

DATA FORM

Routine Wetland Delineation (1987 COE Manual)

QC ID: 15-1

Project Site: <u>2Rivers Pipeline Project</u>		Date: <u>6/22/2001</u>
Applicant/Owner: <u>Equilon</u>		County: <u>Fayette</u>
Investigator(s): <u>Benchmark Ecological Services, Inc.</u> <u>BD, NH</u>		State: <u>Illinois</u>
Do Normal Circumstances Exist on the site?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Community ID: <u>PE</u>
Is the site significantly disturbed (atypical situation)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Transect ID: <u>62205</u>
Is the area a potential problem area? (If needed, explain in Remarks spaces)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Plot ID: <u>WPT 174</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <i>Apocynum cannabinum</i>	H	FAC	9.		
2. <i>Salix nigra</i>	S	OBL	10.		
3. <i>Polygonum lapathifolium</i>	H	OBL	11.		
4. <i>Ludwigia peploides</i>	H	OBL	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW, OR FAC (excluding FAC-): 100%

Remarks: Wetter species along shoreline of inundated open water area.

HYDROLOGY

<input checked="" type="checkbox"/> Recorded Data (Describe in Remarks): <u> </u> Stream, Lake, or Tide Gauge <input checked="" type="checkbox"/> Aerial Photographs <input checked="" type="checkbox"/> Other <u> </u> No Recorded Data Available	Wetland Hydrology Indicators: Primary Indicators: <input checked="" type="checkbox"/> Inundated <input checked="" type="checkbox"/> Saturated in Upper 12 Inches <u> </u> Water Marks <u> </u> Drift Lines <u> </u> Sediment Deposits <input checked="" type="checkbox"/> Drainage Patterns in Wetlands Secondary Indicators: <u> </u> Oxidized Root Channels (upper 12") <u> </u> Water Stained Leaves <input checked="" type="checkbox"/> Local Soil Survey Data <u> </u> Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0-4</u> (in.) Depth to Free Water in Pit: <u> </u> (in.) Depth to Saturated Soil: <u> </u> (in.)	

Remarks: Other Recorded Data: USGS Quadrangle, NWI Data, Soil Survey.

CONFIDENTIAL

Benchmark Ecology Services Inc.

QC ID: 15-2

SOILS

Map Unit Name (Series and Phase): <u>Wakeland silt loam Frequently Flooded</u>	Drainage Class: <u>P</u>
Taxonomy (subgroup): <u>Aeric Flavaquents</u>	Field Observations Confirmed Map Type? Yes <input type="checkbox"/> No <input type="checkbox"/>

Profile Description

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, ect.

Hydric Soil Indicators

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

Remarks: No pit, inundated.

WETLAND DETERMINATION

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

Remarks: Part in open water. Western 150-151. South 152-159. East 160-165. Marathon 149.

Photos: 1700,1701

DATA FORM

Routine Wetland Delineation

(1987 COE Manual)

QC ID: 22-1

Project Site: <u>2Rivers Pipeline Project</u>		Date: <u>6/22/2001</u>
Applicant/Owner: <u>Equilon</u>		County: <u>Fayette</u>
Investigator(s): <u>Benchmark Ecological Services, Inc. BD, NH</u>		State: <u>Illinois</u>
Do Normal Circumstances Exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Community ID: <u>RF</u>	
Is the site significantly disturbed (atypical situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Transect ID: <u>62205</u>	
Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Plot ID: <u>WPT 173</u>	
<small>(If needed, explain in Remarks spaces)</small>		

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <i>Acer saccharinum</i>	T	FACW	9.		
2. <i>Acer saccharinum</i>	S	FACW	10.		
3. <i>Fraxinus pennsylvanica</i>	T	FACW	11.		
4. <i>Fraxinus pennsylvanica</i>	S	FACW	12.		
5. <i>Phalaris arundinacea</i>	H	FACW+	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW, OR FAC (excluding FAC-): 100%

Remarks: Mixed forest community (trees/open) with *P. arundinacea* prevalent in open areas.

HYDROLOGY

<p><input checked="" type="checkbox"/> Recorded Data (Describe in Remarks):</p> <p style="padding-left: 20px;"><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Aerial Photographs</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p style="padding-left: 20px;"><input type="checkbox"/> Inundated</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Saturated in Upper 12 Inches</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Water Marks</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Drift Lines</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Sediment Deposits</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators:</p> <p style="padding-left: 20px;"><input type="checkbox"/> Oxidized Root Channels (upper 12")</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Water Stained Leaves</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Local Soil Survey Data</p> <p style="padding-left: 20px;"><input type="checkbox"/> Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u> - </u> (in.)</p> <p>Depth to Free Water in Pit: <u> - </u> (in.)</p> <p>Depth to Saturated Soil: <u> 2 </u> (in.)</p>	

Remarks: Other Recorded Data: USGS Quadrangle, NWI Data, Soil Survey. Slightly undulating, may include narrow (<10m) strips of upland, perpendicular to pipeline.

Benchmark Ecology Services Inc.

QC ID: 22-2

SOILS

Map Unit Name (Series and Phase): <u>Wakeland silt loam</u>	Drainage Class: <u>P</u> Field Observations
Taxonomy (subgroup): <u>Aeric Flavaquents</u>	Confirmed Map Type? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Profile Description

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, ect.
0-10	A	10 YR 4/1			Silt Loam
10-18	B	10 YR 4/1	2.5 YR 5/4	Few moderate	Silt Loam

Hydric Soil Indicators

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

Remarks: Negative to alfa alfa dipyridil.

WETLAND DETERMINATION

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

Remarks: West 160-165. East 162-168. C/L Marathon 166,169-172.

Photos: 1702

DATA FORM

Routine Wetland Delineation (1987 COE Manual)

QC ID: 25-1

Project Site: <u>2Rivers Pipeline Project</u>		Date: <u>6/23/2001</u>
Applicant/Owner: <u>Equilon</u>		County: <u>Fayette</u>
Investigator(s): <u>Benchmark Ecological Services, Inc. BD, NH</u>		State: <u>Illinois</u>
Do Normal Circumstances Exist on the site?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Community ID: <u>UF</u>
Is the site significantly disturbed (atypical situation)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Transect ID: <u>62301</u>
Is the area a potential problem area? (If needed, explain in Remarks spaces)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Plot ID: <u>WPT 186</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <i>Acer saccharinum</i>	T	FACW	9.		
2. <i>Ulmus rubra</i>	T	FAC	10.		
3. <i>Morus rubra</i>	T	FAC-	11.		
4. <i>Juglans nigra</i>	T	FACU	12.		
5. <i>Rubus occidentalis</i>		NI	13.		
6. <i>Toxicodendron radicans</i>	V	FAC+	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW, OR FAC (excluding FAC-): 50%

Remarks:

HYDROLOGY

<p><input checked="" type="checkbox"/> Recorded Data (Describe in Remarks):</p> <p><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p><input checked="" type="checkbox"/> Aerial Photographs</p> <p><input checked="" type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators:</p> <p><input type="checkbox"/> Oxidized Root Channels (upper12")</p> <p><input type="checkbox"/> Water Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>-</u> (in.)</p> <p>Depth to Free Water in Pit: <u>-</u> (in.)</p> <p>Depth to Saturated Soil: <u>-</u> (in.)</p>	
<p>Remarks: Other Recorded Data: USGS Quadrangle, NWI Data, Soil Survey. No pit. Steep slope.</p>	

Benchmark Ecology Services Inc.

