

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: E. OF BROOKLANE DR.
S. OF BROOKLANE PLACE

GPS Location: 44.5394 N 123.2834 W

Date: 8/1/2002

Map Number: S-3

On-site: Off-Site:

Riparian Code: S-MAR-R-5 (L)

Investigators: SE/ME

Reach Length: 1950 feet

Hydrologic Basin: MARY'S RIVER

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 3-6 feet
Lake/Pond: Width: _____ feet
Wetland: Width: 0-150 feet

LWI Wetland Code: S-MAR-W-15

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: Conser silty clay loam

Adjacent Land Uses? (Check as many as needed)

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

Dominant tree species: None

Comments: see next page

Average slope in the riparian area: (Question 1)

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

Extent of impervious surface within the riparian area. (Question 4)

<10% 10% - 25% >25%

Is the stream or water resource constricted by man-made features? (Question 8)

Yes No

Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)

Yes No

Dominant vegetation layer within riparian area? (Question 10)

Woody vegetation Herbaceous vegetation Bare ground

Does woody vegetation hang over the edge of the water? (Questions 11 & 14)

Yes No

Large woody debris in riparian area? (Question 15)

Yes No

Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)

>40% 10% - 40% <10%

Degree of development or human caused disturbance. (Question 19)

<25% 25% - 75% >75%

How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)

low, slight moderate high, very high, severe

What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)

Woody vegetation Herbaceous vegetation Bare ground

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

Yes No

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

Yes No or no flood prone area present

How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?

More than 2 2 layers 1 layer or unvegetated

Riparian Width Determination

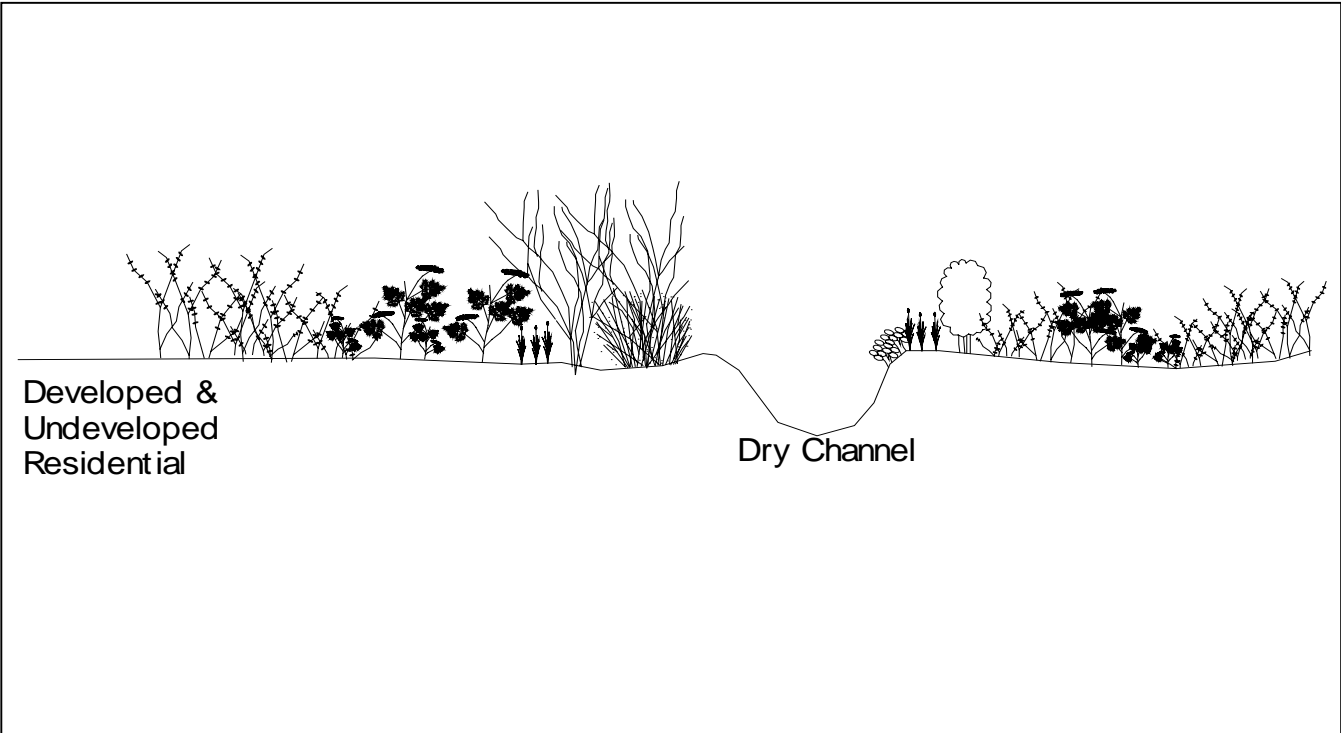


Corvallis Riparian Inventory

RIPARIAN CODE
S-MAR-R-5 (L)

