

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: Mulkey Creek, portion west of the
Bald Hill park trail

GPS Location: 44.5742 N 123.3313 W

Date: 9/16/2002

Map Number: W-5

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

Riparian Code: WC-OAK-R-27

Investigators: CR/PF

Reach Length: 2175 feet

Hydrologic Basin: OAK CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: **Width:** 3 feet
Lake/Pond: **Width:** _____ feet
Wetland: **Width:** 300 feet

LWI Wetland Code: WC-OAK-W-31

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: QUERCUS GARRYANA

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

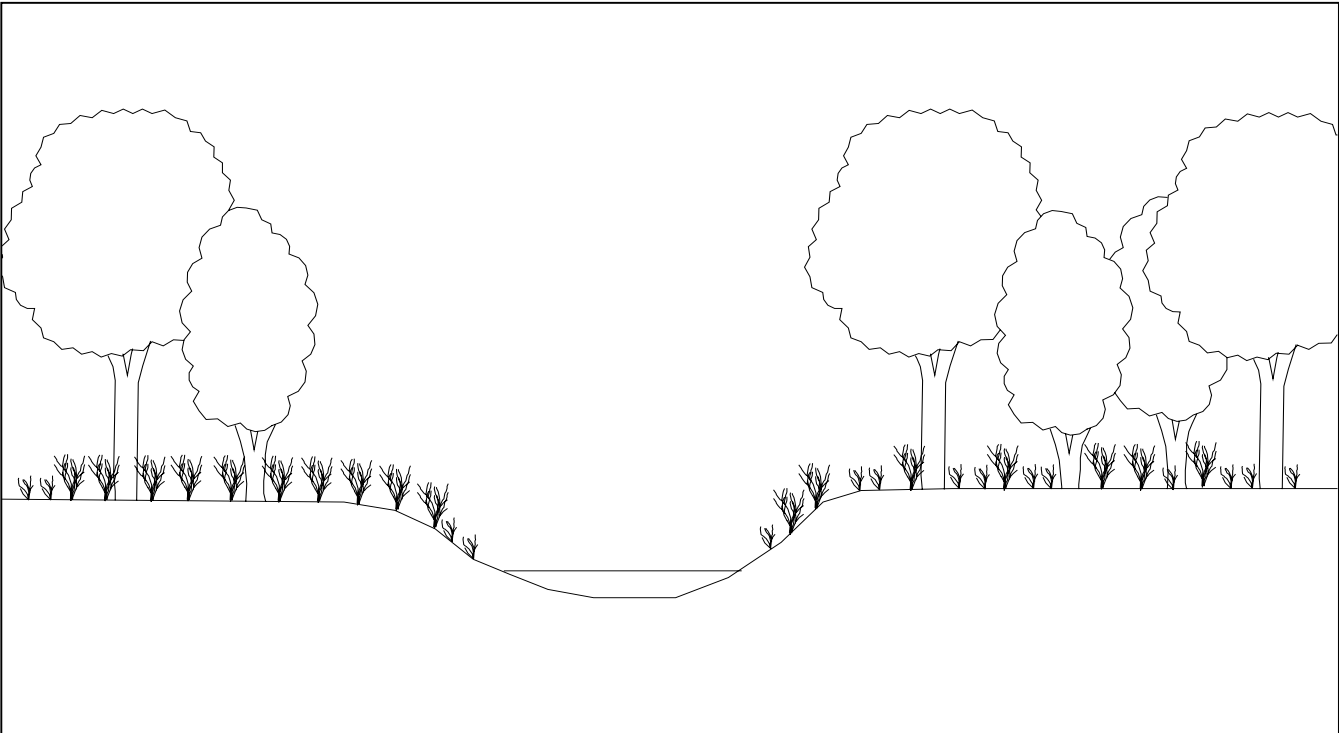


Corvallis Riparian Inventory

RIPARIAN CODE
WC-OAK-R-27

Date: 9/16/2002 **Investigators:** CR/PF
Dominant tree species: QUERCUS GARRYANA

Comments: Riparian area for Mulkey Creek located on the west side of the Bald Hill park trail. The creek is approximately 3 feet wide and the riparian area includes an upland forest dominated by native vegetation.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-27

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
WC-OAK-R-27

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
WC-OAK-R-27

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

WC-OAK-R-27

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

RIPARIAN CODE

WC-OAK-R-27

WILDLIFE HABITAT (continued)

