

APPENDIX G

Wetland Data Sheets

Parametrix

Data Plot #: 1
Wetland: 34A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 11/24/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, M. Louthier, E. Greene State: WA
 1987 Method 1989 Method Community ID: PFO
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 1
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

This data plot is located near Flag 2. The area is the eastward extension of the wetland in Marymoor Park.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	Carex obnupta	T	Herb	OBL
2.	Equisetum arvense	2	Herb	FAC
3.	Polystichum munitum	5	Herb	FACU
4.	Cornus sericea	15	Shrub	FACW
5.	Ilex aquifolium	T	Shrub	NL
✓ 6.	Rubus spectabilis	20	Shrub	FAC+
7.	Rubus ursinus	2	Shrub	FACU
✓ 8.	Symphoricarpos albus	50	Shrub	FACU
9.	Acer circinatum	15	Tree	FAC-
✓ 10.	Fraxinus latifolia	40	Tree	FACW
✓ 11.	Populus trichocarpa	60	Tree	FAC

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 75

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

75 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: 2-4 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation and saturation in the upper 12 inches satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 1
Wetland: 34A

Project/Site: East Lake Sammamish Trail Date: 11/24/1999

SOIL

Soil Survey Data:

Map Unit Name: Seattle Muck Drainage Class: Very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Medihemists Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	O	10YR 2/1	none	none	mucky silt hemic

Hydric Soil Indicators:

<input checked="" type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

The upper 16 inches of the soil profile is histic soil. Therefore, the hydric soil criterion is satisfied.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 10
Wetland: 26A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/2/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 10
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

This data plot is located between Zaccuse Creek and the south end of the wetland, between Flags 15 and 16. Other portions are forested with willow.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
1. <u>Equisetum arvense</u>	<u>15</u>	<u>Herb</u>	<u>FAC</u>
✓ 2. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
✓ 3. <u>Alnus rubra (s)</u>	<u>25</u>	<u>Shrub</u>	<u>FAC</u>
4. <u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

100 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria. Wetland includes Zaccuse Creek.

Parametrix

Data Plot #: 10
Wetland: 26A

Project/Site: East Lake Sammamish Trail Date: 12/2/1999

SOIL

Soil Survey Data:

Map Unit Name: Shalcar Muck Drainage Class: Very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Terric Medisaprists Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-4	A	10YR 3/1	none	none	mucky loamy sand
4-10	B	10YR 2/1	none	none	mucky cobbly loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input checked="" type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria. Cobbles dominate after 10 inches and it is difficult to dig.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 101
Wetland: 34E

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/22/2002
Applicant/Owner: King County County: King
Investigator: Jim Kelley, Scott Rozenbaum, Linda Ellis State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 101
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
Wetland boundary was reviewed in response to comments by DDES.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Equisetum telmateia</u>	<u>20</u>	<u>H</u>	<u>FACW</u>
✓ 2. <u>Phalaris arundinaceae</u>	<u>100</u>	<u>H</u>	<u>FACW</u>
3. <u>Rubus discolor</u>	<u>15</u>	<u>S</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace.

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 10 (in.)
Depth to Saturated Soil: 4 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Parametrix

Data Plot #: 101
Wetland: 34E

Project/Site: East Lake Sammamish Trail Date: 1/22/2002

SOIL

Soil Survey Data:

Map Unit Name: unmapped Drainage Class: _____

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): _____ Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-8		10YR 3/2	7.5YR 4/4	small, few, fine, distinct	gravelly sandy loam
8-18		10YR 3/2	7.5YR 4/4	small, few, fine, distinct	gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil was saturated at 4 to 10 inches; mottling was infrequent (rare). There was no solid evidence of true hydric soil conditions.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

This area was considered wetland based on soil saturation and vegetation community. Hydric soil indicators were weak.

Parametrix

Data Plot #: 102
Wetland: Station 550

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/22/2002
Applicant/Owner: King County County: King
Investigator: L. Ellis, S. Rozenbaum, J. Kelley State: WA
 1987 Method 1989 Method Community ID: Upland
Do Normal Circumstances exist on the site? Yes X No _____ Field Plot ID: 102
Is the site significantly disturbed (Atypical Situation)? Yes _____ No X
Is the area a potential Problem Area? Yes _____ No X

Remarks (Explain sample location, disturbances, problem areas):
This area is a 6 to 8 inch wide stream.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
1. <u>Equisetum telmateia</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
✓ 2. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace.

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

HYDROLOGY

Recorded Data (Describe in Remarks):

_____ Stream, Lake, or Tide Gage
_____ Aerial Photograph
_____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: _____ (in.)
Depth to Free Water in Pit: _____ (in.)
Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

_____ Inundated
_____ Saturated in Upper 12 inches
_____ Saturated in Upper 18 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

No wetland hydrology is present. This plot is adjacent to the ditch. There is a 24-inch-deep 4-foot-wide incised drainage channel. No saturation was observed within 18 inches of the surface.

Parametrix

Data Plot #: 102
Wetland: Station 550

Project/Site: East Lake Sammamish Trail Date: 1/22/2002

SOIL

Soil Survey Data:

Map Unit Name: unmapped Drainage Class: _____

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): _____ Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
1-17		10YR 2/1	none	none	sandy loam
17+		2.5Y 4/2	none	none	sandy loam

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

Hydric soils are not present adjacent to the stream.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?

Hydric Soils Present? Yes No Yes No

Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

Area is not a wetland because hydric soils and wetland hydrology are not present.

Parametrix

Data Plot #: 103

Wetland: Station 550

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/22/2002

Applicant/Owner: King County County: King

Investigator: L. Ellis, S. Rozenbaum, J. Kelley State: WA

1987 Method 1989 Method

Community ID: Upland

Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 103

Is the site significantly disturbed (Atypical Situation)? Yes No X

Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: none (in.)
Depth to Saturated Soil: none (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Parametrix

Data Plot #: 103
Wetland: Station 550

Project/Site: East Lake Sammamish Trail Date: 1/22/2002

SOIL

Soil Survey Data:

Map Unit Name: unmapped Drainage Class: _____

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): _____ Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
1-16		2.5Y 3/2	none	none	silt loam

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

Soils in this area are disturbed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

This area is a stream. This area is not a wetland because hydric soils and wetland hydrology are not present.

Parametrix

Data Plot #: 104
Wetland: Station 440

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/22/2002
Applicant/Owner: King County County: King
Investigator: L. Ellis, S. Rozenbaum, J. Kelley State: WA

1987 Method 1989 Method

Community ID: Upland

Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 104

Is the site significantly disturbed (Atypical Situation)? Yes No X

Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
✓ 1.	Bare ground	40		
2.	Dactylis glomerata	5	Herb	FACU
3.	Geranium robertianum	5	Herb	NL
4.	Holcus lanatus	10	Herb	FAC
✓ 5.	Poa spp.	35	Herb	NL
6.	Ranunculus repens	1	Herb	FACW
7.	Rubus discolor	1-2	Shrub	FACU

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 11

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 No Recorded Data Available

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: none (in.)
Depth to Saturated Soil: none (in.)

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

There is no soil saturation except in compacted tire ruts.

Parametrix

Data Plot #: 104
Wetland: Station 440

Project/Site: East Lake Sammamish Trail Date: 1/22/2002

SOIL

Soil Survey Data:

Map Unit Name: unmapped Drainage Class: _____

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): _____ Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-7	Ap1	2.5Y 3/3	none	none	sandy loam
7-13	Ap2	10YR 3/1	none	none	gravelly sandy loam

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

Ap1 horizon has a mixed profile.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

No wetland criteria are met in this area, therefore this area is not a wetland.

Parametrix

Data Plot #: 105
Wetland: Station 440

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/22/2002
Applicant/Owner: King County County: King
Investigator: L. Ellis, S. Rozenbaum, J. Kelley State: WA
 1987 Method 1989 Method Community ID: Upland
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 105
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X
Remarks (Explain sample location, disturbances, problem areas):

VEGETATION (✓ Dominant species are checked)

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace.

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
There is no vegetation in this area.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: none (in.)
Depth to Saturated Soil: none (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Wetland hydrology is spotty.

Parametrix

Data Plot #: 105
Wetland: Station 440

Project/Site: East Lake Sammamish Trail Date: 1/22/2002

SOIL

Soil Survey Data:

Map Unit Name: unmapped Drainage Class: _____

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): _____ Yes No NA

Profile Description:

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

There are pockets of saturated hydric soils interspersed with well drained non-hydric soils - this area is disturbed.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is this Sampling Point Within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

This area is not a wetland because hydrophytic vegetation, hydric soils, and wetland hydrology are not present.

Parametrix

Data Plot #: 106
Wetland: Station 241

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/22/2002
Applicant/Owner: King County County: King
Investigator: L. Ellis, S. Rozenbaum, J. Kelley State: WA
 1987 Method 1989 Method Community ID: Upland
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 106
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X
Remarks (Explain sample location, disturbances, problem areas):

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
✓ 1.	<u>Equisetum telmateia</u>	<u>20</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>75</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Rubus discolor</u>	<u>65</u>	<u>Shrub</u>	<u>FACU</u>
✓ 4.	<u>Alnus rubra</u>	<u>20</u>	<u>Tree</u>	<u>FAC</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 75

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: none (in.)
Depth to Saturated Soil: none (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Parametrix

Data Plot #: 106
Wetland: Station 241

Project/Site: East Lake Sammamish Trail Date: 1/22/2002

SOIL

Soil Survey Data:

Map Unit Name: unmapped Drainage Class: _____

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): _____ Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-10		10YR 3/1	none	none	silt
10-16		2.5 Y 4/3	10YR 3/4	few, fine, distinct	silt loam
16-18		5Y 5/3	10YR 3/4	common, fine, prominent	loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.): _____

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

Hydrology and hydric soils are not present in this area, therefore this area is not a wetland.

Parametrix

Data Plot #: 11
Wetland: 25D

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/2/1999
Applicant/Owner: King County County: King
Investigator: M. Louther State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 11
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

This wetland is located west of railroad grade and between a gravel access road. The area is a maintained yard. The data plot is on the north end of the wetland.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Festuca arundinacea</u>	<u>5</u>	<u>Herb</u>	<u>FAC-</u>
✓ 2.	<u>Poa sp.</u>	<u>50</u>	<u>Herb</u>	<u>OBL</u>
✓ 3.	<u>Ranunculus repens</u>	<u>50</u>	<u>Herb</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

100 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5-1 (in.)
Depth to Free Water in Pit: 4 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Standing water to 1 inch in center part of wetland. Soil saturated throughout profile. Inundation and saturation in the upper 12 inches satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 11
Wetland: 25D

Project/Site: East Lake Sammamish Trail Date: 12/2/1999

SOIL

Soil Survey Data:

Map Unit Name: Mixed Alluvial Land Drainage Class: Well to very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): N/A Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	A	10YR 2/1	10YR 4/6	few, small, faint	gravelly sandy loam
16+	B	2.5Y 4/2	10YR 4/6	common, large, prominent	gravelly sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input checked="" type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 12
Wetland: 25C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/8/1999
Applicant/Owner: King County County: King
Investigator: S. Rozenbaum State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 12
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The wetland is a wet trough. The data plot is north of Flag 3.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Iris pseudacorus</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>90</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Scirpus microcarpus</u>	<u>5</u>	<u>Herb</u>	<u>OBL</u>
4.	<u>Spiraea douglasii</u>	<u>5</u>	<u>Shrub</u>	<u>FACW</u>
✓ 5.	<u>Alnus rubra</u>	<u>30</u>	<u>Tree</u>	<u>FAC</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 8 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria. 90 percent of the trough is inundated.

Parametrix

Data Plot #: 12
Wetland: 25C

Project/Site: East Lake Sammamish Trail Date: 12/8/1999

SOIL

Soil Survey Data:

Map Unit Name: Mixed Alluvial Land Drainage Class: Well drained to very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): N/A Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-6	Ap1	10YR 2/1	none	none	organic rich sandy loam
6-9	Ap2	10YR 3/2	none	none	silt loam
9-16	B	10YR 4/1	10YR 3/4	common, distinct	silt loam

Hydric Soil Indicators:

- Histosol Listed on Local Hydric Soils List
- Histic Epipedon Listed on State Hydric Soils List
- Sulfidic Odor Listed on National Hydric Soils List
- Probable Aquic Moisture Regime Aquic Moisture Regime
- Reducing Conditions Organic Streaking in Sandy Soils
- Gleyed or Low-Chroma Colors Mottles
- High Organic Content in Surface Layer Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 13
Wetland: 25F

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/8/1999
Applicant/Owner: King County County: King
Investigator: S. Rozenbaum, K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 13
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
Plot on north end of wetland, 20 feet south of Ebright Creek.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Athyrium filix-femina</u>	<u>10</u>	<u>Herb</u>	<u>FAC+</u>
2.	<u>Equisetum telmateia</u>	<u>15</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Phalaris arundinacea</u>	<u>35</u>	<u>Herb</u>	<u>FACW</u>
4.	<u>Solanum dulcamara</u>	<u>5</u>	<u>Herb</u>	<u>FAC+</u>
5.	<u>Cornus sericea</u>	<u>15</u>	<u>Shrub</u>	<u>FACW</u>
✓ 6.	<u>Rubus discolor</u>	<u>30</u>	<u>Shrub</u>	<u>FACU</u>
✓ 7.	<u>Alnus rubra</u>	<u>50</u>	<u>Tree</u>	<u>FAC</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 67

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
67 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 6 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
X Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Saturation in the upper 12 inches, water stained leaves, and a water table at 6 inches satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 13
Wetland: 25F

Project/Site: East Lake Sammamish Trail Date: 12/8/1999

SOIL

Soil Survey Data:

Map Unit Name: Mixed Alluvial Land Drainage Class: Well to very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): N/A Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-6	A	10YR 3/1	none	none	silt loam
6-12	B	10YR 3/1	none	none	cobbly silt loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 14
Wetland: 25B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/8/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, S. Rozenbaum State: WA
 1987 Method 1989 Method Community ID: PFO
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 14
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is on the edge of the wetland near Flag 5.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
2.	<u>Phalaris arundinacea</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Cornus sericea</u>	<u>30</u>	<u>Shrub</u>	<u>FACW</u>
✓ 4.	<u>Lonicera involucrata</u>	<u>20</u>	<u>Shrub</u>	<u>FAC+</u>
5.	<u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>
✓ 6.	<u>Fraxinus latifolia</u>	<u>50</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 3 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
X Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Saturation in the upper 12 inches, sediment deposits, and drainage patterns satisfy the wetland hydric soil criteria. Most of the area is inundated up to 12 inches.

