Yes3 pts	1
ł	o. No1 pt	
10.	What is the dominant vegetation layer in the riparian area?	
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pts	
	b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts	2
	c. Bare ground 1 pt	
11. l	Does woody vegetation hang over the edge of the water?	
	a. Yes 2 pts	1
	b. No1 pts	
	<b>!</b> !	
	Total Points:	4
Fune	ction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)	
	FUNCTION IS:	LOW



## City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-CC-1

12. Ho	w many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a.	More than 2 layers	3 pts	
b.	2 layers	0 -1-	1
c.	1 layer, or unvegetated	41	
		•••	
13. WI	nat is the dominant vegetation layer in the riparian area?		
a.	Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b.	Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
	Bare ground	1 nt	
14. Do	es woody vegetation hang over the edge of the water?		
a.	Yes	2 pts	1
b.	No	1 0+	
15. Is l	arge woody debris present within the riparian area?		
a.	Yes	3 pts	1
b.	No	1 pt	
16. Wł	nat percent of the water resource edge is bordered by a vegetated riparian		
	ea at least 30 feet wide?		
	Greater than 40%	2 nto	
		3 pts	,
	Between 10% and 40%	2 pts	
c.	Less than 10%	1 pt	

Questions continued on next page



#### City of Molalla Riparian Inventory

#### WILDLIFE HABITAT (continued)

RIPARIAN CODE

R-CC-1

17.	Is surface water present throughout the year?		Score
	a. Yes	3 pts	
	b. No	2 . ( )	3
18.	Is there more than one type of water resource (e.g. stream, wetland, lake/pond within or immediately adjacent to the riparian reach?	)	
	a. Yes	3 pts	1
	b. No	1 nt	
19.	What is the degree of development or human-caused disturbance (e.g. building impervious surfaces, lawns, agriculture, trash) in the riparian area?	gs,	
	a. Less than 25%	3 pts	
	b. Between 25% and 75%	2 nts	1
	c. Greater than 75%	4 4	
		Total Points:	12

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

LOW

## **Riparian Characterization Form**



#### City of Molalla Riparian Inventory

	Access Annual Control of the Control						
GENERAL INFORMAT	TION A PA						
Date:	6/7/01		Riparia	n Code:	R-	·CC-2	81
On-site:	Off-Site: ⊠		Reach I	Length:	2	000'	<del></del>
Investigators:	SE/PF		Hydrolo	ogic Basin:_	Cream	ery Creek	mayoring the state of the state
WATER RESOURCE II	NFORMATION	44	í				-34.5o
Water Resource:	Lake/Pond: Wetland:	X	Width: Width: Width:		5'	feet feet feet	
LWI Wetland Code:	CC-6A	, CC-6B					
Water present year-	round: Yes 🛭	⊠ No					
Are salmonids prese	nt in the adjacent w	vater resou	rce?	Yes		No 🗵	
Is the water resource	e listed for tempera	ture on DE	Q's 303(	d) list:	Yes □		No 🗵
Within FEMA-mapp	oed 100-year floodp	lain:	Yes		No ⊠		
Mapped soil series:			Daytor	n silt loam			
Adjacent Land Uses	? (Check as many as nee	eded)					
Agriculture: Commercial/Indus.: Residential:	□ Une	Roads: developed: Forestry:					
Woo	dy vegetation			Her	baceous vege	tation	
(trees, sh	rubs, vines >1 meter)				ees, shrubs, vii	nes <1 meter	r)
Fraxinus latifolia				arundinace			
Pseudotsuga menziesi	i		Alopecui	rus pratensi:	2		
Populus trichocarpa							
						<del></del>	
							J. 16. 0

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% 区 10% - 25% □ >25% □
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes ⊠ No □
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation □ Herbaceous vegetation ⊠ Bare ground □
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes □ No ⊠
Large woody debris in riparian area? (Question 15)
Yes ⊠ No □
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40%  \[ \begin{array}{cccccccccccccccccccccccccccccccccccc
Degree of development or human caused disturbance. (Question 19)
<25% □ 25% - 75% ⊠ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate □ high, very high, severe ⊠
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)
Woody vegetation □ Herbaceous vegetation ⊠ Bare ground □
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes ⊠ No □
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes □ No or no flood prone area present □
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than $2 \square$ 2 layers $\square$ 1 layer or unvegetated $\square$

## **Riparian Width Determination**



## City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-2

Date:	6/7/01	Investigators:	SE/PF	_
Dominant tree	species:	Fraxinus latifolia	(see other side for list of specie	es)
Potential tree l	neight (PTH)/Wid	lth of riparian area :	75 / 20-50	feet
		measured horizontally from edge	of water resource)	
PTH determine On-site	ed by: vegetation 🗵	Reference site	Code	_
Comments: railroad tracks.			notography and observations Some areas have trees and sh	
but many areas	have only a <i>Phala</i>	ris arundinacea wetland bu	ffer zone.	
		egy manufactures		
Population of the state of the			Francis Francis	lachfolia.



#### City of Molalla Riparian Inventory

#### **WATER QUALITY**

RIPARIAN CODE

R-CC-2

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	3
c. Greater than 5:1 (20%)	1 nt 11	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3:2 feet) high	2 pts	2
c. Bare ground	1 pt	
3. What is the dominant vegetation at the top of bank (if defined)		
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?	p in the state of	
- I then 100/	3 pts	
h Datwoon 100/ and 250/	2 nto	3
C 1 250/		
c. Greater than 25%	' Pt	
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard		
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.		
a. Low, slight, moderate	2 pts	1
b. High, severe, very high	4	
<i>5</i> , , ,	. []]	
	<b>Total Points:</b>	11

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

MEDIUM



#### City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE R-CC-2

6. Are there	e flood prone areas	(adjacent flat areas, d	epressions, swales, FEMA		Score
mapped	100-year floodplain	, etc.) beyond the top	of bank or edge of the		
water res	source?		J		
a. Yes				3 pts	3
b. No					
	*******				
7. Is woody	vegetation (trees, s	hrubs, vines) greater (	than 1 meter (3.2 feet) high		
dominan	t in the flood prone	riparian area?	, , ,		
a. Yes	_	•		3 pts	1
b. No or	no flood prone area	nrecent		1 nt	
			•••••••		
8. Is the str	eam or water resou	rce constricted by ma	n-made features		
(e.g. chan	nelization, riprap,	concrete wall)?			
a. No		ŕ		3 pts	3
b. Yes				2	
			•••••		
				"	
				<b>Total Points:</b>	7
					•
Function:	High (8-9 pts)	Medium (5-7 pts)	Low (3-4 nts)		
- amouton.	B (0 > Pto)	(6 / ptb)	20 (c . p.to)		

**FUNCTION IS:** 



#### City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-CC-2

**MEDIUM** 

**FUNCTION IS:** 

9. Does the aspect or orientation of the riparian area allow for shading	g of water	Score
at midday in the summer?		
a. Yes	3 pts	3
b. No	1 -+	
10. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 fee	et) high 3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 fe	eet) high 2 pts	2
c. Bare ground	1 pt	ē
11. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	1
b. No	II	
	11	
	Total Points:	6
Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		
		e



#### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-CC-2

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers	3 pts	
b. 2 layers	0 1	2
c. 1 layer, or unvegetated	4 -4	
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
Daniel and Market and		
c. Bare ground	'	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	1
b. No		
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	3
b. No	1 24	
	'	
16. What percent of the water resource edge is bordered by a vegetated riparian		
area at least 30 feet wide?		
Constanting 400/	3 pts	
h Determine 100/ and 400/	2 pts	2
I th 100/		
c. Less than 10%	1 pt	
	l	

Questions continued on next page



#### City of Molalla Riparian Inventory

## WILDLIFE HABITAT (continued)

RIPARIAN CODE

R-CC-2

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
b. No	1 pt	3
18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?		
a. Yes	3 pts	1
b. No	1 pt	
19. What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?		
a. Less than 25%	3 pts	
b. Between 25% and 75%	2 pts	2
c. Greater than 75%	1 pt	
То	tal Paints:	16

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

**MEDIUM** 

## **Riparian Characterization Form**



## City of Molalla Riparian Inventory

GENERAL BURGEN AND VICTORY

GENERAL INFORMATION			
Date: 4/20/01	Riparian Code:	R-CC-3L	
On-site: ⊠ Off-Site: □	Reach Length:	600	
Investigators: CR/PF	Hydrologic Basin:	Creamery Cred	ek
WATER RESOURCE INFORMATION	Maria		
Water Resource: Stream/River: x Lake/Pond: Wetland:	Width: Width:	fe	eet eet eet
LWI Wetland Code: CC-7C			
Water present year-round: Yes ⊠	No 🗆		
Are salmonids present in the adjacent water		□ No □	ব
Is the water resource listed for temperature o		Yes 🗆	No ⊠
Within FEMA-mapped 100-year floodplain:	Yes	No ⊠	
Mapped soil series:	Dayton silt loam		
Adjacent Land Uses? (Check as many as needed)			
0	oads: □		
Commercial/Indus.:  Undevelo			
Residential: 🗵 Fore	estry: 🗆		
Woody vegetation	Hei	baceous vegetation	
(trees, shrubs, vines >1 meter)		ees, shrubs, vines <1 r	neter)
Fraxinus latifolia	Phalaris arundinace	ea	
Rubus discolor	Galium aparine		
Cytisus scoparius	Convolvulus arvensi	S	State
Crataegus douglasii	Festuca arundinacea	a	:
	Chrysanthemum leu	canthemum	
	Taraxacum officinal	e	

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% 🗵 10% - 25% 🗆 >25% 🗖
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes □ No ⊠
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ⊠ Herbaceous vegetation □ Bare ground □
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes □ No ⊠
Large woody debris in riparian area? (Question 15)
Yes ⊠ No □
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% × 10% - 40% × <10% □
Degree of development or human caused disturbance. (Question 19)
<25% ⊠ 25% - 75% □ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate □ high, very high, severe ⊠
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)
Woody vegetation ☐ Herbaceous vegetation ☒ Bare ground ☐
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes ⊠ No □
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes ⊠ No or no flood prone area present □
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 □ 2 layers ⊠ 1 layer or unvegetated □

## Riparian Width Determination



# City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-3L

Date:	4/20/	01 Investigator	·s:	CR/PF	
Dominant tree s	pecies:	Fraxinus latifolia	5.	(see other side for list of species	)
Potential tree he		()/Width of riparian area: (Width measured horizontally from	 n edge o	75 / 75 of water resource)	feet
PTH determined On-site ve	by:			Code	
Comments: double wides and west side of road.		nded by development, double be on the left. At culvert Cres			
Typical Cross Se	ction:				
		Creamony Great			nobile



#### City of Molalla Riparian Inventory

#### **WATER QUALITY**

RIPARIAN CODE

R-CC-3L

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	3
c. Greater than 5:1 (20%)	4 _ 1 1)	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
3. What is the dominant vegetation at the top of bank (if defined)	ĮĮ.	
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?	J.	
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 -4-1	3
c. Greater than 25%	4	
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard		
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.		
a. Low, slight, moderate	2 pts	1
b. High, severe, very high	4	¥
	<b>Total Points:</b>	12

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

HIGH



#### City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-CC-3L

6. Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource?		Score
77	3 pts	3
b. No	·······	
7. Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high		
dominant in the flood prone riparian area?		
a. Yes	3 pts	3
b. No or no flood prone area present		
8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?		
a. No	3 pts	3
b. Yes		
To	otal Points:	9
Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)		

**FUNCTION IS:** 

HIGH



#### City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-CC-3L

9.	Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		Score
	a. Yes	3 pts	1
	b. No		
10.	What is the dominant vegetation layer in the riparian area?	2	
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	2
	<ul><li>b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high</li><li>c. Bare ground</li></ul>		3
11.	c. Bare ground  Does woody vegetation hang over the edge of the water?		
	a. Yes	2 pts	1
	b. No	1 pts	
		Total Points:	5
Fu	nction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		

**FUNCTION IS:** 

MEDIUM



#### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-CC-3L

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers	3 pts	
b. 2 layers	2 pts	2
c. 1 layer, or unvegetated	1 pt	
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 nt	
	`	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	1
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	3
b. No	1 pt	
	'	
16. What percent of the water resource edge is bordered by a vegetated riparian		
area at least 30 feet wide?		
a. Greater than 40%	3 pts	
b. Between 10% and 40%	2 pts	3
c. Less than 10%	1 pt	
	"	

Questions continued on next page



#### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-CC-3L

17. Is surface water	present throughout the year?		Score
a. Yes		3 pts	
b. No		1 pt	3
18. Is there more the	nan one type of water resource (e.g. st	ream, wetland, lake/pond)	
within or imme	diately adjacent to the riparian reach	?	
a. Yes		3 pts	1
b. No		1 pt	
19. What is the deg	ree of development or human-caused	disturbance (e.g. buildings,	
impervious su	rfaces, lawns, agriculture, trash) in th	e riparian area?	
a. Less than 25	%	3 pts	
b. Between 25%		2 pts	3
c. Greater than		A STATE OF THE STA	
		Total Points:	19

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

HIGH

## **Riparian Characterization Form**



## City of Molalla Riparian Inventory

GENERAL INFORMATI	ION The second s			
Date:	4/20/01	Riparian Code:	R-Co	C-3R
On-site: ⊠	Off-Site: □	Reach Length:	60	00
Investigators:	CR/PF	Hydrologic Basin:	Creamer	ry Creek
WATER RESOURCE IN	FORMATION			
Water Resource:		Width:	15'	feet
	Lake/Pond:	Width:		feet feet
LWI Wetland Code:	CC-7C			
  Water present year-re		o 🗆		
-	t in the adjacent water reso			No 🗵
-	listed for temperature on D		Yes □	No 🗵
Within FEMA-mappe	ed 100-year floodplain:	Yes 🗆	No 🗵	
Mapped soil series:		Dayton silt loam		
Adjacent Land Uses?	(Check as many as needed)			
Agriculture:				
Commercial/Indus.: Residential:	-			
Residential.	E Forestry	. 🗅		
Wood	dy vegetation	He	rbaceous vegeta	ation
(trees, shru	ubs, vines >1 meter)	(include tr	ees, shrubs, vine	es <1 meter)
Fraxinus latifolia		Phalaris arundinace	га	
Rubus discolor	· · · · · · · · · · · · · · · · · · ·	Galium aparine		
Cytisus scoparius		Convolvulus arvens	is	
Crataegus douglasii		Festuca arundinace	· · · · · · · · · · · · · · · · · · ·	
		Chrysanthemum leu		o van e a
*		Tarayacum officinal	le	

