

Appendix E

Riparian Assessment Forms



Riparian Characterization Form



City of Molalla Riparian Inventory

GENERAL INFORMATION

Date: 6/7/01

Riparian Code: R-CC-1

On-site: Off-Site:

Reach Length: 2900'

Investigators: SE

Hydrologic Basin: Creamery Creek

WATER RESOURCE INFORMATION

Water Resource: Stream/River:
 Lake/Pond:
 Wetland:

Width: 5' feet
 Width: feet
 Width: feet

LWI Wetland Code: CC-4

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) 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: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Sorbus scopulina</i>	<i>Phalaris arundinacea</i>
<i>Rubus discolor</i>	<i>Conium maculatum</i>
<i>Cytisus scoparius</i>	<i>Ranunculus repens</i>
<i>Crataegus monogyna</i>	<i>Rubus discolor</i>
<i>Rosa sp.</i>	

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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

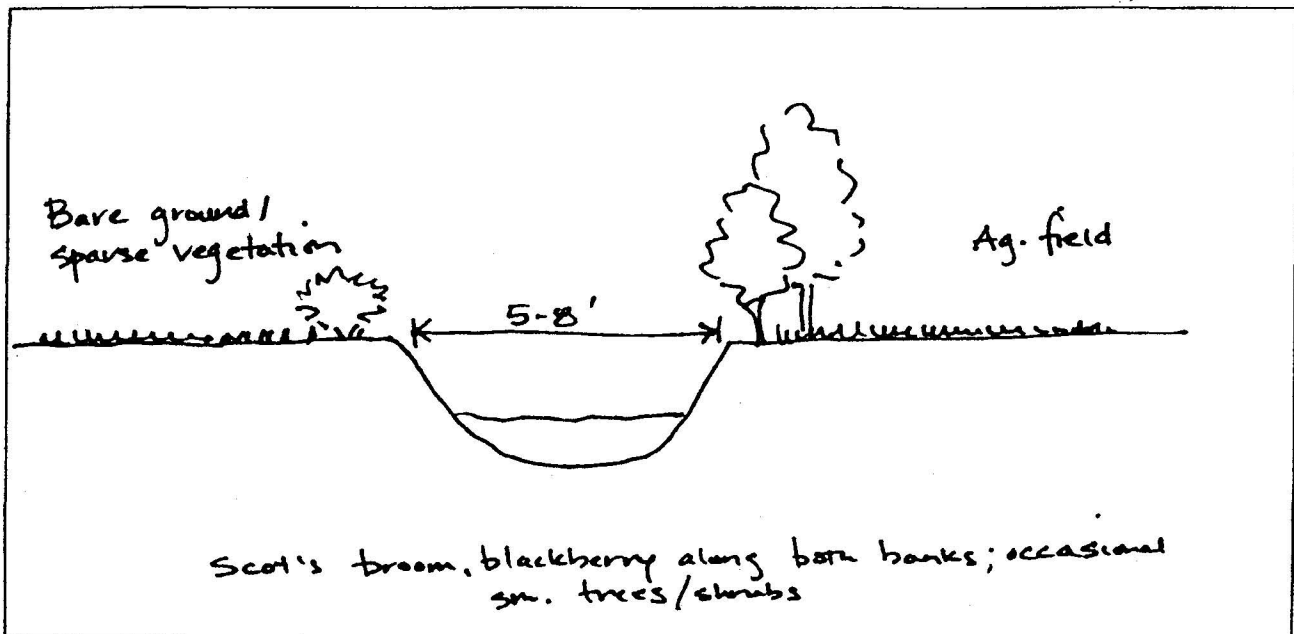
RIPARIAN CODE

R-CC-1

Date:	<u>6/7/01</u>	Investigators:	<u>SE</u>
Dominant tree species:	<u>Fraxinus latifolia</u> (see other side for list of species)		
Potential tree height (PTH)/Width of riparian area :	<u>75' / 10-15'</u>		feet
(Width measured horizontally from edge of water resource)			
PTH determined by:			
On-site vegetation	<input type="checkbox"/>	Reference site	<input checked="" type="checkbox"/> Code <u>R-CC-2</u>

Comments: Offsite analysis performed using aerial photography and observations made from Village Drive and Wedgewood Drive. South of Creamery Creek is recent and ongoing residential development. North of the creek are agricultural fields with plans for future residential development.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-CC-1

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	<u>3</u>
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	<u>2</u>
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	<u>2</u>
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	<u>3</u>
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	<u>1</u>
b. High, severe, very high	1 pts	
Total Points:		<u>11</u>

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-1

FLOOD MANAGEMENT

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?

- a. Yes 3 pts
- b. No 1 pt

Score

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
- b. No or no flood prone area present 1 pt

1

8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?

- a. No 3 pts
- b. Yes 1 pt

1

Total Points:

3

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS:

LOW

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-1

THERMAL REGULATION

9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?

- a. Yes 3 pts
b. No 1 pt

Score

1

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
c. Bare ground 1 pt

2

11. Does woody vegetation hang over the edge of the water?

- a. Yes 2 pts
b. No 1 pt

1

Total Points: 4

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS: **LOW**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-1

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<hr style="width: 100px; margin: 0 auto;"/> 1 <hr style="width: 100px; margin: 0 auto;"/>
b. 2 layers	2 pts	
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	<hr style="width: 100px; margin: 0 auto;"/> 2 <hr style="width: 100px; margin: 0 auto;"/>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<hr style="width: 100px; margin: 0 auto;"/> 1 <hr style="width: 100px; margin: 0 auto;"/>
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	<hr style="width: 100px; margin: 0 auto;"/> 1 <hr style="width: 100px; margin: 0 auto;"/>
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	<hr style="width: 100px; margin: 0 auto;"/> 2 <hr style="width: 100px; margin: 0 auto;"/>
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-CC-1

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	..... 3 pts	<u>3</u>
b. No	..... 1 pt	
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	<u>1</u>
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	<u>1</u>
b. Between 25% and 75%	..... 2 pts	
c. Greater than 75%	..... 1 pt	
Total Points:		<u>12</u>

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

FUNCTION IS: **LOW**

Riparian Characterization Form



City of Molalla Riparian Inventory

GENERAL INFORMATION	
Date: <u>6/7/01</u>	Riparian Code: <u>R-CC-2</u>
On-site: <input type="checkbox"/> Off-Site: <input checked="" type="checkbox"/>	Reach Length: <u>2000'</u>
Investigators: <u>SE/PF</u>	Hydrologic Basin: <u>Creamery Creek</u>

WATER RESOURCE INFORMATION	
Water Resource: Stream/River: <input checked="" type="checkbox"/>	Width: <u>5'</u> feet
Lake/Pond: <input type="checkbox"/>	Width: _____ feet
Wetland: <input type="checkbox"/>	Width: _____ feet
LWI Wetland Code: <u>CC-6A, CC-6B</u>	
Water present year-round: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are salmonids present in the adjacent water resource? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the water resource listed for temperature on DEQ's 303(d) list: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: Dayton silt loam

Adjacent Land Uses? (Check as many as needed)

- Agriculture:
- Commercial/Indus.:
- Residential:
- Roads:
- Undeveloped:
- Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Fraxinus latifolia</i>	<i>Phalaris arundinacea</i>
<i>Pseudotsuga menziesii</i>	<i>Alopecurus pratensis</i>
<i>Populus trichocarpa</i>	

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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-2

Date: 6/7/01 Investigators: SE/PF

Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 20-50 feet

(Width measured horizontally from edge of water resource)

PTH determined by:

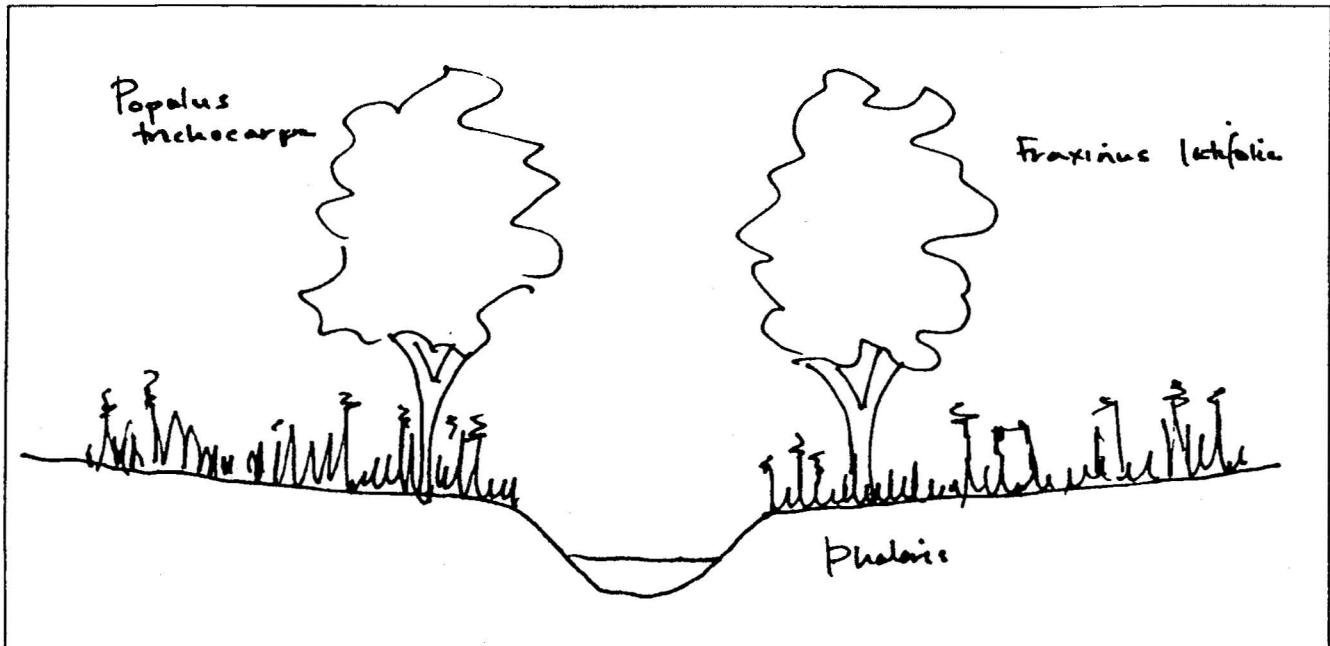
On-site vegetation

Reference site

Code

Comments: Offsite analysis performed using aerial photography and observations made from railroad tracks. Creek flows through ag fields and tree farms. Some areas have trees and shrubs but many areas have only a Phalaris arundinacea wetland buffer zone.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-2

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	<u>3</u>
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	<u>2</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	<u>2</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	<u>3</u>
b. Between 10% and 25%	2 pts	
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	<u>1</u>
b. High, severe, very high	1 pts	
Total Points:		<u>11</u>

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-2

FLOOD MANAGEMENT

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?

- a. Yes 3 pts
- b. No 1 pt

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
- 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
- b. Yes 1 pt

Score

3

1

3

Total Points:

7

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS:

MEDIUM

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-CC-2

THERMAL REGULATION

9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?