Date: 8/1/2002 Investigators: SE/ME
Dominant tree species: None

Comments: The drainage is a small 3 to 6 foot wide channel that flows north and east into the Mary's River. The drainage flows through a upland/wetland meadow dominated by herbaceous vegetation. The right side of the riparian area is dominated by meadow and the left side includes meadow, residential development, and roads.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MAR-R-5 (L)

WATER QUALITY

| | | Score |
|--|-------|-----------|
| 1. What is the average slope in the riparian area? | | |
| a. Less than 10:1 (10%) | 3 pts | 3 |
| b. Between 10:1 (10%) and 5:1 (20%) | 2 pts | |
| c. Greater than 5:1 (20%) | 1 pt | |
| 2. What is the dominant vegetation cover in the riparian area? | | |
| a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high | 3 pts | 2 |
| b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high | 2 pts | |
| c. Bare ground | 1 pt | |
| 3. What is the dominant vegetation at the top of bank (if defined) or edge of water resource? | | |
| a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high | 3 pts | 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
S-MAR-R-5 (L)

FLOOD MANAGEMENT

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

Score

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

3

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

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

1

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

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

1

Total Points: 5

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

FUNCTION IS: **MEDIUM**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

| |
|----------------------|
| RIPARIAN CODE |
| S-MAR-R-5 (L) |

THERMAL REGULATION

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

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

Score

3

10. What is the dominant vegetation layer in the riparian area?

- a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pts
- b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts
- c. Bare ground 1 pt

2

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

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

2

Total Points:

7

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

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MAR-R-5 (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>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>2</u> |
| b. Between 10% and 40% | 2 pts | |
| c. Less than 10% | 1 pt | |

Questions continued on next page

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

WILDLIFE HABITAT (continued)

| |
|----------------------|
| RIPARIAN CODE |
| S-MAR-R-5 (L) |

| | | 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>15</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: MARY'S RIVER | Reach: S-MAR-R-5L | Size (acres): 14.81 |
| Map: S-3 | | Length (feet): 1950 |
| Dominant Cover Type: HERBACEOUS | | |
| ARA Cover Type: Grass short (lawn, pasture) | | |
| Other ARA Types: Emergent wetland (seasonal water) | | |
| % of Total Cover: Trees: 0 Shrubs: 20 Herbs/Vines: 80 Bare: 0 | | |
| Dominant Cover Type At Edge of Water: HERBACEOUS | | |
| Edge of Water ARA Type: Grass tall (ryegrass, meadow) | | |
| 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: DECIDUOUS | | |
| Dominant Species: Scouler willow (<i>Salix scouleriana</i>) | | |
| Secondary Species: Douglas' spirea (<i>Spiraea douglasii</i>), Himalayan blackberry (<i>Rubus discolor</i>), English hawthorn (<i>Crataegus monogyna</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: DECIDUOUS | | |
| Dominant Species: NONE | | |
| Secondary Species: autumn willowherb (<i>Epilobium brachycarpum</i>), reed canarygrass (<i>Phalaris arundinacea</i>), soft rush (<i>Juncus effusus</i>), mountain tarweed (<i>Madia glomerata</i>), Spanish-clover (<i>Lotus purshiana</i>) curly dock (<i>Rumex crispus</i>), birds-foot trefoil (<i>Lotus corniculatus</i>), Queen Anne's lace (<i>Daucus carota</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 checked="" type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input type="radio"/> >90% | | |

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MARY'S RIVER

Map: S-3

Reach: S-MAR-R-5L

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, UNDEVELOPED

Land Use adjacent: RESIDENTIAL, UNDEVELOPED

Infrastructure Impingement: PARTIALLY IMPINGED

In Channel Alteration: MODERATELY ALTERED

LWD Recruitment Potential: LOW

Shade Potential: LOW

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: REMOVAL OF NUISANCE SPECIES AND REPLACING WITH NATIVE VEGETATION

Current Efforts NONE OBSERVED

COMMENTS

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: E. OF BROOKLANE DR.
S. OF BROOKLANE PLACE

GPS Location: 44.5394 N 123.2834 W

Date: 8/1/2002

Map Number: S-3

On-site: Off-Site:

Riparian Code: S-MAR-R-5 (R)

Investigators: SE/ME

Reach Length: 1950 feet

Hydrologic Basin: MARY'S RIVER

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 3-6 feet
Lake/Pond: Width: _____ feet
Wetland: Width: 60-1440 feet

LWI Wetland Code: S-MAR-W-15

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: Conser silty clay loam

Adjacent Land Uses? (Check as many as needed)

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

Dominant tree species: None

Comments: see next page

Average slope in the riparian area: (Question 1)

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

Extent of impervious surface within the riparian area. (Question 4)

<10% 10% - 25% >25%

Is the stream or water resource constricted by man-made features? (Question 8)

Yes No

Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)

Yes No

Dominant vegetation layer within riparian area? (Question 10)

Woody vegetation Herbaceous vegetation Bare ground

Does woody vegetation hang over the edge of the water? (Questions 11 & 14)

Yes No

Large woody debris in riparian area? (Question 15)

Yes No

Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)

>40% 10% - 40% <10%

Degree of development or human caused disturbance. (Question 19)

<25% 25% - 75% >75%

How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)

low, slight moderate high, very high, severe

What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)

Woody vegetation Herbaceous vegetation Bare ground

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

Yes No

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

Yes No or no flood prone area present

How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?