Parametrix

Data Plot #: 14
Wetland: 25B

Project/Site: East Lake Sammamish Trail Date: 12/8/1999

SOIL

Soil Survey Data:

Map Unit Name: Norma Sandy Loam Drainage Class: Poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Fluventic Humaquepts Yes X No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-12	A	10YR 3/1	none	none	mucky fine sandy loam

Hydric Soil Indicators:

<u> </u> Histosol	<u> </u> Listed on Local Hydric Soils List
<u>X</u> Histic Epipedon	<u> </u> Listed on State Hydric Soils List
<u>X</u> Sulfidic Odor	<u> </u> Listed on National Hydric Soils List
<u> </u> Probable Aquic Moisture Regime	<u> </u> Aquic Moisture Regime
<u> </u> Reducing Conditions	<u> </u> Organic Streaking in Sandy Soils
<u>X</u> Gleyed or Low-Chroma Colors	<u> </u> Mottles
<u>X</u> High Organic Content in Surface Layer	<u> </u> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <u>X</u> No <u> </u>	Yes <u>X</u> No <u> </u>
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 15
Wetland: 25A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/8/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, S. Rozenbaum State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 15
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is located 30 feet north of Flag 5. There is a trough with a stream in the north end.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>15</u>	<u>Herb</u>	<u>FACW</u>
2.	<u>Juncus effusus</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Lemna minor</u>	<u>50</u>	<u>Herb</u>	<u>OBL</u>
4.	<u>Phalaris arundinacea</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
5.	<u>Rubus discolor</u>	<u>15</u>	<u>Shrub</u>	<u>FACU</u>
✓ 6.	<u>Salix lucida ssp. lasiandra</u>	<u>30</u>	<u>Shrub</u>	<u>FACW+</u>
7.	<u>Salix scouleriana</u>	<u>5</u>	<u>Shrub</u>	<u>FAC</u>
✓ 8.	<u>Salix sitchensis</u>	<u>30</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 12 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Saturation in the upper 12 inches, sediment deposits, and drainage patterns satisfy the wetland hydric soil criteria. 90 percent of the trough in the north end is inundated.

Parametrix

Data Plot #: 15
Wetland: 25A

Project/Site: East Lake Sammamish Trail Date: 12/8/1999

SOIL

Soil Survey Data:

Map Unit Name: Norma Sandy Loam Drainage Class: Poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Fluventic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	10YR 3/1	none	none	mucky silt loam
5-15	B	10YR 3/1	none	none	silt loam
15-18	C	5Y 3/1	none	none	sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 16
Wetland: 24C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/8/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, S. Rozenbaum State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 16
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

This wetland is associated with an unnamed stream and Wetland 24A. Other portions are predominantly forested.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Athyrium filix-femina</u>	<u>T</u>	<u>Herb</u>	<u>FAC+</u>
2.	<u>Epilobium angustifolium</u>	<u>T</u>	<u>Herb</u>	<u>FACU+</u>
✓ 3.	<u>Equisetum telmateia</u>	<u>50</u>	<u>Herb</u>	<u>FACW</u>
4.	<u>Phalaris arundinacea</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
5.	<u>Scirpus microcarpus</u>	<u>15</u>	<u>Herb</u>	<u>OBL</u>
6.	<u>Solanum dulcamara</u>	<u>T</u>	<u>Herb</u>	<u>FAC+</u>
✓ 7.	<u>Cornus sericea</u>	<u>25</u>	<u>Shrub</u>	<u>FACW</u>
8.	<u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>
✓ 9.	<u>Salix sitchensis</u>	<u>25</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 6 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

The soil is saturated to the surface and the water table is at 6 inches. Wetland is over 50 percent inundated. Therefore, the hydrologic criterion is satisfied.

Parametrix

Data Plot #: 16
Wetland: 24C

Project/Site: East Lake Sammamish Trail Date: 12/8/1999

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	10YR 2/1	none	none	mucky silt loam
5-12	B	10YR 2/1	none	none	sandy loam
12-16	C	2.5Y 3/1	none	none	gravelly sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 17
Wetland: 24D

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/9/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, S. Rozenbaum State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 17
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located in the center of a small wetland.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
1. Moss	10		
2. Equisetum telmateia	T	Herb	FACW
✓ 3. Lythrum salicaria	30	Herb	FACW+
✓ 4. Phalaris arundinacea	100	Herb	FACW
5. Cytisus scoparius	5	Shrub	NL
6. Rubus discolor	T	Shrub	FACU

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5 (in.)
Depth to Free Water in Pit: 6 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
The soil is saturated to the surface or inundated. Therefore, the hydrologic criterion is satisfied.

Parametrix

Data Plot #: 17
Wetland: 24D

Project/Site: East Lake Sammamish Trail Date: 12/9/1999

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-12	A	10YR 3/1	none	none	mucky sandy loam
12-18	B	2.5Y 2/1	none	none	gravelly loamy sand

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 18
Wetland: 24A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/9/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, S. Rozenbaum State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 18
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

This wetland is associated with Pine Lake Creek and a large wetland on the east side of East Lake Sammamish Parkway. Data plot is located 5 feet south of flg near bottom of trough. Other portions are forested.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
✓ 2. <u>Scirpus microcarpus</u>	<u>25</u>	<u>Herb</u>	<u>OBL</u>
✓ 3. <u>Salix lucida ssp. lasiandra</u>	<u>50</u>	<u>Shrub</u>	<u>FACW+</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

100 percent of the dominant plants are hydrophytic; therefore, the wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5 (in.)
Depth to Free Water in Pit: 6 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

The soil is saturated to the surface and 10 percent of the area is inundated; therefore, the wetland hydrologic criterion is satisfied.

Parametrix

Data Plot #: 18
Wetland: 24A

Project/Site: East Lake Sammamish Trail Date: 12/9/1999

SOIL

Soil Survey Data:

Map Unit Name: Seattle Muck Drainage Class: Very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Medihemists Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-6	A	7.5YR 3/1	none	none	mucky sandy loam
6-12	B	7.5YR 3/1	none	none	gravelly sandy loam
12-18	C	2.5Y 3/1	none	none	gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators meet the hydric soils criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 19
Wetland: 24B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/9/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, S. Rozenbaum State: WA
 1987 Method 1989 Method Community ID: PFO
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 19
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

This wetland is associated with Pine Lake Creek and Wetland 24A. Data plot is located 10 feet south of Flag 3.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
✓ 1.	<u>Athyrium filix-femina</u>	<u>30</u>	<u>Herb</u>	<u>FAC+</u>
✓ 2.	<u>Equisetum telmateia</u>	<u>25</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Juncus effusus</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
✓ 4.	<u>Phalaris arundinacea</u>	<u>30</u>	<u>Herb</u>	<u>FACW</u>
5.	<u>Rubus discolor</u>	<u>15</u>	<u>Shrub</u>	<u>FACU</u>
✓ 6.	<u>Salix lucida ssp. lasiandra</u>	<u>25</u>	<u>Shrub</u>	<u>FACW+</u>
7.	<u>Alnus rubra</u>	<u>10</u>	<u>Tree</u>	<u>FAC</u>
✓ 8.	<u>Salix sitchensis</u>	<u>75</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5 (in.)
Depth to Free Water in Pit: 5 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

The area is inundated. Therefore, the wetland hydrology criterion is satisfied.

Parametrix

Data Plot #: 19
Wetland: 24B

Project/Site: East Lake Sammamish Trail Date: 12/9/1999

SOIL

Soil Survey Data:

Map Unit Name: Seattle Muck Drainage Class: Very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Medihemists Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	7.5YR 3/1	none	none	mucky sandy loam
6-12	B	7.5YR 3/1	none	none	gravelly sandy loam
12-18	C	2.5Y 3/1	none	none	sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators meet the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 20
Wetland: 23A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/9/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, S. Rozenbaum State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 20
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This area includes hill seeps. Data plot is located in the center of a small wetland area.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Equisetum hyemale</u>	<u>50</u>	<u>Herb</u>	<u>FACW</u>
2. <u>Equisetum telmateia</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
✓ 3. <u>Juncus effusus</u>	<u>25</u>	<u>Herb</u>	<u>FACW</u>
✓ 4. <u>Phalaris arundinacea</u>	<u>25</u>	<u>Herb</u>	<u>FACW</u>
5. <u>Populus trichocarpa (s)</u>	<u>10</u>	<u>Shrub</u>	<u>FAC</u>
6. <u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied. This plot located in an area which is palustrine emergent. Remaining portion of wetland is forested.

HYDROLOGY

Recorded Data (Describe in Remarks):
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 5 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:
 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
The soil is saturated to the surface and the water table is at 5 inches. Therefore, the wetland hydrologic criterion is met.

Parametrix

Data Plot #: 20
Wetland: 23A

Project/Site: East Lake Sammamish Trail Date: 12/9/1999

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	7.5YR 3/1	none	none	gravelly loam
5-16	B	7.5YR 3/1	none	none	gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil color and other indicators meet the hydric soils criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 21
Wetland: 23B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/9/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, S. Rozenbaum State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 21
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

This wetland is contiguous with Lake Sammamish. The hydrology is supplied by groundwater. Data plot is located 5 feet northwest of Flag 6.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
✓ 1.	<u>Equisetum hyemale</u>	<u>50</u>	<u>Herb</u>	<u>FACW</u>
2.	<u>Equisetum telmateia</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Lotus corniculatus</u>	<u>T</u>	<u>Herb</u>	<u>FAC</u>
4.	<u>Mosses</u>	<u>5</u>	<u>Herb</u>	<u> </u>
5.	<u>Phalaris arundinacea</u>	<u>15</u>	<u>Herb</u>	<u>FACW</u>
✓ 6.	<u>Scirpus microcarpus</u>	<u>80</u>	<u>Herb</u>	<u>OBL</u>
7.	<u>Rubus discolor</u>	<u>5</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

100 percent of the dominant plants are hydrophytic, therefore, the wetland criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 4 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Since the soil is saturated in the upper 12 inches and the water table is at 4 inches, the wetland hydrology criterion is satisfied.

Parametrix

Data Plot #: 21
Wetland: 23B

Project/Site: East Lake Sammamish Trail Date: 12/9/1999

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	7.5YR 3/1	none	none	mucky gravelly sandy loam
6-12	B	7.5YR 3/1	none	none	gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil color and other indicators meet the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 22
Wetland: 22A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/9/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, S. Rozembaum State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 22
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

This wetland is associated with an intermittent stream and seeps. It is the northward continuation of Wetland 22B. Data plot is located in the north end, west of Flag 2.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	Juncus effusus	10	Herb	FACW
✓ 2.	Phalaris arundinacea	80	Herb	FACW
✓ 3.	Scirpus microcarpus	60	Herb	OBL
4.	Rubus discolor	15	Shrub	FACU
✓ 5.	Populus trichocarpa	30	Tree	FAC

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

100 percent of the dominant plants are hydrophytic. Therefore, the wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

The soil is saturated to the surface, with the water table also at the surface. Thirty percent of the area is inundated. Therefore, the wetland hydrologic criterion is satisfied.

Parametrix

Data Plot #: 22
Wetland: 22A

Project/Site: East Lake Sammamish Trail Date: 12/9/1999

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-18	Oa	7.5YR 3/1	none	none	Sapric

Hydric Soil Indicators:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
The presence of organic soil to 18 inches satisfies the hydric soil criterion.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates this area is a wetland.

Parametrix

Data Plot #: 22AE-1
Wetland: 22C/D

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/22/2003
Applicant/Owner: King County County: King
Investigator: K. Dunkin, C. Worsley State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 22AE-1
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is located near the northeastern wetland boundary.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Prunus spp.</u>	<u>T</u>		
2.	<u>Phalaris arundinacea</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Poa spp.</u>	<u>30</u>	<u>Herb</u>	<u>NL</u>
✓ 4.	<u>Ranunculus repens</u>	<u>60</u>	<u>Herb</u>	<u>FACW</u>
5.	<u>Taraxacum officinale</u>	<u>T</u>	<u>Herb</u>	<u>FACU</u>
6.	<u>Thuja plicata</u>	<u>15</u>	<u>Tree</u>	<u>FAC</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
This area is mowed. Vegetation in this area is dominated by wetland species.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 12 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

This area drains to a ditch on the east side of the railroad. Saturation in the upper 12 inches and drainage patterns indicate wetland hydrology.

Parametrix

Data Plot #: 22AE-1
Wetland: 22C/D

Project/Site: East Lake Sammamish Trail Date: 1/22/2003

SOIL

Soil Survey Data:

Map Unit Name: Fill Drainage Class: _____

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): _____ Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-17	A	10YR 2/1	none	none	gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

High organic content in the surface layer indicates hydric soils.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

All three wetland criteria are met. This sample area is within a wetland.

Parametrix

Data Plot #: 22AN-1
Wetland: 22C/D

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/22/2003
Applicant/Owner: King County County: King
Investigator: K. Dunkin, C. Worsley State: WA
 1987 Method 1989 Method Community ID: Upland
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 22AN-1
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

This data plot is located north of the northern wetland boundary and south of the entrance drive to the mint grove.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Agrostis spp.</u>	<u>60</u>	<u>Herb</u>	<u>FAC</u>
2. <u>Cardamine spp.</u>	<u>5</u>	<u>Herb</u>	<u>FACW+</u>
✓ 3. <u>Festuca spp.</u>	<u>40</u>	<u>Herb</u>	<u> </u>
4. <u>Juncus effusus</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
5. <u>moss</u>	<u>10</u>	<u>Herb</u>	<u> </u>
6. <u>Plantago lanceolata</u>	<u>T</u>	<u>Herb</u>	<u>FACU+</u>
7. <u>Ranunculus repens</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
8. <u>Scirpus microcarpus</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>
9. <u>Taraxacum officinale</u>	<u>T</u>	<u>Herb</u>	<u>FACU</u>
10. <u>Trifolium spp.</u>	<u>T</u>	<u>Herb</u>	<u> </u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace.

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

Vegetation is a mixture of weedy species well adapted to compact fill soils. This area is mowed occasionally. Vegetation does not indicate wetland or upland conditions.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: >16 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Soil is saturated at surface due to intense rain on the day of the field investigation. Below 4 inches soil is not saturated. No free water was present in the soil pit.