- a. Yes 3 pts
b. No 1 pt

Score

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
c. Bare ground 1 pt

2

11. Does woody vegetation hang over the edge of the water?

- a. Yes 2 pts
b. No 1 pt

1

Total Points:

6

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS:

MEDIUM

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-2

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<u>2</u>
b. 2 layers	2 pts	
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	<u>2</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<u>1</u>
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	<u>3</u>
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	<u>2</u>
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-CC-2

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	<u>3</u>
b. No	1 pt	
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	<u>1</u>
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	<u>2</u>
b. Between 25% and 75%	2 pts	
c. Greater than 75%	1 pt	
Total Points:		<u>16</u>

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: <u>4/20/01</u>	Riparian Code: <u>R-CC-3L</u>
On-site: <input checked="" type="checkbox"/> Off-Site: <input type="checkbox"/>	Reach Length: <u>600</u>
Investigators: <u>CR/PF</u>	Hydrologic Basin: <u>Creamery Creek</u>

WATER RESOURCE INFORMATION	
Water Resource: Stream/River: <input checked="" type="checkbox"/>	Width: <u>15'</u> feet
Lake/Pond: <input type="checkbox"/>	Width: _____ feet
Wetland: <input type="checkbox"/>	Width: _____ feet
LWI Wetland Code: <u>CC-7C</u>	
Water present year-round: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are salmonids present in the adjacent water resource? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the water resource listed for temperature on DEQ's 303(d) list: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: Dayton silt loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Fraxinus latifolia</i>	<i>Phalaris arundinacea</i>
<i>Rubus discolor</i>	<i>Galium aparine</i>
<i>Cytisus scoparius</i>	<i>Convolvulus arvensis</i>
<i>Crataegus douglasii</i>	<i>Festuca arundinacea</i>
	<i>Chrysanthemum leucanthemum</i>
	<i>Taraxacum officinale</i>

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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 Investigators: CR/PF

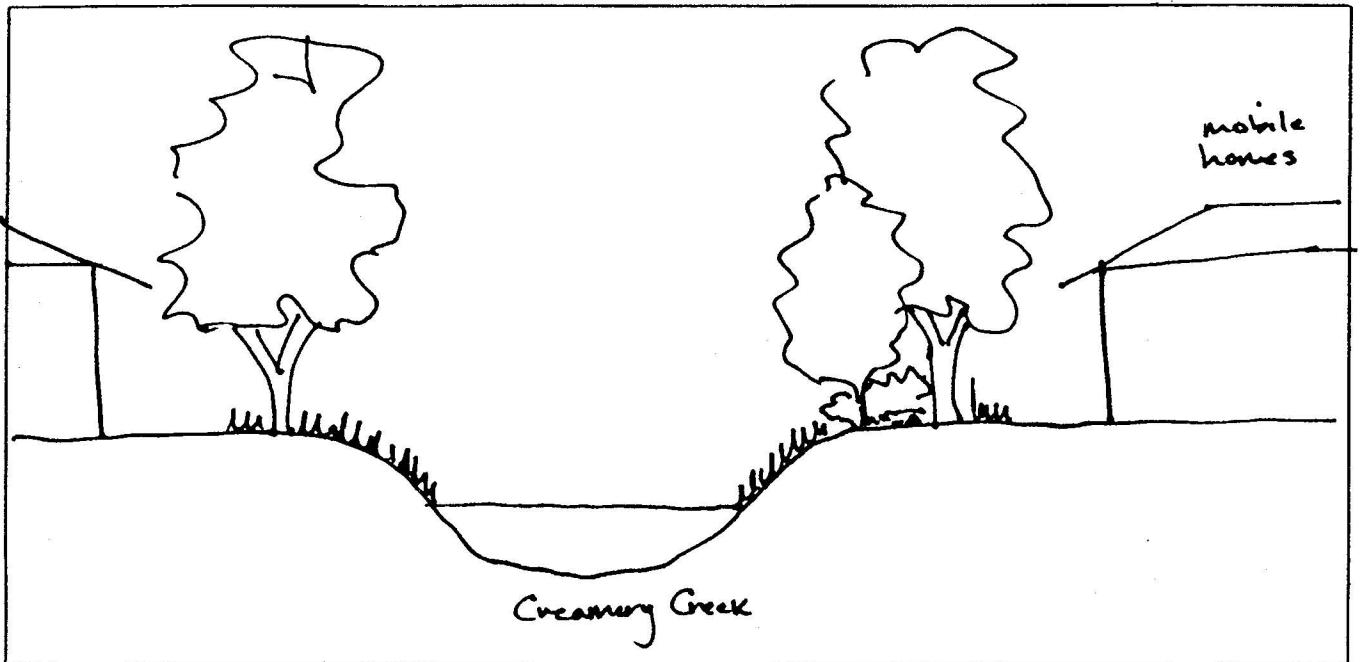
Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 75 feet
(Width measured horizontally from edge of water resource)

PTH determined by:
On-site vegetation Reference site Code

Comments: Surrounded by development, double-wide trailer subdivision on right and individual double wides and open space on the left. At culvert Creamery Creek flows NW beneath road, on west side of road.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-CC-3L

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	3
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	3
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	2
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	3
b. Between 10% and 25%	2 pts	
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	1 pt	
Total Points:		12

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-3L

FLOOD MANAGEMENT

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?

- a. Yes 3 pts
b. No 1 pt

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
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
b. Yes 1 pt

Score

3

3

3

Total Points:

9

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-CC-3L

THERMAL REGULATION

		Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		
a. Yes	3 pts	1
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	1
b. No	1 pt	
Total Points:		5

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-3L

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<u>2</u>
b. 2 layers	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<u>1</u>
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	<u>3</u>
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	<u>3</u>
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-CC-3L

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	
b. No	1 pt	<u>3</u>
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	
b. No	1 pt	<u>1</u>
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	
c. Greater than 75%	1 pt	<u>3</u>
Total Points:		<u>19</u>

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

Date: 4/20/01

Riparian Code: R-CC-3R

On-site: Off-Site:

Reach Length: 600

Investigators: CR/PF

Hydrologic Basin: Creamery Creek

WATER RESOURCE INFORMATION

Water Resource: Stream/River:
 Lake/Pond:
 Wetland:

Width: 15' feet
 Width: _____ feet
 Width: _____ feet

LWI Wetland Code: CC-7C

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) 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: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Fraxinus latifolia</i>	<i>Phalaris arundinacea</i>
<i>Rubus discolor</i>	<i>Galium aparine</i>
<i>Cytisus scoparius</i>	<i>Convolvulus arvensis</i>
<i>Crataegus douglasii</i>	<i>Festuca arundinacea</i>
	<i>Chrysanthemum leucanthemum</i>
	<i>Taraxacum officinale</i>

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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-3R

Date: 4/20/01 **Investigators:** CR/PF

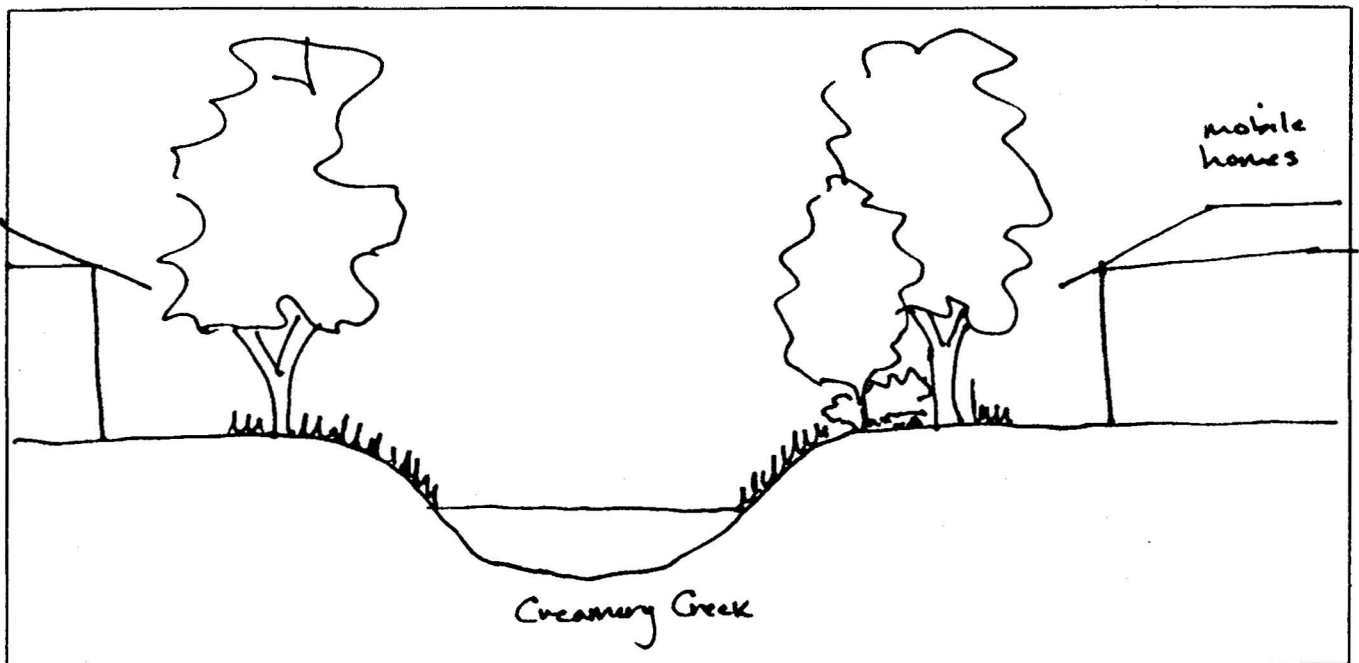
Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 50-75 feet
(Width measured horizontally from edge of water resource)

PTH determined by:
On-site vegetation Reference site Code

Comments: Surrounded by development, double-wide trailer subdivision on right and individual double wides and open space on the left. At culvert Creamery Creek flows NW beneath road, on west side of road.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-CC-3R

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	<u>3</u>
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	<u>2</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	<u>2</u>
b. Between 10% and 25%	2 pts	
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	<u>1</u>
b. High, severe, very high	1 pts	
Total Points:		<u>11</u>

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-CC-3R

FLOOD MANAGEMENT

		Score
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?		
a. Yes	3 pts	3
b. No	1 pt	
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	1 pts	
Total Points:		7

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS: MEDIUM

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-CC-3R

THERMAL REGULATION

		Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		
a. Yes	3 pts	1
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	1
b. No	1 pts	
Total Points:		5

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-CC-3R

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<u>2</u>
b. 2 layers	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<u>1</u>
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	<u>3</u>
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	<u>3</u>
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-CC-3R

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	<u>3</u>
b. No	1 pt	
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	<u>1</u>
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	<u>2</u>
b. Between 25% and 75%	2 pts	
c. Greater than 75%	1 pt	
Total Points:		<u>18</u>

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-1

On-site: Off-Site:

Reach Length: 1325'

Investigators: SE/PF

Hydrologic Basin: Bear Creek

WATER RESOURCE INFORMATION

Water Resource: Stream/River:
 Lake/Pond:
 Wetland:

Width: 12-15 feet
 Width: _____ feet
 Width: _____ feet

LWI Wetland Code: BC-1B

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) list: Yes No

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: Wapato silty clay loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Fraxinus latifolia</i>	<i>Phalaris arundinacea</i>
<i>Pseudotsuga menziesii</i>	<i>Hedera helix</i>
<i>Crataegus monogyna</i>	<i>Solanum dulcamara</i>
<i>Prunus sp.</i>	
<i>Rubus discolor</i>	
<i>Populus trichocarpa</i>	
<i>Quercus garryana</i>	

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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-1

Date: 5/1/01 **Investigators:** SE/PF

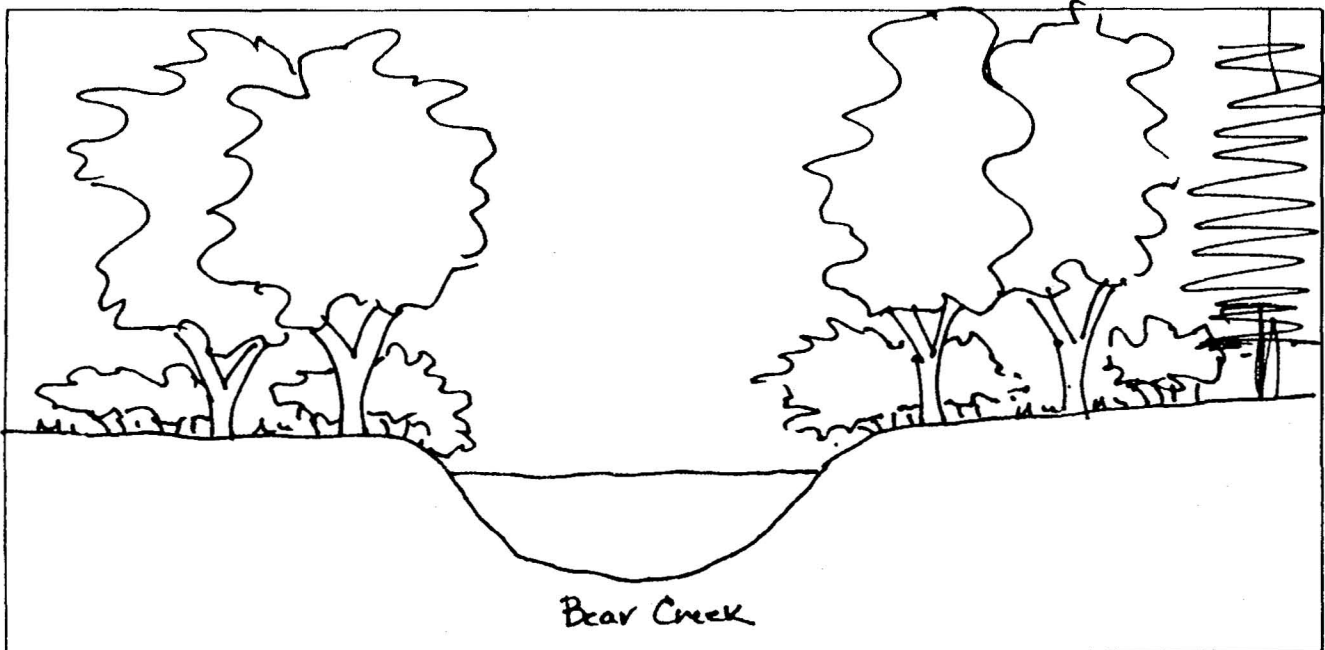
Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 75 **feet**
(Width measured horizontally from edge of water resource)

