Vegetation Management Plan for

USS Rhea Solar LLC

Prepared December 9, 2025
Revised December 16, 2025 by:

Natural Resource Services

Contents

1. USS Rhea Solar LLC Vegetation Management Plan (VMP) Overview

1.1. Site Developer

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1.3. Project Description

The proposed USS Rhea Solar project is a 4.48 MW AC project planned for approximately 37.6 acres of land in Elburn, Kane County, Illinois. Tracker-style panels with approximately 30”-36” ground clearance at max tilt and above-ground drivelines are planned. The site will be planted with native pollinator mixes, including buffer areas located to the north, east and northwest corner of the fenced array. No vegetative screening is currently proposed. A flood inundation area is located in the southern central area of the fenced array.

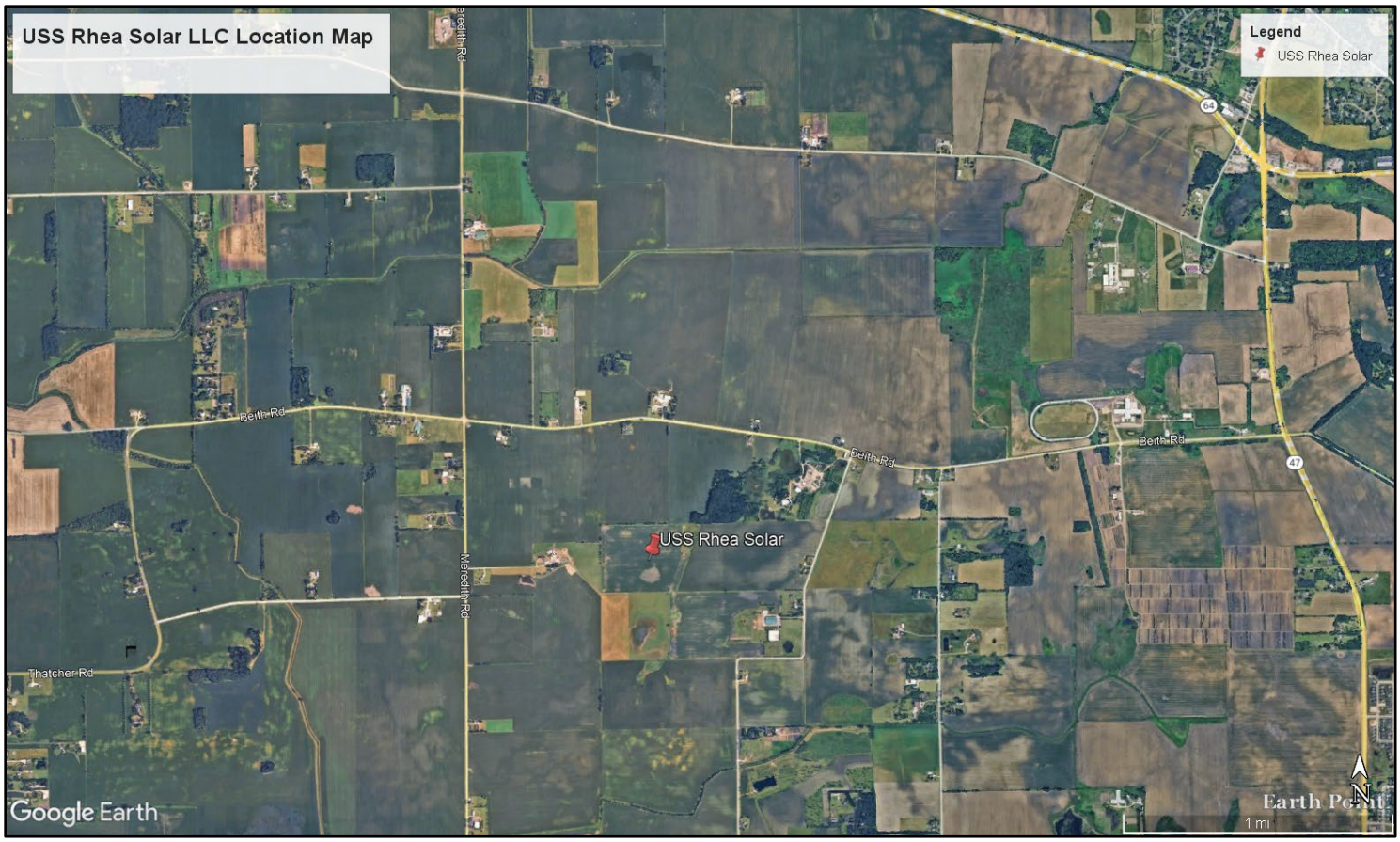
1.4. VMP Use and Objectives

The VMP was written to provide a brief overview and description of the project and to act as a guide for vegetation installation and management. It has been custom-written based on information known at the time of writing. The VMP should be treated as a living document and adjusted as additional information about the site is gathered both pre and post construction. A qualified native vegetation contractor with a history of success working on native vegetation restorations should be contracted to implement the procedures outlined in this document and to provide feedback and suggestions for the VMP during the lifespan of the project.

2. Site Information

2.1. Site Location

The proposed Rhea Solar site is located on the west side of Francis Road between Meredith Road and Freeland Road. Rhea Solar is bordered by agricultural fields and a commercial property. The GPS coordinates for the site are 41.915837, -88.518058.



2.2. Map of Array Layout

2.3. Site Conditions

A review of historical aerial photos shows that the entire site has been in traditional agricultural row crops for the last 30 years. Signs of saturated soils can be observed in the central southern area of the array from year to year. A review of the soils on the USDA Web Soil Survey shows mostly poorly drained and moderately well drained soils. The site largely consists of Drummer silty clay loam and Barony silt loam. Drummer silty clay loam is classified as a hydric soil.

3. Overview of Vegetation Establishment and Management

3.1. Vegetative Goals

