



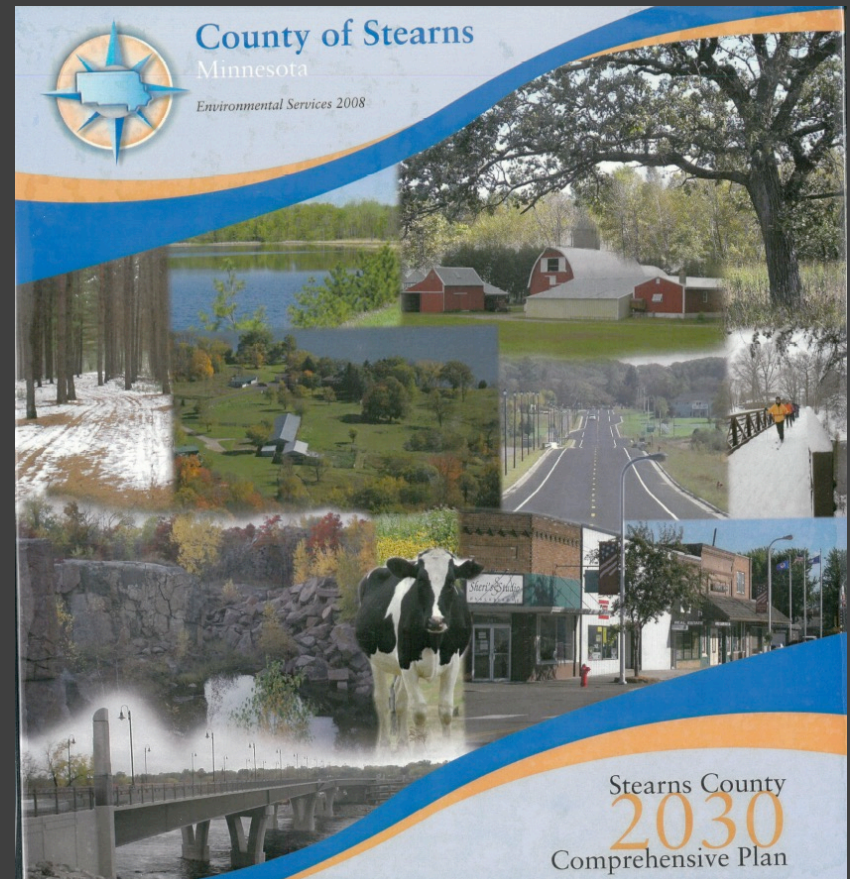
Stearns County  
*Minnesota*

# Solar in Stearns County

Jennifer Buckentine

# 2008

- Comprehensive Plan
- Objective 4. Encourage use of renewable energy systems, including wind energy and solar energy, which reduce the footprint of development on local and global natural systems.