PTH determined by:
On-site vegetation **Reference site** **Code** _____

Comments: Bear Creek north of sewage plant. Creek is 1.4 feet deep. Analysis performed looking upstream of bridge on access road to sewage plant.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

WATER QUALITY

RIPARIAN CODE
R-BC-1

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	3
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	3
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	2
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	3
b. Between 10% and 25%	2 pts	
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 pt	
Total Points:		13

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-1

FLOOD MANAGEMENT

		Score
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?		
a. Yes	..... 3 pts	<u>3</u>
b. No	..... 1 pt	
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	<u>1</u>
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	<u>3</u>
b. Yes	..... 1 pts	
Total Points:		<u>7</u>

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE R-BC-1

THERMAL REGULATION

		Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		
a. Yes	3 pts	<hr style="border: none; border-top: 1px solid black;"/> 3 <hr style="border: none; border-top: 1px solid black;"/>
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	<hr style="border: none; border-top: 1px solid black;"/> 3 <hr style="border: none; border-top: 1px solid black;"/>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
11. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<hr style="border: none; border-top: 1px solid black;"/> 2 <hr style="border: none; border-top: 1px solid black;"/>
b. No	1 pts	
Total Points:		<hr style="border: none; border-top: 1px solid black;"/> 8 <hr style="border: none; border-top: 1px solid black;"/>

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-1

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	3
b. 2 layers	2 pts	
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	3
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
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?		
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	3
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-1

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	3
b. No	1 pt	
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	3
b. Between 25% and 75%	2 pts	
c. Greater than 75%	1 pt	
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

Date: 6/7/01

Riparian Code: R-BC-2

On-site: Off-Site:

Reach Length: 550

Investigators: SE/PF

Hydrologic Basin: Bear Creek

WATER RESOURCE INFORMATION

Water Resource: Stream/River:
 Lake/Pond:
 Wetland:

Width: 15-20' feet
 Width: _____ feet
 Width: _____ feet

LWI Wetland Code: _____

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) list: Yes No

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: Wapato silty clay loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Quercus garryana</i>	<i>Anthoxanthum odoratum</i>
<i>Fraxinus latifolia</i>	<i>Festuca arundinacea</i>
	<i>Alopecurus geniculatus</i>
	<i>Cirsium vulgare</i>
	<i>Cirsium arvense</i>
	<i>Holcus lanatus</i>
	<i>Chrysanthemum leucanthemum</i>

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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

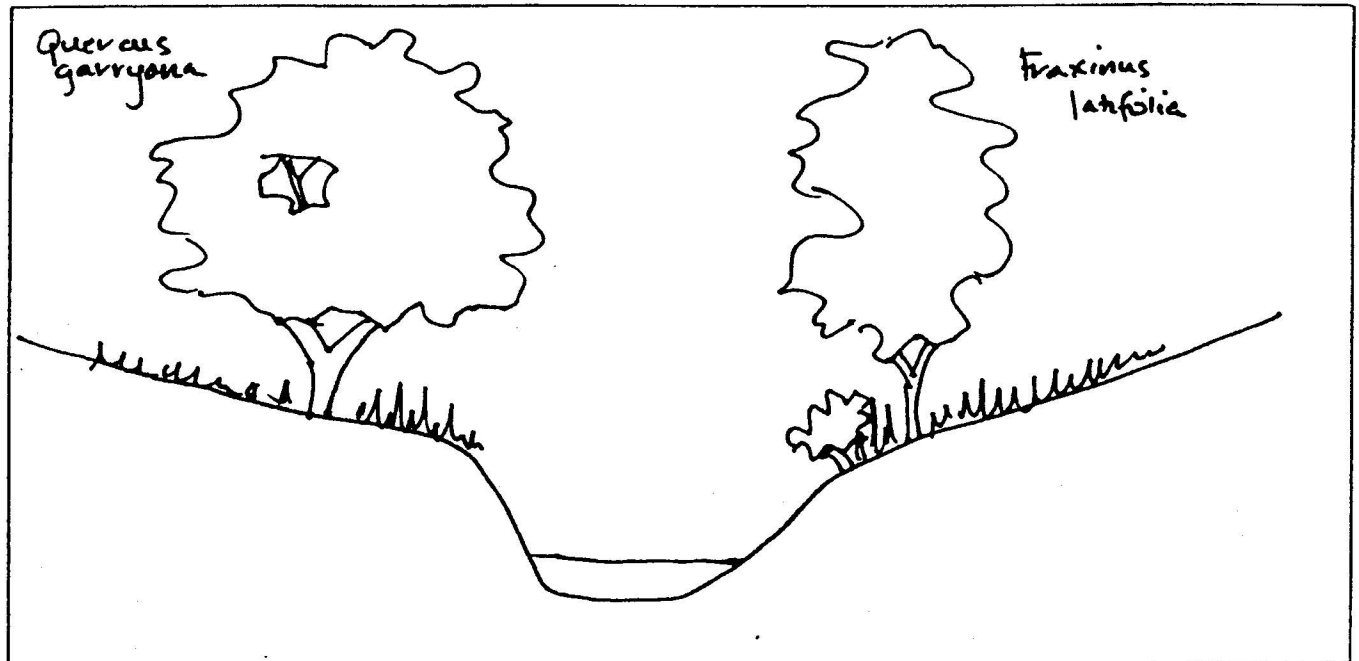
Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 25 feet
(Width measured horizontally from edge of water resource)

PTH determined by:
On-site vegetation Reference site Code

Comments: Offsite, from the north along Toliver Road, and east from Highway 213.
This reach is in an actively grazed cow pasture.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-2

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	3
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	2
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	2
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	3
b. Between 10% and 25%	2 pts	
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 pt	
Total Points:		12

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-2

FLOOD MANAGEMENT

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?

- a. Yes 3 pts
- b. No 1 pt

Score

3

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
- b. No or no flood prone area present 1 pt

1

8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?

- a. No 3 pts
- b. Yes 1 pt

3

Total Points:

7

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS:

MEDIUM

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-2

THERMAL REGULATION

9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?

- a. Yes 3 pts
- b. No 1 pt

Score

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
- c. Bare ground 1 pt

2

11. Does woody vegetation hang over the edge of the water?

- a. Yes 2 pts
- b. No 1 pt

1

Total Points:

6

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS:

MEDIUM

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-2

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<u>2</u>
b. 2 layers	2 pts	
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	<u>2</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<u>1</u>
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	<u>1</u>
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	<u>3</u>
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-2

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	3
b. No	1 pt	
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	3
b. Between 25% and 75%	2 pts	
c. Greater than 75%	1 pt	
Total Points:		16

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

FUNCTION IS: MEDIUM

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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



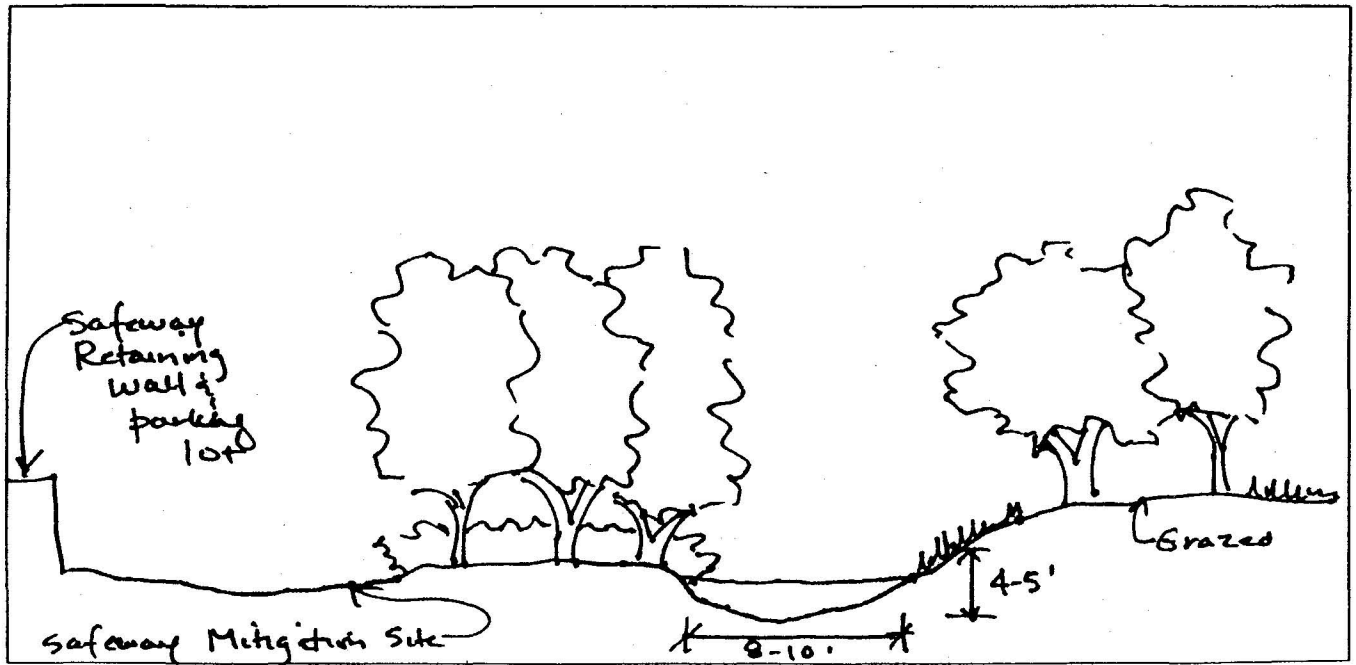
City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-3L

Date:	4/18/01	Investigators:	FS/SE
Dominant tree species:	<i>Fraxinus latifolia</i>	(see other side for list of species)	
Potential tree height (PTH)/Width of riparian area :	75 / 75	feet	
(Width measured horizontally from edge of water resource)			
PTH determined by:	On-site vegetation <input checked="" type="checkbox"/>	Reference site	Code _____

Comments: Reach of creek fenced off from grazing horses, so narrow fringe of groundcover on north bank. South bank (left bank) largely intact, extends out to Safeway mitigation.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-3L

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	<u>3</u>
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	<u>2</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	<u>3</u>
b. Between 10% and 25%	2 pts	
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	<u>2</u>
b. High, severe, very high	1 pts	
Total Points:		<u>13</u>

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-3L

FLOOD MANAGEMENT

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?

- a. Yes 3 pts
- b. No 1 pt

Score

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
- b. No or no flood prone area present 1 pt

1

8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?