17. Is surface water present throughout the year?

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

Score

1

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

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

3

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: OAK	Reach: WC-OAK-R-27	Size (acres): 16.32
Map: W-5		Length (feet): 2175
Dominant Cover Type: WOODY		
ARA Cover Type: Hardwood Forest >70% closed canopy		
Other ARA Types: Emergent/herb wetland or pond (seasonal water)		
% of Total Cover: Trees: 60 Shrubs: 30 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: Oregon white oak (<i>Quercus garryana</i>)		
Secondary Species: Oregon ash (<i>Fraxinus latifolia</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 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: Common snowberry (<i>Symphoricarpos albus</i>)		
Secondary Species: English holly (<i>Ilex aquifolium</i>), Himalayan blackberry (<i>Rubus discolor</i>), English hawthorn (<i>Crataegus monogyna</i>), Indian plum (<i>Oemleria cerasiformis</i>), poison oak (<i>Rhus diversiloba</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 type="radio"/> <10% <input type="radio"/> 10%-50% <input checked="" 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%		
Herbaceous		
Type: DECIDUOUS		
Dominant Species: brome (<i>Bromus</i> sp.)		
Secondary Species: sword fern (<i>Polystichum munitum</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 checked="" type="radio"/> 50%-90 <input type="radio"/> >90%		

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: OAK

Map: W-5

Reach: WC-OAK-R-27

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

Land Use adjacent: AGRICULTURAL

Infrastructure Impingement: NON-IMPINGED

In Channel Alteration: UNALTERED

LWD Recruitment Potential: LOW

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: FEW, GOOD COVER ALREADY

Current Efforts NONE

COMMENTS CHANNEL 3 FT WIDE 2 FT DEEP INTERMITTENT

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: Mulkey Creek, portion east of the
Bald Hill park trail

GPS Location: 44.5729 N 123.3249 W

Date: 9/16/2002

Map Number: W-5

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

Riparian Code: WC-OAK-R-28

Investigators: CR/JVS

Reach Length: 450 feet

Hydrologic Basin: OAK CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: **Width:** 20 feet
Lake/Pond: **Width:** _____ feet
Wetland: **Width:** 300-600 feet