Parametrix

Data Plot #: 22AN-1
Wetland: 22C/D

Project/Site: East Lake Sammamish Trail Date: 1/22/2003

SOIL

Soil Survey Data:

Map Unit Name: Fill Drainage Class: _____

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): _____ Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	C	10YR 3/2	none	none	fill, gravelly sandy loam

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

Compact gravelly sandy loam soils are saturated in the top 2 to 4 inches due to current rain. No hydric soil indicators are present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

This sample area does not meet wetland criteria.

Parametrix

Data Plot #: 22AN-2
Wetland: 22C/D

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/22/2003
Applicant/Owner: King County County: King
Investigator: K. Dunkin, C. Worsley State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 22AN-2
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is located in the northern portion of Wetland 22AN.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Agrostis spp.</u>	<u>80</u>	<u>Herb</u>	<u>FAC</u>
2. <u>Cardamine spp.</u>	<u>10</u>	<u>Herb</u>	<u> </u>
3. <u>Holcus lanatus</u>	<u>10</u>	<u>Herb</u>	<u>FAC</u>
4. <u>Iris spp.</u>	<u>10</u>	<u>Herb</u>	<u> </u>
5. <u>Juncus effusus</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
6. <u>Mentha spp.</u>	<u>10</u>	<u>Herb</u>	<u> </u>
7. <u>Phalaris arundinacea</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
8. <u>Rumex crispus</u>	<u>5</u>	<u>Herb</u>	<u>FAC+</u>
9. <u>Scirpus microcarpus</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>
10. <u>unknown broadleaf</u>	<u>5</u>	<u>Herb</u>	<u> </u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
This area is mowed. A mixture of weedy and wetland plants is present.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 12 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Wetland hydrology is indicated by saturated soil and drainage patterns. Groundwater discharge and local surface area runoff support wetland hydrology.

Parametrix

Data Plot #: 22AN-2
Wetland: 22C/D

Project/Site: East Lake Sammamish Trail Date: 1/22/2003

SOIL

Soil Survey Data:

Map Unit Name: Fill Drainage Class: _____

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): _____ Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-14	A	10YR 2/1	10YR 3/3	common, medium, faint	sandy loam
14+	C	5GY 5/1	none	none	sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input checked="" type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Hydric soils are indicated by low chroma colors and redox features. Hydric soil indicator development is probably recent and indicators are not strong.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

All three wetland criteria are met. This sample area is within a wetland.

Parametrix

Data Plot #: 22AN-3
Wetland: 22C/D

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/22/2003
Applicant/Owner: King County County: King
Investigator: K. Dunkin, C. Worsley State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 22AN-3
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is located in the central portion of Wetland 22AN in a mowed turf area.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Phalaris arundinacea</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Poa/Festuca sp.</u>	<u>90</u>	<u>Herb</u>	<u> </u>
3.	<u>Prunus spp.</u>	<u>7</u>	<u>Shrub</u>	<u> </u>
4.	<u>Rubus discolor</u>	<u>10</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace.

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
Two failing cherry trees are present. This area is maintained lawn with no broadleaf weeds present. The plant community doesn't indicate wetland or upland conditions.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 1 to 2 (in.)
Depth to Free Water in Pit: 6 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Most of this sample area is disturbed soil/fill with approximately 10 percent having standing water 1 to 2 inches deep. Wetland hydrology is supported by groundwater discharge and local area runoff.

Parametrix

Data Plot #: 22AN-3
Wetland: 22C/D

Project/Site: East Lake Sammamish Trail Date: 1/22/2003

SOIL

Soil Survey Data:

Map Unit Name: Fill Drainage Class: _____

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): _____ Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-17+	A	10YR 2/1	10Y 5/1, 10YR 3/4	common, fine, distinct/common, fine, prominent	sandy loam/gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soils in the data plot are fill. Small accumulation of organic matter at the surface is present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

Wetland hydrology and hydric soil are present. The vegetation community is disturbed by mowing and probably herbicide applications, and doesn't indicate wetland or upland. This sample area is within a wetland.

Parametrix

Data Plot #: 23
Wetland: 4D

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/10/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, S. Rozenbaum, E. Greene State: WA
 1987 Method 1989 Method Community ID: PFO
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 23
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

Data plot is located at south end of wetland, below large Fraxinus latifolia. The majority of the wetland is PEM dominated by Phalaris arundinacea.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
2. <u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>
✓ 3. <u>Fraxinus latifolia</u>	<u>70</u>	<u>Tree</u>	<u>FACW</u>
✓ 4. <u>Salix sitchensis</u>	<u>50</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

100% of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5-2 (in.)
Depth to Free Water in Pit: 5 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation and saturation in the upper 12 inches and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 23
Wetland: 4D

Project/Site: East Lake Sammamish Trail Date: 12/10/1999

SOIL

Soil Survey Data:

Map Unit Name: Woodinville Silt Loam Drainage Class: Poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Fluvaqueunts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	10YR 3/1	none	none	silt loam
5-18	B	10YR 4/1	7.5YR 4/6	common, distinct	very fine sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soils criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 24
Wetland: 4B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/10/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, S. Rozenbaum, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 24
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located 10 feet south of Flag 16.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>60</u>	<u>Herb</u>	<u>FACW</u>
✓ 2. <u>Salix sitchensis</u>	<u>30</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100% of the dominant plants are hydrophytic, therefore the vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: 1-30 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 X Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation and saturation in the upper 12 inches and drainage patterns in the wetland satisfy the wetland hydrologic criteria.

Parametrix

Data Plot #: 24
Wetland: 4B

Project/Site: East Lake Sammamish Trail Date: 12/10/1999

SOIL

Soil Survey Data:

Map Unit Name: Sammamish Silt Loam Drainage Class: Poorly drained

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Humaquepts Yes X No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	10YR 3/1	none	none	mucky silty loam
5-18	B	5Y 4/1	none	none	very fine sandy loam

Hydric Soil Indicators:

- | | |
|--|---|
| <u> </u> Histosol | <u> </u> Listed on Local Hydric Soils List |
| <u>X</u> Histic Epipedon | <u>X</u> Listed on State Hydric Soils List |
| <u>X</u> Sulfidic Odor | <u>X</u> Listed on National Hydric Soils List |
| <u> </u> Probable Aquic Moisture Regime | <u>X</u> Aquic Moisture Regime |
| <u> </u> Reducing Conditions | <u> </u> Organic Streaking in Sandy Soils |
| <u> </u> Gleyed or Low-Chroma Colors | <u> </u> Mottles |
| <u>X</u> High Organic Content in Surface Layer | <u> </u> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes X No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes X No Yes X No
Wetland Hydrology Present? Yes X No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 24E-1
Wetland: 24E

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/22/2003
Applicant/Owner: King County County: King
Investigator: K. Dunkin, C. Worsley State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 24E-1
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is located on the railbed near the southern wetland boundary.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Cardamine spp.</u>	<u>T</u>	<u>Herb</u>	<u> </u>
2.	<u>Epilobium ciliatum</u>	<u>T</u>	<u>Herb</u>	<u>FACW-</u>
3.	<u>Holcus lanatus</u>	<u>10</u>	<u>Herb</u>	<u>FAC</u>
4.	<u>Juncus spp.</u>	<u>10</u>	<u>Herb</u>	<u> </u>
5.	<u>Lemna minor</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>
6.	<u>Phalaris arundinacea</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
7.	<u>Ranunculus repens</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
8.	<u>Scirpus microcarpus</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>
9.	<u>Veronica americana</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
Vegetation in this sample area is dominated by wetland species. Vegetation is sparse and occasionally mowed.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 1 (in.)
Depth to Free Water in Pit: surface (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Wetland hydrology is indicated by inundation, saturation, and drainage patterns.

Parametrix

Data Plot #: 24E-1
Wetland: 24E

Project/Site: East Lake Sammamish Trail Date: 1/22/2003

SOIL

Soil Survey Data:

Map Unit Name: Fill Drainage Class: _____

Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): _____ Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-1	A	5Y 4/2	none	none	muck
1-5	C	5Y 4/2	none	none	2 inch gravel with fines
5-16+	C	10YR 2/1	none	none	2 inch round gravel with fines

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Very little soil is present on the railbed; however, the top 5 inches include approximately 1 inch with organic matter accumulations and 5 inches of reduced matrix.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

Soil does not meet technical wetland criteria. Vegetation and hydrology indicate wetland. This sample area is within a wetland.

Parametrix

Data Plot #: 25
Wetland: 1A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/14/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, M. Louthier State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 25
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located 10 feet south of Flag 1.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
2. <u>Symphoricarpos albus</u>	<u>15</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 8 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 X Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Shallow swales are inundated up to 1 inch and 90 percent of the wetland is saturated. Drainage patterns in the wetland, oxidized root channels, and saturation in the upper 12 inches satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 25
Wetland: 1A

Project/Site: East Lake Sammamish Trail Date: 12/14/1999

SOIL

Soil Survey Data:

Map Unit Name: Sammamish Silt Loam Drainage Class: Somewhat poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Fluvaquentic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-3	A	7.5YR 3/1	none	none	sandy clay loam
3-18	B	7.5YR 3/1	10YR 4/6	few, distinct	silty clay loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other hydric soil indicators satisfy the hydric soil criterion.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 26
Wetland: 2A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/14/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 26
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

The data plot is 25 feet south of Laughing Jacobs Creek and 5 feet west of the rail bed.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Carex sp.</u>	<u>T</u>	<u>Herb</u>	<u> </u>
✓ 2.	<u>Equisetum telmateia</u>	<u>25</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Glyceria elata</u>	<u>T</u>	<u>Herb</u>	<u>FACW+</u>
✓ 4.	<u>Cornus sericea</u>	<u>50</u>	<u>Shrub</u>	<u>FACW</u>
✓ 5.	<u>Salix lucida ssp. lasiandra</u>	<u>80</u>	<u>Shrub</u>	<u>FACW+</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 4-8 (in.)
Depth to Free Water in Pit: surface (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

The wetland drains into Laughing Jacobs Creek. 30 to 40 percent of the wetland is inundated up to 8 inches. Inundation and saturation in the upper 12 inches, and drainage patterns in the wetland satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 26
Wetland: 2A

Project/Site: East Lake Sammamish Trail Date: 12/14/1999

SOIL

Soil Survey Data:

Map Unit Name: Mixed Alluvium Drainage Class: Well drained to very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): N/A Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	10YR 3/2	none	none	silt loam
5-18	B	2.5Y 3/2	10YR 4/6	common, distinct	silt loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and mottles satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 27
Wetland: 3A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/14/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA

1987 Method 1989 Method

Community ID: PFO

Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 27

Is the site significantly disturbed (Atypical Situation)? Yes No X

Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located west of Flag 3.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
✓ 1.	<u>Equisetum telmateia</u>	<u>30</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>50</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Rosa pisocarpa</u>	<u>10</u>	<u>Shrub</u>	<u>FAC</u>
4.	<u>Rubus laciniatus</u>	<u>15</u>	<u>Shrub</u>	<u>FACU+</u>
✓ 5.	<u>Rubus spectabilis</u>	<u>35</u>	<u>Shrub</u>	<u>FAC+</u>
✓ 6.	<u>Rubus ursinus</u>	<u>20</u>	<u>Shrub</u>	<u>FACU</u>
✓ 7.	<u>Alnus rubra</u>	<u>50</u>	<u>Tree</u>	<u>FAC</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 80

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
80 percent of the dominant plants are hydrophytic. Therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:
X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Field Observations:

Depth of Surface Water: 0.5 (in.)
Depth to Free Water in Pit: surface (in.)
Depth to Saturated Soil: surface (in.)

Secondary Indicators (2 or more required):
 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
The wetland is north of Laughing Jacobs Creek, but is not connected to it by surface flow. Inundation was present over 20 to 30 percent of the area and saturation in the upper 12 inches of soil satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 27
Wetland: 3A

Project/Site: East Lake Sammamish Trail Date: 12/14/1999

SOIL

Soil Survey Data:

Map Unit Name: Everett Gravelly Sandy Loam Drainage Class: Somewhat excessively drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	10YR 3/2	none	none	sandy loam
5-18	B	2.5Y 3/2	10YR 4/4	common, distinct	silty clay loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil color and mottles satisfy the hydric soils criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 28
Wetland: 14A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/14/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, M. Louther State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 28
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is north of the walkway.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
2. <u>Typha latifolia</u>	<u>5</u>	<u>Herb</u>	<u>OBL</u>
3. <u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation and saturation in the upper 12 inches satisfy the wetland hydrology criteria. This wetland is associated with an unnamed stream.

Parametrix

Data Plot #: 28
Wetland: 14A

Project/Site: East Lake Sammamish Trail Date: 12/14/1999

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-4	A	10YR 3/1	none	none	mucky silt loam
6-14	B	2.5Y 3/1	none	none	gravelly loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

Soil color and other indicators satisfy hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 29
Wetland: 13A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/14/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, M. Louther State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 29
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located 15 feet east of Flag 7.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Athyrium filix-femina</u>	<u>T</u>	<u>Herb</u>	<u>FAC+</u>
2.	<u>Equisetum telmateia</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Juncus effusus</u>	<u>60</u>	<u>Herb</u>	<u>FACW</u>
✓ 4.	<u>Phalaris arundinacea</u>	<u>20</u>	<u>Herb</u>	<u>FACW</u>
✓ 5.	<u>Scirpus microcarpus</u>	<u>70</u>	<u>Herb</u>	<u>OBL</u>
6.	<u>Populus trichocarpa (s)</u>	<u>5</u>	<u>Shrub</u>	<u>FAC</u>
7.	<u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 10 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 X Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, oxidized root channels, saturation in upper 12 inches, and drainage patterns satisfy the wetland hydrologic criteria.

