

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: _____
Reservoir Avenue

GPS Location: 44.5518 N 123.3189 W

Map Number: W-13

Date: 8/13/2002

Riparian Code: WC-SQU-R-5

On-site: Off-Site:

Reach Length: 7350 feet

Investigators: PF/CR

Hydrologic Basin: SQUAW CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 5-8 feet
Lake/Pond: _____ Width: _____ feet
Wetland: Width: 300-2100 feet

LWI Wetland Code: WC-SQU-W-8

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: Amity, Woodburn, & Willamette silt loam, Hazelair complex, Bellpine silty clay loam

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

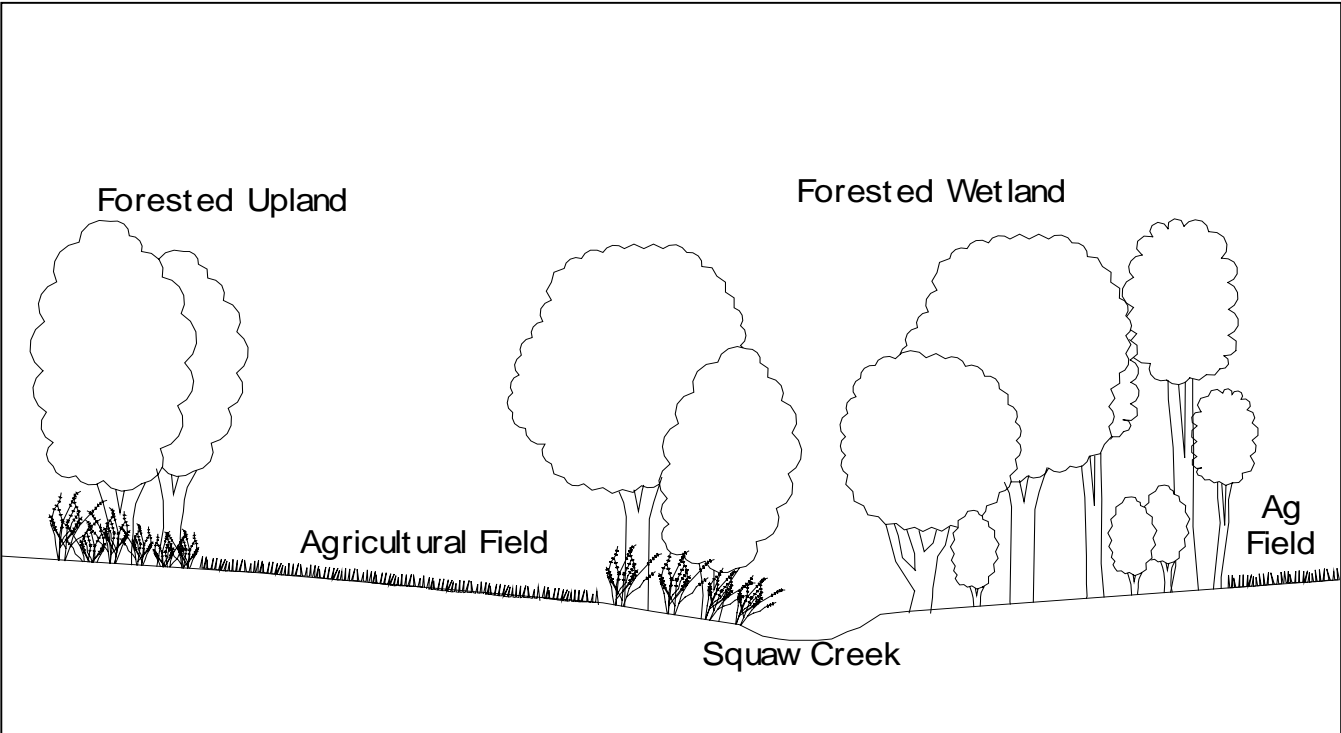


Corvallis Riparian Inventory

RIPARIAN CODE
WC-SQU-R-5

Date: 8/13/2002 **Investigators:** PF/CR
Dominant tree species: *Fraxinus latifolia*

Comments: Section of Squaw Creek Philomath Boulevard north to Reservoir Avenue.
This is an off-site assessment due to lack of access to this reach of the creek and the adjacent
wetland and riparian area. Primarily fields of agricultural grasses bordered by stands of upland
forest between recent residential development.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-SQU-R-5

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

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
WC-SQU-R-5

FLOOD MANAGEMENT

6. Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource?