LWI Wetland Code: WC-OAK-W-29

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: FRAXINUS LATIFOLIA

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

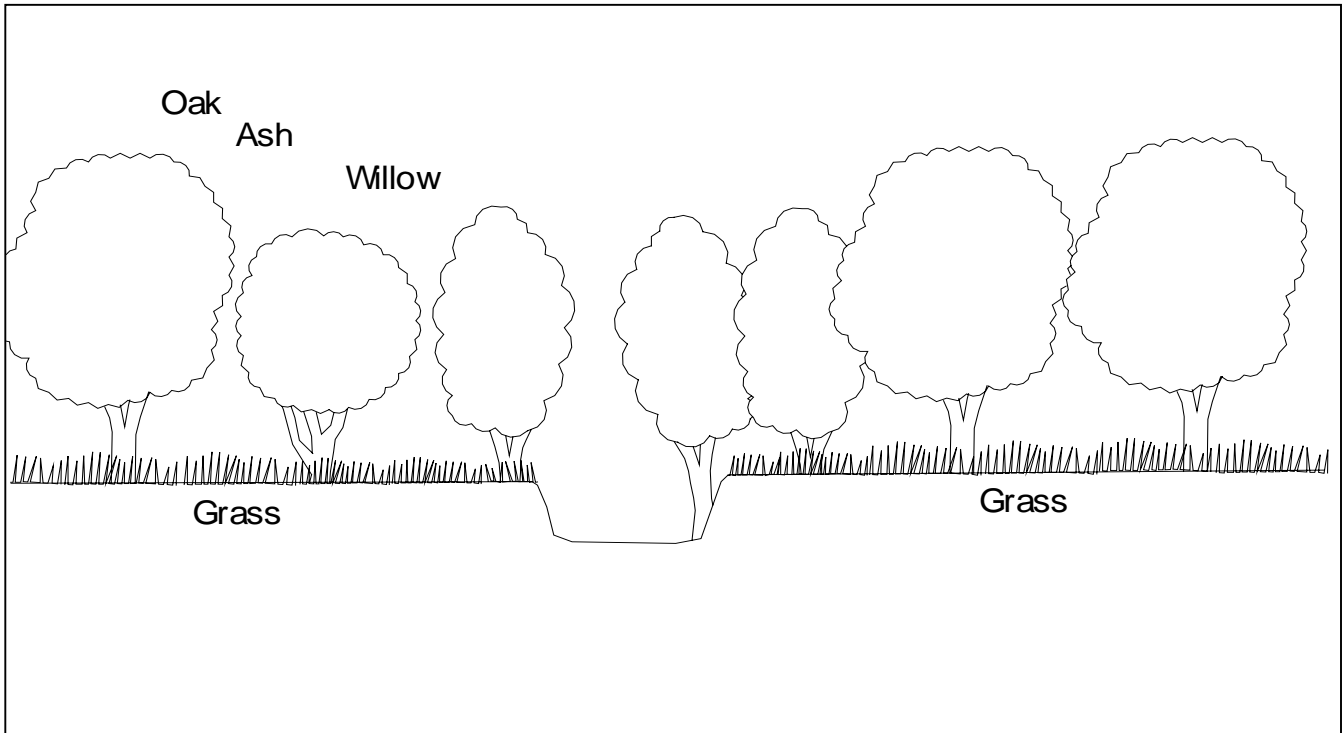


Corvallis Riparian Inventory

RIPARIAN CODE
WC-OAK-R-28

Date: 9/16/2002 Investigators: CR/JVS
Dominant tree species: FRAXINUS LATIFOLIA

Comments: Riparian area for Mulkey Creek located on the east side of the Bald Hill park trail. This portion of the riparian area is downstream of an oak woodland. The channel widens out and flows through a field dominated by Deschampsia bordered by Fraxinus and Salix.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-28

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
WC-OAK-R-28

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
WC-OAK-R-28

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

WC-OAK-R-28

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>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



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-28

WILDLIFE HABITAT (continued)

17. Is surface water present throughout the year?

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

Score

1

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

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

3

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:

19

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

FUNCTION IS:

HIGH

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: OAK

Reach: WC-OAK-R-28

Size (acres): 1.41

Map: W-5

Length (feet): 450

Dominant Cover Type: WOODY

ARA Cover Type: Hardwood Forest >70% closed canopy

Other ARA Types Grass short (lawn, pasture), Mixed Woodland 30-70% closed canopy

% of Total Cover Trees: 40 **Shrubs** 30 **Herbs/Vines** 30 **Bare:** 0

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: Oregon ash (*Fraxinus latifolia*)

Secondary Species: Red alder (*Alnus rubra*), Pacific willow (*Salix lasiandra*)

% 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: Pacific willow (*Salix lasiandra*)

Secondary Species: Scouler willow (*Salix scouleriana*), Common snowberry (*Symphoricarpos albus*), Indian plum (*Oemleria cerasiformis*)

% 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 mannagrass (*Glyceria elata*)

Secondary Species: soft rush (*Juncus effusus*), tufted hairgrass (*Deschampsia cespitosa*), mountain tarweed (*Madia glomerata*), Himalayan blackberry (*Rubus discolor*), tall fescue (*Festuca arundinacea*)

% 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: OAK

Map: W-5

Reach: WC-OAK-R-28

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: UNDEVELOPED, AGRICULTURAL

Infrastructure Impingement: PARTIALLY IMPINGED

In Channel Alteration: MODERATELY ALTERED

LWD Recruitment Potential: MODERATE

Shade Potential: MODERATE

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: RIPARIAN PLANTINGS

Current Efforts NONE

COMMENTS DATA FOCUSED ON GATHERING OFF-SITE INFORMATION AS WELL AS VISIBLE WITH BALD HILL AREA. WIDER CHANNEL WITH LOW FLOWS IN FIELD THAN IN FORESTED AREA TO WEST OF PATH. (3FT DIAMETER CULVERT BENEATH PATH)

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: North of OSU
Equestrian center

GPS Location: 44.5763 N 123.3083 W

Date: 6/25/2002

Map Number: W-6

On-site: Off-Site:

Riparian Code: WC-OAK-R-29 (L)

Investigators: PF/CR

Reach Length: 1875 feet

Hydrologic Basin: OAK CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 6-8 feet
Lake/Pond: Width: _____ feet
Wetland: Width: _____ feet