The primary vegetative goal is to establish permanent vegetation that does not interfere with solar production. This solar site is being planted with 100% native species. The species chosen produce an emphasis on native pollinator habitat to achieve and maintain Pollinator Friendly status as defined in the Illinois Pollinator Friendly Solar Site Act (525 ILCS 55/) [1] .

3.2. Contribution of Native Habitat on Solar Sites

Economical production of power is the foremost goal of solar sites. There is a parallel opportunity to provide critically important native pollinator-friendly habitat throughout the array while capitalizing on the long-term low maintenance needs of native vegetation.

Establishing prairies and other native plant communities within the confines of solar sites provides a tremendous opportunity to restore ecosystems that have been severely degraded or eliminated across all areas of the country.

Native plants have profound root systems, many reaching 12 or more feet deep into the soil. Rainwater follows those roots into the ground, helping to reduce water runoff and promote the drainage of standing water into an aquifer. Those deep roots also stabilize the soil, preventing erosion from rain and wind. The plants provide seeds for songbirds, cover for game birds and, of course, provide blossoms and host plants for our beloved butterflies and other nectar-loving insects.

Native grasses and forbs will be selected based on their ecological appropriateness to the specific conditions of this site, with consideration to their mature height to not interfere with panel productivity. These species will not require irrigation, fertilizer, or other soil amendments.

The contribution to habitat restoration cannot be overstated given the acreage impacted and lifespan of the project.

[1] https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=3900&ChapterID=44

3.3. Vegetation Installation Overview

The native mixes planned for this array are selected for ecological appropriateness to the soil moisture, types and site conditions as well as the mature plant height of 24” to 36” so as to not interfere with panel productivity. The habitat provides low-maintenance vegetation that won’t require fertilizer, amended soils or irrigation on this site.

It is important to note that the species selected for this site are based on their ability to successfully establish from seed and thrive within the unique conditions found on solar sites. From a practical standpoint, the species contained in these mixes are generally available in the marketplace and, as a whole, have reasonable price points. Ultimately, the list consists of well-performing, workhorse species coupled with smaller amounts of more unique species for a robust mixture.