Score

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

3

7. Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?

- a. Yes 3 pts
- b. No or no flood prone area present 1 pt

3

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

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

1

Total Points: 7

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
WC-SQU-R-5

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

WC-SQU-R-5

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>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>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-SQU-R-5

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

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:

20

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

FUNCTION IS:

HIGH

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: SQUAW

Reach: WC-SQU-R-5

Size (acres): 276.99

Map: W-13

Length (feet): 7350

Dominant Cover Type: HERBACEOUS

ARA Cover Type: Grass short (lawn, pasture)

Other ARA Types Mixed Woodland 30-70% closed canopy, Hardwood Woodland 30-70% closed canopy,

% of Total Cover **Trees:** 20 **Shrubs** 10 **Herbs/Vines** 65 **Bare:** 5

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: Oregon ash (*Fraxinus latifolia*)

Secondary Species: Douglas fir (*Pseudotsuga menziesii*), bigleaf maple (*Acer macropylum*), 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: UNKNOWN

Secondary Species: English hawthorn (*Crataegus monogyna*), poison oak (*Rhus diversiloba*), sweet cherry (*Prunus avium*)

% 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: Agricultural grasses

Secondary Species: Himalayan blackberry (*Rubus discolor*), Queen Anne's lace (*Daucus carota*), Canada thistle (*Cirsium arvense*), tall fescue (*Festuca arundinacea*), field horsetail (*Equisetum arvense*), perennial ryegrass (*Lolium perenne*)

% 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: SQUAW

Map: W-13

Reach: WC-SQU-R-5

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, RESIDENTIAL

Infrastructure Impingement: PARTIALLY IMPINGED

In Channel Alteration: UNALTERED

LWD Recruitment Potential: MODERATE

Shade Potential: MODERATE

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: Much of the riparian area is located within agricultural fields that could be replanted with native trees/shrubs.

Current Efforts NONE OBSERVED

COMMENTS Off-site assessment. Residential development is occurring north and east of this area.

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: Squaw Cr. West of Brooklane Dr.
to Reed Place Park

GPS Location: 44.5516 N 123.2803 W

Date: 8/13/2002

Map Number: W-15

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

Riparian Code: WC-SQU-R-6

Investigators: CR/PF

Reach Length: 1875 feet

Hydrologic Basin: SQUAW CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: **Width:** 12-15 feet
Lake/Pond: **Width:** _____ feet
Wetland: **Width:** _____ feet

LWI Wetland Code: WC-SQU-W-1

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: Waldo silty clay 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