LWI Wetland Code: WC-OAK-M90-17

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: Quercus garryana

Comments: see other 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

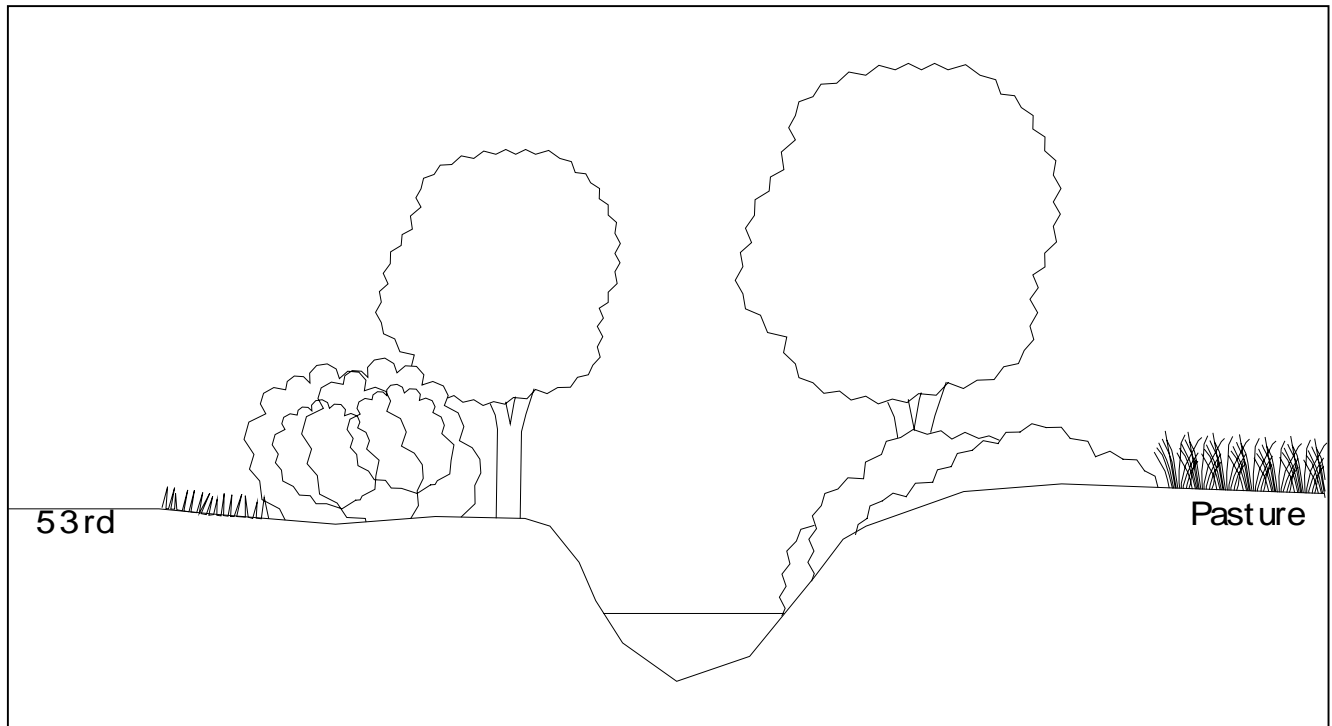


Corvallis Riparian Inventory

RIPARIAN CODE
WC-OAK-R-29 (L)

Date: 6/25/2002 Investigators: PF/CR
Dominant tree species: QUERCUS GARRYANA

Comments: Mainstem of Oak Creek parallel to 53rd. Riparian area confined by road.
Channel approximately 6-feet wide.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-29 (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

WC-OAK-R-29 (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

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



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-29 (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

WC-OAK-R-29 (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>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



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-29 (L)

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>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

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: OAK

Reach: WC-OAK-R-29L

Size (acres): 5.83

Map: W-6

Length (feet): 1875

Dominant Cover Type: WOODY

ARA Cover Type: Oak savanna (<30% canopy)

Other ARA Types Grass short (lawn, pasture)

% of Total Cover **Trees:** 40 **Shrubs** 40 **Herbs/Vines** 20 **Bare:** 0

Dominant Cover Type

At Edge of Water: WOODY

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

Riparian System: LOTIC

Trees:

Type: DECIDUOUS

Dominant Species: Oregon white oak (*Quercus garryana*)

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: English hawthorn (*Crataegus monogyna*)

Secondary Species: Common snowberry (*Symphoricarpos albus*), poison oak (*Rhus diversiloba*), 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: MIXED

Dominant Species: meadow foxtail (*Alopecurus pratensis*)

Secondary Species: Canada thistle (*Cirsium arvense*), Queen Anne's lace (*Daucus carota*), St. John's wort (*Hypericum perforatum*), oxeye daisy (*Chrysanthemum leucanthemum*), Robert's geranium (*Geranium robertianum*)

% 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: OAK

Map: W-6

Reach: WC-OAK-R-29L

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: AGRICULTURAL

Land Use adjacent: AGRICULTURAL

Infrastructure Impingement: FULLY IMPINGED

In Channel Alteration: MODERATELY ALTERED

LWD Recruitment Potential: MODERATE

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: NOT MUCH DUE TO CLOSE PROXIMITY TO WALNUT BLVD

Current Efforts NONE OBSERVED

COMMENTS

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: North of OSU Equestrian
Center

GPS Location: 44.5763 N 123.3083 W

Date: 6/25/2002

Map Number: W-6

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

Riparian Code: WC-OAK-R-29 (R)

Investigators: PF/CR

Reach Length: 1875 feet

Hydrologic Basin: OAK CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: **Width:** 6-8 feet
Lake/Pond: **Width:** _____ feet
Wetland: **Width:** 75 feet