More than 2 2 layers 1 layer or unvegetated

Riparian Width Determination

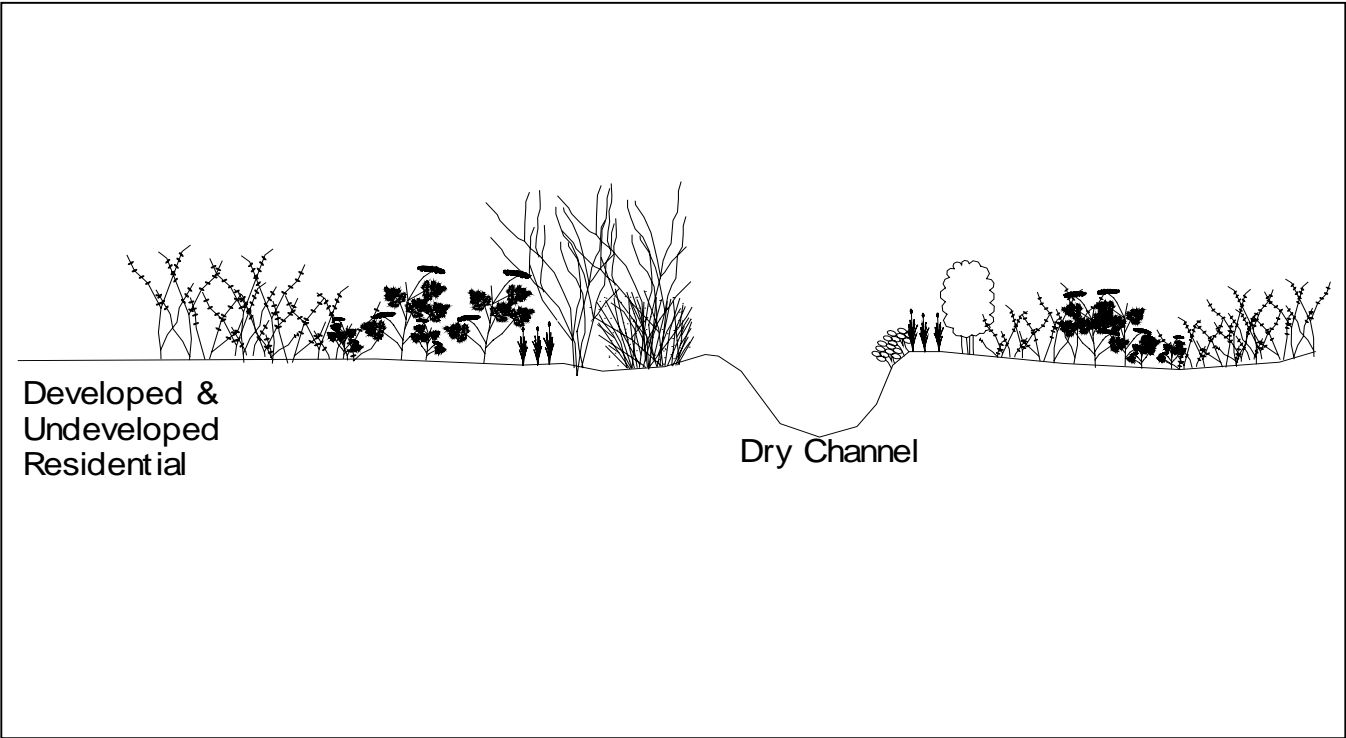


Corvallis Riparian Inventory

RIPARIAN CODE
S-MAR-R-5 (R)

Date: 8/1/2002 Investigators: SE/ME
Dominant tree species: None

Comments: The drainage is a small 3 to 6 foot wide channel that flows north and east into the Mary's River. The drainage flows through a upland/wetland meadow dominated by herbaceous vegetation. The right side of the riparian area is dominated by meadow and the left side includes meadow, residential development, and roads.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MAR-R-5 (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 | 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
S-MAR-R-5 (R)

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> <p>a. Yes 3 pts</p> <p>b. No 1 pt</p> | <p>3</p> <hr/> |
| <p>7. Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?</p> <p>a. Yes 3 pts</p> <p>b. No or no flood prone area present 1 pt</p> | <p>1</p> <hr/> |
| <p>8. Is the stream or water resource constricted by man-made features (e.g. channelization, riprap, concrete wall)?</p> <p>a. No 3 pts</p> <p>b. Yes 1 pt</p> | <p>1</p> <hr/> |
| Total Points: | <p>5</p> <hr/> |

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

FUNCTION IS: MEDIUM

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
S-MAR-R-5 (R)

THERMAL REGULATION

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

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

Score

3

10. What is the dominant vegetation layer in the riparian area?

- a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pts
- b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts
- c. Bare ground 1 pt

2

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

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

2

Total Points:

7

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

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MAR-R-5 (R)

WILDLIFE HABITAT

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

S-MAR-R-5 (R)

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:

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: MARY'S RIVER | Reach: S-MAR-R-5R | Size (acres): 14.81 |
| Map: S-3 | | Length (feet): 1950 |
| Dominant Cover Type: HERBACEOUS | | |
| ARA Cover Type: Grass tall (ryegrass, meadow) | | |
| Other ARA Types Emergent wetland (seasonal water), Grass natural/dry prairie | | |
| % of Total Cover Trees: 0 Shrubs 20 Herbs/Vines 80 Bare: 0 | | |
| Dominant Cover Type | | |
| At Edge of Water: HERBACEOUS | | |
| Edge of Water ARA Type Grass tall (ryegrass, meadow) | | |
| Riparian System: LOTIC | | |
| Trees: | | |
| Type: NONE | | |
| Dominant Species: NONE | | |
| 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 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 type="radio"/> 10%-50% <input checked="" type="radio"/> 50%-90 <input type="radio"/> >90% | | |
| Shrubs/Sapling | | |
| Type: DECIDUOUS | | |
| Dominant Species: Scouler willow (<i>Salix scouleriana</i>) | | |
| Secondary Species: Douglas' spirea (<i>Spiraea douglasii</i>), Himalayan blackberry (<i>Rubus discolor</i>), English hawthorn (<i>Crataegus monogyna</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: DECIDUOUS | | |
| Dominant Species: NONE | | |
| Secondary Species: autumn willowherb (<i>Epilobium brachycarpum</i>), reed canarygrass (<i>Phalaris arundinacea</i>), soft rush (<i>Juncus effusus</i>), mountain tarweed (<i>Madia glomerata</i>), Spanish-clover (<i>Lotus purshiana</i>) curly dock (<i>Rumex crispus</i>), birds-foot trefoil (<i>Lotus corniculatus</i>), Queen Anne's lace (<i>Daucus carota</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 checked="" type="radio"/> 10%-50% <input type="radio"/> 50%-90 <input type="radio"/> >90% | | |

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MARY'S RIVER

Map: S-3

Reach: S-MAR-R-5R

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: PARTIALLY IMPINGED

In Channel Alteration: MODERATELY 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 NUISANCE SPECIES AND REPLACING WITH NATIVE VEGETATION

Current Efforts NONE OBSERVED

COMMENTS

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: Bank of Mary's River in Avery Park
GPS Location: 44.5542 N 123.2750 W
Date: 6/12/2002
Map Number: S-1
On-site: **Off-Site:**
Riparian Code: S-MAR-R-6
Investigators: ME/SE
Reach Length: 4875 feet
Hydrologic Basin: MARY'S RIVER

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 75 feet
Lake/Pond: Width: _____ feet
Wetland: Width: _____ feet
LWI Wetland Code: _____
Water present year-round: Yes No
Are salmonids present in the adjacent water resource? Yes No
Is the water resource listed for temperature on DEQ's 303(d) list: Yes No
Within FEMA-mapped 100-year floodplain: Yes No
Mapped soil series: Chehalis silty clay loam

Adjacent Land Uses? (Check as many as needed)

Agriculture: Residential: Undeveloped:
Commercial/Indus.: Roads: Forestry:
Other: PARKS, OPEN SPACE

Dominant tree species: ACER MACROPHYLLUM

Comments: see next page

Average slope in the riparian area: (Question 1)

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

Extent of impervious surface within the riparian area. (Question 4)

<10% 10% - 25% >25%

Is the stream or water resource constricted by man-made features? (Question 8)

Yes No

Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)

Yes No

Dominant vegetation layer within riparian area? (Question 10)

Woody vegetation Herbaceous vegetation Bare ground

Does woody vegetation hang over the edge of the water? (Questions 11 & 14)

Yes No

Large woody debris in riparian area? (Question 15)

Yes No

Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)

>40% 10% - 40% <10%

Degree of development or human caused disturbance. (Question 19)

<25% 25% - 75% >75%

How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)

low, slight moderate high, very high, severe

What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)

Woody vegetation Herbaceous vegetation Bare ground

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

Yes No

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

Yes No or no flood prone area present

How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?

