2022 Habitat Friendly Solar Summit Aurora Utility Solar Case Study

We exist to Heal the Earth

Jake Janski Director of Field Services



Aurora Solar

- 16 sites across 12 Counties
- Site size ranges:
 - 3.5-10 MW
 - 40-100 Acre
- Dry sandy soil to heavy wet soil types
- Habitat Friendly seeding throughout



Seed Mix Design

Goals: Habitat vs Grazing Tolerance for disturbance Cost and Market Availability Soil Types and Hydrology Germination Success Species to Avoid





Aurora Solar

Array Mix - Sandy Soils

Date:	10/24/2016	
Total Acres:	1.00	
Grass Ibs/ac:	11.70	
Forb lbs/ac:	1.30	
Cover Crop Ibs/ac:	15.00	
Total lbs/ac:	28.00	-



Aurora Solar Prairie Mix - Xeric

Date:	10/24/2016
Total Acres:	1.00
Grass Ibs/ac:	9.75
Forb lbs/ac:	3.25
Cover Crop lbs/ac:	15.00
Total Ibs/ac:	28.00

8740 77th Street NE Otseps, MN 55362

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Aurora's Assortment of Habitat Friendly Seed Mixes 3 Seeding Area Types: *Open Prairie, Arrays, and Wetlands* Up to 4 Seed Mix Options for each: *Xeric soils, Mesic soils, Heavy soils and "Weed Control" mixes*



11



Creating & Implementing a Vegetation Plan

Understanding the Site Goals and Seed Mixes Designed Establishment vs Long Term Maintenance Phases Using the Whole Toolbox Timelines and Metrics Setting Expectations Planning to be Adaptive





Vegetation Management: Grazing Pollinator Habitat

Height and Density reduction Fire Risk Mitigation Agricultural Utilization Reduced Risk of Infractions Nutrient Recycling Habitat Enhancement?

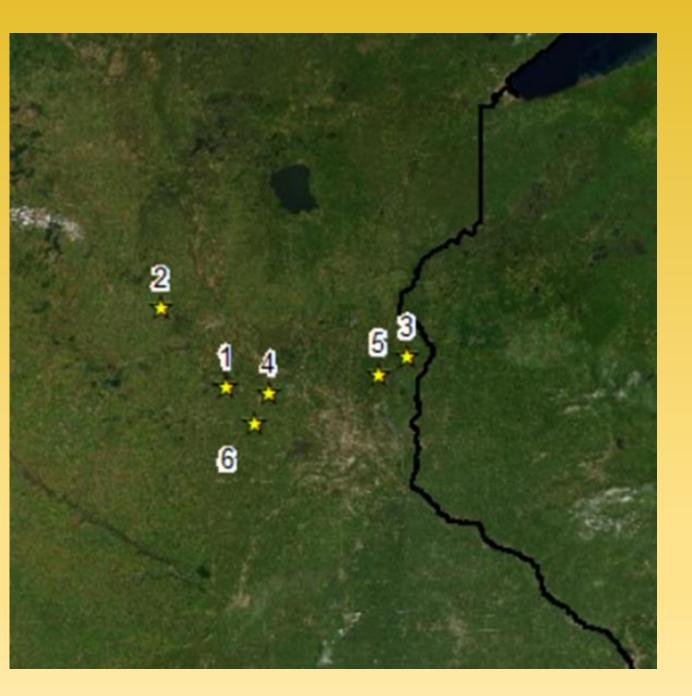




Post-Grazing of Pollinator Habitat

Left: Low intensity graze deployment for vegetation height/density reduction Right: High intensity graze deployment for thatch removal

MN



MNL's Pollinator Habitat Quality Study via MDA AGRI Grant

- Three-year study, starting in 2020, to determine the impacts of prescribed sheep grazing on restored pollinator habitat vegetation density and diversity
- Six study sites across MN selected All sites were seeded with diverse pollinator friendly native mixes in 2016-2017 and were considered "established" at the onset of the study
 - All will be managed with sheep grazing instead of mechanical mowing
- Each plot is sampled up to three times a year in June, July and August from 2020-2022
- 2020 baseline data shows little change in plant community composition as expected
- Annual reports are published in the MDA Greenbook (<u>https://www.mda.state.mn.us/greenbook</u>)



Post-Grazing of Pollinator Habitat Ungrazed "Control Plot" Grazed "Study Plot"













Questions?

MRE

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