

## 6.7 Eastwood

The proposed Eastwood facility has a capacity of 5.5 MW AC and is located in Section 14 of Mankato Township in Blue Earth County. The site is located east of the city of Mankato, southwest of the intersection of County Highway 17 and County Road 186. Aurora anticipates that access to the facility will be through a newly constructed access road off of County Road 186. Preliminary plans anticipate that all of the 49.7 acres of Aurora’s site control would be developed for the facility. Electricity from the facility will be delivered to Xcel Energy’s Eastwood Substation, located approximately 1.2 miles northwest 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 21) is dominated by cultivated crops (93 percent). The preliminary development area avoids Mankato to the west, and is similar in agricultural land cover to the eastern portion of the study area around the Eastwood Substation (Figure 31).

**Table 21: Eastwood Facility Land Cover**

Land Cover	Control Area		Development Area		Study Area	
	Acres	Percent	Acres	Percent	Acres	Percent
Open Water	-	-	-	-	236.4	1.9%
Developed, Open Space	1.9	3.9%	1.9	3.9%	1,440.6	11.5%
Developed, Low Intensity	-	-	-	-	1,297.7	10.3%
Developed, Medium Intensity	0.1	0.1%	0.1	0.1%	1,437.9	11.5%
Developed, High Intensity	-	-	-	-	631.3	5.0%
Barren Land	-	-	-	-	80.5	0.6%
Deciduous Forest	1.3	2.5%	1.3	2.5%	447.5	3.6%
Evergreen Forest	-	-	-	-	1.3	0.0%
Mixed Forest	-	-	-	-	-	-
Shrub/Scrub	-	-	-	-	4.7	0.0%
Grassland Herbaceous	0.2	0.5%	0.23	0.5%	457.8	3.7%
Pasture/Hay	-	-	-	-	101.2	0.8%
Cultivated Crops	46.2	93.0%	46.2	93.0%	5,817.9	46.3%
Woody Wetlands	-	-	-	-	58.9	0.5%
Emergent Herbaceous Wetlands	-	-	-	-	540.2	4.3%
<b>Totals</b>	<b>49.7</b>	<b>100.0%</b>	<b>49.7</b>	<b>100.0%</b>	<b>12,553.94</b>	<b>100.0%</b>

### 6.7.1 Effects on Human Settlement

The facility is on a cultivated parcel located in a predominantly agricultural area with scattered rural residences. The nearest home is located approximately 220 feet south of the preliminary development area. Construction of the facility will not result in displacement of any homes or businesses.

The facility is located in the Greater East Mankato Infill District, an extra-territorial planning area of the city of Mankato. Mankato Township and the city of Mankato have entered into a Joint Resolution for Orderly Annexation for the entire township; under the joint resolution all non-farm development is required to be annexed into the city prior to development. The area of site control is designated as low density residential in the Land use Plan.

There are no recreational trails, county, state or local parks within one-half mile of the proposed facility. Construction and operation of the facility would not impact the use of nearby recreational resources.

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

### **6.7.2 Effects on Land Based Economies**

The proposed facility would remove approximately 46 acres from agricultural use. At this time EERA staff is not aware of any other announced solar developments in the area of the proposed facility, so there is no indication that the conversion of land from agricultural uses would be part of a cumulative reduction of available land for crops or pasture.

Approximately 8.5 acres (17 percent) of the preliminary development area are considered to be prime farmland and 41.2 acres (83 percent) of the preliminary development area are considered to be prime farmland if drained (Table 13). The prime farmland exclusion in Minnesota Rule 7850.4400, Subpart 4 does not apply to the Eastwood facility as it is within an orderly annexation area.

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 Eastwood facility.

