



Chipmunk Solar

Exhibit Q

Ecological Assessment Report

**Filing 5 of 10**

**Case No. 21-0960 EL BGN**

## **APPENDIX C**

### ORAM Wetland Evaluation Data Forms

<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kwolek, E. Wilson	<b>Date:</b> 26 Aug 2021
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0	0
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

5	5
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

7	12
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> ditch | <input type="checkbox"/> point source (nonstormwater) |
| <input checked="" type="checkbox"/> tile  | <input type="checkbox"/> filling/grading              |
| <input type="checkbox"/> dike             | <input type="checkbox"/> road bed/RR track            |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other _____                  |

8	20
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☒ Recent or no recovery (1)

Check all disturbances observed

- |  |   |
|--|---|
| <input type="checkbox"/> mowing                          | <input type="checkbox"/> shrub/sapling removal          |
| <input type="checkbox"/> grazing                         | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input checked="" type="checkbox"/> clearcutting         | <input type="checkbox"/> sedimentation                  |
| <input checked="" type="checkbox"/> selective cutting    | <input type="checkbox"/> dredging                       |
| <input checked="" type="checkbox"/> woody debris removal | <input checked="" type="checkbox"/> farming             |
| <input checked="" type="checkbox"/> toxic pollutants     | <input checked="" type="checkbox"/> nutrient enrichment |

20
subtotal this page



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kwak, E. Wilson	<b>Date:</b> 26 Aug 2021
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20

subtotal first page

0	20
max 10 pts.	subtotal

### Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

0	20
max 20 pts.	subtotal

### Metric 6. Plant communities, interspersions, microtopography.

#### 6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

#### 6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high (4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

#### 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

#### 6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ Vegetated hummocks/tussucks
- ☐ Coarse woody debris >15cm (6in)
- ☐ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

#### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

#### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

#### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

#### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

20

**End of Quantitative Rating. Complete Categorization Worksheets.**



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kwiatkowski, E. Wilson	<b>Date:</b> 26 Aug 2021
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0	0
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

5	5
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

9	14
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> ditch | <input type="checkbox"/> point source (nonstormwater) |
| <input checked="" type="checkbox"/> tile  | <input type="checkbox"/> filling/grading              |
| <input type="checkbox"/> dike             | <input type="checkbox"/> road bed/RR track            |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other                        |

10	24
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☒ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

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- ☐ None or none apparent (9)
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- |   |   |
|---|---|
| <input type="checkbox"/> mowing                       | <input type="checkbox"/> shrub/sapling removal          |
| <input type="checkbox"/> grazing                      | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting                 | <input type="checkbox"/> sedimentation                  |
| <input checked="" type="checkbox"/> selective cutting | <input type="checkbox"/> dredging                       |
| <input type="checkbox"/> woody debris removal         | <input checked="" type="checkbox"/> farming             |
| <input checked="" type="checkbox"/> toxic pollutants  | <input checked="" type="checkbox"/> nutrient enrichment |

24
subtotal this page



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kuehl, E. Wilson	<b>Date:</b> 26 Aug 2021
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24

  
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0	24
max 10 pts.	subtotal

**Metric 5. Special Wetlands.**

Check all that apply and score as indicated.

- ☐ Bog (10)  
☐ Fen (10)  
☐ Old growth forest (10)  
☐ Mature forested wetland (5)  
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☒ Lake Erie coastal/tributary wetland-restricted hydrology (5)  
☐ Lake Plain Sand Prairies (Oak Openings) (10)  
☐ Relict Wet Prairies (10)  
☐ Known occurrence state/federal threatened or endangered species (10)  
☐ Significant migratory songbird/water fowl habitat or usage (10)  
☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

6	30
max 20 pts.	subtotal

**Metric 6. Plant communities, interspersions, microtopography.****6a. Wetland Vegetation Communities.**

Score all present using 0 to 3 scale.

- ☐ Aquatic bed  
☐ Emergent  
☐ Shrub  
☒ Forest  
☐ Mudflats  
☐ Open water  
☐ Other

**6b. horizontal (plan view) Interspersion.**  
Select only one.

- ☐ High (5)  
☐ Moderately high (4)  
☐ Moderate (3)  
☒ Moderately low (2)  
☐ Low (1)  
☐ None (0)

**6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage**

- ☐ Extensive >75% cover (-5)  
☐ Moderate 25-75% cover (-3)  
☐ Sparse 5-25% cover (-1)  
☐ Nearly absent <5% cover (0)  
☒ Absent (1)

**6d. Microtopography.**

Score all present using 0 to 3 scale.

- ☐ Vegetated hummocks/tussocks  
☐ Coarse woody debris >15cm (6in)  
☒ Standing dead >25cm (10in) dbh  
☐ Amphibian breeding pools

**Vegetation Community Cover Scale**

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
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**Narrative Description of Vegetation Quality**

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mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

**Mudflat and Open Water Class Quality**

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

**Microtopography Cover Scale**

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

30

**End of Quantitative Rating. Complete Categorization Worksheets.**



Site: 1784 Chipmunk Solar Rater(s): C. Kwolok, E. Wilson Date: 26 Aug 2021

1	1
max 6 pts.	subtotal

**Metric 1. Wetland Area (size).**

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)  
☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)  
☐ 10 to <25 acres (4 to <10.1ha) (4 pts)  
☐ 3 to <10 acres (1.2 to <4ha) (3 pts)  
☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)  
☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  
☐ <0.1 acres (0.04ha) (0 pts)

5	6
max 14 pts.	subtotal

**Metric 2. Upland buffers and surrounding land use.**

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  
☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  
☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  
☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  
☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)  
☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  
☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

9	15
max 30 pts.	subtotal

**Metric 3. Hydrology.**

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)  
☐ Other groundwater (3)  
☒ Precipitation (1)  
☐ Seasonal/intermittent surface water (3)  
☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)  
☐ 0.4 to 0.7m (15.7 to 27.6in) (2)  
☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)  
☒ Recovered (7)  
☒ Recovering (3)  
☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)  
☐ Between stream/lake and other human use (1)  
☒ Part of wetland/upland (e.g. forest), complex (1)  
☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)  
☐ Regularly inundated/saturated (3)  
☐ Seasonally inundated (2)  
☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- ☒ ditch  
☒ tile  
☐ dike  
☐ weir  
☐ stormwater input  
☐ point source (nonstormwater)  
☐ filling/grading  
☐ road bed/RR track  
☐ dredging  
☐ other \_\_\_\_\_

