

# Lincoln County Service Center Pollinator Project

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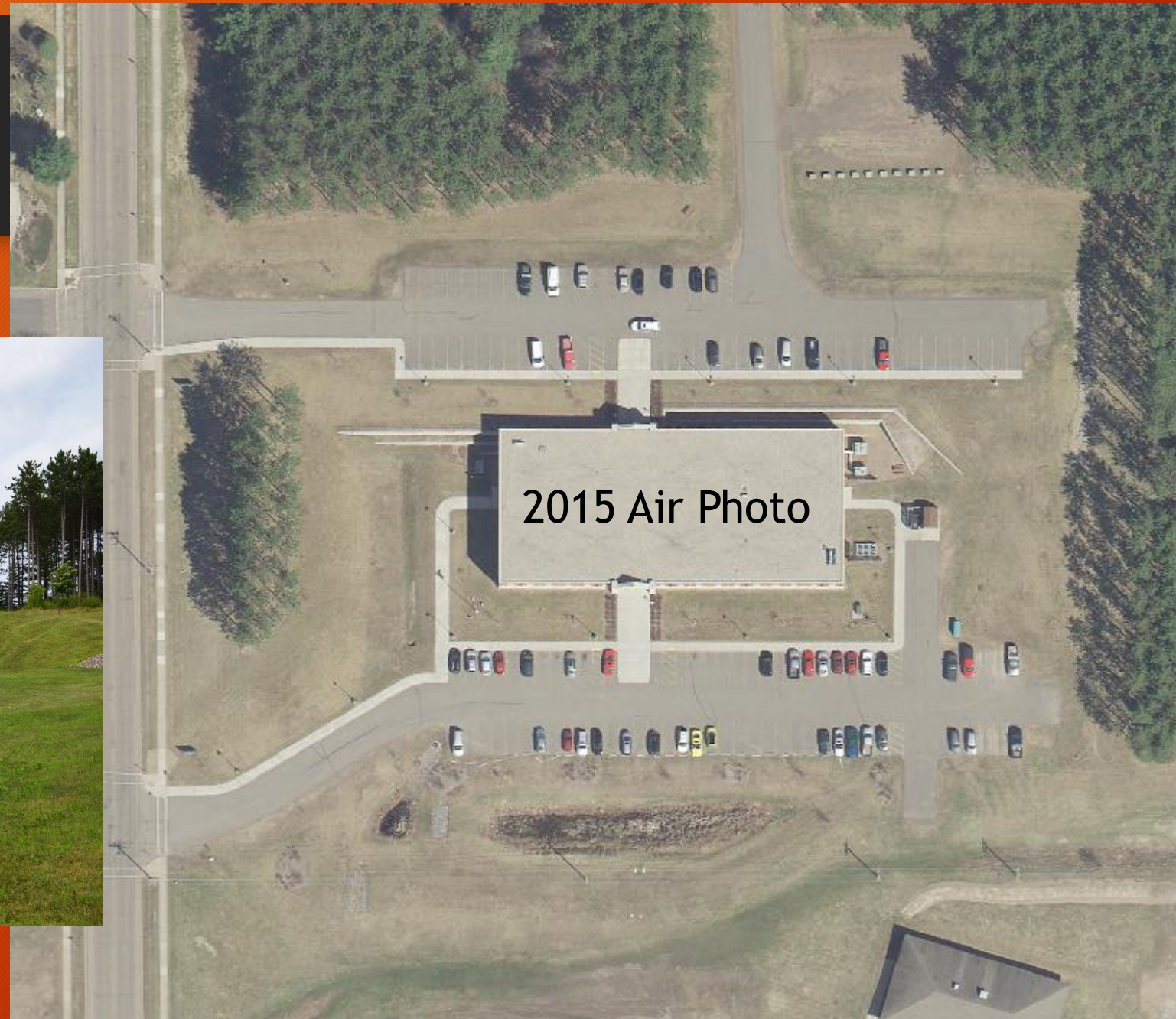