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% \( \square \) 10% - 25% \( \Square \) >25% \( \square \)
Is the reach constricted by man-made features? (Question 8)
Yes ⊠ No □
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes □ No ⊠
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes □ No ⊠
Large woody debris in riparian area? (Question 15)
Yes ⊠ No □
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% 🗵 10% - 40% 🗵 <10% 🗆
Degree of development or human caused disturbance. (Question 19)
<25% □ 25% - 75% ⊠ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate $\square$ high, very high, severe $\boxtimes$
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)
Woody vegetation ☐ Herbaceous vegetation ☒ Bare ground ☐
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes ⊠ No □
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes ⊠ No or no flood prone area present □
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 □ 2 layers ⊠ 1 layer or unvegetated □

## **Riparian Width Determination**



## City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-3R

Date:	4/20/0	1 Investigators:	CR/PF	•
Dominant tree	e species:	Fraxinus latifolia	(see other side for list of species	)
Potential tree	height (PTH)	/Width of riparian area :	75 / 50-75	feet
	13)	Width measured horizontally from ed	ge of water resource)	
PTH determin On-site	ned by: e vegetation [2	Reference site	□ Code	
Comments: double wides a west side of ro	nd open space		ide trailer subdivision on right a ry Creek flows NW beneath roa	
Typical Cross	Section:			
7	S T S	Creamony Greek		nobile homes



#### City of Molalla Riparian Inventory

## **WATER QUALITY**

RIPARIAN CODE

R-CC-3R

1. What is the average slope in the riparian area?	·	Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 nto	3
c. Greater than 5:1 (20%)	1 -4	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
•••••••••••••••••••••••••••••••••••••••		
3. What is the dominant vegetation at the top of bank (if defined)	il l	
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 ptg	2
c. Greater than 25%	4 .	
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard	1	
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.		
a. Low, slight, moderate	2 pts	1
b. High, severe, very high	4	
	<b>Total Points:</b>	11

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

FUNCTION IS: MEDIUM



## City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-CC-3R

6. Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA		Score
mapped 100-year floodplain, etc.) beyond the top of bank or edge of the		
water resource?		
a. Yes	3 pts	3
b. No	N 10 N 30 N	MANAGE OF
	1	
7. Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high		
dominant in the flood prone riparian area?		
a. Yes	3 pts	3
b. No or no flood prone area present	1 pt	
8. Is the stream or water resource constricted by man-made features		
(e.g. channelization, riprap, concrete wall)?		
a. No	3 pts	1
b. Yes	2 2	
Tot	tal Points:	7
	200400000 Pc1 50430000033000000 U	
Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)		
runction. Angli (5-7 pts) Medium (5-7 pts) Low (5-4 pts)		

**FUNCTION IS:** 

**MEDIUM** 



#### City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-CC-3R

	e aspect or orientation of the riparian area allow for shading of wat	er	Score
at midda a. Yes	ay in the summer?	3 pts	1
b. No			
10. What is	s the dominant vegetation layer in the riparian area?		
	ody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herl	paceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	h 2 pts	3
c. Bare	ground	1 pt	
11. Does we	oody vegetation hang over the edge of the water?	2 pts	1
b. No			
		Total Points:	5
Function:	High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		

**FUNCTION IS:** 

MEDIUM



# City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-CC-3R

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?	to .	Score
a. More than 2 layers	3 pts	
b. 2 layers	2 pts	2
c. 1 layer, or unvegetated	1 nt	
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	4 -4	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	1
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	3
b. No	1 pt	
16. What percent of the water resource edge is bordered by a vegetated riparian		
area at least 30 feet wide?		
a Greater than 10%	3 pts	
h Patrican 10% and 10%	2 ntc	3
I 41 100/	1 pt	
c. Less than 10%	· ' P'	

Questions continued on next page



#### City of Molalla Riparian Inventory

#### WILDLIFE HABITAT (continued)

RIPARIAN CODE

R-CC-3R

17. Is surface water present thr	oughout the year?	Score
a. Yes	3 pts	
h No	1 pt	3
18. Is there more than one type	of water resource (e.g. stream, wetland, lake/pond)	
within or immediately adjac	cent to the riparian reach?	
a. Yes	3 pts	1
b No	1 pt	
19. What is the degree of develo	opment or human-caused disturbance (e.g. buildings,	
impervious surfaces, lawns	s, agriculture, trash) in the riparian area?	
a. Less than 25%	3 pts	
b. Between 25% and 75%	2 pts	2
c. Greater than 75%	1 pt	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	Total Points:	18

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

FUNCTION IS: MEDIUM

# **Riparian Characterization Form**



## City of Molalla Riparian Inventory

GENERAL INFORMAT	TION						
Date:	5/1/01	3	Riparia	n Code:	I	R-BC-1	
On-site: ⊠	Off-Site: □	I	Reach I	ength:		1325'	
Investigators:	SE/PF	· I	Hydrolo	ogic Basin:_	Вє	ear Creek	
WATER RESOURCE IT	NFORMATION						
Water Resource: LWI Wetland Code:	Lake/Pond: Wetland:	1	Width: Width: Width:		12-15	feet feet feet	
Water present year-	round: Yes 🗵	No l		Yes		No ⊠	
Is the water resource	e listed for temperature or	n DEQ	e's 303(	d) list:	Yes □		No 🗵
Within FEMA-mapp	oed 100-year floodplain:	7	Yes .		No ⊠	]	
Mapped soil series:		W	apato si	lty clay loar	n		***
Adjacent Land Uses	? (Check as many as needed)						
Agriculture: Commercial/Indus.: Residential:	⊠ Undevelop	ads: [ ped: [ stry: [	X				
Woo	ody vegetation			Her	baceous veg	getation	
(trees, shi	rubs, vines >1 meter)			(include tre	ees, shrubs, v	vines <1 mete	r)
Fraxinus latifolia				arundinace	ra		······································
Pseudotsuga menziesi	i		ledera l				···
Crataegus monogyna		S	<u> Solanum</u>	dulcamara			
Prunus sp.							
Rubus discolor							
Populus trichocarpa							

1 meter = 3.2 feet

Quercus garryana

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% × 10% - 25% □ >25% □
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes ⊠ No □
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes ⊠ No □
Large woody debris in riparian area? (Question 15)
Yes ⊠ No □
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% \( \otimes \) 10% - 40% \( \otimes \) <10% \( \otimes \)
Degree of development or human caused disturbance. (Question 19)
<25% ⊠ 25% - 75% □ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)
Woody vegetation ☐ Herbaceous vegetation ☒ Bare ground ☐
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes ⊠ No □
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes □ No or no flood prone area present ⊠
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 ⊠ 2 layers □ 1 layer or unvegetated □

## **Riparian Width Determination**



# City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-1

Date: 5/	1/01	Investigators:	S	SE/PF	_
Dominant tree species:	Frax	cinus latifolia	(see other	side for list of specie	s)
Potential tree height (PT	•	parian area: d horizontally from edg		5 / 75 urce)	_feet
PTH determined by: On-site vegetation		Reference site			_
Comments: Bear looking upstream of brid		sewage plant. Creek d to sewage plant.	is 1.4 feet d	eep. Analysis per	formed
Typical Cross Section:					
	Sold States of the States of t				



## City of Molalla Riparian Inventory

## **WATER QUALITY**

RIPARIAN CODE

R-BC-1

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	0 1 1	3
c. Greater than 5:1 (20%)	1 nt	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
***************************************		
3. What is the dominant vegetation at the top of bank (if defined)	II.	
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 pts	3
c. Greater than 25%	1 pt	
5. How does the Natural Resources Conservation Service (formerly	,	
Soil Conservation Service) soil survey rank the water erosion hazard	l l	
of the dominant mapped unit in the riparian area? Select the highest	я я	
water erosion hazard description if more than one is listed.		
a. Low, slight, moderate	2 pts	2
b. High, severe, very high	1 pts	
		12
	<b>Total Points:</b>	13

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

HIGH



## City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-1

6. Are ther	e flood prone areas (adjacent flat areas, depressions, swales, FEMA		Score
mapped	100-year floodplain, etc.) beyond the top of bank or edge of the		
water re	source?		
a. Yes		3 pts	3
b. No			
7. Is woody	vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high		
dominan	t in the flood prone riparian area?		
a. Yes		3 pts	1
b. No or	no flood prone area present	1 pt	
8. Is the str	ream or water resource constricted by man-made features		
(e.g. chan	nnelization, riprap, concrete wall)?		
a. No		3 pts	3
b. Yes			
	Tota	al Points:	7
		-	
Function:	High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)		

**FUNCTION IS:** 



# City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-1

9.	Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		Score
	a. Yes		3
	b. No	1 pt	
10	. What is the dominant vegetation layer in the riparian area?		
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
	b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
	c. Bare ground	1 pt	
11.	Does woody vegetation hang over the edge of the water?		
	a. Yes	2 pts	2
	b. No		
		   Total Points:	88
Fu	nction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		

**FUNCTION IS:** 

HIGH



## City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-1

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?	Score
a. More than 2 layers 3 pts	
b. 2 layers 2 pts	3
c. 1 layer, or unvegetated 1 pt	
13. What is the dominant vegetation layer in the riparian area?	
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts	3
c. Bare ground	
14. Does woody vegetation hang over the edge of the water?	
a. Yes 2 pts	2
b. No	
15. Is large woody debris present within the riparian area?	
a. Yes 3 pts	3
b. No	
16. What percent of the water resource edge is bordered by a vegetated riparian	
area at least 30 feet wide?	ŀ
a. Greater than 40% 3 pts	
b. Between 10% and 40% 2 pts	3
c. Less than 10%	

Questions continued on next page



#### City of Molalla Riparian Inventory

# WILDLIFE HABITAT (continued)

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

RIPARIAN CODE

R-BC-1

**FUNCTION IS:** 

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
b. No	1 pt	3
18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?		
a. Yes	3 pts	1
b. No	1 nt	
19. What is the degree of development or human-caused disturbance (e.g. buildings impervious surfaces, lawns, agriculture, trash) in the riparian area?	,	
a Loss than 259/	3 pts	
1. Determine 2507 and 7507	2 -4-	3
c. Greater than 75%	1 pt	
$\mathbf{T}$	otal Points:	21

# **Riparian Characterization Form**



# City of Molalla Riparian Inventory

GENERAL INFORMATION						
Date: 6/7/01		Riparian C	ode:	R-I	3C-2	
On-site: □ Off-Site:	$\boxtimes$	Reach Leng	gth:	5	50	
Investigators: S	E/PF	Hydrologic	Basin:	Bear	Creek	<del></del>
WATER RESOURCE INFORMATION	ON"					
	River: x Pond: tland:	Width: Width:			feet feet feet	
LWI Wetland Code:						
Water present year-round:	Yes ⊠ No					
Are salmonids present in the adjacent water resource? Yes \( \square\) No \( \square\)						
Is the water resource listed for t	Is the water resource listed for temperature on DEQ's 303(d) list: Yes □ No ⊠					
Within FEMA-mapped 100-year floodplain: Yes □ No ⊠						
Mapped soil series:	Ţ	Wapato silty o	lay loam			
Adjacent Land Uses? (Check as m	nany as needed)					
Agriculture: 🗵	Roads:					
Commercial/Indus.:	Undeveloped:					
Residential:	Forestry:					
Woody vegetati	ion		Herbac	eous veget	ation	
(trees, shrubs, vines >1		(in	clude trees,	-		)
Quercus garryana		Anthoxanthum odoratum				
Fraxinus latifolia						
		Alopecurus g	geniculatus			
	T.	Cirsium vulg	are			
		Cirsium arve	ense		167	
		Holcus lanai	us			

Chrysanthemum leucanthemum

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% ☒ 10% - 25% □ >25% □
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes ⊠ No □
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ☐ Herbaceous vegetation ☒ Bare ground ☐
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes □ No ⊠
Large woody debris in riparian area? (Question 15)
Yes □ No ⊠
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% 🗵 10% - 40% 🗆 <10% 🗖
Degree of development or human caused disturbance. (Question 19)
<25% ⊠ 25% - 75% □ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate   high, very high, severe
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)
Woody vegetation ☐ Herbaceous vegetation ☒ Bare ground ☐
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes ⊠ No □
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes □ No or no flood prone area present ⊠
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 □ 2 layers ⊠ 1 layer or unvegetated □

# **Riparian Width Determination**



# City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-2

Date:	6/7/01	Investigators:	SE/PF	
Dominant tree	e species:	Fraxinus latifolia	(see other side for list of species	)
Potential tree	height (PTH)/W	idth of riparian area :	75 / 25	feet
	72	th measured horizontally from edg	ge of water resource)	
PTH determin	100			
On-site	vegetation 🗵	Reference site	Code	
Commontes	Offsita fra	m the north along Taliyar De	and and aget from Highway 213	
Comments:	an actively graz		oad, and east from Highway 213	•
I IIIs I Cacii Is III	all actively graz	cu cow pasture.		
				* * * *
Typical Cross	Section:			
queras garryona			Traxions languistic	
		Alde	Charle Manager	



#### City of Molalla Riparian Inventory

## **WATER QUALITY**

RIPARIAN CODE

R-BC-2

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 nto	3
c. Greater than 5:1 (20%)	1 -4	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 pt	
	· · · · · · · · · · · · · · · · · · ·	
3. What is the dominant vegetation at the top of bank (if defined)		
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 pt	
	'	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 pts	3
c. Greater than 25%	1 nt	
5. How does the Natural Resources Conservation Service (formerly	i i	
Soil Conservation Service) soil survey rank the water erosion hazard		
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.	II.	
a. Low, slight, moderate	2 pts	2
b. High, severe, very high	1 pts	
	"	
Tota	l Points:	12

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

HIGH



## City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-2

6. Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA		Score
mapped 100-year floodplain, etc.) beyond the top of bank or edge of the		
water resource?		
a. Yes	3 pts	3
b. No		
7. Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high		
dominant in the flood prone riparian area?	4	
a. Yes	3 pts	1
b. No or no flood prone area present	11	
8. Is the stream or water resource constricted by man-made features		
(e.g. channelization, riprap, concrete wall)?		
	3 pts	3
a. No b. Yes		
To	otal Points:	7
	-	
Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)		