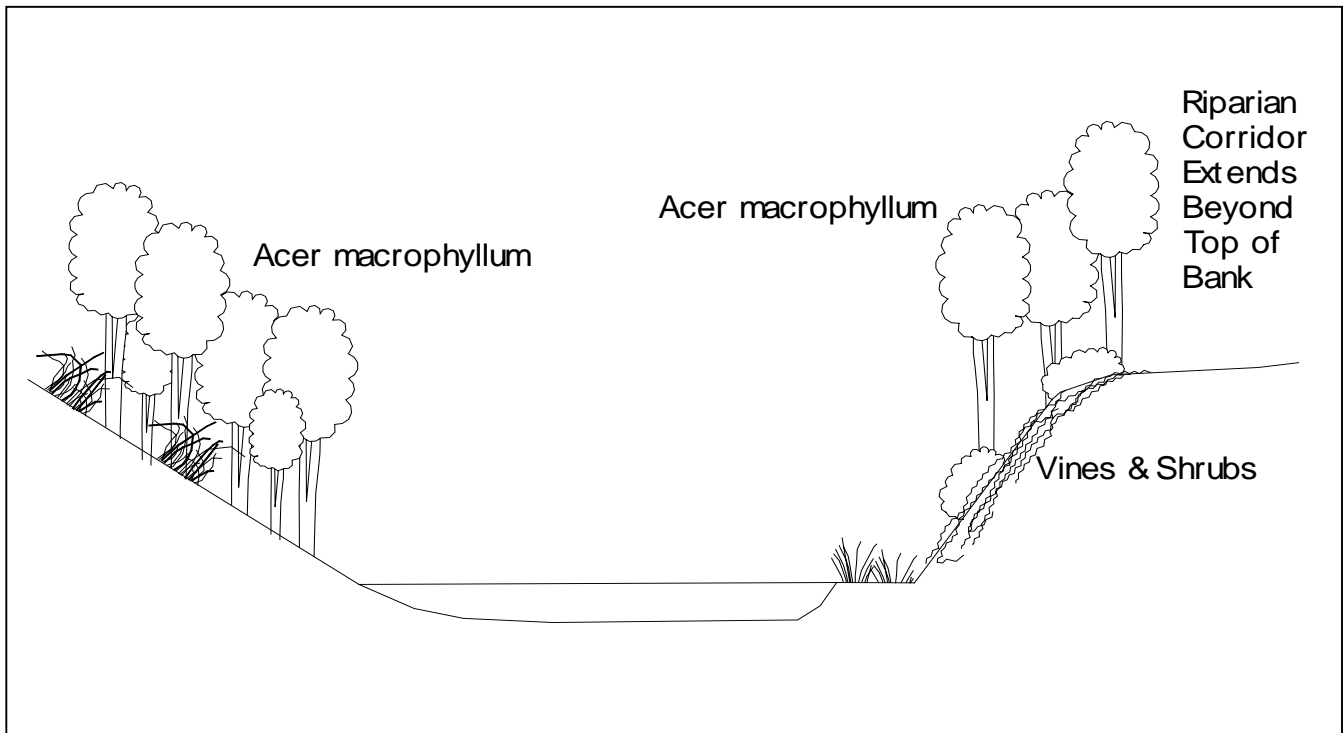
RIPARIAN CODE

WC-SQU-R-6

Date: 8/13/2002 Investigators: CR/PF

Dominant tree species: ACER MACROPHYLLUM

Comments: Squaw Creek west of Brooklane Drive to Reed Place. Mostly undeveloped to either side of the stream, with the exception of Brooklane Dr. to the east and south; some residential development along the southwestern edge of the reach; agricultural land further to the west. Forested riparian area is present along the reach.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-SQU-R-6

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-SQU-R-6

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-SQU-R-6

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-SQU-R-6

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-SQU-R-6

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

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:

23

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

FUNCTION IS:

HIGH

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: SQUAW

Reach: WC-SQU-R-6

Size (acres): 38.56

Map: W-15

Length (feet): 1875

Dominant Cover Type: WOODY

ARA Cover Type: Mixed Forest >70% closed canopy

Other ARA Types Grass short (lawn, pasture), Emergent/herb wetland or pond (seasonal water)

% of Total Cover Trees: 75 **Shrubs** 20 **Herbs/Vines** 5 **Bare:** 0

Dominant Cover Type

At Edge of Water: WOODY

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

Riparian System: LOTIC

Trees:

Type: MIXED

Dominant Species: Bigleaf maple (*Acer macrophyllum*)

Secondary Species: Oregon white oak (*Quercus garryana*), Oregon ash (*Fraxinus latifolia*), Douglas fir (*Pseudotsuga menziesii*), Red alder (*Alnus rubra*), sweet cherry (*Prunus avium*), Grand fir (*Abies grandis*), western red cedar (*Thuja plicata*)

% 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: Common snowberry (*Symphoricarpos albus*)

Secondary Species: Himalayan blackberry (*Rubus discolor*), Oregon ash (*Fraxinus latifolia*), poison oak (*Rhus diversiloba*), sweet cherry (*Prunus avium*), English hawthorn (*Crataegus monoavna*), beaked hazelnut (*Corvlus cornuta*), 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: NONE

Secondary Species: English ivy (*Hedera helix*), nipplewort (*Lapsana communis*), cleavers bedstraw (*Galium aparine*), trailing blackberry (*Rubus ursinus*), 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: SQUAW

