

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

b	
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

b	Rogue River is outside of Study Area
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	Is upstream of Rogue River
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space			
2. Agriculture			
3. Exclusive Forest Use		c	
4. Developed uses			
5. Other			

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

c

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

a

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space			
2. Agriculture			
3. Exclusive Forest Use		see next question	
4. Developed uses			
5. Other			

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

a

17 What is the (entire) wetland acreage?

a	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

b	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

a	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	b
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? b

23 What is the dominant wetland vegetation cover?

c	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

a	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet w

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

a	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	urban
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Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

b	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

a	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

a	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

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b	
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7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
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b	
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
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a	
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space			
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

b

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- a. Developed uses

b

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next question		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

b

17 What is the (entire) wetland acreage?

a	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	a
RURAL a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

a	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet wide?

b	a. >40%	b. bet. 10% & 40%	c. <10%
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a	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre
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Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

b	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

b	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

b	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

a	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

b	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

**Oregon Freshwater Wetland Assessment Function Questions
Answer Sheet**

OFWAM UNIT #		MWC-1
Wildlife Habitat		
1	b	
2	c	
3	a	
4	c	
5	b	
6	a	
7	a	
8	c	
9b	c	
Provides habitat for some species		
Fish Habitat		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Not applicable		
Water Quality (pollutant removal)		
1	b	
2	a	
3	b	
4	a	Ditches likely provide connectivity
5	a	
6	b	
Impacted or degraded		
Hydrologic Control (flood control & water supply)		
1	a	
2	a	
3	a	
4	a	
5	c	
6	a	
7	b	
Intact		

OFWAM UNIT #		MWC-2
Wildlife Habitat		
1	a	
2	a	
3	b	
4	c	
5	a	
6	a	
7	a	
8	b	
9b	b	
Provides diverse wildlife habitat		
Fish Habitat		
Streams and Rivers		
1	a	
2	b	
3	b	
4	a	
5	b	
6	b	
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Intact		
Water Quality (pollutant removal)		
1	a	
2	a	
3	a	
4	a	
5	b	
6	c	
Intact		
Hydrologic Control (flood control & water supply)		
1	a	
2	a	
3	a	
4	b	
5	a	
6	b	
7	b	
Intact		

**Oregon Freshwater Wetland Assessment
Function and Condition Summary Sheet**

Wetland identification: MWC-1

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Relatively isolated, habitat not interspersed, low structural diversity, no open water, lacks woody vegetation. Adjacent land use is rural/residential and industrial. Located south of Swanson Creek
Fish Habitat	Not applicable	No stream / pond / lake present.
Water Quality	Impacted or degraded	Surface inflow. Fed by ditch in-flow; ponding; within floodplain of Swanson Creek, a tributary to Whetsone and the Rogue. Average vegetative cover <60% due to vernal pool component.
Hydrologic Control	Intact	Located within Swanson Creek 100-year floodplain.
Description		
Wetland ID's: W36, W04 (A, B and Mosaic components).		

Wetland identification: MWC-2

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides diverse wildlife habitat	Forested, woody cover along Swanson Creek. Diverse herbaceous vegetation. Two wetland vegetation classes present, interspersed, large size. Provides meadow / pasture habitat for insects and small birds. Good structural diversity. Adjacent to developed areas.
Fish Habitat	Intact	Wetland complex connected to natural stream channel (Swanson Creek). No recorded water quality issues upstream. Shaded riparian corridor. Small portions of stream ditched/culverted.
Water Quality	Intact	Surface inflow from Swanson Creek and surrounding upland. Interspersed ponding, well vegetated. Within floodplain of Swanson Creek, a tributary to Whetsone and the Rogue.
Hydrologic Control	Intact	Within 100-year floodplain of Swanson Creek. Adjacent industrial / residential land use. Restricted outflow; ponding during growing season; Complex >5 acres in size.
Description		
Wetland ID's: W06, W34, W35, W23, W24, W83 through W88. Swanson Creek riparian feature.		

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 - c. Forested or natural area.

b	comments: Light industrial also present. Pasture land dominant use.
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Water quality - see DEQ website

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- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

b	comments: Rogue River is outside of Study Area
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
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 - c. One or more upstream reaches are listed in severe water quality condition.

a	comments: Extensive ditching to east for flood irrigation.
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	<i>see next two questions</i>		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space b
- b. Agriculture
- c. Developed uses

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space b
- b. Agriculture
- a. Developed uses

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	<i>see next question</i>		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses b
- b. Agriculture
- c. Exclusive Forest Use or Open Space

17 What is the (entire) wetland acreage?

a	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
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28 Estimate area of unvegetated, open water within the wetland.

b	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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33 Does the lake or pond contain areas of deep and shallow water?

b	a. yes	b. cannot be determined	c. no
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b	
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a	
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b

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21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	b
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

a	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet wi

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

a	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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28 Estimate area of unvegetated, open water within the wetland.

b	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre

URBAN

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

b	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
---	--	--	---

Streams connected to the wetland

30 What is the physical character of the stream channel?

b	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

b	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

a	a. yes (describe)	b. unable to determine or not applicable	c. no
---	-------------------	--	-------

38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

c	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

**Oregon Freshwater Wetland Assessment Function Questions
Answer Sheet**

OFWAM UNIT# MWC-3		
Wildlife Habitat		
1	b	
2	b	
3	c	
4	b	
5	a	
6	a	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1	b	
2	c	
3	c	
4	a	
5	b	
6	c	
Impacted or Degraded		
Water Quality (pollutant removal)		
1	b	
2	a	
3	a	
4	a	
5	b	
6	c	
Intact		
Hydrologic Control (flood control & water supply)		
1	b	
2	a	
3	a	
4	b	
5	b	
6	b	
7	b	
Impacted or Degraded		

OFWAM UNIT # MWC-4		
Wildlife Habitat		
1	b	
2	a	
3	b	
4	b	
5	a	
6	a	
7	a	
8	b	
9b	b	
Provides diverse wildlife habitat		
Fish Habitat (if applicable)		
Streams and Rivers		
1	a	
2	b	
3	b	
4	a	
5	b	
6	b	
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Impacted or Degraded		
Water Quality (pollutant removal)		
1	a	
2	a	
3	a	
4	a	
5	b	
6	c	
Intact		
Hydrologic Control (flood control & water supply)		
1	a	
2	a	
3	a	
4	c	
5	a	
6	a	
7	b	
Intact		

