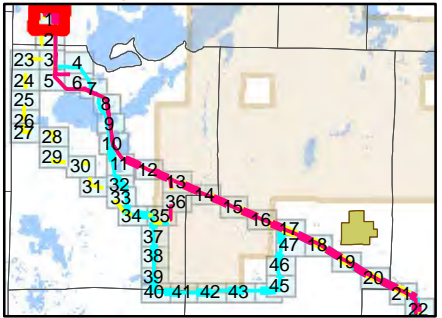



Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

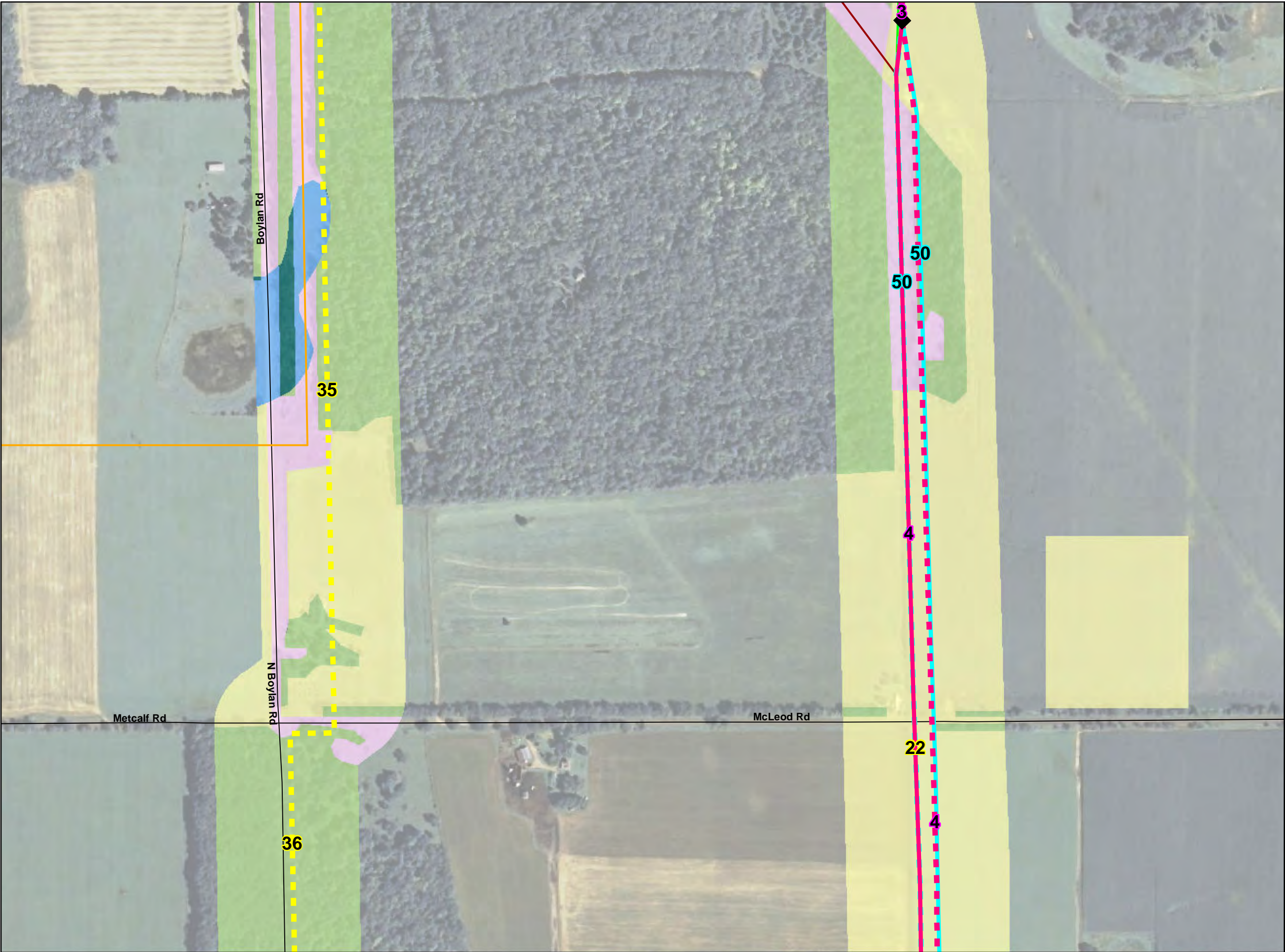
  
RESPONSIBLE BY NATURE™

0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011

Page 1 of 47





Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Route Segment Endpoint

Radisson Substation Site

Existing Transmission

69kV AC

161kV AC

345kV AC

Substation (Xcel)

Substation (Not Xcel)

Road

Railroad

Commercial / Industrial

Crop Land

Forested Wetland

Non-Forested Wetland

Pasture

Grassland

Residential

Upland Forest

RESPONSIBLE BY NATURE™

0

400

Feet

↑

N

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover

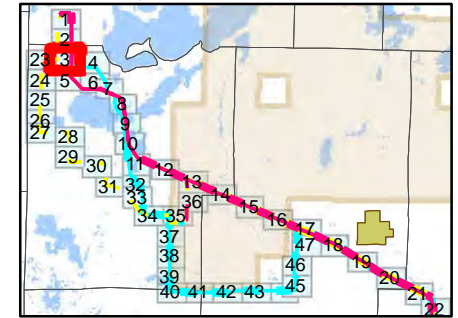
Date: 8/29/2011

Page 2 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCNB4\_LULC\_11x17\_4800.mxd



# Appendix B-4 Land Cover Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project

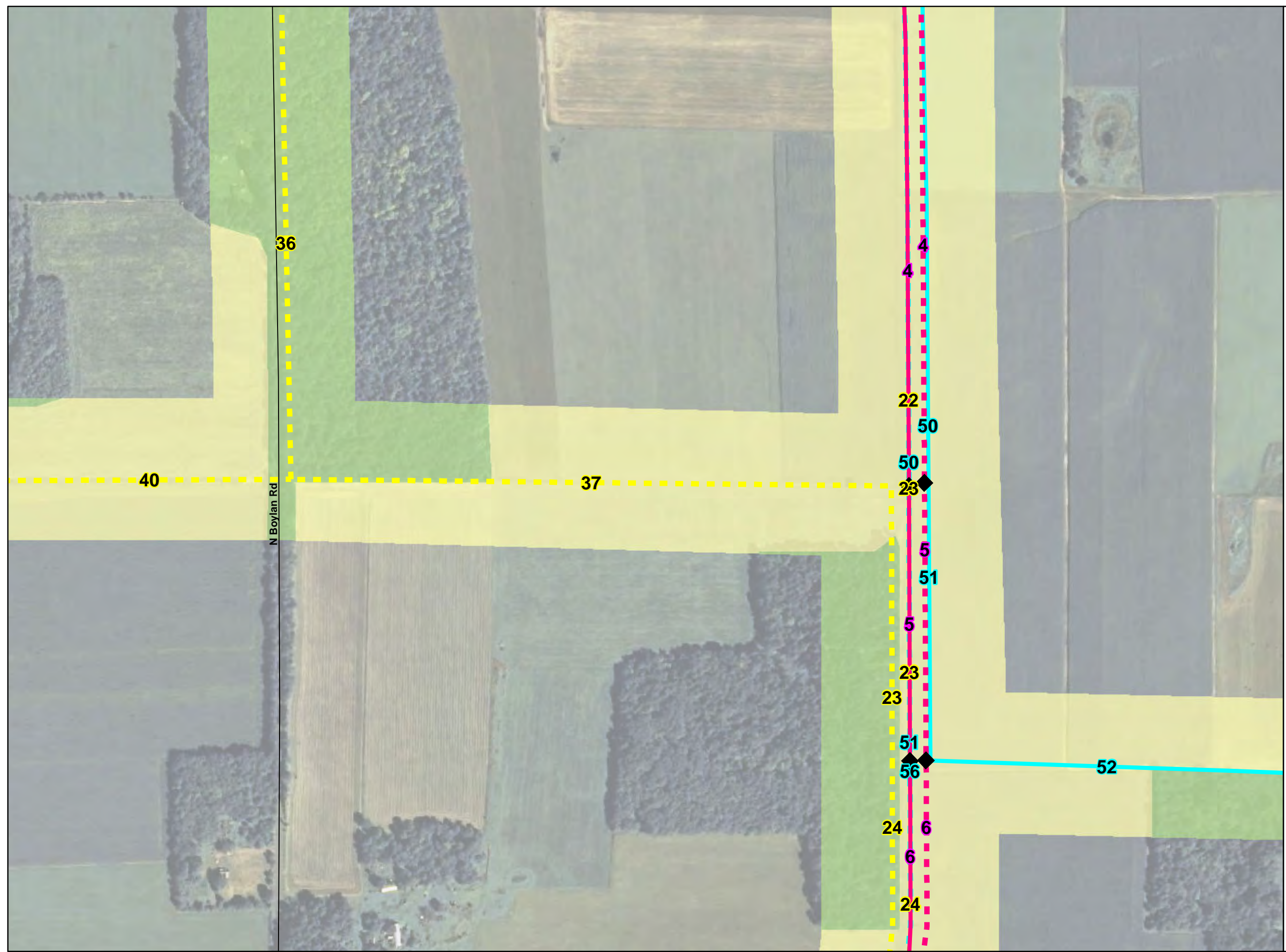


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

**Xcel Energy**  
RESPONSIBLE BY NATURE™

0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011 Page 3 of 47







Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad
- Commercial / Industrial
- Crop Land
- Forested Wetland
- Non-Forested Wetland
- Pasture
- Grassland
- Residential
- Upland Forest

0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011

Page 4 of 47





Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Route Segment Endpoint

Radisson Substation Site

Existing Transmission

69kV AC

161kV AC

345kV AC

Substation (Xcel)

Substation (Not Xcel)

Road

Railroad

Commercial / Industrial

Crop Land

Forested Wetland

Non-Forested Wetland

Pasture

Grassland

Residential

Upland Forest

RESPONSIBLE BY NATURE™

0400

Feet

↑

N

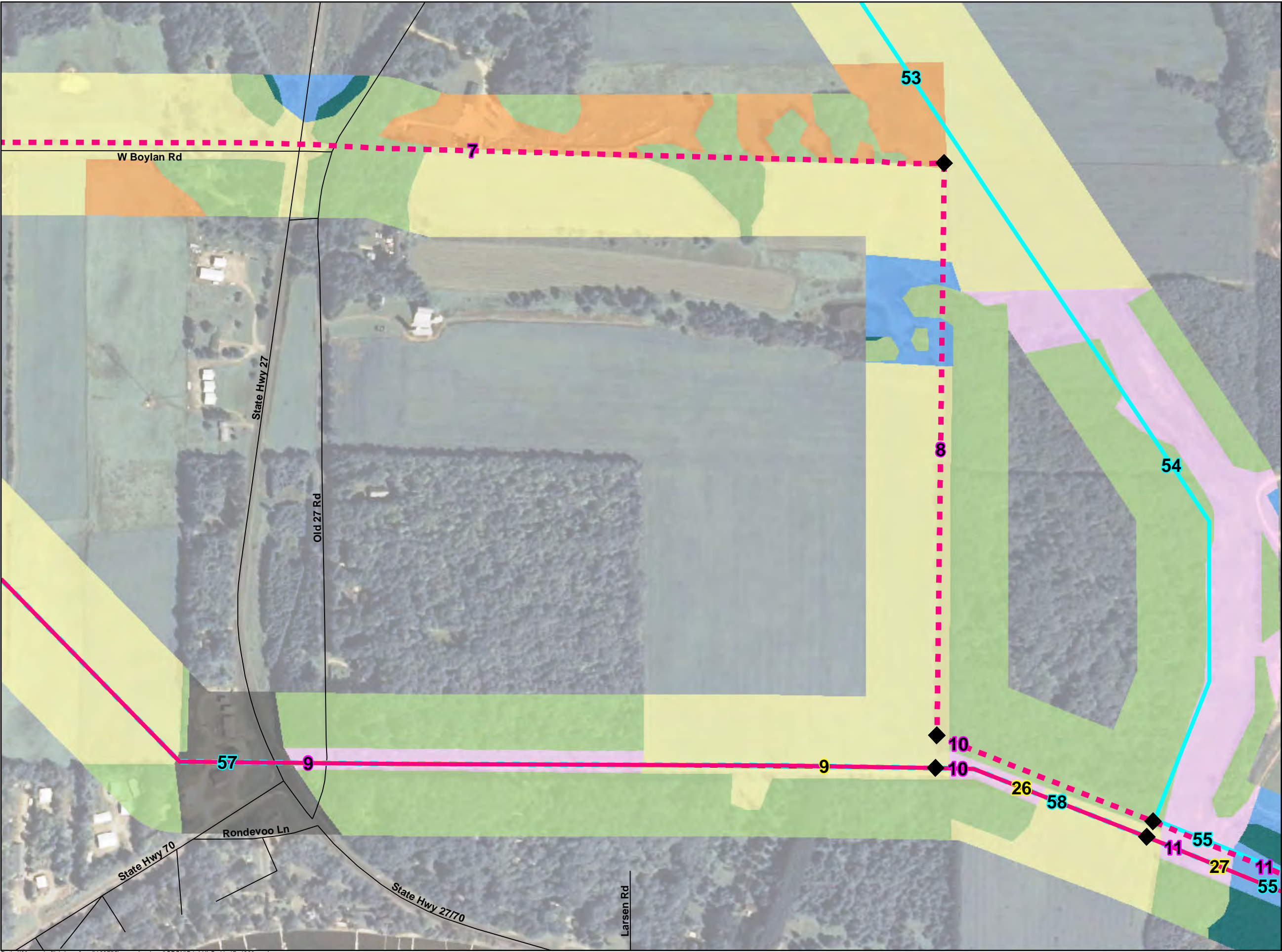
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover

Date: 8/29/2011

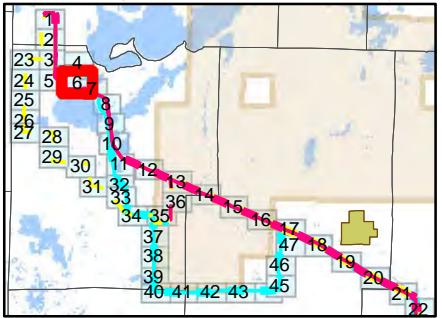
Page 5 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B4\_LULC\_11x17\_4800.mxd






Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

  
RESPONSIBLE BY NATURE™

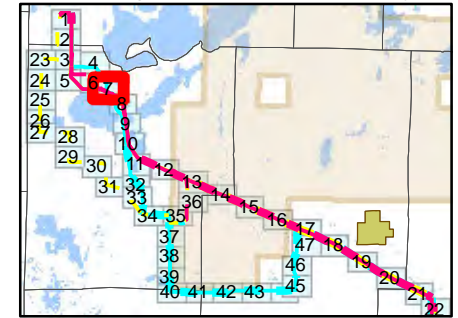
0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed Land Cover  
Date: 8/29/2011

Page 6 of 47



Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



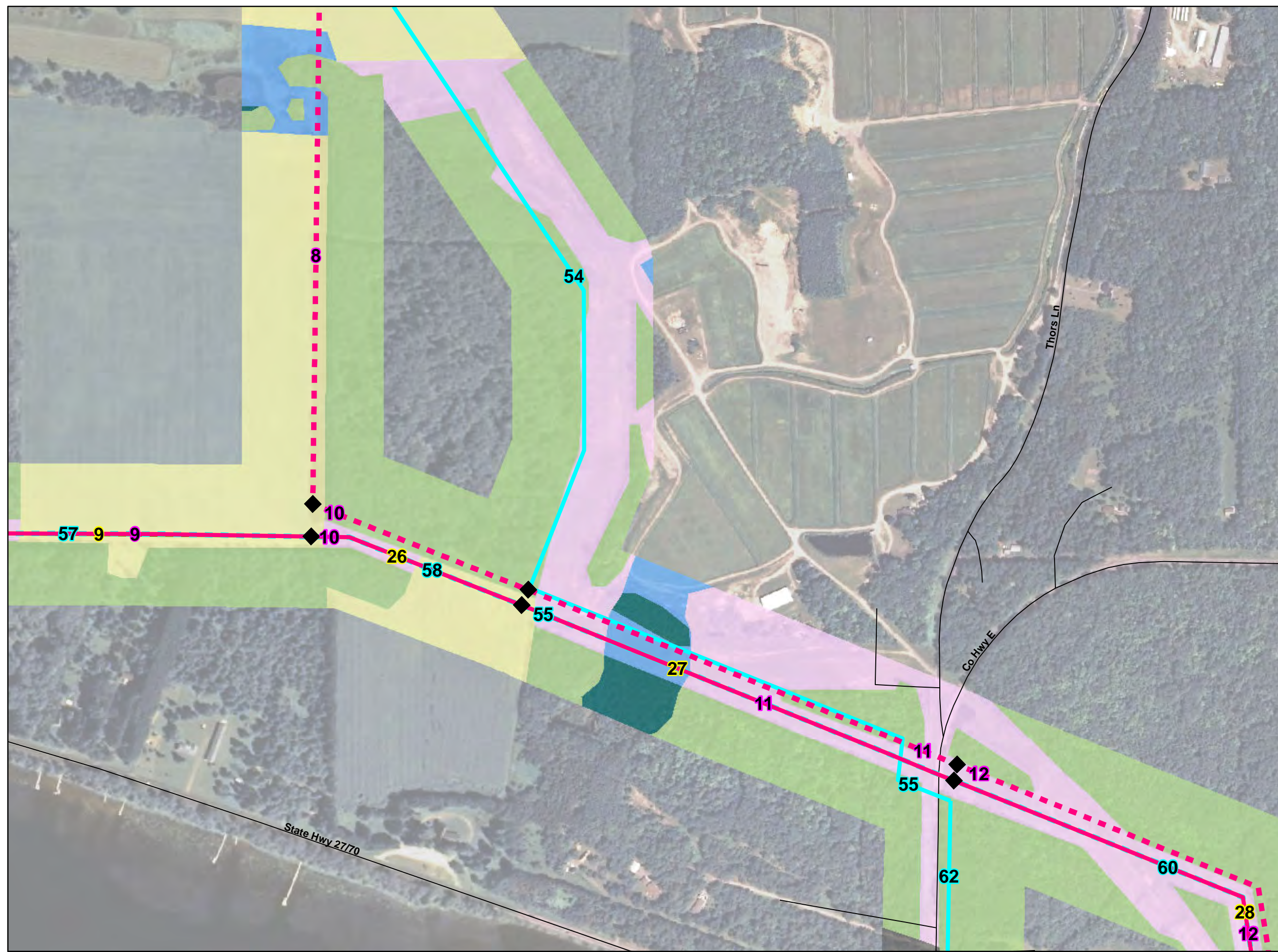
- Route Alternatives**
- Preferred Route 161 kV
  - - Preferred Route 69 kV
  - - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - - Alternate Route A 69 kV
  - - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - - Alternate Route B 69 kV
  - - Alternate Route B 161/69 kV
  - ◆ Route Segment Endpoint
  - ▭ Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - ▭ Substation (Xcel)
  - ▭ Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

**Xcel Energy**  
RESPONSIBLE BY NATURE™

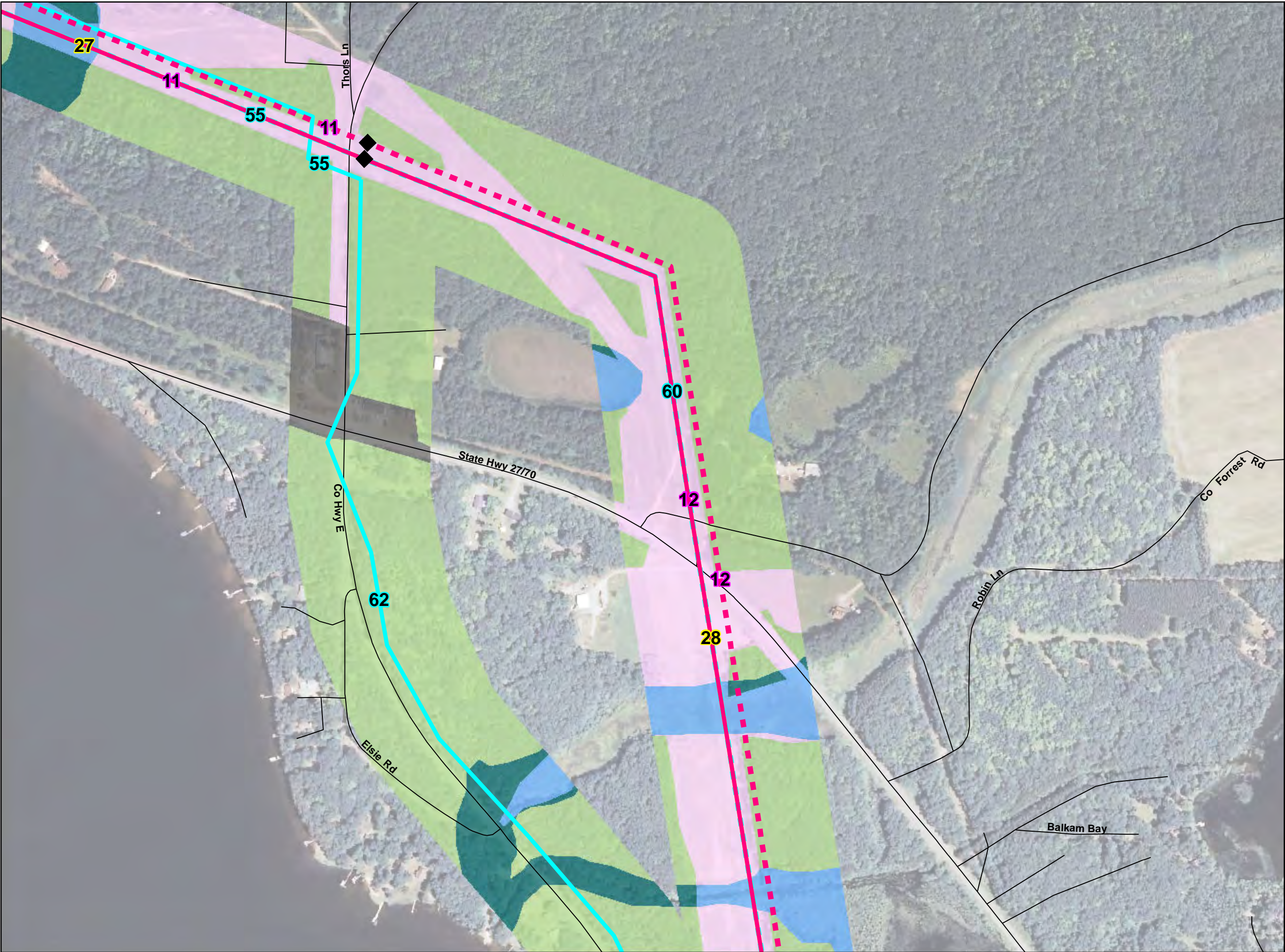
0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011

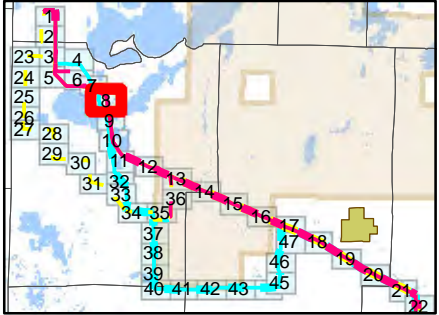
Page 7 of 47







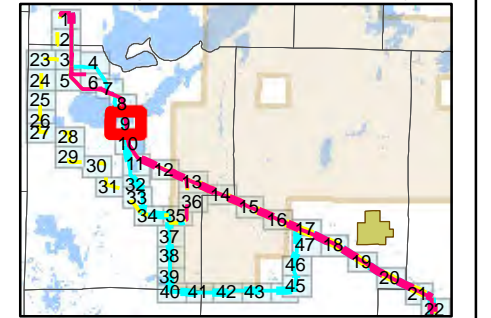
Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest



Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

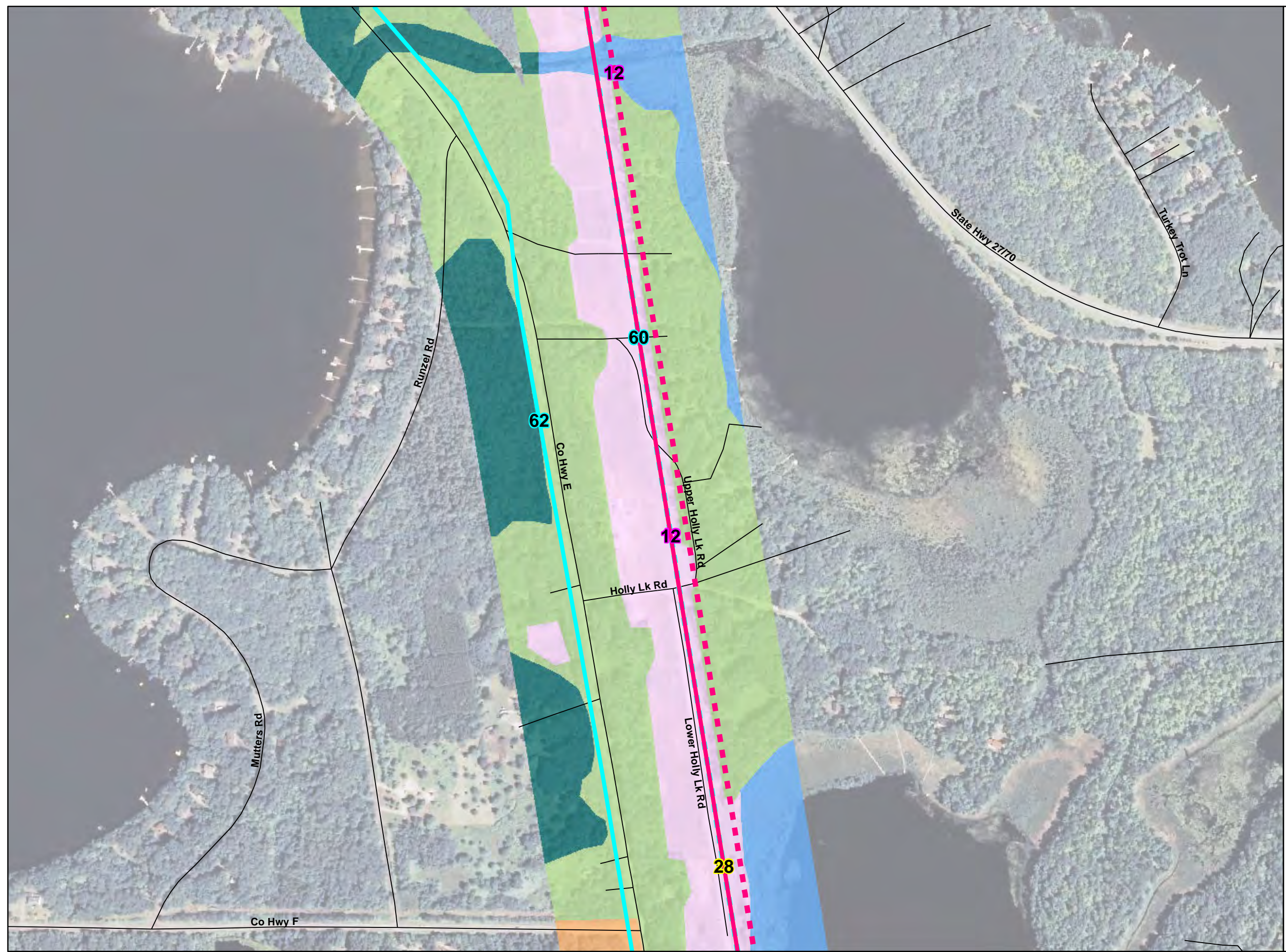


- Route Alternatives**
- Preferred Route 161 kV
  - - Preferred Route 69 kV
  - - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - - Alternate Route A 69 kV
  - - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - - Alternate Route B 69 kV
  - - Alternate Route B 161/69 kV
  - ◆ Route Segment Endpoint
  - ▭ Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

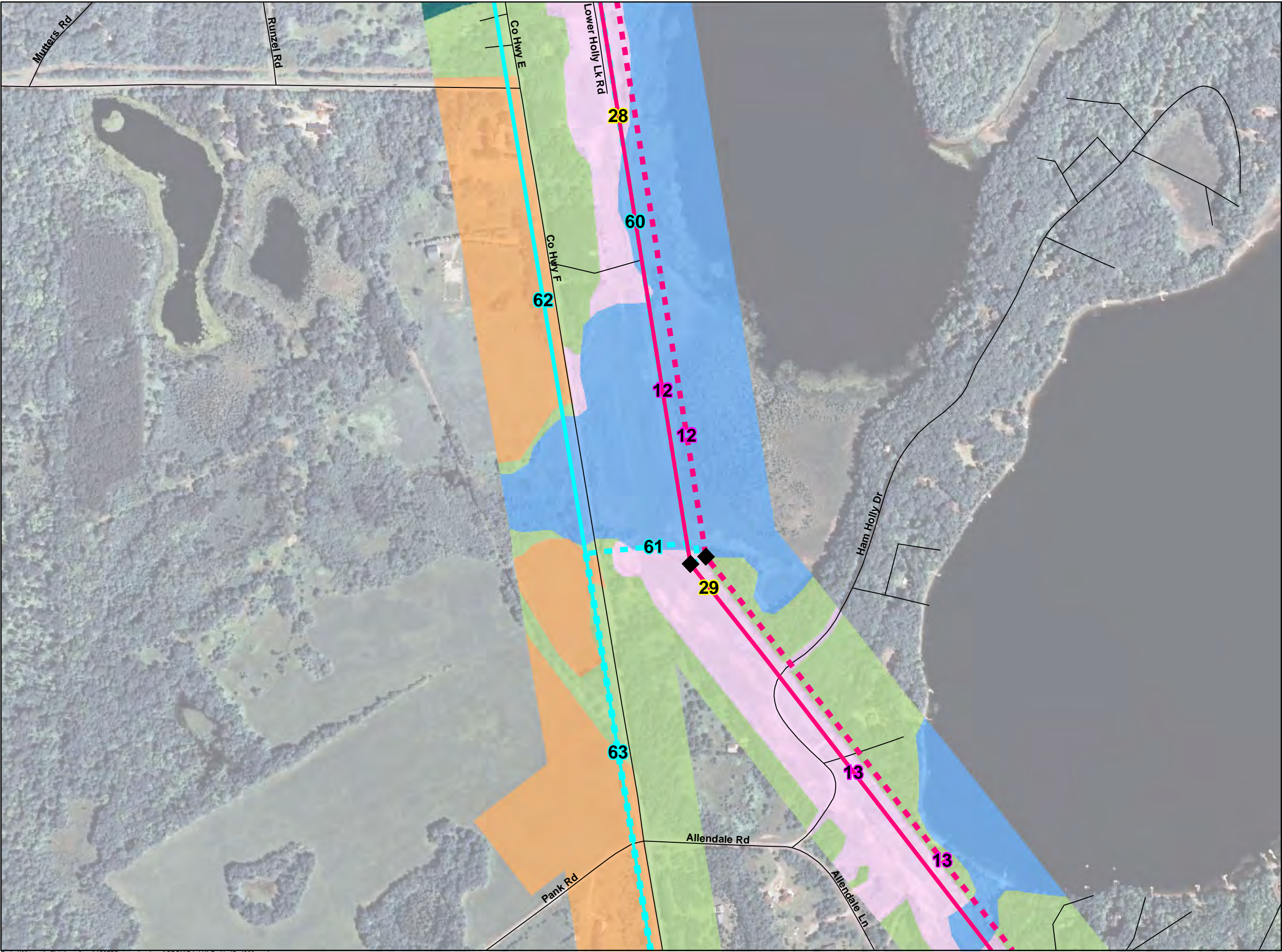
**Xcel Energy**  
RESPONSIBLE BY NATURE™

0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed Land Cover  
Date: 8/29/2011 Page 9 of 47







Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Route Segment Endpoint

Radisson Substation Site

Existing Transmission

69kV AC

161kV AC

345kV AC

Substation (Xcel)

Substation (Not Xcel)

Road

Railroad

Commercial / Industrial

Crop Land

Forested Wetland

Non-Forested Wetland

Pasture

Grassland

Residential

Upland Forest

XcelEnergy<sup>®</sup>  
RESPONSIBLE BY NATURE™

0400

Feet

↑

N

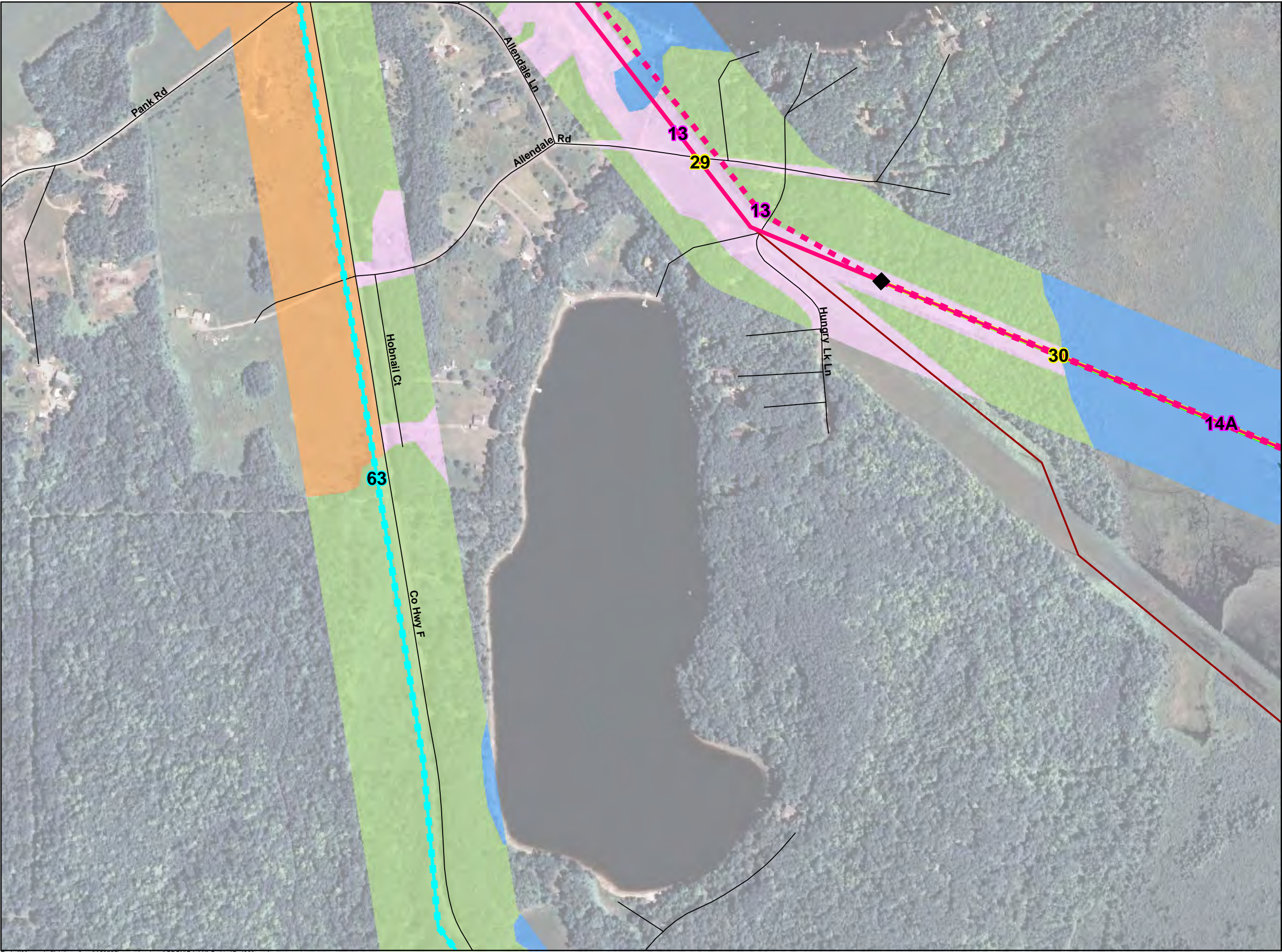
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover

Date: 8/29/2011

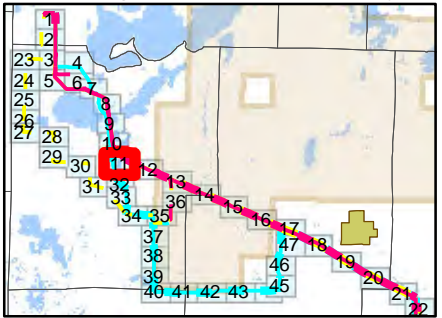
Page 10 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B4\_LULC\_11x17\_4800.mxd





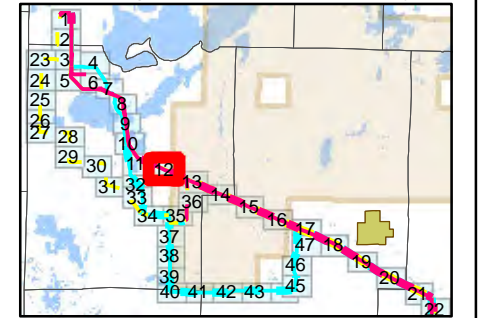
Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest



Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

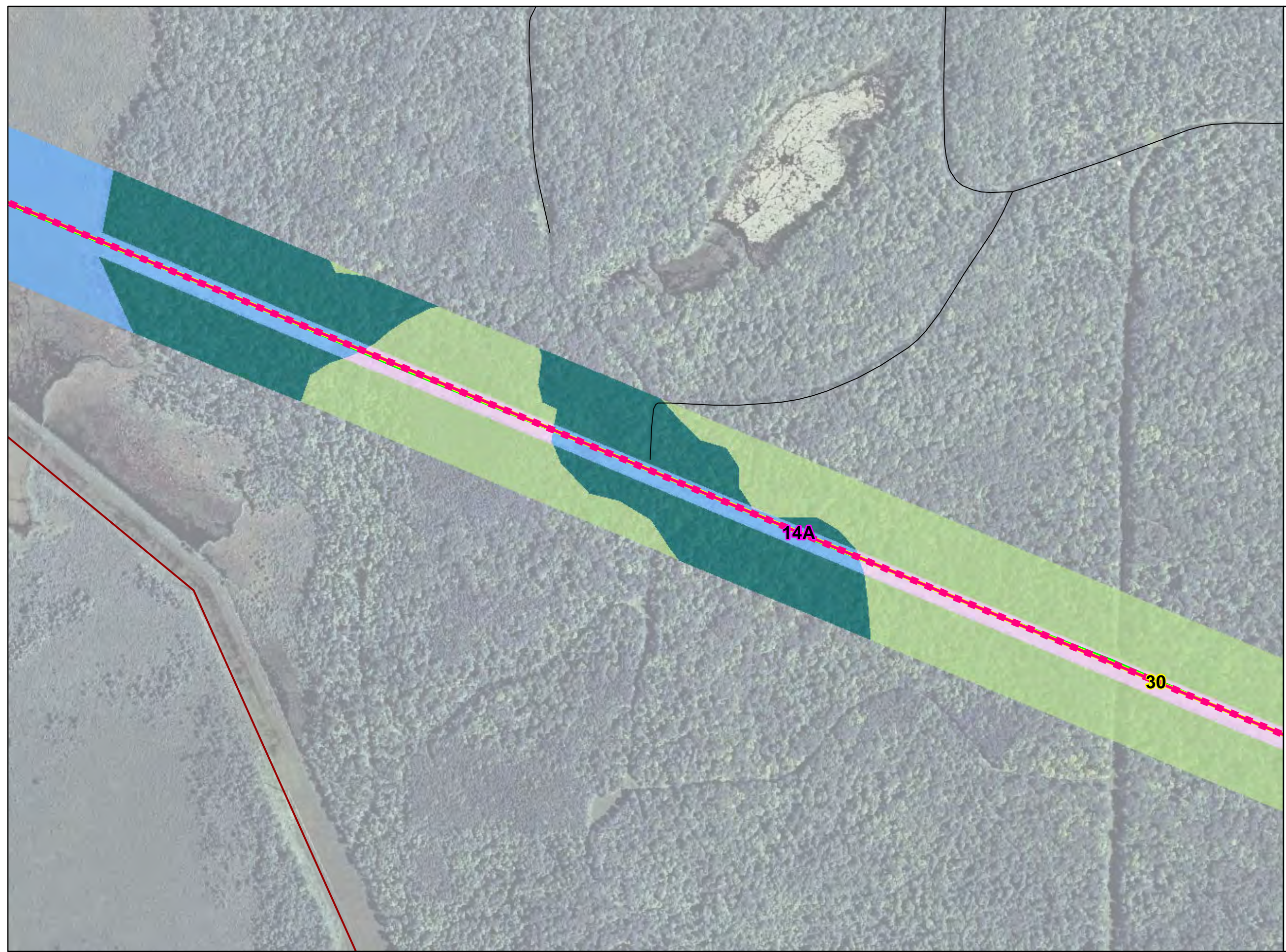


- Route Alternatives**
- Preferred Route 161 kV
  - - Preferred Route 69 kV
  - . Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - - Alternate Route A 69 kV
  - . Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - - Alternate Route B 69 kV
  - . Alternate Route B 161/69 kV
  - ◆ Route Segment Endpoint
  - ▭ Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - ▭ Substation (Xcel)
  - ▭ Substation (Not Xcel)
  - Road
  - Railroad
  - ▭ Commercial / Industrial
  - ▭ Crop Land
  - ▭ Forested Wetland
  - ▭ Non-Forested Wetland
  - ▭ Pasture
  - ▭ Grassland
  - ▭ Residential
  - ▭ Upland Forest

**XcelEnergy®**  
RESPONSIBLE BY NATURE™

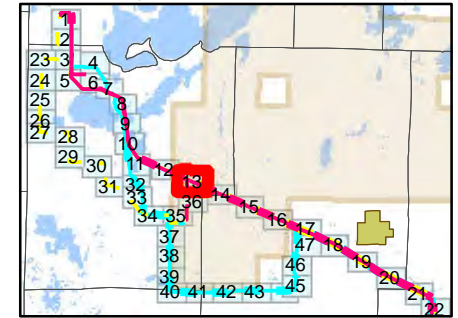
0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011 Page 12 of 47






Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

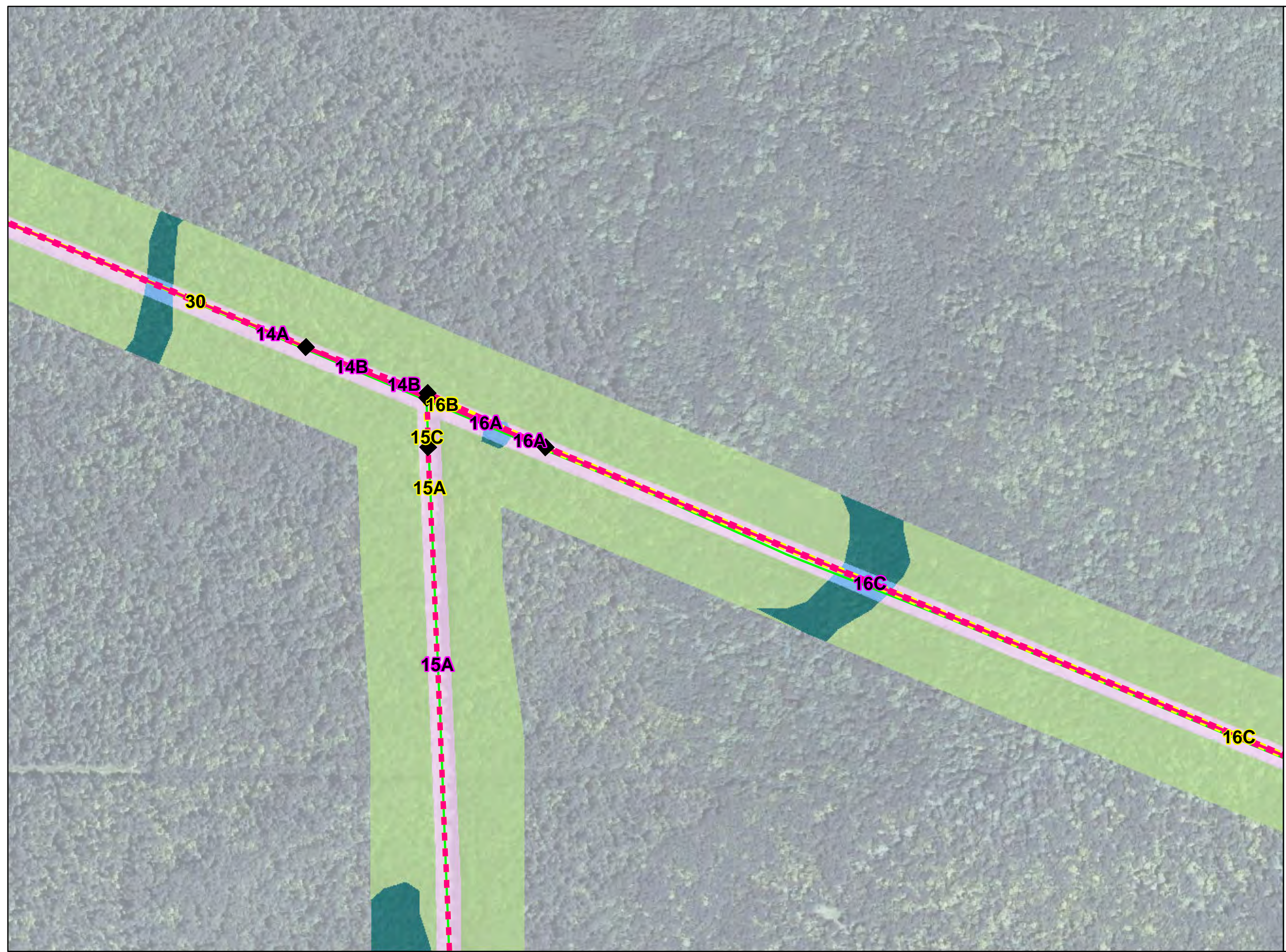


- Route Alternatives**
- Preferred Route 161 kV
  - - Preferred Route 69 kV
  - . Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - - Alternate Route A 69 kV
  - . Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - - Alternate Route B 69 kV
  - . Alternate Route B 161/69 kV
  - ◆ Route Segment Endpoint
  - ▭ Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - ▭ Substation (Xcel)
  - ▭ Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

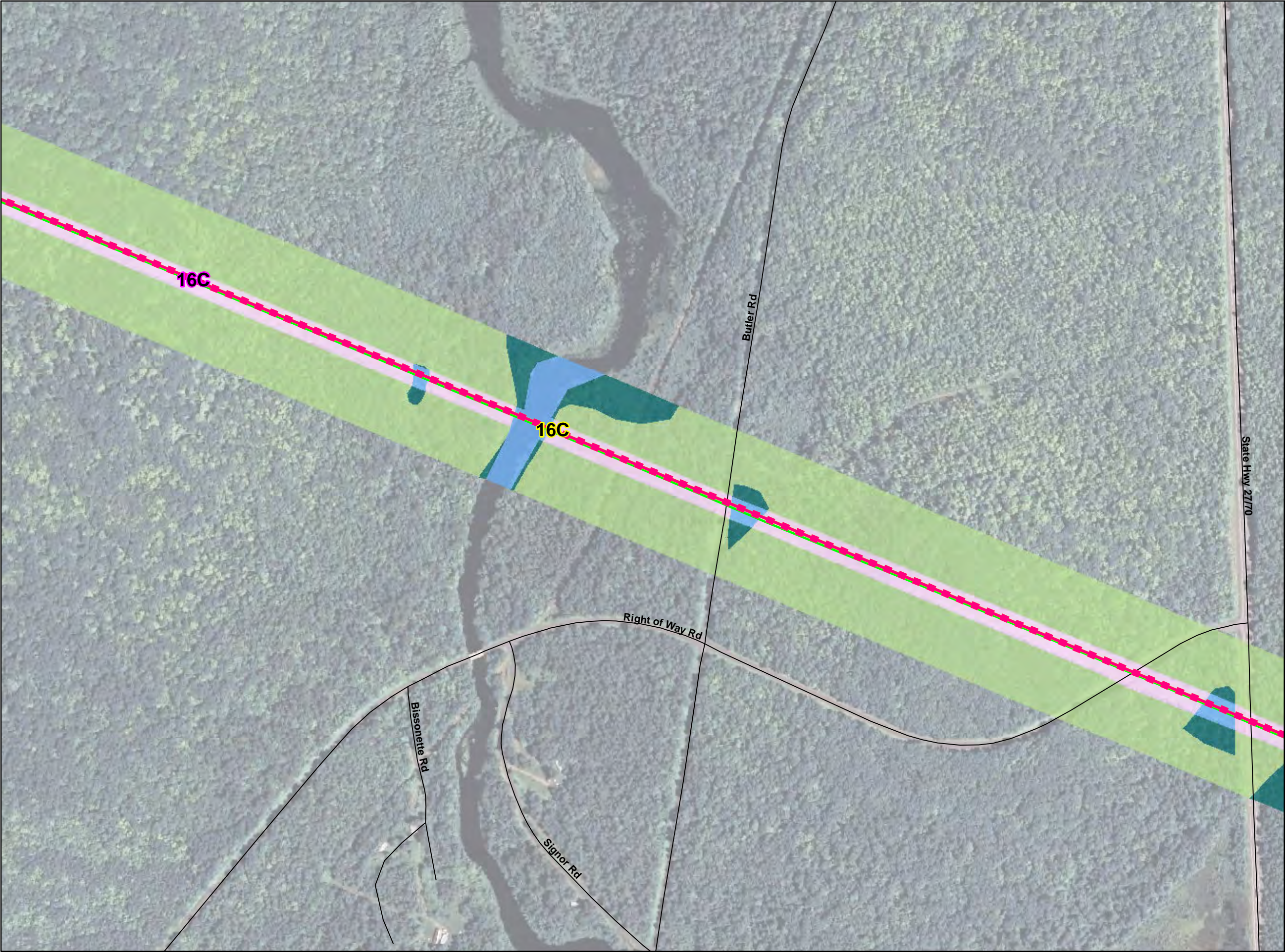
 **XcelEnergy**  
RESPONSIBLE BY NATURE™

0 400 Feet

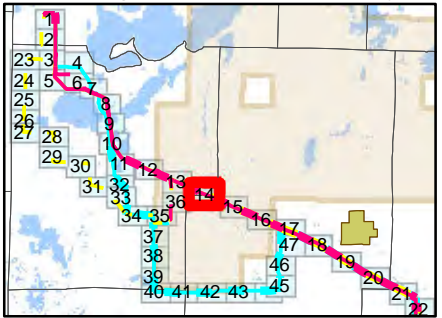
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011 Page 13 of 47