Map: W-15

Reach: WC-SQU-R-6

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, AGRICULTURE

Land Use adjacent: AGRICULTURAL, RESIDENTIAL

Infrastructure Impingement: PARTIALLY IMPINGED

In Channel Alteration: UNALTERED

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: NONE

Current Efforts UNKNOWN, NO ACCESS

COMMENTS MOSTLY UNDEVELOPED, FORESTED RIPARIAN AREA ALONG STREAM

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: North of Reservoir
GPS Location: 44.5642 N 123.3195 W
Map Number: W-9, W-10
Date: 10/1/2002
Riparian Code: WC-SQU-R-7
On-site: Off-Site:
Reach Length: 5400 feet
Investigators: PF/CR
Hydrologic Basin: SQUAW CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 5-12 feet
Lake/Pond: Width: feet
Wetland: Width: 25-1000+ feet
LWI Wetland Code: WC-SQU-W-13
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: Willamette silt loam, Witham silty clay loam

Adjacent Land Uses? (Check as many as needed)

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

Dominant tree species: Salix sp.

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

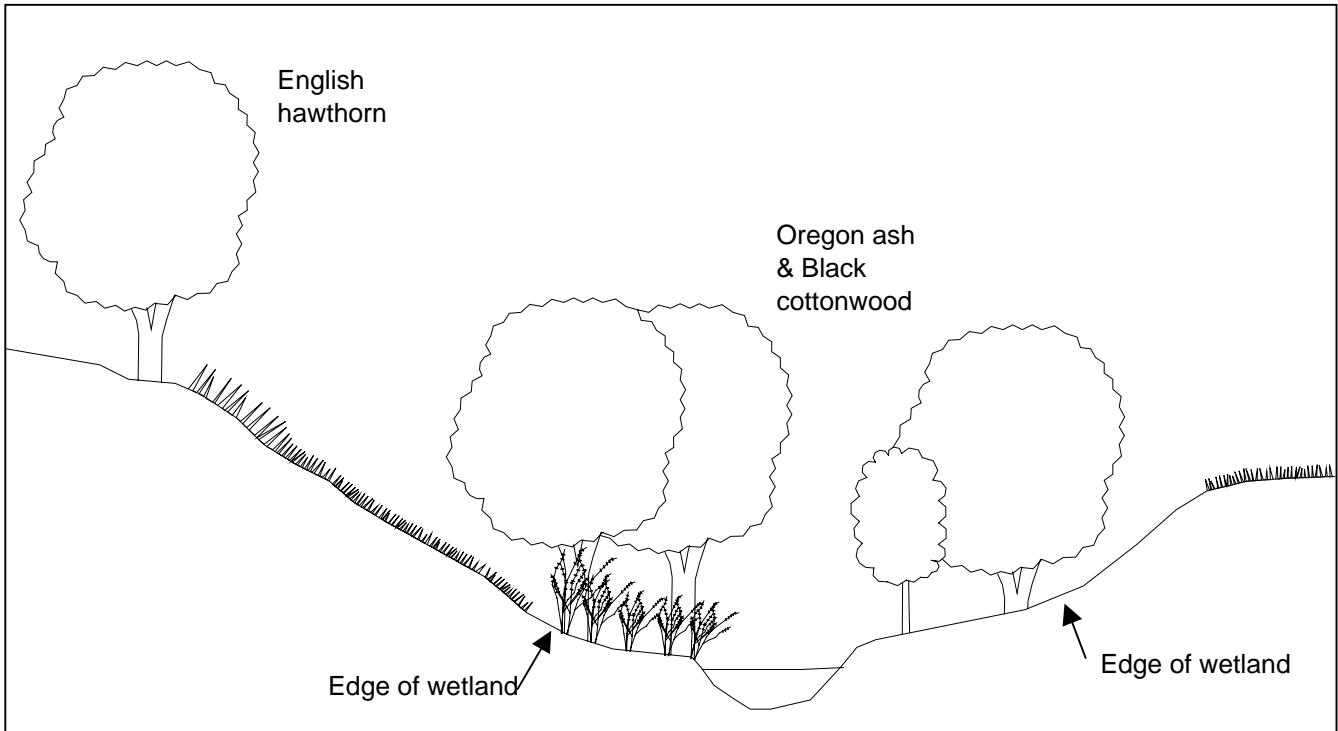


Corvallis Riparian Inventory

RIPARIAN CODE
WC-SQU-R-7

Date: 10/1/2002 Investigators: PF/CR
Dominant tree species: Salix sp.