**Oregon Freshwater Wetland Assessment
Function and Condition Summary Sheet**

Wetland identification: MWC-3

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Habitat not interspersed, adjoining waters are approximately 0.6 acres in total. Some structural diversity. Lacks woody vegetation. Adjacent land use is residential. Borderline diverse / some.
Fish Habitat	Impacted or Degraded	Ditches are channelized, one man-made irrigation pond present.
Water Quality	Intact	Overland sheet inflow and surface flow via ditches. Extensive ponding during growing season is likely, based on historical aerial imagery. Tributary to Swanson Creek.
Hydrologic Control	Impacted or Degraded	Agriculture is dominant surrounding land use.
Description		
Wetland ID's: W07, W38. Adjoining waters: AW35, WA29.		

Wetland identification: MWC-4

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides diverse wildlife habitat	Forested, woody cover along Swanson Creek. Diverse herbaceous vegetation. Two wetland vegetation classes present, interspersed, large size. Provides meadow / pasture habitat for insects and small birds. Good structural diversity. Adjacent to developed areas.
Fish Habitat	Impacted or Degraded	Wetland complex connected to natural stream channel (Swanson Creek). No recorded water quality issues upstream. Shaded riparian corridor. Small portions of stream ditched/culverted.
Water Quality	Intact	Surface inflow from Swanson Creek and surrounding upland. Interspersed ponding, well vegetated. Within floodplain of Swanson Creek, a tributary to Whetsone and the Rogue.
Hydrologic Control	Intact	Within 100-year floodplain of Swanson Creek. Adjacent industrial / residential land use. Restricted outflow; ponding during growing season; Complex >5 acres in size.
Description		
Wetland ID's: W08, W09, W39-(A-B), W40 through W43.		

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

a	comments: housing development upstream
---	--

Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

b	comments:
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	comments:
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
see next two questions		

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

b

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space
- b. Agriculture
- a. Developed uses

b

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
see next question		

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

a

17 What is the (entire) wetland acreage?

a	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	a
RURAL a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

b	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

c	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet w

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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28 Estimate area of unvegetated, open water within the wetland.

b	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	urban
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Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

c	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

c	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

c	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

c	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

b	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

c	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

a	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

a	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

b	
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

b	
---	--

8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next two questions		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

b

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space
- b. Agriculture
- a. Developed uses

b

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next question		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

a

17 What is the (entire) wetland acreage?

a	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	a
RURAL a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

c	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
---	---------	-------------	--------

26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet wi

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
---	--	---	--

28 Estimate area of unvegetated, open water within the wetland.

a	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre
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Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

b	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

c	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

b	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

c	a. 60% or more	b. bet. 20% & <60%	c. <20%
---	----------------	--------------------	---------

35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
---	---------	-------------------	---------

Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

c	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

a	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

a	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

Oregon Freshwater Wetland Assessment Function Questions Answer Sheet

OFWAM UNIT# MWC-5		
Wildlife Habitat		
1	a	
2	b	
3	c	
4	b	
5	a	
6	b	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1	c	
2	c	
3	c	
4	a	
5	b	
6	c	
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Impacted or Degraded		
Water Quality (pollutant removal)		
1	c	
2	a	
3	a	
4	a	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	a	
3	a	
4	a	
5	b	
6	a	
7	a	
Intact		

OFWAM UNIT # MWC-6		
Wildlife Habitat		
1	a	
2	c	
3	b	
4	a	
5	a	
6	b	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1	c	
2	b	
3	c	
4	a	
5	b	
6	c	
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Impacted or Degraded		
Water Quality (pollutant removal)		
1	c	
2	a	
3	a	
4	a	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	a	
3	a	
4	a	
5	c	
6	a	
7	b	
Intact		

**Oregon Freshwater Wetland Assessment
Function and Condition Summary Sheet**

Wetland identification: MWC-5

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Mostly emergent with adjoining open water, interspersed, large size. Provides meadow / pasture habitat for insects and small birds. Somewhat mosaic distribution of wetland/upland areas. Surface water connection via channelized stream. Relatively undisturbed pasture.
Fish Habitat	Impacted or Degraded	Ditches are channelized, two ponds present.
Water Quality	Impacted or Degraded	Primarily groundwater input. Lacks woody vegetation. Seasonal ponding; adjacent to light industrial land use and agriculture. No clear connection to Swanson Creek.
Hydrologic Control	Intact	Complex >5 acres in size. Extensive flooding during growing season. Restricted outlet due to adjoining Vilas road and industrial development.
Description		
Wetland ID's: W10-(A, D-G), W22. Water ID's: AW16, AW32.		

Wetland identification: MWC-6

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Five wetland vegetation classes present, well interspersed, large size, diverse. Good structural at eastern end (W21, W53 on slope), open water interspersed, and streams / ditches present.
Fish Habitat	Impacted or Degraded	Ditches are channelized, several man made and natural ponds present.
Water Quality	Impacted or Degraded	Groundwater input. Streams extensively channelized. Surrounding land use is flood irrigated pasture. Downstream channel runs through / adjacent to Medford airport.
Hydrologic Control	Intact	Limited outlet. Not in floodplain, however ponding is likely. Adjacent to developed land uses. Drainage feeds to pond with restricted outflow.
Description		
Wetland ID's: W11, W21, W46 through W51, W53 through W57. Water ID's: WA14, WA15, AW33, AW17, WA16, WA28.		