Parametrix

Data Plot #: 29
Wetland: 13A

Project/Site: East Lake Sammamish Trail Date: 12/14/1999

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-6	A	2.5Y4/1	none	none	silt clay loam
6-18	B	5G 4/1	10YR 4/4	common, distinct	silt clay loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 3
Wetland: 33A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 11/24/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, M. Louther State: WA
 1987 Method 1989 Method Community ID: PFO
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 3
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is north of Flag 3.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Equisetum arvense</u>	<u>35</u>	<u>Herb</u>	<u>FAC</u>
✓ 2. <u>Equisetum telmateia</u>	<u>35</u>	<u>Herb</u>	<u>FACW</u>
3. <u>Phalaris arundinacea</u>	<u>15</u>	<u>Herb</u>	<u>FACW</u>
4. <u>Tolmiea menziesii</u>	<u>15</u>	<u>Herb</u>	<u>FAC</u>
✓ 5. <u>Physocarpus capitatus</u>	<u>80</u>	<u>Shrub</u>	<u>FACW-</u>
6. <u>Rubus discolor</u>	<u>10</u>	<u>Shrub</u>	<u>FACU</u>
✓ 7. <u>Salix lucida ssp. lasiandra</u>	<u>40</u>	<u>Shrub</u>	<u>FACW+</u>
✓ 8. <u>Fraxinus latifolia</u>	<u>40</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 3
Wetland: 33A

Project/Site: East Lake Sammamish Trail Date: 11/24/1999

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-10	A	10YR 2/1	none	none	hemic
>10	C	10YR 2/1	none	none	cobbly silt

Hydric Soil Indicators:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

High organic content in soil. The upper 10 inches of the soil profile is a histosol, therefore the hydric soil criterion is satisfied.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 30
Wetland: 4A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/14/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, M. Louther State: WA
 1987 Method 1989 Method Community ID: PFO
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 30
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located on the west edge of the wetland.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>30</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Alnus rubra</u>	<u>60</u>	<u>Tree</u>	<u>FAC</u>
✓ 4.	<u>Populus trichocarpa</u>	<u>25</u>	<u>Tree</u>	<u>FAC</u>
5.	<u>Salix sitchensis</u>	<u>15</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 4 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
X Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

90 percent of wetland is inundated up to 18 inches and water flows north. Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 30
Wetland: 4A

Project/Site: East Lake Sammamish Trail Date: 12/14/1999

SOIL

Soil Survey Data:

Map Unit Name: Bellingham Silt Loam Drainage Class: Poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	10YR 4/2	none	none	silty clay loam
5-18	B	10YR 5/1	10YR 5/4	common, few	silty clay loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input checked="" type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input checked="" type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil color, mottles and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 31
Wetland: 5A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/15/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 31
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located near Flag 1.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>70</u>	<u>Herb</u>	<u>FACW</u>
2. <u>Cornus sericea</u>	<u>10</u>	<u>Shrub</u>	<u>FACW</u>
✓ 3. <u>Lonicera involucrata</u>	<u>50</u>	<u>Shrub</u>	<u>FAC+</u>
✓ 4. <u>Salix lucida ssp. lasiandra</u>	<u>30</u>	<u>Shrub</u>	<u>FACW+</u>
✓ 5. <u>Spiraea douglasii</u>	<u>30</u>	<u>Shrub</u>	<u>FACW</u>
✓ 6. <u>Alnus rubra</u>	<u>100</u>	<u>Tree</u>	<u>FAC</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 6-18 (in.)
Depth to Free Water in Pit: surface (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
X Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

The wetland receives water from trough to the west. Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria. This data plot taken in small <0.25 AC area dominated by alder. Wetland is PEM overall.

Parametrix

Data Plot #: 31
Wetland: 5A

Project/Site: East Lake Sammamish Trail Date: 12/15/1999

SOIL

Soil Survey Data:

Map Unit Name: Bellingham Silt Loam Drainage Class: Poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Humaquepts Yes X No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-18	A	5GY 5/1	7.5YR 4/6	many, prominent	silt loam

Hydric Soil Indicators:

<u> </u> Histosol	<u> X </u> Listed on Local Hydric Soils List
<u> </u> Histic Epipedon	<u> X </u> Listed on State Hydric Soils List
<u> X </u> Sulfidic Odor	<u> X </u> Listed on National Hydric Soils List
<u> </u> Probable Aquic Moisture Regime	<u> X </u> Aquic Moisture Regime
<u> </u> Reducing Conditions	<u> </u> Organic Streaking in Sandy Soils
<u> X </u> Gleyed or Low-Chroma Colors	<u> X </u> Mottles
<u> </u> High Organic Content in Surface Layer	<u> </u> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <u> X </u> No <u> </u>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <u> X </u> No <u> </u>	Yes <u> X </u> No <u> </u>
Wetland Hydrology Present?	Yes <u> X </u> No <u> </u>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 32
Wetland: 7A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/15/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 32
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is between Flags 6 and 7. Wetland is in trough between the rail bed and a fill pad.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>80</u>	<u>Herb</u>	<u>FACW</u>
2. <u>Cornus sericea</u>	<u>15</u>	<u>Shrub</u>	<u>FACW</u>
3. <u>Rubus discolor</u>	<u>5</u>	<u>Shrub</u>	<u>FACU</u>
✓ 4. <u>Salix lucida ssp. lasiandra</u>	<u>50</u>	<u>Shrub</u>	<u>FACW+</u>
✓ 5. <u>Salix sitchensis</u>	<u>25</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 6-16 (in.)
Depth to Free Water in Pit: surface (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 32
Wetland: 7A

Project/Site: East Lake Sammamish Trail Date: 12/15/1999

SOIL

Soil Survey Data:

Map Unit Name: Bellingham Silt Loam Drainage Class: Poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	10YR 3/2	none	none	silty clay loam
5-18	B	2.5Y 4/1	10YR 4/4	common, distinct	silty clay loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input checked="" type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soils criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 33
Wetland: 8B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/15/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 33
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located 3 feet east of the outflow culvert at the north end of the wetland.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
2. <u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>
✓ 3. <u>Spiraea douglasii</u>	<u>30</u>	<u>Shrub</u>	<u>FACW</u>
4. <u>Salix sitchensis</u>	<u>T</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5 (in.)
Depth to Free Water in Pit: surface (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 X Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 X Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 33
Wetland: 8B

Project/Site: East Lake Sammamish Trail Date: 12/15/1999

SOIL

Soil Survey Data:

Map Unit Name: Bellingham Silt Loam Drainage Class: Poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-15	A	10YR 3/2	10YR 4/6, 2.5Y 3/4	common, distinct	silty clay loam
15-18	B	2.5Y 3/1	none	none	silty clay loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 34
Wetland: 8A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/15/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 34
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located south of Flag 1.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Juncus effusus</u>	<u>30</u>	<u>Herb</u>	<u>FACW</u>
✓ 2. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
3. <u>Scirpus microcarpus</u>	<u>10</u>	<u>Herb</u>	<u>OBL</u>
4. <u>Alnus rubra (s)</u>	<u>15</u>	<u>Shrub</u>	<u>FAC</u>
5. <u>Rosa pisocarpa</u>	<u>10</u>	<u>Shrub</u>	<u>FAC</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

The north end of the wetland is PEM. 100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5 (in.)
Depth to Free Water in Pit: surface (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

60 percent of the wetland is inundated. Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 34
Wetland: 8A

Project/Site: East Lake Sammamish Trail Date: 12/15/1999

SOIL

Soil Survey Data:

Map Unit Name: Sammamish Silt Loam Drainage Class: Somewhat poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Fluvaquentic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-15	A	10YR 3/1	none	none	loam
15-18	B	2.5Y 3/2	10YR 4/6	many, distinct	very fine sand

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 35
Wetland: 9B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/16/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 35
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located 10 feet south of Flag 1.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Moss</u>	<u>20</u>	<u>Herb</u>	<u>NI</u>
✓ 3.	<u>Phalaris arundinacea</u>	<u>50</u>	<u>Herb</u>	<u>FACW</u>
✓ 4.	<u>Rubus discolor</u>	<u>40</u>	<u>Shrub</u>	<u>FACU</u>
✓ 5.	<u>Salix lucida ssp. lasiandra</u>	<u>50</u>	<u>Shrub</u>	<u>FACW+</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 67

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
67 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 11 (in.)
Depth to Saturated Soil: 2 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 35
Wetland: 9B

Project/Site: East Lake Sammamish Trail Date: 12/16/1999

SOIL

Soil Survey Data:

Map Unit Name: Sammamish Silt Loam Drainage Class: Somewhat poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Fluvaquentic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-10	A	10YR 3/1	none	few, faint	silt loam
10-18	B	2.5Y/2	10YR 4/6	many, prominent	silty clay loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 36
Wetland: 10A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/16/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PFO
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 36
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot located north of Flag 5.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
✓ 2. <u>Cornus sericea</u>	<u>40</u>	<u>Shrub</u>	<u>FACW</u>
3. <u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>
✓ 4. <u>Populus trichocarpa</u>	<u>60</u>	<u>Tree</u>	<u>FAC</u>
✓ 5. <u>Salix sitchensis</u>	<u>20</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 8 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

X Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, saturation in the upper 12 inches, and oxidized root channels satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 36
Wetland: 10A

Project/Site: East Lake Sammamish Trail Date: 12/16/1999

SOIL

Soil Survey Data:

Map Unit Name: Sammamish Silt Loam Drainage Class: Somewhat poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Fluvaquentic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-8	A	10YR 3/2	10YR 4/2	common, faint	silt loam
8-18	B	10YR 4/2	2.5Y 5/3	many, distinct	silty clay loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 37
Wetland: 12A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/16/1999
Applicant/Owner: King County County: King
Investigator: S. Rozenbaum, M. Louther State: WA
 1987 Method 1989 Method Community ID: PFO
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 37
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is in the north end of the wetland.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
1. <u>Athyrium filix-femina</u>	<u>2</u>	<u>Herb</u>	<u>FAC+</u>
2. <u>Carex sp.</u>	<u>1</u>	<u>Herb</u>	<u> </u>
3. <u>Elytrigia repens (Agropyron repens)</u>	<u>1</u>	<u>Herb</u>	<u>FAC-</u>
✓ 4. <u>Equisetum telmateia</u>	<u>35</u>	<u>Herb</u>	<u>FACW</u>
5. <u>Phalaris arundinacea</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
6. <u>Rubus discolor</u>	<u>5</u>	<u>Shrub</u>	<u>FACU</u>
7. <u>Rubus ursinus</u>	<u>2</u>	<u>Shrub</u>	<u>FACU</u>
✓ 8. <u>Salix sp.</u>	<u>50</u>	<u>Shrub</u>	<u>OBL-FAC</u>
✓ 9. <u>Alnus rubra</u>	<u>30</u>	<u>Tree</u>	<u>FAC</u>
10. <u>Fraxinus latifolia</u>	<u>2</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied. Phalaris arundinacea and Rubus discolor are dominant throughout the rest of the wetland.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: 1-10 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 X Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation, saturation in the upper 12 inches, and oxidized root channels satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 37
Wetland: 12A

Project/Site: East Lake Sammamish Trail Date: 12/16/1999

SOIL

Soil Survey Data:

Map Unit Name: Everett Gravelly Sandy Loam Drainage Class: Somewhat excessively drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-7	A	10YR 2/1	none	none	gravelly sandy loam
7-16	B	10YR 3/1 and 2.5Y 4/1	10YR 3/3	common, distinct	very fine sandy loam

Hydric Soil Indicators:

- Histosol Listed on Local Hydric Soils List
- Histic Epipedon Listed on State Hydric Soils List
- Sulfidic Odor Listed on National Hydric Soils List
- Probable Aquic Moisture Regime Aquic Moisture Regime
- Reducing Conditions Organic Streaking in Sandy Soils
- Gleyed or Low-Chroma Colors Mottles
- High Organic Content in Surface Layer Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and mottles satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 38
Wetland: 4E

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/17/1999
Applicant/Owner: King County County: King
Investigator: S. Rozenbaum, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 38
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

The data plot is near Flag 8A. The wetland is an approximately 12 foot wide trough between the rail bed and East Lake Sammamish Parkway.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>15</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>90</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Typha latifolia</u>	<u>35</u>	<u>Herb</u>	<u>OBL</u>
4.	<u>Populus trichocarpa (s)</u>	<u>3</u>	<u>Shrub</u>	<u>FAC</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: 5 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 38
Wetland: 4E

Project/Site: East Lake Sammamish Trail Date: 12/17/1999

SOIL

Soil Survey Data:

Map Unit Name: Woodinville Silt Loam Drainage Class: Poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Fluvaquents Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-11	A	N2.5/	none	none	silt
11-14	B	5Y2.5/1	none	none	very fine sandy loam
14-15+	Oa	10YR 2/2	none	none	sapric material (muck)

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 39
Wetland: 15C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/5/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 39
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
Wetland is associated with two unnamed streams.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Athyrium filix-femina</u>	<u>2</u>	<u>Herb</u>	<u>FAC+</u>
✓ 2.	<u>Callitriche heterophylla</u>	<u>20</u>	<u>Herb</u>	<u>OBL</u>
3.	<u>Epilobium ciliatum</u>	<u>15</u>	<u>Herb</u>	<u>FACW-</u>
✓ 4.	<u>Equisetum telmateia</u>	<u>25</u>	<u>Herb</u>	<u>FACW</u>
5.	<u>Iris pseudacorus</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>
6.	<u>Juncus effusus</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
✓ 7.	<u>Lythrum salicaria</u>	<u>40</u>	<u>Herb</u>	<u>FACW+</u>
✓ 8.	<u>Phalaris arundinacea</u>	<u>20</u>	<u>Herb</u>	<u>FACW</u>
9.	<u>Rubus discolor</u>	<u>10</u>	<u>Shrub</u>	<u>FACU</u>
10.	<u>Rubus spectabilis</u>	<u>10</u>	<u>Shrub</u>	<u>FAC+</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 9 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Saturated soil in the upper 12 inches of the soil and drainage into two unnamed streams flowing through the wetland indicate that the wetland hydrology criteria are satisfied.

Parametrix

Data Plot #: 39
Wetland: 15C

Project/Site: East Lake Sammamish Trail Date: 1/5/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	O	10YR 2/1	none	none	Histic
16-18	B	5GY 5/1	10YR 5/8	few, prominent	Silt loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
The presence of organic soil from 0 to 16 inches satisfies the hydric soils criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates this area is a wetland.