Comments: Riparian area around old log ponds and north of Squaw Creek. Includes an old industrial site, roads, undeveloped and farmed fields.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-SQU-R-7

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

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
WC-SQU-R-7

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-SQU-R-7

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-SQU-R-7

WILDLIFE HABITAT

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

Questions continued on next page

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-SQU-R-7

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

2

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: SQUAW

Reach: WC-SQU-R-7

Size (acres): 122.58

Map: W-9, W-10

Length (feet): 5400

Dominant Cover Type: HERBACEOUS

ARA Cover Type: Grass tall (ryegrass, meadow)

Other ARA Types Developed, Grass short (lawn, pasture), Seasonal wetlands

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

Dominant Cover Type

At Edge of Water: WOODY

Edge of Water ARA Type Shrubs wetland, seasonally

Riparian System: LENTIC

Trees:

Type: NONE

Dominant Species: NONE

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%

Shrubs/Sapling

Type: DECIDUOUS

Dominant Species: English hawthorn (*Crataegus monogyna*)

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: MIXED

Dominant Species: colonial bentgrass (*Agrostis tenuis*)

Secondary Species: Himalayan blackberry (*Rubus discolor*), perennial ryegrass (*Lolium perenne*), common velvetgrass (*Holcus lanatus*), Queen Anne's lace (*Daucus carota*)

% 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: SQUAW

Map: W-9, W-10

Reach: WC-SQU-R-7

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, INDUSTRIAL

Land Use adjacent: UNDEVELOPED, AGRICULTURAL, INDUSTRIAL

Infrastructure Impingement: PARTIALLY IMPINGED

In Channel Alteration: HEAVILY ALTERED

LWD Recruitment Potential: LOW

Shade Potential: LOW

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: REMOVAL OF INVASIVES; PORTION WITHIN BALD HILL PARK

Current Efforts

COMMENTS RIPARIAN AREA IS DISTANT FROM ACTUAL STREAM

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: SUNSET PARK
RESEARCH WAY

GPS Location: 44.5493 N 123.2957 W

Date: 8/13/2002

Map Number: W-14

On-site: Off-Site:

Riparian Code: WC-SQU-R-8 (L)

Investigators: PF/CR

Reach Length: 2475 feet

Hydrologic Basin: SQUAW CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 4-6 feet
Lake/Pond: Width: _____ feet
Wetland: Width: 50-300 feet

LWI Wetland Code: WC-SQU-W-3

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: Waldo silty clay loam, Amity silt loam, Willamette silt loam

Adjacent Land Uses? (Check as many as needed)