QC ID: 25-2

SOILS

Map Unit Name (Series and Phase): <u>Titus silty clay loam Frequently Flooded</u>	Drainage Class: <u>P</u> Field Observations
Taxonomy (subgroup): <u>Vertic Endoquolls</u>	Confirmed Map Type? Yes <input type="checkbox"/> No <input type="checkbox"/>

Profile Description

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, ect.

Hydric Soil Indicators

<input type="checkbox"/> Histisol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input checked="" type="checkbox"/> Listed on Hydric Soils List <input checked="" type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
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Remarks: No pit, steep slope.

WETLAND DETERMINATION

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

Remarks: Steep bank.

Photos:

DATA FORM

Routine Wetland Delineation (1987 COE Manual)

QC ID: 26-1

Project Site: <u>2Rivers Pipeline Project</u>		Date: <u>6/23/2001</u>
Applicant/Owner: <u>Equilon</u>		County: <u>Fayette</u>
Investigator(s): <u>Benchmark Ecological Services, Inc. BD, NH</u>		State: <u>Illinois</u>
Do Normal Circumstances Exist on the site? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Community ID: <u>UF</u>	
Is the site significantly disturbed (atypical situation)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Transect ID: <u>62301</u>	
Is the area a potential problem area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Plot ID: <u>WPT 191</u>	
(If needed, explain in Remarks spaces)		

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <i>Acer saccharinum</i>	T	FACW	9.		
2. <i>Quercus palustris</i>	T	FACW	10.		
3. <i>Toxicodendron radicans</i>	S	FAC+	11.		
4. <i>Toxicodendron radicans</i>	V	FAC+	12.		
5. <i>Ampelopsis arborea</i>	S	FACW	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW, OR FAC (excluding FAC-): 100%

Remarks: Wraps around shallow emergent wetland (WPT 190) and ends on East @ *A. saccharinum* PF wetland. Species dominance varies somewhat.

HYDROLOGY

<p><input checked="" type="checkbox"/> Recorded Data (Describe in Remarks):</p> <p><input type="checkbox"/> Stream, Lake, or Tide Gauge</p> <p><input checked="" type="checkbox"/> Aerial Photographs</p> <p><input checked="" type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p> <hr/> <p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>NA</u> (in.)</p> <p>Depth to Saturated Soil: <u>NA</u> (in.)</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p><input type="checkbox"/> Inundated</p> <p><input type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input type="checkbox"/> Water Marks</p> <p><input type="checkbox"/> Drift Lines</p> <p><input type="checkbox"/> Sediment Deposits</p> <p><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators:</p> <p><input type="checkbox"/> Oxidized Root Channels (upper 12")</p> <p><input checked="" type="checkbox"/> Water Stained Leaves</p> <p><input type="checkbox"/> Local Soil Survey Data</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
<p>Remarks: Other Recorded Data: USGS Quadrangle, NWI Data, Soil Survey. >3% slope, should drain quickly.</p>	

CONFIDENTIAL

Benchmark Ecology Services Inc.

QC ID: 26-2

SOILS

Map Unit Name (Series and Phase): <u>Titus silty clay loam Frequently Flooded</u>	Drainage Class: <u>P</u>
Taxonomy (subgroup): <u>Vertic Endoquolls</u>	Field Observations Confirmed Map Type? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Profile Description

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, ect.
1-18	A	2.5 YR 7/1	7.5 YR 5/8	many, distinct	Sandy loam
0-1	O				Organic layer

Hydric Soil Indicators

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

Remarks: Negative alfa alfa dipyrilidil. Soils sandy in texture, not matching soil survey munsell colors.

WETLAND DETERMINATION

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

Remarks:

Photos: 1705,1706

DATA FORM

Routine Wetland Delineation (1987 COE Manual)

QC ID: 27-1

Project Site: <u>2Rivers Pipeline Project</u>		Date: <u>6/23/2001</u>
Applicant/Owner: <u>Equilon</u>		County: <u>Fayette</u>
Investigator(s): <u>Benchmark Ecological Services, Inc. BD, NH</u>		State: <u>Illinois</u>
Do Normal Circumstances Exist on the site?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Community ID: <u>RE</u>
Is the site significantly disturbed (atypical situation)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Transect ID: <u>62301</u>
Is the area a potential problem area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Plot ID: <u>WPT 185</u>
(If needed, explain in Remarks spaces)		

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <i>Polygonum pennsylvanicum</i>	H	OBL	9.		
2. <i>Rumex crispus</i>	H	FAC+	10.		
3. <i>Phalaris arundinacea</i>	H	FACW+	11.		
4. <i>Salix nigra</i>	S	OBL	12.		
5. <i>Acer saccharinum</i>	T	FACW	13.		
6. <i>Acer saccharinum</i>	S	FACW	14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW, OR FAC (excluding FAC-): 100%

Remarks: Shallow stream bank with emergents being dominant. Includes short mud bar with *A. saccharinum* (few trees).

HYDROLOGY

<p><input checked="" type="checkbox"/> Recorded Data (Describe in Remarks):</p> <p style="padding-left: 20px;"><u> </u> Stream, Lake, or Tide Gauge</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Aerial Photographs</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Other</p> <p><input type="checkbox"/> No Recorded Data Available</p>	<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators:</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Inundated</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Saturated in Upper 12 Inches</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Water Marks</p> <p style="padding-left: 20px;"><input type="checkbox"/> Drift Lines</p> <p style="padding-left: 20px;"><input type="checkbox"/> Sediment Deposits</p> <p style="padding-left: 20px;"><input type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators:</p> <p style="padding-left: 20px;"><input type="checkbox"/> Oxidized Root Channels (upper 12")</p> <p style="padding-left: 20px;"><input type="checkbox"/> Water Stained Leaves</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Local Soil Survey Data</p> <p style="padding-left: 20px;"><input type="checkbox"/> Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0-6</u> (in.)</p> <p>Depth to Free Water in Pit: <u>11</u> (in.)</p> <p>Depth to Saturated Soil: <u>0</u> (in.)</p>	<p>Remarks: Other Recorded Data: USGS Quadrangle, NWI Data, Soil Survey. Stream bank Algae on surface of soil</p>

Benchmark Ecology Services Inc.

