

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: North and south of Crystal Lake
Drive, east of 99 W

GPS Location: 44.5503 N 123.2630 W

Date: 6/12/2002

Map Number: S-2

On-site: **Off-Site:**

Riparian Code: S-MIL-R-1 (L)

Investigators: SE/ME

Reach Length: 1950 feet

Hydrologic Basin: MILL RACE

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 10-12 feet
Lake/Pond: Width: _____ feet
Wetland: Width: _____ feet

LWI Wetland Code: None

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: Bashaw clay

Adjacent Land Uses? (Check as many as needed)

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

Dominant tree species: POPULUS TRICHOCARPA

Comments: see next page

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 stream or water resource 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

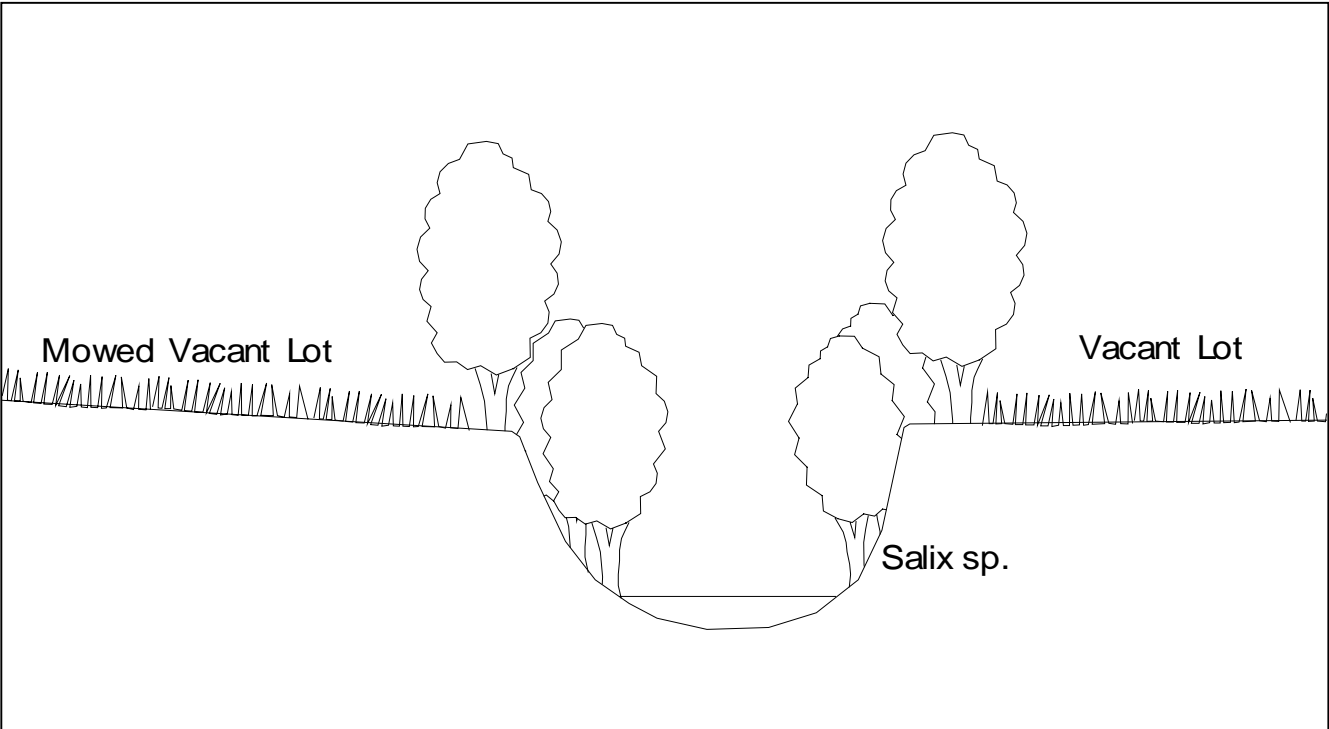


Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-1 (L)

Date: 6/12/2002 Investigators: SE/ME
Dominant tree species: *Populus trichocarpa*

Comments: This reach of the riparian area includes extensive areas that are frequently mowed up to the edge of the creek.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-1 (L)

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	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	2
b. High, severe, very high	1 pts	
Total Points:		9

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-1 (L)

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

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: 5

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-1 (L)

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

2

Total Points:

7

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

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-1 (L)

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>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>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



Corvallis Riparian Inventory

WILDLIFE HABITAT (continued)

RIPARIAN CODE
S-MIL-R-1 (L)

		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	1
b. Between 25% and 75%	2 pts	
c. Greater than 75%	1 pt	
Total Points:		15