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

a	comments: pasture, residential, industrial
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

b	comments:
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	comments: Rogue river is outside study area, downstream
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
see next two questions		

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

b

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space
- b. Agriculture
- a. Developed uses

b

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
see next question		

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

b

17 What is the (entire) wetland acreage?

a	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

a	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	b
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? b

23 What is the dominant wetland vegetation cover?

b	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

a	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet w

b	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
---	--	---	--

28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
---	--	--	---

Streams connected to the wetland

30 What is the physical character of the stream channel?

c	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

c	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

a	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

c	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

a	
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

b	
---	--

8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	
---	--

Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space 2. Agriculture 3. Exclusive Forest Use 4. Developed uses 5. Other	see next two questions		

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space a
- b. Agriculture
- c. Developed uses

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space a
- b. Agriculture
- a. Developed uses

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space 2. Agriculture 3. Exclusive Forest Use 4. Developed uses 5. Other	see next question		

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses a
- b. Agriculture
- c. Exclusive Forest Use or Open Space

17 What is the (entire) wetland acreage?

a	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

b	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
---	--	--	---

19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN a. Two or more	b. One w/ > 5 species	c. One w/ < 5 specie	b
RURAL a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? c

23 What is the dominant wetland vegetation cover?

c	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

a	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet wi

b	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

n/a	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

n/a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

a	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

a	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

Oregon Freshwater Wetland Assessment Function Questions Answer Sheet

OFWAM UNIT# MWC-7		
Wildlife Habitat		
1	b	rural
2	b	
3	a	
4	c	
5	a	
6	b	
7	a	
8	b	
9b	b	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1	c	
2	c	
3	c	
4	a	
5	b	
6	c	
Lakes and Ponds		
1	n/a	
2	n/a	
3	n/a	
4	n/a	
5	n/a	
6	n/a	
Impacted or Degraded		
Water Quality (pollutant removal)		
1	a	
2	a	
3	b	
4	a	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	a	
2	a	
3	a	
4	c	
5	b	
6	b	
7	a	
Intact		

OFWAM UNIT # MWC-8		
Wildlife Habitat		
1	b	
2	c	
3	a	
4	c	
5	b	
6	b	
7	a	
8	a	
9b	b	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Not applicable		
Water Quality (pollutant removal)		
1	a	
2	a	
3	c	
4	a	
5	a	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	a	
3	a	
4	a	
5	c	
6	a	
7	a	
Intact		

**Oregon Freshwater Wetland Assessment
Function and Condition Summary Sheet**

Wetland identification: MWC-7

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Limited structural diversity, very small waters and vernal pools interspersed, one Cowardin class. Adjacent to Swanson Creek, with a portion crossing in to the 100-year floodplain. Lacks woody vegetation.
Fish Habitat	Impacted or Degraded	Small ditch runs through center of complex.
Water Quality	Impacted or Degraded	Surface in-flow, however wetland vegetation percentage is low because of mosaic structure. Vernal pool ponding during the growing season evident in aerial imagery.
Hydrologic Control	Intact	Partly intersects with Swanson Creek 100-year floodplain. More than 5 acres in size.
Description		
<p>Wetland ID's: W82. Landform was visually observed from southern boundary of parcel, however the characteristics of the vernal pools were not confirmed due to denied access. This polygon is from the Agate Desert Vernal Pool Planning TAC (2000), which has been extended slightly to the NW using desktop interpretation.</p> <p>Water ID's: AW10, WA11</p>		

Wetland identification: MWC-8

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Isolated with low structural diversity. Surrounded by developed land uses.
Fish Habitat	Not applicable	Not connected to a stream, ditch or open water.
Water Quality	Impacted or Degraded	Outside the floodplain of Swanson Creek. Low percentage of wetland vegetation cover due to mosaic structure.
Hydrologic Control	Intact	Polygon more than 5 acres in size, however actual wetland acreage may be smaller. No apparent outlet. Wetland surrounded by industrial and residential land use, and pasture.
Description		
<p>Wetland ID's: W25. Not accessed for verification. This wetland polygon is from the Agate Desert Vernal Pool Planning TAC (2000), and the Medford Hydrography CAD (2013). Native oaks are present within the wetland polygon and were included as upland habitat in the OFWAM assessment.</p>		

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

a	comments:
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

b	comments:
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	comments:
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
see next two questions		

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

b

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space
- b. Agriculture
- a. Developed uses

b

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
see next question		

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

b

17 What is the (entire) wetland acreage?

b	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	a
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? **b**

23 What is the dominant wetland vegetation cover?

c	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

c	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet w

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
RURAL	a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

c	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

n/a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

b	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

c	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
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a	
---	--

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b	
---	--

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a	
---	--

Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next two questions		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space b
- b. Agriculture
- c. Developed uses

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space b
- b. Agriculture
- a. Developed uses

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next question		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses a
- b. Agriculture
- c. Exclusive Forest Use or Open Space

17 What is the (entire) wetland acreage?

b	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

b	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)	a			
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	b
RURAL	a. 3 or 4	b. 2	c. 1	

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c	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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b	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet wide?

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

n/a	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

n/a	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

n/a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

b	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

b	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

Oregon Freshwater Wetland Assessment Function Questions Answer Sheet

OFWAM UNIT# MWC-9		
Wildlife Habitat		
1	a	
2	c	
3	c	
4	c	
5	a	
6	b	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Not applicable		
Water Quality (pollutant removal)		
1	a	
2	b	
3	b	
4	b	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	b	
3	b	
4	c	
5	c	
6	b	
7	a	
Impacted or Degraded		

OFWAM UNIT # BCS-1		
Wildlife Habitat		
1	b	
2	c	
3	b	
4	c	
5	b	
6	b	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Not applicable		
Water Quality (pollutant removal)		
1	a	
2	b	
3	b	
4	b	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	b	
3	b	
4	b	
5	c	
6	a	
7	a	
Impacted or Degraded		

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

c	comments: a portion is agriculture, and further upstream is open upland forest.
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comments: Adjacent Larson creek is listed as water quality limited for temperature and dissolved oxygen
---	---

8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	comments:
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space 2. Agriculture 3. Exclusive Forest Use 4. Developed uses 5. Other	see next two questions		

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space b
- b. Agriculture
- c. Developed uses

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space b
- b. Agriculture
- a. Developed uses

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space 2. Agriculture 3. Exclusive Forest Use 4. Developed uses 5. Other	see next question		

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses b
- b. Agriculture
- c. Exclusive Forest Use or Open Space

17 What is the (entire) wetland acreage?

b	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
---	--------	-------

Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	b
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)?

a

23 What is the dominant wetland vegetation cover?

b	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet w

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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28 Estimate area of unvegetated, open water within the wetland.