More than 2 2 layers 1 layer or unvegetated

Riparian Width Determination



Corvallis Riparian Inventory

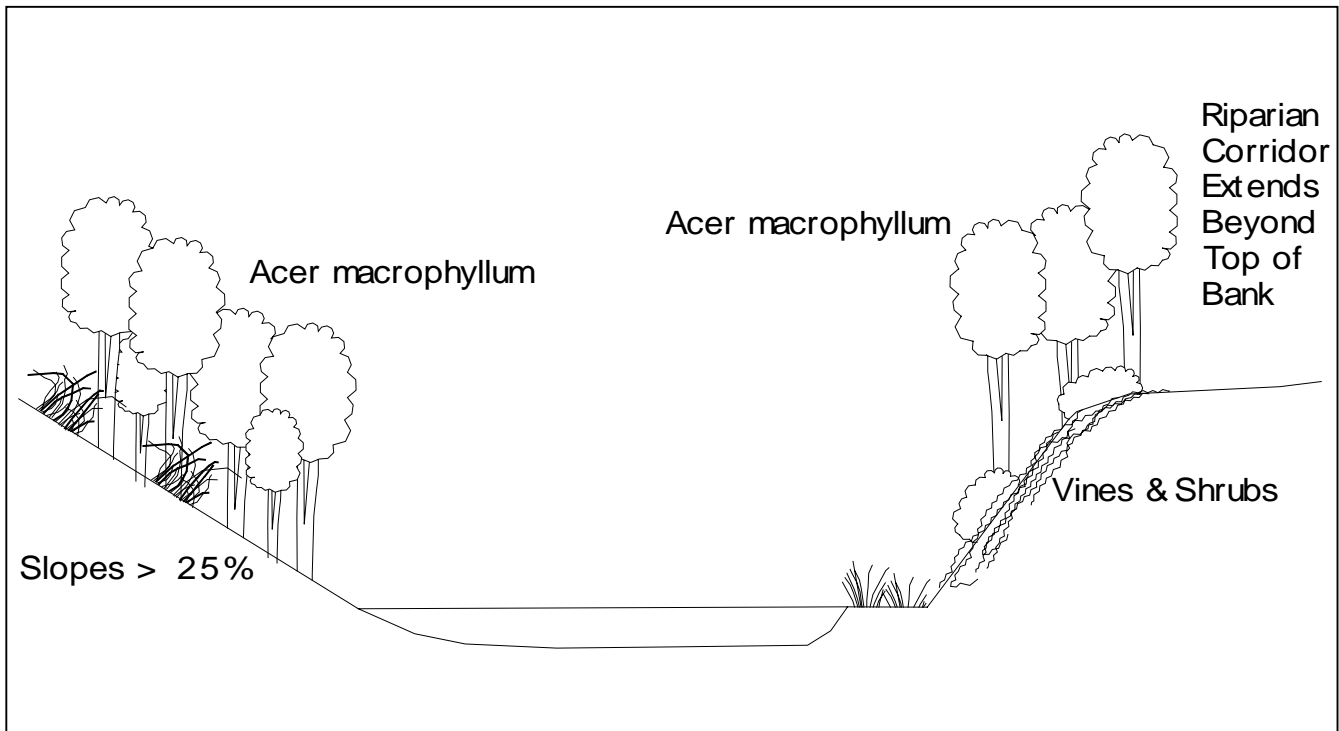
RIPARIAN CODE

S-MAR-R-6

Date: 6/12/2002 Investigators: ME/SE

Dominant tree species: *Acer macrophyllum*

Comments: The slopes on either side of the river within the riparian area are steep, relatively undisturbed, and dominated with native vegetation.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MAR-R-6

WATER QUALITY

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

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

Score

3

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

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

3

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

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

3

Total Points: 9

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE
S-MAR-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

1

10. What is the dominant vegetation layer in the riparian area?

- a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pts
- b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts
- c. Bare ground 1 pt

3

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

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

2

Total Points:

6

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

FUNCTION IS:

MEDIUM

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

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

Questions continued on next page

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MAR-R-6

WILDLIFE HABITAT (continued)

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

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

FUNCTION IS: HIGH

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MARY'S RIVER

Reach: S-MAR-R-6

Size (acres): 60.57

Map: S-1

Length (feet): 4875

Dominant Cover Type: WOODY

ARA Cover Type: Mixed Forest >70% closed canopy

Other ARA Types Mixed Woodland 30-70% closed canopy

% 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 macropylum*)

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.*), vetch (*Vicia sp.*), fringecup (*Tellima grandiflora*)

% 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: MARY'S RIVER

Map: S-1

Reach: S-MAR-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

Land Use adjacent: 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: NONE

Current Efforts NONE OBSERVED

COMMENTS

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: Confluence of Mary's River and the Willamette River
GPS Location: 44.5548 N 123.2638 W
Date: 6/12/2002
Map Number: S-1, S-2
On-site: **Off-Site:**
Riparian Code: S-MAR-R-7 (L)
Investigators: SE/ME
Reach Length: 2250 feet
Hydrologic Basin: MARY'S RIVER

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 70-100 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: Malabon silty clay loam

Adjacent Land Uses? (Check as many as needed)

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

Dominant tree species: POPULUS TRICHOCARPA

Comments: see next page

Average slope in the riparian area: (Question 1)

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

Extent of impervious surface within the riparian area. (Question 4)

<10% 10% - 25% >25%

Is the stream or water resource constricted by man-made features? (Question 8)

Yes No

Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)

Yes No

Dominant vegetation layer within riparian area? (Question 10)

Woody vegetation Herbaceous vegetation Bare ground

Does woody vegetation hang over the edge of the water? (Questions 11 & 14)

Yes No

Large woody debris in riparian area? (Question 15)

Yes No

Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)

>40% 10% - 40% <10%

Degree of development or human caused disturbance. (Question 19)

<25% 25% - 75% >75%

How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)

low, slight moderate high, very high, severe

What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)

Woody vegetation Herbaceous vegetation Bare ground

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

Yes No

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

Yes No or no flood prone area present

How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?