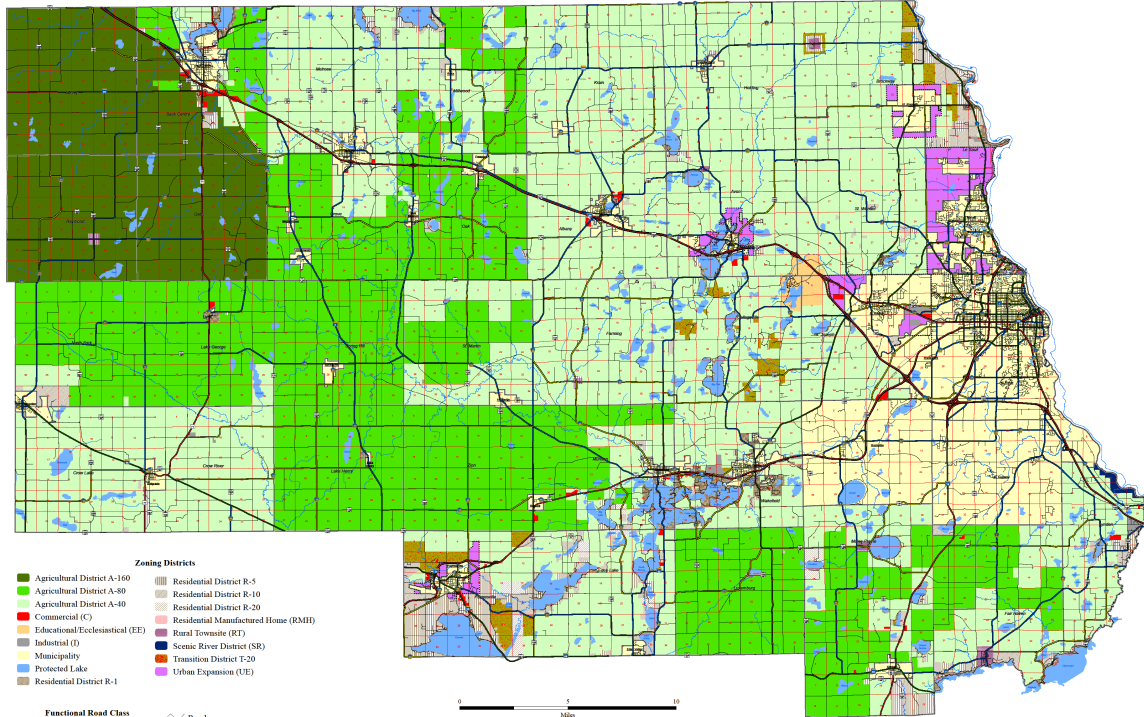




- St. John's University request
- Zoning Ord amendment
- Limited - Educational/ Ecclesiastical

2009

## Stearns County Official Zoning Map



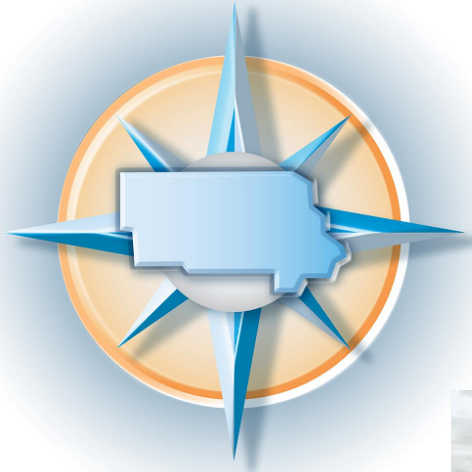
- Expanded to Ag Districts
- Solar Accessory

2010



Zoning Ordinance #229  
June 17, 2010

Date: 9/20/20



**LAND USE AND ZONING ORDINANCE #439**

Printed June 17, 2015



- More ordinance updates
  - Definitions
  - Setbacks
  - Screening

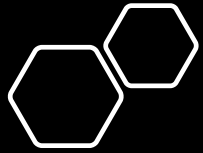
2015



- Solar Work Group
- Ordinance updates again!
  - Impervious clarified
  - Greater dwelling setback
  - Large scale tree removal
  - **Beneficial habitat standards**