b	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

b	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
---	--	--	---

Streams connected to the wetland

30 What is the physical character of the stream channel?

n/a	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

n/a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

b	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

b	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

b	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

a	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

b	
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comment: Downstream Bear creek is listed as water quality limited - Temperature, sediment, and bacteria.
---	--

8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next two questions		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space b
- b. Agriculture
- c. Developed uses

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space b
- b. Agriculture
- a. Developed uses

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next question		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses b
- b. Agriculture
- c. Exclusive Forest Use or Open Space

17 What is the (entire) wetland acreage?

b	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 specie	b
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RURAL	a. 3 or 4	b. 2	c. 1
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21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)?

b

23 What is the dominant wetland vegetation cover?

c	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet wi

b	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

a	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
---	--	---	--

28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre
RURAL	a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre

URBAN

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

a	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

b	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

c	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

c	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

c	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

Oregon Freshwater Wetland Assessment Function Questions Answer Sheet

OFWAM UNIT# BCS-2		
Wildlife Habitat		
1	b	
2	b	
3	b	
4	b	
5	a	
6	b	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1	b	
2	c	
3	b	
4	a	
5	b	
6	b	
Impacted or Degraded		
Water Quality (pollutant removal)		
1	a	
2	b	
3	a	
4	b	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	b	
3	b	
4	a	
5	b	
6	b	
7	c	
Impacted or Degraded		

OFWAM UNIT # BCS-3		
Wildlife Habitat		
1	b	
2	c	
3	b	
4	c	
5	a	
6	a	
7	a	
8	b	
9b	b	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1	c	
2	b	
3	c	
4	a	
5	b	
6	a	
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Impacted or Degraded		
Water Quality (pollutant removal)		
1	a	
2	c	
3	b	
4	a	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	c	
3	b	
4	c	
5	c	
6	b	
7	b	
Impacted or Degraded		

**Oregon Freshwater Wetland Assessment
Function and Condition Summary Sheet**

Wetland identification: BCS-2

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Riparian vegetation along Larson Creek includes oak, ash, willow, and blackberry. One wetland type.
Fish Habitat	Impacted or Degraded	Larson Creek reservoir is small. It adjoins the wetlands, but does not have a clear connection to Larson Creek.
Water Quality	Impacted or Degraded	Could be intact if ponding is occurring (unable to determine). Evidence that main source of hydrology is from up-slope canal and associated ditches used for flood irrigation.
Hydrologic Control	Impacted or Degraded	Larson Creek reservoir connects to wetlands, but does not have a clear connection to Larson Creek. No culvert observed under road to west.
Description		
Wetland ID's: W13 and W66 Water ID's: AW21 - Larson Creek Reservoir. East Lateral Canal is upslope. Passes LSW criteria because it is within 1/4 mile of water quality limited Larson creek.		

Wetland identification: BCS-3

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Adjoining upland vegetation somewhat sparse. Single Cowardin class.
Fish Habitat	Impacted or Degraded	Wetland connected to tributary via intermittent or potentially ephemeral drainage / ditch that lacks woody vegetation.
Water Quality	Impacted or Degraded	Connected to tributary by likely intermittent stream. Inflow potentially from East Lateral Canal and AW22 pond.
Hydrologic Control	Impacted or Degraded	Residence is in close proximity, however majority of surrounding land use is flood irrigated pasture.
Description		
Wetland ID's: W68. Unnamed tributary to Bear Creek is located approximately 300 feet to the south, outside the study area and is connected by an ephemeral drainage.		

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

b	comments: Pasture, and golf course
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comments: Bear Creek, downstream
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	comments:
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
<i>see next two questions</i>		

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

b

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space
- b. Agriculture
- a. Developed uses

b

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
<i>see next question</i>		

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

a

17 What is the (entire) wetland acreage?

a	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
---	--------	-------

Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	a
RURAL a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

b	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet w

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

a	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
---	--	---	--

28 Estimate area of unvegetated, open water within the wetland.

b	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

a	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
---	--	--	---

Streams connected to the wetland

30 What is the physical character of the stream channel?

n/a	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
-----	---	-------------------------------------	--

31 What percentage of the stream is shaded by riparian vegetation?

n/a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

b	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

c	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

a	a. yes (describe)	b. unable to determine or not applicable	c. no
---	-------------------	--	-------

38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

a	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

a	
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comments: Bear Creek is listed as water quality limited
---	---

8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

c	comments: Bear creek is listed as severe with data
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space 2. Agriculture 3. Exclusive Forest Use 4. Developed uses 5. Other	see next two questions		

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space a
- b. Agriculture
- c. Developed uses

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space a
- b. Agriculture
- a. Developed uses

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space 2. Agriculture 3. Exclusive Forest Use 4. Developed uses 5. Other	see next question		

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses c
- b. Agriculture
- c. Exclusive Forest Use or Open Space

17 What is the (entire) wetland acreage?

b	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
---	--	--	---

19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

a	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	a
RURAL a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

a	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

a	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by a vegetative buffer at least 25 feet wide?

a	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

a	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
---	--	---	--

28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

a	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

b	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

b	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

b	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

b	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

b	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

b	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

Oregon Freshwater Wetland Assessment Function Questions Answer Sheet

OFWAM UNIT# BCS-4		
Wildlife Habitat		
1	a	
2	b	
3	b	
4	b	
5	a	
6	a	
7	a	
8	b	
9b	c	
Provides diverse wildlife habitat		
Fish Habitat (if applicable)		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1	b	
2	c	
3	c	
4	a	
5	b	
6	a	
Impacted or Degraded		
Water Quality (pollutant removal)		
1	a	
2	a	
3	a	
4	a	
5	b	
6	c	
Intact		
Hydrologic Control (flood control & water supply)		
1	b	
2	a	
3	a	
4	a	
5	b	
6	a	
7	b	
Intact		

OFWAM UNIT # BCS-5		
Wildlife Habitat		
1	a	
2	a	
3	a	
4	c	
5	a	
6	a	
7	c	
8	a	
9b	a	
Provides diverse wildlife habitat		
Fish Habitat (if applicable)		
Streams and Rivers		
1	a	
2	b	
3	b	
4	c	
5	a	
6	a	
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Intact		
Water Quality (pollutant removal)		
1	a	
2	b	
3	a	
4	a	
5	a	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	a	
2	b	
3	b	
4	b	
5	a	
6	c	
7	a	
Impacted or Degraded		