8	23
max 20 pts.	subtotal

**Metric 4. Habitat Alteration and Development.**

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)  
☒ Recovered (3)  
☐ Recovering (2)  
☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)  
☐ Very good (6)  
☐ Good (5)  
☐ Moderately good (4)  
☒ Fair (3)  
☐ Poor to fair (2)  
☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)  
☐ Recovered (6)  
☒ Recovering (3)  
☒ Recent or no recovery (1)

Check all disturbances observed

- ☐ mowing  
☐ grazing  
☐ clearcutting  
☒ selective cutting  
☒ woody debris removal  
☒ toxic pollutants  
☐ shrub/sapling removal  
☐ herbaceous/aquatic bed removal  
☐ sedimentation  
☐ dredging  
☒ farming  
☒ nutrient enrichment

23
subtotal this page



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kwolek, E. Wilson	<b>Date:</b> 26 Aug 2021
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23

subtotal first page

0	23
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
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- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

4	27
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

### 6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

### 6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☒ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

### 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

### 6d. Microtopography.

Score all present using 0 to 3 scale.

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### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

27

End of Quantitative Rating. Complete Categorization Worksheets.



Site: 1784 Chipmunk Solar	Rater(s): C. Krolek, E. Wilson	Date: 26 Aug 2021
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0	0
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

1	1
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

4	5
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☐ Recovering (3)
- ☒ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> ditch | <input type="checkbox"/> point source (nonstormwater) |
| <input checked="" type="checkbox"/> tile  | <input checked="" type="checkbox"/> filling/grading   |
| <input type="checkbox"/> dike             | <input type="checkbox"/> road bed/RR track            |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other                        |

5	10
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☐ Recovering (2)
- ☒ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☐ Recovering (3)
- ☒ Recent or no recovery (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> mowing               | <input type="checkbox"/> shrub/sapling removal          |
| <input type="checkbox"/> grazing              | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting         | <input type="checkbox"/> sedimentation                  |
| <input type="checkbox"/> selective cutting    | <input type="checkbox"/> dredging                       |
| <input type="checkbox"/> woody debris removal | <input type="checkbox"/> farming                        |
| <input type="checkbox"/> toxic pollutants     | <input type="checkbox"/> nutrient enrichment            |

10
subtotal this page



PEM 2-D

<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kwiatkowski, E. Wilson	<b>Date:</b> 26 Aug 2011
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10

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0	10
max 10 pts.	subtotal

### Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☒ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

2	12
max 20 pts.	subtotal

### Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☒ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☒ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☒ Moderately low (2)
- ☐ Low (1)
- ☒ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☒ Vegetated hummocks/tussocks
- ☒ Coarse woody debris >15cm (6in)
- ☒ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

#### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

#### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

#### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

#### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

12

End of Quantitative Rating. Complete Categorization Worksheets.



Site: 1784 Chipmunk Salar

Rater(s): C. Kudo, E. Wilson

Date: 8/27/21

1	1
max 6 pts.	subtotal

**Metric 1. Wetland Area (size).**

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)  
☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)  
☐ 10 to <25 acres (4 to <10.1ha) (4 pts)  
☐ 3 to <10 acres (1.2 to <4ha) (3 pts)  
☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)  
☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  
☐ <0.1 acres (0.04ha) (0 pts)

8	9
max 14 pts.	subtotal

**Metric 2. Upland buffers and surrounding land use.**

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☒ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  
☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  
☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  
☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  
☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)  
☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  
☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

9	18
max 30 pts.	subtotal

**Metric 3. Hydrology.**

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)  
☐ Other groundwater (3)  
☒ Precipitation (1)  
☐ Seasonal/intermittent surface water (3)  
☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)  
☐ 0.4 to 0.7m (15.7 to 27.6in) (2)  
☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)  
☒ Recovered (7)  
☒ Recovering (3)  
☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)  
☐ Between stream/lake and other human use (1)  
☒ Part of wetland/upland (e.g. forest), complex (1)  
☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)  
☐ Regularly inundated/saturated (3)  
☐ Seasonally inundated (2)  
☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- ☐ ditch  
☐ tile  
☐ dike  
☐ weir  
☐ stormwater input

- ☐ point source (nonstormwater)  
☐ filling/grading  
☐ road bed/RR track  
☐ dredging  
☐ other

13	31
max 20 pts.	subtotal

**Metric 4. Habitat Alteration and Development.**

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)  
☒ Recovered (3)  
☐ Recovering (2)  
☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)  
☐ Very good (6)  
☐ Good (5)  
☒ Moderately good (4)  
☐ Fair (3)  
☐ Poor to fair (2)  
☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)  
☒ Recovered (6)  
☐ Recovering (3)  
☐ Recent or no recovery (1)

Check all disturbances observed

- ☐ mowing  
☐ grazing  
☐ clearcutting  
☐ selective cutting  
☐ woody debris removal  
☒ toxic pollutants

- ☐ shrub/sapling removal  
☐ herbaceous/aquatic bed removal  
☐ sedimentation  
☐ dredging  
☒ farming  
☒ nutrient enrichment

subtotal this page

last revised 1 February 2001 jjm



Site: 1784 Chipmunk Solar

Rater(s): C. Kusilek, E. Wilson

Date: 8/27/21

31

subtotal first page

0

31

max 10 pts.

subtotal

**Metric 5. Special Wetlands.**

Check all that apply and score as indicated.

- ☐ Bog (10)  
☐ Fen (10)  
☐ Old growth forest (10)  
☐ Mature forested wetland (5)  
☒ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)  
☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)  
☐ Lake Plain Sand Prairies (Oak Openings) (10)  
☐ Relict Wet Prairies (10)  
☐ Known occurrence state/federal threatened or endangered species (10)  
☐ Significant migratory songbird/water fowl habitat or usage (10)  
☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

7

38

max 20 pts.

subtotal

**Metric 6. Plant communities, interspersions, microtopography.****6a. Wetland Vegetation Communities.**

Score all present using 0 to 3 scale.

- ☐ Aquatic bed  
☐ Emergent  
☐ Shrub  
☒ Forest  
☐ Mudflats  
☐ Open water  
☐ Other

**6b. horizontal (plan view) Interspersion.**  
Select only one.

- ☐ High (5)  
☐ Moderately high (4)  
☐ Moderate (3)  
☒ Moderately low (2)  
☐ Low (1)  
☐ None (0)

**6c. Coverage of invasive plants.** Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)  
☐ Moderate 25-75% cover (-3)  
☐ Sparse 5-25% cover (-1)  
☐ Nearly absent <5% cover (0)  
☒ Absent (1)

**6d. Microtopography.**

Score all present using 0 to 3 scale.