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

FUNCTION IS: MEDIUM

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MILL RACE

Reach: S-MIL-R-1L

Size (acres): 4.28

Map: S-2

Length (feet): 1950

Dominant Cover Type: BARE

ARA Cover Type: developed

Other ARA Types Grass tall (ryegrass, meadow)

% of Total Cover Trees: 5 Shrubs 10 Herbs/Vines 30 Bare: 55

Dominant Cover Type

At Edge of Water: WOODY

Edge of Water ARA Type Mixed Woodland 30-70% closed canopy

Riparian System: LOTIC

Trees:

Type: DECIDUOUS

Dominant Species: Black cottonwood (*Populus trichocarpa*)

Secondary Species: Oregon ash (*Fraxinus latifolia*)

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

Shrubs/Sapling

Type: DECIDUOUS

Dominant Species: willow (*Salix* sp.)

Secondary Species: NONE

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

Herbaceous

Type: DECIDUOUS

Dominant Species: tall fescue (*Festuca arundinacea*)

Secondary Species: oxeye daisy (*Chrysanthemum leucanthemum*), vetch (*Vicia* sp.)

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MILL RACE

Map: S-2

Reach: S-MIL-R-1L

RTE Species

ORNHIC Plant Community: None Noted Listed Community Noted

ORNHIC or Benton Co. NSP List None Detected Potential Listed Species Detected

Riparian Condition Assessment

Land Use within: COMMERCIAL, RESIDENTIAL

Land Use adjacent: RESIDENTIAL

Infrastructure Impingement: PARTIALLY IMPINGED

In Channel Alteration: MODERATELY ALTERED

LWD Recruitment Potential: LOW

Shade Potential: HIGH

RCA Functional Designation: Nearly Fully Functional

Restoration Potential

Adjacent slopes of 15% or greater <10% 10%-50% 50%-90 >90%

Undeveloped land within 50ft of top of bank <10% 10%-50% 50%-90 >90%

Within 100-yr floodplain: <10% 10%-50% 50%-90 >90%

Low quality wetlands or hydric soils: <10% 10%-50% 50%-90 >90%

Adjacent landscape areas: <10% 10%-50% 50%-90 >90%

Opportunities: REPLACE STREAMSIDE VEGETATION

Current Efforts NONE OBSERVED

COMMENTS VACANT MOWED LOTS ADJACENT TO LEFT SIDE NORTH OF CRYSTAL LAKE WAY;
HEAVILY ALTERED DOWNSTREAM

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: North and south of Crystal Lake
Drive, east of 99 W

GPS Location: 44.5503 N 123.2630 W

Date: 6/12/2002

Map Number: S-2

On-site: **Off-Site:**

Riparian Code: S-MIL-R-1 (R)

Investigators: SE/ME

Reach Length: 1950 feet

Hydrologic Basin: MILL RACE

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 10-12 feet
Lake/Pond: Width: _____ feet
Wetland: 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: Bashaw clay

Adjacent Land Uses? (Check as many as needed)

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

Dominant tree species: POPULUS TRICHOCARPA

Comments: see next page

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 stream or water resource 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