**Oregon Freshwater Wetland Assessment
Function and Condition Summary Sheet**

Wetland identification: BCS-4

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides diverse wildlife habitat	Two Cowardin classes present, dominated by emergent vegetation with limited diversity and moderate interspersion. Adjoins open water, and I-5 corridor.
Fish Habitat	Impacted or Degraded	Coho present in Bear Creek, downstream. Connected to Bear Creek via culvert under I-5 corridor.
Water Quality	Intact	Large area, well vegetated, tributary to Bear Creek.
Hydrologic Control	Intact	Aerial imagery suggests flooding / ponding present. Receives flow from ditches and tributaries leading to Bear Creek.
Description		
Wetland ID's: W70-W72, W74. Water ID's: WA08, WA22, WA24, WA25, WA28		

Wetland identification: BCS-5

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides diverse wildlife habitat	Forested, woody, scrub-shrub cover. Diverse vegetation. Two Cowardin classes classes present, interspersed, large size, good structural diversity. Bear Creek runs through middle. Adjacent to developed areas.
Fish Habitat	Intact	Provides shade to Bear Creek, a natural channel with good structural diversity. Coho recorded in Bear Creek (federally threatened).
Water Quality	Impacted or Degraded	Bear Creek is water quality limited due to temperature, bacteria and sediment.
Hydrologic Control	Impacted or Degraded	Dominant downstream cover within 500 feet is natural area within the Bear Creek Greenway.
Description		
Wetland ID's: W18, W79 Water ID's: Bear Creek		

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

b	comments:
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comments: Bear creek, downstream
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	comments:
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
<i>see next two questions</i>		

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

a

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space
- b. Agriculture
- a. Developed uses

a

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
<i>see next question</i>		

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

c

17 What is the (entire) wetland acreage?

b	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	b
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

c	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

c	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by a vegetative buffer at least 25 feet wide?

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

b	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

b	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

c	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

b	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

b	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

a	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

a	
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comment: Bear creek
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next two questions		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space b
- b. Agriculture
- c. Developed uses

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space b
- b. Agriculture
- a. Developed uses

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next question		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses b
- b. Agriculture
- c. Exclusive Forest Use or Open Space

17 What is the (entire) wetland acreage?

a	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	a
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

c	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

c	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by a vegetative buffer at least 25 feet wide?

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

n/a	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

n/a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

c	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

a	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

a	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

Oregon Freshwater Wetland Assessment Function Questions Answer Sheet

OFWAM UNIT# BCS-6		
Wildlife Habitat		
1	b	
2	c	
3	c	
4	c	
5	a	
6	b	
7	a	
8	a	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1	b	
2	c	
3	c	
4	a	
5	a	
6	b	
Impacted or Degraded		
Water Quality (pollutant removal)		
1	b	
2	b	
3	a	
4	b	
5	a	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	b	
3	b	
4	a	
5	c	
6	c	
7	b	
Impacted or Degraded		

OFWAM UNIT # BCS-7		
Wildlife Habitat		
1	a	
2	c	
3	c	
4	c	
5	a	
6	b	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Not applicable		
Water Quality (pollutant removal)		
1	c	
2	a	
3	a	
4	a	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	a	
3	a	
4	a	
5	c	
6	b	
7	a	
Intact		

**Oregon Freshwater Wetland Assessment
Function and Condition Summary Sheet**

Wetland identification: BCS-6

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Isolated wetland within golf course.
Fish Habitat	Impacted or Degraded	Culvert from wetland flows to underground piping, and into artificial pond
Water Quality	Impacted or Degraded	Wetland on slope, surrounded by golf course, drained by underground culvert.
Hydrologic Control	Impacted or Degraded	Wetland on slope, surrounded by golf course, drained by underground culvert. Not in floodplain, not upstream of developed areas. Extensive ponding not likely.
Description		
Wetland ID's: W17. Other small probable wetlands on golf course too small for functional assessment. Water ID's: Artificial ponds on golf course include AW27, AW36, AW37, AW38, AW39		

Wetland identification: BCS-7

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Isolated, habitat not interspersed, no open water. Two Cowardin classes. Adjacent to Bear Creek which is water quality limited.
Fish Habitat	Not applicable	Ditch is minor.
Water Quality	Impacted or Degraded	Ground water input. Lacks extensive woody vegetation.
Hydrologic Control	Intact	Ground water fed wetland, ponding evident in ditch that runs through site. Large area. Woody vegetation present.
Description		
Wetland ID's: W19-(A-B). Field visit found no surface connection to W20 wetland which has, therefore, been excluded from this assessment unit (see BCS-8).		

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

a	comments:
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comments: Bear creek is water quality limited for temperature, bacteria, sediment.
---	--

8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	comments:
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
<i>see next two questions</i>		

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

b

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space
- b. Agriculture
- a. Developed uses

b

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
<i>see next question</i>		

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

b

17 What is the (entire) wetland acreage?

b	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	b
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

c	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

c	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet w

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
---	--	---	--

28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

n/a	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
-----	--	--	---

Streams connected to the wetland

30 What is the physical character of the stream channel?

n/a	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

n/a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

c	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

c	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

a	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

a	
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	Bear Creek is 303(d) for multiple criteria
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next two questions		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space b
- b. Agriculture
- c. Developed uses

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space b
- b. Agriculture
- a. Developed uses

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next question		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses b
- b. Agriculture
- c. Exclusive Forest Use or Open Space

17 What is the (entire) wetland acreage?

b	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)	a			
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 specie	c
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? b

23 What is the dominant wetland vegetation cover?

c	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet wi

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
---	--	---	--

28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

c	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

c	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

b	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

c	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

**Oregon Freshwater Wetland Assessment Function Questions
Answer Sheet**

OFWAM UNIT# BCS-8		
Wildlife Habitat		
1	b	
2	c	
3	c	
4	c	
5	a	
6	b	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Not applicable		
Water Quality (pollutant removal)		
1	c	
2	c	
3	a	
4	b	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	c	
3	b	
4	a	
5	c	
6	b	
7	a	
Impacted or Degraded		