QC ID: 27-2

SOILS

Map Unit Name (Series and Phase): <u>Wakeland silt loam Frequently Flooded</u>				Drainage Class: <u>P</u>	
Taxonomy (subgroup): <u>Aeric Fluvaquents</u>				Field Observations Confirmed Map Type? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Profile Description					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, ect.
0-19		10 YR 4/2			Silty loam
Hydric Soil Indicators					
<input type="checkbox"/> Histisol			<input type="checkbox"/> Concretions		
<input type="checkbox"/> Histic Epipedon			<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils		
<input type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking in Sandy Soils		
<input checked="" type="checkbox"/> Aquic Moisture Regime			<input checked="" type="checkbox"/> Listed on Hydric Soils List		
<input type="checkbox"/> Reducing Conditions			<input checked="" type="checkbox"/> Listed on National Hydric Soils List		
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (Explain in Remarks)		
Remarks: Very thin layer of algae on surface of soil. Negative alfa alfa dipyridal.					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is Sample Point Within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Remarks: see other comments. 177 Marathon. WPT 178 North boundry. 179-181,184 West Boundry. WPT 182-183 East boundry.					
Photos: 1703					

Appendix B

**2Rivers Pipeline
Site Photographs**

PE Wetlands

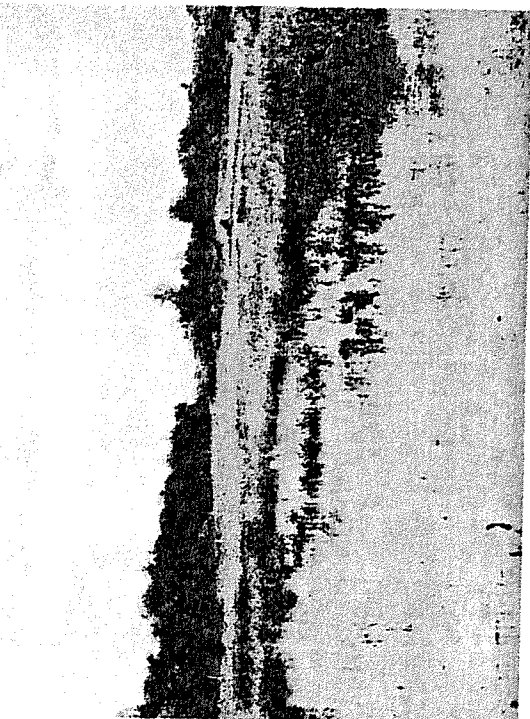


Photo 1647



Photo 1649

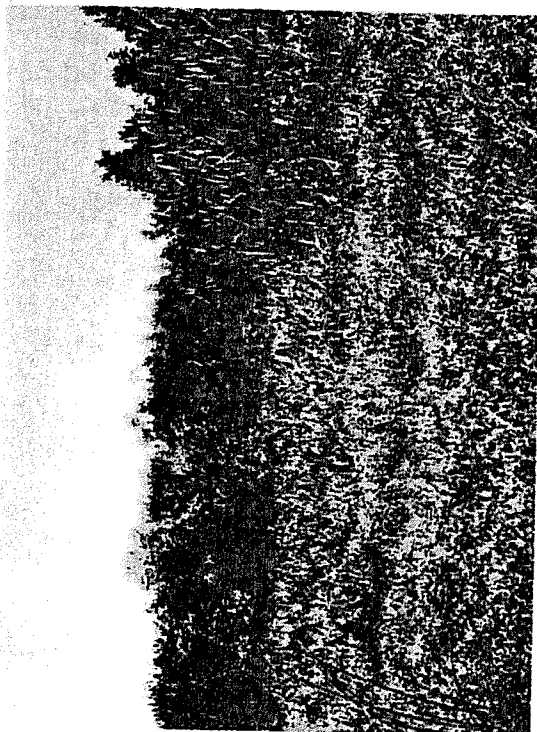


Photo 1671

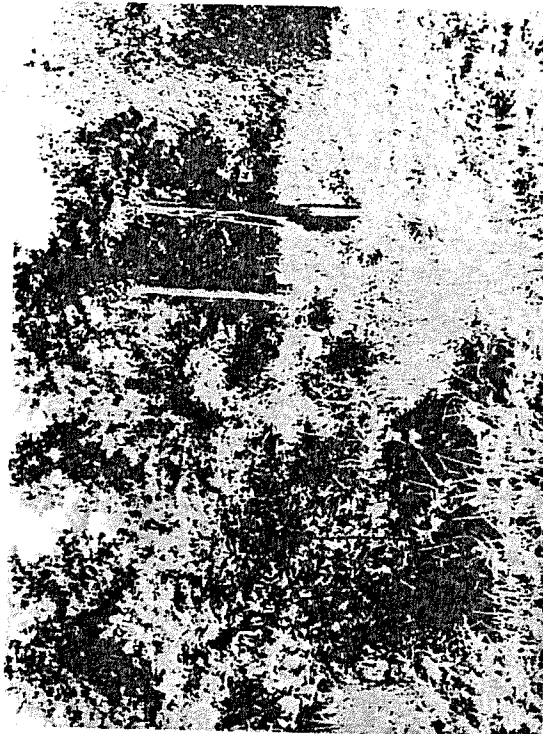


Photo 1672

Benchmark Ecological Services, Inc

B-01

Equilon 2Rivers Project

PE Wetlands

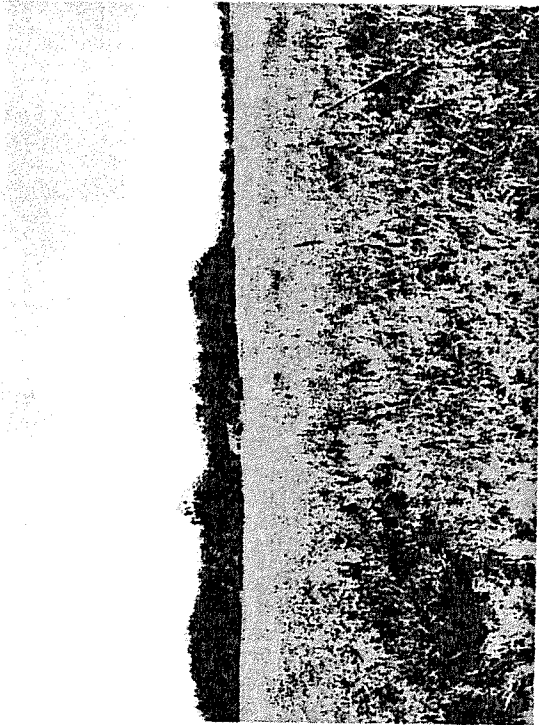


Photo 1718

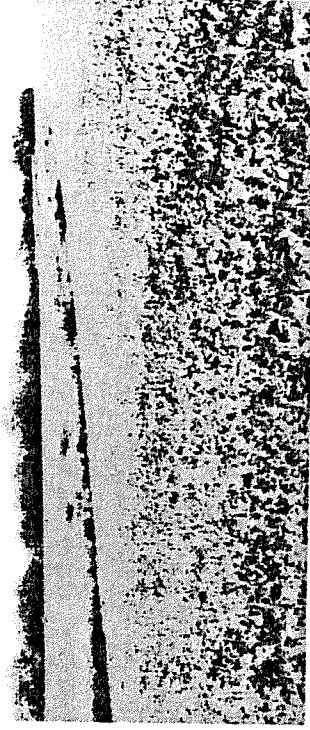


Photo 1723

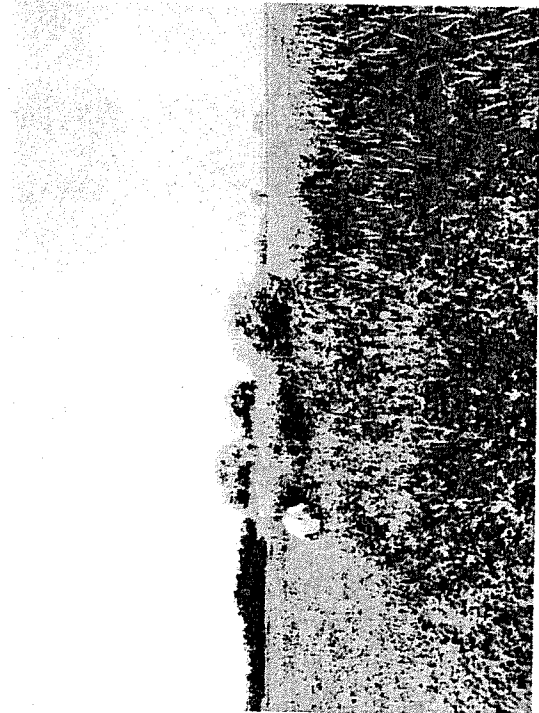