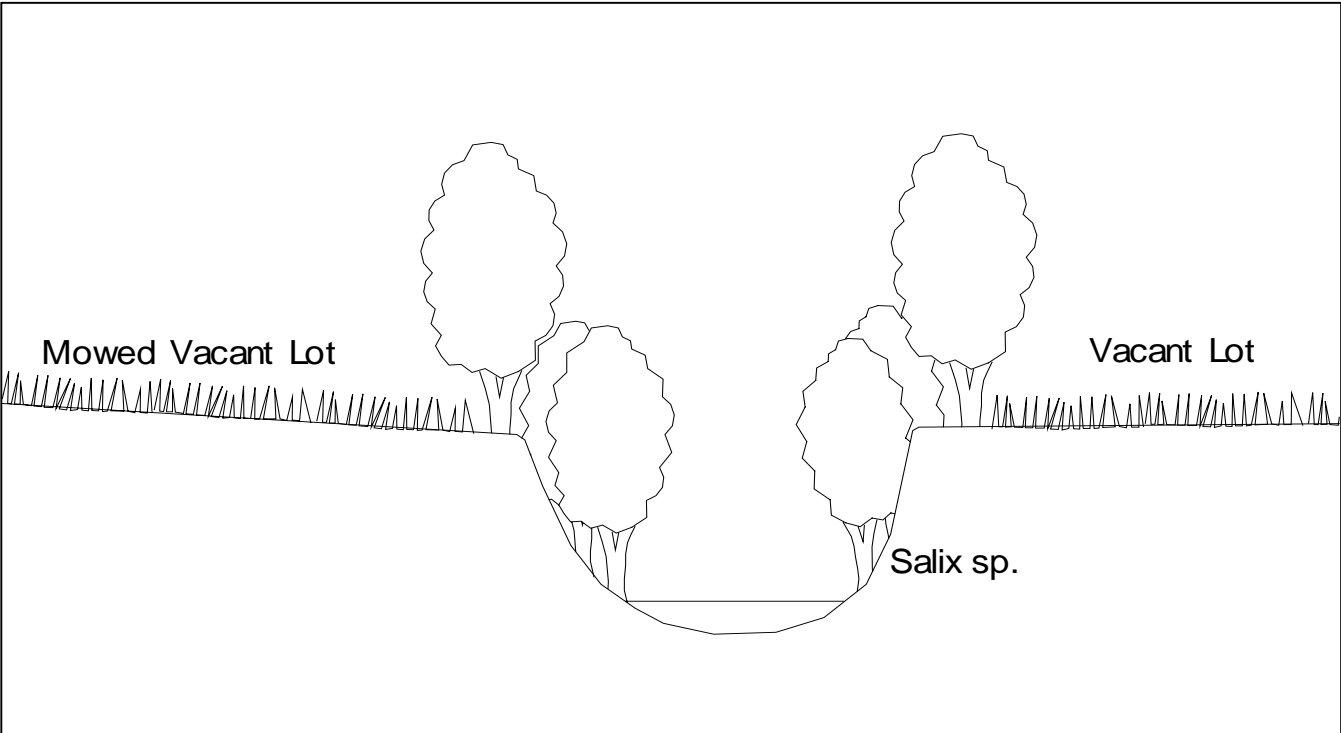


Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-1 (R)

Date: 6/12/2002 Investigators: SE/ME
Dominant tree species: *Populus trichocarpa*

Comments: This reach of the riparian area includes extensive areas that are frequently mowed up to the edge of the creek.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-1 (R)

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>1</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>10</u>

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-1 (R)

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

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: 5

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-1 (R)

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

2

Total Points:

7

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

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-1 (R)

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>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>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



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-1 (R)

WILDLIFE HABITAT (continued)

17. Is surface water present throughout the year?

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

Score

3

18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?

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

1

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

1

Total Points:

15

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

FUNCTION IS:

MEDIUM

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MILL RACE	Reach: S-MIL-R-1R	Size (acres): 4.28
Map: S-2		Length (feet): 1950
Dominant Cover Type: BARE		
ARA Cover Type: developed		
Other ARA Types Grass tall (ryegrass, meadow)		
% of Total Cover Trees: 5 Shrubs 10 Herbs/Vines 40 Bare: 45		
Dominant Cover Type		
At Edge of Water: WOODY		
Edge of Water ARA Type Mixed Woodland 30-70% closed canopy		
Riparian System: LOTIC		
Trees:		
Type: DECIDUOUS		
Dominant Species: Black cottonwood (<i>Populus trichocarpa</i>)		
Secondary Species: Oregon ash (<i>Fraxinus latifolia</i>)		
% Total Cover: <input checked="" type="radio"/> <10% <input type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input type="radio"/> >90%		
% Invasive Cover: <input checked="" type="radio"/> <10% <input type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input type="radio"/> >90%		
% Native Cover: <input type="radio"/> <10% <input type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input checked="" type="radio"/> >90%		
Shrubs/Sapling		
Type: DECIDUOUS		
Dominant Species: Black cottonwood (<i>Populus trichocarpa</i>)		
Secondary Species: willow (<i>Salix</i> sp.), Himalayan blackberry (<i>Rubus discolor</i>), Douglas hawthorn (<i>Crataegus douglasii</i>)		
% Total Cover: <input type="radio"/> <10% <input checked="" type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input type="radio"/> >90%		
% Invasive Cover: <input checked="" type="radio"/> <10% <input type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input type="radio"/> >90%		
% Native Cover: <input type="radio"/> <10% <input type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input checked="" type="radio"/> >90%		
Herbaceous		
Type: DECIDUOUS		
Dominant Species: tall fescue (<i>Festuca arundinacea</i>)		
Secondary Species: orchardgrass (<i>Dactylis glomerata</i>), common velvetgrass (<i>Holcus lanatus</i>), curly dock (<i>Rumex crispus</i>), oxeye daisy (<i>Chrysanthemum leucanthemum</i>)		
% Total Cover: <input type="radio"/> <10% <input type="radio"/> 10%-50% <input checked="" type="radio"/> 50%-90 <input type="radio"/> >90%		
% Invasive Cover: <input type="radio"/> <10% <input checked="" type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input type="radio"/> >90%		
% Native Cover: <input type="radio"/> <10% <input checked="" type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input type="radio"/> >90%		