- a. No 3 pts
- b. Yes 1 pt

3

Total Points: 5

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-3L

THERMAL REGULATION

	Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?	
a. Yes 3 pts	<u>3</u>
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts	
c. Bare ground 1 pt	
11. Does woody vegetation hang over the edge of the water?	
a. Yes 2 pts	<u>2</u>
b. No 1 pt	
Total Points:	<u>8</u>

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-3L

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	3
b. 2 layers	2 pts	
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	3
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
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?		
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	3
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-3L

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	<u>3</u>
b. No	1 pt	
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	<u>1</u>
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	<u>2</u>
b. Between 25% and 75%	2 pts	
c. Greater than 75%	1 pt	
Total Points:		<u>20</u>

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

Date: 4/18/01

Riparian Code: R-BC-3R

On-site: Off-Site:

Reach Length: 400

Investigators: FS/SE

Hydrologic Basin: Bear Creek

WATER RESOURCE INFORMATION

Water Resource: Stream/River:
 Lake/Pond:
 Wetland:

Width: 12 feet
 Width: _____ feet
 Width: _____ feet

LWI Wetland Code: BC-2A

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) list: Yes No

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: Wapato silty clay loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Pseudotsuga menziesii</i>	<i>Phalaris arundinacea</i>
<i>Quercus garryana</i>	<i>Dactylus glomerata</i>
<i>Fraxinus latifolia</i>	<i>Galium aparine</i>
<i>Crataegus monogyna</i>	<i>Impatiens sp.</i>
<i>Rubus discolor</i>	<i>Lamium purpureum</i>
	<i>Conium maculatum</i>

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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-3R

Date: 4/18/01 **Investigators:** FS/SE

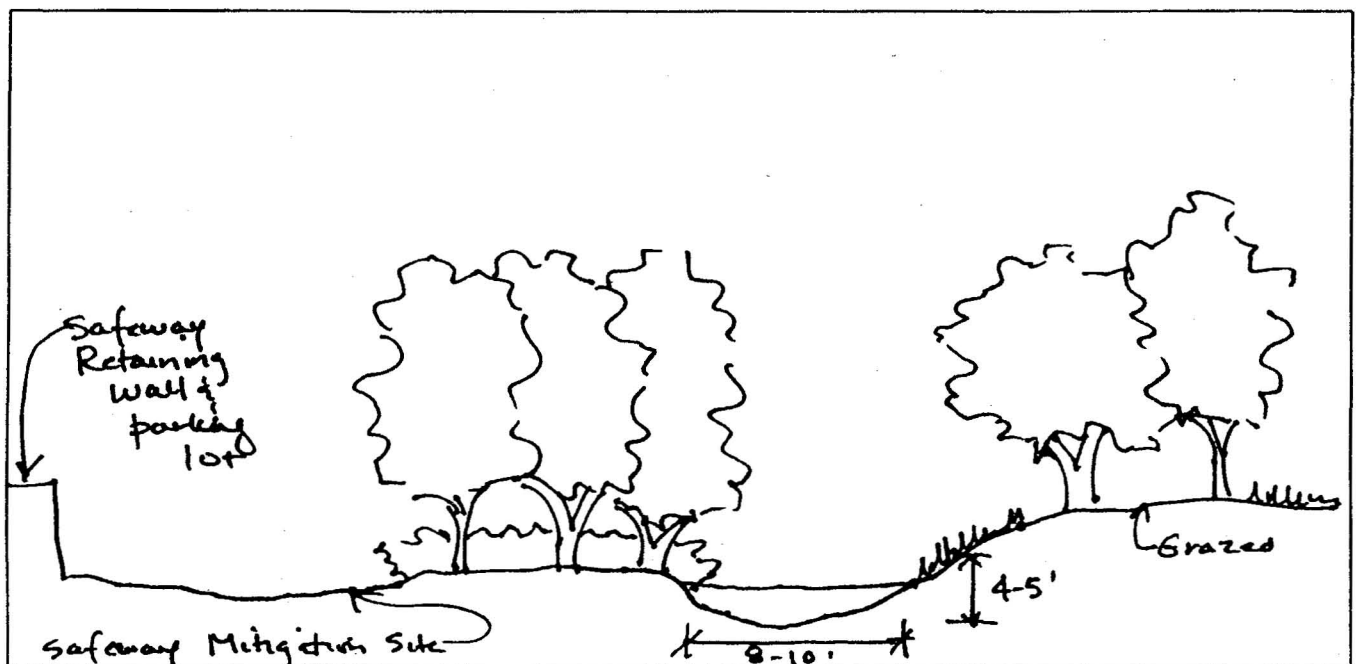
Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 15-50 **feet**
(Width measured horizontally from edge of water resource)

PTH determined by:
On-site vegetation **Reference site** **Code** _____

Comments: Reach of creek fenced off from grazing horses, so narrow fringe of groundcover on north bank. South bank (left bank) largely intact, extends out to Safeway mitigation.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-3R

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	<u>3</u>
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	<u>2</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	<u>2</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	<u>3</u>
b. Between 10% and 25%	2 pts	
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	<u>2</u>
b. High, severe, very high	1 pts	
Total Points:		<u>12</u>

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-3R

FLOOD MANAGEMENT

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?

- a. Yes 3 pts
- b. No 1 pt

Score

3

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
- b. No or no flood prone area present 1 pt

1

8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?

- a. No 3 pts
- b. Yes 1 pt

3

Total Points: 7

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-3R

THERMAL REGULATION

		Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		
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	2
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:		7

Function: **High (7-8 pts)** **Medium (5-6 pts)** **Low (3-4 pts)**

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-3R

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<u>2</u>
b. 2 layers	2 pts	
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	<u>2</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<u>2</u>
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	<u>1</u>
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	<u>1</u>
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-3R

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	
b. No	1 pt	<u>3</u>
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	
b. No	1 pt	<u>1</u>
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	
c. Greater than 75%	1 pt	<u>2</u>
Total Points:		<u>14</u>

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: _____	4/18/01	Riparian Code: _____	R-BC-4L
On-site: <input checked="" type="checkbox"/>	Off-Site: <input type="checkbox"/>	Reach Length: _____	800
Investigators: _____	FS/SE	Hydrologic Basin: _____	Bear Creek

WATER RESOURCE INFORMATION				
Water Resource:	Stream/River: <input checked="" type="checkbox"/>	Width: _____	8 - 10	feet
	Lake/Pond: <input type="checkbox"/>	Width: _____		feet
	Wetland: <input type="checkbox"/>	Width: _____		feet
LWI Wetland Code: _____	BC-2A			
Water present year-round:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Are salmonids present in the adjacent water resource?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
Is the water resource listed for temperature on DEQ's 303(d) list:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: _____ Wapato silty clay loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Quercus garryana</i>	<i>Phalaris arundinacea</i>
<i>Pseudotsuga menziesii</i>	<i>Dactylus glomerata</i>
<i>Cytisus scoparius</i>	<i>Galium aparine</i>
<i>Fraxinus latifolia</i>	<i>Festuca arundinacea</i>
<i>Crataegus monogyna</i>	
<i>Rubus discolor</i>	

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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-4L

Date: 4/18/01 Investigators: FS/SE

Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 25-50 feet
(Width measured horizontally from edge of water resource)

PTH determined by:

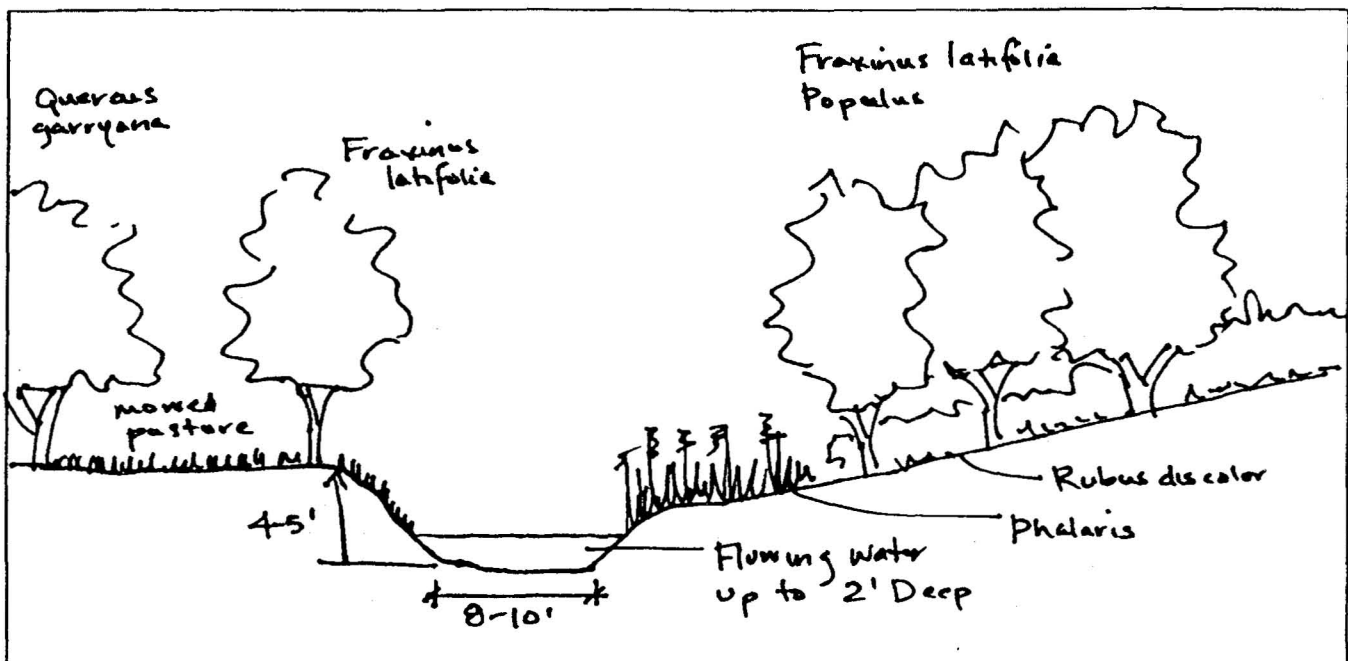
On-site vegetation

Reference site

Code _____

Comments: Reach adjacent to tree farm, some pastureland, undeveloped wooded areas. Old gravel roadbed extends downslope from Industrial Way. Outfall to creek discharging polluted stormwater (oily slicks from sediments).

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-4L

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	<u>3</u>
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	<u>2</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	<u>3</u>
b. Between 10% and 25%	2 pts	
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	<u>2</u>
b. High, severe, very high	1 pt	
Total Points:		<u>13</u>

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

FUNCTION IS: HIGH

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-4L

FLOOD MANAGEMENT

Score

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?

- a. Yes 3 pts
- b. No 1 pt

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
- b. No or no flood prone area present 1 pt

1

8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?

- a. No 3 pts
- b. Yes 1 pt

3

Total Points: 5

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-4L

THERMAL REGULATION

9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?

- a. Yes 3 pts
b. No 1 pt

Score

1

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
c. Bare ground 1 pt

3

11. Does woody vegetation hang over the edge of the water?

- a. Yes 2 pts
b. No 1 pt

1

Total Points:

5

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS:

MEDIUM

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-4L

WILDLIFE HABITAT

	Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? a. More than 2 layers 3 pts b. 2 layers 2 pts c. 1 layer, or unvegetated 1 pt	<hr/> 3 <hr/>
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 c. Bare ground 1 pt	<hr/> 3 <hr/>
14. Does woody vegetation hang over the edge of the water? a. Yes 2 pts b. No 1 pt	<hr/> 1 <hr/>
15. Is large woody debris present within the riparian area? a. Yes 3 pts b. No 1 pt	<hr/> 1 <hr/>
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 c. Less than 10% 1 pt	<hr/> 3 <hr/>

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-4L

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	3
b. No	1 pt	
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	2
b. Between 25% and 75%	2 pts	
c. Greater than 75%	1 pt	
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:	<u>4/18/01</u>	Riparian Code:	<u>R-BC-4R</u>
On-site:	<input checked="" type="checkbox"/>	Off-Site:	<input type="checkbox"/>
Reach Length:			<u>800</u>
Investigators:	<u>FS/SE</u>	Hydrologic Basin:	<u>Bear Creek</u>

WATER RESOURCE INFORMATION			
Water Resource:	Stream/River:	<input checked="" type="checkbox"/>	Width:
	Lake/Pond:	<input type="checkbox"/>	<u>8 - 10</u> feet
	Wetland:	<input type="checkbox"/>	Width: _____ feet
			Width: _____ feet
LWI Wetland Code:	<u>BC-2A</u>		
Water present year-round:	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/>
Are salmonids present in the adjacent water resource?	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the water resource listed for temperature on DEQ's 303(d) list:	Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/>

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: Wapato silty clay loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Quercus garryana</i>	<i>Phalaris arundinacea</i>
<i>Pseudotsuga menziesii</i>	<i>Dactylus glomerata</i>
<i>Cytisus scoparius</i>	<i>Galium aparine</i>
<i>Fraxinus latifolia</i>	<i>Festuca arundinacea</i>
<i>Crataegus monogyna</i>	
<i>Rubus discolor</i>	

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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-4R