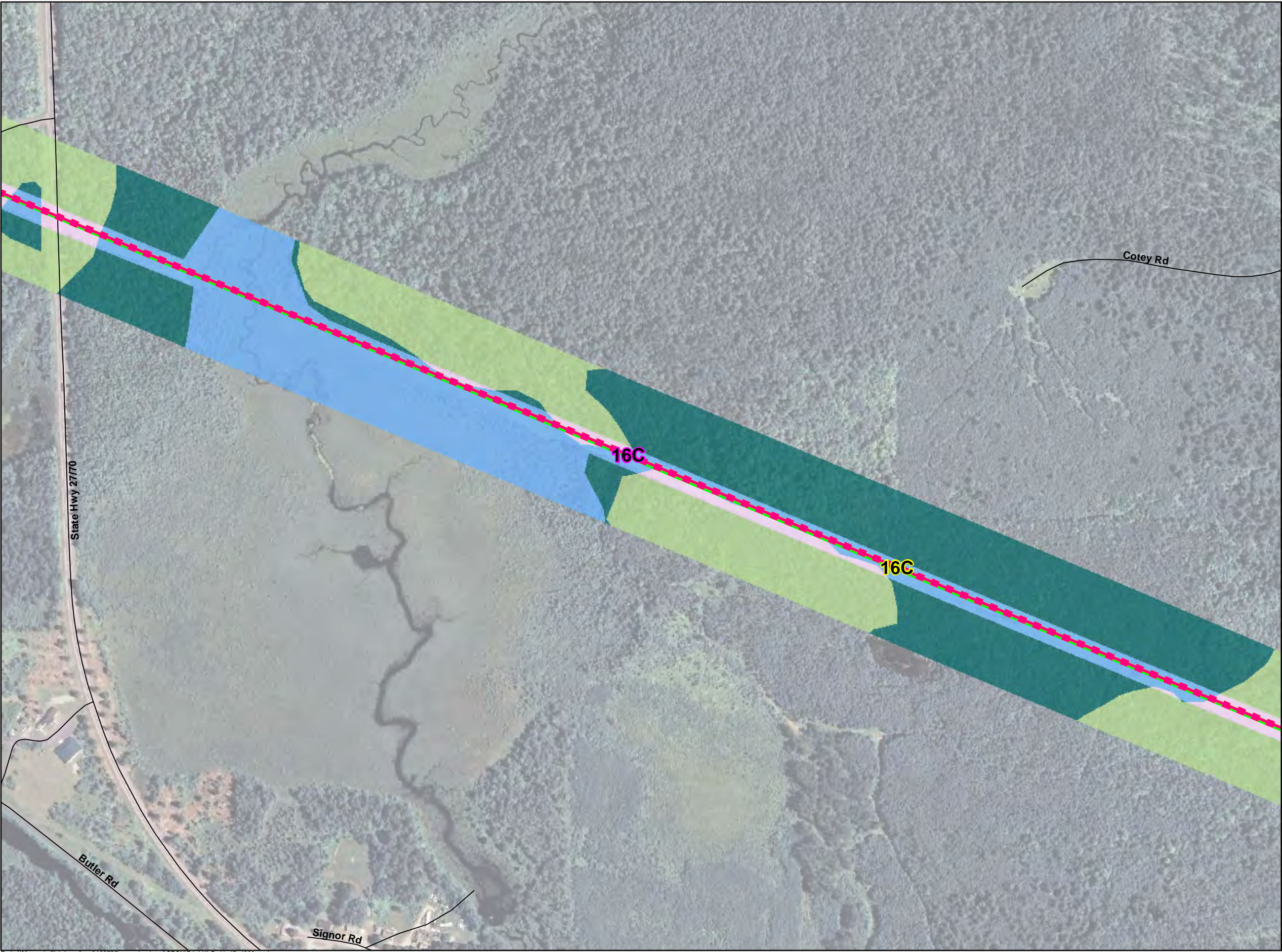


Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest





Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Route Segment Endpoint

Radisson Substation Site

Existing Transmission

69kV AC

161kV AC

345kV AC

Substation (Xcel)

Substation (Not Xcel)

Road

Railroad

Commercial / Industrial

Crop Land

Forested Wetland

Non-Forested Wetland

Pasture

Grassland

Residential

Upland Forest

RESPONSIBLE BY NATURE™

0400

Feet

↑

N

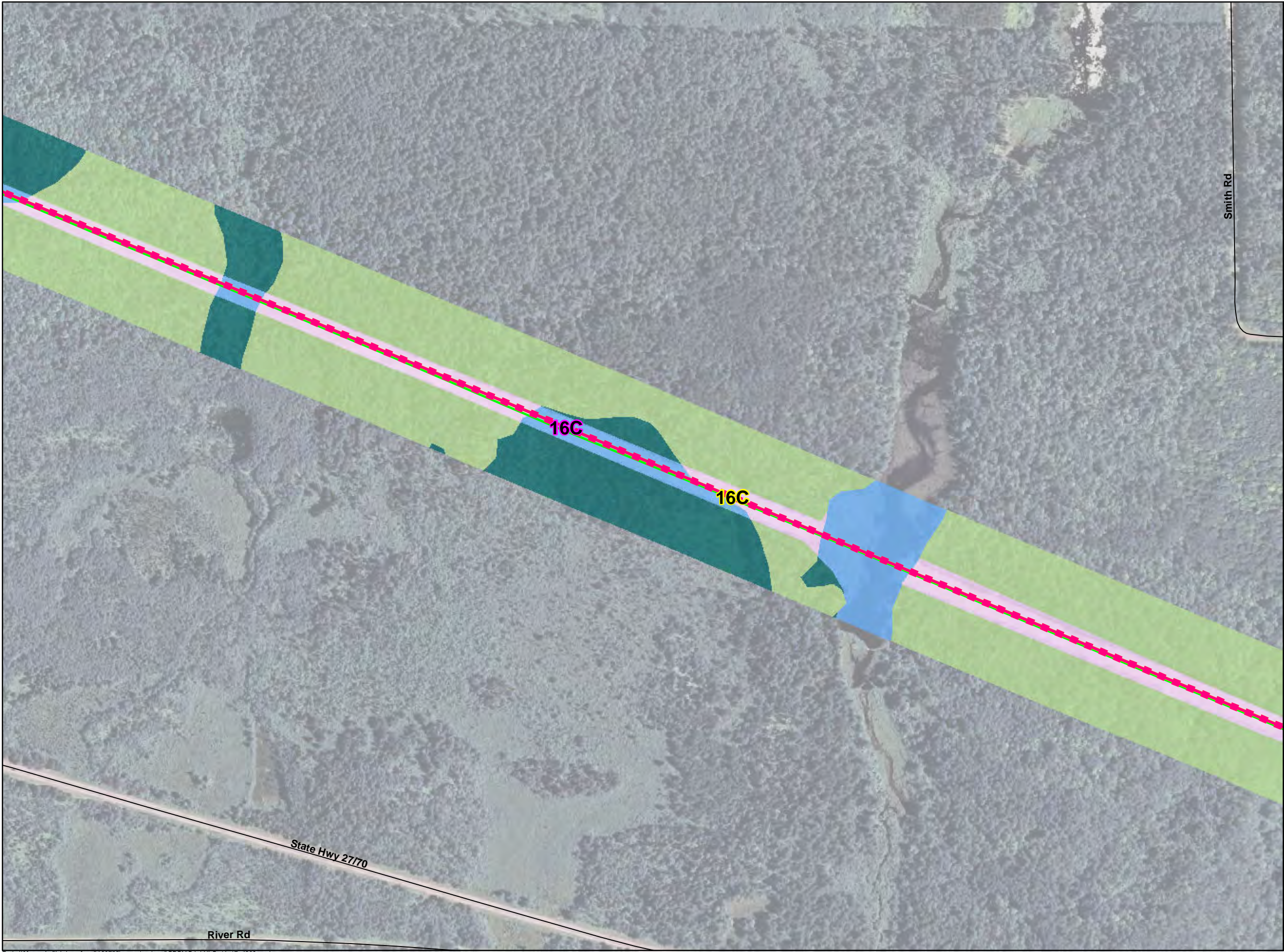
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover

Date: 8/29/2011

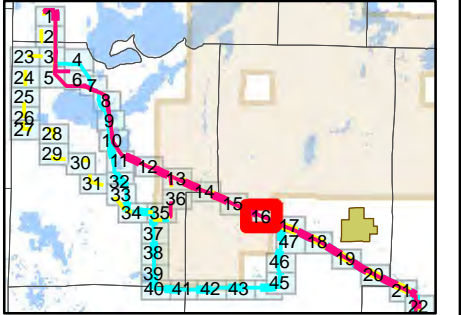
Page 15 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCNB4\_LULC\_11x17\_4800.mxd





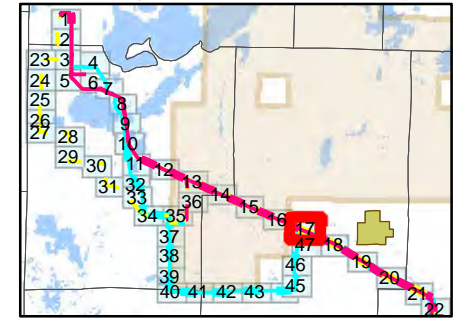
Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest



Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

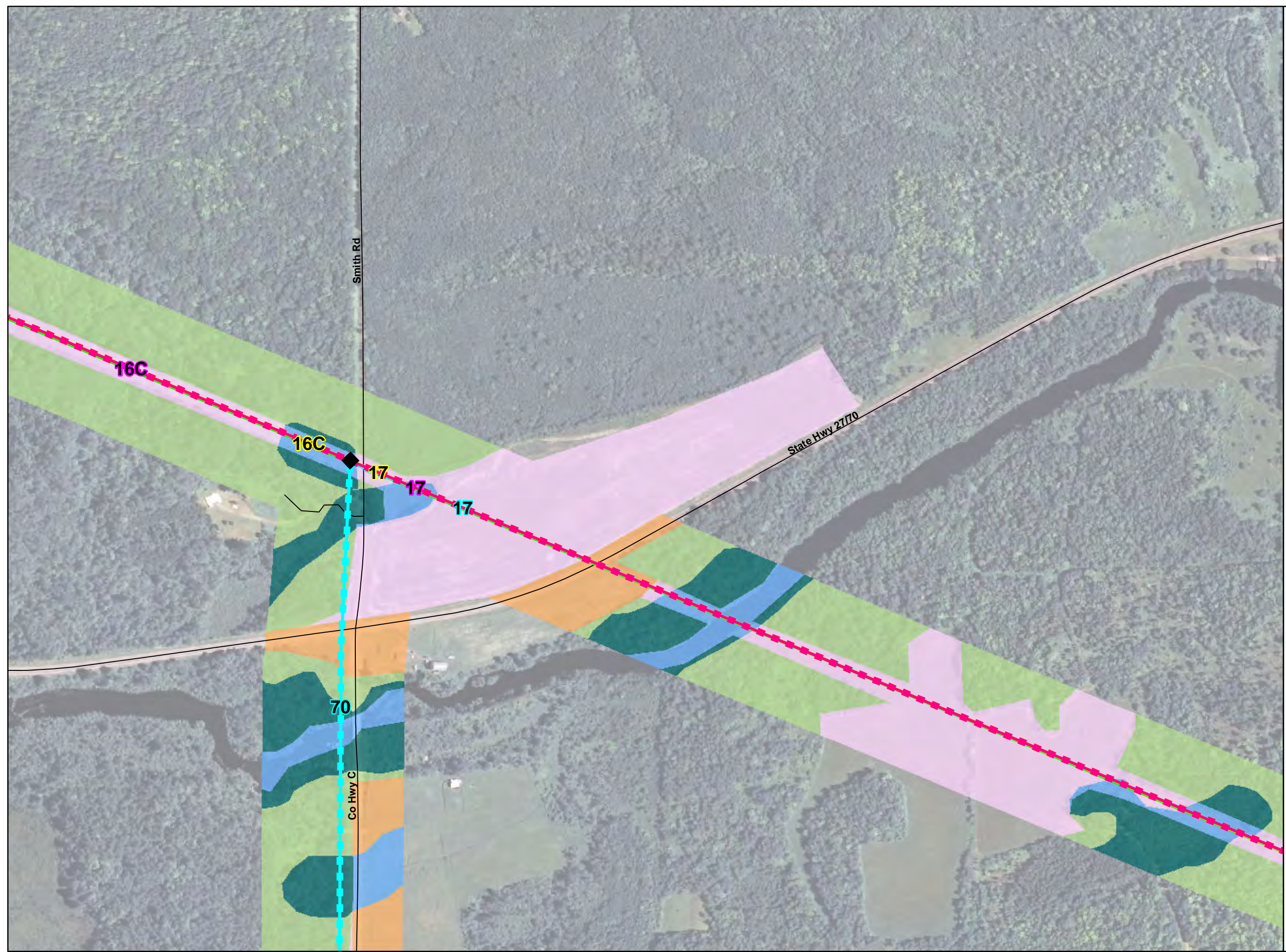


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

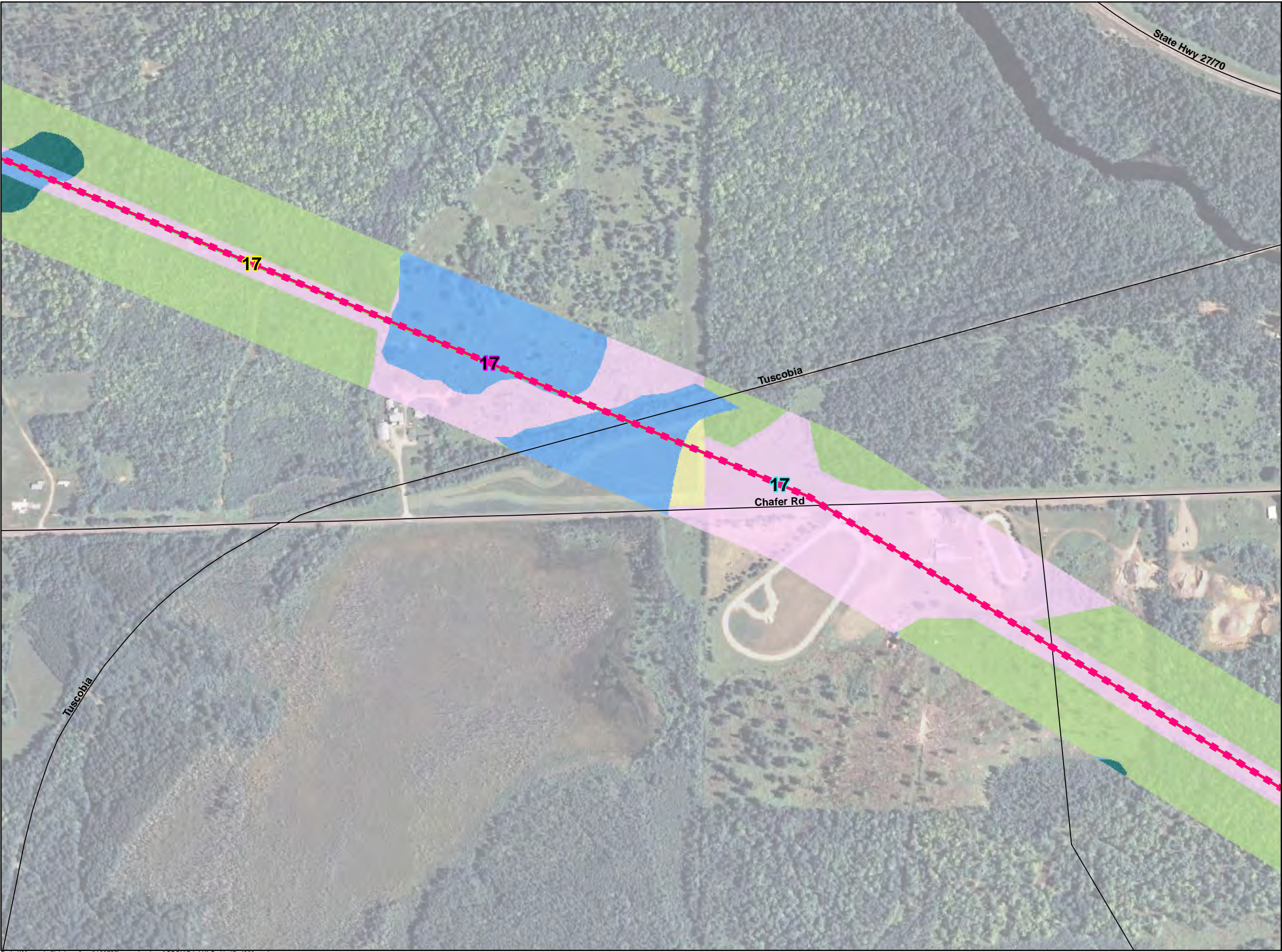
**Xcel Energy**  
RESPONSIBLE BY NATURE™

0 400 Feet

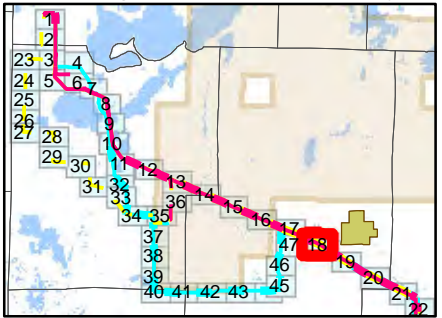
Sources: NAIP 2010, Field/Desktop Reviewed Land Cover  
Date: 8/29/2011 Page 17 of 47







Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project




**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad
- Commercial / Industrial
- Crop Land
- Forested Wetland
- Non-Forested Wetland
- Pasture
- Grassland
- Residential
- Upland Forest

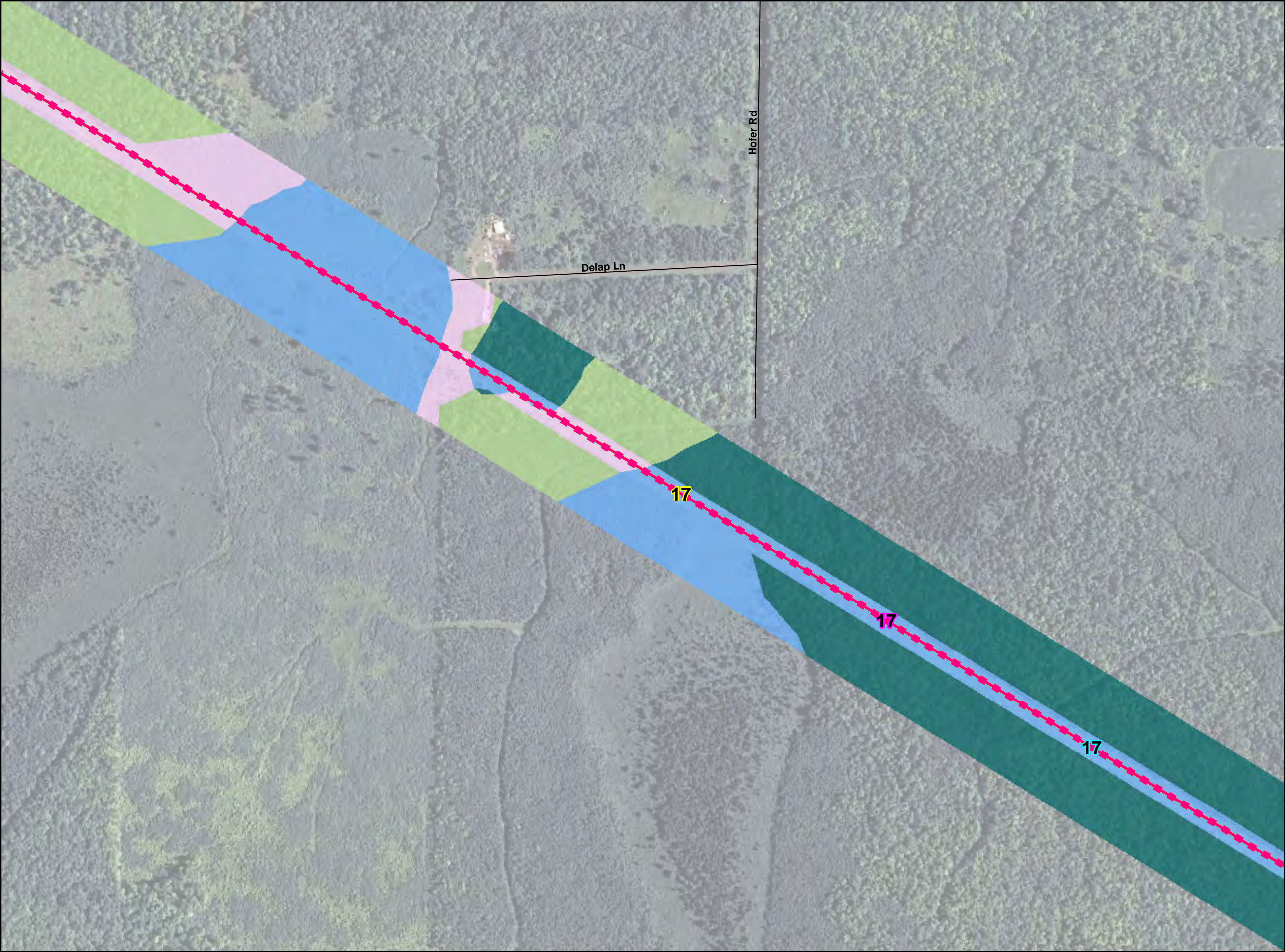


0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011

Page 18 of 47





Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad
- Commercial / Industrial
- Crop Land
- Forested Wetland
- Non-Forested Wetland
- Pasture
- Grassland
- Residential
- Upland Forest

0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011

Page 19 of 47





Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad
- Commercial / Industrial
- Crop Land
- Forested Wetland
- Non-Forested Wetland
- Pasture
- Grassland
- Residential
- Upland Forest

Xcel Energy®  
RESPONSIBLE BY NATURE™

0400

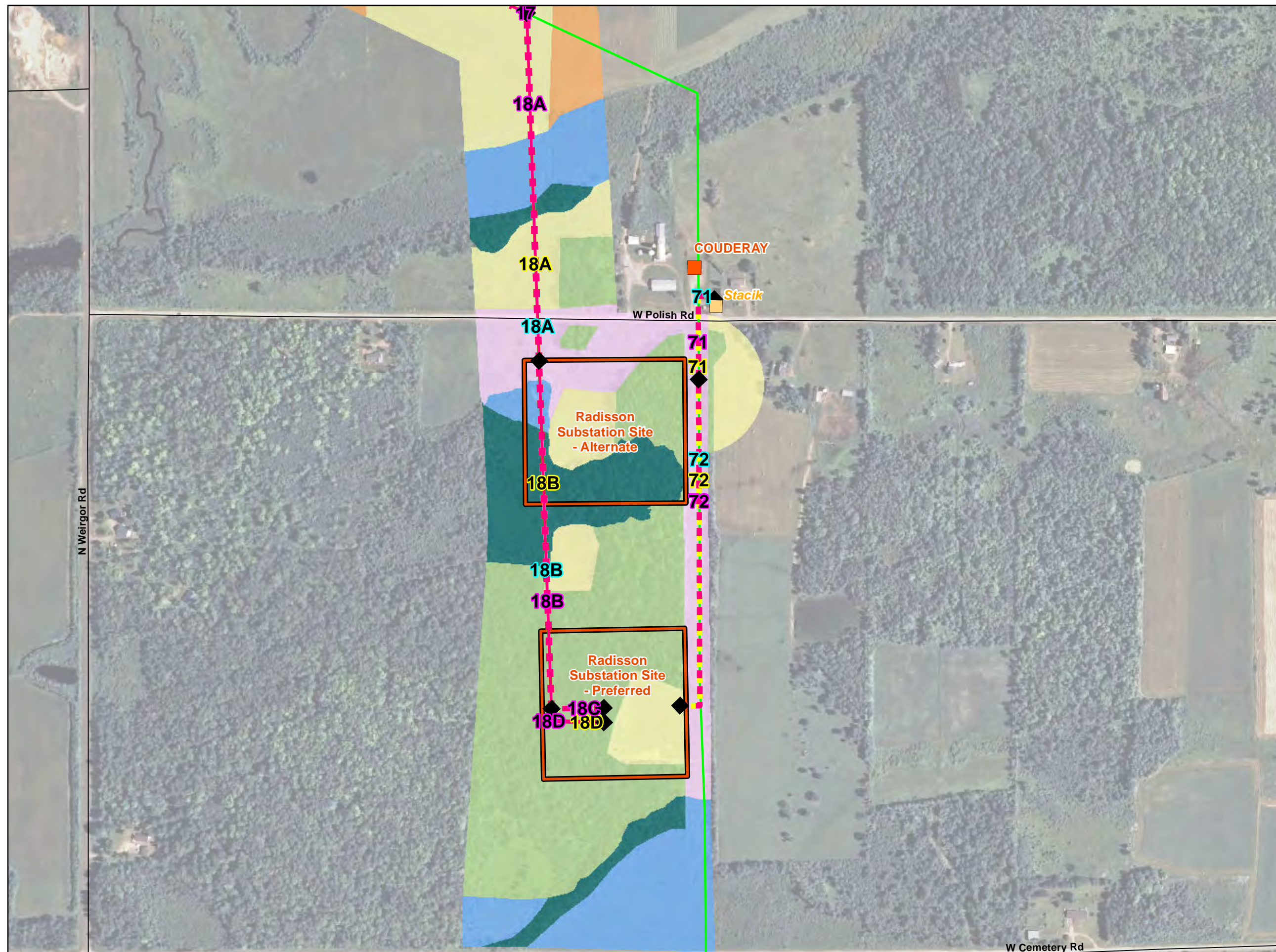
Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011Page 20 of 47