**FUNCTION IS:** 



#### City of Molalla Riparian Inventory

## THERMAL REGULATION

RIPARIAN CODE

R-BC-2

**MEDIUM** 

**FUNCTION IS:** 

9.	Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		Score
	a. Yes b. No	4	3
10.	What is the dominant vegetation layer in the riparian area?	2 nto	
	<ul><li>a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high</li><li>b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high</li><li>c. Bare ground</li></ul>	3 pts 2 pts1 pt	2
11.	Does woody vegetation hang over the edge of the water?  a. Yes	2 pts	11
	***************************************	Total Points:	6
Fu	nction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)	_	



#### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-2

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers	3 pts	
b. 2 layers	المغماد	2
c. 1 layer, or unvegetated		
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	2 ptc	
. , , , , , , , , , , , , , , , , , , ,	3 pts	•
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	1
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
o Veg	3 pts	1
b. No	·····	
b. No		
16. What percent of the water resource edge is bordered by a vegetated riparian		
area at least 30 feet wide?	ł	
a Greater than 10%	3 pts	
h Retween 10% and 40%	2 nte	3
c. Less than 10%	1 nt	
C. Less than 1070	' Pt	
	l II	

Questions continued on next page



#### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-2

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
	1 pt	3
18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?		
a. Yes	3 pts	1
	1 pt	
19. What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?		:
a. Less than 25%	3 pts	
	2 pts	3
c. Greater than 75%	1 pt	
Total Po	oints:	16

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

# **Riparian Characterization Form**



# City of Molalla Riparian Inventory

GENERAL INFORMAT	CION (a) (a) (b) (b)					
Date:	4/18/01	Riparia	n Code:		R-BC-3L	
On-site: □	Off-Site: □	Reach L	ength:		400	
Investigators:	FS/SE	Hydrolo	ogic Basin:	I	Bear Creek	
WATER RESOURCE II	NFORMATION					
Water Resource:	Stream/River: x					
	Lake/Pond: Wetland:	Width: Width:			feet feet	
LWI Wetland Code:	BC-2A					
			•			
	nt in the adjacent water resou		Yes	П	No ⊠	
Are samonius prese	nt in the adjacent water reson	irce:	res		NO 🖾	
Is the water resource	e listed for temperature on DE	CQ's 303(d	d) list:	Yes		No 🗵
Within FEMA-mapp	oed 100-year floodplain:	Yes		No	X	
Mapped soil series:		Wapato si	lty clay loar	m		
Adjacent Land Uses	? (Check as many as needed)					
Agriculture:	□ Roads:					
Commercial/Indus.:	<b>∠</b> Undeveloped:					
Residential:	<b>⊠</b> Forestry:					
Woo	ody vegetation	T	Hei	rbaceous v	regetation	
	rubs, vines >1 meter)				, vines <1 meter	er)
Pseudotsuga menziesi		Phalaris	arundinace		<u></u>	
Quercus garryana		Dactylus	glomerata			
Fraxinus latifolia		Galium a				
Crataegus monogyna		Impatien	s sp.			
Rubus discolor		Lamium	purpureum			10.00
		Conjum	magulatum			

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% × 10% - 25% ¬ >25% ¬
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes ⊠ No □
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes ⊠ No □
Large woody debris in riparian area? (Question 15)
Yes ⊠ No □
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% 🗵 10% - 40% 🗆 <10% 🗀
Degree of development or human caused disturbance. (Question 19)
<25% □ 25% - 75% ⊠ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question
Woody vegetation ☐ Herbaceous vegetation ☒ Bare ground ☐
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes □ No ⊠
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes □ No or no flood prone area present ⊠
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 ☑ 2 layers ☐ 1 layer or unvegetated ☐