OFWAM UNIT # BCS-9		
Wildlife Habitat		
1	c	
2	c	
3	b	
4	c	
5	a	
6	b	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1	c	
2	c	
3	c	
4	a	
5	b	
6	c	
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Impacted or Degraded		
Water Quality (pollutant removal)		
1	a	
2	b	
3	b	
4	b	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	b	
3	b	
4	c	
5	c	
6	b	
7	a	
Impacted or Degraded		

**Oregon Freshwater Wetland Assessment
Function and Condition Summary Sheet**

Wetland identification: BCS-8

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Limited structural diversity. Isolated. Agriculture and developed land uses surround the wetland.
Fish Habitat	Not applicable	Very small pond present.
Water Quality	Impacted or Degraded	Ground water fed. No connection to ditch along southern boundary of parcel.
Hydrologic Control	Impacted or Degraded	Ground water fed. No connection to flood plain. Slight slope - little to no ponding.
Description		
Wetland ID's: W20 Water ID's: WA26		

Wetland identification: BCS-9

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Flood irrigated pasture with limited diversity, one Cowardin class. Adjacent land use is flood irrigated pasture and other agriculture.
Fish Habitat	Impacted or Degraded	Highly altered irrigation canal that is not diked on eastern side and therefore connected to W03.
Water Quality	Impacted or Degraded	Connected to Phoenix Canal, used for flood irrigation. FAC vegetation is dominated by meadow foxtail as a result of flood irrigation activities on clay soils.
Hydrologic Control	Impacted or Degraded	No ponding, as wetland is located on a slope. Receives hydrology from ditches used for flooding along the east side of the parcel.
Description		
Wetland ID's: W03. Highly altered setting limits functional value. Phoenix Canal runs along western edge, and is a tributary to Larson Creek, and Larson Creek to Bear Creek.		

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

b	
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comment: Larson and Bear creeks are water quality limited for multiple criteria.
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space			
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			
see next two questions			

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

b

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space
- b. Agriculture
- a. Developed uses

b

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space			
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			
see next question			

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

b

17 What is the (entire) wetland acreage?

b	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

b	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
---	--	--	---

19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
---	--------	-------

Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	a
RURAL a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

a	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet w

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
---	--	--	---

Streams connected to the wetland

30 What is the physical character of the stream channel?

n/a	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

n/a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
---	--	--------------------------------	--

37 Is there evidence of flooding or ponding during a portion of the growing season?

a	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

a	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

b	comments:
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comments: Larson creek is listed as water quality limited for temperature, bacteria.
---	--

8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	comments:
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	<i>see next two questions</i>		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space b
- b. Agriculture
- c. Developed uses

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space b
- b. Agriculture
- a. Developed uses

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	<i>see next question</i>		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses b
- b. Agriculture
- c. Exclusive Forest Use or Open Space

17 What is the (entire) wetland acreage?

c	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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**Connection
 estimated - not
 confirmed**

19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	a
RURAL a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

a	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
---	---------	-------------	--------

26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet w

c	a. >40%	b. bet. 10% & 40%	c. <10%
---	---------	-------------------	---------

27 How is the wetland connected to other wetlands?

a	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
---	--	---	--

28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
---	--	--	---

Streams connected to the wetland

30 What is the physical character of the stream channel?

b	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
---	---	-------------------------------------	--

Connection estimated - not confirmed

31 What percentage of the stream is shaded by riparian vegetation?

a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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East Lateral Canal

37 Is there evidence of flooding or ponding during a portion of the growing season?

a	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

c	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

**Oregon Freshwater Wetland Assessment Function Questions
Answer Sheet**

OFWAM UNIT# LSC-1		
Wildlife Habitat		
1	a	
2	a	
3	b	
4	c	
5	b	
6	b	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Not applicable		
Water Quality (pollutant removal)		
1	a	
2	a	
3	a	
4	b	
5	b	
6	c	
Intact		
Hydrologic Control (flood control & water supply)		
1	b	
2	a	
3	b	
4	a	
5	a	
6	b	
7	b	
Impacted or Degraded		

OFWAM UNIT # LSC-2		
Wildlife Habitat		
1	a	
2	a	
3	b	
4	c	
5	a	
6	a	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1	a	
2	b	
3	c	
4	a	
5	b	
6	c	
Lakes and Ponds		
1	n/a	
2	n/a	
3	n/a	
4	n/a	
5	n/a	
6	n/a	
Impacted or Degraded		
Water Quality (pollutant removal)		
1	a	
2	a	
3	a	
4	b	
5	b	
6	c	
Intact		
Hydrologic Control (flood control & water supply)		
1	b	
2	a	
3	c	
4	c	
5	a	
6	b	
7	b	
Impacted or Degraded		

**Oregon Freshwater Wetland Assessment
Function and Condition Summary Sheet**

Wetland identification: LSC-1

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Heavily impacted by cattle. Isolated, habitat not interspersed, low structural diversity, no open water. Two Cowardin classes; scrub-shrub dominated.
Fish Habitat	Not applicable	Drainage is ephemeral.
Water Quality	Intact	Ponding observed during site visit. PSS component is well vegetated with willow.
Hydrologic Control	Impacted or Degraded	Sheet flow and ephemeral drainage provide hydrology. Surrounding land use is agriculture.
Description		
Wetland ID's: W15. Water ID's: Feeds to Mud Creek		

Wetland identification: LSC-2

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Habitat with limited interspersed, some structural diversity, no open water. Two Cowardin classes; PSS dominated with emergent understory. Connected to Mud Creek and associated riparian vegetation. Adjacent land use is agricultural.
Fish Habitat	Impacted or Degraded	Unnamed tributary is intermittent or ephemeral and flows into intermittent Mud Creek. Unable to determine whether there is an "unimpeded surface water connection to the stream". If there is no connection, this function is not applicable.
Water Quality	Intact	Ponding occurs in wetland, and two Cowardin classes are present; PSS dominated with emergent understory.
Hydrologic Control	Impacted or Degraded	Not located on a floodplain. Surrounded by pasture. Wetland is associated with drainage which feeds to Mud Creek.
Description		
Wetland ID's: W62 Water ID's: Ditch feeds to Mud Creek		