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

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

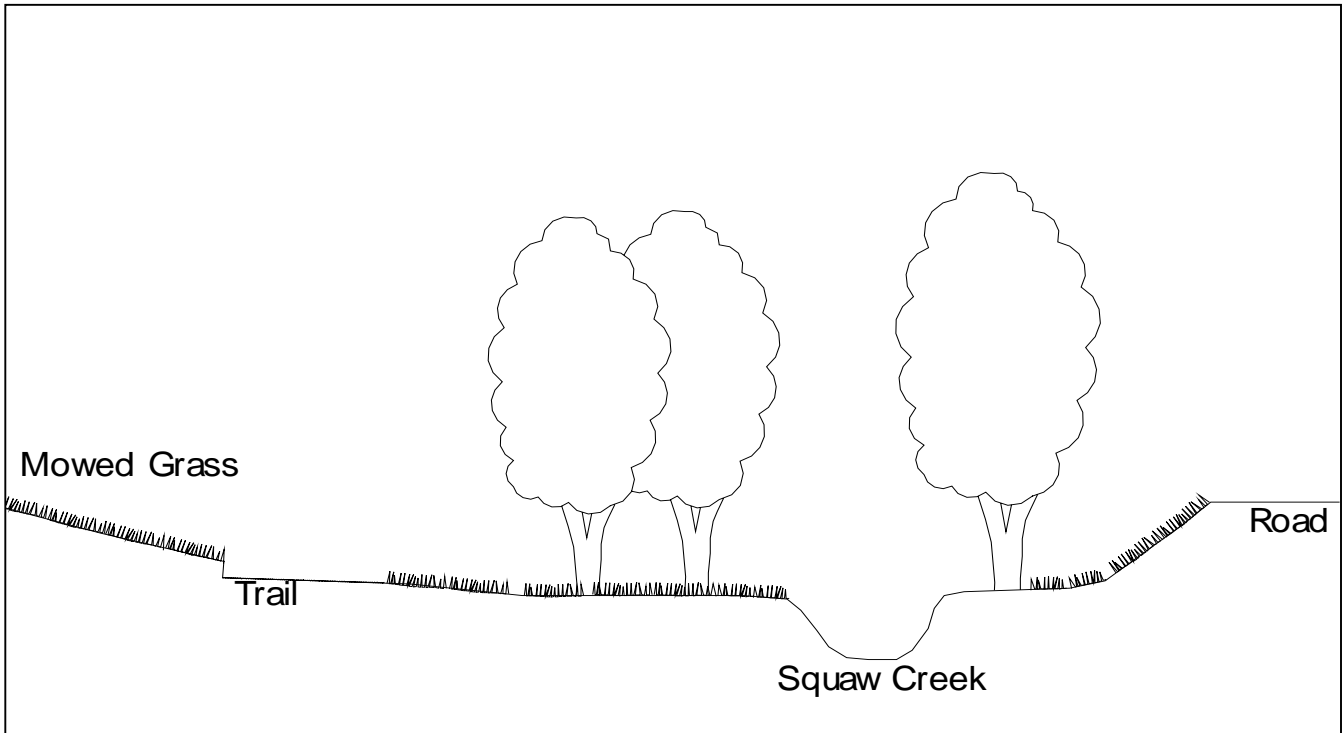


Corvallis Riparian Inventory

RIPARIAN CODE
WC-SQU-R-8 (L)

Date: 8/13/2002 **Investigators:** PF/CR
Dominant tree species: *Fraxinus latifolia*

Comments: Park between Research Way and Sunset Park. Channel is more incised than upstream section. Some disturbance in riparian area from mowing/gravel parking lot, path. Squaw Creek culverted at both ends of reach.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-SQU-R-8 (L)

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

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
WC-SQU-R-8 (L)

FLOOD MANAGEMENT

		Score
<p>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?</p>		
a. Yes	..... 3 pts	3
b. No	..... 1 pt	
<p>7. Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?</p>		
a. Yes	..... 3 pts	1
b. No or no flood prone area present	..... 1 pt	
<p>8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?</p>		
a. No	..... 3 pts	3
b. Yes	..... 1 pts	
Total Points:		7

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
WC-SQU-R-8 (L)

THERMAL REGULATION

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

WC-SQU-R-8 (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>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
WC-SQU-R-8 (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	3
b. No	1 pt	
19. What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?		
a. Less than 25%	3 pts	3
b. Between 25% and 75%	2 pts	
c. Greater than 75%	1 pt	
Total Points:		21

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

FUNCTION IS: HIGH

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: SQUAW	Reach: WC-SQU-R-8L	Size (acres): 17.77
Map: W-15		Length (feet): 2475
Dominant Cover Type: HERBACEOUS		
ARA Cover Type: Grass short (lawn, pasture)		
Other ARA Types: Hardwood Woodland 30-70% closed canopy		
% of Total Cover: Trees: 5 Shrubs: 5 Herbs/Vines: 90 Bare: 0		
Dominant Cover Type At Edge of Water: WOODY		
Edge of Water ARA Type: Mixed Forest >70% closed canopy		
Riparian System: LOTIC		
Trees:		
Type: DECIDUOUS		
Dominant Species: Oregon ash (<i>Fraxinus latifolia</i>)		
Secondary Species: NONE		
% 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: Rose (<i>Rosa</i> sp.)		
Secondary Species: Common snowberry (<i>Symphoricarpos albus</i>), hawthorn (<i>Crataegus</i> sp.)		
% 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%		
Herbaceous		
Type: MIXED		
Dominant Species: mixed grasses		
Secondary Species: bentgrass (<i>Agrostis</i> sp.), orchardgrass (<i>Dactylis glomerata</i>), annual bluegrass (<i>Poa annua</i>), meadow foxtail (<i>Alopecurus pratensis</i>), tall fescue (<i>Festuca arundinacea</i>), colonial bentgrass (<i>Agrostis tenuis</i>), creeping bentgrass (<i>Agrostis stolonifera</i>), redtop (<i>Agrostis alba</i>), Himalayan blackberry (<i>Rubus discolor</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 checked="" type="radio"/> 10%-50% <input type="radio"/> 50%-90% <input type="radio"/> >90%		