Date: 4/18/01 Investigators: FS/SE

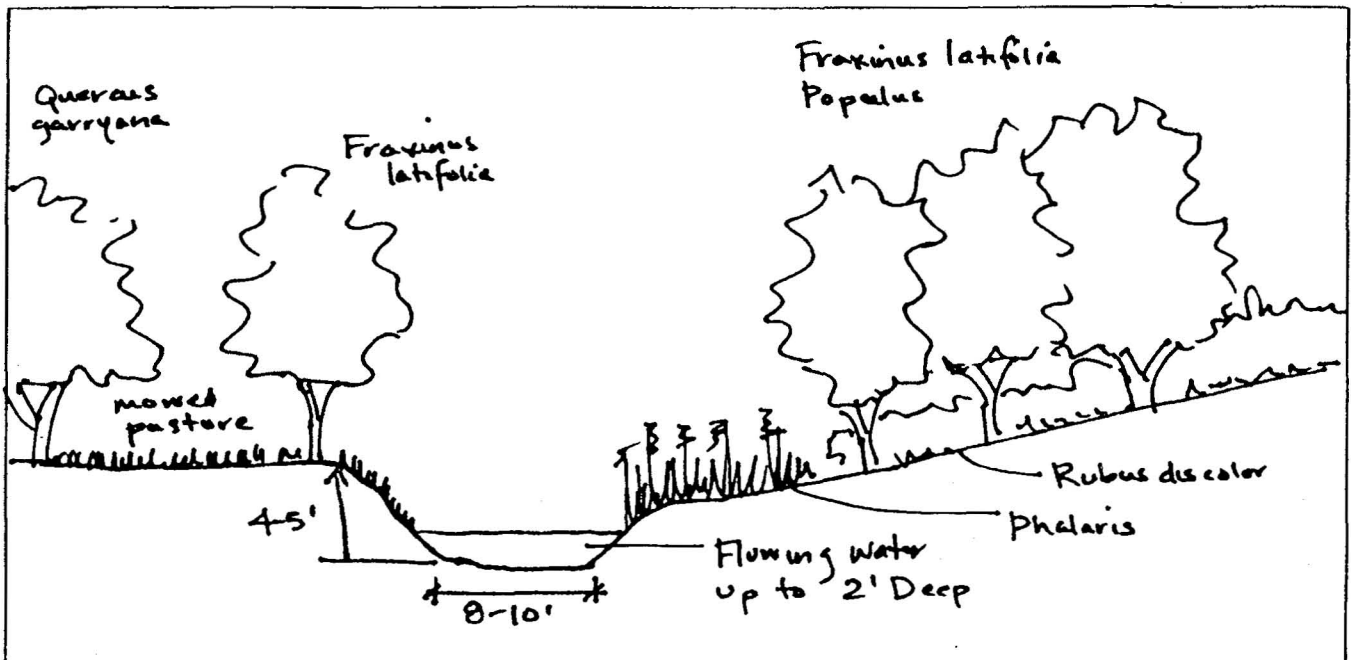
Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 75 feet
(Width measured horizontally from edge of water resource)

PTH determined by:
On-site vegetation Reference site Code _____

Comments: Reach adjacent to tree farm, some pastureland, undeveloped wooded areas. Old gravel roadbed extends downslope from Industrial Way. Outfall to creek discharging polluted stormwater (oily slicks from sediments).

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-4R

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	<u>3</u>
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	<u>2</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	<u>3</u>
b. Between 10% and 25%	2 pts	
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	<u>2</u>
b. High, severe, very high	1 pt	
Total Points:		<u>13</u>

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-4R

FLOOD MANAGEMENT

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?

- a. Yes 3 pts
- b. No 1 pt

Score

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
- b. No or no flood prone area present 1 pt

1

8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?

- a. No 3 pts
- b. Yes 1 pt

3

Total Points:

5

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS:

MEDIUM

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-4R

THERMAL REGULATION

		Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		
a. Yes	3 pts	1
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	1
b. No	1 pt	
Total Points:		5

Function: **High (7-8 pts)** **Medium (5-6 pts)** **Low (3-4 pts)**

FUNCTION IS: MEDIUM

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-4R

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	3
b. 2 layers	2 pts	
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	3
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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?		
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	3
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE R-BC-4R

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	
b. No	1 pt	<u>3</u>
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	
b. No	1 pt	<u>1</u>
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	
c. Greater than 75%	1 pt	<u>2</u>
Total Points:		<u>17</u>

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: Bear Creek

WATER RESOURCE INFORMATION

Water Resource: Stream/River:
 Lake/Pond:
 Wetland:

Width: 5-8 feet
 Width: _____ feet
 Width: _____ feet

LWI Wetland Code: BC-17A, BC-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) list: Yes No

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: Wapato silty clay loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Fraxinus latifolia</i>	<i>Phalaris arundinacea</i>
<i>Rubus discolor</i>	<i>Rubus discolor</i>
<i>Symphoricarpos albus</i>	<i>Galium aparine</i>
<i>Quercus garryana</i>	<i>Hedera helix</i>
<i>Amelanchier alnifolia</i>	<i>Impatiens sp.</i>
<i>Oemleria cerasiformis</i>	<i>Tellima grandiflora</i>
<i>Physocarpus capitatus</i>	<i>Polystichum munitum</i>

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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

Date: 5/1/01 Investigators: SE/PF

Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 50-75 feet
(Width measured horizontally from edge of water resource)

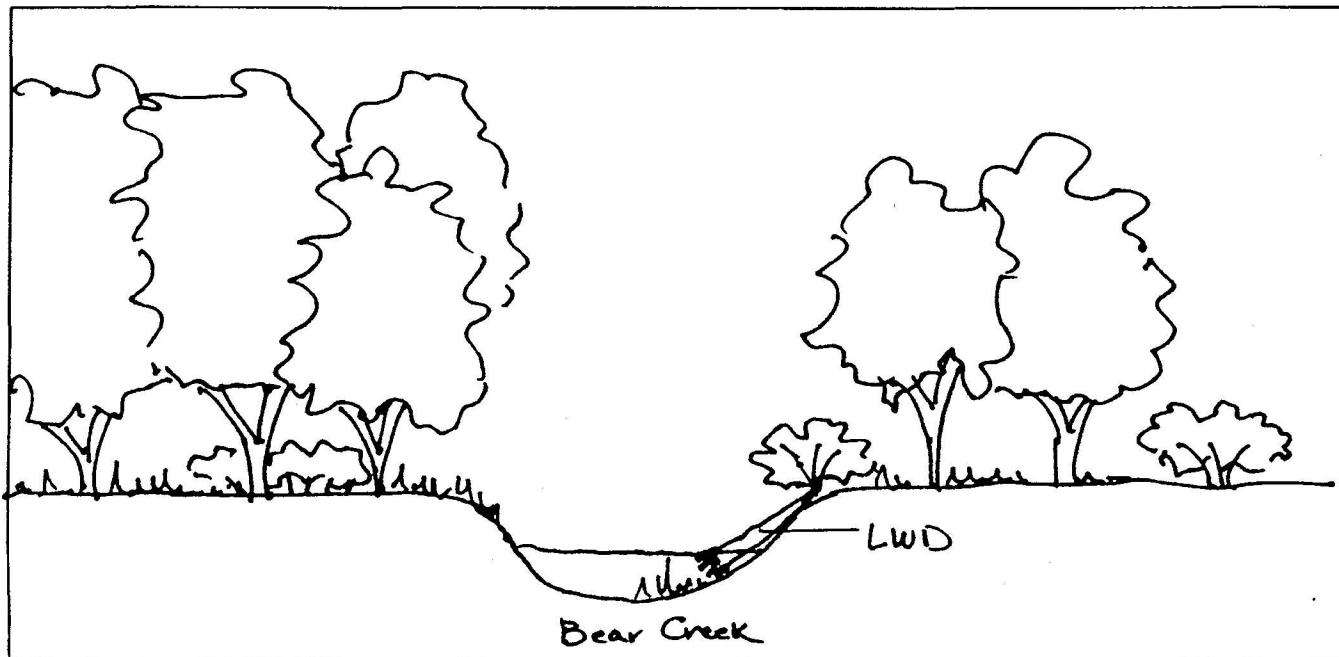
PTH determined by:

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:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-5L

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	<u>3</u>
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	<u>3</u>
b. Between 10% and 25%	2 pts	
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	<u>2</u>
b. High, severe, very high	1 pt	
Total Points:		<u>14</u>

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-5L

FLOOD MANAGEMENT

		Score
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?		
a. Yes	.....	3 pts
b. No	.....	1 pt
		3
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
b. No or no flood prone area present	.....	1 pt
		3
8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?		
a. No	.....	3 pts
b. Yes	.....	1 pts
		3
Total Points:		9

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-5L

THERMAL REGULATION

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
- b. No 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
- c. Bare ground 1 pt

3

11. Does woody vegetation hang over the edge of the water?

- a. Yes 2 pts
- b. No 1 pt

2

Total Points:

8

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-5L

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	3
b. 2 layers	2 pts	
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	3
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
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?		
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	3
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-5L

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	..... 3 pts	<u>3</u>
b. No	..... 1 pt	
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	<u>1</u>
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	<u>3</u>
b. Between 25% and 75%	..... 2 pts	
c. Greater than 75%	..... 1 pt	
Total Points:		<u>21</u>

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

Date: 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:
 Lake/Pond:
 Wetland:

Width: 5-8 feet
 Width: feet
 Width: feet

LWI Wetland Code: BC-17A, BC-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) list: Yes No

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: Wapato silty clay loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Fraxinus latifolia</i>	<i>Phalaris arundinacea</i>
<i>Rubus discolor</i>	<i>Rubus discolor</i>
<i>Symphoricarpos albus</i>	<i>Galium aparine</i>
<i>Quercus garryana</i>	<i>Hedera helix</i>
<i>Amelanchier alnifolia</i>	<i>Impatiens sp.</i>
<i>Oemleria cerasiformis</i>	<i>Tellima grandiflora</i>
<i>Physocarpus capitatus</i>	<i>Polystichum munitum</i>

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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

Date: 5/1/01 **Investigators:** SE/PF

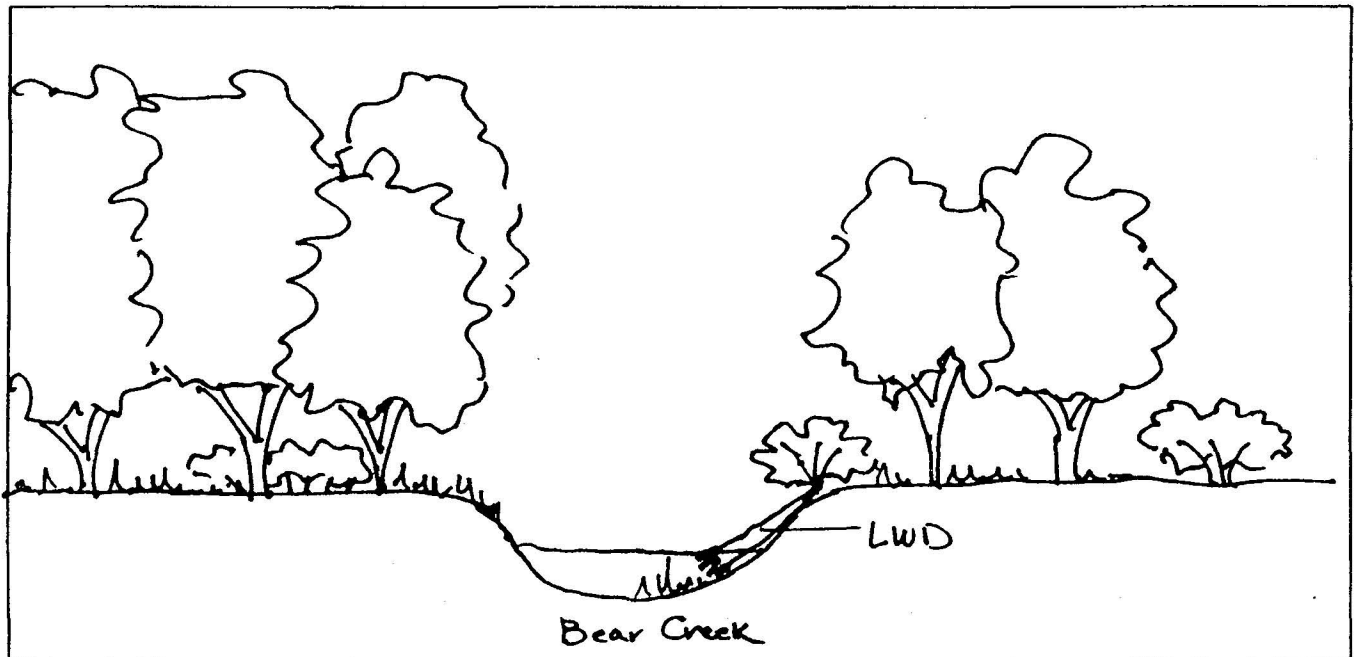
Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 50-75 feet
(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:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-5R

WATER QUALITY

	Score	
1. What is the average slope in the riparian area?		
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		
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 pt		
Total Points:		14

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-5R

FLOOD MANAGEMENT

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?

