



# Monarch CCAA

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# What it is and isn't

## What it is:

- Federal Endangered Species Act, 50 CFR 17
- CCAA – One of several ways to comply with ESA
- Optional / Voluntary

## What it isn't:

- A mandate
- The only option



## Endangered Species Act

*"The term 'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."*

# Important Resources

- MnDOT State Aid Website
  - Environmental Forms & Information
  - <http://www.dot.state.mn.us/stateaid/environmental-forms.html>
- University of Illinois – Chicago (UIC)
  - <http://rightofway.erc.uic.edu/>
- USFWS Website
  - <https://www.fws.gov/savethemonarch/CCAA.html>

## Information

### Monarch Butterfly CCAA

- [Important Caveats for Monarch CCAA Items Posted on State Aid Website](#)
- [Sample Board Presentation on CCAA \(PowerPoint\)](#)
- [St. Louis County Board Presentation \(PowerPoint\)](#)
- [CCAA Common FAQs \(PDF\)](#)
- [Example Request for Board Action \(PDF\)](#)
- [Example Monarch CCAA Letter to Residents \(Stearns County\) \(PDF\)](#)
- [Draft Monarch CCAA Application \(Stearns County\) \(PDF\)](#)
- [Monarch CCAA Implementation Phase Map \(Stearns County\) \(PDF\)](#)
- [Monarch CCAA Enrolled and Adopted Area Calculation \(St. Louis County\) \(PDF\)](#)
- [Kandiyohi County Approved Monarch CCAA Application \(PDF\)](#)
- [Monarch CCAA Information Webinar #1 \(YouTube\)](#)
- [Webinar #1 Presentation Slides \(PowerPoint\)](#)
- [Monarch CCAA Information Webinar #2 \(YouTube\)](#)
- [Webinar #2 Presentation Slides \(PowerPoint\)](#)
- [Monarch CCAA Information Webinar #3](#)

# Monarch Butterflies 101

- Monarch butterflies typically arrive in MN in May
- Multiple generations during Minnesota's summer
- Eggs laid on or near milkweed
- Pupate in a chrysalis that is formed away from milkweed (on grasses, shrubs, and artificial structures (fencing, walls, posts, etc.)
- Adults that emerge in August / September migrate south



# Business Case

- Monarch butterflies, milkweed, and floral resources relatively common on Minnesota roadsides
- Monarchs present throughout most of the growing / construction season (May to September)
- *Take* reasonably certain to occur during routine maintenance/operations activities, and on many projects
- Compliance strategy needed; predictability desired for planning and risk management



# Business Case

- Permitting need anticipated for non-federal actions, including both maintenance and projects
- Streamlining desired for federal undertakings to avoid project-specific formal consultation (Federal aid, permits: USACE, USFS, etc.)
  - Formal consultation = 6-8 months, minimum
  - Standard consultation = 15-45 days, average
- Statewide need vs case-by-case
- Habitat Conservation Plan (HCP) is most common compliance process for non-federal activities, but is time consuming and expensive
  - May take multiple years to develop (~ 3 yrs avg)
- Detailed cost/benefit not needed, business case is clear




# Monarch CCAA

- Programmatic approach
- Public-private collaboration
- Reduced costs
- Reduced workload
- Consistency
- Only requires 5-8% of roadsides to be managed with monarchs in mind



First instar monarch caterpillar.



Nationwide Candidate Conservation Agreement for Monarch Butterfly on Energy and Transportation Lands

An integrated Candidate Conservation Agreement with Assurances (CCAA) and Candidate Conservation Agreement (CCA)