- ☐ Vegetated hummocks/tussucks  
☒ Coarse woody debris >15cm (6in)  
☐ Standing dead >25cm (10in) dbh  
☐ Amphibian breeding pools

**Vegetation Community Cover Scale**

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

**Narrative Description of Vegetation Quality**

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

**Mudflat and Open Water Class Quality**

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

**Microtopography Cover Scale**

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

38

**End of Quantitative Rating. Complete Categorization Worksheets.**



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kordich, E. Wilson	<b>Date:</b> 8/27/21
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2	2
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- 2 ☒ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

5	7
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☒ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- 4 ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- 1 ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

11	18
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- 1 ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- 1 ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- 7 ☒ None or none apparent (12)
- ☒ Recovered (7)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- 1 ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- 1 ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> ditch            | <input type="checkbox"/> point source (nonstormwater) |
| <input type="checkbox"/> tile             | <input type="checkbox"/> filling/grading              |
| <input type="checkbox"/> dike             | <input type="checkbox"/> road bed/RR track            |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other                        |

11.5	29.5
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- 3 ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- 4 ☒ Good (5)
- ☒ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- 4.5 ☒ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> mowing               | <input type="checkbox"/> shrub/sapling removal          |
| <input type="checkbox"/> grazing              | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting         | <input type="checkbox"/> sedimentation                  |
| <input type="checkbox"/> selective cutting    | <input type="checkbox"/> dredging                       |
| <input type="checkbox"/> woody debris removal | <input checked="" type="checkbox"/> farming             |
| <input type="checkbox"/> toxic pollutants     | <input checked="" type="checkbox"/> nutrient enrichment |

29.5
subtotal this page



<b>Site:</b> 1784 Chiswick Solar	<b>Rater(s):</b> C Kusolek, E Wilson	<b>Date:</b> 8/27/21
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29.5	
subtotal first page	
0	29.5
max 10 pts.	subtotal

### Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☒ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

7	36.5
max 20 pts.	subtotal

### Metric 6. Plant communities, interspersions, microtopography.

#### 6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☒ Aquatic bed
- ☒ Emergent
- ☒ Shrub
- ☒ Forest
- ☒ Mudflats
- ☒ Open water
- ☒ Other

#### 6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☒ Moderate (3)
- ☒ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

#### 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☒ Nearly absent <5% cover (0)
- ☒ Absent (1)

#### 6d. Microtopography.

Score all present using 0 to 3 scale.

- ☒ Vegetated hummocks/tussucks
- ☒ Coarse woody debris >15cm (6in)
- ☒ Standing dead >25cm (10in) dbh
- ☒ Amphibian breeding pools

#### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

#### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

#### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

#### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

36.5
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End of Quantitative Rating. Complete Categorization Worksheets.



<b>Site:</b> 1784 Chisumuk Solar	<b>Rater(s):</b> C. Kunkley, E. Wilson	<b>Date:</b> 8/27/21
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0	0
max 6 pts.	subtotal

## Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

5	5
max 14 pts.	subtotal

## Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☒ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

9	14
max 30 pts.	subtotal

## Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
  - ☐ Other groundwater (3)
  - ☒ Precipitation (1)
  - ☐ Seasonal/intermittent surface water (3)
  - ☐ Perennial surface water (lake or stream) (5)
- 3c. Maximum water depth. Select only one and assign score.
- ☐ >0.7 (27.6in) (3)
  - ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
  - ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> ditch            | <input type="checkbox"/> point source (nonstormwater) |
| <input type="checkbox"/> tile             | <input type="checkbox"/> filling/grading              |
| <input type="checkbox"/> dike             | <input type="checkbox"/> road bed/RR track            |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other                        |

10.5	24.5
max 20 pts.	subtotal

## Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> mowing               | <input type="checkbox"/> shrub/sapling removal          |
| <input type="checkbox"/> grazing              | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting         | <input type="checkbox"/> sedimentation                  |
| <input type="checkbox"/> selective cutting    | <input type="checkbox"/> dredging                       |
| <input type="checkbox"/> woody debris removal | <input checked="" type="checkbox"/> farming             |
| <input type="checkbox"/> toxic pollutants     | <input checked="" type="checkbox"/> nutrient enrichment |

24.5
subtotal this page



<b>Site:</b> 1784 Chir muck Solar	<b>Rater(s):</b> C. Kwak, E. Wilson	<b>Date:</b> 8/27/21
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24.5

subtotal first page

0	24.5
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☒ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

4	28.5
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

### 6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☒ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

### 6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high (4)
- ☐ Moderate (3)
- ☒ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

### 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

### 6d. Microtopography.

Score all present using 0 to 3 scale.

- ☒ Vegetated hummocks/tussocks
- ☐ Coarse woody debris >15cm (6in)
- ☒ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

28.5

**End of Quantitative Rating. Complete Categorization Worksheets.**



<b>Site:</b> 1784 Cusumunk Solar	<b>Rater(s):</b> C. Kivulile, E. Wilson	<b>Date:</b> 2/27/21
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0	0
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

5	5
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☐ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

9	14
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- ☐ ditch
- ☒ tile
- ☐ dike
- ☐ weir
- ☐ stormwater input

- ☐ point source (nonstormwater)
- ☐ filling/grading
- ☐ road bed/RR track
- ☐ dredging
- ☐ other

12	26
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- ☐ mowing
- ☐ grazing
- ☐ clearcutting
- ☐ selective cutting
- ☐ woody debris removal
- ☒ toxic pollutants

- ☐ shrub/sapling removal
- ☐ herbaceous/aquatic bed removal
- ☐ sedimentation
- ☐ dredging
- ☒ farming
- ☒ nutrient enrichment

26
subtotal this page



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kwolek, E. Wilson	<b>Date:</b> 8/27/21
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26	
subtotal first page	
0	26
max 10 pts.	subtotal

### Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☒ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

3	29
max 20 pts.	subtotal

### Metric 6. Plant communities, interspersions, microtopography.

#### 6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

#### 6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high (4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

#### 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

#### 6d. Microtopography.

Score all present using 0 to 3 scale.

- ☒ Vegetated hummocks/tussucks
- ☐ Coarse woody debris >15cm (6in)
- ☐ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

#### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

#### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

#### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

#### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

29
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End of Quantitative Rating. Complete Categorization Worksheets.