# Presentation Overview

- Starting the project
  - Committee approval
  - Funding
- Implementing the project
  - Site preparation
  - Seeding
  - Educational field day
- Future of the project
  - Maintenance
  - Educational events
- Future cost savings

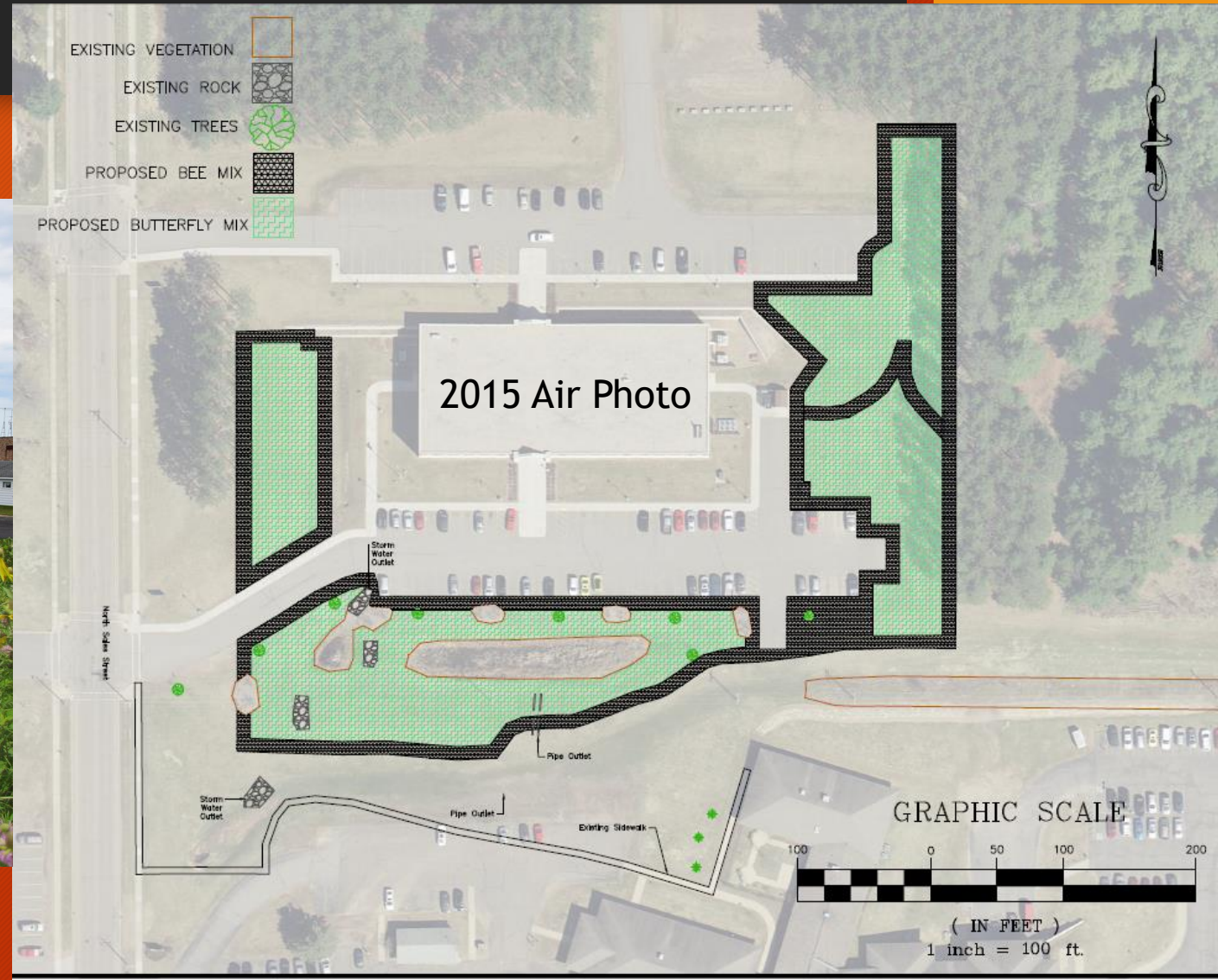


# Starting The Project





# Idea Is Taking “Root”





# Starting The Project

## Committee Approval

- Land Services Committee
- Maintenance Committee

## Funding

- Seed funded by *The Bee & Butterfly Habitat Fund*  
(estimated value \$3,000)
- Match contributions
  - Staff hours (60 Hours)
  - Machine hours (40 Hours)
  - Donated straw mulch (\$200)