### **6.7.3 Effects on Archaeological and Historic Resources**

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

### **6.7.4 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 show approximately 2.71 acres of wetlands within the

area of land control; 2.14 acres of Type 1 (seasonally flooded basins or floodplains, 0.01 acres of Type 2 (wet meadow) and 0.56 acres of Type 3 (shallow marsh)).<sup>112</sup>

The preliminary design for the facility does not anticipate any grading of the site during construction.<sup>113</sup>

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

### **6.7.5 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 Eastwood facility.<sup>114</sup>

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

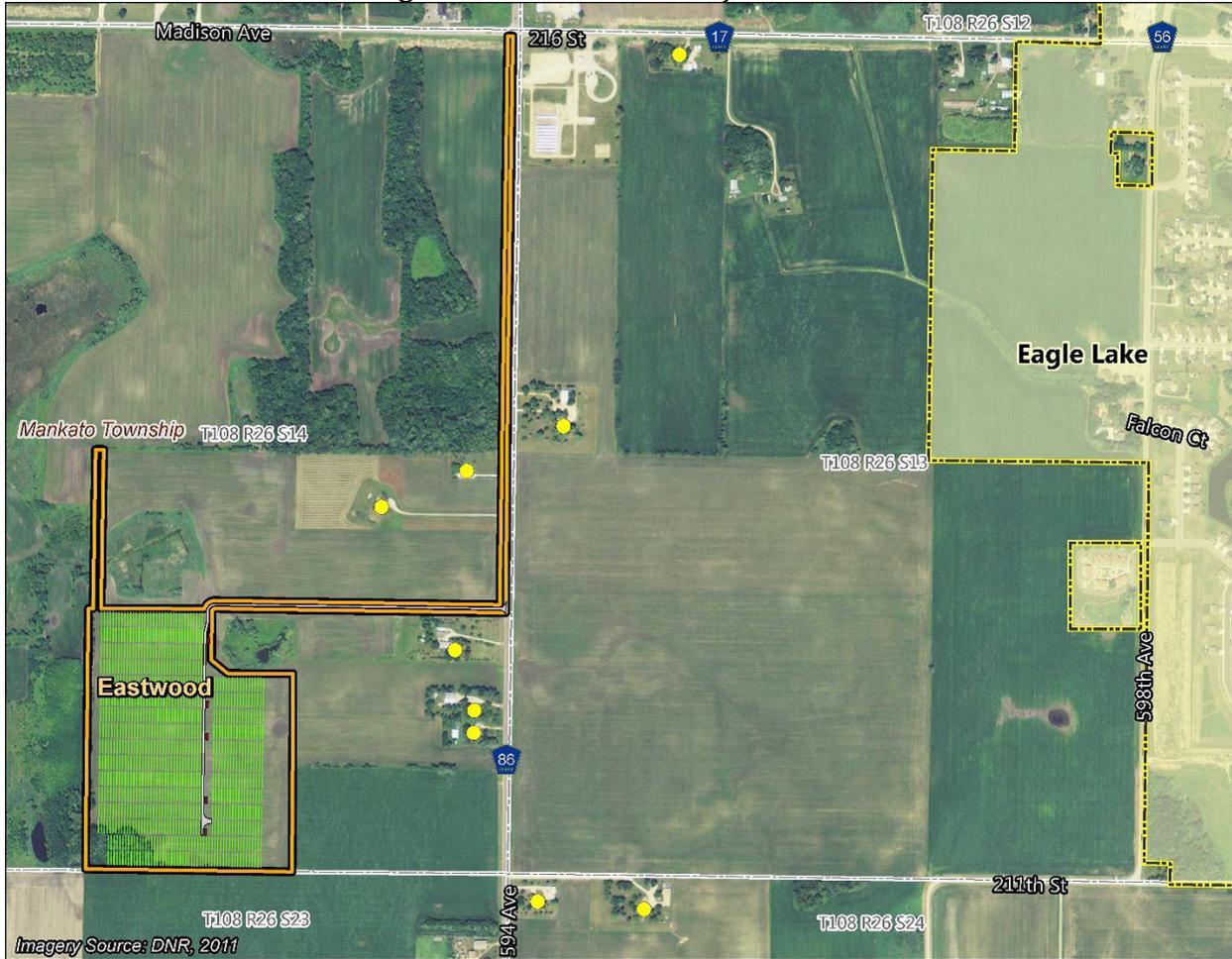
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<sup>112</sup> Appendix C