Site: <u>Chipmunk Solar Project</u>	Rater(s): <u>F. Wilson / C. Knapp</u>	Date: <u>08/30/2021</u>
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1	1
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

2	3
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

12	15
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- ☐ ditch
- ☐ tile
- ☐ dike
- ☐ weir
- ☐ stormwater input

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☒ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

8	23
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- ☐ mowing
- ☐ grazing
- ☐ clearcutting
- ☐ selective cutting
- ☐ woody debris removal
- ☐ toxic pollutants
- ☐ shrub/sapling removal
- ☐ herbaceous/aquatic bed removal
- ☐ sedimentation
- ☐ dredging
- ☒ farming (cattle)
- ☐ nutrient enrichment

23
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subtotal this page



1-I PFD

**Site:** Chipmunk Solar Project **Rater(s):** E. Wilson / C. Handick **Date:** 08/30/2021

23

subtotal first page

0 23

max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

6 29

max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☒ Aquatic bed
- ☒ Emergent
- ☒ Shrub
- ☒ Forest
- ☒ Mudflats
- ☒ Open water
- ☒ Other

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high (4)
- ☐ Moderate (3)
- ☒ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☒ Vegetated hummocks/tussocks
- ☒ Coarse woody debris >15cm (6in)
- ☒ Standing dead >25cm (10in) dbh
- ☒ Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

29

End of Quantitative Rating. Complete Categorization Worksheets.



<b>Site:</b> 1784 Chipmunk Salar	<b>Rater(s):</b> C. Kuselky, E. Wilson	<b>Date:</b> 8/30/21
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1	1
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

5	5
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☐ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

9	14
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> ditch            | <input type="checkbox"/> point source (nonstormwater) |
| <input type="checkbox"/> tile             | <input type="checkbox"/> filling/grading              |
| <input type="checkbox"/> dike             | <input type="checkbox"/> road bed/RR track            |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other                        |

13	27
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☒ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- |  |   |
|--|---|
| <input type="checkbox"/> mowing                      | <input type="checkbox"/> shrub/sapling removal          |
| <input type="checkbox"/> grazing                     | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting                | <input type="checkbox"/> sedimentation                  |
| <input type="checkbox"/> selective cutting           | <input type="checkbox"/> dredging                       |
| <input type="checkbox"/> woody debris removal        | <input checked="" type="checkbox"/> farming             |
| <input checked="" type="checkbox"/> toxic pollutants | <input checked="" type="checkbox"/> nutrient enrichment |

27
subtotal this page

<b>Site:</b> 1784 Quinzemeck Solar	<b>Rater(s):</b> C. Kusilek, E. Wilson	<b>Date:</b> 8/30/21
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27

subtotal first page

0	27
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

6	33
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

### 6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

### 6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

### 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

### 6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ Vegetated hummocks/tussocks
- ☐ Coarse woody debris >15cm (6in)
- ☐ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

33

**End of Quantitative Rating. Complete Categorization Worksheets.**



Site: 1784 Chisumunka Solo	Rater(s): C. Kwolek, E. Wilson	Date: 8/30/21
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0	0
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

5	5
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☒ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

5	10
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☐ Recovering (3)
- ☒ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> ditch            | <input type="checkbox"/> point source (nonstormwater) |
| <input type="checkbox"/> tile             | <input type="checkbox"/> filling/grading              |
| <input type="checkbox"/> dike             | <input checked="" type="checkbox"/> road bed/RR track |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other                        |

5	15
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☐ Recovering (2)
- ☒ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☒ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☒ Recent or no recovery (1)

Check all disturbances observed

- |  |   |
|--|---|
| <input type="checkbox"/> mowing                  | <input type="checkbox"/> shrub/sapling removal          |
| <input type="checkbox"/> grazing                 | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input checked="" type="checkbox"/> clearcutting | <input type="checkbox"/> sedimentation                  |
| <input type="checkbox"/> selective cutting       | <input type="checkbox"/> dredging                       |
| <input type="checkbox"/> woody debris removal    | <input type="checkbox"/> farming                        |
| <input type="checkbox"/> toxic pollutants        | <input checked="" type="checkbox"/> nutrient enrichment |

15
subtotal this page



**Site:** 1784 Chiepmunk Solar **Rater(s):** C. Kwolek, E. Wilson **Date:** 8/30/21

15  
subtotal first page

0 15  
max 10 pts. subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

3 18  
max 20 pts. subtotal

## Metric 6. Plant communities, interspersions, microtopography.

### 6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☒ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

### 6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high (4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

### 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

### 6d. Microtopography.

Score all present using 0 to 3 scale.

- ☒ Vegetated hummocks/tussucks
- ☐ Coarse woody debris >15cm (6in)
- ☐ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

18

End of Quantitative Rating. Complete Categorization Worksheets.



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kwalek, E. Wilson	<b>Date:</b> 8/30/21
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1	1
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

6	7
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☒ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

9	16
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> ditch | <input type="checkbox"/> point source (nonstormwater) |
| <input checked="" type="checkbox"/> tile  | <input type="checkbox"/> filling/grading              |
| <input type="checkbox"/> dike             | <input type="checkbox"/> road bed/RR track            |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other _____                  |

12	28
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- |  |   |
|--|---|
| <input type="checkbox"/> mowing                      | <input type="checkbox"/> shrub/sapling removal          |
| <input type="checkbox"/> grazing                     | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting                | <input type="checkbox"/> sedimentation                  |
| <input type="checkbox"/> selective cutting           | <input type="checkbox"/> dredging                       |
| <input type="checkbox"/> woody debris removal        | <input checked="" type="checkbox"/> farming             |
| <input checked="" type="checkbox"/> toxic pollutants | <input checked="" type="checkbox"/> nutrient enrichment |

28
subtotal this page



<b>Site:</b> 170 <sup>th</sup> Chipmunk Cr.	<b>Rater(s):</b> C. E. Smith, C. H. Smith	<b>Date:</b> 8/30/21
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28
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subtotal first page

0	28
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max 10 pts.

subtotal

**Metric 5. Special Wetlands.**

Check all that apply and score as indicated.