## **Riparian Width Determination**



# City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-3L

<b>Date:</b> 4/18	/01 Invest	igators:	FS/SE	_
Dominant tree species:	Fraxinus latif	olia(see oth	(see other side for list of species	
Potential tree height (PT)			75 / 75	feet
PTH determined by:	(Width measured horizontal	ly from edge of water re	esource)	
On-site vegetation	⊠ Refere	nce site Cod	e	_
Comments: Reach	of creek fenced off fron	n grazing horses, so	narrow fringe of gro	undcover
on north bank. South bank				
Typical Cross Section:				
	e e			
				5
	~~~~	1 .	~~,_^	7
Salman	9 2	3	2	
Retaining	> > >	ζ.	> 5	5
porkey	3 { }	3	E STAN S	W.T
100	Carlow San	3	74/	1 date
	Jan Jan	Fe	Heller LG	razed
1	K3-11-11-11-11-11-11-11-11-11-11-11-11-11	2	4-5'	



#### City of Molalla Riparian Inventory

# **WATER QUALITY**

RIPARIAN CODE

R-BC-3L

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)		3
c. Greater than 5:1 (20%)		
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	4 +	
3. What is the dominant vegetation at the top of bank (if defined)		
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
	2 pts	2
c. Bare ground		
4. What is the extent of impervious surfaces within the riparian area?	: :	
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 -4-	3
c. Greater than 25%	السيد	
***************************************		
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard		
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.		
a. Low, slight, moderate	2 pts	2
b. High, severe, very high	1 pts	
	"	
Tot	al Points:	13
	_	

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

HICH



## City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-3L

6. Are there flood prone areas (adjacen	t flat areas, depressions, swales, FEMA	Score
mapped 100-year floodplain, etc.) be	yond the top of bank or edge of the	
water resource?		
a. Yes	3 pts	1
	1 pt	
7. Is woody vegetation (trees, shrubs, vi	ines) greater than 1 meter (3.2 feet) high	
dominant in the flood prone riparian	area?	
a. Yes	3 pts	1
b. No or no flood prone area present	1 pt	
8. Is the stream or water resource const	η	
N	2 -4-	3
	1 pts	
	Total Points:	5
Function: High (8-9 pts) Mediu	m (5-7 pts) Low (3-4 pts)	

**FUNCTION IS:** 



## City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-3L

**FUNCTION IS:** 

9.	Does the aspect or orientation of the riparian area allow for shading of water		Score
	at midday in the summer?		
	a. Yes	3 pts	3
	b. No		
10.	What is the dominant vegetation layer in the riparian area?		
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
	b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
	c. Bare ground	1 pt	
11.	Does woody vegetation hang over the edge of the water?		
	a. Yes	2 pts	2
	b. No	1 pts	
		1	
	Total	Points:	8
Fu	nction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		



## City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-3L

12. How many vegetation layers (i	.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers		3 pts	
b. 2 layers		2 nto	3
c. 1 layer, or unvegetated		NAMES AND ADDRESS OF THE STATE	
13. What is the dominant vegetation	on layer in the riparian area?		
a. Woody vegetation (trees, shr	ubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or wo	oody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground		1 pt	
14. Does woody vegetation hang ov	ver the edge of the water?	1	
a. Yes		2 pts	2
h No		1 01	
15. Is large woody debris present v	within the riparian area?		
a. Yes		3 pts	3
b. No		1 pt	
16. What percent of the water reso	ource edge is bordered by a vegetated riparian		
area at least 30 feet wide?		ĺĺ.	
a. Greater than 40%		3 pts	
b. Between 10% and 40%		2 nte	3
c. Less than 10%		1 nt	
,			

Questions continued on next page



# City of Molalla Riparian Inventory

# **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-3L

HIGH

**FUNCTION IS:** 

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
b. No	- 1	3
8. Is there more than one type of water resource (e.g. stream, wetland, lake/pond)		
within or immediately adjacent to the riparian reach?	i	
a. Yes	3 pts	1
b. No		
<ol> <li>What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?</li> <li>a. Less than 25%</li> <li>b. Petween 25% and 75%</li> </ol>		
b. Between 25% and 75% c. Greater than 75%	2 pts   1 pt	2
To	tal Points:	20

# **Riparian Characterization Form**



# City of Molalla Riparian Inventory

GENERAL INFORMAT	CON			
Date:	4/18/01	Riparian Code:	R-BC-3R	<del></del>
On-site: □	Off-Site: □	Reach Length:	400	<del></del>
Investigators:	FS/SE	Hydrologic Basin:	Bear Creek	
WATER RESOURCE II	NFORMATION			
Water Resource:	Stream/River: x Lake/Pond: Wetland:	Width: Width: Width:	12 feet feet feet	
LWI Wetland Code:	BC-2A			
Water present year-	round: Yes 🗵 No			:
Are salmonids prese	nt in the adjacent water resou	rce? Yes	□ No ⊠	
Is the water resource	e listed for temperature on DE	CQ's 303(d) list:	Yes 🗆	No 🗵
Within FEMA-mapp	oed 100-year floodplain:	Yes	No ⊠	
Mapped soil series:	W-12-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	Wapato silty clay loa	m	
Adjacent Land Uses	? (Check as many as needed)			
Agriculture:	⊠ Roads:			
Commercial/Indus.:	30 00 00 00 00 00 00 00 00 00 00 00 00 0			
Residential:	☐ Forestry:			
Woo	ody vegetation	He	rbaceous vegetation	
	rubs, vines >1 meter)	1	ees, shrubs, vines <1 meter	)
Pseudotsuga menziesi	i	Phalaris arundinace	ea	
Quercus garryana	3	Dactylus glomerata		- 12 PL
Fraxinus latifolia		Galium aparine	,	
Crataegus monogyna		Impatiens sp.		
Rubus discolor		Lamium purpureum		
		Conjum maculatum		

Average stope in the riparian area. (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% ⊠ 10% - 25% □ >25% □
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes ⊠ No □
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ☐ Herbaceous vegetation ☒ Bare ground ☐
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes ⊠ No □
Large woody debris in riparian area? (Question 15)
Yes □ No ⊠
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40%
Degree of development or human caused disturbance. (Question 19)
<25% □ 25% - 75% ⊠ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)
Woody vegetation ☐ Herbaceous vegetation ☒ Bare ground ☐
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes ⊠ No □
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes □ No or no flood prone area present ⊠
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 □ 2 layers ⊠ 1 layer or unvegetated □

# **Riparian Width Determination**



# City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-3R

Date:	4/18/	/01	Invoctic	rotors		EC/CE	***************************************
			Investig			FS/SE	
Dominant tree s	pecies:	$\frac{Fr}{}$	raxinus latifoi	lia	_(see other	side for list of sp	ecies)
Potential tree he	eight (PTI					/ 15-50	feet
PTH determine	d by:	(Width measu	red horizontally	from edge of	f water reso	urce)	
	egetation	$\boxtimes$	Referen	ce site	Code_		
Comments:	Reach	of creek fen	aced off from	grazing hor	ses, so na	rrow fringe of	groundcover
on north bank. S							
				-			
			***************************************		****		
Typical Cross S	ection:						
					MI N		d a
				÷.			
is a			_				~~~
		524	مرحمك	5		١-، ٢-٠	
Safeway	L	5	7	5	5	<b>&gt;</b>	<b>S</b> > -
wall	3 ,	$\langle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	7	5		<b>?</b>	ζ, >
portes	40	5	5 >	2		2 May	- V
Y '-	•	-17	Jan.	}			- Num
		450	1/1/1/2	3	لا،	All Marie Control	Grazes
		-		<b>C</b>		4-5'	
Safaray 1	4 chq chr	n Sule		£ 8-10	<del>, *</del>		



#### City of Molalla Riparian Inventory

# **WATER QUALITY**

RIPARIAN CODE

R-BC-3R

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 nto	3
c. Greater than 5:1 (20%)	1 -+	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 pt	
3. What is the dominant vegetation at the top of bank (if defined)		
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 nt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 -1-	3
c. Greater than 25%	4	
5. How does the Natural Resources Conservation Service (formerly	Į.	
Soil Conservation Service) soil survey rank the water erosion hazard		
of the dominant mapped unit in the riparian area? Select the highest	a.	
water erosion hazard description if more than one is listed.		
a. Low, slight, moderate	2 pts	- 2
b. High, severe, very high	1 pto	
	<b>Total Points:</b>	12
	Lotal Lomits.	

Function:

High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

HIGH



## City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-3R

6. Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA		Score
mapped 100-year floodplain, etc.) beyond the top of bank or edge of the		
water resource?		
a. Yes	3 pts	3
b. No		
7. Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high		
dominant in the flood prone riparian area?		
a. Yes	3 pts	1
b. No or no flood prone area present		
8. Is the stream or water resource constricted by man-made features		
(e.g. channelization, riprap, concrete wall)?		
a. No	3 pts	3
b. Yes	. 1	
***************************************		
	<b>Total Points:</b>	7
	_	•
Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)		
runction. High (0-7 pts) Medium (3-7 pts)		

**FUNCTION IS:** 



## City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-3R

**FUNCTION IS:** 

9.	Does the aspect or orientation of the riparian area allow for shading of water		Score
	at midday in the summer?		
	a. Yes	pts	3
	b. No1	pt	
10	. What is the dominant vegetation layer in the riparian area?		
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	pts	
	b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	pts	2
	c. Bare ground	pt	
		-	
11.	. Does woody vegetation hang over the edge of the water?		
	a. Yes	pts	2
		pts	
	Total Poi	nts:	7
Fu	nction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		



#### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-3R

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers	3 pts	
b. 2 layers		2
c. 1 layer, or unvegetated		
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?  a. Yes	2 pts	2
b. No		
15. Is large woody debris present within the riparian area?  a. Yes	3 pts	1
b. No	1 pt	
16. What percent of the water resource edge is bordered by a vegetated riparian area at least 30 feet wide?	"	
a. Greater than 40%	3 pts	
b. Between 10% and 40%	2 pts	11
c. Less than 10%	1 pt	
	<del>5.5</del> 0	

Questions continued on next page



## City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-3R

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
b. No	1 nt	3
18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond)		
within or immediately adjacent to the riparian reach?	ľ	
a. Yes	3 pts	1
b. No	1 pt	
19. What is the degree of development or human-caused disturbance (e.g. buildings,		
impervious surfaces, lawns, agriculture, trash) in the riparian area?	ļ	
a. Less than 25%	3 pts	
b. Between 25% and 75%	2 nto	2
c. Greater than 75%	1 pt	
Tot	al Points:	14

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

# **Riparian Characterization Form**



## City of Molalla Riparian Inventory

GENERAL INFORMA	FION .			
Date:	4/18/01	Riparian Code:	R-BC-4L	
On-site: ⊠	Off-Site: □	Reach Length:	800	
Investigators:	FS/SE	Hydrologic Basin:	Bear Creek	
WATER RESOURCE II	NFORMATION			0
Water Resource:	Lake/Pond: Wetland:	Width:Width:	8 - 10 feet feet feet	
	BC-2A			
		ırce? Yes	□ <b>N</b> o ⊠	
	ent in the adjacent water resou		Yes 🗆	No 🗵
Within FEMA-mapp	ped 100-year floodplain:	Yes $\square$	No ⊠	
Mapped soil series:		Wapato silty clay loa	am	
Adjacent Land Uses	? (Check as many as needed)			
Agriculture:	<b>⊠</b> Roads	: <b>□</b>		
Commercial/Indus.:	□ Undeveloped	<b>:</b> 🗵		
Residential:	<b>▼</b> Forestry	: 🗆	e.	
Woo	ody vegetation	He	erbaceous vegetation	
	rubs, vines >1 meter)	(include t	rees, shrubs, vines <1 mete	er)
Quercus garryana		Phalaris arundinad		
Pseudotsuga menziesi	ii	Dactylus glomerate		······
Cytisus scoparius		Galium aparine	***************************************	
Fraxinus latifolia		Festuca arundinace	еа	
Crataegus monogyna				

Rubus discolor

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% 🗵 10% - 25% 🗆 >25% 🗅
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes □ No ⊠
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ⊠ Herbaceous vegetation □ Bare ground □
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes □ No ⊠
Large woody debris in riparian area? (Question 15)
Yes □ No ⊠
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% × 10% - 40% □ <10% □
Degree of development or human caused disturbance. (Question 19)
<25% □ 25% - 75% ⊠ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate $\boxtimes$ high, very high, severe $\square$
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3
Woody vegetation ☐ Herbaceous vegetation ☒ Bare ground ☐
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes □ No ⊠
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes □ No or no flood prone area present ⊠
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2   2 layers □ 1 layer or unvegetated □

# **Riparian Width Determination**



# City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-4L

<b>Date:</b> 4/1	8/01	Investigators: _	FS/SE	
Dominant tree species:	F1	raxinus latifolia	(see other side for list of s	species)
Potential tree height (PT			75 / 25-50	feet
PTH determined by:	(Width measi	ared horizontally from edge	e of water resource)	
On-site vegetation	ı 🗵	Reference site	Code	
Comments: Reac	h adjacent to	tree farm, some pastur	reland, undeveloped wood	ded areas. Old
gravel roadbed extends do	wnslope fron	n Industrial Way. Outf	all to creek discharging p	olluted
stormwater (oily slicks fro	m sediments	).		
		and the second s		
Typical Cross Section:				
			Fraxious latificia	
Queras			Populus	
garryone	Fraunus		. 22	ν ζ
7- 7	Fraymus latifolia		32 N &	5
7	5	<		$\subseteq$
	ζ			>
> >	<b>)</b>	Σ	7 7	sihr
5		ζ	= } A	We are
V mones		7	my may	J. A. W.
Transit where wil	1.	不是是	65 Marchael	
	reak.	Jan Maria		us discolor
4-5'	1 4	Flund	Phelare	3
_		k vot	2' Deep	
	7 8-	101	- 1	



#### City of Molalla Riparian Inventory

# **WATER QUALITY**

RIPARIAN CODE

R-BC-4L

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	المغماد	3
c. Greater than 5:1 (20%)	1 nt	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
3. What is the dominant vegetation at the top of bank (if defined)		
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 -4-	3
c. Greater than 25%	1 1	
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard		
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.		
a. Low, slight, moderate	2 pts	2
b. High, severe, very high	4	
	<b>Total Points:</b>	13

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

HIGH



## City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-4L

6. Are there	flood prone areas (adjacent flat areas, depressions, swales, FEMA	<b>\</b>	Score
mapped 1	00-year floodplain, etc.) beyond the top of bank or edge of the		
water reso	ource?		
a. Yes		3 pts	1
b. No			
7. Is woody	vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) hig	h	
dominant	in the flood prone riparian area?		
a. Yes		3 pts	1
b. No or r	no flood prone area present		
8. Is the stre	am or water resource constricted by man-made features		
(e.g. chann	elization, riprap, concrete wall)?		
a. No		3 pts	3
b. Yes			
		<b>Total Points:</b>	5
Function:	High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)		
			STREET, MEDICAL PROPERTY AND APPROPRIES.

**FUNCTION IS:** 



# City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-4L

MEDIUM

**FUNCTION IS:** 

9.	Does the aspect or orientation of the riparian area allow for shading of water		Score
	at midday in the summer?		
	a. Yes	3 pts	1
	b. No	1 n+	
10.	What is the dominant vegetation layer in the riparian area?	İ	
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
	b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
	c. Bare ground	1 pt	
11.	Does woody vegetation hang over the edge of the water?		
	a. Yes	2 pts	1
	b. No	- 11	
	Т	otal Points:	5
Fu	nction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		
			THE STATE OF THE S



## City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-4L

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?	Score
a. More than 2 layers 3 p	ts
b. 2 layers 2 p	ts 3
c. 1 layer, or unvegetated 1 p	t
13. What is the dominant vegetation layer in the riparian area?	
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	11
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 p	ts 3
c. Bare ground	t
14. Does woody vegetation hang over the edge of the water?  a. Yes  b. No  1 p  15. Is large woody debris present within the riparian area?	
• • •	to 1
	[
b. No1 p	
16. What percent of the water resource edge is bordered by a vegetated riparian area at least 30 feet wide?	