- | | | | | |
|--------|-------|-------|--|---|
| a. Yes | | 3 pts | \| | 3 |
| b. No | | 1 pt | | |

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 | \| | 3 |
| b. Yes | | 1 pt | | |

Total Points: 9

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-5R

THERMAL REGULATION

		Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		
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	1 pts	
Total Points:		8

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-5R

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	3
b. 2 layers	2 pts	
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	3
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
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?		
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	3
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-5R

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	..... 3 pts	
b. No	..... 1 pt	<u>3</u>
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	<u>1</u>
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	<u>3</u>
c. Greater than 75%	..... 1 pt	
Total Points:		<u>21</u>

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	
Date: <u>5/1/01</u>	Riparian Code: <u>R-BC-6L</u>
On-site: <input checked="" type="checkbox"/> Off-Site: <input type="checkbox"/>	Reach Length: <u>1325'</u>
Investigators: <u>SE/PF</u>	Hydrologic Basin: <u>Bear Creek</u>

WATER RESOURCE INFORMATION	
Water Resource: Stream/River: <input checked="" type="checkbox"/>	Width: <u>4-10</u> feet
Lake/Pond: <input type="checkbox"/>	Width: _____ feet
Wetland: <input type="checkbox"/>	Width: _____ feet
LWI Wetland Code: <u>BC-17B</u>	
Water present year-round: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Are salmonids present in the adjacent water resource? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the water resource listed for temperature on DEQ's 303(d) list: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: Wapato silty clay loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Fraxinus latifolia</i>	<i>Phalaris arundinacea</i>
<i>Populus trichocarpa</i>	<i>Epilobium watsonii</i>
<i>Symphoricarpos albus</i>	<i>Lamium purpureum</i>
<i>Rubus discolor</i>	<i>Rumex crispus</i>
<i>Pseudotsuga menziesii</i>	<i>Rubus discolor</i>
<i>Quercus garryana</i>	<i>Conium maculatum</i>
<i>Crataegus monogyna</i>	

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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-6L

Date: 5/1/01 Investigators: SE/PF

Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 50 feet
(Width measured horizontally from edge of water resource)

PTH determined by:

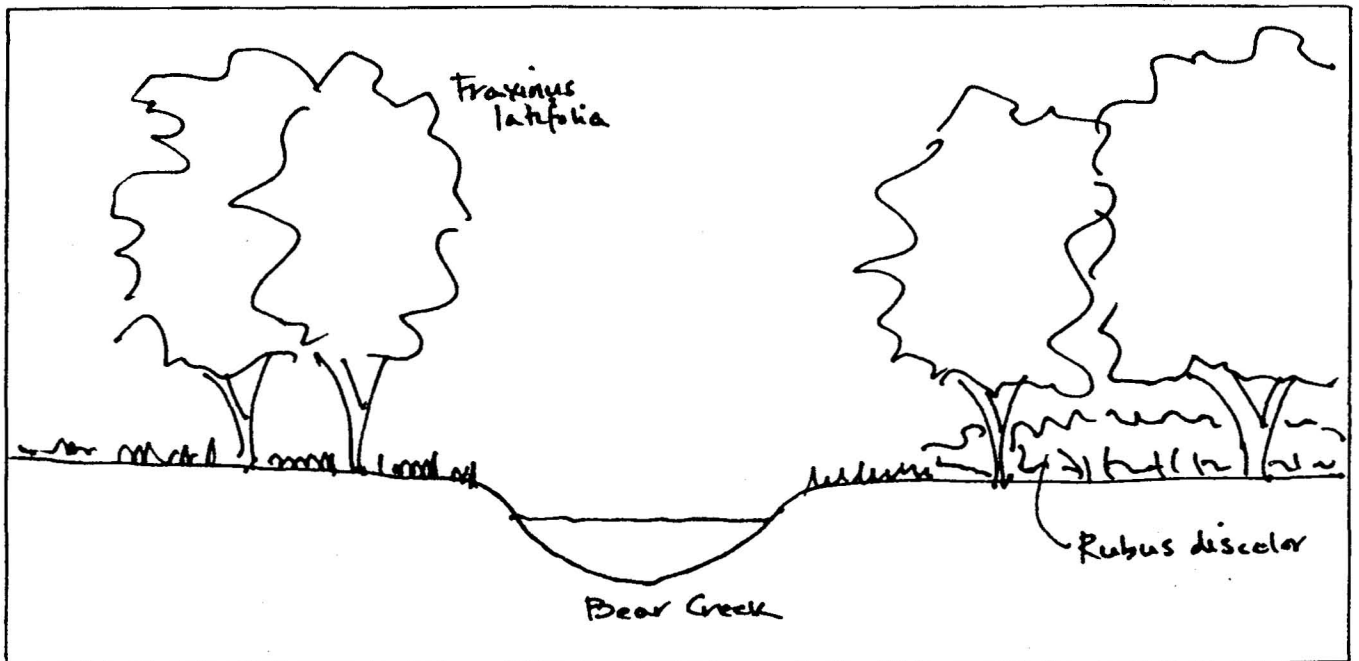
On-site vegetation

Reference site

Code

Comments: North of Lowe Road to Ona Road. Shrub layer dominated by *Rubus Discolor*, left side more encroachment by horse pasture and residential. Two stone weirs with 6 to 12 inch drops in this reach.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-6L

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	<u>3</u>
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	<u>3</u>
b. Between 10% and 25%	2 pts	
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	<u>2</u>
b. High, severe, very high	1 pt	
Total Points:		<u>14</u>

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-6L

FLOOD MANAGEMENT

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?

- a. Yes 3 pts
- b. No 1 pt

Score

3

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
- b. No or no flood prone area present 1 pt

3

8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?

- a. No 3 pts
- b. Yes 1 pts

3

Total Points:

9

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-6L

THERMAL REGULATION

		Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		
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	1 pts	
Total Points:		8

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-6L

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<u>2</u>
b. 2 layers	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<u>2</u>
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	<u>3</u>
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	<u>3</u>
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-6L

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	..... 3 pts	<u>1</u>
b. No	..... 1 pt	
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	<u>1</u>
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	<u>3</u>
b. Between 25% and 75%	..... 2 pts	
c. Greater than 75%	..... 1 pt	
Total Points:		<u>18</u>

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-6R

On-site: Off-Site:

Reach Length: 1325'

Investigators: SE/PF

Hydrologic Basin: Bear Creek

WATER RESOURCE INFORMATION

Water Resource: Stream/River:
 Lake/Pond:
 Wetland:

Width: 4-10 feet
 Width: feet
 Width: feet

LWI Wetland Code: BC-17B

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) list: Yes No

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: Wapato silty clay loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Fraxinus latifolia</i>	<i>Phalaris arundinacea</i>
<i>Populus trichocarpa</i>	<i>Epilobium watsonii</i>
<i>Symphoricarpos albus</i>	<i>Lamium purpureum</i>
<i>Rubus discolor</i>	<i>Rumex crispus</i>
<i>Pseudotsuga menziesii</i>	<i>Rubus discolor</i>
<i>Quercus garryana</i>	<i>Conium maculatum</i>
<i>Crataegus monogyna</i>	

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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-6R

Date: 5/1/01 Investigators: SE/PF

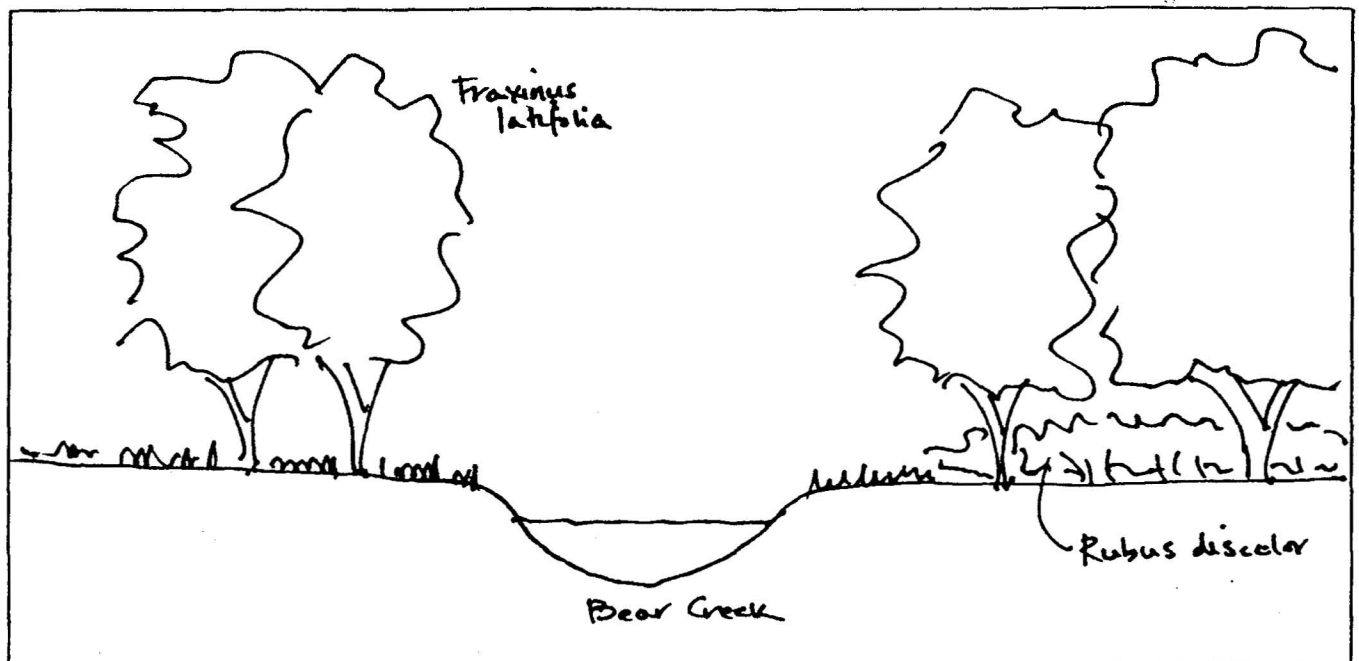
Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 75 feet
(Width measured horizontally from edge of water resource)

PTH determined by:
On-site vegetation Reference site Code

Comments: North of Lowe Road to Ona Road. Shrub layer dominated by Rubus Discolor, left side more encroachment by horse pasture and residential. Two stone weirs with 6 to 12 inch drops in this reach.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-6R

WATER QUALITY

	Score
1. What is the average slope in the riparian area? a. Less than 10:1 (10%) 3 pts b. Between 10:1 (10%) and 5:1 (20%) 2 pts c. Greater than 5:1 (20%) 1 pt	3
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 c. Bare ground 1 pt	3
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 c. Bare ground 1 pt	3
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 c. Greater than 25% 1 pt	3
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 b. High, severe, very high 1 pt	2
Total Points:	14

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-6R

FLOOD MANAGEMENT

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

- | | | | | |
|--------|-------|-------|--|---|
| a. Yes | | 3 pts | \| | 3 |
| b. No | | 1 pt | | |

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 | \| | 3 |
| b. Yes | | 1 pts | | |

Total Points: 9

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-6R

THERMAL REGULATION

	Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer? a. Yes 3 pts b. No 1 pt	<hr/> 3 <hr/>
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 c. Bare ground 1 pt	<hr/> 3 <hr/>
11. Does woody vegetation hang over the edge of the water? a. Yes 2 pts b. No 1 pt	<hr/> 2 <hr/>
Total Points:	<hr/> 8 <hr/>

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-6R

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	3
b. 2 layers	2 pts	
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	3
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
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?		
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	3
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-6R

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	..... 3 pts	<u>1</u>
b. No	..... 1 pt	
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	<u>1</u>
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	<u>3</u>
b. Between 25% and 75%	..... 2 pts	
c. Greater than 75%	..... 1 pt	
Total Points:		<u>19</u>

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

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 INFORMATION

Water Resource: Stream/River:
 Lake/Pond:
 Wetland:

Width: 8' avg. (4-10') feet
 Width: _____ feet
 Width: _____ feet

LWI Wetland Code: BC-19

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) 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: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Fraxinus latifolia</i>	<i>Solanum dulcamara</i>
<i>Pseudotsuga menziesii</i>	<i>Phalaris arundinacea</i>
<i>Acer circinatum</i>	<i>Galium aparine</i>
<i>Symphoricarpos albus</i>	<i>Rubus discolor</i>
<i>Rubus discolor</i>	
<i>Salix sp.</i>	
<i>Crataegus monogyna</i>	

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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: 5/1/01 **Investigators:** PF/SE