- ☐ Bog (10)  
☐ Fen (10)  
☐ Old growth forest (10)  
☐ Mature forested wetland (5)  
☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)  
☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)  
☐ Lake Plain Sand Prairies (Oak Openings) (10)  
☐ Relict Wet Prairies (10)  
☐ Known occurrence state/federal threatened or endangered species (10)  
☐ Significant migratory songbird/water fowl habitat or usage (10)  
☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

4	32
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max 20 pts.

subtotal

**Metric 6. Plant communities, interspersions, microtopography.****6a. Wetland Vegetation Communities.**

Score all present using 0 to 3 scale.

- ☐ Aquatic bed  
☐ Emergent  
☐ Shrub  
☐ Forest  
☐ Mudflats  
☐ Open water  
☐ Other

**6b. horizontal (plan view) Interspersion.**

Select only one.

- ☐ High (5)  
☐ Moderately high (4)  
☐ Moderate (3)  
☐ Moderately low (2)  
☐ Low (1)  
☐ None (0)

**6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage**

- ☐ Extensive >75% cover (-5)  
☐ Moderate 25-75% cover (-3)  
☐ Sparse 5-25% cover (-1)  
☐ Nearly absent <5% cover (0)  
☒ Absent (1)

**6d. Microtopography.**

Score all present using 0 to 3 scale.

- ☐ Vegetated hummocks/tussocks  
☐ Coarse woody debris >15cm (6in)  
☐ Standing dead >25cm (10in) dbh  
☐ Amphibian breeding pools

**Vegetation Community Cover Scale**

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

**Narrative Description of Vegetation Quality**

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

**Mudflat and Open Water Class Quality**

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

**Microtopography Cover Scale**

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

32
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**End of Quantitative Rating. Complete Categorization Worksheets.**



DEM 1-M

<b>Site:</b> 1784 Chicomuk Solar	<b>Rater(s):</b> C. Kwolek, E. Wilson	<b>Date:</b> 8/30/21
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0	0
max 6 pts.	subtotal

**Metric 1. Wetland Area (size).**

- Select one size class and assign score.
- ☐ >50 acres (>20.2ha) (6 pts)
  - ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
  - ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
  - ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
  - ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
  - ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
  - ☒ <0.1 acres (0.04ha) (0 pts)

5	5
max 14 pts.	subtotal

**Metric 2. Upland buffers and surrounding land use.**

- 2a. Calculate average buffer width. Select only one and assign score. Do not double check.
- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
  - ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
  - ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
  - ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)
- 2b. Intensity of surrounding land use. Select one or double check and average.
- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
  - ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
  - ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
  - ☐ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

6	11
max 30 pts.	subtotal

**Metric 3. Hydrology.**

- 3a. Sources of Water. Score all that apply.
- ☐ High pH groundwater (5)
  - ☐ Other groundwater (3)
  - ☒ Precipitation (1)
  - ☐ Seasonal/Intermittent surface water (3)
  - ☐ Perennial surface water (lake or stream) (5)
- 3b. Connectivity. Score all that apply.
- ☐ 100 year floodplain (1)
  - ☐ Between stream/lake and other human use (1)
  - ☒ Part of wetland/upland (e.g. forest), complex (1)
  - ☐ Part of riparian or upland corridor (1)
- 3c. Maximum water depth. Select only one and assign score.
- ☐ >0.7 (27.6in) (3)
  - ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
  - ☒ <0.4m (<15.7in) (1)
- 3d. Duration inundation/saturation. Score one or dbl check.
- ☐ Semi- to permanently inundated/saturated (4)
  - ☐ Regularly inundated/saturated (3)
  - ☐ Seasonally inundated (2)
  - ☒ Seasonally saturated in upper 30cm (12in) (1)
- 3e. Modifications to natural hydrologic regime. Score one or double check and average.
- ☐ None or none apparent (12)
  - ☐ Recovered (7)
  - ☒ Recovering (3)
  - ☒ Recent or no recovery (1)

Check all disturbances observed

  - ☒ ditch
  - ☒ tile
  - ☐ dike
  - ☐ weir
  - ☐ stormwater input
- point source (nonstormwater)

  - ☐ filling/grading
  - ☐ road bed/RR track
  - ☐ dredging
  - ☐ other \_\_\_\_\_

6	17
max 20 pts.	subtotal

**Metric 4. Habitat Alteration and Development.**

- 4a. Substrate disturbance. Score one or double check and average.
- ☐ None or none apparent (4)
  - ☐ Recovered (3)
  - ☒ Recovering (2)
  - ☐ Recent or no recovery (1)
- 4b. Habitat development. Select only one and assign score.
- ☐ Excellent (7)
  - ☐ Very good (6)
  - ☐ Good (5)
  - ☐ Moderately good (4)
  - ☒ Fair (3)
  - ☐ Poor to fair (2)
  - ☐ Poor (1)
- 4c. Habitat alteration. Score one or double check and average.
- ☐ None or none apparent (9)
  - ☐ Recovered (6)
  - ☒ Recovering (3)
  - ☒ Recent or no recovery (1)

Check all disturbances observed

  - ☐ mowing
  - ☐ grazing
  - ☐ clearcutting
  - ☐ selective cutting
  - ☐ woody debris removal
  - ☐ toxic pollutants
- ☐ shrub/sapling removal
  - ☐ herbaceous/aquatic bed removal
  - ☐ sedimentation
  - ☐ dredging
  - ☒ farming
  - ☒ nutrient enrichment

17
subtotal this page



<b>Site:</b> 1704 Silver Creek Silt	<b>Rater(s):</b> P. Knecht & W. Liscow	<b>Date:</b> 8/30/21
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17

subtotal first page

0 17

max 10 pts.

subtotal

**Metric 5. Special Wetlands.**

Check all that apply and score as indicated.

- ☐ Bog (10)  
☐ Fen (10)  
☐ Old growth forest (10)  
☐ Mature forested wetland (5)  
☒ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)  
☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)  
☐ Lake Plain Sand Prairies (Oak Openings) (10)  
☐ Relict Wet Prairies (10)  
☐ Known occurrence state/federal threatened or endangered species (10)  
☐ Significant migratory songbird/water fowl habitat or usage (10)  
☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

5 22

max 20 pts.

subtotal

**Metric 6. Plant communities, interspersions, microtopography.****6a. Wetland Vegetation Communities.**

Score all present using 0 to 3 scale.