More than 2 2 layers 1 layer or unvegetated

Riparian Width Determination

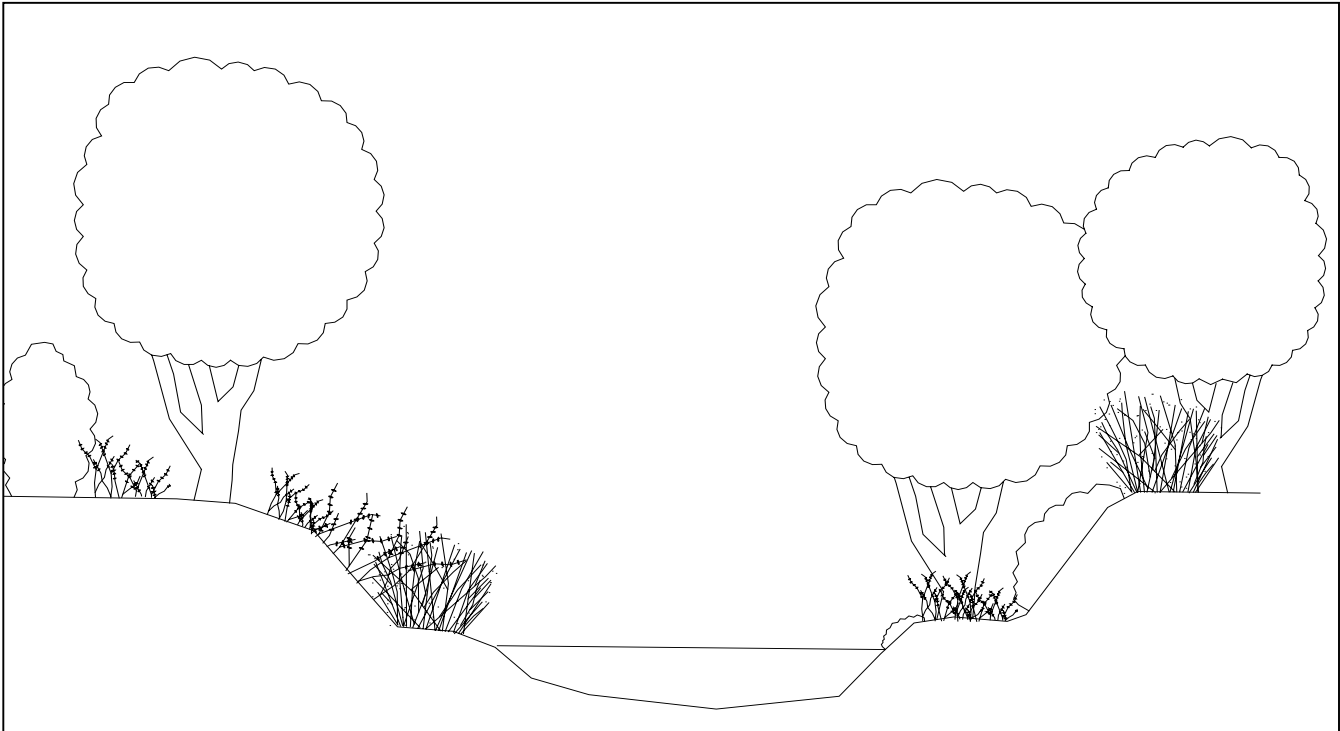


Corvallis Riparian Inventory

RIPARIAN CODE
S-MAR-R-7 (L)

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

Comments: This riparian area is the last reach of the Mary's River before confluence with the Willamette River.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MAR-R-7 (L)

WATER QUALITY

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

FLOOD MANAGEMENT

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

Score

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

3

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

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

3

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

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

3

Total Points: 9

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

| |
|----------------------|
| RIPARIAN CODE |
| S-MAR-R-7 (L) |

THERMAL REGULATION

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

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

Score

3

10. What is the dominant vegetation layer in the riparian area?

- a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pts
- b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts
- c. Bare ground 1 pt

3

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

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

2

Total Points:

8

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

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MAR-R-7 (L)

WILDLIFE HABITAT

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

Questions continued on next page

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

WILDLIFE HABITAT (continued)

RIPARIAN CODE

S-MAR-R-7 (L)

17. Is surface water present throughout the year?

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

Score

3

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

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

1

19. What is the degree of development or human-caused disturbance (e.g. buildings, impervious surfaces, lawns, agriculture, trash) in the riparian area?

- a. Less than 25% 3 pts
- b. Between 25% and 75% 2 pts
- c. Greater than 75% 1 pt

2

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: MARY'S RIVER

Reach: S-MAR-R-7L

Size (acres): 17.21

Map: S-1, S-2

Length (feet): 2250

Dominant Cover Type: WOODY

ARA Cover Type: Mixed Woodland 30-70% closed canopy

Other ARA Types Developed

% of Total Cover Trees: 65 Shrubs 30 Herbs/Vines 5 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: Black cottonwood (*Populus trichocarpa*)

Secondary Species: Oregon ash (*Fraxinus latifolia*), bigleaf maple (*Acer macropyllum*), Red alder (*Alnus rubra*),

% 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: Scouler willow (*Salix scouleriana*)