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

b	comments: not visually confirmed
---	----------------------------------

Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comments: Larson creek is listed as water quality limited for temperature, bacteria.
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	comments:
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
<i>see next two questions</i>		

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

b

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space
- b. Agriculture
- a. Developed uses

b

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
<i>see next question</i>		

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

b

17 What is the (entire) wetland acreage?

a	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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Connection estimated - not confirmed

19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	b
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? b

23 What is the dominant wetland vegetation cover?

b	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet w

b	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
---	--	---	--

28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
---	--	--	---

Streams connected to the wetland

30 What is the physical character of the stream channel?

a	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
---	---	-------------------------------------	--

Connection estimated - not confirmed

31 What percentage of the stream is shaded by riparian vegetation?

b	a. >75%	b. bet. 50% & 75%	c. <50%
---	---------	-------------------	---------

32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

b	a. >25%	b. bet. 10% & 25%	c. <10%
---	---------	-------------------	---------

Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
-----	---------	-------------------	---------

Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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East Lateral Canal

37 Is there evidence of flooding or ponding during a portion of the growing season?

b	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

c	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

b	comments:
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comments: Larson creek is listed as water quality limited for temperature, bacteria.
---	--

8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	comments:
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
<i>see next two questions</i>		

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space
- b. Agriculture
- c. Developed uses

b

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space
- b. Agriculture
- a. Developed uses

b

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- 1. Open Space
- 2. Agriculture
- 3. Exclusive Forest Use
- 4. Developed uses
- 5. Other

a. <20%	b. bet. 20% & 50%	c. >50%
<i>see next question</i>		

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses
- b. Agriculture
- c. Exclusive Forest Use or Open Space

b

17 What is the (entire) wetland acreage?

b	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	b
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? a

23 What is the dominant wetland vegetation cover?

a	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet w

c	a. >40%	b. bet. 10% & 40%	c. <10%
---	---------	-------------------	---------

27 How is the wetland connected to other wetlands?

b	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
---	--	---	--

28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
	RURAL a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

b	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

c	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

n/a	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

n/a	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

b	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

c	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

Oregon Freshwater Wetland Assessment Function Questions Answer Sheet

OFWAM UNIT# LSC-3		
Wildlife Habitat		
1	b	
2	b	
3	b	
4	c	
5	a	
6	b	
7	a	
8	b	
9b	b	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1	b	
2	a	
3	b	
4	a	
5	b	
6	c	
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Impacted or Degraded		
Water Quality (pollutant removal)		
1	a	
2	b	
3	b	
4	b	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	b	
3	a	
4	c	
5	b	
6	b	
7	b	
Impacted or Degraded		

OFWAM UNIT # LSC-4		
Wildlife Habitat		
1	b	
2	a	
3	b	
4	c	
5	a	
6	b	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1	c	
2	b	
3	c	
4	a	
5	b	
6	c	
Lakes and Ponds		
1		
2		
3		
4		
5		
6		
Impacted or Degraded		
Water Quality (pollutant removal)		
1	a	
2	b	
3	a	
4	b	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	b	
3	b	
4	c	
5	a	
6	b	
7	b	
Impacted or Degraded		

**Oregon Freshwater Wetland Assessment
Function and Condition Summary Sheet**

Wetland identification: LSC-3

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Habitat with limited interspersions, some structural diversity, no open water. One Cowardin class; herbaceous dominated. Adjacent to a small portion of intermittent Mud Creek, and to the east lateral canal. Adjacent land use is agricultural.
Fish Habitat	Impacted or Degraded	Mud Creek is intermittent. Unable to determine whether there is an "unimpeded surface water connection to the stream". If there is no connection, this function is not applicable.
Water Quality	Impacted or Degraded	Potentially fed by flood irrigation from the East Lateral Canal. No evidence of ponding. Connection to Mud Creek not confirmed.
Hydrologic Control	Impacted or Degraded	Not located on a floodplain. Surrounded by pasture. Fed potentially by flood irrigation waters from East Lateral Canal and drains down towards Mud Creek.
Description		
Wetland ID's: W63 and W64. Water ID's: East Lateral Canal and potentially Mud Creek.		

Wetland identification: LSC-4

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Surrounded by agriculture. Well vegetated, however relatively small and isolated.
Fish Habitat	Impacted or Degraded	Drainages / ditches likely to be altered by agricultural activities.
Water Quality	Impacted or Degraded	Small wetland - associated with a minor drainage within an agricultural setting.
Hydrologic Control	Impacted or Degraded	Not located in a floodplain. Agriculture immediately downstream.
Description		
Wetland ID's: W62 Water ID's: Ditch feeds to Mud Creek		

WETLAND CHARACTERIZATION QUESTIONS

Land uses within the watershed

6. What is the dominant land use in the watershed upstream from the assessment area? (Modified for HC7)
- a. Urban or urbanizing (mix of urban, agriculture and forest uses).
 - b. Agriculture (farming, ranching or grazing).
 - c. Forested or natural area.

b	
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Water quality - see DEQ website

7. Consult the most recent State of Oregon DEQ 305(b) Report to determine whether any streams in the study area are listed as water quality limited (included in CWA 303(d) reporting).
- a. Streams or portions of streams within the study area are listed as water quality limited.
 - b. No streams or portions of streams within the study area are listed as water quality limited.

a	comment: Lazy creek (ajacent) water quality limited for bacteria.
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8. Consult the most recent Oregon Statewide Assessment of Nonpoint Sources of Water Pollution to determine the water quality condition of stream reaches in the watershed upstream from the assessment area. (If both "b" and "c" apply, choose "c.")
- a. All upstream reaches are listed as no problem (or no data available).
 - b. One or more upstream reaches are listed in moderate water quality condition.
 - c. One or more upstream reaches are listed in severe water quality condition.

a	
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Wetland Structure and Landscape

15 What percentage of area within 500 feet of the wetland edge is dedicated to these land uses?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next two questions		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

15 Modified for WH8: What is the dominant existing land use within 500 feet of the wetland's edge?

- a. Exclusive Forest Use or Open Space b
- b. Agriculture
- c. Developed uses

15 Modified for WQ5: What is the dominant existing land use within 500 feet of the wetland's edge?

- c. Exclusive Forest Use or Open Space b
- b. Agriculture
- a. Developed uses

16 What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

	a. <20%	b. bet. 20% & 50%	c. >50%
1. Open Space	see next question		
2. Agriculture			
3. Exclusive Forest Use			
4. Developed uses			
5. Other			

16 Modified for HC6: What is the dominant existing land use within 500 feet of the wetland on the downstream or down-slope edge of the wetland?