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MILL RACE

Map: S-2

Reach: S-MIL-R-1R

RTE Species

ORNHIC Plant Community: None Noted Listed Community Noted

ORNHIC or Benton Co. NSP List None Detected Potential Listed Species Detected

Riparian Condition Assessment

Land Use within: COMMERCIAL

Land Use adjacent: COMMERCIAL

Infrastructure Impingement: FULLY IMPINGED

In Channel Alteration: MODERATELY ALTERED

LWD Recruitment Potential: LOW

Shade Potential: HIGH

RCA Functional Designation: Partially Functional

Restoration Potential

Adjacent slopes of 15% or greater <10% 10%-50% 50%-90 >90%

Undeveloped land within 50ft of top of bank <10% 10%-50% 50%-90 >90%

Within 100-yr floodplain: <10% 10%-50% 50%-90 >90%

Low quality wetlands or hydric soils: <10% 10%-50% 50%-90 >90%

Adjacent landscape areas: <10% 10%-50% 50%-90 >90%

Opportunities: IMPROVE STREAMSIDE VEGETATION

Current Efforts NONE OBSERVED

COMMENTS SALIX COVER ALONG STREAM BANKS PROVIDES NEARLY TOTAL SHADING OF STREAM

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: West of 99 W,
near Bridgeway Avenue

GPS Location: 44.5473 N 123.2668 W

Date: 6/12/2002

Map Number: S-3

On-site: Off-Site:

Riparian Code: S-MIL-R-2 (L)

Investigators: ME/SE

Reach Length: 1350 feet

Hydrologic Basin: MILL RACE

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 22 feet
Lake/Pond: Width: _____ feet
Wetland: 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: Bashaw clay

Adjacent Land Uses? (Check as many as needed)

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

Dominant tree species: POPULUS TRICHOCARPA

Comments: see next page

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 stream or water resource 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

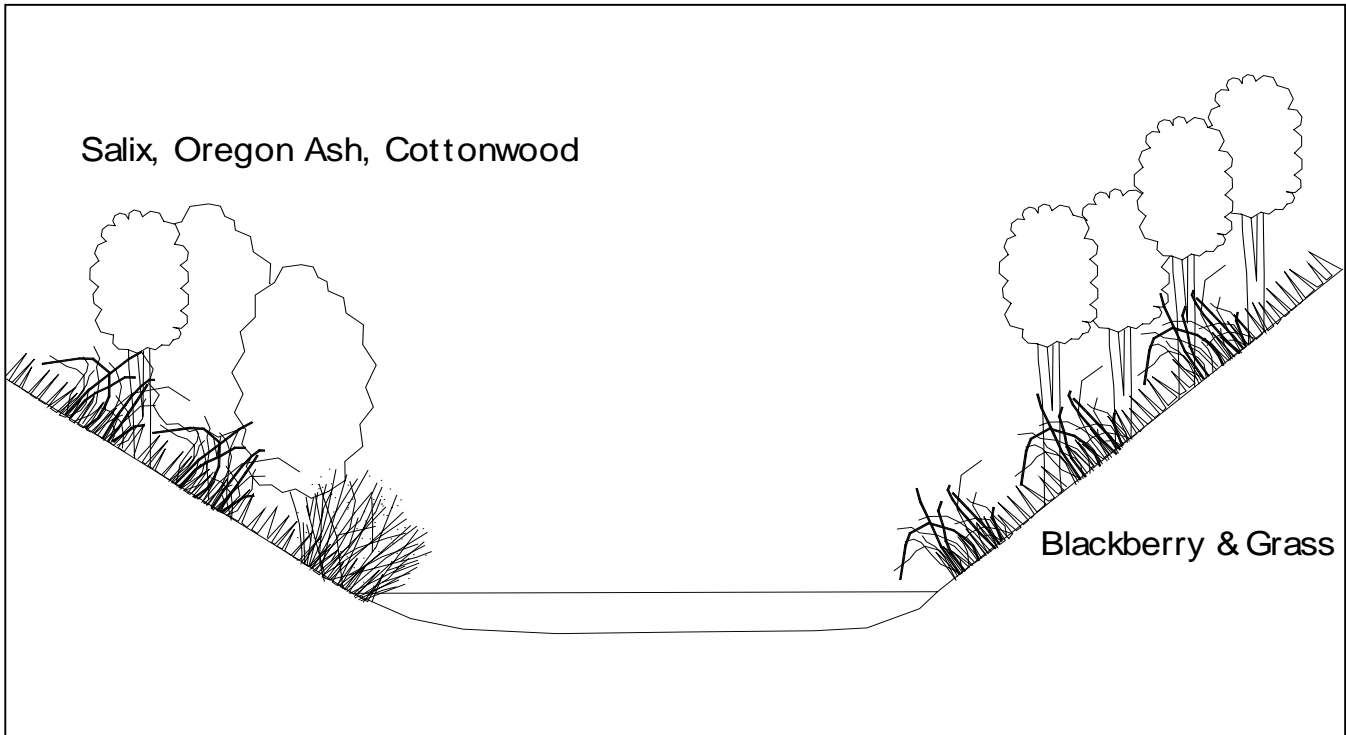


Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-2 (L)