3.4. Vegetation Management Overview

Maintenance plays a vital role in the eventual success of any native landscape installation, especially during the establishment period of years one through three. Active management is similar in all areas of the project site. All areas of the site are inspected annually followed by maintenance necessary to encourage healthy native species while discouraging non-native/invasive species. During the growing season of the first year of establishment, the site shall be inspected a minimum of three times.

4. Vegetation Installation Procedures

4.1. Site Inspections and Monitoring

Site inspections and monitoring throughout the installation process are vital to continually assess site conditions and determine what procedures are needed and the timing of those procedures. The pre-construction site inspection is particularly important to determine the need for any herbicide application or mowing prior to soil preparation and seeding.

4.2. Site Preparation Herbicide Application

A site preparation herbicide application, if deemed necessary, should be performed by a licensed, qualified contractor using appropriate herbicides to kill all actively growing weeds on the project site. Typically, only glyphosate herbicide is necessary, but if certain perennial weed species are present such as Canada thistle, a broadleaf additive may be necessary. The contractor should carefully select an herbicide with a short soil residual, such as Garlon 3A, to minimize the impact on germination of the permanent seeding. The vegetation should not be disturbed for a minimum of 14 days after an herbicide application to allow time for effective weed elimination.

4.3. Site Preparation Mowing

Site preparation mowing may be required to reset vegetative growth to prepare for an herbicide application. Additionally, site preparation mowing may be needed to cut and mulch vegetation to simplify the soil preparation and seeding process.

4.4. Soil and Seedbed Preparation

Soil and seedbed preparation is vital to the success of any planting. Disking and harrowing (or raking) the site is common and extremely effective. If extreme compaction is present on site, a ripper may be needed to mitigate the compaction. The seedbed should be relatively smooth and firm prior to seeding. Soil that is too clumpy or too fluffy may result in seeds being planted too deep in the soil to germinate and survive.

4.5. Seed and Seeding

Custom native pollinator seed mixes have been designed for use on this project and are found in Section 8. Seeding will be completed through broadcasting by using a mechanical spreader appropriate for the specified seed mixes. Large and fluffy seeds (such as most grasses and cover crop) should be broadcast first and then lightly harrowed/raked into the soil. Following the harrowing, small seeds (such as most forbs, sedges, and rushes) should be broadcast on top of the soil.

4.6. Erosion control

Erosion control measures should be implemented as required after permanent seeding is completed.

5. Vegetation Management Procedures

5.1. Adaptive Management

An adaptive management strategy is vital to the success of any project, but especially so for native pollinator restorations. Adaptive management consists of continual monitoring and adjusting maintenance strategies based on the site conditions in order to achieve the best outcomes. No two sites are exactly the same and responding to changing site conditions, weed pressures, weather, and a multitude of other variables is essential to the success of the planting.

5.2. Complete Site Maintenance Mowing

Complete site maintenance mowing consists of mowing the entire project area during the growing season, including trimming as appropriate around equipment or in inaccessible areas. Complete site maintenance mowing is implemented primarily during the establishment phase of the restoration (years 1-3) for several reasons. First, if a closed canopy of vegetation develops, mowing is implemented to knock back the taller vegetation and allow sunlight to reach the native seedlings below. Second, if weed species are present and actively nearing their seed set, mowing is implemented to prevent those weeds from producing viable seed. Third, vegetation has become tall enough to shade the panels or impact other solar equipment on site and must be cut down.

5.3. Integrated Vegetation Maintenance

Integrated vegetation maintenance or IVM is a method using a combination of targeted mowing/trimming and herbicide application aimed at reducing or eliminating weed species and promoting the desired vegetation. IVM can also include grazing, haying, and other maintenance options as appropriate. IVM is implemented starting towards the end of the 2nd full growing season typically and is used throughout the life of the project. 3 IVM visits are typical on most sites until year 5 when a reduction to 1-2 visits per year can be made if site conditions allow.