- a. Developed uses b
- b. Agriculture
- c. Exclusive Forest Use or Open Space

17 What is the (entire) wetland acreage?

b	a. >5 acres	b. bet. 0.5 & 5 acres	c. < 0.5 acres
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18 How is wetland connected to a stream, lake, or pond ? (see Figure, p. 35)

a	a. connected by surface water (culv., ditch, int./per. stream)	b. not connected to water body within 1 mile	c. not connected, no water bodies within 1 mile
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19 Is all or part of the wetland located within the 100-year floodplain or within an enclosed basin?

b	a. yes	b. no
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Wetland Habitat

21 What is percentage wetland area by Cowardin class (10% or more)?

	a. bet. 70% & 100%	b. bet. 50% & <70%	c. bet. 20% & <50%	d. bet. 10% & <20%
Open water (OW >6.6ft)				
Emergent (EM)				
Scrub-shrub (SS)				
Forested (FO)				

21 Modified for WH1: How many Cowardin wetland classes are present?

URBAN	a. Two or more	b. One w/ > 5 species	c. One w/ < 5 species	a
RURAL	a. 3 or 4	b. 2	c. 1	

21 Modified for WQ3: What is the degree of wetland vegetation cover (a.H>60%/ b.M/ c.L<60%)? **c**

23 What is the dominant wetland vegetation cover?

c	a. woody (FO & SS)	b. emergent and ponding, or open water only (EM w/ water or OW)	c. emergent vegetation only or wet meadow (EM)
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24 How interspersed are the Cowardin classes (and upland inclusions)? (see Figure p. 37)

b	a. high	b. moderate	c. low
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26 For urban areas, what percentage of the wetland edge is bordered by upland wildlife habitat buffer at least 25ft feet wide?

c	a. >40%	b. bet. 10% & 40%	c. <10%
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27 How is the wetland connected to other wetlands?

c	a. connected within 3 miles by surface water	b. not connected; wetlands present within 3 miles	c. not connected, no other wetlands within 3 miles
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28 Estimate area of unvegetated, open water within the wetland.

c	a. >1 acres	b. bet. 0.5 and 1 acre	c. <0.5 acre	URBAN
RURAL	a. >3 acres	b. bet. 0.5 and 3 acre	c. <0.5 acre	

Fisheries Habitat

29 Are fish present in a stream, lake or pond connected to the wetland?

c	a. salmon, trout or sensitive species are present at some time during the year	b. other fish species are present at some time during the year	c. no species are present at any time during the year
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Streams connected to the wetland

30 What is the physical character of the stream channel?

n/a	a. natural channel, or modified portions are returning to a natural channel	b. only portions of stream modified	c. extensively modified or confined in a non-vegetated channel or pipe
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31 What percentage of the stream is shaded by riparian vegetation?

n/a	a. >75%	b. bet. 50% & 75%	c. <50%
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32 What percentage of the stream contains instream structures such as large woody debris, floating/submerged vegetation, large rocks or boulders?

n/a	a. >25%	b. bet. 10% & 25%	c. <10%
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Lakes or ponds (entire lake or pond and wetland complex)

33 Does the lake or pond contain areas of deep and shallow water?

b	a. yes	b. cannot be determined	c. no
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34 What percentage of the shoreline is shaded at the water's edge by forested or scrub-shrub vegetation?

c	a. 60% or more	b. bet. 20% & <60%	c. <20%
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35 What percentage of the wetland complex contains cover objects such as submerged logs, floating or submerged vegetation, large rocks or boulders?

c	a. >25%	b. bet. 10% & 25%	c. <10%
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Wetland Hydrology

36 What is the wetland's primary source of water? (emphasis on primary)

a	a. surface flow, including streams and ditches	b. precipitation or sheet flow	c. groundwater, including springs or seeps
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37 Is there evidence of flooding or ponding during a portion of the growing season?

b	a. yes (describe)	b. unable to determine or not applicable	c. no
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38 Is the water flow out of the wetland restricted (beaver dam, concrete structure, undersized culvert)?

c	a. yes, restricted or no outlet	b. minor restrictions slow down the water (i.e., undersized culvert)	c. no, outlet has unrestricted flow
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(bold questions =field; office review important for 15, 16, 26)

**Oregon Freshwater Wetland Assessment Function Questions
Answer Sheet**

OFWAM UNIT # LPC-1		
Wildlife Habitat		
1	a	
2	c	
3	b	
4	c	
5	a	
6	c	
7	a	
8	b	
9b	c	
Provides habitat for some species		
Fish Habitat (if applicable)		
Streams and Rivers		
1		
2		
3		
4		
5		
6		
Lakes and Ponds		
1	b	
2	c	
3	c	
4	a	
5	b	
6	c	
Impacted or Degraded		
Water Quality (pollutant removal)		
1	a	
2	b	
3	c	
4	b	
5	b	
6	c	
Impacted or Degraded		
Hydrologic Control (flood control & water supply)		
1	b	
2	b	
3	b	
4	c	
5	c	
6	b	
7	b	
Impacted or Degraded		

**Oregon Freshwater Wetland Assessment
Function and Condition Summary Sheet**

Wetland identification: LPC-1

Function	Evaluation Descriptor	Rationale
Wildlife Habitat	Provides habitat for some species	Surrounded by active orchards. Two Cowardin classes present. Well vegetated.
Fish Habitat	Impacted or Degraded	Artificial canal and pond - highly altered.
Water Quality	Impacted or Degraded	Adjacent to Lazy Creek. Abuts Phoenix Canal. Lacks woody vegetation with low degree of cover; small size. Adjacent agricultural land use.
Hydrologic Control	Impacted or Degraded	Connects to Phoenix Canal and irrigation pond.
Description		
Wetland ID's: W61 Water ID's: AW18, and Phoenix Canal. More than 1/4 mile distance from Lazy Creek.		