Photo 1729

Benchmark Ecological Services, Inc

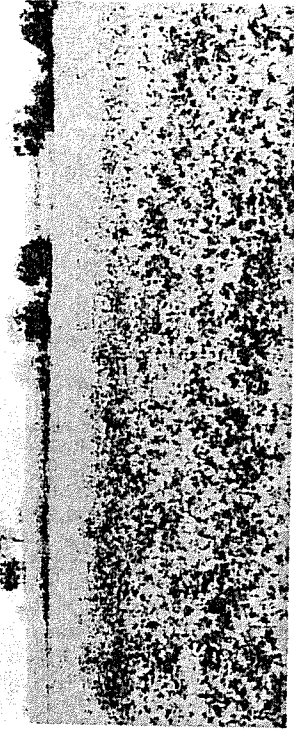


Photo 1732

Equilon 2Rivers Project

B-02

PE Wetlands

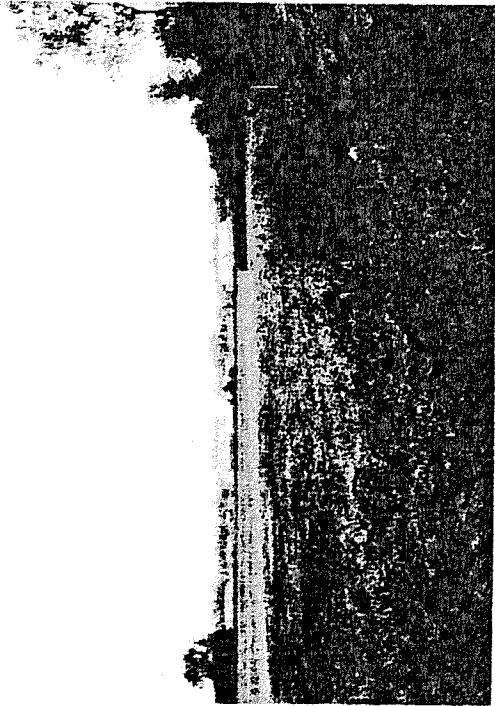


Photo 1772



Photo 1798

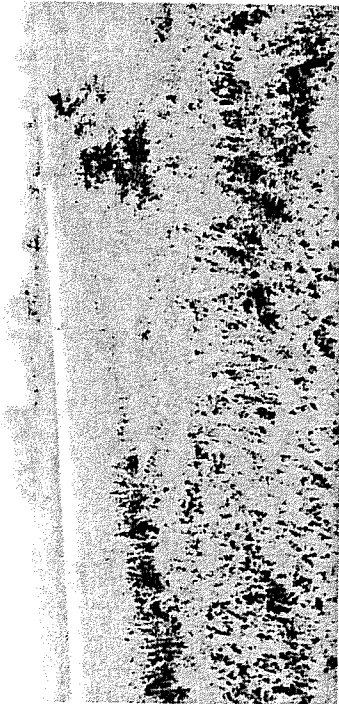


Photo 1799

Benchmark Ecological Services, Inc



Photo 1800

Equilon 2Rivers Project

B-03

PE Wetlands

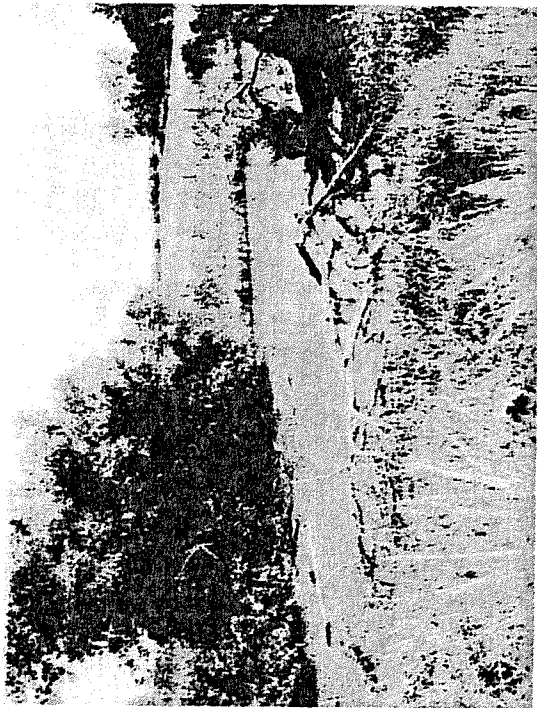


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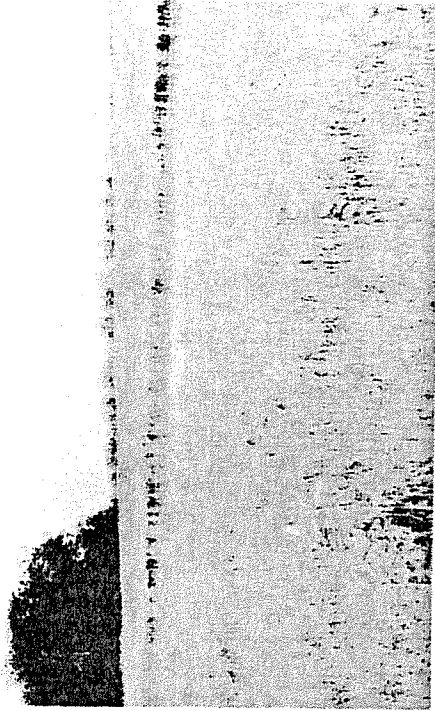


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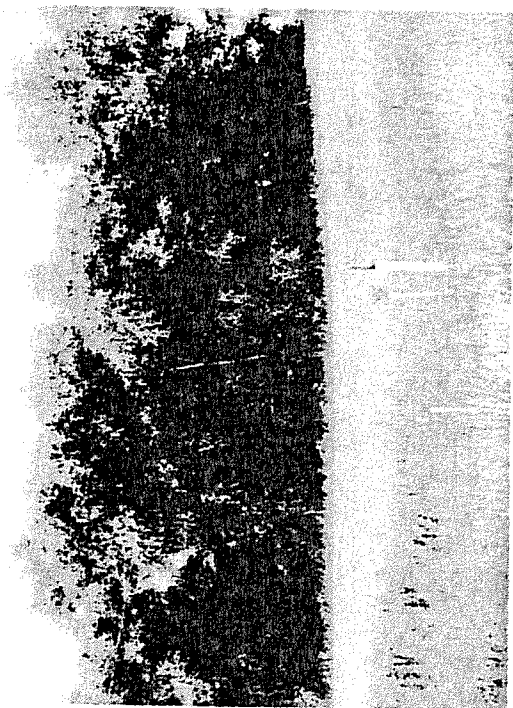


Photo 1801

Benchmark Ecological Services, Inc

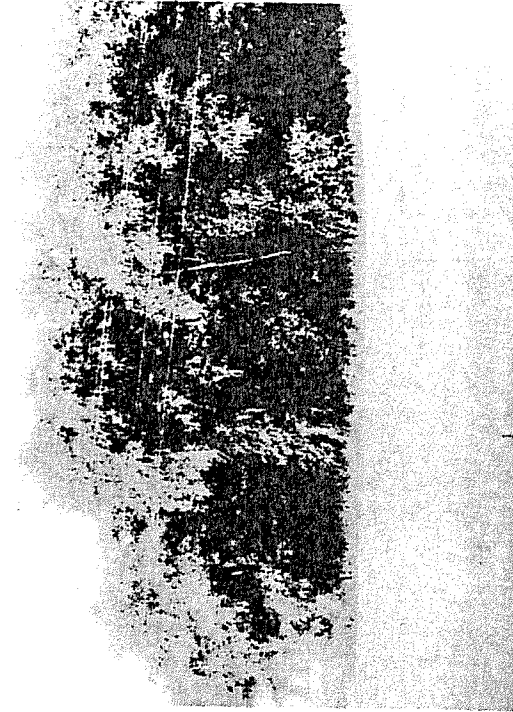


Photo 1802

Equilon 2 Rivers Project

B-04

Carlyle Agricultural PE Wetlands

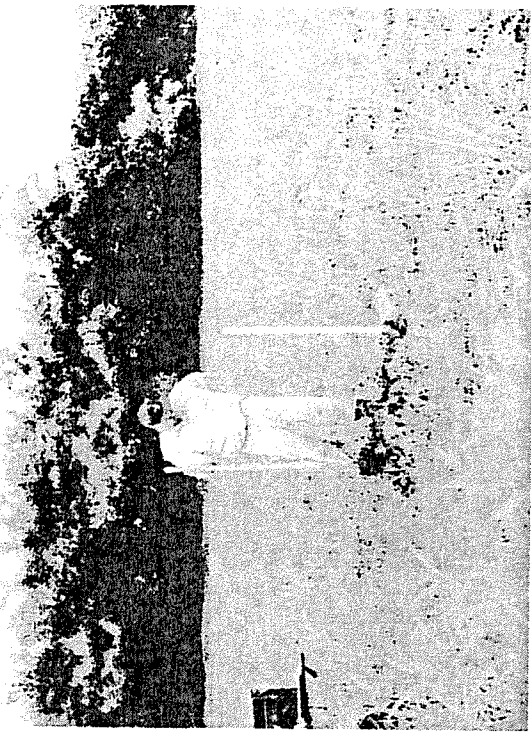


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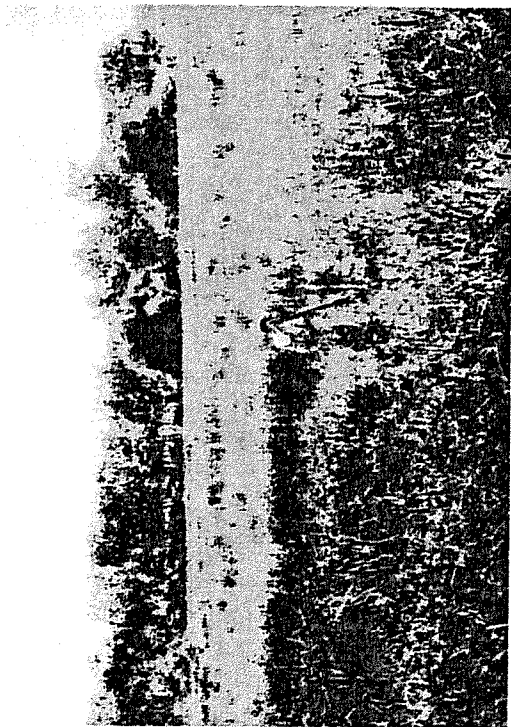