5.4. Dormant Mowing

Dormant mowing is a type of complete site mow implemented when vegetation is not actively growing on site. This method is typically performed in early spring or fall. Oftentimes, dormant mows are completed in the fall to mulch up dead vegetation and encourage decomposition. This practice also has a dual purpose of cleaning up the site to make electrical maintenance easier and to reduce the chance of accidental fire.

6. Vegetation Installation and Management Timeline

6.1. Site Prep and Installation Phase

Site Preparation:

1. Prior to the start of construction, a cover crop may be seeded to aid in erosion control, soil moisture management, and weed suppression.
2. Inspection of the project area to assess site conditions and determine the need for any site prep mowing or spraying activities.
3. If necessary, an herbicide application will be completed using glyphosate (Round-up® or equivalent) as per manufacturer's directions in areas with actively growing vegetation. Allow a minimum of 14 days before disturbing the soil or completing seeding activities.
4. When perennial broadleaf vegetation is present a triclopyr herbicide will be added (Garlon 3A® or equivalent) as per manufacturer's directions. When a broadleaf herbicide is used allow a minimum of 30 days before disturbing the site or completing seeding.
5. Depending on the density and type of undesirable vegetation present (i.e., annual vs perennial) a complete site mowing might be advisable in lieu of an herbicide application. For instance, if the site is dominated by Foxtail (an annual), mowing would be preferrable to an herbicide application.

Soil Prep and Seeding:

1. Construction debris, garbage, and building materials will be removed and/or staged outside the intended seeding areas.
2. Disk soil within the project area in preparation for seeding. Harrow or rake the soil to achieve the proper seedbed.
3. Broadcast the large and fluffy seed (mostly grasses) along with a cover crop of winter wheat or oats.
4. Harrow or rake the soil to work the seed to a proper depth.
5. Broadcast the small seeds (forbs, sedges, rushes, small grass seeds) on top of the soil.

Installation Phase Maintenance

If the site is seeded in the summer or early fall, 1-2 complete site mowings may be needed during this first partial growing season.

6.2. Establishment Phase

Year 1 is defined as the 1st full growing season for the vegetation. A recommendation of 3 complete site mowings is most common for this phase. Depending on site conditions and vegetation growth, more or less may be needed.

Year 2 is the second full growing season. 3 total visits are typical with 2 complete site mowings and 1 Integrated Vegetation Maintenance visit the most likely combination.

Year 3 typically requires 3 IVM site visits depending on vegetation status. Maintenance Phase

Year 4 – 34. During the maintenance phase, 2 IVM visits are typical.

7. Monitoring

Consistent project monitoring is essential to evaluate vegetative establishment, weed presence, and possible erosion concerns. This information helps determine which management procedures to utilize, the proper timing for those procedures, and whether any other remedial action is required such as reseeding or replanting. As the site's vegetation matures, adaptive management should be utilized as previously described.