March 2020

CN-00048251

# Conservation Measures

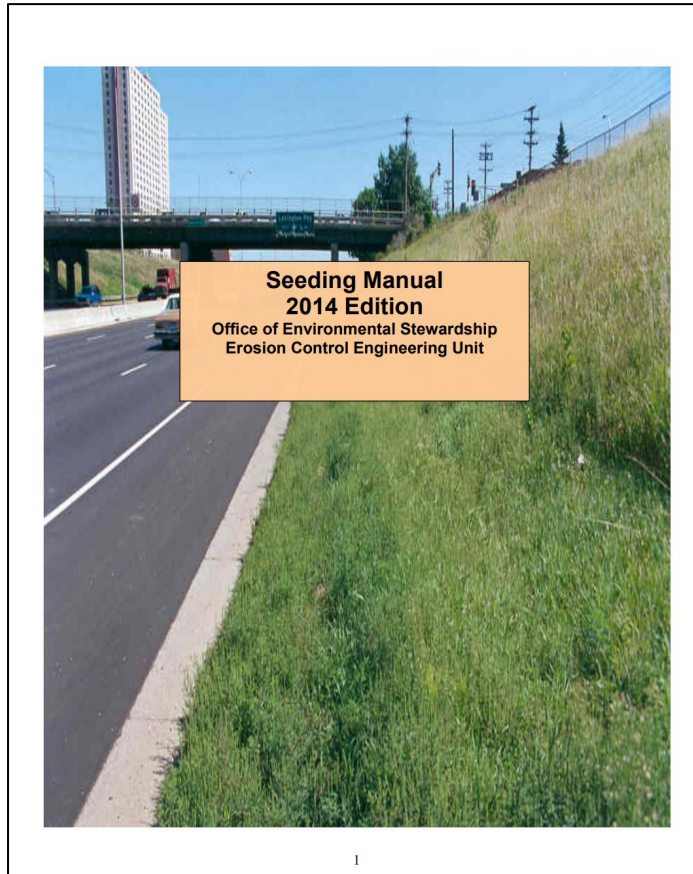
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- Idling lands
  - Conservation and strategic mowing
  - Native seeding
  - Roadside prairie management plans
  - Research
  - Outreach, Education, Collaboration



***You may already be doing this!***



# Seed Mixes



Update anticipated later this year

## 45-241

## PowerFull Mix

Common Name	Scientific Name	Rate (lb/ac)	Rate (kg/ha)	Seeds/ sq ft
Annual Ryegrass	<i>Lolium multiflorum</i>	8.00	8.97	39.85
Sheep Fescue	<i>Festuca ovina</i>	7.00	7.85	85.20
Park Kentucky bluegrass	<i>Poa pratensis Park</i>	5.00	5.60	159.50
big bluestem	<i>andropogon gerardii</i>	4.25	4.76	15.60
little bluestem	<i>Schizachyrium scoparium</i>	3.00	3.36	16.55
switchgrass	<i>Panicum virgatum</i>	3.00	3.36	15.45
fowl bluegrass	<i>Poa palustris</i>	2.00	2.24	95.50
side-oats grama	<i>Bouteloua curtipendula</i>	2.00	2.24	4.40
Indian grass	<i>Sorghastrum nutans</i>	1.50	1.68	6.60
woolgrass	<i>scirpus cyperinus</i>	0.25	0.28	155.00
<b>Grasses Subtotal</b>		<b>36.00</b>	<b>40.35</b>	<b>593.65</b>
Field Pea	<i>Pisum sativum</i>	15.00	16.81	1.03
Canada milk vetch	<i>Astragalus canadensis</i>	2.00	2.24	12.50
purple prairie clover	<i>Dalea purpurea</i>	2.00	2.24	11.00
Annual Alfalfa	<i>Medicago sativa "Nitro"</i>	2.00	2.24	10.40
<b>Legumes Subtotal</b>		<b>21.00</b>	<b>23.54</b>	<b>34.93</b>
forage radish	<i>Raphanus sativus var. longipinnatus</i>	3.00	3.36	2.70
Early Sunflower	<i>Heliopsis helianthoides</i>	0.15	0.17	0.35
black-eyed susan	<i>Rudbeckia hirta</i>	0.15	0.17	5.00
common yarrow	<i>Achillea millefolium</i>	0.10	0.11	6.50
wild bergamot	<i>Monarda fistulosa</i>	0.10	0.11	2.50
smooth aster	<i>Symphotrichum laeve</i>	0.10	0.11	2.00
stiff goldenrod	<i>Oligoneuron rigidum</i>	0.10	0.11	1.50
Maximilian's sunflower	<i>Helianthus maximilianii</i>	0.10	0.11	0.50
golden alexanders	<i>Zizia aurea</i>	0.10	0.11	0.40
common milkweed	<i>Asclepias syriaca</i>	0.10	0.11	0.15
<b>Forbs Subtotal</b>		<b>4.00</b>	<b>4.48</b>	<b>21.60</b>
<b>Total</b>		<b>61.00</b>	<b>68.37</b>	<b>650.18</b>
<b>Purpose:</b>	Early and long-term erosion control on roadsides, in wet-mesic through dry soils			
<b>Planting Area:</b>	Statewide			

# More than monarchs...

**40+ species**

of birds & small mammal  
nest on roadsides in MN



Roadsides may be the  
**only remaining  
habitat** in intensively  
farmed areas

In some areas

**40% of pheasants**

in the fall population  
are produced on roadsides

*MINNESOTA HUNTING & FISHING*

# Thank you

**Christopher E. Smith**

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