Secondary Species: Himalayan blackberry (*Rubus discolor*), Common snowberry (*Symphoricarpos albus*), clustered wild rose (*Rosa pisocarpa*), red-osier dogwood (*Cornus stolonifera*)

% 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: red fescue (*Festuca rubra*)

Secondary Species: St. John's wort (*Hypericum sp.*), reed canarygrass (*Phalaris arundinacea*), common velvetgrass (*Holcus lanatus*), common morning-glory (*Ipomoea purpurea*), common tansy (*Tanacetum vulgare*), orchardgrass (*Dactylis glomerata*), vetch (*Vicia sp.*)

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

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

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

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MARY'S RIVER

Map: S-1, S-2

Reach: S-MAR-R-7L

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: 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: REMOVAL OF NUSIANCE SPECIES AND REPLACE WITH NATIVE VEGETATION

Current Efforts NONE OBSERVED

COMMENTS RIPARIAN SAMPLE POINT IS LOCATED AT THE CONFLUENCE OF MARYS RIVER AND WILLAMETTE RIVER. PARK ADJACENT ON BOTH SIDES

Riparian Characterization Form



Corvallis Riparian Inventory

GENERAL INFORMATION

Location of data point: Confluence of Mary's River and the Willamette River
GPS Location: 44.5548 N 123.2638 W
Date: 6/12/2002
Map Number: S-1, S-2
On-site: **Off-Site:**
Riparian Code: S-MAR-R-7 (R)
Investigators: SE/ME
Reach Length: 2250 feet
Hydrologic Basin: MARY'S RIVER

WATER RESOURCE INFORMATION

Water Resource: Stream/River: Width: 70-100 feet
Lake/Pond: Width: _____ feet
Wetland: Width: 0-300 feet
LWI Wetland Code: S-MAR-M50-10
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: Malabon silty clay loam

Adjacent Land Uses? (Check as many as needed)

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

Dominant tree species: Populus trichocarpa

Comments: see next page

Average slope in the riparian area: (Question 1)

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

Extent of impervious surface within the riparian area. (Question 4)

<10% 10% - 25% >25%

Is the stream or water resource constricted by man-made features? (Question 8)

Yes No

Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)

Yes No

Dominant vegetation layer within riparian area? (Question 10)

Woody vegetation Herbaceous vegetation Bare ground

Does woody vegetation hang over the edge of the water? (Questions 11 & 14)

Yes No

Large woody debris in riparian area? (Question 15)

Yes No

Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)

>40% 10% - 40% <10%

Degree of development or human caused disturbance. (Question 19)

<25% 25% - 75% >75%

How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)

low, slight moderate high, very high, severe

What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)

Woody vegetation Herbaceous vegetation Bare ground

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

Yes No

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

Yes No or no flood prone area present

How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?