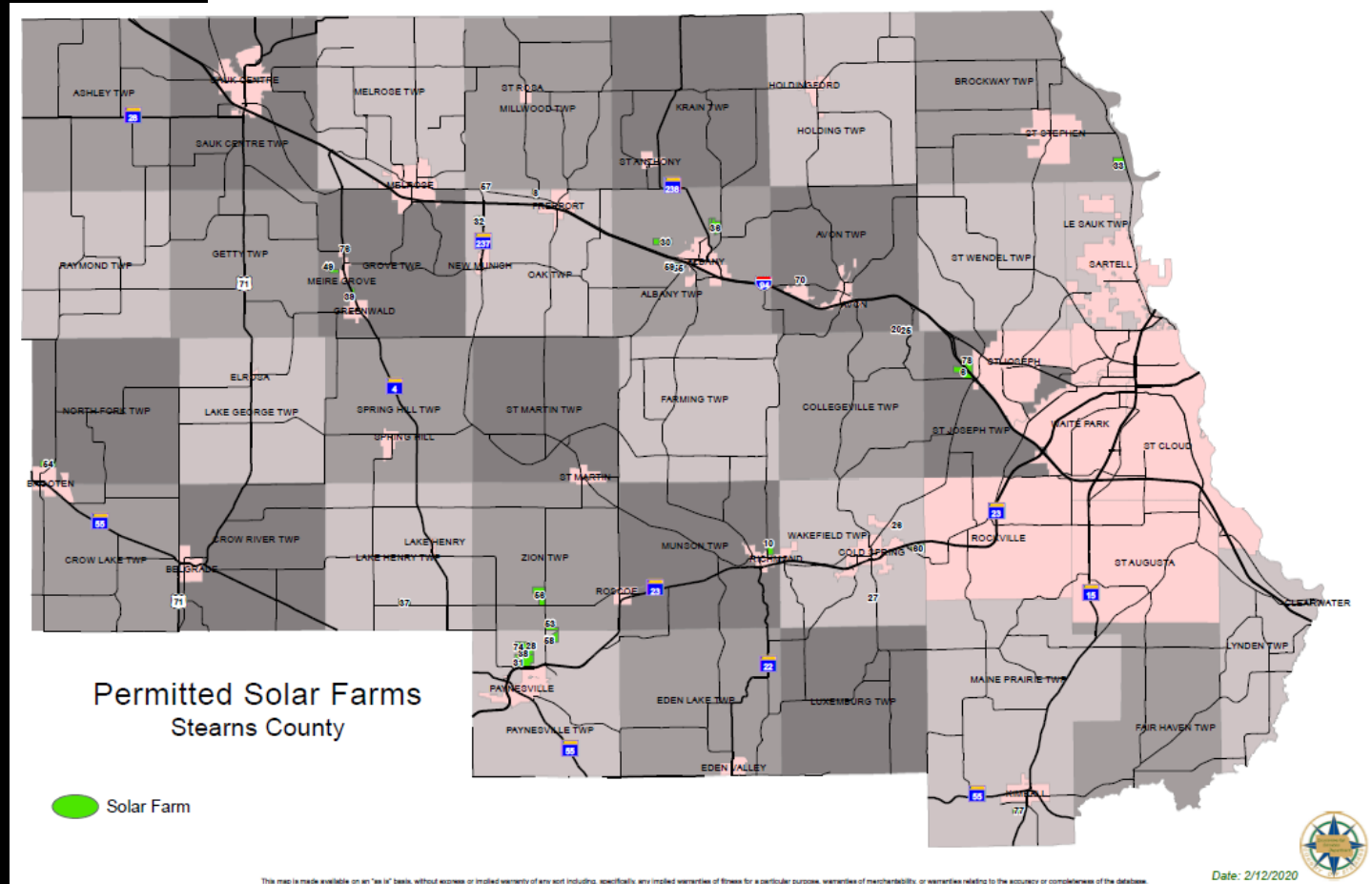


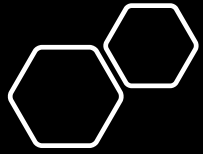
2016



# Today

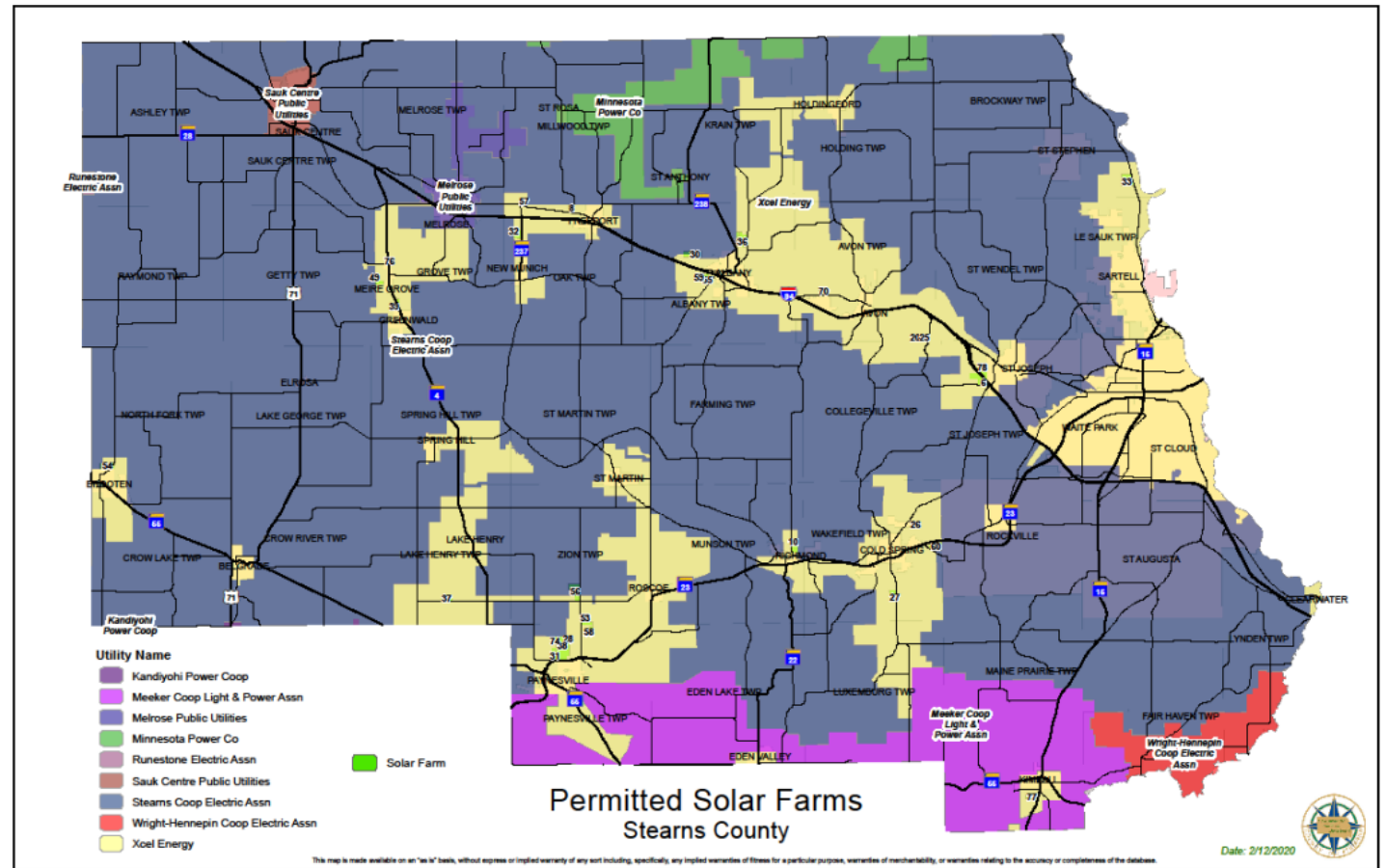
- 58MW solar permitted by County
- 30MW permitted by State