8. Seed Mixes

USS Rhea Solar Native Pollinator Mix

Seeding Rate - 11.5 lb/acre - 76.1 seed/ft²

Common Name	Scientific Name	Bloom Month	% of Mix by Weight	Lbs/Acre	Seeds per ft²	% of Mix by Seeds/ft²
Sideoats Grama	Bouteloua curtipendula		19.83%	2.28	5.03	6.60%
Prairie Brome	Bromus kalmii		0.87%	0.10	0.29	0.39%
Plains Oval Sedge	Carex brevior		3.04%	0.35	3.72	4.89%
Bicknell's Sedge	Carex bicknellii		1.05%	0.12	0.75	0.99%
Troublesome Sedge	Carex molesta		2.00%	0.23	2.11	2.77%
Brown Fox Sedge	Carex vulpinoidea		2.17%	0.25	9.18	12.06%
Silky Wild Rye	Elymus villosus		6.52%	0.75	1.52	1.99%
Little Bluestem	Schizachyrium scoparium		38.00%	4.37	24.07	31.63%
Prairie Dropseed	Sporobolus heterolepis		0.43%	0.05	0.29	0.38%
Graminoid Total			**73.91%**	**8.50**	**46.97**	**61.71%**
Common Yarrow	Achillea millefolium	Jun-Aug	0.48%	0.06	3.63	4.77%
Nodding Onion	Allium cernuum	Jul-Aug	0.26%	0.03	0.08	0.11%
Lead Plant	Amorpha canescens	Jun-Aug	1.44%	0.17	0.98	1.28%
Canada Anemone	Anemone canadensis	May-Jun	0.05%	0.01	0.02	0.02%
Wild Columbine	Aquilegia canadensis	Apr-Jun	0.05%	0.01	0.07	0.10%
Common Milkweed	Asclepias syriaca	Jun-Aug	0.37%	0.04	0.06	0.08%
Butterfly Milkweed	Asclepias tuberosa	Jun-Aug	0.35%	0.04	0.06	0.08%
Canada Milkvetch	Astragalus canadensis	Jun-Aug	1.18%	0.14	0.84	1.11%
Partridge Pea	Chamaecrista fasciculata	Jul-Sep	3.38%	0.39	0.39	0.51%
White Prairie Clover	Dalea candida	Jun-Sep	4.43%	0.51	3.56	4.67%
Purple Prairie Clover	Dalea purpurea	Jul-Sep	6.55%	0.75	4.98	6.54%
Cream Gentian	Gentiana flavida	Aug-Sep	0.05%	0.01	0.27	0.35%
Prairie Blazing Star	Liatris pycnostachya	Jul-Sep	0.26%	0.03	0.12	0.16%
Virginia Mountain Mint	Pycnanthemum virginianum	Jun-Sep	0.10%	0.01	0.95	1.24%
Prairie Wild Rose	Rosa arkansana	Jun-Aug	0.32%	0.04	0.03	0.04%
Black-eyed Susan	Rudbeckia hirta	Jun-Oct	2.09%	0.24	8.13	10.68%
Gray Goldenrod	Solidago nemoralis	Aug-Oct	0.05%	0.01	0.57	0.75%
Ohio Goldenrod	Solidago ohioensis	Aug-Sep	0.05%	0.01	0.21	0.28%
Calico Aster	Symphyotrichum lateriflorum	Aug-Oct	0.05%	0.01	0.48	0.63%
Sky Blue Aster	Symphyotrichum oolentangiense	Aug-Oct	0.17%	0.02	0.57	0.75%
Ohio Spiderwort	Tradescantia ohiensis	May-Jul	0.26%	0.03	0.09	0.12%
Hoary Vervain	Verbena stricta	Jun-Sep	1.56%	0.18	1.85	2.42%
Golden Alexanders	Zizia aurea	Apr-Jun	2.61%	0.30	1.21	1.59%
Forb Total			**26.09%**	**3.00**	**29.14**	**38.29%**
Mix Total			**100.00%**	**11.50**	**76.12**	**100.00%**

December 2025

Northern IL, mostly poorly drained and moderately well drained loam soils mix for the array and buffer areas