Photo 1687

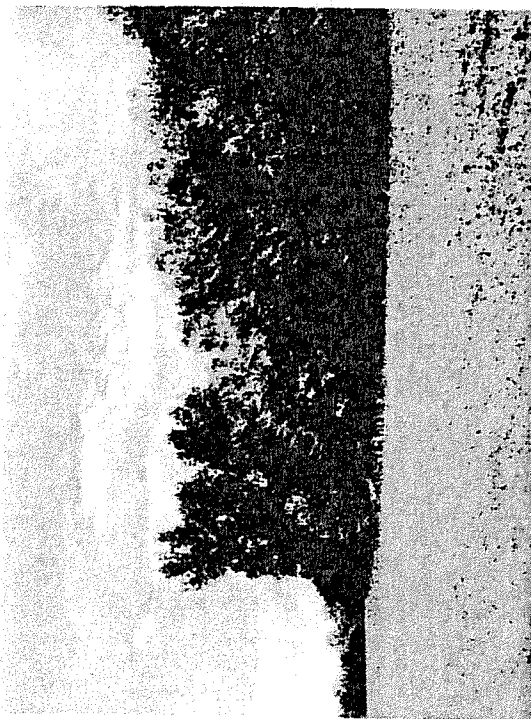


Photo 1696



Photo 1699

B-05

Bonchmark Ecological Services, Inc

Equilon 2Rivers Project

Black Willow Wetlands

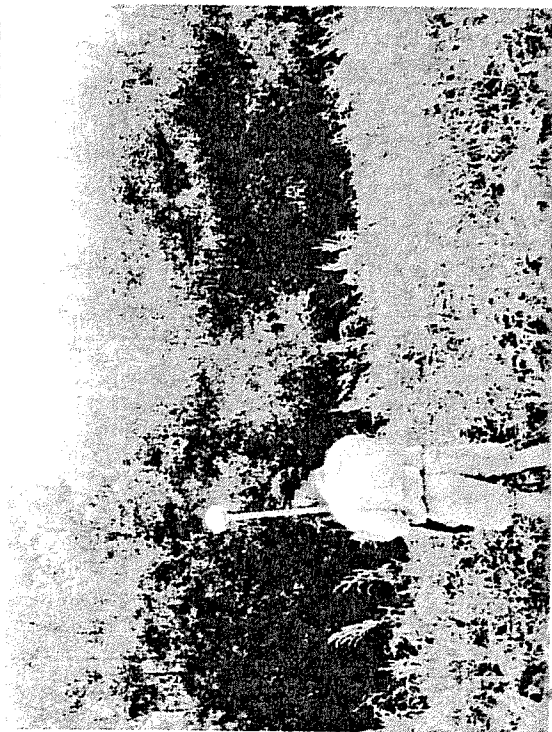


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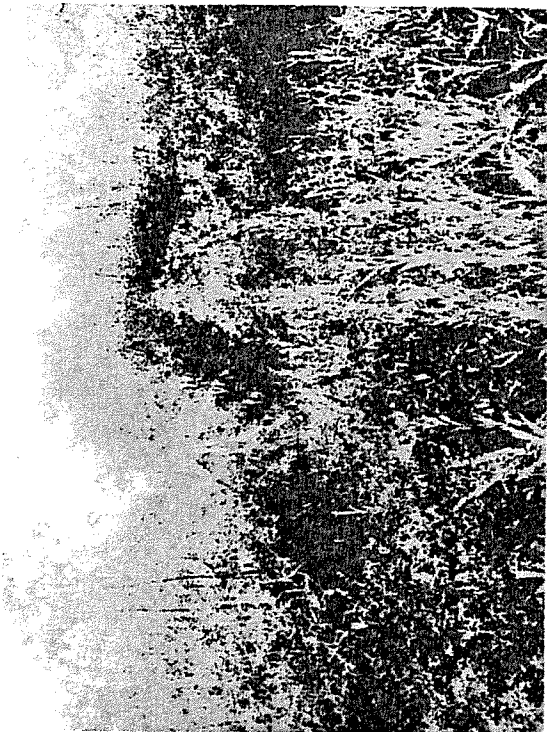


Photo 1659



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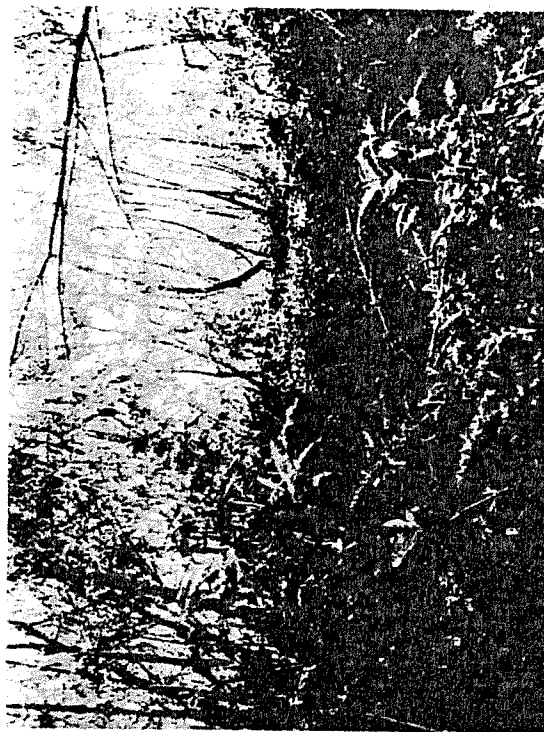