# Implementing The Project

## Site Preparation



Sprayed 6-10-19



Rototilled 7-16-19



Soil Finisher 7-25-19



# Implementing The Project

## Honey Bee Mix Seeding



Seeded 7-25-19



### WI Honey Bee Mix

<u>Scientific Name</u>	<u>Common Name</u>	<u>PLS LB/Acre</u>	<u>PLS Oz/Acre</u>	<u>% of Mix</u>
<i>Medicago sativa</i>	Alfalfa*	0.500		6.2%
<i>Trifolium hybridum</i>	Alsike Clover	0.400		15.3%
<i>Trifolium incarnatum</i>	Crimson Clover	2.000		16.4%
<i>Trifolium repens</i>	Ladino White Clover	0.400		19.1%
<i>Trifolium pratense</i>	Medium Red Clover	0.900		13.5%
<i>Onobrychis viciifolia</i>	Sainfoin	2.000		3.3%
<i>Phacelia tanacetifolia</i>	Phacelia	0.460		5.5%
<i>Agastache foeniculum</i>	Anise Hyssop/Fragrant Giant Hyssop	0.010		0.8%
<i>Rudbeckia hirta</i>	Black-Eyed Susan	0.030		2.6%
<i>Helianthus maximiliani</i>	Maximilian Sunflower	0.100		1.1%
<i>Andropogon gerardii</i>	Big Bluestem*	0.300		2.7%
<i>Elymus canadensis</i>	Canada Wildrye	0.800		5.0%
<i>Schizachyrium scoparium</i>	Little Bluestem-Aldous	0.600		8.5%

Total	8.500	0.000	100.0%
Total Seeding Rate (PLS LB/Acre):	8.500	Rev Date:	11/28/18