a. Greater than 40% 3 p b. Between 10% and 40% 2 p c. Less than 10% 1 p	ts3

Questions continued on next page



#### City of Molalla Riparian Inventory

### **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-4L

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
b. No	4	3
18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond)		
within or immediately adjacent to the riparian reach?		
a. Yes	3 pts	1
b. No	1 pt	
19. What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?		
a. Less than 25%	3 pts	
b. Between 25% and 75%	0 -4-1	2
c. Greater than 75%	1 pt	
Tot	al Points:	17

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

MEDIUM

## **Riparian Characterization Form**



## City of Molalla Riparian Inventory

GENERAL INFORMAT	ION			
Date:	4/18/01	Riparian Code:	R-B	C-4R
On-site: ⊠	Off-Site: □	Reach Length:	8	00
T	ro/or	XX -1 - 1 - ' - D - '	D	0 1
investigators:	FS/SE	Hydrologic Basii	n:Bear	Creek
WATER RESOURCE IN	FORMATION			
Water Resource:	Stream/River: x	Width:	8 - 10	feet
	Lake/Pond:	XX/: JAL .		feet
	Wetland:	Width:		feet
LWI Wetland Code:	BC-2A	**************************************		
Water present year-r	ound: Yes ⊠	No 🗆		
Are salmonids preser	nt in the adjacent water res	source? Ye	es 🗆	No ⊠
Is the water resource	listed for temperature on	DEQ's 303(d) list:	Yes □	No 🗵
Within FEMA-mapp	ed 100-year floodplain:	Yes 🗆	No 🗵	
Mapped soil series:	- DAYCH I	Wapato silty clay lo	oam	
Adjacent Land Uses?	(Check as many as needed)			
Agriculture:	Roa	ds: □		
Commercial/Indus.:	□ Undevelope	ed: ⊠		
Residential:	× Forest	ry: □		
Woo	dy vegetation	T-	Ierbaceous veget	ation
(trees, shrubs, vines >1 meter)			trees, shrubs, vine	
Quercus garryana	, , , , , , , , , , , , , , , , , , , ,	Phalaris arundina		
Pseudotsuga menziesii	į	Dactylus glomera	**************	***************************************
Cytisus scoparius	. J. J. (1900) (1900) (1900) (1900)	Galium aparine		
Fraxinus latifolia		Festuca arundina	сеа	
Crataegus monogyna		2	·	

Rubus discolor

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% 🗵 10% - 25% 🗆 >25% 🗆
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes □ No ⊠
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes □ No ⊠
Large woody debris in riparian area? (Question 15)
Yes □ No ⊠
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% × 10% - 40%
Degree of development or human caused disturbance. (Question 19)
<25% □ 25% - 75% ⊠ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)
Woody vegetation ☐ Herbaceous vegetation ☑ Bare ground ☐
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes □ No ⊠
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes □ No or no flood prone area present ⊠
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2   2 layers □ 1 layer or unvegetated □

## **Riparian Width Determination**



### City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-4R

Date:	4/18/01	Investigators:	FS/SE	
Dominant tree	species:	Fraxinus latifolia	(see other side for list of	species)
Potential tree h	eight (PTH)/	Width of riparian area :	75 / 75	feet
	W)	idth measured horizontally from edg	e of water resource)	
PTH determine	ed by:			
On-site v	vegetation 🗵	Reference site	Code	<del></del>
Comments: gravel roadbed estormwater (oily	extends downs	jacent to tree farm, some pasture lope from Industrial Way. Outfediments).		
Queras s		etrfolia	Frozinus latificia Populus	
Money	2 V	) 5		Manca:



### City of Molalla Riparian Inventory

### **WATER QUALITY**

RIPARIAN CODE

R-BC-4R

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 nto	3
c. Greater than 5:1 (20%)	1 pt	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
3. What is the dominant vegetation at the top of bank (if defined)		
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	2
c. Bare ground	1 nt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 -4-	3
c. Greater than 25%		
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard		
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.		
a Love slight moderate	2 pts	2
h Tick course was high	1 nto	
b. High, severe, very high		
	<b>Total Points:</b>	13
	Total Louis.	

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

HIGH



### City of Molalla Riparian Inventory

## **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-4R

6. Are ther	e flood prone areas	(adjacent flat areas, d	lepressions, swales, FEMA		Score
mapped	100-year floodplain	, etc.) beyond the top	of bank or edge of the		
water re	source?				
a. Yes	,			3 pts	1
b. No					
7. Is woody	vegetation (trees, s	hrubs, vines) greater	than 1 meter (3.2 feet) high	1	
dominan	t in the flood prone	riparian area?			
a. Yes				3 pts	1
b. No or	no flood prone area				
8. Is the str	eam or water resou	rce constricted by ma	n-made features		
(e.g. chan	nelization, riprap, o	concrete wall)?			
a. No			***************************************	3 pts	3
b. Yes				***************************************	
				<b>Total Points:</b>	5
					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Function:	High (8-9 pts)	Medium (5-7 pts)	Low (3-4 pts)		
			E	UNCTION IC.	MEDITAL



# City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-4R

9. Does the aspect or orientation of the riparian area allow for shading of water		Score
at midday in the summer?	9	
a. Yes	3 pts	1
b. No		
10. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
11. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	1
b. No	. 11	
		=
`	Fotal Points:	5
Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		

**FUNCTION IS:** 

MEDIUM



### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-4R

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers	3 pts	
b. 2 layers	0 (	3
c. 1 layer, or unvegetated	1 n+	
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 -4	
	'	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	1
b. No	1 pt	
***************************************		
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	1
b. No	1 pt	
16. What percent of the water resource edge is bordered by a vegetated riparian		
area at least 30 feet wide?		
	3 pts	
h Patyyaan 10% and 10%	2 pts	3
Y		
c. Less than 10%	1 pt	

Questions continued on next page



### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-4R

17. Is surface water pre	sent throughout the year?	Score
a. Yes	3 pts	
b. No	1 pt	3
	one type of water resource (e.g. stream, wetland, lake/pond) By adjacent to the riparian reach?	
a. Yes	3 pts	1
b. No	1 pt	
v	of development or human-caused disturbance (e.g. buildings, s, lawns, agriculture, trash) in the riparian area?	
a. Less than 25%	3 pts	
b. Between 25% and		2
c. Greater than 75%		
	Total Points:	17

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

MEDIUM

# **Riparian Characterization Form**



## City of Molalla Riparian Inventory

GENERAL INFORMATION			•	
Date: 5/1/01	Riparian Code:	R	-BC-5L	
On-site: ☑ Off-Site: □	Reach Length:		1800'	
Investigators: SE/PF	Hydrologic Basin:	Ве	ar Creek	
WATER RESOURCE INFORMATION				
Water Resource: Stream/River: x Lake/Pond: Wetland: P.C. 17A P.C. 2P.	Width:	5-8	feet feet feet	
	No □	_		
Are salmonids present in the adjacent water res	ource? Yes		No 🗵	
Is the water resource listed for temperature on l	DEQ's 303(d) list:	Yes □		No ⊠
Within FEMA-mapped 100-year floodplain:	Yes	No ⊠	l	
Mapped soil series:	Wapato silty clay loa	m		
Adjacent Land Uses? (Check as many as needed)				
Agriculture: □ Road	is: □			
Commercial/Indus.:  Undeveloped				
Residential:   Foresti	ry: 🗆			
Woody vegetation	He	rbaceous veg	retation	
(trees, shrubs, vines >1 meter)			rines <1 meter)	)
Fraxinus latifolia	Phalaris arundinace			
Rubus discolor	Rubus discolor			
Symphoricarpos albus	Galium aparine			
Quercus garryana	Hedera helix	341		19
Amelanchier alnifolia	Impatiens sp.			
Oemleria cerasiformis	Tellima grandiflora	3		

Polystichum munitum

1 meter = 3.2 feet

Physocarpus capitatus

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% ⊠ 10% - 25% □ >25% □
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes ⊠ No □
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes ⊠ No □
Large woody debris in riparian area? (Question 15)
Yes ⊠ No □
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% 🗵 10% - 40% 🗆 <10% 🗅
Degree of development or human caused disturbance. (Question 19)
<25% ⊠ 25% - 75% □ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate ⊠ high, very high, severe □
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes ⊠ No □
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes ⊠ No or no flood prone area present ⊠
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 ⊠ 2 layers □ 1 layer or unvegetated □

# **Riparian Width Determination**



## City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-5L

	30.000 T.			
Date:	5/1/0	1 Investigators:	SE/PF	<del>.</del>
Dominant tree s	pecies:	Fraxinus latifolia	see other side for list of species	)
Potential tree he	eight (PTH)	/Width of riparian area :	75 / 50-75	feet
		Width measured horizontally from edge of	water resource)	•
PTH determine On-site v	d by: egetation [	<b>⊠</b> Reference site □	Code	
Comments: south of Industria		xtends from Ona Road to west of M	olalla Forest Road,	
Typical Cross So	ection:			
		Addition of the state of the st	-LWO	XXX



#### City of Molalla Riparian Inventory

### **WATER QUALITY**

RIPARIAN CODE

R-BC-5L

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	~ . !!	3
c. Greater than 5:1 (20%)	2 1 1	(a) Management
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	4	
3. What is the dominant vegetation at the top of bank (if defined)		
or edge of water resource?	į	
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
•		
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%		3
c. Greater than 25%		<del>"</del>
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard		
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.	Ì	
a. Low, slight, moderate	2 pts	2
b. High, severe, very high	4	
,		
	<b>Total Points:</b>	14
	i otal i omis.	

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

HIGH



### City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-5L

Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA		Score
mapped 100-year floodplain, etc.) beyond the top of bank or edge of the		
water resource?		
a. Yes	3 pts	3
b. No	11	
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high		
dominant in the flood prone riparian area?		
a. Yes	3 pts	3
b. No or no flood prone area present		
Is the stream or water resource constricted by man-made features		
(e.g. channelization, riprap, concrete wall)?		
a. No	3 pts	3
b. Yes	4 6	
	<b>Total Points:</b>	9
		257

**FUNCTION IS:** 

HIGH



### City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-5L

HIGH

**FUNCTION IS:** 

9.	Does the aspect or orientation of the riparian area allow for shading of water	Score
	at midday in the summer?	
	a. Yes3 p	ts 3
	b. No1 p	t
10.	What is the dominant vegetation layer in the riparian area?	
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	ts
	b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 p	ts 3
	c. Bare ground 1 p	t
11.	Does woody vegetation hang over the edge of the water?	
	a. Yes	ts2
	b. No 1 p	ts
		11
	Total Point	ts: 8
Fur	nction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)	



### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-5L

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers	3 pts	
b. 2 layers	2 -1-	3
c. 1 layer, or unvegetated	4	
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?  a. Yes  b. No	2 pts	2
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	3
b. No	1 pt	
16. What percent of the water resource edge is bordered by a vegetated riparian area at least 30 feet wide?	The state of the s	
a. Greater than 40%	3 pts	
b. Between 10% and 40%	2 pts	3
c. Less than 10%	1 pt	

Questions continued on next page



# City of Molalla Riparian Inventory

# **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-5L

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
b. No	1 nt II	3
18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?		
a. Yes	3 pts	1
b. No	1 pt	
19. What is the degree of development or human-caused disturbance (e.g. building	s,	
impervious surfaces, lawns, agriculture, trash) in the riparian area?		
a. Less than 25%	3 pts	
b. Between 25% and 75%	O	3
c. Greater than 75%	1 nt	
ן ד	Total Points:	21

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

HIGH

## **Riparian Characterization Form**



### City of Molalla Riparian Inventory

GENERAL INFORMATION		
<b>Date:</b> 5/1/01	Riparian Code: R-BC-5R	
On-site: ⊠ Off-Site: □	Reach Length: 1800'	
Investigators: SE/PF	Hydrologic Basin: Bear Creek	
WATER RESOURCE INFORMATION		
Water Resource: Stream/River: x Lake/Pond: Wetland:	Width:         5-8         feet           Width:         feet           Width:         feet	
LWI Wetland Code: BC-17A, 1	C-2B	
Water present year-round: Yes ⊠	No 🗆	
Are salmonids present in the adjacent was	er resource? Yes 🗆 No 🗵	
Is the water resource listed for temperature	e on DEQ's 303(d) list: Yes □ No	X
Within FEMA-mapped 100-year floodpla	n: Yes □ No ⊠	
Mapped soil series:	Wapato silty clay loam	
Adjacent Land Uses? (Check as many as neede  Agriculture: □		
	reloped: ⊠	
Residential: 🗵 F	orestry:	
Woody vegetation	Herbaceous vegetation	
(trees, shrubs, vines >1 meter)	(trees, shrubs, vines >1 meter) (include trees, shrubs, vines <1 meter)	
Fraxinus latifolia	Phalaris arundinacea	
Rubus discolor	Rubus discolor	
Symphoricarpos albus	Galium aparine	
Quercus garryana	Hedera helix	
Amelanchier alnifolia	Impations sp	

Tellima grandiflora

Polystichum munitum

1 meter = 3.2 feet

Oemleria cerasiformis

Physocarpus capitatus

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% 🗵 10% - 25% 🗆 >25% 🗅
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes ⊠ No □
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes ⊠ No □
Large woody debris in riparian area? (Question 15)
Yes ⊠ No □
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% 🗵 10% - 40% 🗆 <10% 🗖
Degree of development or human caused disturbance. (Question 19)
<25% ⊠ 25% - 75% □ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate ⊠ high, very high, severe □
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes ⊠ No □
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes ⊠ No or no flood prone area present ⊠
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 ⊠ 2 layers □ 1 layer or unvegetated □

# **Riparian Width Determination**



# City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-5R

Dominant tree species: Fraxinus latifolia (see other side for list of species)  Potential tree height (PTH)/Width of riparian area: 75 / 50-75  (Width measured horizontally from edge of water resource)  PTH determined by: On-site vegetation ☑ Reference site ☐ Code  Comments: Reach extends from Ona Road to west of Molalla Forest Road, south of Industrial Way.  Typical Cross Section:	_	SE/PF	Investigators:	<b>Date:</b> 5/1/
(Width measured horizontally from edge of water resource)  PTH determined by: On-site vegetation ☑ Reference site □ Code  Comments: Reach extends from Ona Road to west of Molalla Forest Road, south of Industrial Way.	5)	(see other side for list of species)	Fraxinus latifolia	Dominant tree species:
PTH determined by: On-site vegetation ☑ Reference site □ Code  Comments: Reach extends from Ona Road to west of Molalla Forest Road, south of Industrial Way.	feet			Potential tree height (PTI
south of Industrial Way.	_	*		
Typical Cross Section:		Molalla Forest Road,	xtends from Ona Road to west o	The Property States and States an
				Typical Cross Section:
as the storestance	XX3	The last of the la		Marian Comment of the
Bear Creek		-LWD	Alberta	



#### City of Molalla Riparian Inventory

### **WATER QUALITY**

RIPARIAN CODE

R-BC-5R

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 240	3
c. Greater than 5:1 (20%)		
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	-
3. What is the dominant vegetation at the top of bank (if defined)	1	
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 nto	3
c. Greater than 25%	النسه	
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard		
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.	ļ	
a. Low, slight, moderate	2 pts	2
b. High, severe, very high	1 pto	5000000
	599	
	<b>Total Points:</b>	14
		<del></del>

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

HICH



### City of Molalla Riparian Inventory

## **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-5R

6. Are there	e flood prone areas	(adjacent flat areas, d	epressions, swales, FEMA		Score
mapped	100-year floodplain	, etc.) beyond the top	of bank or edge of the		
water res	source?		•		
a. Yes			***************************************	3 pts	3