# Today

- 58MW solar permitted by County
- 30MW permitted by State





# What does the Ordinance address?

- Stormwater management & erosion control
- Foundations
- Power & communication lines
- Screening
- Setbacks

# What does the Ordinance address?

- Detailed site plan
- Decommissioning
- Aviation analysis
- Visual impact analysis

# What does the Ordinance address?

- Vegetation management
  - Tree removal
  - Ground cover
    - Beneficial habitat standards – MN Statutes, section 216B.1642
    - Maintained for duration of operation
    - Financial guarantee required

## Habitat Friendly Solar Plantings

2016 – 2019

- BWSR review plans
- Stearns Environmental Services follow up

 **BOARD OF WATER  
AND SOIL RESOURCES**

## Habitat Friendly Solar Plantings

New in 2020!

- Collaboration with **Stearns SWCD** and BWSR



# Meeting the Beneficial Habitat Standard

## Conditional Use permit conditions:

- Shall install and establish ground cover meeting the beneficial habitat standards consistent with Minnesota Statutes, section 216B.1642
- Assessment form required prior to construction site permit
- Financial guarantee required prior to construction site permit
- Maintained for life of project



Stearns County  
*Minnesota*

# Meeting the Beneficial Habitat Standard

## Construction site permit/ building permit:

- Planting plan and Project Planning Assessment Form
- \$\$ for seeding installation
- \$\$ for follow up inspections
- Also \$\$ for decommissioning and screening

DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL
Dirt Work: Disk & Harrow	9.5 Acres	\$200.00	\$1,900.00
Seeding	9.5 Acres	\$175.00	\$1,662.50
Array Area Seed Mix	35 LBS	\$134.63	\$4,712.05
Open Area Pollinator Mix	76.71 LBS	\$104.75	\$8,035.37
Low Growing Solar Array Moist Soils Mix	0.6 LBS	\$126.98	\$632.36
		<b>Total Quote</b>	<b>\$16,942.28</b>

**Solar Site Pollinator Habitat Assessment Form for Project Planning**  
For solar companies and local governments to meet pollinator/wildlife habitat certification

**1. PERCENT OF PROPOSED SITE VEGETATION COVER TO BE DOMINATED BY WILDFLOWERS**

31-45% +5 points  
 46-60% +10 points  
 61+% +15 points  
 Total points:

*Note: Projects may have "array" mixes and diverse border mixes; forb dominance should be averaged across the entire site. The dominance should be calculated from total numbers of forb seeds vs. grass seeds (from all seed mixes) to be planted.*

