 JayMarc - Bridle Trails WRI#12257 January 2013

Plate 26

WETLAND FIELD DATA FORM

WETLAND FIELD DATA FORM Wetland A

BEGIN BY CHECKING ANY OF THE FOLLOWING (a. – e.) THAT APPLY:

a. The wetland is contiguous to Lake Washington;

b. The wetland contains at least 1/4 acre of organic soils, such as peat bogs or mucky soils;

c. The wetland is equal to or greater than 10 acres in size and having three or more wetland classes, as defined by the U.S. Fish & Wildlife Service (Cowardin et al., 1979), one of which is open water;

d. The wetland has significant habitat value to state or federally listed threatened or endangered wildlife species; or

e. The wetland contains state or federally listed threatened or endangered plant species.

IF ANY OF THE CRITERIA LISTED ABOVE ARE MET, THEN THE WETLAND IS CONSIDERED TO BE TYPE 1. IF THAT IS THE CASE, PLEASE CONTINUE TO COMPLETE THE ENTIRE FORM, BUT DO NOT ASSIGN POINTS.

IF THE WETLAND DOES NOT MEET THE CRITERIA LISTED ABOVE FOR TYPE 1, COMPLETE THE ENTIRE FORM, USING THE ASSIGNED POINTS TO DETERMINE IF IT IS A TYPE 2 OR TYPE 3 WETLAND.

Type 2 wetlands typically have at least two wetland vegetation classes, are at least partially surrounded by buffers of native vegetation, connected by surface water flow (perennial or intermittent) to other wetlands or streams, and contain or are associated with forested habitat.

1. **Total wetland area**

Estimate wetland area and score from choices	Acres		Point Value	Points
	>20.00	=	6	
	10-19.99	=	5	
	5-9.99	=	4	
	1-4.99	=	3	
	0.1-0.99	=	2	2
	<0.1	=	1	

2. **Wetland classes: Determine the number of wetland classes that qualify, and score according to the table.**

	# of Classes		Points
Open Water: if the area of open water is >1/3 acre or >10% of the total wetland area	1	=	1
Aquatic Beds: if the area of aquatic beds is >10% of the open water area or >1/2 acre	2	=	3
Emergent: if the area of emergent class is >1/2 acre or >10% of the total wetland area	3	=	5
Scrub-Shrub: if the area of scrub-shrub class is >1/2 acre or >10% of the total wetland area	4	=	7
Forested: if the area of forested class is >1/2 acre or >10% of the total wetland area	5	=	10

WETLANDA

3. **Plant species diversity.**

For all wetland classes which qualified in 2 above, count the number of different plant species and score according to the table below. You do not have to name them.

e.g., if a wetland has an aquatic bed class with 3 species, and emergent class with 4 species and a scrub-shrub class with 2 species, you would circle 2, 2, and 1 in the second column (below).

Class	# of Species	Point Value	Class	# of Species	Point Value
Aquatic Bed	1-2	= 1	Scrub-Shrub	1-2	= 1
	3	= 2		3-4	= 2
	>3	= 3		>4	= 3
Emergent	1-2	= 1	Forested	1-2	= 1
	3-4	= 2		3-4	= 2
	>4	= 3		>4	= 3

4. **Structural diversity.**

If the wetland has a forested class, add 1 point for each of the following attributes present:

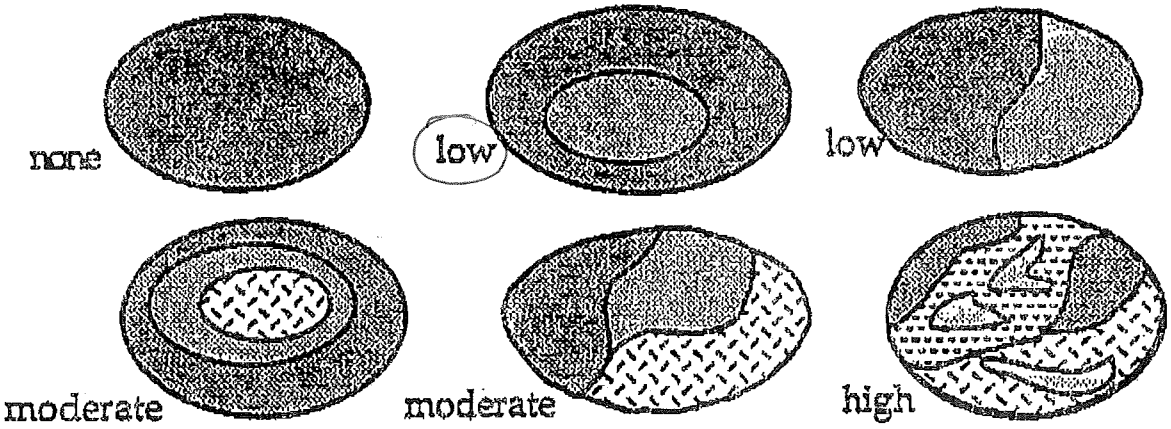
Trees >50' tall = 1
Trees 20' to 49' tall = 1
shrubs = 1
Herbaceous ground cover = 1