LWI Wetland Code: WC-OAK-M90-17

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: FRAXINUS LATIFOLIA

Comments: see other 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

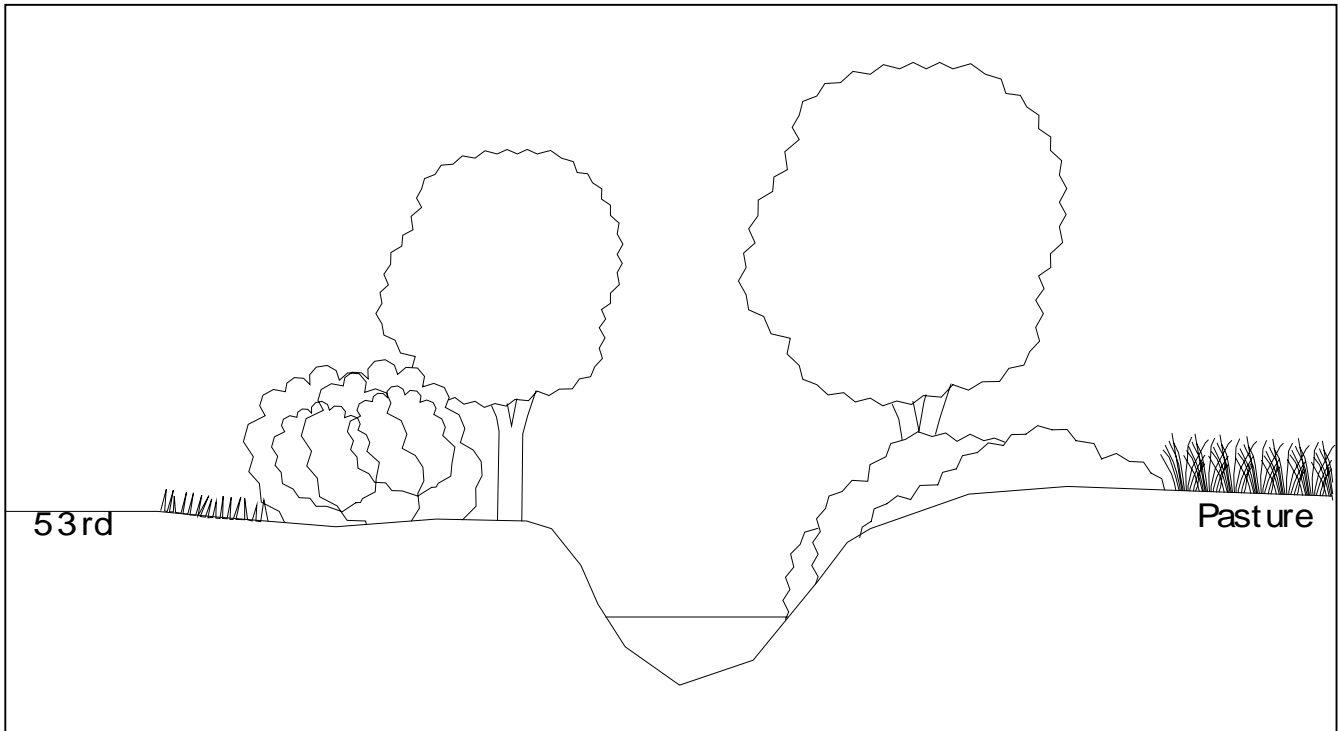


Corvallis Riparian Inventory

RIPARIAN CODE
WC-OAK-R-29 (R)

Date: 6/25/2002 **Investigators:** PF/CR
Dominant tree species: *Fraxinus latifolia*

Comments: Mainstem of Oak Creek parallel to 53rd. Riparian area disturbed by grazing
Channel approximately 6-feet wide.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-29 (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	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

WC-OAK-R-29 (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

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



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-29 (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

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

WC-OAK-R-29 (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>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>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



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-29 (R)

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>3</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

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: OAK

Reach: WC-OAK-R-29R

Size (acres): 5.83

Map: W-6

Length (feet): 1875

Dominant Cover Type: WOODY

ARA Cover Type: Oak savanna (<30% canopy)

Other ARA Types Grass short (lawn, pasture)

% of Total Cover Trees: 10 **Shrubs** 10 **Herbs/Vines** 80 **Bare:** 0

Dominant Cover Type

At Edge of Water: WOODY

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

Riparian System: LOTIC

Trees:

Type: DECIDUOUS

Dominant Species: Oregon ash (*Fraxinus latifolia*)

Secondary Species: Oregon white oak (*Quercus garryana*)

% 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: Sitka willow (*Salix sitchensis*)

Secondary Species: Oregon ash (*Fraxinus latifolia*), 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: MIXED

Dominant Species: meadow foxtail (*Alopecurus pratensis*)

Secondary Species: Canada thistle (*Cirsium arvense*), Queen Anne's lace (*Daucus carota*), St. John's wort (*Hypericum perforatum*), oxeye daisy (*Chrysanthemum leucanthemum*), Robert's geranium (*Geranium robertianum*)