Parametrix

Data Plot #: 4
Wetland: 32B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 11/30/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 4
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

32a and 32b opposite 33rd Place NE. Plot is located north of boardwalk at midsection of wetland. Wetland is entirely confined between East Lake Sammamish Parkway and railroad bed.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Festuca sp.</u>	<u>T</u>	<u>Herb</u>	<u> </u>
✓ 2.	<u>Juncus effusus</u>	<u>25</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Phalaris arundinacea</u>	<u>80</u>	<u>Herb</u>	<u>FACW</u>
4.	<u>Scirpus microcarpus</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>
5.	<u>Populus trichocarpa (s)</u>	<u>T</u>	<u>Shrub</u>	<u>FAC</u>
✓ 6.	<u>Rosa pisocarpa</u>	<u>80</u>	<u>Shrub</u>	<u>FAC</u>
✓ 7.	<u>Rubus discolor</u>	<u>25</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 75

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

Other traces of vegetation in wetland are Scouler's willow, Japanese knotweed, red alder seedlings. 75 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5 (in.)
Depth to Free Water in Pit: 0.5 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
X Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Wetland hydrology is indicated by inundation associated with stream 0143E.

Parametrix

Data Plot #: 4
Wetland: 32B

Project/Site: East Lake Sammamish Trail Date: 11/30/1999

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-6	A	10YR 4/2	none	none	mucky sandy loam
6-15	B	10YR 4/2	7.5YR 5/6 and 10YR 5/2	common, distinct	mucky sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Hydric soil is indicated by mottles and low chroma.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates this area is a wetland.

Parametrix

Data Plot #: 40
Wetland: 15A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/5/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PFO
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 40
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

The wetland is on the west side of the rail bed and is associated with Wetlands 15B and 15C and two streams. The wetland includes the adjacent ditch.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Carex obnupta</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>
✓ 2.	<u>Equisetum telmateia</u>	<u>25</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Phalaris arundinacea</u>	<u>50</u>	<u>Herb</u>	<u>FACW</u>
4.	<u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>
5.	<u>Rubus spectabilis</u>	<u>T</u>	<u>Shrub</u>	<u>FAC+</u>
6.	<u>Alnus rubra</u>	<u>T</u>	<u>Tree</u>	<u>FAC</u>
✓ 7.	<u>Fraxinus latifolia</u>	<u>70</u>	<u>Tree</u>	<u>FACW</u>
8.	<u>Pseudotsuga menziesii</u>	<u>T</u>	<u>Tree</u>	<u>FACU</u>
✓ 9.	<u>Thuja plicata</u>	<u>20</u>	<u>Tree</u>	<u>FAC</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

Forest cover dominates dat plot location, but most of the area is occupied by mowed grasses. 100 percent of the dominant plants are hydrophytic, the wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 8 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Soil is saturated in upper 12 inches. Therefore, the wetland hydrology criterion is met.

Parametrix

Data Plot #: 40
Wetland: 15A

Project/Site: East Lake Sammamish Trail Date: 1/5/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-14	O	7.5YR 2.5/2	none	none	Histic
15-20	A	N 5/1	none	none	gravelly loamy sand

Hydric Soil Indicators:

- Histosol Listed on Local Hydric Soils List
- Histic Epipedon Listed on State Hydric Soils List
- Sulfidic Odor Listed on National Hydric Soils List
- Probable Aquic Moisture Regime Aquic Moisture Regime
- Reducing Conditions Organic Streaking in Sandy Soils
- Gleyed or Low-Chroma Colors Mottles
- High Organic Content in Surface Layer Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil is organic and satisfies the hydric soil criterion.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 41
Wetland: 15B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/5/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA

1987 Method 1989 Method

Community ID: PEM

Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 41

Is the site significantly disturbed (Atypical Situation)? Yes No X

Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This wetland is associated with two unnamed streams.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
✓ 1.	<u>Cardamine occidentalis</u>	<u>30</u>	<u>Herb</u>	<u>FACW+</u>
2.	<u>Epilobium ciliatum</u>	<u>T</u>	<u>Herb</u>	<u> </u>
3.	<u>Juncus effusus</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
✓ 4.	<u>Lythrum salicaria</u>	<u>25</u>	<u>Herb</u>	<u>FACW+</u>
✓ 5.	<u>Phalaris arundinacea</u>	<u>20</u>	<u>Herb</u>	<u>FACW</u>
✓ 6.	<u>Rorippa nasturtium-aquaticum</u>	<u>30</u>	<u>Herb</u>	<u>OBL</u>
✓ 7.	<u>Scirpus microcarpus</u>	<u>20</u>	<u>Herb</u>	<u>OBL</u>
8.	<u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>
9.	<u>Populus spp.</u>	<u>T</u>	<u>Tree</u>	<u> </u>
10.	<u>Salix spp.</u>	<u>15</u>	<u>Tree</u>	<u> </u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic. Therefore the wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 12 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
The soil is saturated in the upper 12 inches and there are drainage patterns in the wetland. Therefore, the wetland hydrology criterion is satisfied.

Parametrix

Data Plot #: 41
Wetland: 15B

Project/Site: East Lake Sammamish Trail Date: 1/5/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-25	O	7.5 2.5/2	none	none	Histic

Hydric Soil Indicators:

<input checked="" type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil indicators satisfy the hydric soils criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 42
Wetland: 16A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/5/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 42
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
Wetland includes the rail bed and ditches on both sides.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Echinochloa crusgalli</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
2.	<u>Equisetum telmateia</u>	<u>15</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Lemna minor</u>	<u>5</u>	<u>Herb</u>	<u>OBL</u>
4.	<u>Ranunculus repens</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
5.	<u>Rorippa nasturtium-aquaticum</u>	<u>2</u>	<u>Herb</u>	<u>OBL</u>
6.	<u>Veronica americana</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

The majority of the data plot was unvegetated railbed. However, plants that were present are hydrophytic. The wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 3 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Water drainage patterns and soil saturated in the upper 12 inches indicate that wetland hydrology is present. The wetland originates from seeps in slope and drains north through a ditch and a culvert to Lake Sammamish.

Parametrix

Data Plot #: 42
Wetland: 16A

Project/Site: East Lake Sammamish Trail Date: 1/5/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-1	O	10YR 2/1	none	none	mucky silt
1-13	Fill	10YR 2/1	none	none	gravel

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

Soil color meets the hydric soil criteria. Accumulation of organic matter on the surface and in gravels is evident as black color. The gravel bed was saturated with water and contained low-chroma soils.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates that this area is a wetland.

Parametrix

Data Plot #: 43
Wetland: 18C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/5/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 43
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This wetland is in a trough. The area is likely part of the lake shoreline isolated by fill for the railroad.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
✓ 1.	<u>Clematis sp.</u>	<u>30</u>	<u>Herb</u>	<u>NL</u>
2.	<u>Equisetum hyemale</u>	<u>7</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Physocarpus capitatus</u>	<u>10</u>	<u>Shrub</u>	<u>FACW-</u>
✓ 4.	<u>Rubus discolor</u>	<u>50</u>	<u>Shrub</u>	<u>FACU</u>
✓ 5.	<u>Fraxinus latifolia</u>	<u>60</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 50

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
Fifty percent of the dominant plants were hydrophytic. The presence of wetland hydrology and wetland soils suggest that Rubus discolor is acting hydrophytic.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: 7 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Soil saturation to the surface and a water table at 7 inches satisfy the wetland hydrology criterion.

Parametrix

Data Plot #: 43
Wetland: 18C

Project/Site: East Lake Sammamish Trail Date: 1/5/2000

SOIL

Soil Survey Data:

Map Unit Name: Mixed Alluvial Land Drainage Class: Well to very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): N/A Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-12	A	10YR 3/2	5YR 3/4	common, distinct	fine sand
12-18	B	10YR 2/1	none	none	fine sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

Low chroma soils with mottles satisfies the hydric soil criterion.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates this area is a wetland.

Parametrix

Data Plot #: 44
Wetland: 31A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/6/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 44
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is near Flag 2.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Athyrium filix-femina</u>	<u>35</u>	<u>Herb</u>	<u>FAC+</u>
2. <u>Equisetum telmateia</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
3. <u>Juncus effusus</u>	<u>1</u>	<u>Herb</u>	<u>FACW</u>
4. <u>Lemna minor</u>	<u>5</u>	<u>Herb</u>	<u>OBL</u>
✓ 5. <u>Phalaris arundinacea</u>	<u>80</u>	<u>Herb</u>	<u>FACW</u>
6. <u>Rorippa nasturtium-aquaticum</u>	<u>1</u>	<u>Herb</u>	<u>OBL</u>
7. <u>Typha latifolia</u>	<u>15</u>	<u>Herb</u>	<u>OBL</u>
8. <u>Rubus spectabilis</u>	<u>10</u>	<u>Shrub</u>	<u>FAC+</u>
9. <u>Alnus rubra</u>	<u>8</u>	<u>Tree</u>	<u>FAC</u>
10. <u>Fraxinus latifolia</u>	<u>5</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 9 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Saturation in the upper 12 inches and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 44
Wetland: 31A

Project/Site: East Lake Sammamish Trail Date: 1/6/2000

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-4	A	7.5YR 3/1	none	none	mucky gravelly sandy loam
4-12	B	5Y 4/1	none	none	gravelly coarse sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 45
Wetland: 31B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/6/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA

1987 Method 1989 Method

Community ID: PEM

Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 45

Is the site significantly disturbed (Atypical Situation)? Yes No X

Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

This area is on fill material and includes part of the rail bed. The data plot is on the edge of the grade.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Agrostis sp.</u>	<u>5</u>	<u>Herb</u>	<u> </u>
2.	<u>Equisetum telmateia</u>	<u>15</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Holcus lanatus</u>	<u>30</u>	<u>Herb</u>	<u>FAC</u>
4.	<u>Juncus effusus</u>	<u>7</u>	<u>Herb</u>	<u>FACW</u>
5.	<u>Lemna sp.</u>	<u>5</u>	<u>Herb</u>	<u> </u>
6.	<u>Phalaris arundinacea</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
7.	<u>Scirpus sp.</u>	<u>5</u>	<u>Herb</u>	<u> </u>
8.	<u>Typha latifolia</u>	<u>2</u>	<u>Herb</u>	<u>OBL</u>
9.	<u>Alnus rubra (s)</u>	<u>15</u>	<u>Shrub</u>	<u>FAC</u>
✓ 10.	<u>Rubus discolor</u>	<u>30</u>	<u>Shrub</u>	<u>FACU</u>
11.	<u>Salix lucida ssp. lasiandra</u>	<u>2</u>	<u>Shrub</u>	<u>FACW+</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 50

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

50 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied. The presence of wetland hydrology and hydric soils suggest that Rubus discolor is acting hydrophytic.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-1 (in.)
Depth to Free Water in Pit: 2 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 45
Wetland: 31B

Project/Site: East Lake Sammamish Trail Date: 1/6/2000

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-2	O	10YR 2/1	none	none	silt loam
2-16	B	10YR 3/2	none	none	loamy sand

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input checked="" type="checkbox"/> Reducing Conditions | <input checked="" type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

Up to 2.5 inches of accumulated organic matter and organic streaking in loamy sand satisfy the hydric soil criteria. Old fill material and sandy soils make coloring difficult.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 46
Wetland: 31C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/6/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 46
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is between Flags 2 and 3.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>15</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>60</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Polystichum munitum</u>	<u>2</u>	<u>Herb</u>	<u>FACU</u>
4.	<u>Corylus cornuta</u>	<u>10</u>	<u>Shrub</u>	<u>FACU</u>
✓ 5.	<u>Rubus discolor</u>	<u>40</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 50

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

50 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied. The presence of wetland hydrology and hydric soils suggest that Rubus discolor is acting hydrophytic.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 12 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Saturation in the upper 12 inches and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 46
Wetland: 31C

Project/Site: East Lake Sammamish Trail Date: 1/6/2000

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	10YR 3/2	none	none	silt loam
5-16	B	5GY 4/1	none	none	sandy loam

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 47
Wetland: 31D

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/6/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PFO
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 47
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is in the center of the wetland.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Carex obnupta</u>	<u>100</u>	<u>Herb</u>	<u>OBL</u>
✓ 2. <u>Populus trichocarpa (s)</u>	<u>55</u>	<u>Shrub</u>	<u>FAC</u>
3. <u>Symphoricarpos albus</u>	<u>5</u>	<u>Shrub</u>	<u>FACU</u>
✓ 4. <u>Fraxinus latifolia</u>	<u>70</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 16 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Saturation in the upper 12 inches and drainage patterns in the wetland satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 47
Wetland: 31D

Project/Site: East Lake Sammamish Trail Date: 1/6/2000

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	A	10YR 2/1	none	none	silt loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil color and high organic content satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 48
Wetland: 29B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/6/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 48
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The wetland is in a yard. This data plot is in the center.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Agrostis sp.</u>	<u>90</u>	<u>Herb</u>	<u>NL</u>
2. <u>Juncus effusus</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
3. <u>Juncus ensifolius</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
4. <u>Lapsana communis</u>	<u>15</u>	<u>Herb</u>	<u>NI</u>
5. <u>Ranunculus repens</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
✓ 6. <u>Scirpus microcarpus</u>	<u>80</u>	<u>Herb</u>	<u>OBL</u>
7. <u>Rubus discolor</u>	<u>5</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
The wetland is dominated by Scirpus microcarpus and an unidentified Agrostis species.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 5 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Saturation in the upper 12 inches and a water table of 5 inches satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 48
Wetland: 29B

Project/Site: East Lake Sammamish Trail Date: 1/6/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood/Kitsap Complex Drainage Class: Varies
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): N/A Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-4	A	10YR 2/1	none	none	silt loam
4-12	B	10YR 2/1	none	none	gravelly silt loam
12-16	C	10Y 4/1	10YR 5/6	common, distinct	loamy sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and high organic matter satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 49
Wetland: 29C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/6/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Green, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PFO
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 49
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is near Flag 3.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Athyrium filix-femina</u>	<u>5</u>	<u>Herb</u>	<u>FAC+</u>
2.	<u>Equisetum hyemale</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Equisetum telmateia</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
4.	<u>Cornus sericea</u>	<u>T</u>	<u>Shrub</u>	<u>FACW</u>
5.	<u>Lonicera involucrata</u>	<u>10</u>	<u>Shrub</u>	<u>FAC+</u>
✓ 6.	<u>Rubus discolor</u>	<u>40</u>	<u>Shrub</u>	<u>FACU</u>
✓ 7.	<u>Rubus spectabilis</u>	<u>60</u>	<u>Shrub</u>	<u>FAC+</u>
8.	<u>Alnus rubra</u>	<u>10</u>	<u>Tree</u>	<u>FAC</u>
✓ 9.	<u>Fraxinus latifolia</u>	<u>50</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 67

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
67 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied. The presence of wetland hydrology and hydric soils suggest that Rubus discolor is acting hydrophytic.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 5 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Saturation in the upper 12 inches, drainage patterns in the wetland, and a water table of 5 inches satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 49
Wetland: 29C

Project/Site: East Lake Sammamish Trail Date: 1/6/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood/Kitsap Comple Drainage Class: Varies
Field Observations Confirm Mapped Type?
Yes No NA

Taxonomy (Subgroup): N/A

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-24	O	10YR 2/1	none	none	Histic

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

The upper 24 inches includes a histic epipedon, therefore the hydric soil criterion is satisfied.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 5
Wetland: 32A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 11/30/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 5
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

Plot is located south of crossing in center of wetland. Wetland is located between East Lake Sammamish Parkway and railroad grade. There is no running surface water but the substrate is sandy.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
2.	<u>Phalaris arundinacea</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Polygonum cuspidatum</u>	<u>100</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace.