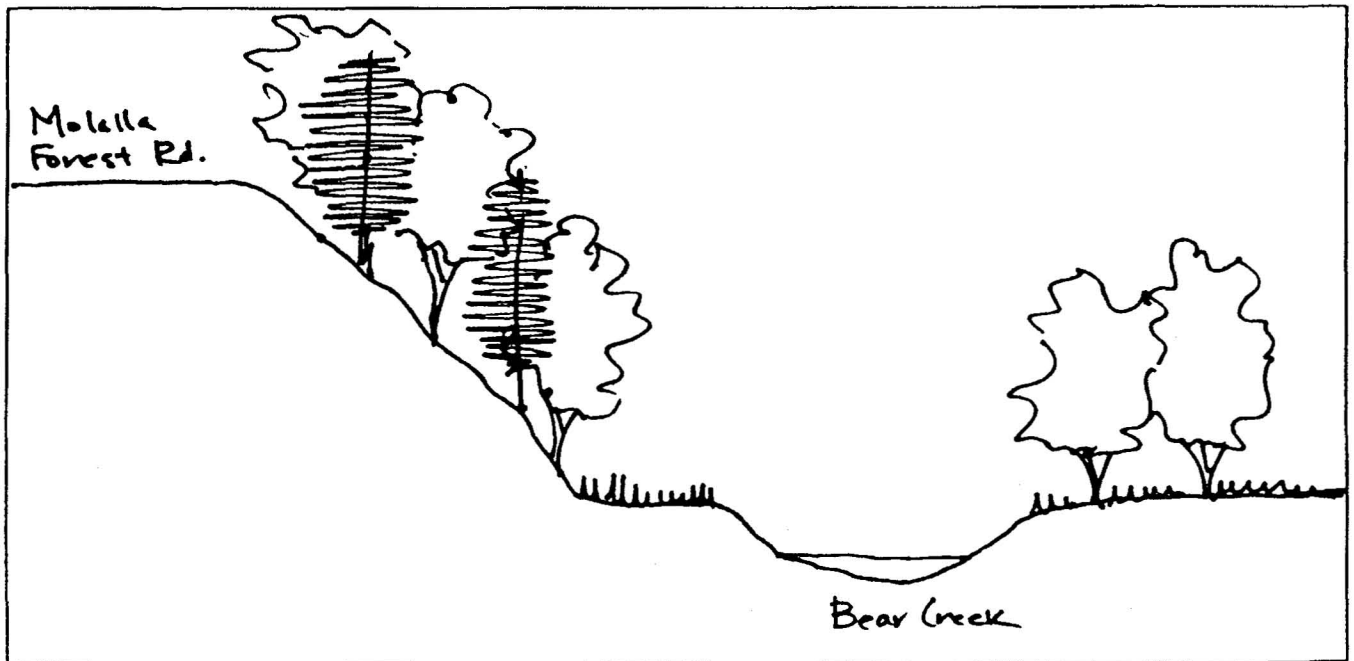
Dominant tree species: Fraxinus latifolius (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 50-75 feet
(Width measured horizontally from edge of water resource)

PTH determined by:
On-site vegetation **Reference site** **Code** _____

Comments: Characterization performed from private drive over Bear Creek, east of Molalla Forest Road. Southeast of this point riparian forest is not as wide on both sides of creek.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-7L

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	<u>2</u>
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	<u>3</u>
b. Between 10% and 25%	2 pts	
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	<u>1</u>
b. High, severe, very high	1 pts	
Total Points:		<u>12</u>

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-7L

FLOOD MANAGEMENT

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?

- a. Yes 3 pts
 b. No 1 pt

Score

3

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
 b. No or no flood prone area present 1 pt

3

8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?

- a. No 3 pts
 b. Yes 1 pt

3

Total Points:

9

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-7L

THERMAL REGULATION

9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?

- a. Yes 3 pts
- b. No 1 pt

Score

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
- c. Bare ground 1 pt

3

11. Does woody vegetation hang over the edge of the water?

- a. Yes 2 pts
- b. No 1 pts

2

Total Points:

8

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-7L

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<u>3</u>
b. 2 layers	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<u>2</u>
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	<u>3</u>
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	<u>3</u>
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-7L

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	<u>3</u>
b. No	1 pt	
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	<u>1</u>
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	<u>3</u>
b. Between 25% and 75%	2 pts	
c. Greater than 75%	1 pt	
Total Points:		<u>21</u>

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	
Date: <u>5/1/01</u>	Riparian Code: <u>R-BC-7R</u>
On-site: <input checked="" type="checkbox"/> Off-Site: <input type="checkbox"/>	Reach Length: <u>825'</u>
Investigators: <u>PF/SE</u>	Hydrologic Basin: <u>Bear Creek</u>

WATER RESOURCE INFORMATION	
Water Resource: Stream/River: <input checked="" type="checkbox"/>	Width: <u>8' avg. (4-10')</u> feet
Lake/Pond: <input type="checkbox"/>	Width: _____ feet
Wetland: <input type="checkbox"/>	Width: _____ feet
LWI Wetland Code: <u>BC-19</u>	
Water present year-round: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are salmonids present in the adjacent water resource? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the water resource listed for temperature on DEQ's 303(d) list: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Within FEMA-mapped 100-year floodplain: Yes No

Mapped soil series: Dayton silt loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: <input type="checkbox"/>	Roads: <input type="checkbox"/>
Commercial/Indus.: <input type="checkbox"/>	Undeveloped: <input checked="" type="checkbox"/>
Residential: <input checked="" type="checkbox"/>	Forestry: <input type="checkbox"/>

Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)
<i>Fraxinus latifolia</i>	<i>Solanum dulcamara</i>
<i>Pseudotsuga menziesii</i>	<i>Phalaris arundinacea</i>
<i>Acer circinatum</i>	<i>Galium aparine</i>
<i>Symphoricarpos albus</i>	<i>Rubus discolor</i>
<i>Rubus discolor</i>	
<i>Salix sp.</i>	
<i>Crataegus monogyna</i>	

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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

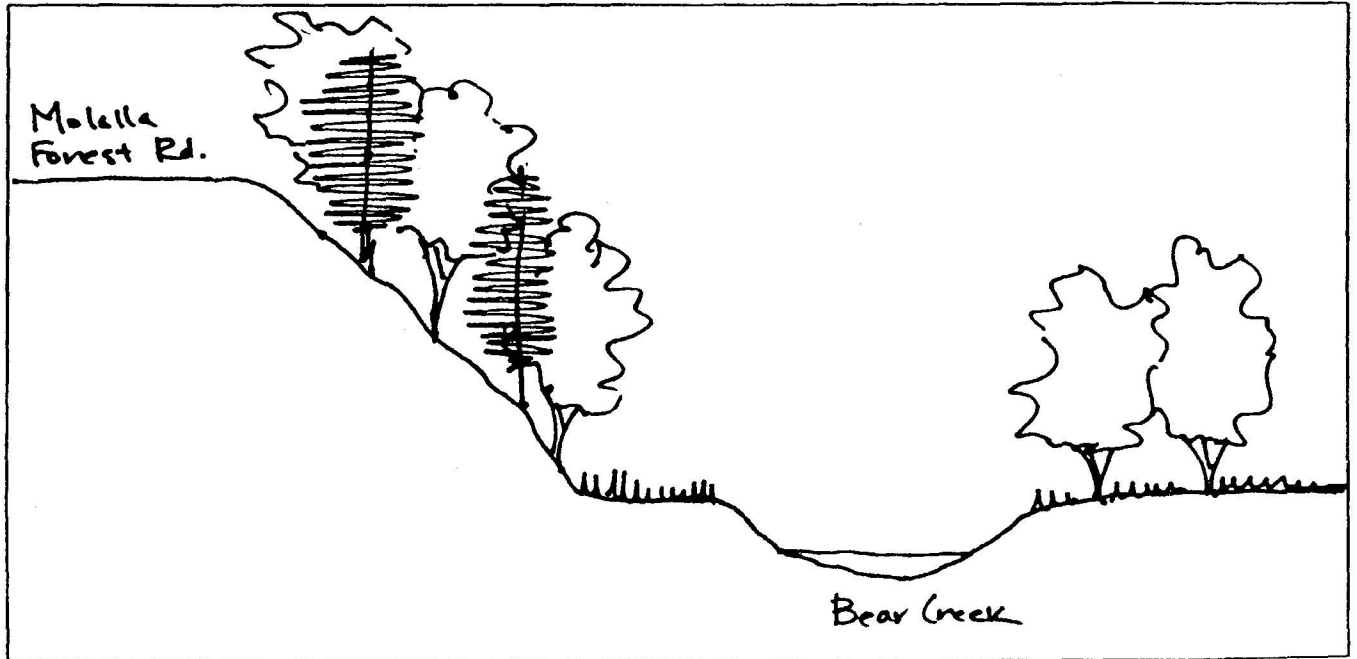
Dominant tree species: Fraxinus latifolius (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 75 feet
(Width measured horizontally from edge of water resource)

PTH determined by:
On-site vegetation Reference site Code _____

Comments: Characterization performed from private drive over Bear Creek, east of Molalla Forest Road. Southeast of this point riparian forest is not as wide on both sides of creek.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-7R

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	<u>3</u>
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	<u>3</u>
b. Between 10% and 25%	2 pts	
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	<u>1</u>
b. High, severe, very high	1 pts	
Total Points:		<u>13</u>

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-7R

FLOOD MANAGEMENT

		Score
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?		
a. Yes	3 pts	3
b. No	1 pt	
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	3
b. Yes	1 pt	
Total Points:		9

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-7R

THERMAL REGULATION

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
- b. No 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
- c. Bare ground 1 pt

3

11. Does woody vegetation hang over the edge of the water?

- a. Yes 2 pts
- b. No 1 pt

2

Total Points:

8

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-7R

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<u>3</u>
b. 2 layers	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<u>2</u>
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	<u>3</u>
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	<u>3</u>
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-7R

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	
b. No	1 pt	<u>3</u>
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	
b. No	1 pt	<u>1</u>
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	
c. Greater than 75%	1 pt	<u>3</u>
Total Points:		<u>21</u>

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

Date: 6/6/01

Riparian Code: R-BC-8L

On-site: Off-Site:

Reach Length: 3350'

Investigators: SE/PF

Hydrologic Basin: Bear Creek

WATER RESOURCE INFORMATION

Water Resource: Stream/River:
 Lake/Pond:
 Wetland:

Width: 20' feet
 Width: _____ feet
 Width: _____ feet

LWI Wetland Code: BC-22A, BC-22B

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) 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: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

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

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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-8L

Date: 6/6/01 Investigators: SE/PF

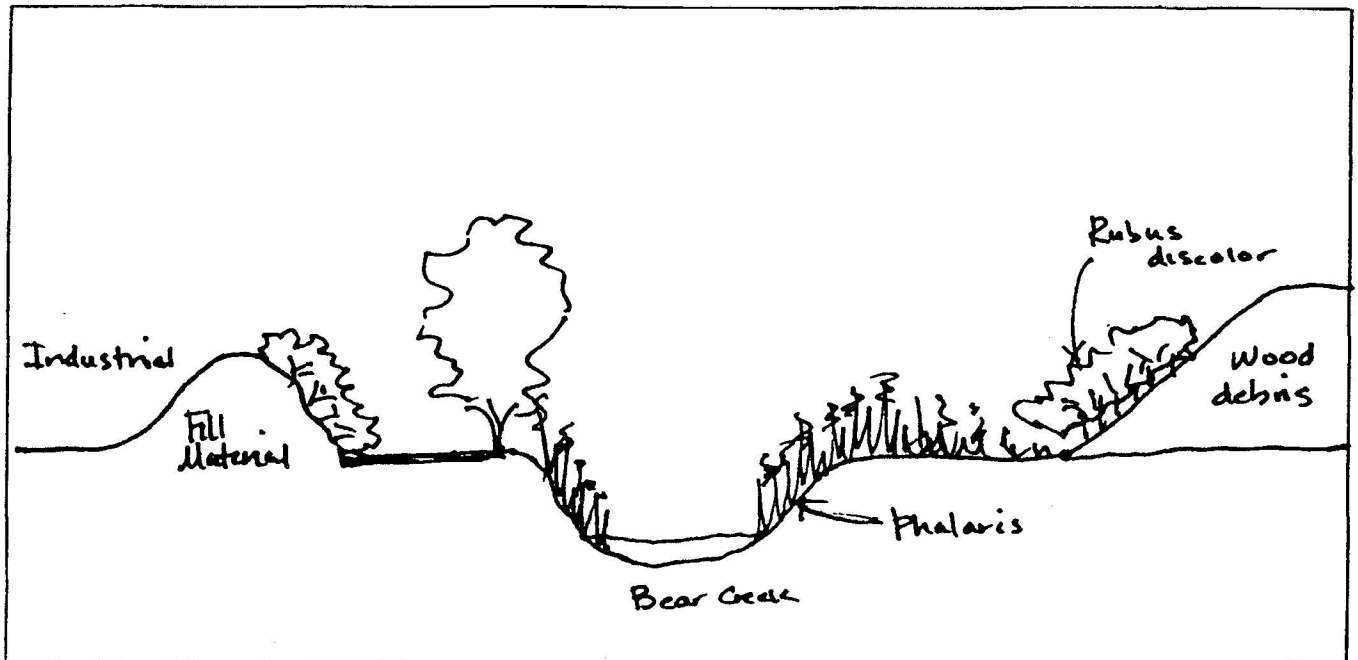
Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 25-75 feet
(Width measured horizontally from edge of water resource)