b. No					,
7. Is woody	vegetation (trees, s	shrubs, vines) greater t	than 1 meter (3.2 feet) high		
dominan	t in the flood prone	riparian area?		1	
a. Yes			***************************************	3 pts	3
b. No or	no flood prone area			9 6	
		161			
8. Is the str	eam or water resou	rce constricted by ma	n-made features		
(e.g. chan	nelization, riprap,	concrete wall)?			
a. No				3 pts	3
b. Yes					
	******				
			T	otal Points:	9
Function:	High (8-9 pts)	Medium (5-7 pts)	Low (3-4 pts)		
			NOTE IN LA	OTTONI IC	THOU



### City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-5R

**FUNCTION IS:** 

9.	Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		Score
	a. Yes	3 pts	3
	b. No		1/100
10.	What is the dominant vegetation layer in the riparian area?		
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
	b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
	c. Bare ground	1 pt	
11.	Does woody vegetation hang over the edge of the water?		
	a. Yes	2 pts	2
	b. No		W- 2000
		Total Points:	8
Fu	nction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		



### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-5R

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers	3 pts	
b. 2 layers	0 1	3
c. 1 layer, or unvegetated	1 nt	
13. What is the dominant vegetation layer in the riparian area?		
	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
- n	اابسه	
c. Bare ground	' Pt	
14. Does woody vegetation hang over the edge of the water?		
o Voc	2 pts	2
,	'	
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
o Vos	3 pts	3
***************************************		
b. No	1 pt	
16. What percent of the water resource edge is bordered by a vegetated riparian		
area at least 30 feet wide?		
a. Greater than 40%	3 pts	
b. Between 10% and 40%	2 -4-	3
c. Less than 10%	1 n+	
	II.	

Questions continued on next page



### City of Molalla Riparian Inventory

# WILDLIFE HABITAT (continued)

RIPARIAN CODE

R-BC-5R

17. I	s surface water present throughout the year?		Score
a	ı. Yes	3 pts	
b	o. No	4	3
	s there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?		
a	ı. Yes	3 pts	1
b	o. No	1 0+	
	What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?		
	T = 2504	3 pts	
	a. Less than 25% b. Between 25% and 75%	2 pts	3
C	c. Greater than 75%	1 nt	
	Tota	l Points:	21

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

HIGH

## **Riparian Characterization Form**



### City of Molalla Riparian Inventory

GENERAL INFORMAT	TION S			
Date:	5/1/01	Riparian Code:	R-B0	C-6L
On-site: ⊠	Off-Site: □	Reach Length:	13	25'
Investigators:	SE/PF	Hydrologic Basin:	Bear	Creek
WATER RESOURCE II	NFORMATION			
Water Resource:	Stream/River: x Lake/Pond: Wetland:	Width: Width: Width:	4-10	feet feet feet
	BC-17B			
Water present year- Are salmonids prese	round: Yes □ No nt in the adjacent water resou	rce? Yes		No ⊠
Is the water resource	e listed for temperature on DE	Q's 303(d) list:	Yes □	No ⊠
Within FEMA-mapp	oed 100-year floodplain:	Yes 🗆	No ⊠	
Mapped soil series:	7	Wapato silty clay loar	<u>n</u>	
Adjacent Land Uses	? (Check as many as needed)			
Agriculture: Commercial/Indus.: Residential:	□ Undeveloped:	$\boxtimes$		
Woo	ody vegetation	Hei	baceous vegeta	ation
(trees, sh	rubs, vines >1 meter)	(include tre	ees, shrubs, vine	es <1 meter)
Fraxinus latifolia		Phalaris arundinace	ea	
Populus trichocarpa		Epilobium watsonii		
Symphoricarpos albus	S	Lamium purpureum		
Rubus discolor		Rumex crispus		
Pseudotsuga menziesi	ii	Rubus discolor		
Ouercus garryana		Conjum maculatum		

1 meter = 3.2 feet

Crataegus monogyna

Average slope in the riparian area: (Question 1)				
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$				
Extent of impervious surface within the riparian area. (Question 4)				
<10% × 10% - 25% ¬ >25% ¬				
Is the reach constricted by man-made features? (Question 8)				
Yes □ No ⊠				
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)				
Yes ⊠ No - □				
Dominant vegetation layer within riparian area? (Question 10)				
Woody vegetation ⊠ Herbaceous vegetation □ Bare ground □				
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)				
Yes ⊠ No □				
Large woody debris in riparian area? (Question 15)				
Yes ⊠ No □				
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)				
>40% × 10% - 40%				
Degree of development or human caused disturbance. (Question 19)				
<25% 区 25% - 75% □ >75% □				
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)				
low, slight moderate $\square$ high, very high, severe $\square$				
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)				
Woody vegetation ⊠ Herbaceous vegetation □ Bare ground □				
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)				
Yes ⊠ No □				
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?				
Yes  No or no flood prone area present				
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?				
More than 2 □ 2 layers ⊠ 1 layer or unvegetated □				

# **Riparian Width Determination**



## City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-6L

Date:	5/1/01	Investigators:	SE/PF		
Dominant tree	species:	Fraxinus latifolia	(see other side for list of species	)	
Potential tree h	Potential tree height (PTH)/Width of riparian area: 75 / 50 f  (Width measured horizontally from edge of water resource)				
PTH determine On-site	ed by: vegetation ⊠	Reference site	Code		
		orse pasture and residential.	layer dominated by Rubus Di. Two stone weirs	scolor,	
Typical Cross S	Section:				
3		travinus latifolia  Bear Greek	Rubus	n Now	



### City of Molalla Riparian Inventory

### **WATER QUALITY**

RIPARIAN CODE

R-BC-6L

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 -4-1	3
c. Greater than 5:1 (20%)	1 nt	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
3. What is the dominant vegetation at the top of bank (if defined)		
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 pts	3
c. Greater than 25%	1 pt	
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard		
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.		
a. Low, slight, moderate	2 pts	2
b. High, severe, very high	1 pts	
	<b>Total Points:</b>	14

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

HIGH



### City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-6L

6. Are there	e flood prone areas (adjacent flat areas, depressions, swales, FEMA		Score
mapped	100-year floodplain, etc.) beyond the top of bank or edge of the		
water res	source?		
a. Yes		3 pts	3
b. No		1 pt	
7. Is woody	vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high		
dominan	t in the flood prone riparian area?		
a. Yes		3 pts	3
b. No or	no flood prone area present	1 pt	
	eam or water resource constricted by man-made features nelization, riprap, concrete wall)?		
a. No		3 pts	3
b. Yes		1 pts	
	Total P	oints:	9
Function:	High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)		
	FUNCTIO	N IS:	HIGH



### City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-6L

**FUNCTION IS:** 

9. Does the aspect or orientation of th	e riparian area allow for shading of water	Score
at midday in the summer?		*
a. Yes	3 pts	3
h No	1 pt	
10. What is the dominant vegetation la	nyer in the riparian area?	
a. Woody vegetation (trees, shrubs,	vines) greater than 1 meter (3.2 feet) high 3 pts	
b. Herbaceous vegetation or woody	vegetation less than 1 meter (3.2 feet) high 2 pts	3
c. Bare ground	1 pt	
11. Does woody vegetation hang over t	he edge of the water?	
a. Yes	2 pts	2
	1 pts	
	ļļ.	
	Total Points:	8
Function: High (7-8 pts) Medi	um (5-6 pts) Low (3-4 pts)	



### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-6L

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers	3 pts	
b. 2 layers	2 pts	2
c. 1 layer, or unvegetated	1000 0000 000	
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 nt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	2
b. No	1 pt	
15. Is large woody debris present within the riparian area?	X 200	
a. Yes	3 pts	3
b. No		
16. What percent of the water resource edge is bordered by a vegetated riparian		
area at least 30 feet wide?		
a. Greater than 40%	3 pts	
b. Between 10% and 40%	2 pts	3
c. Less than 10%	1 pt	

Questions continued on next page



### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-6L

17.	Is surface water present throughout the year?	1000	Score
	a. Yes	3 pts	
	b. No		1
18.	Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?	t	
	a. Yes	3 pts	1
	b. No	1 nt	
19.	What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?		
	a. Less than 25%	3 pts	
	b. Between 25% and 75%	0 -1-11	3
	c. Greater than 75%	1 pt	
	Tota	l Points:	18

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

MEDIUM

# **Riparian Characterization Form**



# City of Molalla Riparian Inventory

GENERAL INFORMAT	TION			
Date:	5/1/01	Riparian Code:	R-BC-	6R
On-site: ⊠	Off-Site: □	Reach Length:	1325	•
Investigators:	SE/PF	Hydrologic Basin:	Bear Cr	eek
WATER RESOURCE II	NFORMATION			
Water Resource: LWI Wetland Code:	Stream/River: x Lake/Pond: Wetland: BC-17B	Width: Width:	4-10	feet feet feet
		· 🗵		
Are salmonids prese	nt in the adjacent water resou	rce? Yes	□ N	o 🗵
Is the water resource	e listed for temperature on DE	Q's 303(d) list:	Yes □	No ⊠
Within FEMA-mapp	ped 100-year floodplain:	Yes 🗆	No ⊠	
Mapped soil series:		Wapato silty clay loa	m	
Adjacent Land Uses	? (Check as many as needed)			
Agriculture: Commercial/Indus.: Residential:	□ Undeveloped:	$\boxtimes$		
Woo	ody vegetation	Не	rbaceous vegetati	on
(trees, shrubs, vines >1 meter)		(include tr	ees, shrubs, vines	<1 meter)
Fraxinus latifolia		Phalaris arundinace	еа	*
Populus trichocarpa		Epilobium watsonii		
Symphoricarpos albus	S	Lamium purpureum		
Rubus discolor		Rumex crispus		
Pseudotsuga menziesi	i	Rubus discolor		
Ouercus garryana		Conjum maculatum		

1 meter = 3.2 feet

Crataegus monogyna

Average stope in the	e riparian area: (Question	11)		
<10:1 (10%) 🗵 ]	Between 10:1 (10%) and	5:1 (20%)	>5:1 (20%)	
Extent of imperviou	ıs surface within the rip	arian area. (Quest	ion 4)	
<10% 🗵	10% - 25% 🛛	>25%		
Is the reach constri	cted by man-made featt	ires? (Question 8)		
Yes □	No ⊠			
Does the orientation summer? (Question 9)	of the riparian area al	low for shading o	f the water reso	urce at midday in
Yes ⊠	No □			
Dominant vegetatio	n layer within riparian	area? (Question 10)		
Woody vegetation	⊠ Herbaceous	vegetation	Bare ground	. 🗖
Does woody vegetat	ion hang over the edge	of the water? (Que	estions 11 & 14)	
Yes 🗵	No 🗆			
Large woody debris	s in riparian area? (Ques	tion 15)		
Yes 🗵	No □			
Percent of water res	source bordered by veg	etated riparian ar	ea at least 30 fee	t wide? (Question 16)
>40% 🗵	10% - 40% □	<10%		
Degree of developm	ent or human caused d	isturbance. (Questi	on 19)	
<25% ☒	25% - 75% 🛚	>75%		
How does the NRCS the Riparian Area?	S soil survey rank water (Question 5)	erosion hazard o	of the dominant i	napped unit in
low, slight mode	rate 🗵	high, very high,	severe $\square$	
What is the domina	nt vegetation at the top	of bank (if define	ed) or edge of wa	ter resource? (Question 3)
Woody vegetation	⊠ Herbaceous	vegetation	Bare ground	
	ne areas (adjacent flat a			
Yes ⊠	No □			
Is woody vegetation flood prone riparia	(trees, shrubs, vines) g n area?	reater than 1 met	er (3.2 feet) high	dominant in the
Yes 🗵 1	No or no flood prone area	present 🗵		
How many vegetation	on layers (i.e. canopy, n	nid-story, ground	cover) are preser	at?
More than 2 ⊠	2 layers □	1 layer	or unvegetated	

## **Riparian Width Determination**



# City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-6R

Date:	5/1/01	Investigators:	SE/PF	
Dominant tree s	pecies:	Fraxinus latifolia	(see other side for list of species	)
Potential tree he	ight (PTH)/Width (	of riparian area :	75 / 75	feet
DTU determined		sured horizontally from edge of	of water resource)	
PTH determined On-site ve	egetation 🗵	Reference site	Code	
Comments: dominated by Rul		oad to Ona Road. Shrub le more encroachment by	ayer horse pasture and residential.	Two
stone weirs with 6	to 12 inch drops in	this reach.		
Typical Cross Se	ection:		. 7	
3 3 mm	Toma Land of	axinus	mun Ly 3) Hel	discolar
		Bear Greek		



# City of Molalla Riparian Inventory

# **WATER QUALITY**

RIPARIAN CODE

R-BC-6R

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 -4-	3
c. Greater than 5:1 (20%)	1 nt	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
3. What is the dominant vegetation at the top of bank (if defined)		
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?	1	
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 ntc	3
c. Greater than 25%	1 pt	
5. How does the Natural Resources Conservation Service (formerly	1	
Soil Conservation Service) soil survey rank the water erosion hazard	1	
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.		
a. Low, slight, moderate	2 pts	2
b. High, severe, very high	4 4 1	
	Total Points:	14

Function:

High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 



## City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-6R

6. Are there	flood prone areas (adjace	nt flat areas, d	epressions, swales, FEMA		Score
mapped 1	00-year floodplain, etc.) b	eyond the top	of bank or edge of the		
water res	ource?				
a. Yes				3 pts	3
b. No					
		`			(4
7. Is woody	vegetation (trees, shrubs, v	vines) greater	than 1 meter (3.2 feet) high		
dominant	in the flood prone riparia	n area?			
a. Yes				3 pts	3
b. No or	no flood prone area present			البية	
8. Is the stre	am or water resource con	stricted by ma	n-made features		
(e.g. chanı	nelization, riprap, concrete	e wall)?			
a. No				3 pts	3
b. Yes				الصية	
	***************************************				
				<b>Total Points:</b>	9
				-	
Function:	High (8-9 pts) Medi	um (5-7 nts)	Low (3-4 pts)		
I william.	Anga (o > peo)	am (5 / pts)	20 (o 1 pts)		

**FUNCTION IS:** 



## City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-6R

9.	Does the aspect or orientation of the riparian area allow for shading of water		Score
	at midday in the summer?  a. Yes  b. No	3 pts 1 pt	3
10.	What is the dominant vegetation layer in the riparian area?		
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
	b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
	c. Bare ground	1 pt	
11.	Does woody vegetation hang over the edge of the water?  a. Yes	2 pts	2
Fu		al Points:	8
	FUNC	TION IS:	HIGH "



## City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-6R

12. How many vegetation layers (i.e	c. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers		3 pts	
b. 2 layers		2 -1-1	3
c. 1 layer, or unvegetated		النستة	
13. What is the dominant vegetation	n layer in the riparian area?		
	bs, vines) greater than 1 meter (3.2 feet) high	3 pts	
	bdy vegetation less than 1 meter (3.2 feet) high	2 pts	3
a Dama amazum d		4	
14. Does woody vegetation hang over	er the edge of the water?	1	
a. Yes		2 pts	2
b. No		1 pt	
15. Is large woody debris present wi	ithin the riparian area?		
a. Yes		3 pts	3
h No		1 pt	
16. What percent of the water resou	rce edge is bordered by a vegetated riparian		
area at least 30 feet wide?			
a. Greater than 40%		3 pts	
h Dotwoon 100/ and 400/		2 nto	3
a I and them 100/		1 nt	

Questions continued on next page



## City of Molalla Riparian Inventory

# WILDLIFE HABITAT (continued)

RIPARIAN CODE

R-BC-6R

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
b. No	1 pt	1
18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?		
a. Yes	3 pts	1
b. No	1 pt	
19. What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?		
a. Less than 25%	3 pts	
b. Between 25% and 75%	2 pts	3
c. Greater than 75%	1 pt	
Tota	al Points:	19

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

# **Riparian Characterization Form**



## City of Molalla Riparian Inventory

GENERAL INFORMAT	FION			
Date:	5/1/01	Riparian Code:	R-BC-7L	
On-site: ⊠	Off-Site: □	Reach Length:	825	
Investigators:	PF/SE	Hydrologic Basin:	Bear Creek	
WATER RESOURCE II	NFORMATION			· · · · · · · · · · · · · · · · · · ·
	Stream/River: x Lake/Pond: Wetland: BC-19	Width: 8' Width: Width:	avg. (4-10') feet feet feet	
Water present year-		□ □ Ves	□ No ⊠	
•	e listed for temperature on DF		Yes □	No ⊠
Within FEMA-mapp	oed 100-year floodplain:	Yes	No ⊠	
Mapped soil series:		Dayton silt loam		
Adjacent Land Uses	? (Check as many as needed)			
Agriculture: Commercial/Indus.: Residential:	□ Undeveloped:	: ×		
Woo	dy vegetation	Не	rbaceous vegetation	
(trees, shrubs, vines >1 meter)		(include tr	ees, shrubs, vines <1 mete	er)
Fraxinus latifolia Solanum dulcamara				
Pseudotsuga menziesi	i	Phalaris arundinace	га	72000 11 20
Acer circinatum		Galium aparine		
Symphoricarpos albus	3	Rubus discolor		
Rubus discolor				
Salix sp			В	

Crataegus monogyna

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\Box$ Between 10:1 (10%) and 5:1 (20%) $\boxtimes$ >5:1 (20%) $\Box$
