

6.22 West Waconia

The proposed West Waconia facility has a capacity of 8.5 MW AC and is located in Section 1 of Young America Township in Carver County. The site is located north/northeast of the city of Young America, northeast of the intersection of 118th Street and State Highway 25. Preliminary design anticipates access to the facility from a newly constructed drive off of 118th Street. Aurora’s site control is 75.7 acres. Preliminary plans anticipate a development area of approximately 78.1 acres. The preliminary development area is larger than the land control to accommodate possible interconnection in the public ROW on the north side of Highway 5/25. Electricity from the facility would be delivered to Xcel Energy’s West Waconia Substation located approximately 1.7 miles northeast of the facility.

The facility is located within the Minnesota and Northeastern Iowa Morainal Section of the Eastern Broadleaf Forest Province. Land cover within the preliminary development area (Table 39) is dominated by cultivated crops (92.4 percent). The proposed location avoids the developed area of Norwood Young America to the southwest, but is otherwise comparable in land cover to the agricultural cover that dominates the study area around the West Waconia Substation (Figure 92).

Table 39: West Waconia Facility - Land Cover

Land Cover	Control Area		Development Area		Study Area	
	Acres	Percent	Acres	Percent	Acres	Percent
Open Water	--	--	--	--	771.2	6.1%
Developed, Open Space	2.3	3.0%	1.6	2.0%	457.6	3.7%
Developed, Low Intensity	0.5	0.7%	3.4	4.4%	175.0	1.4%
Developed, Medium Intensity	--	--	--	--	10.8	0.1%
Developed, High Intensity	--	--	--	--	--	--
Barren Land	--	--	--	--	--	--
Deciduous Forest	0.4	0.5%	0.4	0.5%	737.6	5.9%
Evergreen Forest	--	--	--	--	22.6	0.2%
Mixed Forest	--	--	--	--	11.1	0.1%
Shrub/Scrub	--	--	--	--	262.1	2.1%
Grassland Herbaceous	--	--	--	--	66.6	0.5%
Pasture/Hay	0.5	0.7%	0.5	0.7%	2,529.6	20.2%
Cultivated Crops	72.1	95.1%	72.1	92.4%	6,769.7	53.9%
Woody Wetlands	--	--	--	--	1.1	0.0%
Emergent Herbaceous Wetlands	--	--	--	--	738.8	5.9%
Totals	75.7	100.0%	78.1	100.0%	12,553.7	100.0%

6.22.1 Effects on Human Settlement

The location is a cultivated parcel located in rural area with scattered rural residences. The nearest home is located approximately 440 feet northwest of the preliminary development area. Construction of the facility will not result in displacement of any homes or businesses. The site has not been identified as being within an orderly annexation area and is located in Carver County's "A" Agricultural District. Under Chapter 152 of the Carver County Code, a minimum setback of 15 feet from any property line and 35 feet from existing or planned road right-of-way for any structure or fence of greater than six feet in height. Solar farms are a conditional use in the Agricultural District; electrical lines are required to be buried.¹⁸⁷ The area of site control is designated as Agriculture in the Carver County 2030 Land Use Plan.¹⁸⁸

A snowmobile trail follows the ditch along State Highway 25 along the northern portion of the facility. No other recreational trails, county, state or local parks identified within one-half mile of the proposed facility. Construction and operation of the facility would not impact the use of nearby recreational resources.

The site is adjacent to State Highway 25; MnDOT has requested that the site be designed to provide an adequate clear zone from Minnesota Highway 25.¹⁸⁹

No mitigation measures beyond those described in Section 5.2 are identified for the West Waconia facility.

6.22.2 Effects on Land Based Economies

The proposed facility would remove approximately 73 acres from agricultural use for at least 25 years. Aurora's proposed Lester Prairie facility is located within 10 miles of the West Waconia facility. Together the two facilities would remove approximately 97 acres from agricultural production for at least 25 years.

Approximately 40 acres (51 percent) of the developed area are considered to be prime farmland and 22 acres (28 percent) are considered to be prime farmland if drained (Table 13). Within the comparison area surrounding the West Waconia Substation, approximately 36 percent is considered to be prime farmland and 24 percent is considered to be prime farmland if drained. Given that prime farmland or prime farmland if drained comprise the majority of the study area, it is likely that any alternate locations would also be sited on prime farmland or prime farmland if drained (Figure 94).

¹⁸⁷ Carver County Ordinance, Section 152,
http://www.co.carver.mn.us/departments/LWS/docs/Code_Title_15.PDF

¹⁸⁸ Carver County 2030 Comprehensive Plan, Land Use - Young America Township.
http://www.co.carver.mn.us/departments/LWS/docs/YoungAmericaTWP_100427.pdf

¹⁸⁹ MnDOT Comments, September 30, 2014, at p. 2

The proposed project would not impact tourism, mining or mineral extraction activity, or forest resources of economic importance.

No mitigation measures beyond those described in Section 5.3 are identified for the West Waconia facility.