# Implementing The Project

## Educational Field Day/Monarch Mix Seeding



Seeded 9-25-19

### WI Monarch Butterfly Mix

Scientific Name	Common Name	PLS LB/Acre	PLS Oz/Acre	% of Mix
<i>Medicago sativa</i>	Alfalfa*	0.200		2.8%
<i>Trifolium hybridum</i>	Alsike Clover	0.080		3.5%
<i>Trifolium incarnatum</i>	Crimson Clover	0.800		7.5%
<i>Trifolium repens</i>	Ladino White Clover	0.080		4.4%
<i>Trifolium pratense</i>	Medium Red Clover	0.250		4.3%
<i>Onobrychis viciifolia</i>	Sainfoin	1.300		2.5%
<i>Phacelia tanacetifolia</i>	Phacelia	0.300		4.1%
<i>Agastache foeniculum</i>	Anise Hyssop/Fragrant Giant Hyssop	0.015		1.4%
<i>Rudbeckia hirta</i>	Black-Eyed Susan	0.040		4.0%
<i>Gaillardia aristata</i>	Blanket Flower	0.150		1.8%
<i>Verbena hastata</i>	Blue Vervain	0.020		2.0%
<i>Asclepias tuberosa</i>	Butterfly Milkweed	0.040		0.2%
<i>Astragalus canadensis</i>	Canada Milkvetch	0.100		1.7%
<i>Asclepias syriaca</i>	Common Milkweed	0.060		2.2%
<i>Oenothera biennis</i>	Evening Primrose	0.025		2.2%
<i>Helianthus helianthoides</i>	False Sunflower/Early Sunflower/Ox-Eye Sunflower	0.140		0.9%
<i>Penstemon digitalis</i>	Foxglove Beardtongue	0.015		0.4%
<i>Zizia aurea</i>	Golden Alexanders	0.030		0.3%
<i>Solidago nemoralis</i>	Gray Goldenrod/Dwarf Goldenrod/Old Field Goldenrod	0.003		0.9%
<i>Ratibida pinnata</i>	Grayhead Coneflower/Yellow Coneflower	0.075		2.0%
<i>Symphotrichum ericoides</i>	Heath Aster	0.005		1.0%
<i>Verbena stricta</i>	Hoary Vervain	0.030		1.3%
<i>Desmanthus illinoensis</i>	Illinois Bundleflower	0.250		1.3%
<i>Vernonia fasciculata</i>	Ironweed	0.015		0.4%
<i>Coreopsis lanceolata</i>	Lance-Leaved Coreopsis/Sand Coreopsis	0.080		1.1%
<i>Helianthus maximiliani</i>	Maximilian Sunflower	0.060		0.7%
<i>Symphotrichum novae-angliae</i>	New England Aster	0.015		1.0%
<i>Echinacea pallida</i>	Pale Purple Coneflower	0.030		0.2%
<i>Chamaecrista fasciculata</i>	Partridge Pea	0.300		0.8%
<i>Ratibida columnifera</i>	Prairie Coneflower/Longheaded Coneflower	0.060		2.8%
<i>Lotus unifoliolatus</i>	Prairie Trefoil/American Birdsfoot Trefoil	0.020		0.5%
<i>Echinacea purpurea</i>	Purple Coneflower	0.150		1.1%
<i>Dalea purpurea</i>	Purple Prairie Clover	0.130		2.6%
<i>Helianthus grosseserratus</i>	Sawtooth Sunflower	0.011		0.4%
<i>Penstemon grandiflorus</i>	Shell Leaf Penstemon/Large-Flowered Beardtongue	0.020		0.3%
<i>Solidago speciosa</i>	Showy Goldenrod	0.008		0.8%
<i>Desmodium canadense</i>	Showy Tick Trefoil	0.040		0.2%
<i>Symphotrichum laeve</i>	Smooth Blue Aster	0.015		1.0%
<i>Oligoneuron rigidum</i>	Stiff Goldenrod	0.015		1.2%
<i>Asclepias incarnata</i>	Swamp Milkweed	0.013		0.1%
<i>Eupatorium altissimum</i>	Tall Boneset	0.006		1.0%
<i>Achillea millefolium</i> var. <i>occidentalis</i>	Western Yarrow	0.015		2.7%
<i>Dalea candida</i>	White Prairie Clover	0.045		1.1%
<i>Monarda fistulosa</i>	Wild Bergamot/Bee Balm	0.026		2.1%
<i>Andropogon gerardii</i>	Big Bluestem*	0.400		4.1%
<i>Elymus canadensis</i>	Canada Wildrye	0.600		4.3%
<i>Schizachyrium scoparium</i>	Little Bluestem	0.400		6.5%
<i>Koeleria macrantha</i>	Prairie Junegrass	0.030		4.4%
<i>Bouteloua curtipendula</i>	Sideoats Grama*	0.500		6.0%
Total		7.012	0.000	100.0%
Total Seeding Rate (PLS LB/Acre):		7.012	Rev Date:	11/28/18



# Evaluating Your New Planting

- 40-50% of seed may be dormant
- Grows quite slowly the first season
  - Will need to be mowed to control competition





# Future Of The Project

## Maintenance

- Mow - 1<sup>st</sup> year, 2020
  - Once a month
- Mow - 2<sup>nd</sup> year, 2021
  - Once between April-May
- Burn - 3<sup>rd</sup> year, 2022 and beyond
  - Burn rotation, different section each year





# Future Of The Project

- Interpretive signage
- Seed Library
- Apiary
- Education Field Days





# Future Cost Savings

## Old Turf Grass Maintenance

- Mowing 2 times per week cost \$165
  - \$82.5 per mowing
- Mowing for a year costs \$2,640
  - About 16 growing weeks between frosts (110 days)

## Cost Savings

- Year One- \$1,980
- Year Two- \$2,475
- Savings after 5 years = \$13,200













# Questions?

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