USS Rhea Solar Wet Areas Mix

Seeding Rate - 6 lb/acre - 138.3 seeds/ft^2

Common Name	Scientific Name	Bloom Month	% of Mix by Weight	Lbs/Acre	Seeds/ft^2	% of Mix by Seeds/ft^2
Bottlebrush Sedge	Carex comosa		6.00%	0.36	3.97	2.87%
Fringed Sedge	Carex crinita		6.00%	0.36	3.04	2.20%
Pointed-broom Sedge	Carex scoparia		3.00%	0.18	5.55	4.02%
Common Fox Sedge	Carex stipata		3.00%	0.18	2.25	1.63%
Brown Fox Sedge	Carex vulpinoidea		3.00%	0.18	6.61	4.78%
Fowl Manna Grass	Glyceria striata		0.30%	0.02	1.06	0.77%
Fowl Bluegrass	Poa palustris		11.70%	0.70	33.52	24.25%
Little Bluestem	Schizachyrium scoparium		36.00%	2.16	11.90	8.61%
Prairie Dropseed	Sporobolus heterolepis		6.00%	0.36	2.12	1.53%
Graminoid Total			**75.00%**	**4.50**	**70.02**	**50.64%**
Canada Anemone	Anemone canadensis	May-Jun	1.51%	0.09	0.27	0.19%
Canada Milkvetch	Astragalus canadensis	Jun-Aug	3.09%	0.19	1.16	0.84%
Nodding Bur Marigold	Bidens cernua	Jun-Sep	0.75%	0.05	0.35	0.25%
Southern Blue Flag Iris	Iris virginica shrevei	May-Jul	1.51%	0.09	0.03	0.02%
Great Blue Lobelia	Lobelia siphilitica	Jul-Oct	1.20%	0.07	13.22	9.56%
Monkey Flower	Mimulus ringens	Jun-Sep	0.60%	0.04	30.41	22.00%
Virginia Mountain Mint	Pycnanthemum virginianum	Jun-Sep	1.51%	0.09	7.32	5.30%
Black-eyed Susan	Rudbeckia hirta	Jun-Oct	4.14%	0.25	8.39	6.07%
Calico Aster	Symphyotrichum lateriflorum	Aug-Oct	0.90%	0.05	4.96	3.59%
Ohio Spiderwort	Tradescantia ohiensis	May-Jul	3.77%	0.23	0.66	0.48%
Golden Alexanders	Zizia aurea	Apr-Jun	6.02%	0.36	1.46	1.06%
Forb Total			**25.00%**	**1.50**	**68.24**	**49.36%**
Mix Total			**100.00%**	**6.00**	**138.26**	**100.00%**

December 2025

Recommended mix for wet areas on site

9. Pollinator Scorecard

Illinois Solar Site Pollinator Habitat Planning Form

Use this form as a draft before completing the *Illinois Planned Pollinator Habitat on Solar Sites Scorecard* online

In Between and Under Solar Panels

1. PLANNED PLANT DIVERSITY IN ROWS & UNDER SOLAR ARRAY (choose up to 2)
   - ☐ 4-6 species +5 pts
   - ☒ 7 or More species +8 pts
   - ☒ All Native Species (minimum 4 species) +10 pts

Perimeter and Buffer Area

2. VEGETATIVE BUFFER PLANNED ADJACENT TO THE SOLAR SITE (choose all that apply)
   - ☒ Buffer planned outside of array fencing +5 pts
   - ☒ Buffer is 30-49ft wide measured from array fencing +5 pts
   - ☐ Buffer is at least 50ft wide measured from array fencing +10 pts
   - ☐ Buffer has Native shrubs/trees that provide food for wildlife +5 pts

3. SEEDS USED FOR NATIVE PERIMETER & BUFFER AREAS (choose all that apply)
   - ☒ Mixes are seeded using at least 20 seeds per square foot of Pure Live Seed or 40 Seeds per square foot on slopes > 5% +10 pts
   - ☐ All seeds are from a source within 150 miles of site +5 pts
   - ☐ At least 2% milkweed cover is planned to be established from seeds/plants +5 pts

4. PLANNED # OF NATIVE SPECIES IN SITE PERIMETER & BUFFER AREA (species with more than 1% cover)(choose 1)
   - ☐ 5-10 species +2 pts
   - ☐ 10-15 species +5 pts
   - ☐ 16-20 species +10 pts
   - ☒ >20 species +15 pts

Exclude invasive and non-native plant species from total

5. PLANNED PERCENT OF PERIMETER & BUFFER AREA DOMINATED BY NATIVE PLANT SPECIES (choose 1)
   - ☐ 26- 50 % +2 pts
   - ☒ 51-75 % +10 pts
   - ☐ More than 75% +15 pts