Extent of impervious surface within the riparian area. (Question 4)
<10% 🗵 10% - 25% 🗆 >25% 🗖
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes ⊠ No □
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes ⊠ No □
Large woody debris in riparian area? (Question 15)
Yes ⊠ No □
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% 🗵 10% - 40% 🗆 <10% 🗅
Degree of development or human caused disturbance. (Question 19)
<25% ⊠ 25% - 75% □ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate □ high, very high, severe ⊠
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes ⊠ No □
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes ⊠ No or no flood prone area present □
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 ⊠ 2 layers □ 1 layer or unvegetated □

# **Riparian Width Determination**



## City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-7L

Date:	5/1/0	)1	nvestigators:	PF/SE	
Dominant tre	e species:	Fraxinus	s latifolius	(see other side for list of species	s)
		(Width of ripar) (Width measured ho	<del>-</del>	75 / 50-75 ge of water resource)	feet
PTH determin	ned by: e vegetation	⊠ I	Reference site	Code	_
Comments: Molalla Forest				e drive over Bear Creek, east of s not as wide on both sides of c	
Typical Cross	Typical Cross Section:				
Molella Forest B				Bear Greek	Vunn.



## City of Molalla Riparian Inventory

## **WATER QUALITY**

RIPARIAN CODE

R-BC-7L

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 ntc	2
c. Greater than 5:1 (20%)	4	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
3. What is the dominant vegetation at the top of bank (if defined)		
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 nto	3
c. Greater than 25%	النية	
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard	*	
of the dominant mapped unit in the riparian area? Select the highest	1	
water erosion hazard description if more than one is listed.	1	
a. Low, slight, moderate	2 pts	1
b. High, severe, very high	4	
	2 manufacture (1 manu	
	<b>Total Points:</b>	12

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

HICH



# City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-7L

6. Are there	e flood prone areas (adjacent flat areas, depressions, swales, FEMA	Score
mapped 1	100-year floodplain, etc.) beyond the top of bank or edge of the	
water res	ource?	
a. Yes	3 pts	3
b. No	1 pt	
7. Is woody	vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	
dominan	t in the flood prone riparian area?	
a. Yes	3 pts	3
b. No or	no flood prone area present 1 pt	
	eam or water resource constricted by man-made features nelization, riprap, concrete wall)?	
a. No	2	3
b. Yes	1 pts	
	Total Points:	9
Function:	High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)	
	FUNCTION IS:	HIGH



## City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-7L

<b>9.</b> ]	Does the aspect or orientation of the riparian area allow for shading of water	Score
	at midday in the summer?	
	a. Yes 3 pts	3
	b. No1 pt	
10.	What is the dominant vegetation layer in the riparian area?	
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pts	
	b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts	3
	c. Bare ground 1 pt	
11.	Does woody vegetation hang over the edge of the water?	
	a. Yes 2 pts	2
	b. No 1 pts	
	Total Points:	8
Fun	ction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)	
	FUNCTION IS:	HIGH.



## City of Molalla Riparian Inventory

### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-7L

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?	Score
a. More than 2 layers 3 pt	3
b. 2 layers 2 pts	s 3
c. 1 layer, or unvegetated 1 pt	
13. What is the dominant vegetation layer in the riparian area?	
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts	3
D - 1	
c. Bare ground	
14. Does woody vegetation hang over the edge of the water?	ll l
	2
h No	`  <del></del> -
0, Νο	∯
15. Is large woody debris present within the riparian area?	
V	3
	`∥ ———
b. No	\(\lambda\)
	#
16. What percent of the water resource edge is bordered by a vegetated riparian	ii .
area at least 30 feet wide?	Į.
a. Greater than 40% 3 pts	5
b. Between 10% and 40% 2 pts	3
c. Less than 10%	

Questions continued on next page



### City of Molalla Riparian Inventory

# **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-7L

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
b. No	1 nt	3
18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?		
a Ves	3 pts	1
b. No	1 pt	
19. What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?		
a. Less than 25%	3 pts	
b. Between 25% and 75%	2 nto	3
c. Greater than 75%	1 pt	
Tot	al Points:	21

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

# **Riparian Characterization Form**



# City of Molalla Riparian Inventory

GENERAL INFORMA	TION						
Date:	5/1/01	Riparian C	Code:	R-E	BC-7R		
On-site: ⊠	Off-Site: □	Reach Len	gth:	8	325'		
Investigators:	PF/SE	Hydrologic	Basin:	Bear	Creek		
WATER RESOURCE I	NFORMATION						
Water Resources	Lake/Pond: Wetland:	Width: Width: Width:		g. (4-10')	feet feet feet		
Water present year-round: Yes ⊠ No □  Are salmonids present in the adjacent water resource? Yes □ No ⊠							
Is the water resourc	e listed for temperature on DI	EQ's 303(d) l	ist:	Yes □		No	X
Within FEMA-mapped 100-year floodplain: Yes □ No ⊠							
Mapped soil series:		Dayton sil	lt loam				
Adjacent Land Uses	? (Check as many as needed)						
Agriculture: Commercial/Indus.: Residential:	□ Undeveloped	: X					
Woo	ody vegetation		Herba	ceous vege	tation		
(trees, sł	es, shrubs, vines >1 meter) (include trees, shrubs, vines <1 meter)						
Fraxinus latifolia		Solanum dulcamara					
Pseudotsuga menzies	ii	Phalaris art	30 11-00-00				
Acer circinatum		Galium apa		88.8. <sup>-</sup> 1	· ,-		
Symphoricarpos albu	S	Rubus disco	olor				
Rubus discolor				wist i			
Salix sp		1 .					

Crataegus monogyna

Average slope in the riparian area: (Question 1)
<10:1 (10%) $\boxtimes$ Between 10:1 (10%) and 5:1 (20%) $\square$ >5:1 (20%) $\square$
Extent of impervious surface within the riparian area. (Question 4)
<10% ☒ 10% - 25% □ >25% □
Is the reach constricted by man-made features? (Question 8)
Yes □ No ⊠
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes ⊠ No □
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes ⊠ No □
Large woody debris in riparian area? (Question 15)
Yes ⊠ No □
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% 🗵 10% - 40% 🗆 <10% 🗅
Degree of development or human caused disturbance. (Question 19)
<25% ▼ 25% - 75% □ >75% □
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate  high, very high, severe
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3
Woody vegetation ☑ Herbaceous vegetation □ Bare ground □
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes ⊠ No □
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes ⊠ No or no flood prone area present □
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 ⊠ 2 layers □ 1 layer or unvegetated □

## **Riparian Width Determination**



# City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-7R

Date:	5/1/01	Investigators:	PF/SE	
Dominant tree	e species:	Fraxinus latifolius	(see other side for list of species	)
Potential tree	height (PTH)/\	Width of riparian area :	75 / 75	feet
DTII datamain		idth measured horizontally from edg	e of water resource)	
PTH determin On-site	vegetation 🗵	Reference site	Code	
Comments: Molalla Forest			e drive over Bear Creek, east of not as wide on both sides of cr	
Typical Cross	Section:			
Molella Forest Rd	2			7
		ullumin	III Viim	Yuman

Bear Creek



## City of Molalla Riparian Inventory

## **WATER QUALITY**

RIPARIAN CODE

R-BC-7R

1. What is the average slope in the riparian area?	Score
a. Less than 10:1 (10%) 3 pts	
b. Between 10:1 (10%) and 5:1 (20%) 2 pts	3
c. Greater than 5:1 (20%) 1 pt	
2. What is the dominant vegetation cover in the riparian area?	[
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts	3
c. Bare ground 1 pt	
3. What is the dominant vegetation at the top of bank (if defined)	
or edge of water resource?	
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts	3
c. Bare ground 1 pt	
	ļ
4. What is the extent of impervious surfaces within the riparian area?	
a. Less than 10%	
b. Between 10% and 25% 2 pts	3
c. Greater than 25% 1 pt	
5. How does the Natural Resources Conservation Service (formerly	
Soil Conservation Service) soil survey rank the water erosion hazard	
of the dominant mapped unit in the riparian area? Select the highest	
water erosion hazard description if more than one is listed.	
a. Low, slight, moderate 2 pts	1
b. High, severe, very high	
Total Points:	13

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 



# City of Molalla Riparian Inventory

### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-7R

6. Are there	e flood prone areas	(adjacent flat areas, d	lepressions, swales, FEMA		Score
mapped	100-year floodplain	, etc.) beyond the top	of bank or edge of the		
water res	source?				
a. Yes		N. N. SONAN, WASHINGANANINESEN MANAGER	****	3 pts	3
b. No				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
7. Is woody	vegetation (trees, s	hrubs, vines) greater	than 1 meter (3.2 feet) high		
dominan	t in the flood prone	riparian area?			
a. Yes			·	3 pts	3
b. No or	no flood prone area	(A)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
8. Is the str	eam or water resou	rce constricted by ma	n-made features		
(e.g. chan	nelization, riprap, o	concrete wall)?			
a. No				3 pts	3
b. Yes					
				Total Points:	9
Function:	High (8-9 pts)	Medium (5-7 pts)	Low (3-4 pts)		
			*		
			ETIN	ACTION IS.	шсп



## City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-7R

Joes the aspect or orientation of the riparian area allow for shading of water		Score
a. Yes		3
b. No	1 pt	
What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	2
h No	1 ntc	
	Total Points:	8
ction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		
	a. Yes b. No  What is the dominant vegetation layer in the riparian area? a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high c. Bare ground  Does woody vegetation hang over the edge of the water? a. Yes b. No	t midday in the summer?  a. Yes 3 pts b. No 1 pt  What is the dominant vegetation layer in the riparian area?  a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pts b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts c. Bare ground 1 pt  Does woody vegetation hang over the edge of the water?  a. Yes 2 pts b. No 1 pts  Total Points:

**FUNCTION IS:** 



## City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-7R

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?	_	Score
a Mara than 2 layare	3 pts	•
h 2 layers	2 ntc	3
c. 1 layer, or unvegetated		
	'	
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?  a. Yes b. No  15. Is large woody debris present within the riparian area?  a. Yes b. No	3 pts	3
<ul> <li>16. What percent of the water resource edge is bordered by a vegetated riparian area at least 30 feet wide?</li> <li>a. Greater than 40%</li> <li>b. Between 10% and 40%</li> <li>c. Less than 10%</li> </ul>	2 pts	3

Questions continued on next page



### City of Molalla Riparian Inventory

### **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-7R

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
b. No	1 nt	3
		,
18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond)		
within or immediately adjacent to the riparian reach?		
a. Yes	3 pts	1
b. No	1 nt	
19. What is the degree of development or human-caused disturbance (e.g. building	s,	
impervious surfaces, lawns, agriculture, trash) in the riparian area?		
a. Less than 25%	3 pts	
b. Between 25% and 75%		3
c. Greater than 75%	1 pt	
,	Γotal Points:	21

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

# **Riparian Characterization Form**



# City of Molalla Riparian Inventory

GENERAL INFORMATION T					
Date: 6/6/01	Riparia	Code:	R-BC	C-8L	<del></del>
On-site: ⊠ Off-Site: □	Reach L	ength:	335	50'	
Investigators: SE/PF	Hydrolo	gic Basin:_	Bear (	Creek	
WATER RESOURCE INFORMATION					
Water Resource: Stream/River: x	Width:		20'	feet	
Lake/Pond:	Width:			feet	
Wetland:	Width:			feet	
LWI Wetland Code: BC-22A, BC-22	2B				
Water present year-round: Yes ⊠	No 🗆				
Are salmonids present in the adjacent water resource? Yes □ No ⊠					
Is the water resource listed for temperature on	DEQ's 303(d	l) list:	Yes □		No 🗵
Within FEMA-mapped 100-year floodplain:	Yes		No ⊠		
Mapped soil series:	Dayton	silt loam			
Adjacent Land Uses? (Check as many as needed)					
Agriculture: ⊠ Roz	ads: 🗵				
Commercial/Indus.: □ Undevelop					
Residential:   Fores	try: □				
Woody vegetation		Her	baceous vegeta	tion	<del></del>
(trees shrubs vines >1 meter)		(include tre	es shribs vine	s <1 meter	r)

Woody vegetation	Herbaceous vegetation		
(trees, shrubs, vines >1 meter)	(include trees, shrubs, vines <1 meter)		
Pseudotsuga menziesii	Veronica americana		
Fraxinus latifolia	Festuca arundinacea		
Spiraea douglasii	Holcus lanatus		
Populus trichocarpa	Juncus effusus		
Crataegus monogyna	Phalaris arundinacea		
Rubus discolor	Equisetum arvense		
Salix lasiandra	Digitalis purpurpea		

Average slope in the riparial	n area: (Question I)		
<10:1 (10%) 🗵 Between 1	10:1 (10%) and 5:1 (20%)	□ >5:1 (20%) □	
Extent of impervious surface	e within the riparian area	. (Question 4)	
<10% 🗵 1	0% - 25% □	>25% 🗆	
Is the reach constricted by m	nan-made features? (Questi	(on 8)	
Yes 🗵 No [			
Does the orientation of the risummer? (Question 9)	iparian area allow for sha	ding of the water reso	urce at midday in
Yes 🗵 No [			
Dominant vegetation layer w	vithin riparian area? (Ques	stion 10)	
Woody vegetation ⊠	Herbaceous vegetation	☐ Bare ground	
Does woody vegetation hang	over the edge of the wate	<b>r?</b> (Questions 11 & 14)	
Yes 🗵 No [			
Large woody debris in ripari	ian area? (Question 15)		
Yes ⊠ No [			
Percent of water resource bo	ordered by vegetated ripa	rian area at least 30 fee	t wide? (Question 16)
>40% 🗵 1	0% - 40% □	<10%	
Degree of development or hu	ıman caused disturbance.	(Question 19)	
<25% ⊠ 2	5% - 75% 🔲	>75% 🗆	
How does the NRCS soil survethe Riparian Area? (Question 5		nzard of the dominant i	mapped unit in
low, slight moderate	☐ high, ver	y high, severe	
What is the dominant vegeta	ation at the top of bank (if	defined) or edge of wa	ter resource? (Question 3)
Woody vegetation ⊠	Herbaceous vegetation	☐ Bare ground	
Are there flood prone areas (floodplain, etc.) beyond the t	, ,		
Yes ⊠ No [			
Is woody vegetation (trees, shallood prone riparian area?	hrubs, vines) greater than	1 meter (3.2 feet) high	dominant in the
Yes ⊠ No or no f	flood prone area present		
How many vegetation layers	(i.e. canopy, mid-story, g	roundcover) are preser	nt?
More than 2 🗵	2 layers □	l layer or unvegetated	

# **Riparian Width Determination**



# City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-8L

Date:	6/6/01	Investigators:	SE/PF	
Dominant tree	species:	Fraxinus latifolia	(see other side for list of species)	ı.
Potential tree h	eight (PTH)/Wid	Ith of riparian area :	75 / 25-75	feet
		measured horizontally from edge	of water resource)	
PTH determine On-site v	ed by: vegetation 🗵	Reference site	Code	
Comments:			mber yard. Debris/wood/rock	
			Constricted by Molalla Fores	<u>t</u>
		nd of the section. Many little		-
Water flow throu	ugh this reach is sl	lowed by beaver activity. Nu	tria and waterfowl are commo	n.
		$\sim$	Rubus	
		ب کر		20101



## City of Molalla Riparian Inventory

## **WATER QUALITY**

RIPARIAN CODE

R-BC-8L

1. What is the average slope in the riparian area?	Score
a. Less than 10:1 (10%) 3 pt	s
b. Between 10:1 (10%) and 5:1 (20%)	3
c. Greater than 5:1 (20%) 1 pt	
2. What is the dominant vegetation cover in the riparian area?	
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pt	s
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pt	3
c. Bare ground 1 pt	
3. What is the dominant vegetation at the top of bank (if defined)	
or edge of water resource?	
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pt	s
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts	3
c. Bare ground 1 pt	
4. What is the extent of impervious surfaces within the riparian area?	
a. Less than 10%	S
b. Between 10% and 25%	3
c. Greater than 25%	
5. How does the Natural Resources Conservation Service (formerly	
Soil Conservation Service) soil survey rank the water erosion hazard	
of the dominant mapped unit in the riparian area? Select the highest	
water erosion hazard description if more than one is listed.	1
a. Low, slight, moderate 2 pts	1
b. High, severe, very high	s
Total Points	: 13

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 



# City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-8L

	-		lepressions, swales, FEM	A	Score