3

5. **Interspection between wetland classes.**

Decide from the diagrams below whether interspection between wetland classes is high, moderate, low or none

3 = High
2 = Moderate
1 = Low
0 = None



 Wetland A

6. **Habitat features**

Add points associated with each habitat feature listed:

Is there evidence of current use by beavers?	= 3
Is a heron rookery located within 300'?	= 2
Are raptor nest(s) located within 300'?	= 1
Are there at least 2 standing dead trees (snags) per acre?	= 1
Are there any other perches (wires, poles, or posts)?	= 1
Are there at least 3 downed logs per acre?	= 1

7. **Connection to streams**

Is the wetland connected at any time of the year via surface water? (score one answer only)

Is the wetland connected at any time of the year via surface water?

To a perennial stream or a seasonal stream *with* fish	= 5
To a seasonal stream *without* fish	= 3
Is not connected to any stream	= 0

3

8. **Buffers**

Step 1: Estimate (to the nearest 5%) the percentage of each buffer or land-use type (below) that adjoins the wetland boundary. Then multiply these percentages by the factor(s) below and enter result in the column to the right.

	% of Buffer		Step 1	Width Factor	Step 2
Roads, buildings or parking lots	%	X 0 =		=	
Lawn, grazed pasture, vineyards or annual crops	30 %	X 1 =	30	1 =	30
Ungrazed grassland or orchards	%	X 2 =		=	
Open water or native grasslands	%	X 3 =		=	
Forest or shrub	70 %	X 4 =	280	2 =	640
				Add buffer total	670

Step 2: Multiply result(s) of step 1:

By 1 if buffer width is 25-50'
By 2 if buffer width is 50-100'
By 3 if buffer width is >100'

Enter results and add subscores

Step 3: Score points according to the following table:

Buffer Total
900-1200 = 4
600-899 = 3
300-599 = 2
100-299 = 1

3

9. **Connection to other habitat areas:**

Is there a riparian corridor to other wetlands within 0.25 of a mile, or a corridor >100' wide with good forest or shrub cover to any other habitat area?	= 5
Is there a narrow corridor <100' wide with good cover or a wide corridor >100' wide with low cover to any other habitat area?	= 3
Is there a narrow corridor <100' wide with low cover or a significant habitat area within 0.25 mile but no corridor?	= 1
Is the wetland and buffer completely isolated by development and/or cultivated agricultural land?	= 0

3

WETLAND A

10. **Scoring**
Add the scores to get a total: 27

Question: Is the total greater than or equal to 22 points?

Answer:
Yes = Type 2
No = Type 3

Type 2

Plate 26

WETLAND FIELD DATA FORM

WETLAND FIELD DATA FORM Wetland B

BEGIN BY CHECKING ANY OF THE FOLLOWING (a. – e.) THAT APPLY:

a. The wetland is contiguous to Lake Washington;

b. The wetland contains at least 1/4 acre of organic soils, such as peat bogs or mucky soils;

c. The wetland is equal to or greater than 10 acres in size and having three or more wetland classes, as defined by the U.S. Fish & Wildlife Service (Cowardin et al., 1979), one of which is open water;

d. The wetland has significant habitat value to state or federally listed threatened or endangered wildlife species; or

e. The wetland contains state or federally listed threatened or endangered plant species.

IF ANY OF THE CRITERIA LISTED ABOVE ARE MET, THEN THE WETLAND IS CONSIDERED TO BE TYPE 1. IF THAT IS THE CASE, PLEASE CONTINUE TO COMPLETE THE ENTIRE FORM, BUT DO NOT ASSIGN POINTS.

IF THE WETLAND DOES NOT MEET THE CRITERIA LISTED ABOVE FOR TYPE 1, COMPLETE THE ENTIRE FORM, USING THE ASSIGNED POINTS TO DETERMINE IF IT IS A TYPE 2 OR TYPE 3 WETLAND.

Type 2 wetlands typically have at least two wetland vegetation classes, are at least partially surrounded by buffers of native vegetation, connected by surface water flow (perennial or intermittent) to other wetlands or streams, and contain or are associated with forested habitat.