<sup>113</sup> Application, at Appendix F

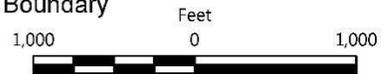
<sup>114</sup> Application, at p. 81

**Figure 30: Eastwood Project Detail**

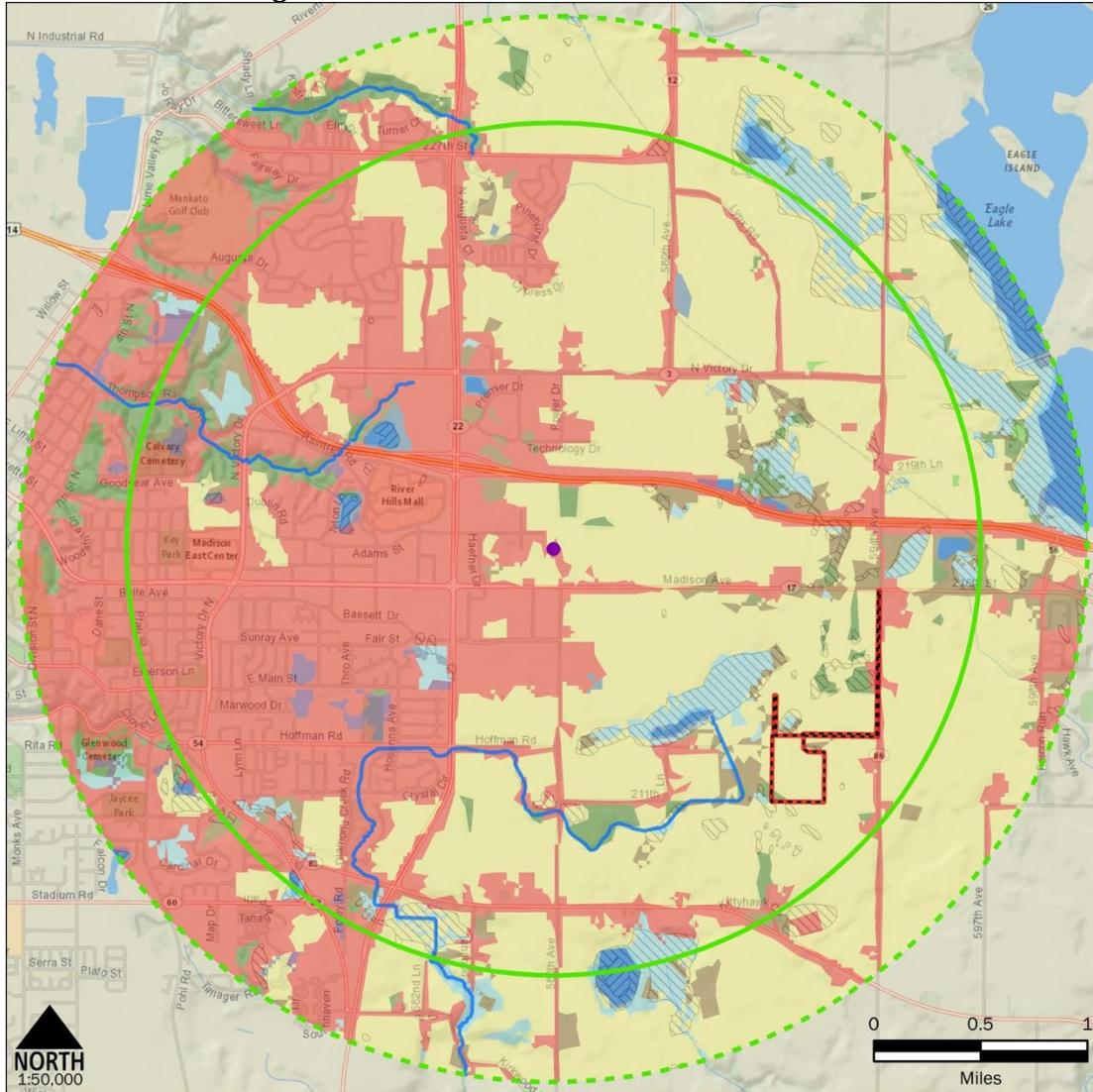


- Residence Location
- Proposed Inverter
- Proposed Arrays
- Proposed Road
- Proposed Grading Area