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: SQUAW

Map: W-15

Reach: WC-SQU-R-8L

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: RESIDENTIAL

Land Use adjacent: RESIDENTIAL

Infrastructure Impingement: PARTIALLY IMPINGED

In Channel Alteration: MODERATELY ALTERED

LWD Recruitment Potential: LOW

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: EXTREMELY LOW DUE TO DEVELOPED ADJACENT AREA

Current Efforts NONE OBSERVED

COMMENTS RIGHT AND LEFT SIDES OF THE RIPARIAN AREA ENCOMPASS OR ARE ADJACENT TO DEVELOPED AREA WHICH ARE DOMINATED BY MOWED LAWN/GRASS

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: SUNSET PARK to RESEARCH WAY GPS Location: 44.5493 N 123.2957 W
Date: 8/13/2002 Map Number: W-14
On-site: Off-Site: Riparian Code: WC-SQU-R-8 (R)
Investigators: PF/CR Reach Length: 2475 feet
Hydrologic Basin: SQUAW CREEK

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 4-6 feet
Lake/Pond: Width: feet
Wetland: Width: 200-300 feet
LWI Wetland Code: WC-SQU-W-3
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: Waldo silty clay loam Amity silt loam, Willamette silt loam

Adjacent Land Uses? (Check as many as needed)

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

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

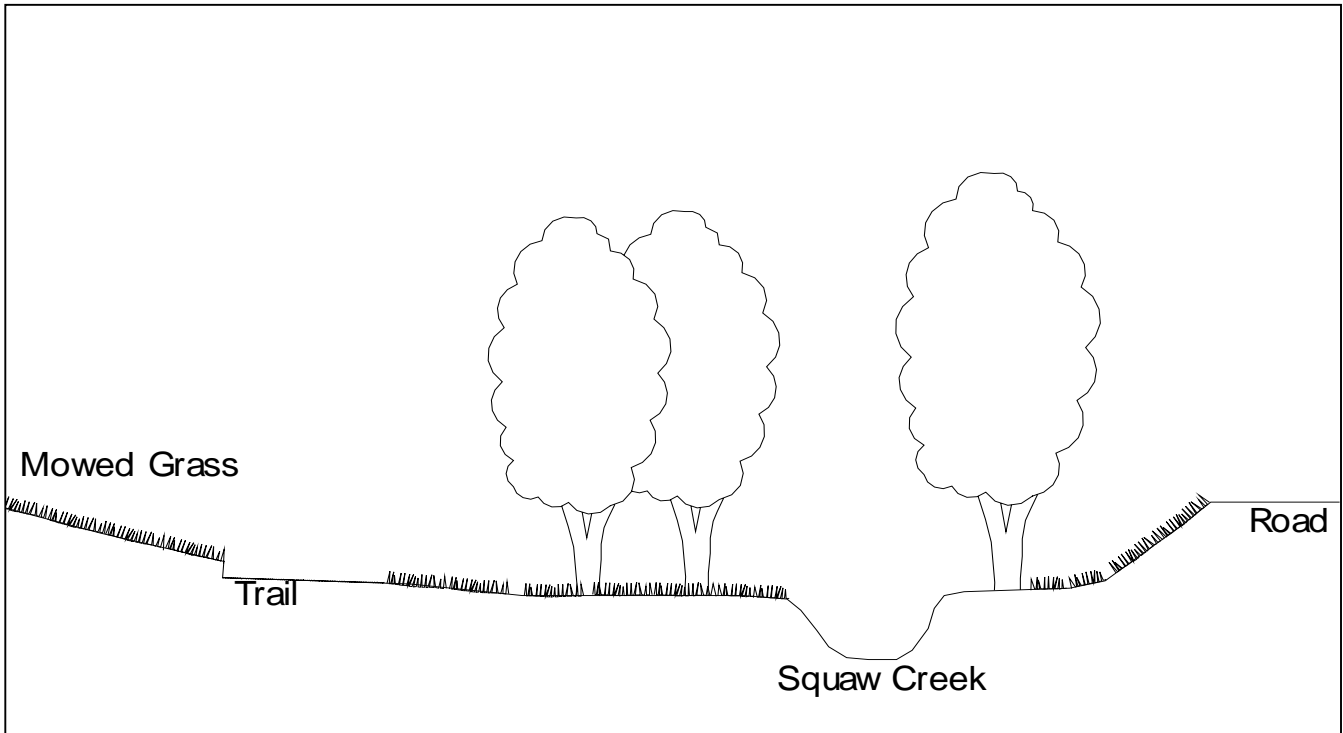


Corvallis Riparian Inventory

RIPARIAN CODE
WC-SQU-R-8 (R)