Date: 6/12/2002 **Investigators:** ME/SE
Dominant tree species: *Populus trichocarpa*

Comments: The banks of the riparian area are steep and heavily vegetated. Extensive developme
on south (right) side and east end of north (left) side.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-2 (L)

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	2
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 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



Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-2 (L)

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

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



Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-2 (L)

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 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



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-2 (L)

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



Corvallis Riparian Inventory

WILDLIFE HABITAT (continued)

RIPARIAN CODE

S-MIL-R-2 (L)

17. Is surface water present throughout the year?

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

Score

3

18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?

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

1

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

3

Total Points:

21

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

FUNCTION IS:

HIGH

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MILL RACE

Reach: S-MIL-R-2L

Size (acres): 6.79

Map: S-3

Length (feet): 1350

Dominant Cover Type: WOODY

ARA Cover Type: Hardwood Forest >70% closed canopy

Other ARA Types NONE

% of Total Cover Trees: 35 **Shrubs** 15 **Herbs/Vines** 25 **Bare:** 25

Dominant Cover Type

At Edge of Water: WOODY

Edge of Water ARA Type Hardwood Forest >70% closed canopy

Riparian System: LOTIC

Trees:

Type: DECIDUOUS

Dominant Species: Black cottonwood (*Populus trichocarpa*)

Secondary Species: Oregon ash (*Fraxinus latifolia*)

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

Shrubs/Sapling

Type: DECIDUOUS

Dominant Species: willow (*Salix* sp.)

Secondary Species: English hawthorn (*Crataegus monogyna*), Himalayan blackberry (*Rubus discolor*)

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

Herbaceous

Type: DECIDUOUS

Dominant Species: orchardgrass (*Dactylis glomerata*)

Secondary Species: sword fern (*Polystichum munitum*), ryegrass (*Lolium* sp.), angelica (*Angelica* sp.)

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MILL RACE

Map: S-3

Reach: S-MIL-R-2L

RTE Species

ORNHIC Plant Community: None Noted Listed Community Noted

ORNHIC or Benton Co. NSP List None Detected Potential Listed Species Detected

Riparian Condition Assessment

Land Use within: COMMERCIAL, UNDEVELOPED

Land Use adjacent: COMMERCIAL, UNDEVELOPED

Infrastructure Impingement: NON-IMPINGED

In Channel Alteration: MODERATELY ALTERED

LWD Recruitment Potential: LOW

Shade Potential: HIGH

RCA Functional Designation: Nearly Fully Functional

Restoration Potential

Adjacent slopes of 15% or greater <10% 10%-50% 50%-90 >90%

Undeveloped land within 50ft of top of bank <10% 10%-50% 50%-90 >90%

Within 100-yr floodplain: <10% 10%-50% 50%-90 >90%

Low quality wetlands or hydric soils: <10% 10%-50% 50%-90 >90%

Adjacent landscape areas: <10% 10%-50% 50%-90 >90%

Opportunities: BLACKBERRY REMOVAL

Current Efforts NONE OBSERVED

COMMENTS

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION	
Location of data point: West of 99 W, near Bridgeway Avenue	GPS Location: 44.5473 N 123.2668 W
Date: 6/12/2002	Map Number: S-3
On-site: <input checked="" type="checkbox"/> Off-Site: <input type="checkbox"/>	Riparian Code: S-MIL-R-2 (R)
Investigators: ME/SE	Reach Length: 1350 feet
	Hydrologic Basin: MILL RACE

WATER RESOURCE INFORMATION	
Water Resource: Stream/River: <input checked="" type="checkbox"/>	Width: 22 feet
Lake/Pond: <input type="checkbox"/>	Width: _____ feet
Wetland: <input type="checkbox"/>	Width: _____ feet
LWI Wetland Code: _____	
Water present year-round: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Are salmonids present in the adjacent water resource? Yes <input checked="" type="checkbox"/> No <input 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: Bashaw clay

Adjacent Land Uses? (Check as many as needed)

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

Dominant tree species: POPULUS TRICHOCARPA

Comments: see next page

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 stream or water resource 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