- ☒ Aquatic bed  
☐ Emergent  
☐ Shrub  
☐ Forest  
☐ Mudflats  
☐ Open water  
☐ Other

**6b. horizontal (plan view) Interspersion.**  
Select only one.

- ☐ High (5)  
☐ Moderately high (4)  
☐ Moderate (3)  
☒ Moderately low (2)  
☐ Low (1)  
☐ None (0)

**6c. Coverage of invasive plants.** Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)  
☐ Moderate 25-75% cover (-3)  
☐ Sparse 5-25% cover (-1)  
☐ Nearly absent <5% cover (0)  
☒ Absent (1)

**6d. Microtopography.**

Score all present using 0 to 3 scale.

- ☒ Vegetated hummocks/tussucks  
☐ Coarse woody debris >15cm (6in)  
☐ Standing dead >25cm (10in) dbh  
☐ Amphibian breeding pools

**Vegetation Community Cover Scale**

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

**Narrative Description of Vegetation Quality**

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

**Mudflat and Open Water Class Quality**

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

**Microtopography Cover Scale**

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

**End of Quantitative Rating. Complete Categorization Worksheets.**



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kwolek, E. Wilson	<b>Date:</b> 8/30/21
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0	0
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- 0 ☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

6	6
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☒ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- 4 ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- 2 ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

9	15
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
  - ☐ Other groundwater (3)
  - 1 ☒ Precipitation (1)
  - ☐ Seasonal/Intermittent surface water (3)
  - ☐ Perennial surface water (lake or stream) (5)
- 3c. Maximum water depth. Select only one and assign score.
- ☐ >0.7 (27.6in) (3)
  - 1 ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
  - ☒ <0.4m (<15.7in) (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- 1 ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- 1 ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
  - 5 ☒ Recovered (7)
  - ☐ Recovering (3)
  - ☐ Recent or no recovery (1)

Check all disturbances observed

<input type="checkbox"/> ditch	<input type="checkbox"/> point source (nonstormwater)
<input checked="" type="checkbox"/> tile	<input type="checkbox"/> filling/grading
<input type="checkbox"/> dike	<input type="checkbox"/> road bed/RR track
<input type="checkbox"/> weir	<input type="checkbox"/> dredging
<input type="checkbox"/> stormwater input	<input type="checkbox"/> other _____

12	27
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- 3 ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- 3 ☒ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
  - 6 ☒ Recovered (6)
  - ☐ Recovering (3)
  - ☐ Recent or no recovery (1)

Check all disturbances observed

<input type="checkbox"/> mowing	<input type="checkbox"/> shrub/sapling removal
<input type="checkbox"/> grazing	<input type="checkbox"/> herbaceous/aquatic bed removal
<input type="checkbox"/> clearcutting	<input type="checkbox"/> sedimentation
<input type="checkbox"/> selective cutting	<input type="checkbox"/> dredging
<input type="checkbox"/> woody debris removal	<input checked="" type="checkbox"/> farming
<input checked="" type="checkbox"/> toxic pollutants	<input checked="" type="checkbox"/> nutrient enrichment

27
subtotal this page



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kwolek, F. Wilson	<b>Date:</b> 8/30/24
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27
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subtotal first page

0	27
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max 10 pts.

subtotal

**Metric 5. Special Wetlands.**

Check all that apply and score as indicated.

- ☐ Bog (10)  
☐ Fen (10)  
☐ Old growth forest (10)  
☐ Mature forested wetland (5)  
☒ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)  
☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)  
☐ Lake Plain Sand Prairies (Oak Openings) (10)  
☐ Relict Wet Prairies (10)  
☐ Known occurrence state/federal threatened or endangered species (10)  
☐ Significant migratory songbird/water fowl habitat or usage (10)  
☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

5	32
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max 20 pts.

subtotal

**Metric 6. Plant communities, interspersions, microtopography.****6a. Wetland Vegetation Communities.**

Score all present using 0 to 3 scale.

- ☒ Aquatic bed  
☒ Emergent  
☒ Shrub  
☒ Forest  
☒ Mudflats  
☒ Open water  
☒ Other

**6b. horizontal (plan view) Interspersion.**

Select only one.

- ☐ High (5)  
☐ Moderately high (4)  
☐ Moderate (3)  
☒ Moderately low (2)  
☐ Low (1)  
☐ None (0)

**6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage**

- ☐ Extensive >75% cover (-5)  
☐ Moderate 25-75% cover (-3)  
☐ Sparse 5-25% cover (-1)  
☐ Nearly absent <5% cover (0)  
☒ Absent (1)

**6d. Microtopography.**

Score all present using 0 to 3 scale.

- ☒ Vegetated hummocks/tussocks  
☒ Coarse woody debris >15cm (6in)  
☒ Standing dead >25cm (10in) dbh  
☒ Amphibian breeding pools

**Vegetation Community Cover Scale**

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

**Narrative Description of Vegetation Quality**

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

**Mudflat and Open Water Class Quality**

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

**Microtopography Cover Scale**

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

**End of Quantitative Rating. Complete Categorization Worksheets.**



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kwolek, E. Wilson	<b>Date:</b> 8/30/21
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0	0
max 6 pts.	subtotal

## Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

1	1
max 14 pts.	subtotal

## Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

4	5
max 30 pts.	subtotal

## Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☐ Recovering (3)
- ☒ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> ditch | <input type="checkbox"/> point source (nonstormwater) |
| <input type="checkbox"/> tile             | <input type="checkbox"/> filling/grading              |
| <input type="checkbox"/> dike             | <input type="checkbox"/> road bed/RR track            |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other                        |

4	9
max 20 pts.	subtotal

## Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☐ Recovering (2)
- ☒ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☒ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☐ Recovering (3)
- ☒ Recent or no recovery (1)

Check all disturbances observed

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> mowing           | <input type="checkbox"/> shrub/sapling removal          |
| <input type="checkbox"/> grazing                     | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting                | <input type="checkbox"/> sedimentation                  |
| <input type="checkbox"/> selective cutting           | <input checked="" type="checkbox"/> dredging            |
| <input type="checkbox"/> woody debris removal        | <input checked="" type="checkbox"/> farming             |
| <input checked="" type="checkbox"/> toxic pollutants | <input checked="" type="checkbox"/> nutrient enrichment |

9
subtotal this page



<b>Site:</b> 1784 Chipmunk Slor	<b>Rater(s):</b> E.W. 180m	<b>Date:</b> 8/30/21
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9

subtotal first page

0	9
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max 10 pts.

subtotal

**Metric 5. Special Wetlands.**

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

1	10
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max 20 pts.

subtotal

**Metric 6. Plant communities, interspersions, microtopography.****6a. Wetland Vegetation Communities.**

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

**6b. horizontal (plan view) Interspersions.**

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

**6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage**

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☒ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

**6d. Microtopography.**

Score all present using 0 to 3 scale.