Whole Site

6. PLANNED PERCENT OF SITE VEGETATION COVER TO BE DOMINATED BY DESIRABLE WILDFLOWERS (choose 1)
   - ☒ 26- 50 % +2 pts
   - ☐ 51-75 % +10 pts
   - ☐ More than 75% +15 pts

7. PLANNED SEASONS WITH AT LEAST THREE BLOOMING NATIVE SPECIES PRESENT (choose all that apply)
   - ☒ Spring (April-May) +5 pts
   - ☒ Summer (June-August) +5 pts
   - ☒ Fall (September-October) +5 pts

8. HABITAT SITE PREPARATION PRIOR TO IMPLEMENTATION (choose all that apply)
   - ☒ Soil preparation done to promote germination and reduce erosion as appropriate for the site. +10 pts
   - ☒ Measures taken to control weeds prior to seeding +10 pts
   - ☐ None -10 pts

9. AVAILABLE HABITAT COMPONENTS WITHIN 0.25 MILES (choose all that apply)
   - ☐ Native bunch grass for bee nesting +2 pts
   - ☒ Native trees/shrubs for bee nesting +2 pts
   - ☐ Clean, perennial water sources +2 pts
   - ☐ Created habitat nesting features +2 pts

10. SITE PLANNING AND MANAGEMENT(choose all that apply)
    - ☒ Detailed establishment and management plan developed +10 pts
    - ☐ Signage legible at forty or more feet stating "pollinator friendly solar habitat" +3 pts

11. INSECTICIDE RISK (choose all that apply)
    - ☐ Planned on-site use of insecticide or pre-planting seed/plant treatment (excluding buildings/electrical boxes, etc.) -40 pts
    - ☐ Communication/registration with local chemical applicators or on www.fieldwatch.com to prevent drift +5 pts

Total Points: 107

Meets Preliminary Pollinator Standards - 85
Provides Exceptional Habitat - 110 and higher

Owner: USS Rhea Solar LLC
Vegetation Consultant: Natural Resource Services, Inc
Project Location: Elburn, Kane County, Illinois
Project Size: ~37.6 **acres**
Final Seeding Date: TBD