1. Total wetland area

Estimate wetland area and score from choices

Acres		Point Value	Points
>20.00	=	6	
10-19.99	=	5	
5-9.99	=	4	
1-4.99	=	3	3
0.1-0.99	=	2	
<0.1	=	1	

2. Wetland classes: Determine the number of wetland classes that qualify, and score according to the table.

	# of Classes		Points
Open Water: if the area of open water is >1/3 acre or >10% of the total wetland area	1	=	1
Aquatic Beds: if the area of aquatic beds is >10% of the **open water** area or >1/2 acre	2	=	3
Emergent: if the area of emergent class is >1/2 acre or >10% of the total wetland area	3	=	5
Scrub-Shrub: if the area of scrub-shrub class is >1/2 acre or >10% of the total wetland area	4	=	7
Forested: if the area of forested class is >1/2 acre or >10% of the total wetland area	5	=	10

10

WETLAND B

3. **Plant species diversity.**

For all wetland classes which qualified in 2 above, count the number of different plant species and score according to the table below. You do not have to name them.

e.g., if a wetland has an aquatic bed class with 3 species, and emergent class with 4 species and a scrub-shrub class with 2 species, you would circle 2, 2, and 1 in the second column (below).

Class	# of Species	Point Value
Aquatic Bed	1-2	= 1
	3	= 2
	>3	= 3
Emergent	1-2	= 1
	3-4	= 2
	>4	= 3

Class	# of Species	Point Value
Scrub-Shrub	1-2	= 1
	3-4	= 2
	>4	= 3
Forested	1-2	= 1
	3-4	= 2
	>4	= 3

5

4. **Structural diversity.**

If the wetland has a forested class, add 1 point for each of the following attributes present:

Trees >50' tall	=	1
Trees 20' to 49' tall	=	1
shrubs	=	1
Herbaceous ground cover	=	1

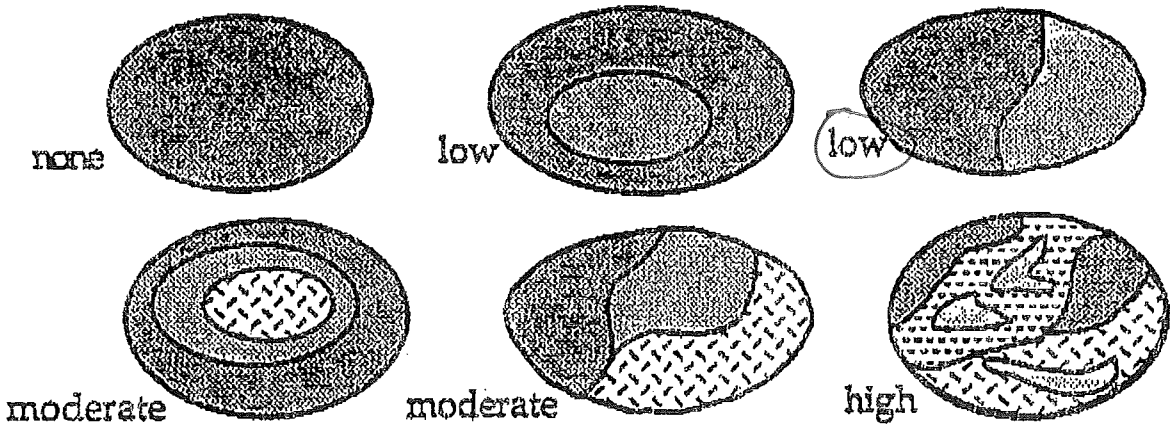
3

5. **Interspection between wetland classes.**

Decide from the diagrams below whether interspection between wetland classes is high, moderate, low or none

3	=	High
2	=	Moderate
1	=	Low
0	=	None

1



 Wetland B

6. **Habitat features**

Add points associated with each habitat feature listed:

Is there evidence of current use by beavers?	=	3
Is a heron rookery located within 300'?	=	2
Are raptor nest(s) located within 300'?	=	1
X Are there at least 2 standing dead trees (snags) per acre?	=	1
X Are there any other perches (wires, poles, or posts)?	=	1
X Are there at least 3 downed logs per acre?	=	1

3

7. **Connection to streams**

Is the wetland connected at any time of the year via surface water? (score one answer only)

Is the wetland connected at any time of the year via surface water?

To a perennial stream or a seasonal stream *with* fish	=	5
To a seasonal stream *without* fish	=	3
Is not connected to any stream	=	0

5

8. **Buffers**

Step 1: Estimate (to the nearest 5%) the percentage of each buffer or land-use type (below) that adjoins the wetland boundary. Then multiply these percentages by the factor(s) below and enter result in the column to the right.