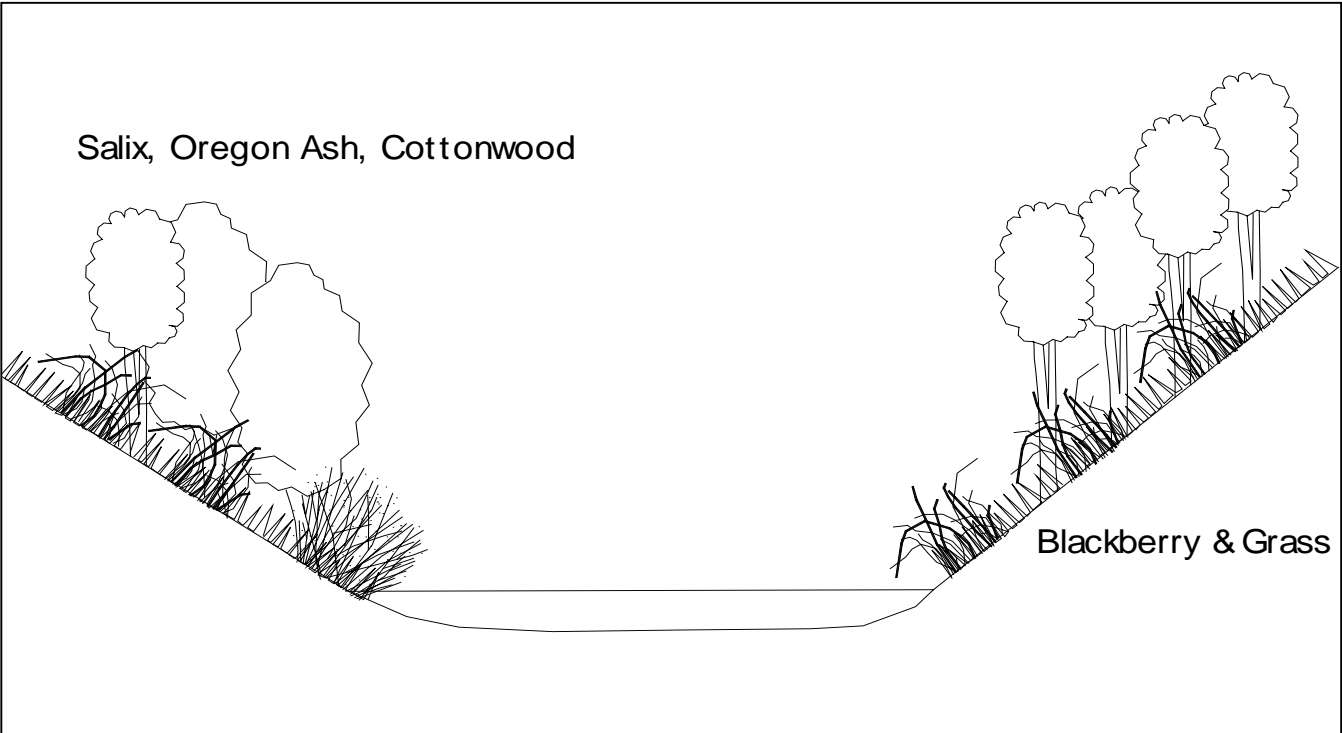


Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-2 (R)

Date: 6/12/2002 **Investigators:** ME/SE
Dominant tree species: *Populus trichocarpa*

Comments: The banks of the riparian area are steep and heavily vegetated. Extensive developme
on south (right) side and east end of north (left) side.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-2 (R)

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	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	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	2
b. High, severe, very high	1 pts	
Total Points:		10

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-2 (R)

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



Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-2 (R)

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

1

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

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

2

Total Points:

6

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

FUNCTION IS:

MEDIUM

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-2 (R)

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>1</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>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



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-2 (R)

WILDLIFE HABITAT (continued)

17. Is surface water present throughout the year?

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

Score

3

18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?

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

1

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

1

Total Points:

16

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

FUNCTION IS:

MEDIUM

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MILL RACE

Reach: S-MIL-R-2R

Size (acres): 6.79

Map: S-3

Length (feet): 1350

Dominant Cover Type: BARE

ARA Cover Type: developed

Other ARA Types Grass short (lawn, pasture)

% of Total Cover Trees: 10 **Shrubs** 10 **Herbs/Vines** 5 **Bare:** 75

Dominant Cover Type

At Edge of Water: WOODY

Edge of Water ARA Type Hardwood Forest >70% closed canopy

Riparian System: LOTIC

Trees:

Type: DECIDUOUS

Dominant Species: Black cottonwood (*Populus trichocarpa*)

Secondary Species: Oregon ash (*Fraxinus latifolia*)

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

Shrubs/Sapling

Type: DECIDUOUS

Dominant Species: willow (*Salix* sp.)