- ☒ Vegetated hummocks/tussocks
- ☐ Coarse woody debris >15cm (6in)
- ☐ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

**Vegetation Community Cover Scale**

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

**Narrative Description of Vegetation Quality**

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

**Mudflat and Open Water Class Quality**

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

**Microtopography Cover Scale**

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

**End of Quantitative Rating. Complete Categorization Worksheets.**



<b>Site:</b> 1784 Chipmunk Solor	<b>Rater(s):</b> C. Kwolob, E. Wilson	<b>Date:</b> 8/30/21
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0	0
max 6 pts.	subtotal

## Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

5	5
max 14 pts.	subtotal

## Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

15	20
max 30 pts.	subtotal

## Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
  - ☐ Other groundwater (3)
  - ☒ Precipitation (1)
  - ☐ Seasonal/Intermittent surface water (3)
  - ☒ Perennial surface water (lake or stream) (5)
- 3c. Maximum water depth. Select only one and assign score.
- ☐ >0.7 (27.6in) (3)
  - ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
  - ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
  - ☒ Between stream/lake and other human use (1)
  - ☒ Part of wetland/upland (e.g. forest), complex (1)
  - ☐ Part of riparian or upland corridor (1)
- 3d. Duration inundation/saturation. Score one or dbl check.
- ☐ Semi- to permanently inundated/saturated (4)
  - ☐ Regularly inundated/saturated (3)
  - ☐ Seasonally inundated (2)
  - ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input type="checkbox"/> ditch	<input type="checkbox"/> point source (nonstormwater)
<input type="checkbox"/> tile	<input type="checkbox"/> filling/grading
<input type="checkbox"/> dike	<input type="checkbox"/> road bed/RR track
<input type="checkbox"/> weir	<input type="checkbox"/> dredging
<input type="checkbox"/> stormwater input	<input type="checkbox"/> other _____

8	20
max 20 pts.	subtotal

## Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input type="checkbox"/> mowing	<input type="checkbox"/> shrub/sapling removal
<input type="checkbox"/> grazing	<input type="checkbox"/> herbaceous/aquatic bed removal
<input type="checkbox"/> clearcutting	<input type="checkbox"/> sedimentation
<input type="checkbox"/> selective cutting	<input type="checkbox"/> dredging
<input type="checkbox"/> woody debris removal	<input type="checkbox"/> farming
<input type="checkbox"/> toxic pollutants	<input type="checkbox"/> nutrient enrichment

28
subtotal this page



Site: 1784 Chipmunk Slough	Rater(s): C. Kuntz, E. W. Ison	Date: 8/30/21
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28
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subtotal first page

0	28
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max 10 pts.

subtotal

### Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

4	32
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max 20 pts.

subtotal

### Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☒ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

6b. horizontal (plan view) Interspersions.

Select only one.

- ☐ High (5)
- ☐ Moderately high (4)
- ☐ Moderate (3)
- ☒ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☒ Vegetated hummocks/tussocks
- ☐ Coarse woody debris >15cm (6in)
- ☐ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

#### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

#### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

#### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

#### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

32
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End of Quantitative Rating. Complete Categorization Worksheets.



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kneale, E. Wilson	<b>Date:</b> 8/30/21
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2	2
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

- Select one size class and assign score.
- ☐ >50 acres (>20.2ha) (6 pts)
  - ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
  - ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
  - ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
  - 2 ☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
  - ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
  - ☐ <0.1 acres (0.04ha) (0 pts)

2	4
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

- 2a. Calculate average buffer width. Select only one and assign score. Do not double check.
- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
  - ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
  - 1 ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
  - ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)
- 2b. Intensity of surrounding land use. Select one or double check and average.
- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
  - 1 ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
  - ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
  - ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

23	27
max 30 pts.	subtotal

### Metric 3. Hydrology.

- 3a. Sources of Water. Score all that apply.
- ☐ High pH groundwater (5)
  - ☐ Other groundwater (3)
  - 6 ☒ Precipitation (1)
  - ☐ Seasonal/Intermittent surface water (3)
  - ☒ Perennial surface water (lake or stream) (5)
- 3b. Connectivity. Score all that apply.
- ☒ 100 year floodplain (1)
  - 3 ☒ Between stream/lake and other human use (1)
  - ☒ Part of wetland/upland (e.g. forest), complex (1)
  - ☐ Part of riparian or upland corridor (1)
- 3c. Maximum water depth. Select only one and assign score.
- ☐ >0.7 (27.6in) (3)
  - 1 ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
  - ☒ <0.4m (<15.7in) (1)
- 3d. Duration inundation/saturation. Score one or dbl check.
- ☐ Semi- to permanently inundated/saturated (4)
  - 1 ☐ Regularly inundated/saturated (3)
  - ☐ Seasonally inundated (2)
  - ☒ Seasonally saturated in upper 30cm (12in) (1)
- 3e. Modifications to natural hydrologic regime. Score one or double check and average.
- ☒ None or none apparent (12)
  - 12 ☐ Recovered (7)
  - ☐ Recovering (3)
  - ☐ Recent or no recovery (1)

Check all disturbances observed

<input type="checkbox"/> ditch	<input type="checkbox"/> point source (nonstormwater)
<input type="checkbox"/> tile	<input type="checkbox"/> filling/grading
<input type="checkbox"/> dike	<input type="checkbox"/> road bed/RR track
<input type="checkbox"/> weir	<input type="checkbox"/> dredging
<input type="checkbox"/> stormwater input	<input type="checkbox"/> other _____

18	45
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

- 4a. Substrate disturbance. Score one or double check and average.
- 4 ☒ None or none apparent (4)
  - ☐ Recovered (3)
  - ☐ Recovering (2)
  - ☐ Recent or no recovery (1)
- 4b. Habitat development. Select only one and assign score.
- ☐ Excellent (7)
  - ☐ Very good (6)
  - 5 ☒ Good (5)
  - ☐ Moderately good (4)
  - ☐ Fair (3)
  - ☐ Poor to fair (2)
  - ☐ Poor (1)
- 4c. Habitat alteration. Score one or double check and average.
- 9 ☒ None or none apparent (9)
  - ☐ Recovered (6)
  - ☐ Recovering (3)
  - ☐ Recent or no recovery (1)