Photo 1664

B-06

Benchmark Ecological Services, Inc

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Box-elder Wetlands



Photo 1725



Photo 1745

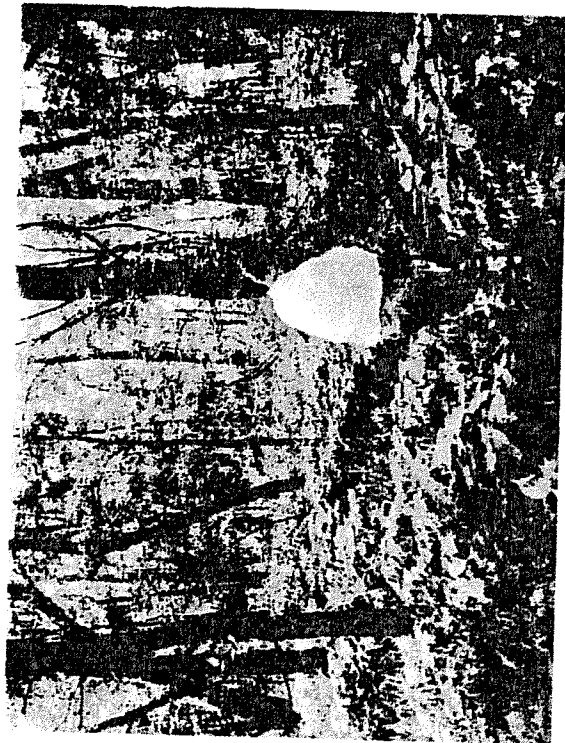


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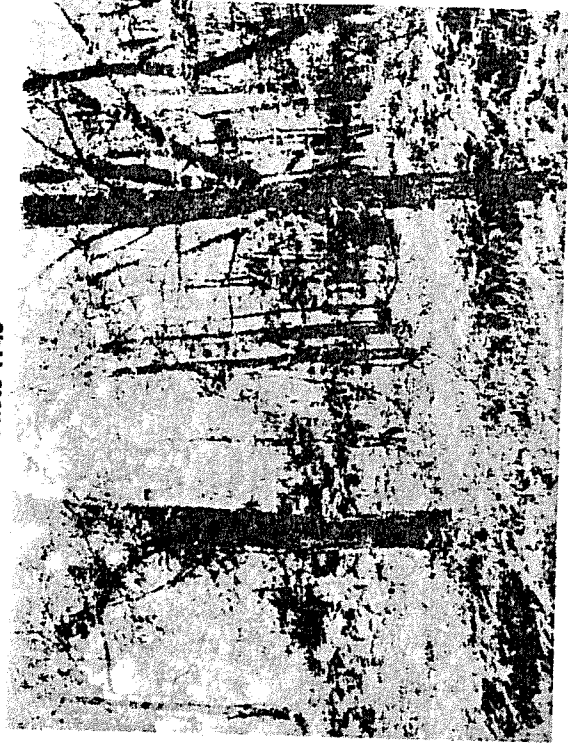


Photo 1782

B-07

Box-elder/Maple Wetlands



Photo 1783



Photo 1785

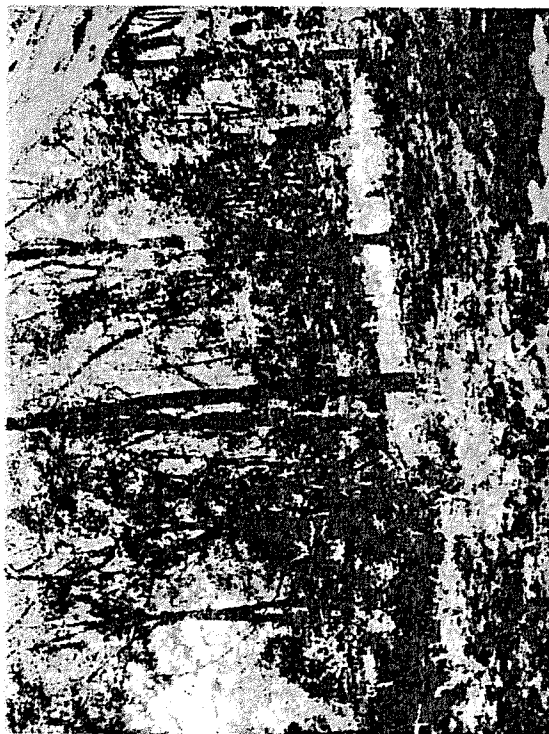


Photo 1787



Photo 1788

B-08

Silver Maple Wetlands

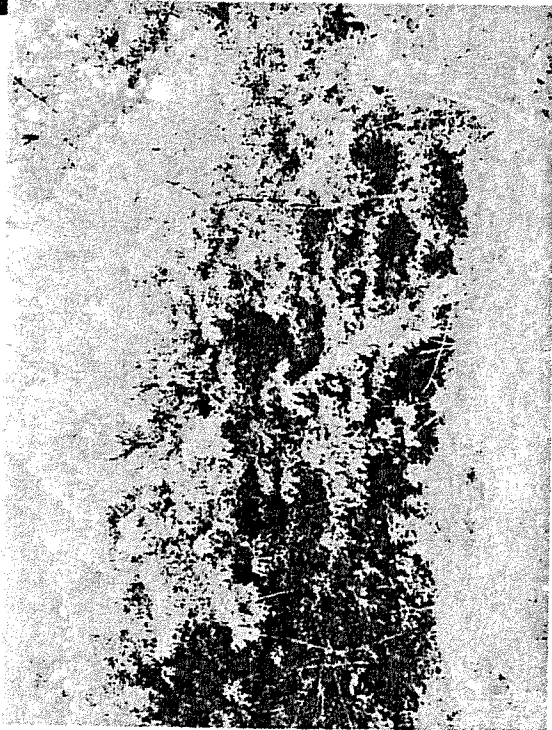


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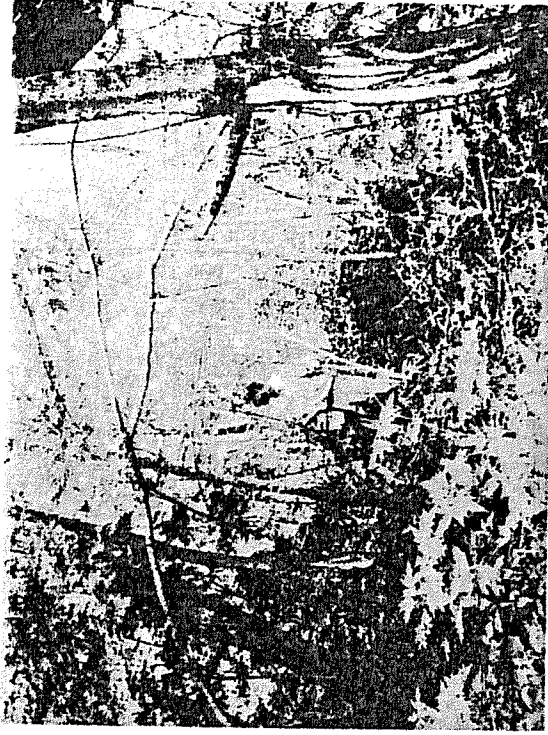