Secondary Species: English hawthorn (*Crataegus monogyna*), Himalayan blackberry (*Rubus discolor*)

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

Herbaceous

Type: DECIDUOUS

Dominant Species: orchardgrass (*Dactylis glomerata*)

Secondary Species: sword fern (*Polystichum munitum*), ryegrass (*Lolium* sp.), angelica (*Angelica* sp.)

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MILL RACE

Map: S-3

Reach: S-MIL-R-2R

RTE Species

ORNHIC Plant Community: None Noted Listed Community Noted

ORNHIC or Benton Co. NSP List None Detected Potential Listed Species Detected

Riparian Condition Assessment

Land Use within: COMMERCIAL

Land Use adjacent: COMMERCIAL, RESIDENTIAL

Infrastructure Impingement: PARTIALLY IMPINGED

In Channel Alteration: MODERATELY ALTERED

LWD Recruitment Potential: LOW

Shade Potential: HIGH

RCA Functional Designation: Nearly Fully Functional

Restoration Potential

Adjacent slopes of 15% or greater <10% 10%-50% 50%-90 >90%

Undeveloped land within 50ft of top of bank <10% 10%-50% 50%-90 >90%

Within 100-yr floodplain: <10% 10%-50% 50%-90 >90%

Low quality wetlands or hydric soils: <10% 10%-50% 50%-90 >90%

Adjacent landscape areas: <10% 10%-50% 50%-90 >90%

Opportunities: BLACKBERRY REMOVAL

Current Efforts NONE OBSERVED

COMMENTS

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: Allen Street, North of Marysville
Golf Course

GPS Location: 44.5459 N 123.2711 W

Date: 6/12/2002

Map Number: S-3

On-site: **Off-Site:**

Riparian Code: S-MIL-R-3

Investigators: ME/SE

Reach Length: 1425 feet

Hydrologic Basin: MILL CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 8-12 feet
Lake/Pond: Width: _____ feet
Wetland: 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: Bashaw clay and Dayton silt loam

Adjacent Land Uses? (Check as many as needed)

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

Dominant tree species: Acer macrophyllum

Comments: see next page

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 stream or water resource 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