% 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: OAK

Map: W-6

Reach: WC-OAK-R-29R

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: AGRICULTURAL

Land Use adjacent: AGRICULTURAL

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: POSSIBLE WETLAND CREATION THROUGH EXCAVATING

Current Efforts NONE OBSERVED

COMMENTS

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: OSU Equestrian property
Date: 6/25/2002
On-site: Off-Site:
Investigators: PF/CR

GPS Location: 44.5793 N 123.3106 W
Map Number: W-6
Riparian Code: WC-OAK-R-30
Reach Length: 600-2400 feet
Hydrologic Basin: OAK CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 2-3 feet
Lake/Pond: Width: _____ feet
Wetland: Width: 125 feet
LWI Wetland Code: WC-OAK-W-18
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: GRAZED PASTURE

Dominant tree species: NONE

Comments: see other 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

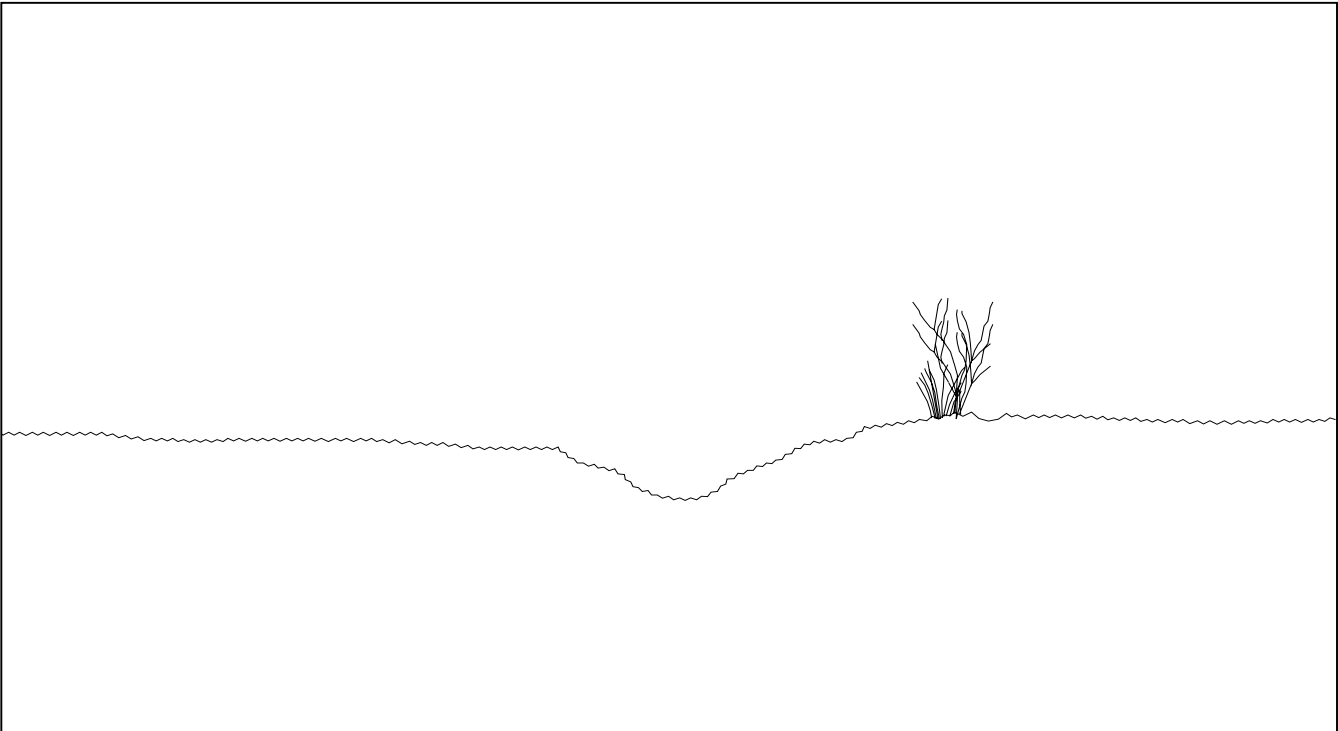


Corvallis Riparian Inventory

RIPARIAN CODE
WC-OAK-R-30

Date: 6/25/2002 **Investigators:** PF/CR
Dominant tree species: NONE

Comments: Shallow grazed swale through field behind OSU equestrian center. No woody vegetation, just grass. Includes a number of channels that average 2-3 feet wide.
Since there were few on-site trees, dominant tree species was determined by a reference site; WC-OAK-R-29R, located downslope of WC-OAK-R-30.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-30