Date: 8/13/2002 **Investigators:** PF/CR
Dominant tree species: *Fraxinus latifolia*

Comments: Squaw Creek reach between Sunset and Research Way. Riparian area confined by Country Club Drive and Golf course development on other side of road. Some residential development at downstream end of reach. Squaw Creek culverted at both ends of reach.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

WC-SQU-R-8 (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	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	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:		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-SQU-R-8 (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

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-SQU-R-8 (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

WC-SQU-R-8 (R)

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	2
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	1
b. No	1 pt	
16. What percent of the water resource edge is bordered by a vegetated riparian area at least 30 feet wide?		
a. Greater than 40%	3 pts	3
b. Between 10% and 40%	2 pts	
c. Less than 10%	1 pt	

Questions continued on next page

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

WILDLIFE HABITAT (continued)

RIPARIAN CODE
WC-SQU-R-8 (R)

		Score
17. Is surface water present throughout the year?		
a. Yes	..... 3 pts	<u>3</u>
b. No	..... 1 pt	
18. Is there more than one type of water resource (e.g. stream, wetland, lake/pond) within or immediately adjacent to the riparian reach?		
a. Yes	..... 3 pts	<u>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>3</u>
b. Between 25% and 75%	..... 2 pts	
c. Greater than 75%	..... 1 pt	
Total Points:		<u>20</u>

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

FUNCTION IS: **HIGH**

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: SQUAW	Reach: WC-SQU-R-8R	Size (acres): 17.77
Map: W-15		Length (feet): 2475
Dominant Cover Type: HERBACEOUS		
ARA Cover Type: Grass short (lawn, pasture)		
Other ARA Types: Hardwood Woodland 30-70% closed canopy, Grass tall (ryegrass, meadow)		
% of Total Cover: Trees: 10 Shrubs: 15 Herbs/Vines: 70 Bare: 5		
Dominant Cover Type At Edge of Water: WOODY		
Edge of Water ARA Type: Mixed Forest >70% closed canopy		
Riparian System: LOTIC		
Trees:		
Type: DECIDUOUS		
Dominant Species: Oregon ash (<i>Fraxinus latifolia</i>)		
Secondary Species: NONE		
% 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%		
Shrubs/Sapling		
Type: DECIDUOUS		
Dominant Species: NONE		
Secondary Species: Common snowberry (<i>Symphoricarpos albus</i>), hawthorn (<i>Crataegus sp.</i>), rose (<i>Rosa sp.</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%		
Herbaceous		
Type: MIXED		
Dominant Species: mixed grasses		
Secondary Species: bentgrass (<i>Agrostis sp.</i>), orchardgrass (<i>Dactylis glomerata</i>), annual bluegrass (<i>Poa annua</i>), meadow foxtail (<i>Alopecurus pratensis</i>), tall fescue (<i>Festuca arundinacea</i>), colonial bentgrass (<i>Agrostis tenuis</i>), creeping bentgrass (<i>Agrostis stolonifera</i>), redtop (<i>Agrostis alba</i>), Himalayan blackberry (<i>Rubus discolor</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 checked="" type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input type="radio"/> >90%		

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: SQUAW

Map: W-15

Reach: WC-SQU-R-8R

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, RESIDENTIAL

Land Use adjacent: RESIDENTIAL

Infrastructure Impingement: FULLY 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: EXTREMELY LOW DUE TO DEVELOPED ADJACENT AREA

Current Efforts NONE OBSERVED

COMMENTS RIGHT AND LEFT SIDES OF THE RIPARIAN AREA ENCOMPASS OR ARE ADJACENT TO DEVELOPED AREA WHICH ARE DOMINATED BY MOWED LAWN/GRASS