	-	etc.) beyond the top	of bank or edge of the		
water resource				2 1	2
a. Yes					3
b. No			<i>a</i> -	1 pt	
7. Is woody veget	tation (trees, s	hrubs, vines) greater	than 1 meter (3.2 feet) his	gh	
dominant in th	he flood prone	riparian area?		1	
a. Yes				3 pts	3
b. No or no flo	ood prone area	District Control of Co		4 1	
8. Is the stream o	or water resou	rce constricted by ma	n-made features		*
(e.g. channeliza	ation, riprap, c	oncrete wall)?			
a. No	*			3 pts	1
b. Yes					
ιφ.				<b>Total Points:</b>	7
Function: Hi	gh (8-9 pts)	Medium (5-7 pts)	Low (3-4 pts)		
				<b>FUNCTION IS:</b>	MEDIUM



## City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-8L

HIGH

**FUNCTION IS:** 

9.	Does the aspect or orientation of the riparian area allow for shading of water		Score
	at midday in the summer?		
	a. Yes	3 pts	3
	b. No	1 nt	
10.	What is the dominant vegetation layer in the riparian area?		
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
	b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
	c. Bare ground	1 pt	
11.	Does woody vegetation hang over the edge of the water?		
	a. Yes	2 pts	2
	b. No		
		ł	
		<b>Total Points:</b>	8
Fu	nction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		



## City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-8L

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers	3 pts	
b. 2 layers	0 -4-1	3
c. 1 layer, or unvegetated	9. 2	
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	······································
14. Does woody vegetation hang over the edge of the water?	Ġ	
a. Yes	2 pts	2
b. No	1 01	
,		
15. Is large woody debris present within the riparian area?	İ	
a. Yes	3 pts	3
b. No	4	
16. What percent of the water resource edge is bordered by a vegetated riparian	į.	
area at least 30 feet wide?		
a. Greater than 40%	3 pts	
b. Between 10% and 40%	2 nto	3
c. Less than 100/	1 pt	
C. Less than 1076		

Questions continued on next page



## City of Molalla Riparian Inventory

### **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-8L

17.	Is surface water present throughout the year?		Score
	a. Yes	3 pts	
	b. No	1 pt	3
18.	Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?		
	a. Yes	3 pts	1
	b. No	1 pt	
19.	What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?		
	a. Less than 25%	3 pts	
	b. Between 25% and 75%	2 nte	3
	c. Greater than 75%	1 pt	
	To	otal Points:	21

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

## **Riparian Characterization Form**



# City of Molalla Riparian Inventory

GENERAL INFORMAT	ION			
Date:	6/6/01	Riparian Code:	R-BC-8	3R
On-site: ⊠	Off-Site: □	Reach Length:	3350	
Investigators:	SE/PF	Hydrologic Basin:_	Bear Cre	eek
WATER RESOURCE IN	FORMATION	- XI		
Water Resource:	Stream/River: x Lake/Pond: Wetland:	Width:	20'	_feet _feet _feet
	BC-22A, BC-22B			
Water present year-re	ouna: Yes 🖾 🗅	No 🗆		
Are salmonids presen	t in the adjacent water reso	ource? Yes	□ N•	0 🗵
Is the water resource	listed for temperature on D	DEQ's 303(d) list:	Yes 🗆	No 🗵
Within FEMA-mappe	ed 100-year floodplain:	Yes	No ⊠	
Mapped soil series:		Dayton silt loam		
Adjacent Land Uses?	(Check as many as needed)			
Agriculture:	□ Road	s: 🗆		
Commercial/Indus.:		d: □		
Residential:	⊠ Forestr	y: 🗆		
Wood	ly vegetation	Her	baceous vegetation	on
(trees, shru	ubs, vines >1 meter)	(include tre	ees, shrubs, vines <	<1 meter)
Pseudotsuga menziesii		Veronica americana		
Fraxinus latifolia		Festuca arundinacea	7	
Spiraea douglasii		Holcus lanatus		
Populus trichocarpa		Juncus effusus		
Crataegus monogyna		Phalaris arundinace	a	
Rubus discolor		Equisetum arvense		

Digitalis purpurpea

Average slope in the riparian area: (Question 1)				
<10:1 (10%) $\Box$ Between 10:1 (10%) and 5:1 (20%) $\Box$ >5:1 (20%) $\boxtimes$				
Extent of impervious surface within the riparian area. (Question 4)				
<10% □ 10% - 25% ☑ >25% □				
Is the reach constricted by man-made features? (Question 8)				
Yes ⊠ No □				
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)				
Yes ⊠ No □				
Dominant vegetation layer within riparian area? (Question 10)				
Woody vegetation   ☐ Herbaceous vegetation ☐ Bare ground ☐				
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)				
Yes ⊠ No □				
Large woody debris in riparian area? (Question 15)				
Yes ⊠ No □				
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)				
>40%  \[ \begin{array}{cccccccccccccccccccccccccccccccccccc				
Degree of development or human caused disturbance. (Question 19)				
<25% □ 25% - 75% □ >75% ⊠				
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)				
low, slight moderate				
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)				
Woody vegetation ⊠ Herbaceous vegetation □ Bare ground □				
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)				
Yes ⊠ No □				
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?				
Yes ⊠ No or no flood prone area present □				
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?				
More than 2 □ 2 layers ⊠ 1 layer or unvegetated □				

# **Riparian Width Determination**



## City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-8R

Date:	6/6/01	Investigators:	SE/PF	
Dominant tree	e species:	Fraxinus latifolia	(see other side for list of sp	ecies)
Potential tree	height (PTH)/Wi	dth of riparian area :	75 / 25-75	feet
	(Widtl	n measured horizontally from edge	of water resource)	
PTH determin	=			
On-site	vegetation 🗵	Reference site	Code	
Comments:	Fast end cor	astricted by development in lu	umber yard Debris/wood	rock niles
		parian zone on the north side.	·	<del></del>
		end of the section. Many littl	·	01031
		slowed by beaver activity. Nu		mmon
THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE S	ought time reacht to t	sie waa ey godwar deervirg. The	The area wateries we are established	
	(	رسحم ا	Rus.	us discolor
Industrial	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Jein.	Wood Wood



## City of Molalla Riparian Inventory

# **WATER QUALITY**

RIPARIAN CODE

R-BC-8R

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 nto	1
c. Greater than 5:1 (20%)	1 nt	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
3. What is the dominant vegetation at the top of bank (if defined)	1	
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 nto	2
c. Greater than 25%	1 -4	
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard	1	
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.		
a. Low, slight, moderate	2 pts	1
b. High, severe, very high	1 pts	
	, 11	
	Total Points:	10

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

FUNCTION IS: MEDIUM



## City of Molalla Riparian Inventory

#### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-8R

MEDIUM

**FUNCTION IS:** 

6. Are there flood prone areas (adjacent flat areas, depressions,	swales, FEMA	Score
mapped 100-year floodplain, etc.) beyond the top of bank or e	edge of the	
water resource?		
a. Yes	3 pts	3
b. No		
7. Is woody vegetation (trees, shrubs, vines) greater than 1 mete	r (3.2 feet) high	
dominant in the flood prone riparian area?		
a. Yes	3 pts	3
	1 pt	
8. Is the stream or water resource constricted by man-made feat	tures	
(e.g. channelization, riprap, concrete wall)?		4
a. No		<u> </u>
b. Yes	1 pts	
	ll	
	Total Points:	7
Function: High (8-9 pts) Medium (5-7 pts) Low (3-4	pts)	
	Nation 1	



# City of Molalla Riparian Inventory

## THERMAL REGULATION

RIPARIAN CODE

R-BC-8R

HIGH

**FUNCTION IS:** 

9.	Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		Score
	a. Yes	3 pts	3
	b. No	1 pt	
10.	What is the dominant vegetation layer in the riparian area?		
	a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
	b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
	c. Bare ground	1 pt	
11.	Does woody vegetation hang over the edge of the water?		
	a. Yes	2 pts	2
	b. No		
		-	
		Total Points:	8
Fu	nction: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		



# City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-8R

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers	3 pts	
b. 2 layers	0 -1-	2
c. 1 layer, or unvegetated	1 nt	
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	3
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?	i	
a. Yes	2 pts	2
b. No	1 pt	
15. Is large woody debris present within the riparian area?	]	
a. Yes	3 pts	3
b. No	1 pt	
,,		
16. What percent of the water resource edge is bordered by a vegetated riparian	li	
area at least 30 feet wide?		
a. Greater than 40%	3 pts	
b. Between 10% and 40%	2 pts	2
c. Less than 10%	1 pt	
	'	

Questions continued on next page



### City of Molalla Riparian Inventory

### **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-8R

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
b. No	1 pt	3
18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?		
a. Yes	3 pts	1
b. No	1 pt	
19. What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?		
a. Less than 25%	3 pts	
b. Between 25% and 75%	2 pts	1
c. Greater than 75%	1 pt	
То	tal Points:	17

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

MEDIUM

# **Riparian Characterization Form**



# City of Molalla Riparian Inventory

GENERAL INFORMAT	IION					
Date:	6/6/01	Riparia	n Code:	R-	-BC-9	
On-site: ⊠	Off-Site: □	Reach I	Length:		350'	
Investigators:	PF/SE	Hydrolo	ogic Basin:	Bea	r Creek	
WATER RESOURCE II	NFORMATION					
Water Resource:	Stream/River: x Lake/Pond:	Width: Width:		20'	feet feet	
	Wetland:	Width:				
LWI Wetland Code:	none					
		·	-			
Water present year-	round: Yes 🗵 I	No 🗆				
Are salmonids prese	nt in the adjacent water res	ource?	Yes		No 🗵	
Is the water resource	e listed for temperature on I	DEQ's 303(	d) list:	Yes □		No 🗵
Within FEMA-mapp	oed 100-year floodplain:	Yes		No 🗵		
Mapped soil series:		Daytor	n silt loam			
Adjacent Land Uses	? (Check as many as needed)					
Agriculture:	□ Road	is: □				
Commercial/Indus.:	<b>☑</b> Undevelope	ed: 🗆				
Residential:	□ Forestr	y: □				
	ody vegetation	1		rbaceous vege		`
(trees, shrubs, vines >1 meter) (include trees, shrubs, vines <1 meter)  Acer macrophyllum Phalaris arundinacea		<u>r)</u>				
Acer macrophyllum				ea		
Cytisus scoparius		Rubus de	iscoior im arvense			
		Cirsium				
	70 70 70 70 70 70 70 70 70 70 70 70 70 7	Custum				
			78.			

Average slope in the	riparian area: (Question 1)		
<10:1 (10%) 🗵 B	etween 10:1 (10%) and 5:1 (	20%) 🗆 >5:1 (20%)	
Extent of impervious	s surface within the riparia	n area. (Question 4)	
<10% 🗆	10% - 25%	>25% 🗵	
Is the reach constrict	ted by man-made features?	(Question 8)	
Yes 🗵	No □		
Does the orientation summer? (Question 9)	of the riparian area allow	for shading of the water	resource at midday in
Yes 🗵	No □		
Dominant vegetation	layer within riparian area	? (Question 10)	
Woody vegetation [	Herbaceous vege	tation   Bare gro	ound 🗵
Does woody vegetation	on hang over the edge of th	e water? (Questions 11 & 14)	
Yes □	No 🗵		
Large woody debris	in riparian area? (Question 1	5)	
Yes □	No ⊠		
Percent of water reso	ource bordered by vegetate	d riparian area at least 30	) feet wide? (Question 16)
>40% □	10% - 40% 🛚	<10% 🗵	
Degree of developme	nt or human caused distur	bance. (Question 19)	
<25% □	25% - 75% 🛚	>75% 🗵	
How does the NRCS the Riparian Area? (	soil survey rank water eros Question 5)	sion hazard of the domina	ant mapped unit in
low, slight modera	ate 🗆 hig	gh, very high, severe	X
What is the dominan	t vegetation at the top of b	ank (if defined) or edge of	water resource? (Question 3)
Woody vegetation [	Herbaceous vege	tation   Bare gro	ound 🗵
-	e areas (adjacent flat areas nd the top of bank or edge		
Yes □	No ⊠		
Is woody vegetation ( flood prone riparian	(trees, shrubs, vines) greate area?	er than 1 meter (3.2 feet) h	nigh dominant in the
Yes □ No	o or no flood prone area pres	ent 🗵	
How many vegetation	n layers (i.e. canopy, mid-s	tory, groundcover) are pr	esent?
More than 2 □	2 layers □	l layer or unvegetate	ed 🗵

# **Riparian Width Determination**



# City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-9

Date:	6/6/01	Investigators:	PF/SE	
Dominant tree s	species:	Fraxinus latifolia	(see other side for list o	of species)
Potential tree h	eight (PTH)/Wid	th of riparian area :	75 / 10	feet
	2.	measured horizontally from edge	of water resource)	·
TH determine On-site v	d by: ∕egetation ⊠	Reference site □	l Code	
omments: parian area wit		rough Floragon Forest Prod ce - rip-rap, fill, wood debri		
Sypical Cross S	ection:	· · · · · · · · · · · · · · · · · · ·		
				Wood
road			المنبك	٤
	82		27/E	3
ri	P-rap Pol	Bsz.	5.3	
	, , ,	Welling 20'		•
	:		- jelov	
			Bear Creek	



## City of Molalla Riparian Inventory

## **WATER QUALITY**

RIPARIAN CODE

R-BC-9

1. What is the average slope in the riparian area?		Score
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 nto	3
c. Greater than 5:1 (20%)	1	
2. What is the dominant vegetation cover in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	1
c. Bare ground	1 pt	
3. What is the dominant vegetation at the top of bank (if defined)		
or edge of water resource?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	1
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	
b. Between 10% and 25%	2 -+-	1
c. Greater than 25%	4 -4	
5. How does the Natural Resources Conservation Service (formerly		
Soil Conservation Service) soil survey rank the water erosion hazard		
of the dominant mapped unit in the riparian area? Select the highest		
water erosion hazard description if more than one is listed.		
a. Low, slight, moderate	2 pts	1
b. High, severe, very high	1 nte	
	<b>Total Points:</b>	7

Function: High (12-14 pts) Medium (8-11 pts) Low (5-7 pts)

**FUNCTION IS:** 

LOW



## City of Molalla Riparian Inventory

### **FLOOD MANAGEMENT**

RIPARIAN CODE

R-BC-9

o. Are there	e nood prone areas	(aujacem nat areas, u	epressions, swates, rema		Score
mapped	100-year floodplain	, etc.) beyond the top (	of bank or edge of the		
water res	source?	_			
a. Yes				3 pts	1
b. No				1 pt	
7. Is woody	vegetation (trees, s	hrubs, vines) greater t	han 1 meter (3.2 feet) high	Ŋ.	
dominan	t in the flood prone	riparian area?			
a. Yes		-		3 pts	1
b. No or	no flood prone area	present		1 pt	
8. Is the str	eam or water resou	rce constricted by mai	n-made features		
(e.g. chan	nelization, riprap, o	concrete wall)?			
a. No		,		3 pts	1
b. Yes					- 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 -
0. 103		•••••		1 pts	
				ll	
			r	otal Points:	3
Function:	High (8-9 pts)	Medium (5-7 pts)	Low (2.4 nts)		
runction.	mgu (o-9 pts)	Medium (3-7 pts)	Low (3-4 pts)		
			FIIN	CTION IS:	LOW



# City of Molalla Riparian Inventory

#### THERMAL REGULATION

RIPARIAN CODE

R-BC-9

9. Does the	aspect or orientation of the riparian area allow for shading of water		Score
at midda	y in the summer?		
a. Yes		3 pts	3
b. No		1 pt	
10. What is	the dominant vegetation layer in the riparian area?		
a. Wood	ly vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herba	aceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	1
c. Bare	ground	1 pt	
11. Does wo	ody vegetation hang over the edge of the water?		
a. Yes		2 pts	1
b. No		1 pts	
	Total	Points:	5
Function:	High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)		

**FUNCTION IS:** 

MEDIUM



#### City of Molalla Riparian Inventory

#### **WILDLIFE HABITAT**

RIPARIAN CODE

R-BC-9

12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		Score
a. More than 2 layers	3 pts	
b. 2 layers		1
c. 1 layer, or unvegetated		
13. What is the dominant vegetation layer in the riparian area?		
a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high	3 pts	
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	1
c Bare ground	1 nt	
v. Baro ground		
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	1
b. No	1 pt	
***************************************		
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	1
b. No	11	
	····	
16. What percent of the water resource edge is bordered by a vegetated riparian		
area at least 30 feet wide?		
a Greater than 40%	3 pts	
h Retween 10% and 40%	2 nte	1
c. Less than 10%		
c. Less than 10%	<sup>1 pt</sup>	
	ii i	

Questions continued on next page



#### Chry of While Riperien Livenion

### **WILDLIFE HABITAT** (continued)

RIPARIAN CODE

R-BC-9

17. Is surface water present throughout the year?		Score
a. Yes	3 pts	
b. No	1 nt	3
18. Is there more than one type of water resource (e.g. stream, we	tland, lake/pond)	
within or immediately adjacent to the riparian reach?		
a. Yes	3 pts	1
b. No	1 nt	
19. What is the degree of development or human-caused disturba	nce (e.g. buildings,	
impervious surfaces, lawns, agriculture, trash) in the riparia	n area?	
a. Less than 25%	3 pts	
b. Between 25% and 75%	المسم	1
c. Greater than 75%	1 nt	
	Total Points:	10

Function: High (19-23 pts) Medium (13-18 pts) Low (8-12 pts)

**FUNCTION IS:** 