6.22.3 Effects on Archaeological and Historic Resources

No archaeological sites were identified in a survey of the West Waconia facility. No mitigation measures beyond those described in Section 5.4 are identified for the West Waconia facility.

6.22.4 Effects on Natural Environment

There are no rivers, streams or lakes within the area of facility site control. Field delineations performed in the summer of 2014 identified approximately 1.5 acres of Type 3 wetlands (shallow marsh) in the area of land control.¹⁹⁰

The preliminary design for the facility anticipates grading of approximately 59.7 acres of the site during construction.¹⁹¹

No mitigation measures beyond those described in Section 5.5 are identified for the West Waconia facility.

6.22.5 Effects on Rare and Unique Natural Resources

A review of the NHIS database did not identify any documented instances of state or federally listed endangered, threatened or special concern species within one mile of the area of site control for the West Waconia facility.¹⁹²

No mitigation measures beyond the field survey described in Section 5.6 are identified for the West Waconia facility.

¹⁹⁰ Appendix C

¹⁹¹ Application, at Appendix F

¹⁹² Application, at p. 81

Figure 91: West Waconia Project Detail



- Residence Location
- Proposed Inverter
- Proposed Arrays
- Proposed Road
- Proposed Grading Area

- Preliminary Development Area
- Facility Land Control
- Municipal Boundary

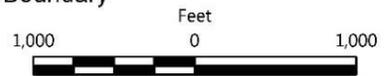


Figure 92: West Waconia Land Cover Overview

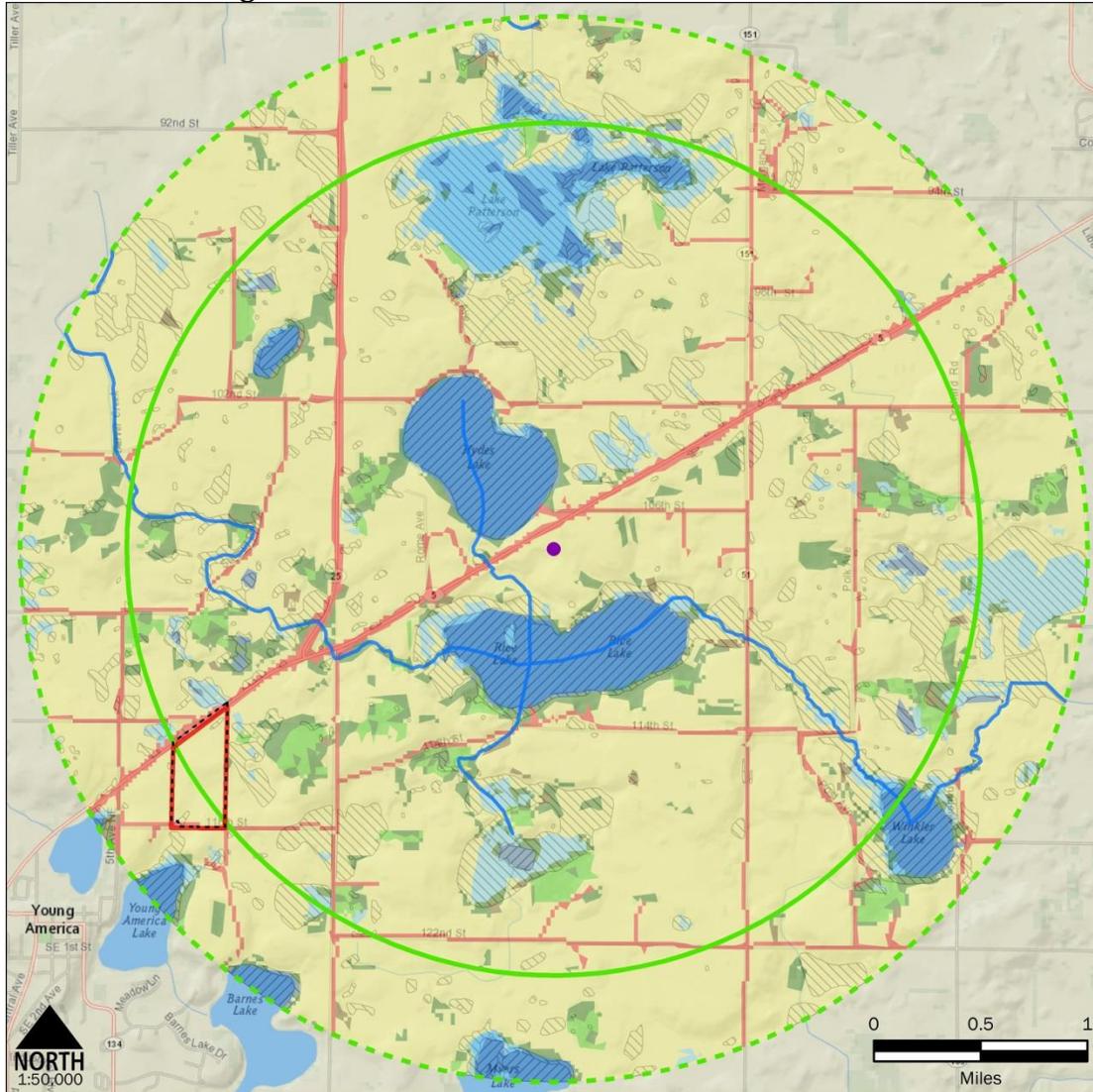
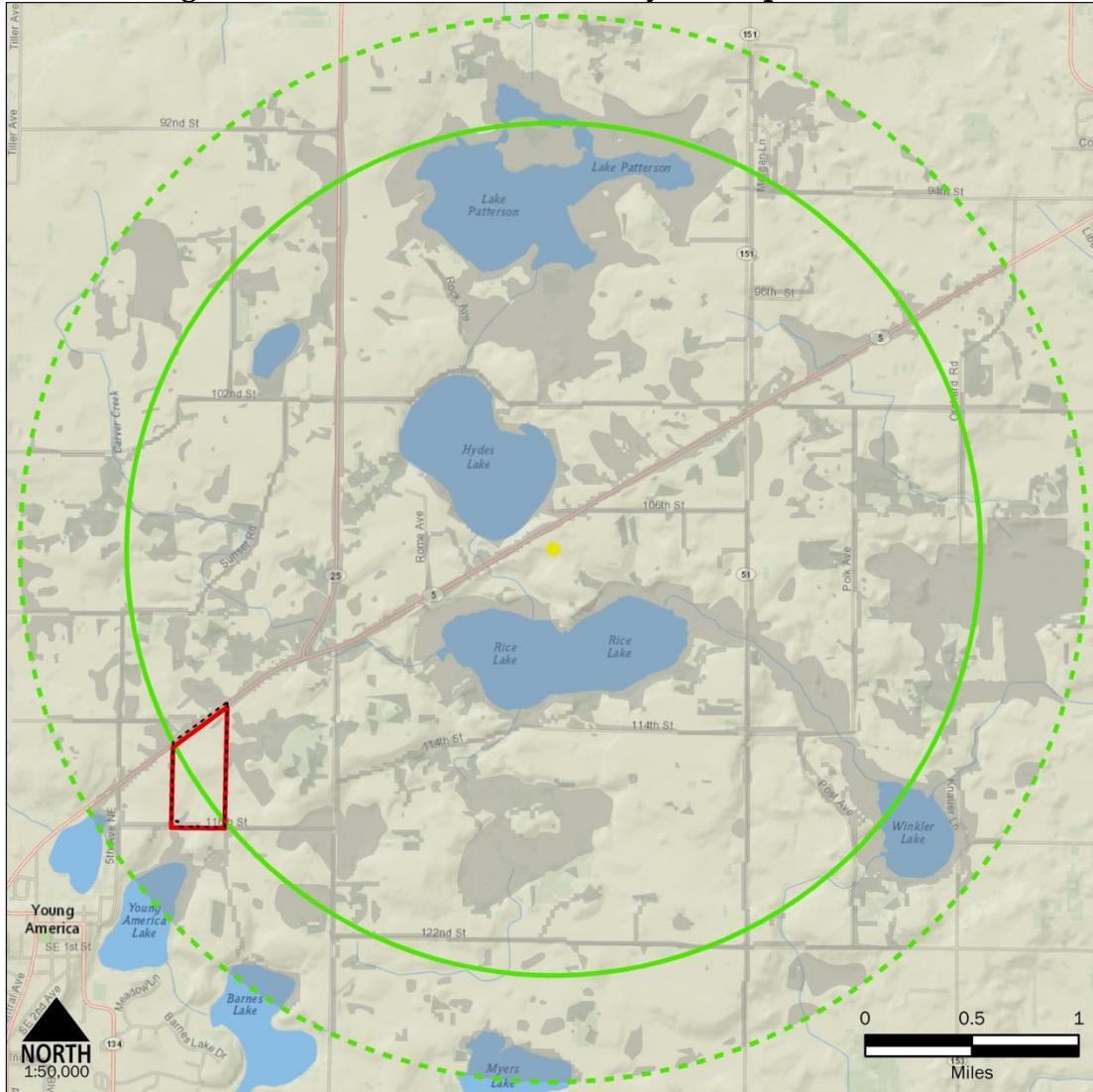


Figure 93: West Waconia Generally Incompatible Areas



**West Waconia Facility
 Generally Incompatible Areas**

- Substation
- Preliminary Development Area
- Facility Control Area
- 2-mile Analysis Buffer
- 2.5-mile Analysis Buffer
- Generally Incompatible Areas

“Generally Incompatible Areas” include: Minnesota Scientific and Natural Areas; Minnesota Wildlife Management Areas; US Fish and Wildlife Service Waterfowl Production Areas; the National Wetland Inventory; and areas classified as open water, developed, forest, and wetland in the National Land Cover Database.



Figure 94: West Waconia Prime Farmland and Other Areas