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

This area is dominated by non-native species. Presence of wetland hydrology and hydric soils suggest that Polygonum cuspidatum is acting hydrophytic.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
X Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
X Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Hydrology indicated by saturated soils, sediment deposits, and water-stained leaves.

Parametrix

Data Plot #: 5
Wetland: 32A

Project/Site: East Lake Sammamish Trail Date: 11/30/1999

SOIL

Soil Survey Data:

Map Unit Name: Alderwood and Kitsap Soils Drainage Class: Various
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): N/A Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	A	10YR 3/1	none	none	loamy sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input checked="" type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soils have low chroma and are therefore hydric.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 50
Wetland: 19A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/20/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 50
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

Wetland is a hill seep and is associated with Wetland 14B on the opposite side of the rail bed. The site drains to a ditch.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Festuca spp.</u>	<u>60</u>	<u>Herb</u>	<u> </u>
2. <u>Medicago spp.</u>	<u>T</u>	<u>Herb</u>	<u> </u>
3. <u>Plantago spp.</u>	<u>10</u>	<u>Herb</u>	<u> </u>
✓ 4. <u>Poa spp.</u>	<u>40</u>	<u>Herb</u>	<u> </u>
5. <u>Ranunculus repens</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
✓ 6. <u>Prunus spp.</u>	<u>30</u>	<u>Tree</u>	<u> </u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. N/D

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

The site is largely a mowed lawn planted with non-native grasses. Existing vegetation may not reflect the hydrologic conditions present on the site. N/D = Not determined.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 5 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

X Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

The soil was saturated to the surface with approximately 5 percent of the area inundated and contained oxidized root channels. Therefore, the criterion for wetland hydrology is satisfied.

Parametrix

Data Plot #: 50
Wetland: 19A

Project/Site: East Lake Sammamish Trail Date: 1/20/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-5	A	10YR 2/1	none	none	silt loam
5-18	B	10YR 3/1	none	none	gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Low-chroma soils satisfies the hydric soil criterion.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

Hydrology and hydric soil parameters are satisfied. Vegetation is non-native plants that are mowed regularly and assumed hydrophytic. The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 51
 Wetland: 19B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/20/2000
 Applicant/Owner: King County County: King
 Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
 Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 51
 Is the site significantly disturbed (Atypical Situation)? Yes No X
 Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This wetland is associated with Wetland 19A. It originates from seeps that drain into Lake Sammamish.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Agrostis spp.</u>	<u>2</u>	<u>Herb</u>	<u> </u>
✓ 2.	<u>Agrostis stolonifera</u>	<u>30</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Carex spp.</u>	<u>10</u>	<u>Herb</u>	<u> </u>
✓ 4.	<u>Festuca spp.</u>	<u>85</u>	<u>Herb</u>	<u> </u>
5.	<u>Juncus effusus</u>	<u>2</u>	<u>Herb</u>	<u>FACW</u>
6.	<u>Lotus corniculatus</u>	<u>10</u>	<u>Herb</u>	<u>FAC</u>
7.	<u>Poa spp.</u>	<u>2</u>	<u>Herb</u>	<u> </u>
8.	<u>Ranunculus repens</u>	<u>15</u>	<u>Herb</u>	<u>FACW</u>
9.	<u>Rosa spp.</u>	<u>2</u>	<u>Shrub</u>	<u> </u>
✓ 10.	<u>Rubus discolor</u>	<u>25</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. N/D

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
The site is largely mowed lawn and maintained garden. Vegetation may not reflect the hydrologic conditions present. N/D = Not determined.

HYDROLOGY

Recorded Data (Describe in Remarks):

- Stream, Lake, or Tide Gage
- Aerial Photograph
- Other
- X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
 Depth to Free Water in Pit: 8 (in.)
 Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

- Inundated
- X Saturated in Upper 12 inches
- Saturated in Upper 18 inches
- Water Marks
- Drift Lines
- Sediment Deposits
- X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

- Oxidized Root Channels in Upper 12 inches
- Water-Stained Leaves
- Local Soil Survey Data
- Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Soil was saturated to the surface with the water table at 18 inches. Therefore, the criterion for wetland hydrology is satisfied.

Parametrix

Data Plot #: 51
Wetland: 19B

Project/Site: East Lake Sammamish Trail Date: 1/20/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-10	A	10YR 2/1	none	none	sandy loam
10-16	B	10YR 3/2	10YR 6/6	coarse, common, distinct	loamy sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Low-chroma soil and mottles at 10 inches satisfies the hydric soil criterion.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
Hydrology and hydric soil parameters are satisfied. Vegetation is non-native plants that are mowed regularly and assumed hydrophytic. The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 52
Wetland: 20B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/20/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 52
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This wetland is mowed yard fed by groundwater seeps and a culvert. Data plot is located near Flag 3.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
1. <u>Carex spp.</u>	<u>5</u>	<u>Herb</u>	<u> </u>
✓ 2. <u>Festuca arundinacea</u>	<u>90</u>	<u>Herb</u>	<u>FAC-</u>
✓ 3. <u>Holcus lanatus</u>	<u>100</u>	<u>Herb</u>	<u>FAC</u>
4. <u>Juncus effusus</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
5. <u>Poa spp.</u>	<u>10</u>	<u>Herb</u>	<u> </u>
6. <u>Ranunculus repens</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
7. <u>Scirpus atrocinctus</u>	<u>5</u>	<u>Herb</u>	<u>OBL</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 50

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
This site is largely mowed lawn. Existing vegetation may not reflect the hydrologic conditions present on the site.

HYDROLOGY

Recorded Data (Describe in Remarks):
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 13 (in.)
Depth to Saturated Soil: 4 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:
 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Soil saturated in the upper 12 inches and oxidized root channels in the upper 12 inches satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 52
Wetland: 20B

Project/Site: East Lake Sammamish Trail Date: 1/20/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-10	A	10YR 3/1	10YR 3/6	few, faint	sandy loam
10-16	B	5Y 5/1	10YR 4/4	common, distinct	sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and presence of other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
Hydrology and hydric soil parameters are satisfied. Vegetation is non-native plants that are mowed regularly and assumed hydrophytic. The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 53
Wetland: 20A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/20/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 53
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This area is a hillside seep covered by English ivy. Data plot located near Flag 3.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Athyrium filix-femina</u>	<u>85</u>	<u>Herb</u>	<u>FAC+</u>
✓ 2. <u>Hedera helix</u>	<u>90</u>	<u>Herb</u>	<u>NL</u>
✓ 3. <u>Phalaris arundinacea</u>	<u>20</u>	<u>Herb</u>	<u>FACW</u>
4. <u>Polystichum munitum</u>	<u>2</u>	<u>Herb</u>	<u>FACU</u>
5. <u>Veronica americana</u>	<u>1</u>	<u>Herb</u>	<u>OBL</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 66

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
Greater than 50 percent of the dominant plants rooted in the wetland are hydrophytic. Therefore, the wetland vegetation criterion is met. Hedera helix originates in the adjacent yard and is not rooted in the wetland.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 16 (in.)
Depth to Saturated Soil: 8 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
The area is saturated in the upper 12 inches of the soil with a water table at 8 inches. Therefore, the wetland hydrologic criteria are satisfied.

Parametrix

Data Plot #: 53
Wetland: 20A

Project/Site: East Lake Sammamish Trail Date: 1/20/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	A	10YR 3/2	10YR 3/4	common, faint	cobbly sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

Soil color and mottles meet the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 54
Wetland: 21B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/20/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 54
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
Data plot is located north of Flag 1.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
2.	<u>Geranium robertianum</u>	<u>5</u>	<u>Herb</u>	<u>NL</u>
3.	<u>Phalaris arundinacea</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
4.	<u>Polygonum cuspidatum</u>	<u>2</u>	<u>Herb</u>	<u>FACU</u>
✓ 5.	<u>Ranunculus repens</u>	<u>25</u>	<u>Herb</u>	<u>FACW</u>
✓ 6.	<u>Alnus rubra (s)</u>	<u>50</u>	<u>Shrub</u>	<u>FAC</u>
7.	<u>Oplopanax horridus</u>	<u>5</u>	<u>Shrub</u>	<u>FAC+</u>
8.	<u>Ribes lacustre</u>	<u>5</u>	<u>Shrub</u>	<u>FAC+</u>
9.	<u>Rubus discolor</u>	<u>5</u>	<u>Shrub</u>	<u>FACU</u>
✓ 10.	<u>Rubus spectabilis</u>	<u>20</u>	<u>Shrub</u>	<u>FAC+</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant exhibit hydrophytic characteristics, therefore, the wetland vegetation criterion is satisfied. Data plot taken near patch of alder, remaining portions of wetland are emergent.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 12 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

The soil is saturated in the upper 12 inches with free water at 12 inches. Therefore, the wetland hydrology criterion is satisfied. Data plot taken near patch of alder, remaining portions of wetland are emergent.

Parametrix

Data Plot #: 54
Wetland: 21B

Project/Site: East Lake Sammamish Trail Date: 1/20/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	A	10YR 2/1	none	none	silt

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other hydric soil indicators meet the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates this area is a wetland.

Parametrix

Data Plot #: 56
Wetland: _____

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/20/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No _____ Field Plot ID: 56
Is the site significantly disturbed (Atypical Situation)? Yes _____ No X
Is the area a potential Problem Area? Yes _____ No X

Remarks (Explain sample location, disturbances, problem areas):
This wetland is contiguous with Wetland 22A and fed by groundwater seeps and a short stream. The data plot is located by the stream.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Juncus effusus</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>60</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Typha latifolia</u>	<u>85</u>	<u>Herb</u>	<u>OBL</u>
4.	<u>Alnus rubra (s)</u>	<u>10</u>	<u>Shrub</u>	<u>FAC</u>
5.	<u>Cornus sericea</u>	<u>5</u>	<u>Shrub</u>	<u>FACW</u>
✓ 6.	<u>Rubus discolor</u>	<u>50</u>	<u>Shrub</u>	<u>FACU</u>
✓ 7.	<u>Rubus spectabilis</u>	<u>25</u>	<u>Shrub</u>	<u>FAC+</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 75

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
Greater than 50 percent of the dominant plants rooted in the wetland are hydrophytic, therefore, the wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

Stream, Lake, or Tide Gage

Aerial Photograph

Other
X
No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 10 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

Inundated
X
Saturated in Upper 12 inches

Saturated in Upper 18 inches

Water Marks

Drift Lines

Sediment Deposits
X
Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

Oxidized Root Channels in Upper 12 inches

Water-Stained Leaves

Local Soil Survey Data

Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Approximately 20 percent of the wetland area is inundated with up to 4 inches of water. In other portions, the soil is saturated to the surface with a water table of 10 inches. Therefore, the wetland hydrologic criteria are met.

Parametrix

Data Plot #: 56
Wetland: _____

Project/Site: East Lake Sammamish Trail Date: 1/20/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-2	O	10YR 2/1	none	none	muck
2-16	A	10YR 2/1	none	none	sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators meet the hydric soils criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 57
Wetland: 34B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/21/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 57
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is near Flag 3.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
2. <u>Rosa pisocarpa</u>	<u>T</u>	<u>Shrub</u>	<u>FAC</u>
3. <u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>
4. <u>Symphoricarpos albus</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 6 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Saturation in the upper 12 inches, drainage patterns in the wetland and a water table at 6 inches satisfies the wetland hydrology criteria.

Parametrix

Data Plot #: 57
Wetland: 34B

Project/Site: East Lake Sammamish Trail Date: 1/21/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-6	A	10YR 3/2	none	none	sandy loam
6-18	B	2.5Y 5/1	10YR 4/6, 10YR 5/6	many distinct	gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil color and mottles satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 58
Wetland: 34C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/21/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 58
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

The wetland is a trough between the rail bed and East Lake Sammamish Parkway. This data plot is near Flag 6.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Athyrium filix-femina</u>	<u>5</u>	<u>Herb</u>	<u>FAC+</u>
✓ 2.	<u>Equisetum telmateia</u>	<u>30</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-12 (in.)
Depth to Free Water in Pit: 12 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 58
Wetland: 34C

Project/Site: East Lake Sammamish Trail Date: 1/21/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-4	A	2.5Y 3/2	none	none	sandy loam
4-18	B	10YR 3/2	10YR 4/6, 10YR 6/4	many/few	gravelly sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 59
Wetland: 35B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/21/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 59
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is in the center of a small wetland.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 12 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Saturation to the surface satisfies the wetland hydrology criteria.