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 pts	
Total Points:		12

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
WC-OAK-R-30

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

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



Corvallis Riparian Inventory

RIPARIAN CODE
WC-OAK-R-30

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



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-30

WILDLIFE HABITAT

		Score
12. How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?		
a. More than 2 layers	3 pts	<u>1</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



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-30

WILDLIFE HABITAT (continued)

17. Is surface water present throughout the year?

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

Score

1

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

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

3

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:

13

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

FUNCTION IS:

MEDIUM

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: OAK	Reach: WC-OAK-R-30	Size (acres): 22.11
Map: W-6		Length (feet): 2400
Dominant Cover Type: HERBACEOUS		
ARA Cover Type: Grass short (lawn, pasture)		
Other ARA Types: NONE		
% of Total Cover: Trees: 0 Shrubs: 0 Herbs/Vines: 100 Bare: 0		
Dominant Cover Type At Edge of Water: HERBACEOUS		
Edge of Water ARA Type: Grass short (lawn, pasture)		
Riparian System: LOTIC		
Trees:		
Type: NONE		
Dominant Species: NONE		
Secondary Species: NONE		
% Total Cover: <input type="radio"/> <10% <input type="radio"/> 10%-50% <input type="radio"/> 50%-90% <input type="radio"/> >90%		
% Invasive Cover: <input 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 type="radio"/> >90%		
Shrubs/Sapling		
Type: NONE		
Dominant Species: NONE		
Secondary Species: NONE		
% Total Cover: <input type="radio"/> <10% <input type="radio"/> 10%-50% <input type="radio"/> 50%-90% <input type="radio"/> >90%		
% Invasive Cover: <input 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 type="radio"/> >90%		
Herbaceous		
Type: MIXED		
Dominant Species: common oat (<i>Avena sativa</i>)		
Secondary Species: common camas (<i>Camassia quamash</i>), yellow parentucellia (<i>Parentucelli viscosa</i>), northwestern mannagrass (<i>Glyceria occidentalis</i>), water foxtail (<i>Alopecurus geniculatus</i>), common velvetgrass (<i>Holcus lanatus</i>), soft rush (<i>Juncus effusus</i>), white clover (<i>Trifolium repens</i>)		
% Total Cover: <input type="radio"/> <10% <input type="radio"/> 10%-50% <input type="radio"/> 50%-90% <input checked="" 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 type="radio"/> 10%-50% <input checked="" type="radio"/> 50%-90% <input type="radio"/> >90%		

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: OAK

Map: W-6

Reach: WC-OAK-R-30

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: AGRICULTURAL

Land Use adjacent: AGRICULTURAL

Infrastructure Impingement: PARTIALLY IMPINGED

In Channel Alteration: MODERATELY ALTERED

LWD Recruitment Potential: LOW

Shade Potential: NONE

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: POSSIBLE ENHANCEMENT PLANTINGS, IF HORSES ARE FENCED OUT.

Current Efforts NONE OBSERVED

COMMENTS

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: RESER STADIUM
to Highway 34

Date: 10/1/2002

On-site: Off-Site:

Investigators: PF/CR

GPS Location: 44.5572 N 123.2803 W

Map Number: W-15

Riparian Code: WC-OAK-R-31

Reach Length: 2550 feet

Hydrologic Basin: OAK CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 20 feet
Lake/Pond: Width: _____ feet
Wetland: Width: _____ feet