Photo 1692



Photo 1694



Photo 1697

B-09

Cottonwood Wetland



Photo 1741



Photo 1742

Willow/Cottonwood Wetland

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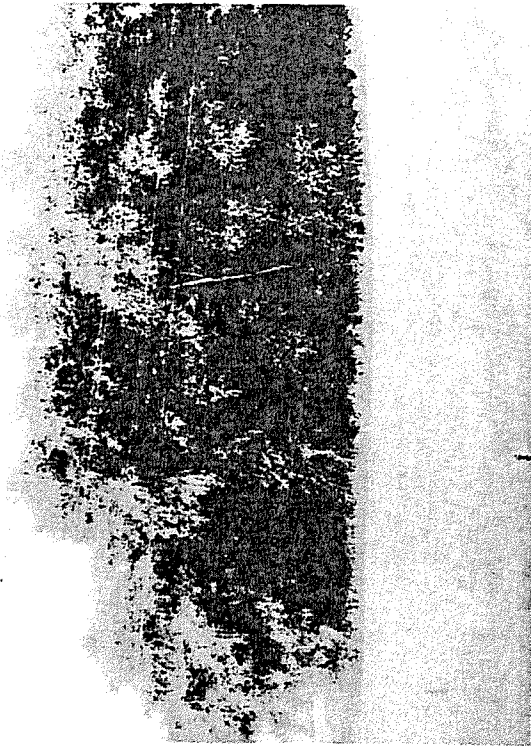


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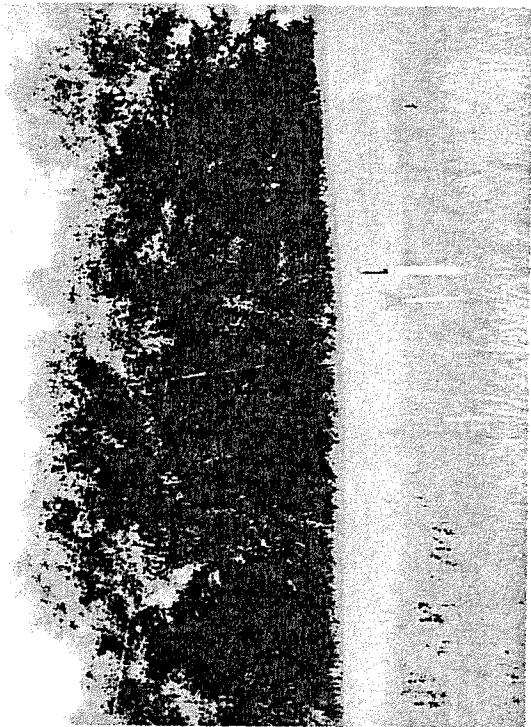


Photo 1801

B-11

Benchmark Ecological Services, Inc

Equilon 2Rivers Project

Upland Forest



Photo 1727



Photo 1728

Benchmark Ecological Services, Inc

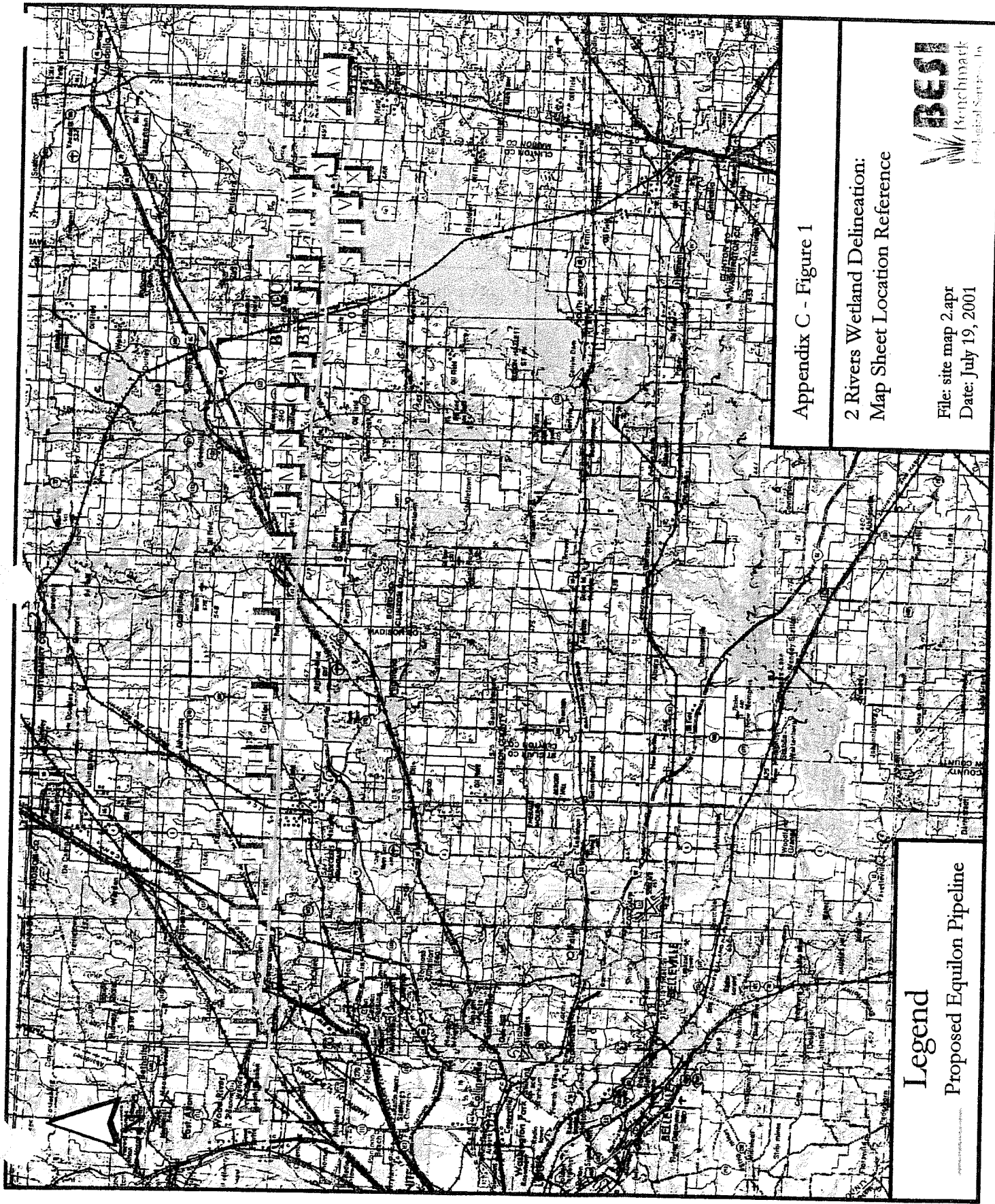
B-12

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Appendix C

**2Rivers Pipeline
Wetland and Stream Crossing Location Maps**



Appendix C - Figure 1

2 Rivers Wetland Delineation:
Map Sheet Location Reference

File: site map 2.apr
Date: July 19, 2001



Legend
Proposed Equilon Pipeline