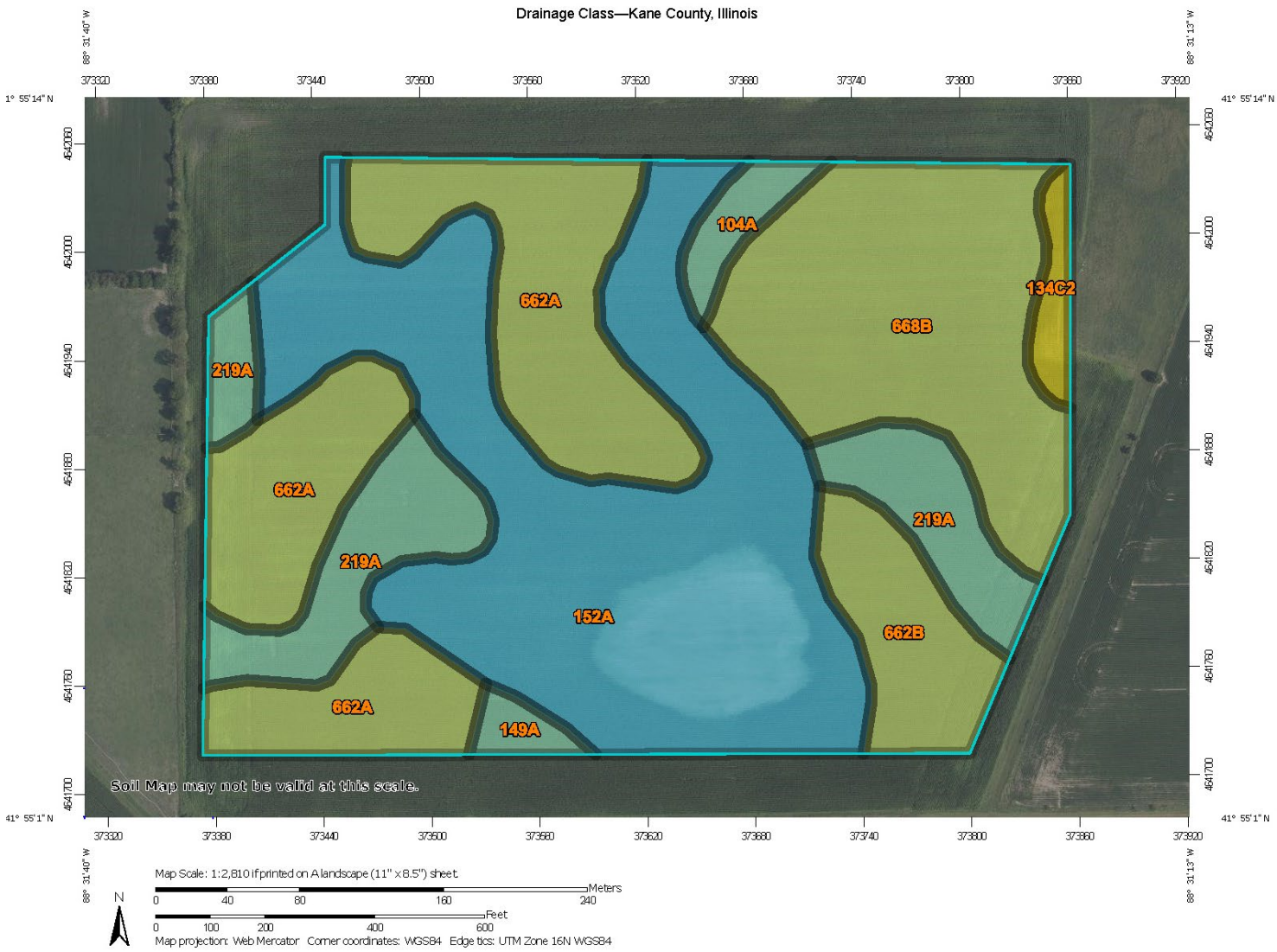
This form is designed (with the help of the Solar Site Pollinator Guidelines found on IDNR's website) to guide owners or managers of solar sites to meet the requirements to be able to claim a site is pollinator friendly according to the "Pollinator Friendly Solar Site Act (525 ILCS 55)". This form is for company records only and does not grant the title of a Pollinator Friendly Solar Site until the "Illinois Planned Pollinator Habitat on Solar Sites Scorecard" is completed with a score of 85 or higher on IDNR's website. This preliminary recognition is good for 3yrs, after which the "Established Pollinator Habitat on Solar Sites Scorecard" will need to be completed every 5 years to maintain recognition as a Pollinator Friendly Solar Site.

12/3/2019

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

12.16.2025

10. Soils Maps



Drainage Class

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
104A	Virgil silt loam, 0 to 2 percent slopes	Somewhat poorly drained	0.7	1.8%
134C2	Camden silt loam, 5 to 10 percent slopes, eroded	Well drained	0.6	1.5%
149A	Brenton silt loam, 0 to 2 percent slopes	Somewhat poorly drained	0.4	1.0%
152A	Drummer silty clay loam, 0 to 2 percent slopes	Poorly drained	13.4	36.1%
219A	Millbrook silt loam, 0 to 2 percent slopes	Somewhat poorly drained	4.3	11.6%
662A	Barony silt loam, 0 to 2 percent slopes	Moderately well drained	8.8	23.6%
662B	Barony silt loam, 2 to 5 percent slopes	Moderately well drained	2.2	5.9%
668B	Somonauk silt loam, 2 to 5 percent slopes	Moderately well drained	6.9	18.4%
Totals for Area of Interest			**37.3**	**100.0%**

Description

"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."