Check all disturbances observed

<input type="checkbox"/> mowing	<input type="checkbox"/> shrub/sapling removal
<input type="checkbox"/> grazing	<input type="checkbox"/> herbaceous/aquatic bed removal
<input type="checkbox"/> clearcutting	<input type="checkbox"/> sedimentation
<input type="checkbox"/> selective cutting	<input type="checkbox"/> dredging
<input type="checkbox"/> woody debris removal	<input type="checkbox"/> farming
<input type="checkbox"/> toxic pollutants	<input type="checkbox"/> nutrient enrichment

45
subtotal this page



Site: 1784 Chipmunk Solar	Rater(s): C. Kusak, E. Wilson	Date: 8/30/21
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45

subtotal first page

0	45
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- 0
- ☐ Bog (10)
  - ☐ Fen (10)
  - ☐ Old growth forest (10)
  - ☐ Mature forested wetland (5)
  - ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
  - ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
  - ☐ Lake Plain Sand Prairies (Oak Openings) (10)
  - ☐ Relict Wet Prairies (10)
  - ☐ Known occurrence state/federal threatened or endangered species (10)
  - ☐ Significant migratory songbird/water fowl habitat or usage (10)
  - ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

7	52
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

### 6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- 2
- ☐ 0 Aquatic bed
  - ☐ 1 Emergent
  - ☐ 0 Shrub
  - ☒ 1 Forest
  - ☒ 0 Mudflats
  - ☐ 0 Open water
  - ☐ Other

### 6b. horizontal (plan view) Interspersions.

Select only one.

- 2
- ☐ High (5)
  - ☐ Moderately high (4)
  - ☐ Moderate (3)
  - ☒ Moderately low (2)
  - ☐ Low (1)
  - ☐ None (0)

### 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- 1
- ☐ Extensive >75% cover (-5)
  - ☐ Moderate 25-75% cover (-3)
  - ☐ Sparse 5-25% cover (-1)
  - ☐ Nearly absent <5% cover (0)
  - ☒ Absent (1)

### 6d. Microtopography.

Score all present using 0 to 3 scale.

- 2
- ☐ 0 Vegetated hummocks/tussocks
  - ☒ 1 Coarse woody debris >15cm (6in)
  - ☒ 1 Standing dead >25cm (10in) dbh
  - ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

52

End of Quantitative Rating. Complete Categorization Worksheets.



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kwiatkowski, E. Wilson	<b>Date:</b> 8/30/21
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1	1
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

2	3
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

16	19
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☒ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☒ 100 year floodplain (1)
- ☒ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> ditch            | <input type="checkbox"/> point source (nonstormwater) |
| <input type="checkbox"/> tile             | <input type="checkbox"/> filling/grading              |
| <input type="checkbox"/> dike             | <input type="checkbox"/> road bed/RR track            |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other                        |

17	36
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☒ None or none apparent (4)
- ☐ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☒ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> mowing               | <input type="checkbox"/> shrub/sapling removal          |
| <input type="checkbox"/> grazing              | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting         | <input type="checkbox"/> sedimentation                  |
| <input type="checkbox"/> selective cutting    | <input type="checkbox"/> dredging                       |
| <input type="checkbox"/> woody debris removal | <input checked="" type="checkbox"/> farming             |
| <input type="checkbox"/> toxic pollutants     | <input checked="" type="checkbox"/> nutrient enrichment |

36
subtotal this page



<b>Site:</b> 1784 Ch. 20000 Solar	<b>Rater(s):</b> C. Kinsale, E. Wilson	<b>Date:</b> 8/30/21
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36

subtotal first page

0	36
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

1	37
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

### 6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

### 6b. horizontal (plan view) Interspersions.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

### 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

### 6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ Vegetated hummocks/tussocks
- ☐ Coarse woody debris >15cm (6in)
- ☐ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

37
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End of Quantitative Rating. Complete Categorization Worksheets.



<b>Site:</b> 1784 Chipmunk Solar	<b>Rater(s):</b> C. Kinsley, E. Wilson	<b>Date:</b> 8/30/21
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2	2
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- 2
- ☐ >50 acres (>20.2ha) (6 pts)
  - ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
  - ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
  - ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
  - ☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
  - ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
  - ☐ <0.1 acres (0.04ha) (0 pts)

2	4
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- 1
- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
  - ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
  - ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
  - ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- 1
- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
  - ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
  - ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
  - ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

6	10
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- 1
- ☐ High pH groundwater (5)
  - ☐ Other groundwater (3)
  - ☒ Precipitation (1)
  - ☐ Seasonal/Intermittent surface water (3)
  - ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- 1
- ☐ >0.7 (27.6in) (3)
  - ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
  - ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- 2
- ☐ None or none apparent (12)
  - ☐ Recovered (7)
  - ☒ Recovering (3)
  - ☒ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- 1
- ☐ 100 year floodplain (1)
  - ☐ Between stream/lake and other human use (1)
  - ☐ Part of wetland/upland (e.g. forest), complex (1)
  - ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- 1
- ☐ Semi- to permanently inundated/saturated (4)
  - ☐ Regularly inundated/saturated (3)
  - ☐ Seasonally inundated (2)
  - ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

7	17
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- 2
- ☐ None or none apparent (4)
  - ☐ Recovered (3)
  - ☒ Recovering (2)
  - ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- 3
- ☐ Excellent (7)
  - ☐ Very good (6)
  - ☐ Good (5)
  - ☒ Moderately good (4)
  - ☐ Fair (3)
  - ☐ Poor to fair (2)
  - ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- 2
- ☐ None or none apparent (9)
  - ☐ Recovered (6)
  - ☒ Recovering (3)
  - ☒ Recent or no recovery (1)

Check all disturbances observed	
<input type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input checked="" type="checkbox"/> nutrient enrichment

17
subtotal this page



Site: 1784 Chipmunk Solar	Rater(s): C. Kowalski, E. Wilson	Date: 8/30/21
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17
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subtotal first page

0	17
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☒ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

3	20
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

### 6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☒ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other

### 6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high (4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

### 6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

### 6d. Microtopography.

Score all present using 0 to 3 scale.

- ☒ Vegetated hummocks/tussocks
- ☒ Coarse woody debris >15cm (6in)
- ☐ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

End of Quantitative Rating. Complete Categorization Worksheets.



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**in**

**Case No(s). 21-0960-EL-BGN**

Summary: Application Exhibit Q (Ecological Assessment, 5 of 10) electronically  
filed by Mr. Michael J. Settineri on behalf of Chipmunk Solar LLC