Parametrix

Data Plot #: 59
Wetland: 35B

Project/Site: East Lake Sammamish Trail Date: 1/21/2000

SOIL

Soil Survey Data:

Map Unit Name: Indianola Loamy Fine Sand Drainage Class: Somewhat excessively drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xeropsamments Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-18	A	10YR 3/1	none	none	silt loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):

Low chroma soils satisfies the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 6
Wetland: 30B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 11/30/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin, M. Louther State: WA
 1987 Method 1989 Method Community ID: PSS
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 6
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

A footpath bisects this wetland. Groundwater seeps are prevalent in the east portion of the wetland, which is a hillside seep. The wetland continues to the east toward the base of the road prism for East Lake Sammamish Way.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Athyrium filix-femina</u>	<u>40</u>	<u>Herb</u>	<u>FAC+</u>
✓ 2. <u>Equisetum arvense</u>	<u>35</u>	<u>Herb</u>	<u>FAC</u>
3. <u>Equisetum telmateia</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
✓ 4. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
✓ 5. <u>Rubus discolor</u>	<u>30</u>	<u>Shrub</u>	<u>FACU</u>
✓ 6. <u>Rubus spectabilis</u>	<u>30</u>	<u>Shrub</u>	<u>FAC+</u>
7. <u>Fraxinus latifolia</u>	<u>10</u>	<u>Tree</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 80

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

The hillslope to the north is dominated by giant horsetail. The southwest portion of wetland is dominated by Himalayan blackberry. Oregon ash is rooted just inside the wetland boundary. 80 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: 1-2 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

A stream is located along the western boundary. Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 6
Wetland: 30B

Project/Site: East Lake Sammamish Trail Date: 11/30/1999

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	O	10YR 2/1	none	none	sapric with some gravels

Hydric Soil Indicators:

<input checked="" type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil has high organic content. Sapric soil and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 60
Wetland: 35A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/21/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, M. Clancy State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 60
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is east of Flag 3.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Agrostis spp.</u>	<u>5</u>	<u>Herb</u>	<u> </u>
2.	<u>Juncus effusus</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Lotus corniculatus</u>	<u>T</u>	<u>Herb</u>	<u>FAC</u>
✓ 4.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
5.	<u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-8 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 60
Wetland: 35A

Project/Site: East Lake Sammamish Trail Date: 1/21/2000

SOIL

Soil Survey Data:

Map Unit Name: Indianola Loamy Fine Sand Drainage Class: Somewhat excessively drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-18	A	5Y 4/2	2.5Y 4/2	distinct, common	cobble and sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Low chroma soil with mottles satisfies the hydric soil criterion.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 61
Wetland: 34E

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/26/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 61
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is in the center of the wetland.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Polystichum munitum</u>	<u>2</u>	<u>Herb</u>	<u>FACU</u>
✓ 4.	<u>Rubus discolor</u>	<u>25</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 50

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
50 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied. The presence of wetland hydrology and hydric soils suggest that Rubus discolor is acting hydrophytic.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-2 (in.)
Depth to Free Water in Pit: 16 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation up to 2 inches in 10 percent of the wetland, saturation in the upper 12 inches throughout the wetland, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 61
Wetland: 34E

Project/Site: East Lake Sammamish Trail Date: 1/26/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes X No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	A	10YR 3/1	10YR 3/4	faint, few	sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes X No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes X No Yes X No
Wetland Hydrology Present? Yes X No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 62
Wetland: 34F

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/26/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 62
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is near Flag 3.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Lythrum salicaria</u>	<u>5</u>	<u>Herb</u>	<u>FACW+</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Iris spp.</u>	<u>T</u>	<u>Shrub</u>	<u> </u>
4.	<u>Physocarpus capitatus</u>	<u>15</u>	<u>Shrub</u>	<u>FACW-</u>
5.	<u>Prunus laurocerasus</u>	<u>8</u>	<u>Shrub</u>	<u>NL</u>
6.	<u>Rosa nutkana</u>	<u>5</u>	<u>Shrub</u>	<u>FAC-</u>
✓ 7.	<u>Rubus discolor</u>	<u>40</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 50

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

50 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied. The presence of wetland hydrology and hydric soils suggest that Rubus discolor is acting hydrophytic.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-1 (in.)
Depth to Free Water in Pit: 1 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 62
Wetland: 34F

Project/Site: East Lake Sammamish Trail Date: 1/26/2000

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-6	A	10YR 4/2	5YR 4/1	many, distinct	cobbly gravelly loamy sand
6-12	B	5Y 4/1	10YR 4/4	many, distinct	gravelly silt loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 63
Wetland: 34G

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/26/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 63
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is near Flag 4.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum hyemale</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Rubus discolor</u>	<u>60</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 50

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

50 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied. The presence of wetland hydrology and hydric soils suggest that Rubus discolor is acting hydrophytic.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-1 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 63
Wetland: 34G

Project/Site: East Lake Sammamish Trail Date: 1/26/2000

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes X No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	A	2.5Y 4/1	10YR 4/4	common, distinct	silt loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input checked="" type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes X No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes X No Yes X No
Wetland Hydrology Present? Yes X No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 64
Wetland: Upland

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/26/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: Upland
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 64
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is north of Wetland 34G

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Rubus discolor</u>	<u>40</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 50

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
50 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: none (in.)
Depth to Saturated Soil: >15 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Wetland hydrology is absent.

Parametrix

Data Plot #: 64
Wetland: Upland

Project/Site: East Lake Sammamish Trail Date: 1/26/2000

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes X No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	A	10YR 4/2	none	none	silt loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

No indicators of hydric soil are present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes X No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No X Yes No X
Wetland Hydrology Present? Yes No X

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

Only one of the wetland parameters is present, therefore, this is an upland area.

Parametrix

Data Plot #: 65
Wetland: 33B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/26/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 65
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is in the north end of the wetland.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Epilobium ciliatum</u>	<u>2</u>	<u>Herb</u>	<u> </u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Scirpus microcarpus</u>	<u>10</u>	<u>Herb</u>	<u>OBL</u>
✓ 4.	<u>Rubus discolor</u>	<u>30</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 50

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
50 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied. The presence of wetland hydrology and hydric soils suggest that Rubus discolor is acting hydrophytic.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-6 (in.)
Depth to Free Water in Pit: 16 & rising (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Approximately 30 percent of the area is inundated up to 6 inches. Inundation and saturation in the upper 12 inches satisfy the hydric soil criteria. Depth to free water at 16 inches and rising.

Parametrix

Data Plot #: 65
Wetland: 33B

Project/Site: East Lake Sammamish Trail Date: 1/26/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-3	A	10YR 3/1	none	none	gravelly loam
3-16	B	10YR 2/1	none	none	gravelly loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 66
 Wetland: 28B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/27/2000
 Applicant/Owner: King County County: King
 Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
 Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 66
 Is the site significantly disturbed (Atypical Situation)? Yes No X
 Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is north of Flag 5. The wetland is fed by a culvert.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>95</u>	<u>Herb</u>	<u>FACW</u>
2. <u>Corylus cornuta</u>	<u>15</u>	<u>Shrub</u>	<u>FACU</u>
3. <u>Rosa spp.</u>	<u>3</u>	<u>Shrub</u>	<u> </u>
✓ 4. <u>Rubus discolor</u>	<u>60</u>	<u>Shrub</u>	<u>FACU</u>
5. <u>Spiraea douglasii</u>	<u>5</u>	<u>Shrub</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 50

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
50 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied. The presence of wetland hydrology and hydric soils suggest that Rubus discolor is acting hydrophytic.

HYDROLOGY

Recorded Data (Describe in Remarks):
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:
 X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Field Observations:

Depth of Surface Water: 0-6 (in.)
 Depth to Free Water in Pit: 12 (in.)
 Depth to Saturated Soil: surface (in.)

Secondary Indicators (2 or more required):
 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria. 100 percent of the area was saturated to the surface and there was 6 inches of water in the ditch.

Parametrix

Data Plot #: 66
Wetland: 28B

Project/Site: East Lake Sammamish Trail Date: 1/27/2000

SOIL

Soil Survey Data:

Map Unit Name: Mixed Alluvial Land Drainage Class: Well to very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): N/A Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-9	A	10YR 3/1	none	none	sandy loam
9-16	B	2.5Y 3/1	none	none	sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input checked="" type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 67
Wetland: 26B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/27/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA

1987 Method 1989 Method

Community ID: PEM

Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 67

Is the site significantly disturbed (Atypical Situation)? Yes No X

Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

Wetland includes Zaccuse Creek. This data plot is 50 feet north of the creek.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
✓ 1.	<u>Agrostis spp.</u>	<u>50</u>	<u>Herb</u>	<u> </u>
2.	<u>Equisetum telmateia</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Festuca spp.</u>	<u>40</u>	<u>Herb</u>	<u> </u>
4.	<u>Geranium robertianum</u>	<u>T</u>	<u>Herb</u>	<u>NL</u>
✓ 5.	<u>Holcus lanatus</u>	<u>40</u>	<u>Herb</u>	<u>FAC</u>
6.	<u>Juncus effusus</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
7.	<u>Mentha arvensis</u>	<u>5</u>	<u>Herb</u>	<u>FACW-</u>
✓ 8.	<u>Phalaris arundinacea</u>	<u>60</u>	<u>Herb</u>	<u>FACW</u>
✓ 9.	<u>Ranunculus repens</u>	<u>20</u>	<u>Herb</u>	<u>FACW</u>
✓ 10.	<u>Rubus discolor</u>	<u>25</u>	<u>Shrub</u>	<u>FACU</u>
11.	<u>Alnus rubra</u>	<u>10</u>	<u>Tree</u>	<u>FAC</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 75

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

75 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 16 (in.)
Depth to Saturated Soil: 12 (in.)

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Saturation in the upper 12 inches satisfies the wetland hydrology criterion.

Parametrix

Data Plot #: 67
Wetland: 26B

Project/Site: East Lake Sammamish Trail Date: 1/27/2000

SOIL

Soil Survey Data:

Map Unit Name: Shalcar Muck Drainage Class: Very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Terric Medisaprists Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-12	A	10YR 2/1	none	none	sandy loam
12-16	B	5Y 4/2	none	none	sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil color and other indicators satisfy the hydric soil criteria. Soil has been disturbed by adjacent development.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 68
Wetland: 23C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/27/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 68
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This wetland is associated with Pine Lake Creek. Data plot is located in north end near Flag 3.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Equisetum telmateia</u>	<u>50</u>	<u>Herb</u>	<u>FACW</u>
✓ 2. <u>Phalaris arundinacea</u>	<u>40</u>	<u>Herb</u>	<u>FACW</u>
3. <u>Pteridium aquilinum</u>	<u>5</u>	<u>Herb</u>	<u>FACU</u>
4. <u>Scirpus microcarpus</u>	<u>10</u>	<u>Herb</u>	<u>OBL</u>
✓ 5. <u>Rubus discolor</u>	<u>50</u>	<u>Shrub</u>	<u>FACU</u>
6. <u>Salix lucida ssp. lasiandra</u>	<u>15</u>	<u>Shrub</u>	<u>FACW+</u>
7. <u>Spiraea douglasii</u>	<u>10</u>	<u>Shrub</u>	<u>FACW</u>
8. <u>Prunus emarginata</u>	<u>5</u>	<u>Tree</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 67

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
Greater than 50 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is met. This location is primarily emergent, however majority of wetland is scrub-shrub.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 9 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
The soil is saturated to the surface and the water table is at 9 inches. Therefore, the wetland hydrology criterion is met.

Parametrix

Data Plot #: 68
Wetland: 23C

Project/Site: East Lake Sammamish Trail Date: 1/27/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-18	A	10YR 2/1	none	none	sandy loam

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input checked="" type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
Soil color and other indicators meet the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 69
Wetland: 22C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/27/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 69
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This wetland is fed by a seep and drains to a ditch into Wetland 22A.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Agrostis spp.</u>	<u>5</u>	<u>Herb</u>	<u> </u>
2.	<u>Equisetum arvense</u>	<u>5</u>	<u>Herb</u>	<u>FAC</u>
3.	<u>Fescue spp.</u>	<u>5</u>	<u>Herb</u>	<u> </u>
4.	<u>Juncus effusus</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
5.	<u>Ranunculus repens</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
✓ 6.	<u>Scirpus microcarpus</u>	<u>85</u>	<u>Herb</u>	<u>OBL</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is met.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 13 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Soil is saturated to the surface and free water is found at 13 inches below the surface. Therefore, the criterion for wetland hydrology is satisfied.

Parametrix

Data Plot #: 69
Wetland: 22C

Project/Site: East Lake Sammamish Trail Date: 1/27/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood Gravelly Sandy Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Entic Durcchrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-6	A	10YR 2/1	none	none	loam
6-16	B	5Y 2/1	none	none	gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Low-chroma soil indicates the hydric soil criterion is met.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 7
Wetland: 28A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 11/30/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 7
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
Plot is in south end of Wetland 28a on a hill 3 feet east of the railroad grade.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Juncus effusus</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Scirpus microcarpus</u>	<u>50</u>	<u>Herb</u>	<u>OBL</u>
4.	<u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 10 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Soil saturated to the surface and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 7
Wetland: 28A

Project/Site: East Lake Sammamish Trail Date: 11/30/1999

SOIL

Soil Survey Data:

Map Unit Name: Alderwood/Kitsap Complex Drainage Class: Various
Field Observations Confirm Mapped Type?
Yes No NA

Taxonomy (Subgroup): N/A

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-10	A	10YR 4/2	none	none	gravelly sandy loam
10-16	B	2.5Y 5/1	10YR 4/6	many, distinct	gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil has low chroma and mottles at 10 inches. Soil color, mottles and sulfidic odor satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 70
Wetland: 10C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/28/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 70
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located between Flags 3 and 4.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
2. <u>Ranunculus repens</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
3. <u>Rubus discolor</u>	<u>10</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-12 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
20 percent of the area is inundated. Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 70
Wetland: 10C

Project/Site: East Lake Sammamish Trail Date: 1/28/2000

SOIL

Soil Survey Data:

Map Unit Name: Oridia Silt Loam Drainage Class: Somewhat poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Fluvaquents Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	O	10YR 2/1	none	none	muck

Hydric Soil Indicators:

<input checked="" type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 71
Wetland: 8C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/28/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 71
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is in the center of a small wetland.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
2. <u>Ranunculus repens</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
3. <u>Solanum dulcamara</u>	<u>10</u>	<u>Herb</u>	<u>FAC+</u>
4. <u>Physocarpus capitatus</u>	<u>5</u>	<u>Shrub</u>	<u>FACW-</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-0.5 (in.)
Depth to Free Water in Pit: 9 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
10 percent of the area was inundated. Inundation and saturation in the upper 12 inches satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 71
Wetland: 8C

Project/Site: East Lake Sammamish Trail Date: 1/28/2000

SOIL

Soil Survey Data:

Map Unit Name: Sammamish Silt Loam Drainage Class: Somewhat poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Fluvaquentic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	A	10YR 3/1	none	none	loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 72
 Wetland: 6A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/28/2000
 Applicant/Owner: King County County: King
 Investigator: K. Dunkin, E. Greene State: WA