More than 2 2 layers 1 layer or unvegetated

Riparian Width Determination

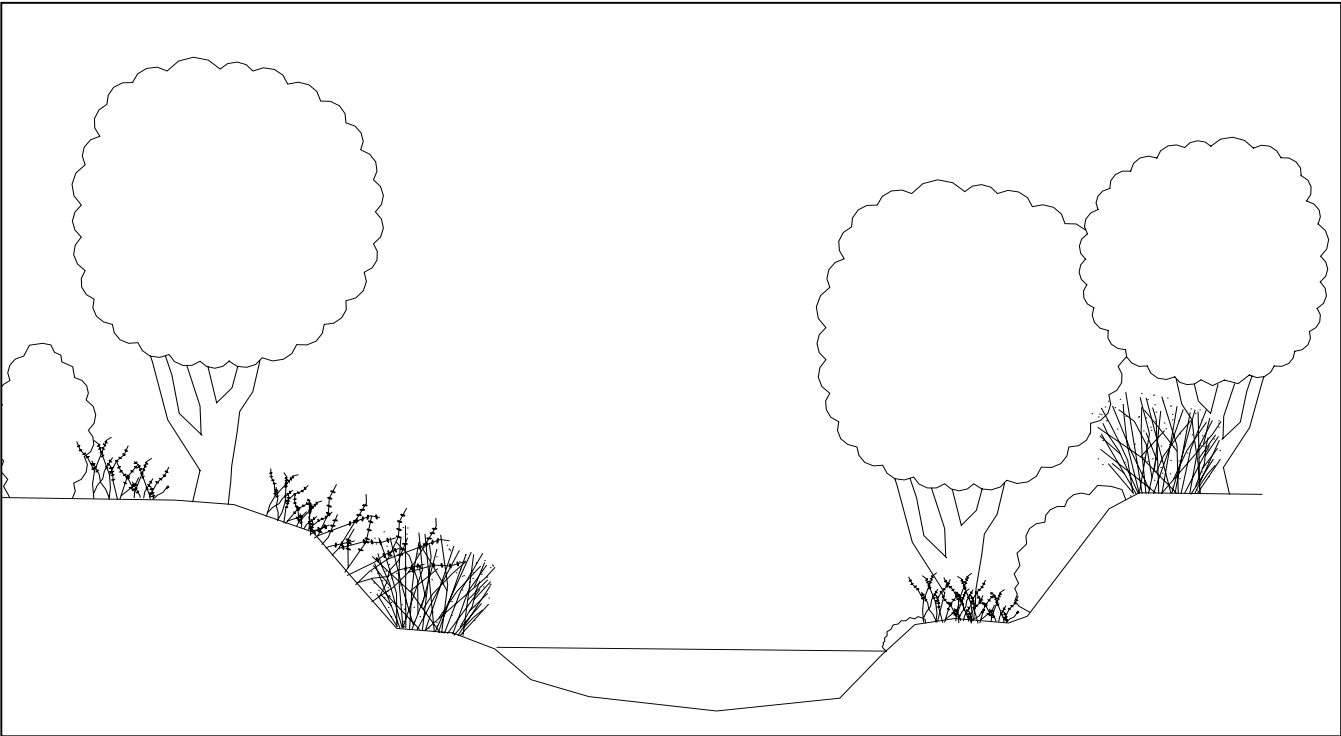


Corvallis Riparian Inventory

RIPARIAN CODE
S-MAR-R-7 (R)

Date: 6/12/2002 **Investigators:** SE/ME
Dominant tree species: *Fraxinus latifolia*

Comments: This riparian area is the last reach of the Mary's River before confluence with the Willamette River.



Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MAR-R-7 (R)

WATER QUALITY

| | | Score |
|--|-------|------------------|
| 1. What is the average slope in the riparian area? | | |
| a. Less than 10:1 (10%) | 3 pts | <u>2</u> |
| b. Between 10:1 (10%) and 5:1 (20%) | 2 pts | |
| c. Greater than 5:1 (20%) | 1 pt | |
| 2. What is the dominant vegetation cover in the riparian area? | | |
| a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high | 3 pts | <u>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>12</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
S-MAR-R-7 (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

3

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

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

3

Total Points: 9

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

FUNCTION IS: **HIGH**

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

| |
|----------------------|
| RIPARIAN CODE |
| S-MAR-R-7 (R) |

THERMAL REGULATION

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

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

Score

3

10. What is the dominant vegetation layer in the riparian area?

- a. Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high 3 pts
- b. Herbaceous vegetation or woody vegetation less than 1 meter (3.2 feet) high 2 pts
- c. Bare ground 1 pt

2

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

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

2

Total Points:

7

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

FUNCTION IS:

HIGH

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MAR-R-7 (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 | 3 |
| b. No | 1 pt | |
| 16. What percent of the water resource edge is bordered by a vegetated riparian area at least 30 feet wide? | | |
| a. Greater than 40% | 3 pts | 3 |
| b. Between 10% and 40% | 2 pts | |
| c. Less than 10% | 1 pt | |

Questions continued on next page

Riparian Functional Assessment Answer Sheet



Corvallis Riparian Inventory

RIPARIAN CODE

S-MAR-R-7 (R)

WILDLIFE HABITAT (continued)

17. Is surface water present throughout the year?

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

Score

3

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

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

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:

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: MARY'S RIVER

Reach: S-MAR-R-7R

Size (acres): 17.21

Map: S-1, S-2

Length (feet): 2250

Dominant Cover Type: HERBACEOUS

ARA Cover Type: Grass short (lawn, pasture)

Other ARA Types Developed

% of Total Cover Trees: 15 **Shrubs** 20 **Herbs/Vines** 35 **Bare:** 30

Dominant Cover Type

At Edge of Water: WOODY

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

Riparian System: LOTIC

Trees:

Type: DECIDUOUS

Dominant Species: Black cottonwood (*Populus trichocarpa*)

Secondary Species: Oregon ash (*Fraxinus latifolia*), bigleaf maple (*Acer macropyllum*), Red alder (*Alnus rubra*),

% 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: Scouler willow (*Salix scouleriana*)

Secondary Species: Himalayan blackberry (*Rubus discolor*), Common snowberry (*Symphoricarpos albus*), clustered wild rose (*Rosa pisocarpa*), red-osier dogwood (*Cornus stolonifera*)

% 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: red fescue (*Festuca rubra*)

Secondary Species: St. John's wort (*Hypericum sp.*), reed canarygrass (*Phalaris arundinacea*), common velvetgrass (*Holcus lanatus*), common morning-glory (*Ipomoea purpurea*), common tansy (*Tanacetum vulgare*), orchardgrass (*Dactylis glomerata*), vetch (*Vicia sp.*)

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

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

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

**Corvallis Natural Features Inventory
Supplemental Riparian Form**

Basin: MARY'S RIVER

Map: S-1, S-2

Reach: S-MAR-R-7R

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, COMMERCIAL

Land Use adjacent: COMMERCIAL

Infrastructure Impingement: FULLY IMPINGED

In Channel Alteration: UNALTERED

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: REMOVAL OF NUSIANCE SPECIES AND REPLACE WITH NATIVE VEGETATION

Current Efforts NONE OBSERVED

COMMENTS RIPARIAN SAMPLE POINT IS LOCATED WHERE MARY'S RIVER MEETS THE
WILLAMETTE. PARK ADJACENT ON BOTH SIDES