	% of Buffer		Step 1	Width Factor		Step 2
Roads, buildings or parking lots	35 %	X 0 =	0		=	
Lawn, grazed pasture, vineyards or annual crops	5 %	X 1 =	5	1	=	5
Ungrazed grassland or orchards	60 %	X 2 =	120	2	=	240
Open water or native grasslands	%	X 3 =			=	
Forest or shrub	%	X 4 =			=	
				Add buffer total		245

Step 2: Multiply result(s) of step 1:

By 1 if buffer width is 25-50'
By 2 if buffer width is 50-100'
By 3 if buffer width is >100'

Enter results and add subscores

Step 3: Score points according to the following table:

Buffer Total
900-1200 = 4
600-899 = 3
300-599 = 2
100-299 = 1

9. **Connection to other habitat areas:**

Is there a riparian corridor to other wetlands within 0.25 of a mile, or a corridor >100' wide with good forest or shrub cover to any other habitat area?	=	5
Is there a narrow corridor <100' wide with good cover or a wide corridor >100' wide with low cover to any other habitat area?	=	3
Is there a narrow corridor <100' wide with low cover or a significant habitat area within 0.25 mile but no corridor?	=	1
Is the wetland and buffer completely isolated by development and/or cultivated agricultural land?	=	0

3

Wetland B

10. **Scoring**
Add the scores to get a total: 34

Question: Is the total greater than or equal to 22 points?

Answer:
Yes = Type 2
No = Type 3

Type 2

January 2013

Plate 26

WETLAND FIELD DATA FORM

WETLAND FIELD DATA FORM Wetland C (off-site)

BEGIN BY CHECKING ANY OF THE FOLLOWING (a. – e.) THAT APPLY:

a. The wetland is contiguous to Lake Washington;

b. The wetland contains at least 1/4 acre of organic soils, such as peat bogs or mucky soils;

c. The wetland is equal to or greater than 10 acres in size and having three or more wetland classes, as defined by the U.S. Fish & Wildlife Service (Cowardin et al., 1979), one of which is open water;

d. The wetland has significant habitat value to state or federally listed threatened or endangered wildlife species; or

e. The wetland contains state or federally listed threatened or endangered plant species.

IF ANY OF THE CRITERIA LISTED ABOVE ARE MET, THEN THE WETLAND IS CONSIDERED TO BE TYPE 1. IF THAT IS THE CASE, PLEASE CONTINUE TO COMPLETE THE ENTIRE FORM, BUT DO NOT ASSIGN POINTS.

IF THE WETLAND DOES NOT MEET THE CRITERIA LISTED ABOVE FOR TYPE 1, COMPLETE THE ENTIRE FORM, USING THE ASSIGNED POINTS TO DETERMINE IF IT IS A TYPE 2 OR TYPE 3 WETLAND.

Type 2 wetlands typically have at least two wetland vegetation classes, are at least partially surrounded by buffers of native vegetation, connected by surface water flow (perennial or intermittent) to other wetlands or streams, and contain or are associated with forested habitat.

1. **Total wetland area**

Estimate wetland area and score from choices

Acres		Point Value	Points
>20.00	=	6	
10-19.99	=	5	
5-9.99	=	4	
1-4.99	=	3	
0.1-0.99	=	2	2
<0.1	=	1	

2. **Wetland classes: Determine the number of wetland classes that qualify, and score according to the table.**

	# of Classes		Points
Open Water: if the area of open water is >1/3 acre or >10% of the total wetland area	1	=	1
Aquatic Beds: if the area of aquatic beds is >10% of the open water area or >1/2 acre	2	=	3
Emergent: if the area of emergent class is >1/2 acre or >10% of the total wetland area	3	=	5
Scrub-Shrub: if the area of scrub-shrub class is >1/2 acre or >10% of the total wetland area	4	=	7
Forested: if the area of forested class is >1/2 acre or >10% of the total wetland area	5	=	10

10

3. **Plant species diversity.**

For all wetland classes which qualified in 2 above, count the number of different plant species and score according to the table below. You do not have to name them.

e.g., if a wetland has an aquatic bed class with 3 species, and emergent class with 4 species and a scrub-shrub class with 2 species, you would circle 2, 2, and 1 in the second column (below).