1987 Method 1989 Method Community ID: PEM
 Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 72
 Is the site significantly disturbed (Atypical Situation)? Yes No X
 Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is 1 foot from Flag 3.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Bidens cernua</u>	<u>T</u>	<u>Herb</u>	<u>FACW+</u>
2.	<u>Carex spp.</u>	<u>5</u>	<u>Herb</u>	<u> </u>
✓ 3.	<u>Epilobium ciliatum</u>	<u>30</u>	<u>Herb</u>	<u>FACW-</u>
4.	<u>Equisetum arvense</u>	<u>T</u>	<u>Herb</u>	<u>FAC</u>
5.	<u>Geranium robertianum</u>	<u>T</u>	<u>Herb</u>	<u>NL</u>
✓ 6.	<u>Phalaris arundinacea</u>	<u>50</u>	<u>Herb</u>	<u>FACW</u>
7.	<u>Ranunculus repens</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
8.	<u>Populus lombardi</u>	<u>T</u>	<u>Shrub</u>	<u> </u>
✓ 9.	<u>Rosa nutkana</u>	<u>50</u>	<u>Shrub</u>	<u>FAC-</u>
10.	<u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>
11.	<u>Rubus laciniatus</u>	<u>5</u>	<u>Shrub</u>	<u>FACU+</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 67

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
67 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
 X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5 (in.)
 Depth to Free Water in Pit: 10 (in.)
 Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:
 X Inundated
 X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 72
Wetland: 6A

Project/Site: East Lake Sammamish Trail Date: 1/28/2000

SOIL

Soil Survey Data:

Map Unit Name: Bellingham Silt Loam Drainage Class: Poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-15	A	10YR 3/1	none	none	gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 73
Wetland: 6B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 1/28/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 73
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located north of Flag 1.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Equisetum telmateia</u>	<u>10</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
3.	<u>Rosa nutkana</u>	<u>15</u>	<u>Shrub</u>	<u>FAC-</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-3 (in.)
Depth to Free Water in Pit: 10 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
X Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 73
Wetland: 6B

Project/Site: East Lake Sammamish Trail Date: 1/28/2000

SOIL

Soil Survey Data:

Map Unit Name: Bellingham Silt Loam Drainage Class: Poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-12	A	10YR 3/1	none	none	gravelly sandy loam
12-18	B	2.5Y 3/1	10YR 4/6	many, distinct	silt loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 74
Wetland: 5B

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 2/2/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 74
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is located between flags 9 and 10.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
✓ 1.	<u>Equisetum telmateia</u>	<u>30</u>	<u>Herb</u>	<u>FACW</u>
2.	<u>Galium trifidum</u>	<u>3</u>	<u>Herb</u>	<u>FACW+</u>
3.	<u>Hypochaeris radicata</u>	<u>5</u>	<u>Herb</u>	<u>FACU</u>
✓ 4.	<u>Phalaris arundinacea</u>	<u>100</u>	<u>Herb</u>	<u>FACW</u>
5.	<u>Solanum dulcamara</u>	<u>10</u>	<u>Herb</u>	<u>FAC+</u>
6.	<u>Typha latifolia</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>
7.	<u>Rubus laciniatus</u>	<u>T</u>	<u>Shrub</u>	<u>FACU+</u>
8.	<u>Spiraea douglasii</u>	<u>T</u>	<u>Shrub</u>	<u>FACW</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-3 (in.)
Depth to Free Water in Pit: 10 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
X Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

X Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 74
Wetland: 5B

Project/Site: East Lake Sammamish Trail Date: 2/2/2000

SOIL

Soil Survey Data:

Map Unit Name: Bellingham Silt Loam Drainage Class: Poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Typic Humaquepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-18	A	2.5Y 3/1	none	none	gravelly silt loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil color and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 75
Wetland: 14C

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 2/2/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin, E. Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 75
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
The data plot is north of Flag 3.

VEGETATION (✓ Dominant species are checked)

Plant Species	% Cover	Stratum	Indicator
✓ 1. <u>Juncus effusus</u>	<u>25</u>	<u>Herb</u>	<u>FACW</u>
✓ 2. <u>Phalaris arundinacea</u>	<u>30</u>	<u>Herb</u>	<u>FACW</u>
✓ 3. <u>Scirpus atrocinctus</u>	<u>25</u>	<u>Herb</u>	<u>OBL</u>
✓ 4. <u>Scirpus microcarpus</u>	<u>100</u>	<u>Herb</u>	<u>OBL</u>
✓ 5. <u>Typha latifolia</u>	<u>20</u>	<u>Herb</u>	<u>OBL</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-5 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
X Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):
Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 75
Wetland: 14C

Project/Site: East Lake Sammamish Trail Date: 2/2/2000

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-16	A	5Y 3/1	10G 3/1	many, distinct	gravelly sandy loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input checked="" type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Soil color, mottles, and other indicators satisfy hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicate the area is a wetland.

Parametrix

Data Plot #: 76
Wetland: 3E

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 2/2/2000
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 76
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):
This data plot is located in the north end of the wetland.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Juncus effusus</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Phalaris arundinacea</u>	<u>80</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Typha latifolia</u>	<u>30</u>	<u>Herb</u>	<u>OBL</u>
4.	<u>Rubus discolor</u>	<u>10</u>	<u>Shrub</u>	<u>FACU</u>
✓ 5.	<u>Alnus rubra</u>	<u>30</u>	<u>Tree</u>	<u>FAC</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 100

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):
100 percent of the dominant plants are hydrophytic, therefore, the wetland vegetation criterion is satisfied.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-16 (in.)
Depth to Free Water in Pit: 11 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
X Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

The area is 20 percent inundated. Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria. Plot taken <0.25 AC which is PEM, overall wetland is PFO.

Parametrix

Data Plot #: 76
Wetland: 3E

Project/Site: East Lake Sammamish Trail Date: 2/2/2000

SOIL

Soil Survey Data:

Map Unit Name: Kitsap Silt Loam Drainage Class: Moderately well drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-9	A	10YR 2/1	none	none	silt loam
9-16	B	2.5Y 4/1	10YR 4/4	common, distinct	silt loam

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input checked="" type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

Low chroma and mottles satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 77
Wetland: 29A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 4/11/2000
Applicant/Owner: King County County: King County
Investigator: Eric Greene State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 77
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

Data Plot is 6 feet east of railbed edge. East boundary of wetland is a four-foot high abutement with fill behind. South end of wetland is a fill pad. Wetland crosses railbed, with standing water, and high organic content in the upper soil layer.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Athyrium filix-femina</u>	<u>5</u>	<u>Herb</u>	<u>FAC+</u>
2.	<u>Equisetum telmateia</u>	<u>5</u>	<u>Herb</u>	<u>FACW</u>
✓ 3.	<u>Gentiana sceptrum</u>	<u>25</u>	<u>Herb</u>	<u>OBL</u>
4.	<u>Glyceria elata</u>	<u>10</u>	<u>Herb</u>	<u>FACW+</u>
5.	<u>Lemna minor</u>	<u>T</u>	<u>Herb</u>	<u>OBL</u>
6.	<u>Rumex crispus</u>	<u>T</u>	<u>Herb</u>	<u>FAC+</u>
✓ 7.	<u>Scirpus microcarpus</u>	<u>35</u>	<u>Herb</u>	<u>OBL</u>
8.	<u>Veronica americana</u>	<u>10</u>	<u>Herb</u>	<u>OBL</u>
✓ 9.	<u>Rubus discolor</u>	<u>30</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. 66

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

Dominant species are hydrophytic, with the exception of Himalayan blackberry.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0 - 4 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: Surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Wetland fed by seeps from road prism, and filled abutement on east boundary. Innundation and saturation in the upper 12 inches satisfy the wetland hydrology criterion.

Parametrix

Data Plot #: 77
Wetland: 29A

Project/Site: East Lake Sammamish Trail Date: 4/11/2000

SOIL

Soil Survey Data:

Map Unit Name: Alderwood/Kitsap Complex Drainage Class: Varies
Field Observations Confirm Mapped Type?
Taxonomy (Subgroup): N/A Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0 - 6	A	10YR 2/1			Loamy Sand
6 - 16	B	5Y 4/2	10YR 4/4	Common Distinct	Loamy Sand

Hydric Soil Indicators:

- Histosol Listed on Local Hydric Soils List
- Histic Epipedon Listed on State Hydric Soils List
- Sulfidic Odor Listed on National Hydric Soils List
- Probable Aquic Moisture Regime Aquic Moisture Regime
- Reducing Conditions Organic Streaking in Sandy Soils
- Gleyed or Low-Chroma Colors Mottles
- High Organic Content in Surface Layer Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):
Soil was very sandy. Sulfidic odor, low-chroma soil colors, and mottles satisfy the hydric soil criterion.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No Yes No
Wetland Hydrology Present? Yes No

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
The presence of all three parameters indicates the area is a wetland.

Parametrix

Data Plot #: 8
Wetland: Upland

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/2/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: Upland
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 8
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

Between East Lake Sammamish Parkway and house 667, approximately 400 feet south of Wetland 28A.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Phalaris arundinacea</u>	<u>T</u>	<u>Herb</u>	<u>FACW</u>
✓ 2.	<u>Rubus discolor</u>	<u>70</u>	<u>Shrub</u>	<u>FACU</u>
✓ 3.	<u>Acer macrophyllum</u>	<u>100</u>	<u>Tree</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace.

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

The wetland vegetation criterion is not met since less than 50 percent of the dominant plants are hydrophytic.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: >18 (in.)
Depth to Saturated Soil: >18 (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

 Inundated
 Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
 Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Wetland hydrology is absent.

Parametrix

Data Plot #: 8
Wetland: Upland

Project/Site: East Lake Sammamish Trail Date: 12/2/1999

SOIL

Soil Survey Data:

Map Unit Name: Everett Gravelly Sandy Loam Drainage Class: Somewhat excessively drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): Dystric Xerochrepts Yes X No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-3	A	10YR 3/1	none	none	cobbly sandy loam
3-16	B	10YR 3/3	none	none	cobbly sandy loam

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> Listed on State Hydric Soils List |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Probable Aquic Moisture Regime | <input type="checkbox"/> Aquic Moisture Regime |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Organic Streaking in Sandy Soils |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Mottles |
| <input type="checkbox"/> High Organic Content in Surface Layer | <input type="checkbox"/> Other (Explain in Remarks) |

Remarks (Describe soil disturbances, local variations, etc.):
No indicators of wetland soils are present.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes No X Is this Sampling Point Within a Wetland?
Hydric Soils Present? Yes No X Yes No X
Wetland Hydrology Present? Yes No X

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):
All wetland parameters are absent. Therefore, this area is an upland.

Parametrix

Data Plot #: 9
Wetland: 27A

WETLAND DETERMINATION (Modified from: 1987 ACOE Wetlands Delineation Manual)

Project/Site: East Lake Sammamish Trail Date: 12/2/1999
Applicant/Owner: King County County: King
Investigator: K. Dunkin State: WA
 1987 Method 1989 Method Community ID: PEM
Do Normal Circumstances exist on the site? Yes X No Field Plot ID: 9
Is the site significantly disturbed (Atypical Situation)? Yes No X
Is the area a potential Problem Area? Yes No X

Remarks (Explain sample location, disturbances, problem areas):

This plot located at the edge of an easement on the west side of the trail near Flag 3. The area is mowed lawn and appears filled. The wetland is associated with an unnamed stream.

VEGETATION (✓ Dominant species are checked)

	Plant Species	% Cover	Stratum	Indicator
1.	<u>Festuca sp.</u>	<u>T</u>	<u>Herb</u>	<u> </u>
2.	<u>Lotus corniculatus</u>	<u>T</u>	<u>Herb</u>	<u>FAC</u>
✓ 3.	<u>Poa sp.</u>	<u>85</u>	<u>Herb</u>	<u> </u>
4.	<u>Rubus discolor</u>	<u>T</u>	<u>Shrub</u>	<u>FACU</u>

Percent of **Dominant Species** that are OBL, FACW, or FAC (except FAC-). Include species noted (*) as showing morphological adaptations to wetlands. "T" indicates trace. N/D

Remarks (Describe disturbances, relevant local variations, seasonal effects, etc.):

The area is a mowed lawn planted with non-native grasses. Existing vegetation may not reflect the hydrologic conditions present on the site. N/D = Not determined.

HYDROLOGY

Recorded Data (Describe in Remarks):

 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 0.5 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: surface (in.)

Wetland Hydrology Indicators (Describe in Remarks):

Primary Indicators:

X Inundated
X Saturated in Upper 12 inches
 Saturated in Upper 18 inches
 Water Marks
 Drift Lines
 Sediment Deposits
X Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):

 Oxidized Root Channels in Upper 12 inches
 Water-Stained Leaves
 Local Soil Survey Data
 Other (Explain in Remarks)

Remarks (As relevant, describe recent precipitation, hydrologic modifications, local variations, etc.):

Inundation, saturation in the upper 12 inches, and drainage patterns satisfy the wetland hydrology criteria.

Parametrix

Data Plot #: 9
Wetland: 27A

Project/Site: East Lake Sammamish Trail Date: 12/2/1999

SOIL

Soil Survey Data:

Map Unit Name: Mixed Alluvial Land Drainage Class: Well to very poorly drained
Field Observations Confirm Mapped Type?

Taxonomy (Subgroup): N/A Yes No NA

Profile Description:

Depth (Inches)	Horizon Designation	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Rhizospheres, etc.
0-3	A	10YR 3/2	none	none	sandy loam
3-6	B	2.5Y 4/1	10YR 4/6	common, distinct	sand
6-12	C	2.5Y 4/1	10YR 4/6	common, distinct	cobbly sand

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Listed on State Hydric Soils List
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Probable Aquic Moisture Regime	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input checked="" type="checkbox"/> Mottles
<input type="checkbox"/> High Organic Content in Surface Layer	<input type="checkbox"/> Other (Explain in Remarks)

Remarks (Describe soil disturbances, local variations, etc.):

The area appears to be filled. However, soil color, mottles, and other indicators satisfy the hydric soil criteria.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is this Sampling Point Within a Wetland?
Hydric Soils Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks (If applicable, explain any differences between 1987 and 1989 delineation results):

Hydrologic and hydric soil parameters are satisfied. Vegetation is non-native grass that is mowed regularly and is assumed to be hydrophytic. The presence of all three parameters indicate the area is a wetland.