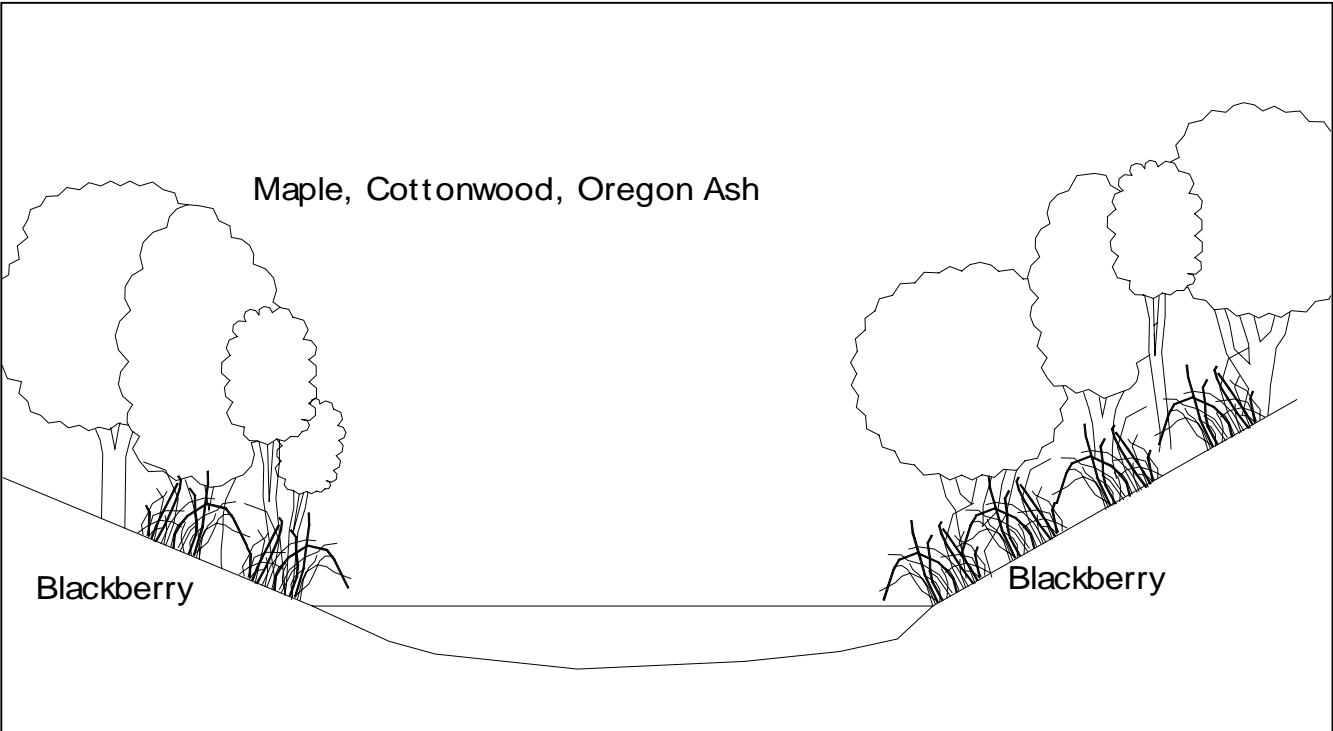


Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-3

Date: 6/12/2002 Investigators: ME/SE
Dominant tree species: *Populus trichocarpa*

Comments: The riparian area immediately adjacent to the creek are relatively undisturbed with a dominance of native vegetation.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-3

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	2
b. High, severe, very high	1 pts	
Total Points:		14

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
S-MIL-R-3

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

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S-MIL-R-3

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	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**

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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



Corvallis Riparian Inventory

RIPARIAN CODE

S-MIL-R-3

WILDLIFE HABITAT (continued)

17. Is surface water present throughout the year?

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

Score

3

18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?

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

1

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

3

Total Points:

21

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

FUNCTION IS:

HIGH

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MILL RACE

Reach: S-MIL-R-3

Size (acres): 10.76

Map: S-3

Length (feet): 1425

Dominant Cover Type: WOODY

ARA Cover Type: Hardwood Forest >70% closed canopy

Other ARA Types Mixed Woodland 30-70% closed canopy, Open (<30% canopy) non-oak woods, Devel

% of Total Cover Trees: 70 **Shrubs** 20 **Herbs/Vines** 10 **Bare:** 0

Dominant Cover Type

At Edge of Water: WOODY

Edge of Water ARA Type Hardwood Forest >70% closed canopy

Riparian System: LOTIC

Trees:

Type: DECIDUOUS

Dominant Species: bigleaf maple (*Acer macrophyllum*)

Secondary Species: English hawthorn (*Crataegus monogyna*), Douglas hawthorn (*Crataegus douglasii*), beaked hazelnut (*Corylus cornuta*), Oregon ash (*Fraxinus latifolia*), Black cottonwood (*Populus trichocarpa*)

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

Shrubs/Sapling

Type: DECIDUOUS

Dominant Species: Himalayan blackberry (*Rubus discolor*)

Secondary Species: rose (*Rosa* sp.)

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

Herbaceous

Type: DECIDUOUS

Dominant Species: tall fescue (*Festuca arundinacea*)

Secondary Species: NONE

% Total Cover: <10% 10%-50% 50%-90 >90%

% Invasive Cover: <10% 10%-50% 50%-90 >90%

% Native Cover: <10% 10%-50% 50%-90 >90%

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MILL RACE

Map: S-3

Reach: S-MIL-R-3

RTE Species

ORNHIC Plant Community: None Noted Listed Community Noted

ORNHIC or Benton Co. NSP List None Detected Potential Listed Species Detected

Riparian Condition Assessment

Land Use within: UNDEVELOPED, AGRICULTURAL

Land Use adjacent: RESIDENTIAL

Infrastructure Impingement: NON-IMPINGED

In Channel Alteration: MODERATELY ALTERED

LWD Recruitment Potential: MODERATE

Shade Potential: HIGH

RCA Functional Designation: Fully Functional

Restoration Potential

Adjacent slopes of 15% or greater <10% 10%-50% 50%-90 >90%

Undeveloped land within 50ft of top of bank <10% 10%-50% 50%-90 >90%

Within 100-yr floodplain: <10% 10%-50% 50%-90 >90%

Low quality wetlands or hydric soils: <10% 10%-50% 50%-90 >90%

Adjacent landscape areas: <10% 10%-50% 50%-90 >90%

Opportunities: REMOVAL OF BLACKBERRY AND TRASH REMOVAL FROM STREAM

Current Efforts NONE OBSERVED

COMMENTS ADJACENT TO GOLF COURSE WEST OF ALLEN. EAST OF ALLEN ST. SLOUGH IS FULL OF GARBAGE, ADJACENT TO RESIDENTIAL AREA. RIPARIAN AREA IS NARROWER SOUTH OF CREEK BECAUSE OF ADJACENT DEVELOPMENT