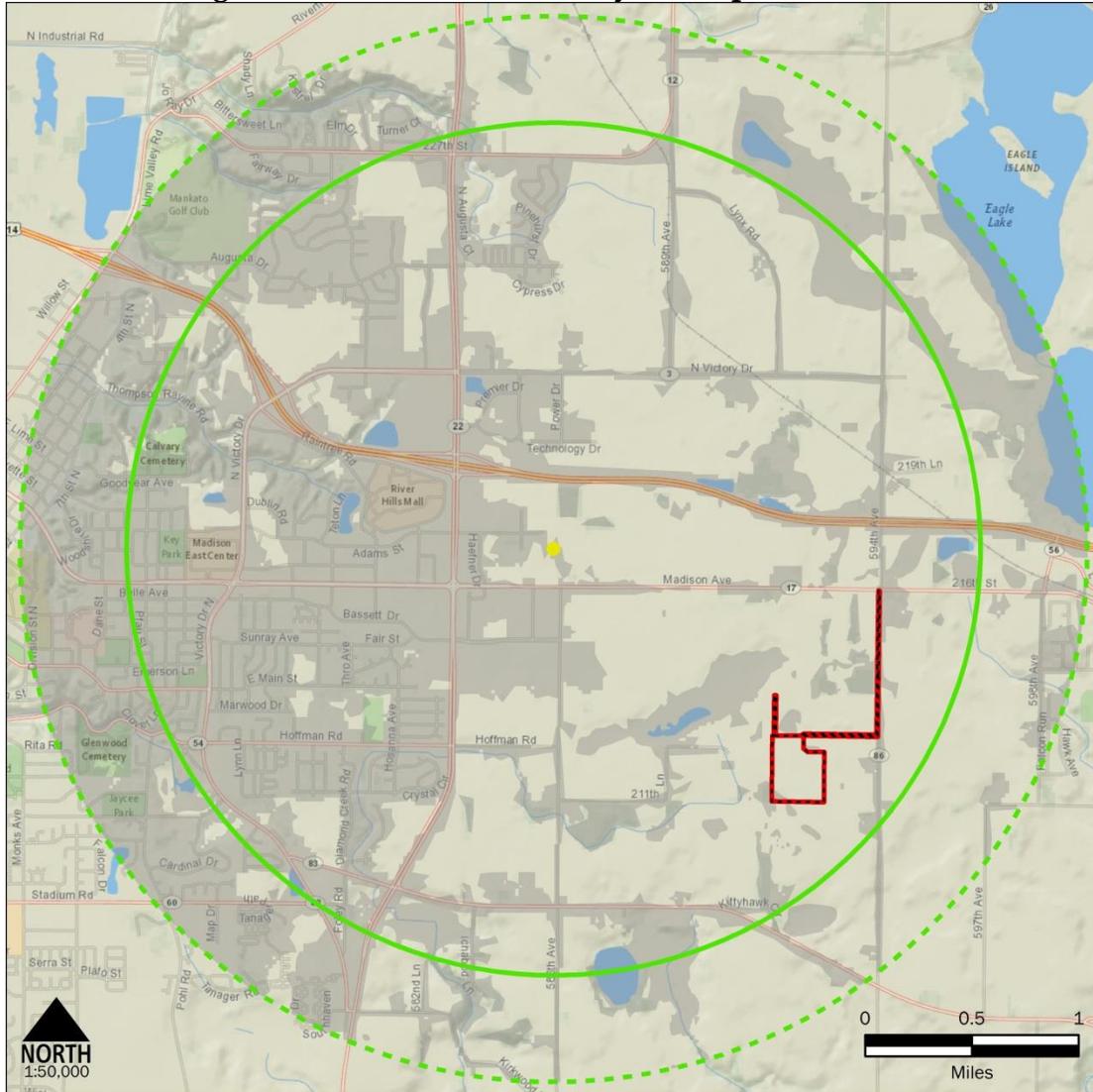
- Preliminary Development Area
- Facility Land Control
- Municipal Boundary