**2. PLANNED % OF SITE DOMINATED BY NATIVE SPECIES COVER**

25-50% +5 points  
 51-75% +10 points  
 76-100% +15 points  
 Total points:

**3. PLANNED COVER DIVERSITY (# of species in seed mixes; numbers from upland and wetland mixes can be combined)**

1-2 species +5 points  
 3-4 species +10 points  
 5+ species +15 points  
 # of points:

**4. AT LEAST 3 BLOOMING**

1-2 bloom stations +2 points  
 3+ bloom stations +2 points  
 # of points:

**5. NESTING WITHIN (if that apply)**

nesting +2 points  
 nesting +2 points  
 # of points:

**6. SITE PLANNING AND MANAGEMENT**

Detailed establishment and management plan developed (see [example plan](#)) with funding/contract to implement +15 points  
 Signage legible at forty or more feet starting pollinator friendly solar habitat (at least 1 every 20ac.) +5 points  
 Total points:

**7. SEED MIXES**

Mixes are composed of at least 40 seeds per square foot +5 points  
 All seed genetic origin within 175 miles of site ([pg. 2-3 of Guidance](#)) +5 points  
 At least 2% milkweed cover to be established from seeds/plants +10 points  
 Total points:

**8. INSECTICIDE RISK**

Planned on-site insecticide use or pre-planting seed/plant treatment (excluding buildings/electrical boxes, etc.) -40 points  
 Communication/registration with local chemical applicators about need to prevent drift from adjacent areas. +10 points  
 Total points:

**Grand Total**

**Provides Exceptional Habitat Meets Pollinator Standards >85 70-84**

Project Name: \_\_\_\_\_  
 Vegetation Consultant: \_\_\_\_\_  
 Project County: \_\_\_\_\_  
 Project Size: \_\_\_\_\_  
 Projected Seeding Date: \_\_\_\_\_

# Meeting the Beneficial Habitat Standard

## Inspections

- Years 1, 2 and 3
- Every 3 years thereafter
- 11 inspections total/project
- Established Project Assessment Form
- Funding



**m BWSR** Solar Site Pollinator Habitat Assessment Form for Established Plantings (after year 3)  
For solar companies and local governments to meet pollinator/wildlife habitat certification

**1. PERCENT OF SITE DOMINATED BY WILDFLOWERS**

1-15 % +10 points  
 16-30 % +15 points  
 31-45 % +20 points  
 46-60 % +25 points  
 61+ % +30 points

Total points

**2. % OF SITE DOMINATED BY NATIVE SPECIES COVER**

1-25% +5 points  
 26-50% +10 points  
 51-75% +15 points  
 76-100% +20 points

Total points

**3. DIVERSITY (# of plant species with >1% cover)**

1-5 species +5 points  
 6-10 species +10 points  
 11-15 species +15 points  
 16-20 species +20 points

Total points

**4. AT LEAST 3 BLOOMING SPECIES (add all that apply)**

1-3 (May) +5 points  
 4-5 (June-August) +5 points  
 6-7 (September-October) +5 points

Total points

**5. HABITAT COMPONENTS WITHIN (add all that apply)**

Grasses for nestling +2 points

**6. AVAILABLE HABITAT COMPONENTS ON-SITE (check/add all that apply)**

At least 2% milkweed cover +5 points  
 Detailed mgmt. plan developed (see [example plan](#)) with funding/contract to implement +15 points  
 Signage legible at forty or more feet stating pollinator friendly solar habitat (at least 1 every 20ac.) +5 points  
 Constructed nesting habitat feature/s (bee blocks, etc.) +5 points

Total points

**7. INSECTICIDE RISK**

Planned on-site insecticide use. (excluding buildings/electrical boxes, etc.) -25 points  
 Communication/registration with local chemical applicators about need to prevent drift from adjacent areas +10 points

Total points

Grand Total

Provides Exceptional Habitat Meets Pollinator Standards >85 70-84

Project Name: \_\_\_\_\_  
 Vegetation Consultant: \_\_\_\_\_  
 Project County: \_\_\_\_\_  
 Project Size: \_\_\_\_\_

Send completed forms, project plans, seed mixes and



# Meeting the Beneficial Habitat Standard

SWCD → BWSR

- Habitat Friendly Solar Projects list

SWCD → Stearns ESD & BSWR

- Issues with planting
- Follow up with solar company



# Meeting the Beneficial Habitat Standard



QUESTIONS?

Jennifer Buckentine

Stearns County Environmental Services

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