Class	# of Species	Point Value
Aquatic Bed	1-2	= 1
	3	= 2
	>3	= 3
Emergent	1-2	= 1
	3-4	= 2
	>4	= 3

Class	# of Species	Point Value
Scrub-Shrub	1-2	= 1
	3-4	= 2
	>4	= 3
Forested	1-2	= 1
	3-4	= 2
	>4	= 3

3

4. **Structural diversity.**

If the wetland has a forested class, add 1 point for each of the following attributes present:

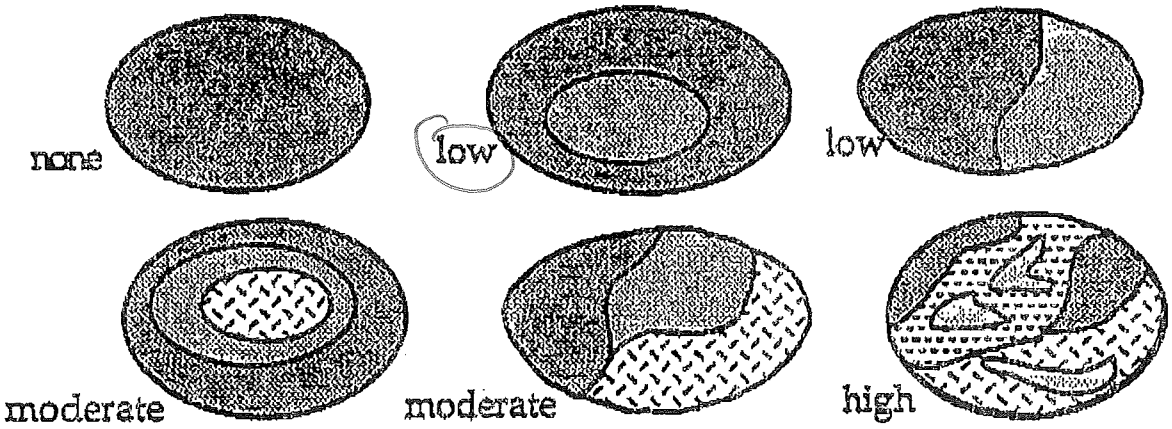
Trees >50' tall	=	1
Trees 20' to 49' tall	=	1
shrubs	=	1
Herbaceous ground cover	=	1

3

5. **Interspection between wetland classes.**

Decide from the diagrams below whether interspection between wetland classes is high, moderate, low or none

3	=	High
2	=	Moderate
1	=	Low
0	=	None



Kirkland Zoning Code Wetland C (offsite)

6. **Habitat features**

Add points associated with each habitat feature listed:

Is there evidence of current use by beavers?	= 3
Is a heron rookery located within 300'?	= 2
Are raptor nest(s) located within 300'?	= 1
Are there at least 2 standing dead trees (snags) per acre?	= 1
Are there any other perches (wires, poles, or posts)?	= 1
Are there at least 3 downed logs per acre?	= 1

7. **Connection to streams**

Is the wetland connected at any time of the year via surface water? (**score one answer only**)

Is the wetland connected at any time of the year via surface water?

To a perennial stream or a seasonal stream *with* fish	= 5
To a seasonal stream *without* fish	= 3
Is not connected to any stream	= 0

5

8. **Buffers**

Step 1: Estimate (to the nearest 5%) the percentage of each buffer or land-use type (below) that adjoins the wetland boundary. Then multiply these percentages by the factor(s) below and enter result in the column to the right.

	% of Buffer		Step 1	Width Factor	Step 2
Roads, buildings or parking lots	___ %	X 0 =	___	___ =	___
Lawn, grazed pasture, vineyards or annual crops	___ %	X 1 =	___	___ =	___
Ungrazed grassland or orchards	___ %	X 2 =	___	___ =	___
Open water or native grasslands	___ %	X 3 =	___	___ =	___
Forest or shrub	100 %	X 4 =	400	1 =	400
				Add buffer total	400

Step 2: Multiply result(s) of step 1:

By 1 if buffer width is 25-50'
By 2 if buffer width is 50-100'
By 3 if buffer width is >100'

Enter results and add subscores

Step 3: Score points according to the following table:

Buffer Total
900-1200 = 4
600-899 = 3
300-599 = 2
100-299 = 1

2

9. **Connection to other habitat areas:**

Is there a riparian corridor to other wetlands within 0.25 of a mile, or a corridor >100' wide with good forest or shrub cover to any other habitat area?	= 6
Is there a narrow corridor <100' wide with good cover or a wide corridor >100' wide with low cover to any other habitat area?	= 3
Is there a narrow corridor <100' wide with low cover or a significant habitat area within 0.25 mile but no corridor?	= 1
Is the wetland and buffer completely isolated by development and/or cultivated agricultural land?	= 0

3

10. **Scoring**
Add the scores to get a total: 30

Question: Is the total greater than or equal to 22 points?

Answer:
Yes = Type 2
No = Type 3