LWI Wetland Code: N/A

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: SCHOOL

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

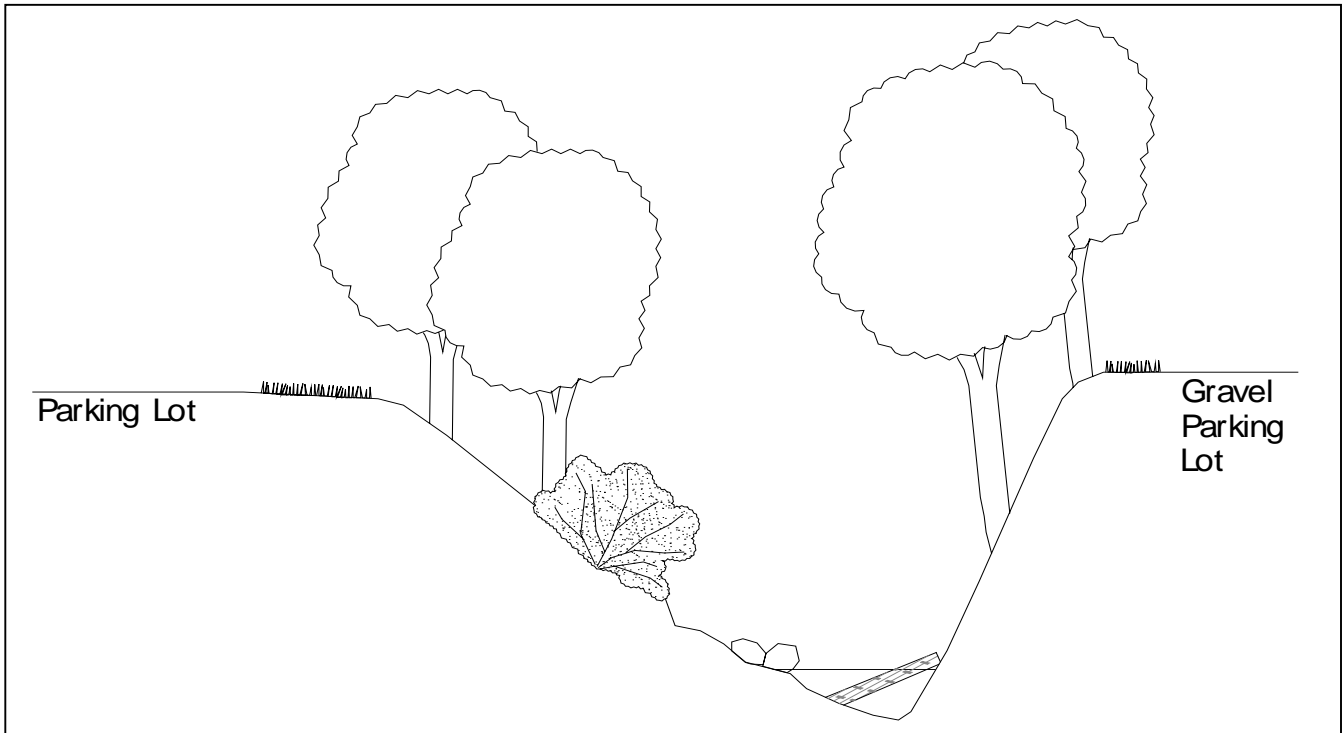


Corvallis Riparian Inventory

RIPARIAN CODE
WC-OAK-R-31

Date: 10/1/2002 Investigators: PF/CR
Dominant tree species: *Acer macrophyllum*

Comments: Section of Oak Creek through OSU campus, behind Reser Stadium. Forested riparian fringe, then disturbed by either parking or roads/ buildings. Some large woody debris in stream. Steep banks.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-OAK-R-31

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
WC-OAK-R-31

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
WC-OAK-R-31

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

WC-OAK-R-31

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	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	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

WILDLIFE HABITAT (continued)

RIPARIAN CODE
WC-OAK-R-31

		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:		17

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

FUNCTION IS: MEDIUM

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: OAK	Reach: WC-OAK-R-31	Size (acres): 24.49
Map: W-15		Length (feet): 2550
Dominant Cover Type: BARE		
ARA Cover Type: developed		
Other ARA Types Grass short (lawn, pasture), Hardwood Woodland 30-70% closed canopy		
% of Total Cover Trees: 5 Shrubs 5 Herbs/Vines 40 Bare: 50		
Dominant Cover Type		
At Edge of Water: WOODY		
Edge of Water ARA Type Hardwood Woodland 30-70% closed canopy		
Riparian System: LOTIC		
Trees:		
Type: MIXED		
Dominant Species: Bigleaf maple (<i>Acer macrophyllum</i>)		
Secondary Species: Douglas fir (<i>Pseudotsuga menziesii</i>), Oregon white oak (<i>Quercus garryana</i>), Oregon ash (<i>Fraxinus latifolia</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 checked="" type="radio"/> 50%-90 <input type="radio"/> >90%		
Shrubs/Sapling		
Type: DECIDUOUS		
Dominant Species: common snowberry (<i>Symphoricarpos albus</i>)		
Secondary Species: Indian plum (<i>Oemleria cerasiformis</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%		
Herbaceous		
Type: MIXED		
Dominant Species: mixed grasses		
Secondary Species: tall fescue (<i>Festuca arundinacea</i>), Kentucky bluegrass (<i>Poa pratensis</i>), annual bluegrass (<i>Poa annua</i>), Himalayan blackberry (<i>Rubus discolor</i>)		
% Total Cover: <input type="radio"/> <10% <input type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input checked="" 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 checked="" type="radio"/> <10% <input type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input type="radio"/> >90%		

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: OAK

Map: W-15

Reach: WC-OAK-R-31

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: COMMERCIAL, RESIDENTIAL

Infrastructure Impingement: FULLY IMPINGED

In Channel Alteration: MODERATELY ALTERED

LWD Recruitment Potential: MODERATE

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: LOW

Current Efforts NONE OBSERVED

COMMENTS SURROUNDED BY OSU, RESIDENTIAL