**Figure 31: Eastwood Land Cover Overview**



**Figure 32: Eastwood Generally Incompatible Areas**



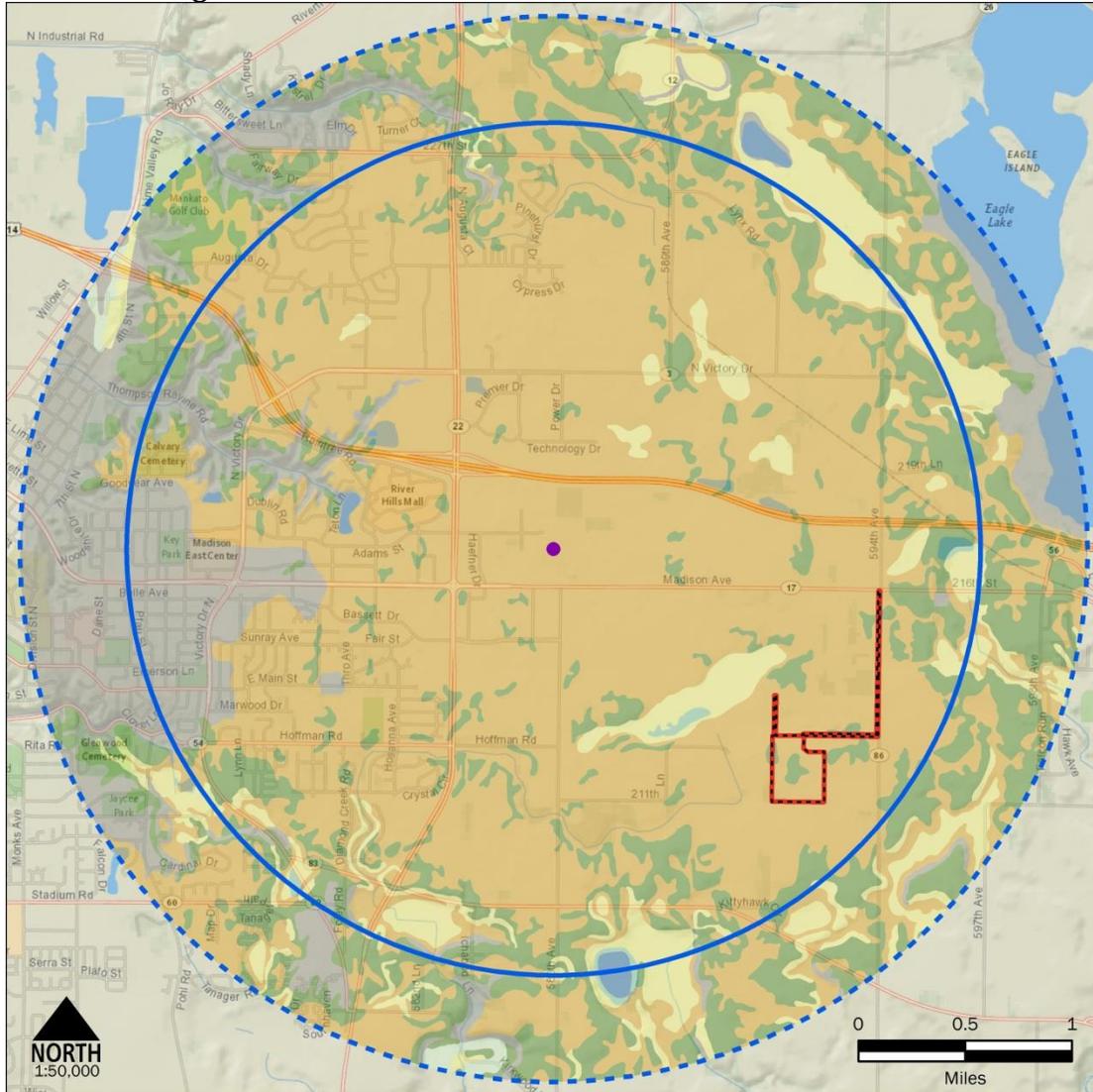
**Eastwood Facility  
 Generally Incompatible Areas**

- 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 33: Eastwood Prime Farmland and Other Areas**



**Eastwood Facility  
 Prime Farmland**

- Substation
- Preliminary Development Area
- Facility Control Area
- 2-mile Analysis Buffer
- 2.5-mile Analysis Buffer
- Prime Farmland
- Prime Farmland if Drained
- Farmland of Statewide Importance
- Not Prime Farmland
- Other Farmland