PTH determined by:
On-site vegetation Reference site Code _____

Comments: East end constricted by development in lumber yard. Debris/wood/rock piles common in what would be the riparian zone on the north side. Constricted by Molalla Forest Road to the south along the east end of the section. Many little fish in creek.
Water flow through this reach is slowed by beaver activity. Nutria and waterfowl are common.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-8L

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	3
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	3
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	3
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	3
b. Between 10% and 25%	2 pts	
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	1 pts	
Total Points:		13

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-8L

FLOOD MANAGEMENT

		Score
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?		
a. Yes	3 pts	3
b. No	1 pt	
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	1 pt	
Total Points:		7

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS: MEDIUM

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-8L

THERMAL REGULATION

		Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		
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	1 pt	
Total Points:		8

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-8L

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<hr style="width: 100%;"/> 3 <hr style="width: 100%;"/>
b. 2 layers	2 pts	
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	<hr style="width: 100%;"/> 3 <hr style="width: 100%;"/>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<hr style="width: 100%;"/> 2 <hr style="width: 100%;"/>
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	<hr style="width: 100%;"/> 3 <hr style="width: 100%;"/>
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	<hr style="width: 100%;"/> 3 <hr style="width: 100%;"/>
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-8L

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	3
b. No	1 pt	
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	3
b. Between 25% and 75%	2 pts	
c. Greater than 75%	1 pt	
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

Date: 6/6/01

Riparian Code: R-BC-8R

On-site: Off-Site:

Reach Length: 3350'

Investigators: SE/PF

Hydrologic Basin: Bear Creek

WATER RESOURCE INFORMATION

Water Resource: Stream/River:
 Lake/Pond:
 Wetland:

Width: 20' feet
 Width: _____ feet
 Width: _____ feet

LWI Wetland Code: BC-22A, BC-22B

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) 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: Roads:
 Commercial/Indus.: Undeveloped:
 Residential: Forestry:

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

1 meter = 3.2 feet

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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-8R

Date: 6/6/01 Investigators: SE/PF

Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 25-75 feet

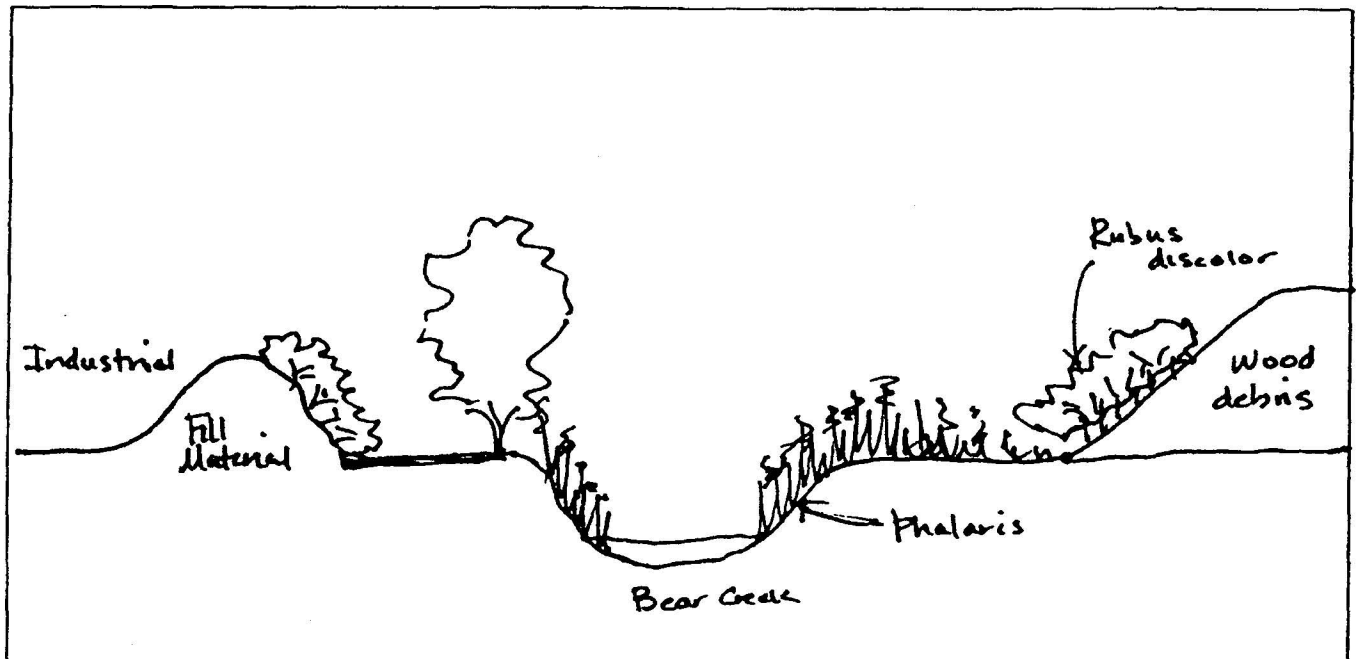
(Width measured horizontally from edge of water resource)

PTH determined by:

On-site vegetation Reference site Code _____

Comments: East end constricted by development in lumber yard. Debris/wood/rock piles
common in what would be the riparian zone on the north side. Constricted by Molalla Forest
Road to the south along the east end of the section. Many little fish in creek.
Water flow through this reach is slowed by beaver activity. Nutria and waterfowl are common.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

WATER QUALITY

RIPARIAN CODE
R-BC-8R

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	<u>1</u>
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	<u>3</u>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	<u>2</u>
b. Between 10% and 25%	2 pts	
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	<u>1</u>
b. High, severe, very high	1 pts	
Total Points:		<u>10</u>

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-8R

FLOOD MANAGEMENT

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

- a. Yes 3 pts
- b. No 1 pt

3

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
- b. No or no flood prone area present 1 pt

3

8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?

- a. No 3 pts
- b. Yes 1 pt

1

Total Points: 7

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE

R-BC-8R

THERMAL REGULATION

		Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?		
a. Yes	..... 3 pts	<u>3</u>
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	<u>3</u>
c. Bare ground	..... 1 pt	
11. Does woody vegetation hang over the edge of the water?		
a. Yes	..... 2 pts	<u>2</u>
b. No	..... 1 pt	
Total Points:		<u>8</u>

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-8R

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<hr style="width: 100%;"/> 2 <hr style="width: 100%;"/>
b. 2 layers	2 pts	
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	<hr style="width: 100%;"/> 3 <hr style="width: 100%;"/>
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
14. Does woody vegetation hang over the edge of the water?		
a. Yes	2 pts	<hr style="width: 100%;"/> 2 <hr style="width: 100%;"/>
b. No	1 pt	
15. Is large woody debris present within the riparian area?		
a. Yes	3 pts	<hr style="width: 100%;"/> 3 <hr style="width: 100%;"/>
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	<hr style="width: 100%;"/> 2 <hr style="width: 100%;"/>
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-8R

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	3 pts	<u>3</u>
b. No	1 pt	
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	<u>1</u>
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	<u>1</u>
b. Between 25% and 75%	2 pts	
c. Greater than 75%	1 pt	
Total Points:		<u>17</u>

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

FUNCTION IS: MEDIUM

Average slope in the riparian area: (Question 1)

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)

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-9

Date: 6/6/01 Investigators: PF/SE

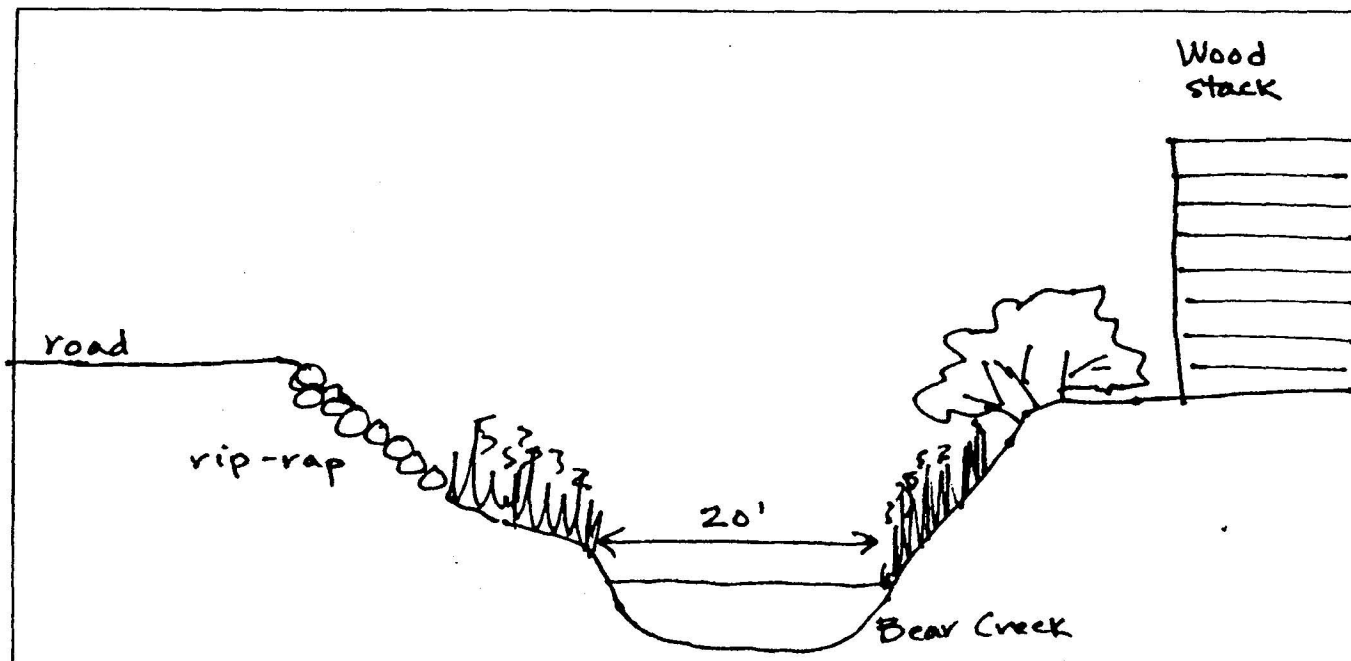
Dominant tree species: Fraxinus latifolia (see other side for list of species)

Potential tree height (PTH)/Width of riparian area : 75 / 10 feet
(Width measured horizontally from edge of water resource)

PTH determined by:
On-site vegetation Reference site Code _____

Comments: Bear Creek through Floragon Forest Products property. Severely impaired riparian area with lots of disturbance - rip-rap, fill, wood debris. Culverted extensively throughout.

Typical Cross Section:



Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-9

WATER QUALITY

		Score
1. What is the average slope in the riparian area?		
a. Less than 10:1 (10%)	3 pts	3
b. Between 10:1 (10%) and 5:1 (20%)	2 pts	
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	1
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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	1
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
c. Bare ground	1 pt	
4. What is the extent of impervious surfaces within the riparian area?		
a. Less than 10%	3 pts	1
b. Between 10% and 25%	2 pts	
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	1 pt	
Total Points:		7

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

FUNCTION IS: **LOW**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-9

FLOOD MANAGEMENT

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?

- a. Yes 3 pts
- b. No 1 pt

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
- 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
- b. Yes 1 pts

Score

1

1

1

Total Points:

3

Function: High (8-9 pts) Medium (5-7 pts) Low (3-4 pts)

FUNCTION IS:

LOW

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-9

THERMAL REGULATION

	Score
9. Does the aspect or orientation of the riparian area allow for shading of water at midday in the summer?	
a. Yes 3 pts	<u>3</u>
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	<u>1</u>
c. Bare ground 1 pt	
11. Does woody vegetation hang over the edge of the water?	
a. Yes 2 pts	<u>1</u>
b. No 1 pts	
Total Points:	<u>5</u>

Function: High (7-8 pts) Medium (5-6 pts) Low (3-4 pts)

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



City of Molalla Riparian Inventory

RIPARIAN CODE
R-BC-9

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	1
b. 2 layers	2 pts	
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	1
b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high	2 pts	
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?		
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	1
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



City of Milledgeville Riparian Inventory

RIPARIAN CODE
R-BC-9

WILDLIFE HABITAT (continued)

		Score
17. Is surface water present throughout the year?		
a. Yes	..... 3 pts	<u>3</u>
b. No	..... 1 pt	
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	<u>1</u>
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	<u>1</u>
b. Between 25% and 75%	..... 2 pts	
c. Greater than 75%	..... 1 pt	
Total Points:		<u>10</u>

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

FUNCTION IS: **LOW**