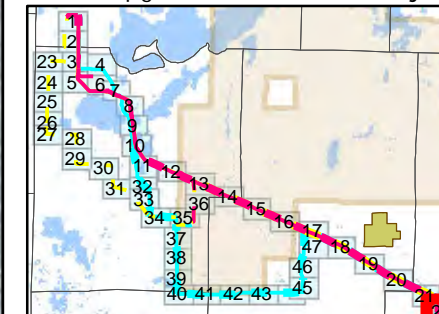









Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project
















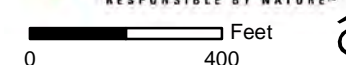
## Route Alternatives

- Preferred Route 161 kV
- - Preferred Route 69 kV
- - - Preferred Route 161/69 kV
- Alternate Route A 161 kV
- - Alternate Route A 69 kV
- - - Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- - Alternate Route B 69 kV
- - - Alternate Route B 161/69 kV
- ◆ Route Segment Endpoint

- 
- Radisson Substation Site

### Existing Transmission

-  69kV AC
-  161kV AC
-  345kV AC
-  Substation (Xcel)
-  Substation (Not Xcel)
-  Road
-  Railroad
-  Commercial / Industrial
-  Crop Land
-  Forested Wetland
-  Non-Forested Wetland
-  Pasture
-  Grassland
-  Residential
-  Upland Forest

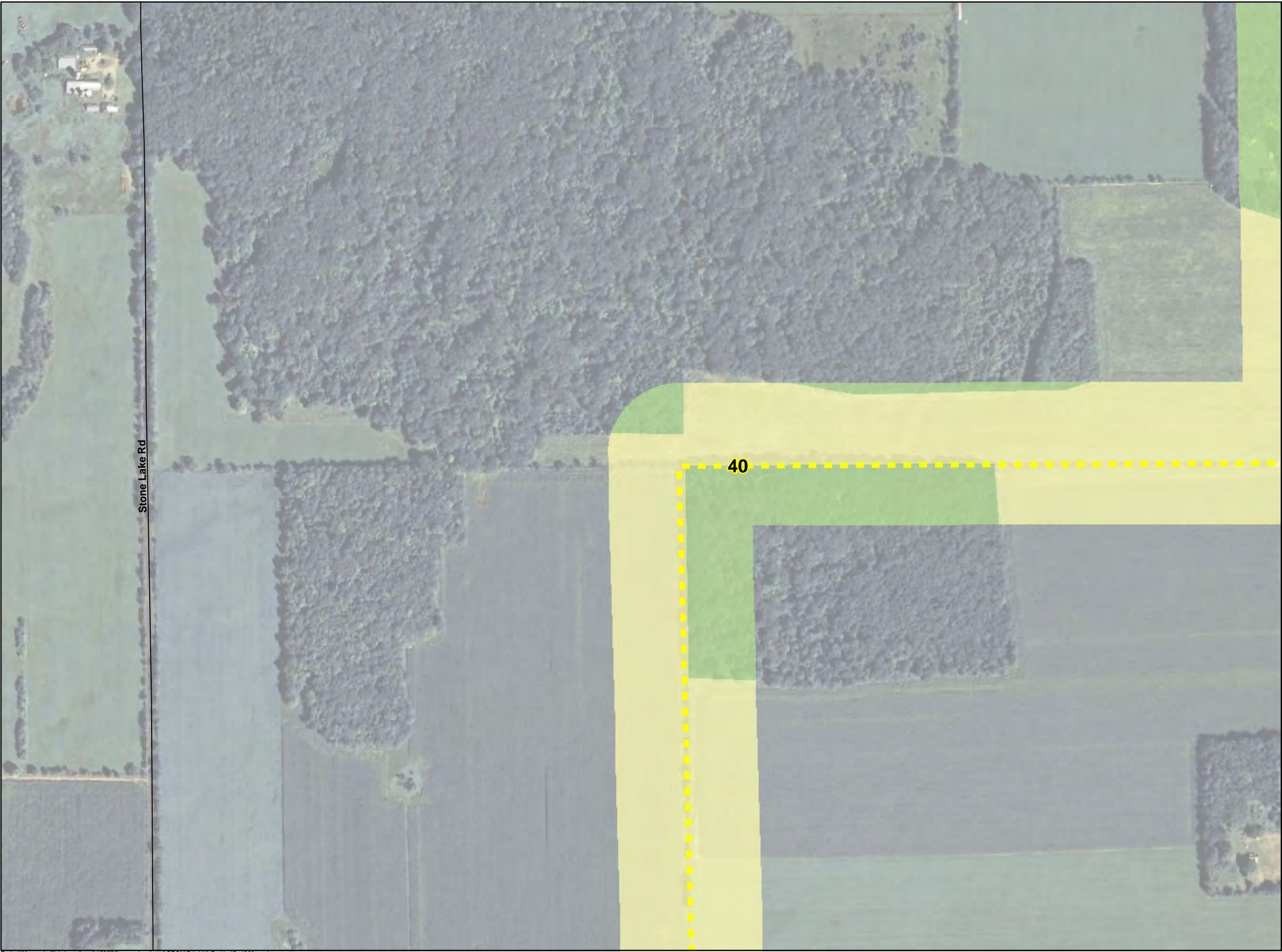


Sources: NAIP 2010, Field/Desktop Reviewed Land Cover

Date: 8/29/2011

Page 22 of 47





Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Route Segment Endpoint

Radisson Substation Site

Existing Transmission

69kV AC

161kV AC

345kV AC

Substation (Xcel)

Substation (Not Xcel)

Road

Railroad

Commercial / Industrial

Crop Land

Forested Wetland

Non-Forested Wetland

Pasture

Grassland

Residential

Upland Forest

RESPONSIBLE BY NATURE™

0400

Feet

↑

N

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover

Date: 8/29/2011

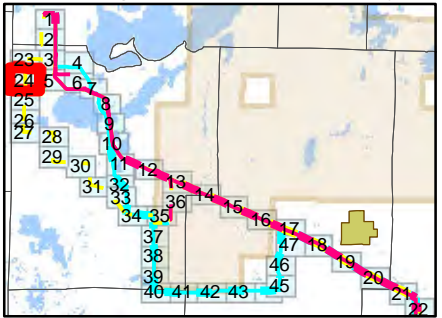
Page 23 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\mxd\CPCNB4\_LULC\_11x17\_4800.mxd

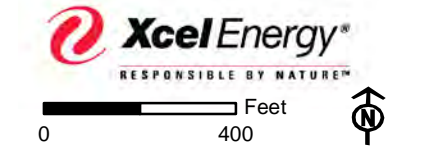




Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



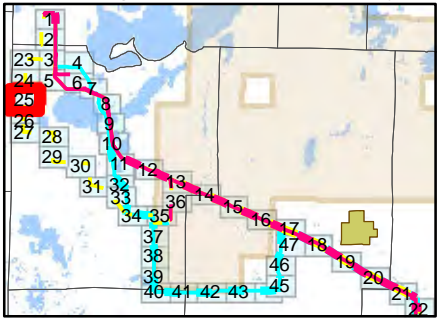
- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest








Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

  
RESPONSIBLE BY NATURE™

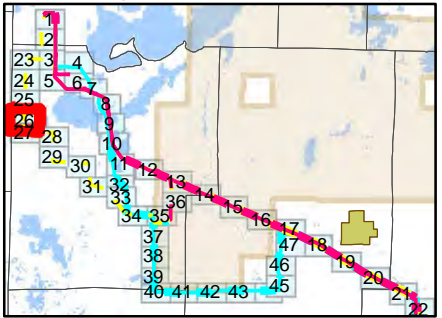
0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011 Page 25 of 47





Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

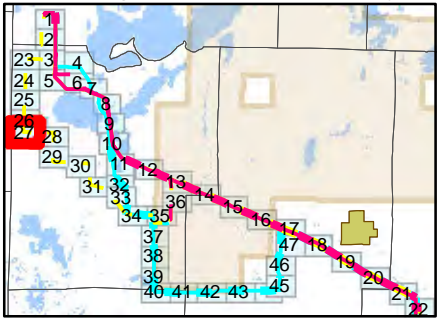


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

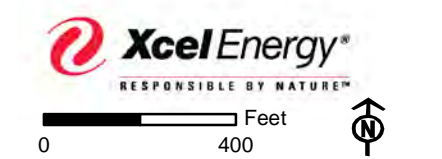




Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

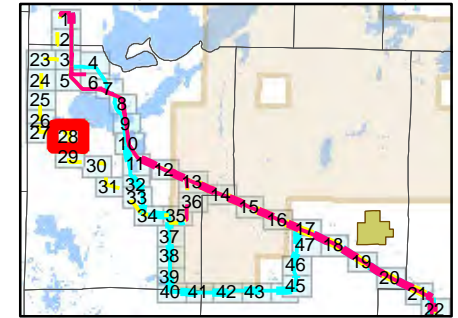


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest





Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

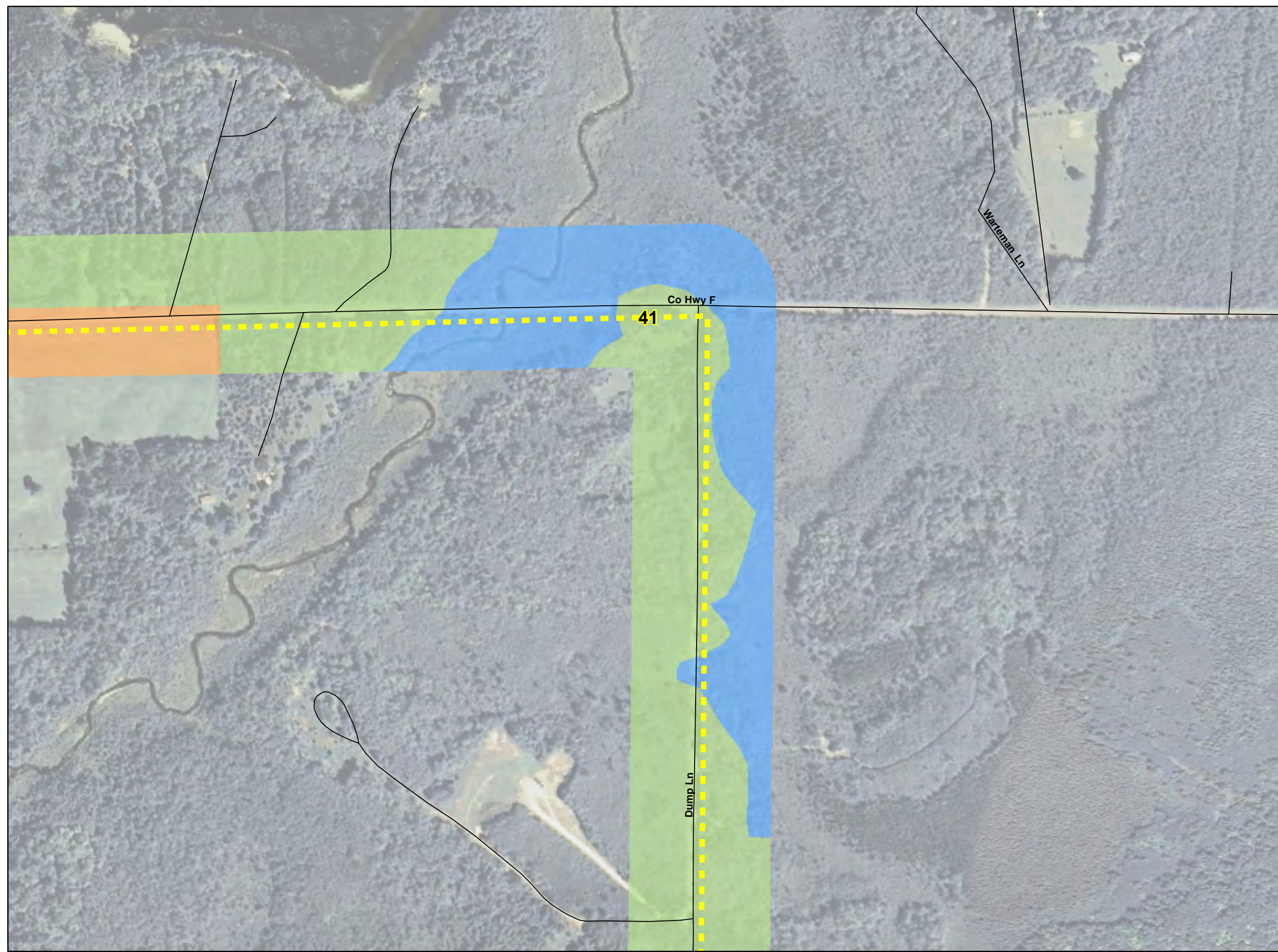


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - ◆ Route Segment Endpoint
  - ▭ Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

**Xcel Energy**  
RESPONSIBLE BY NATURE™

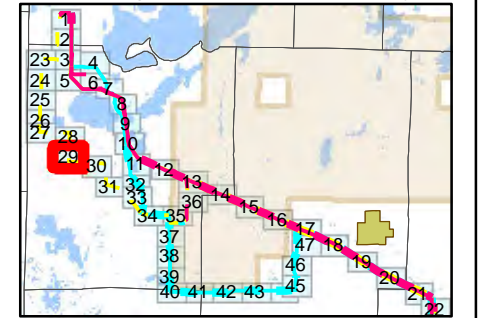
0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011 Page 28 of 47






Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

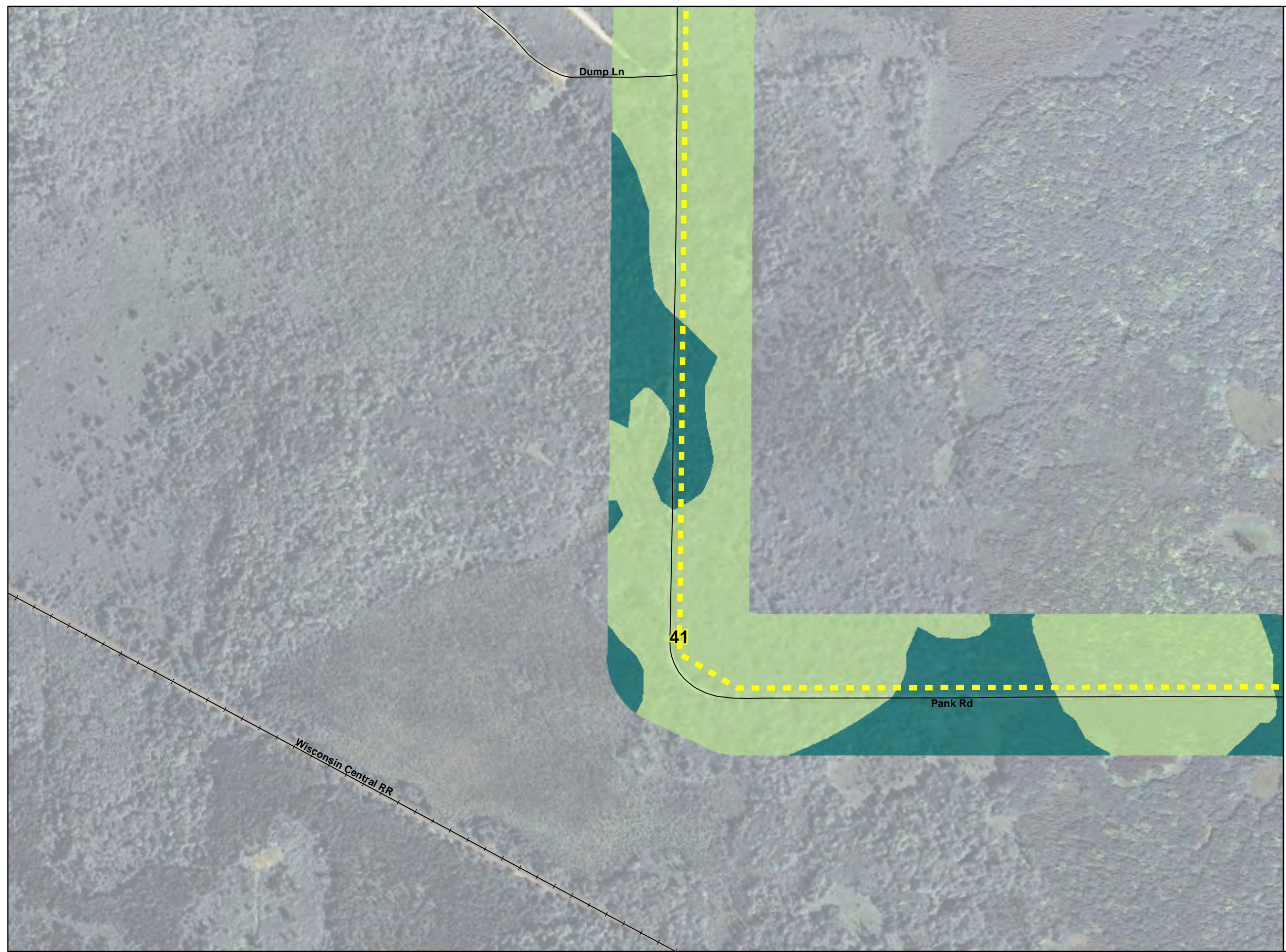


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - ◆ Route Segment Endpoint
  - ▭ Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

  
RESPONSIBLE BY NATURE™

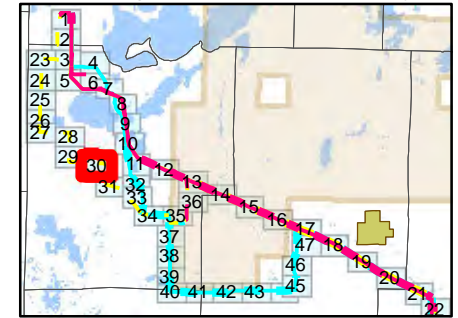
0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011 Page 29 of 47

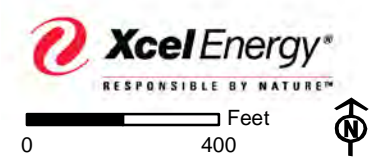




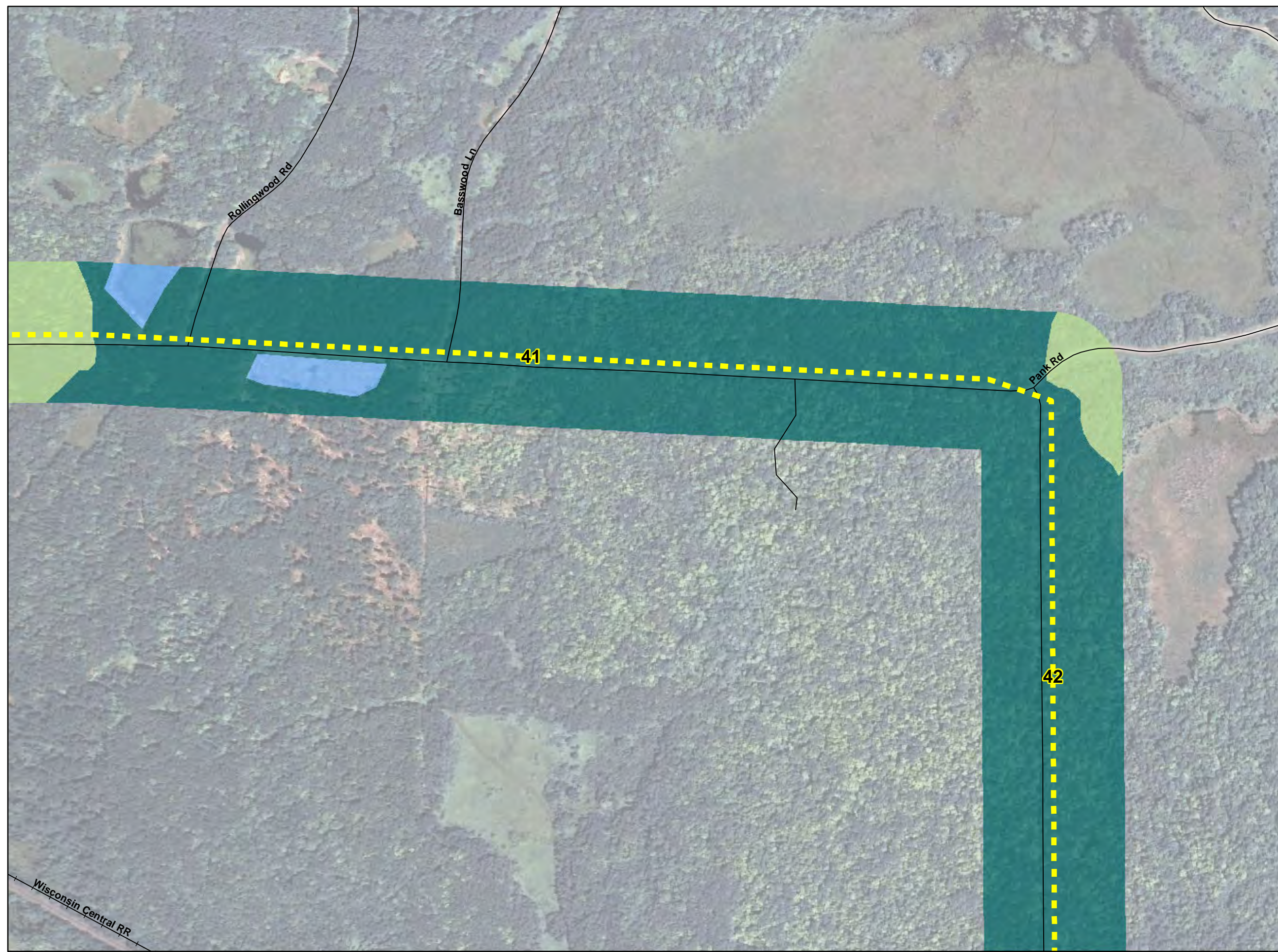
Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - ◆ Route Segment Endpoint
  - ▭ Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

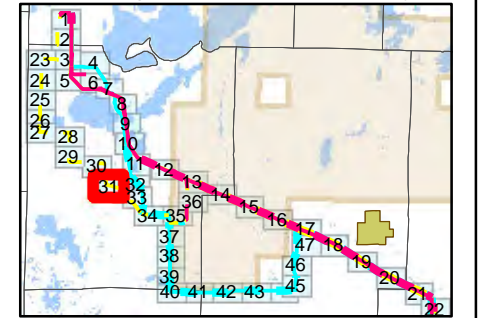


Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011 Page 30 of 47





# Appendix B-4 Land Cover Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project

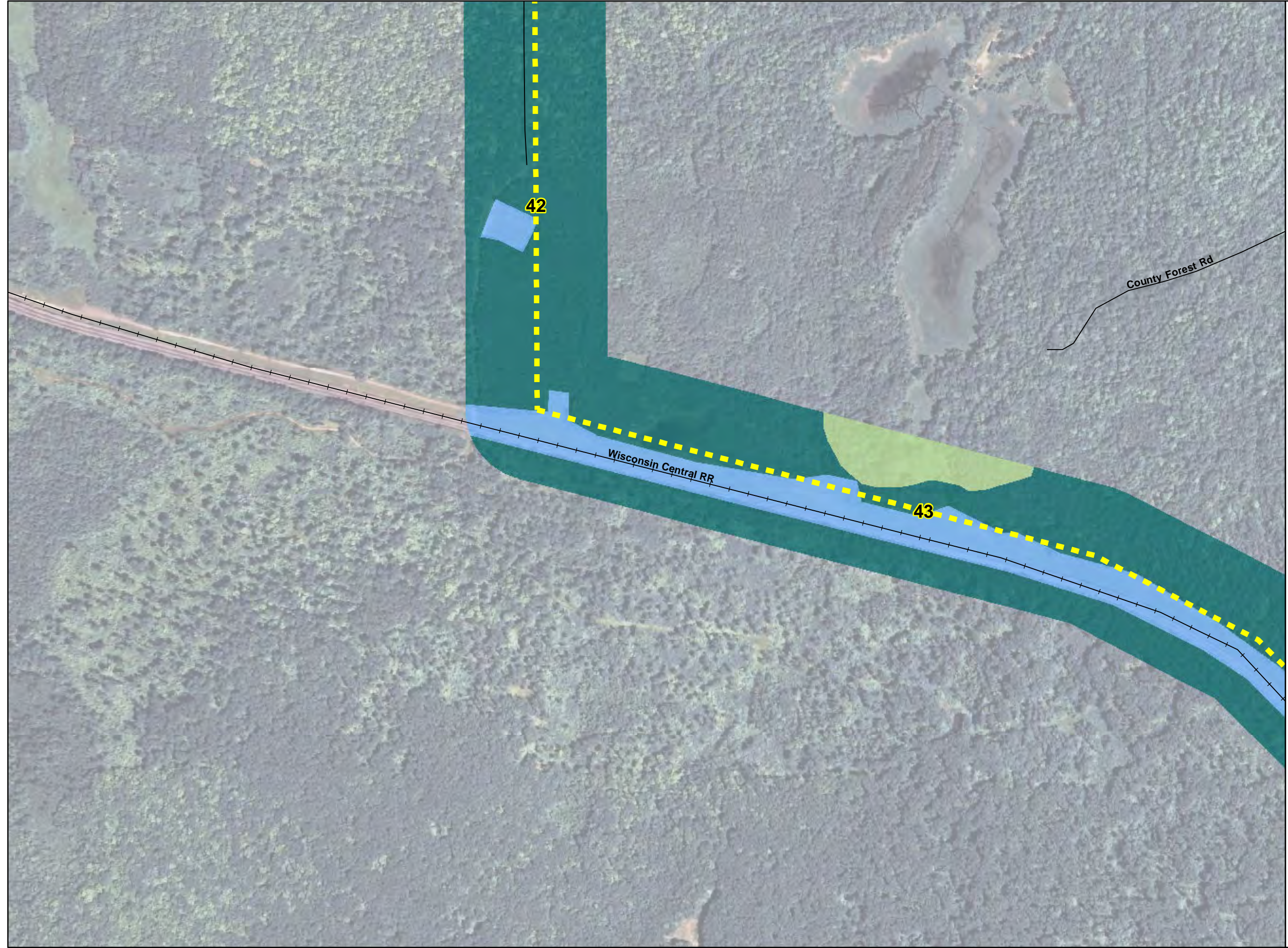


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

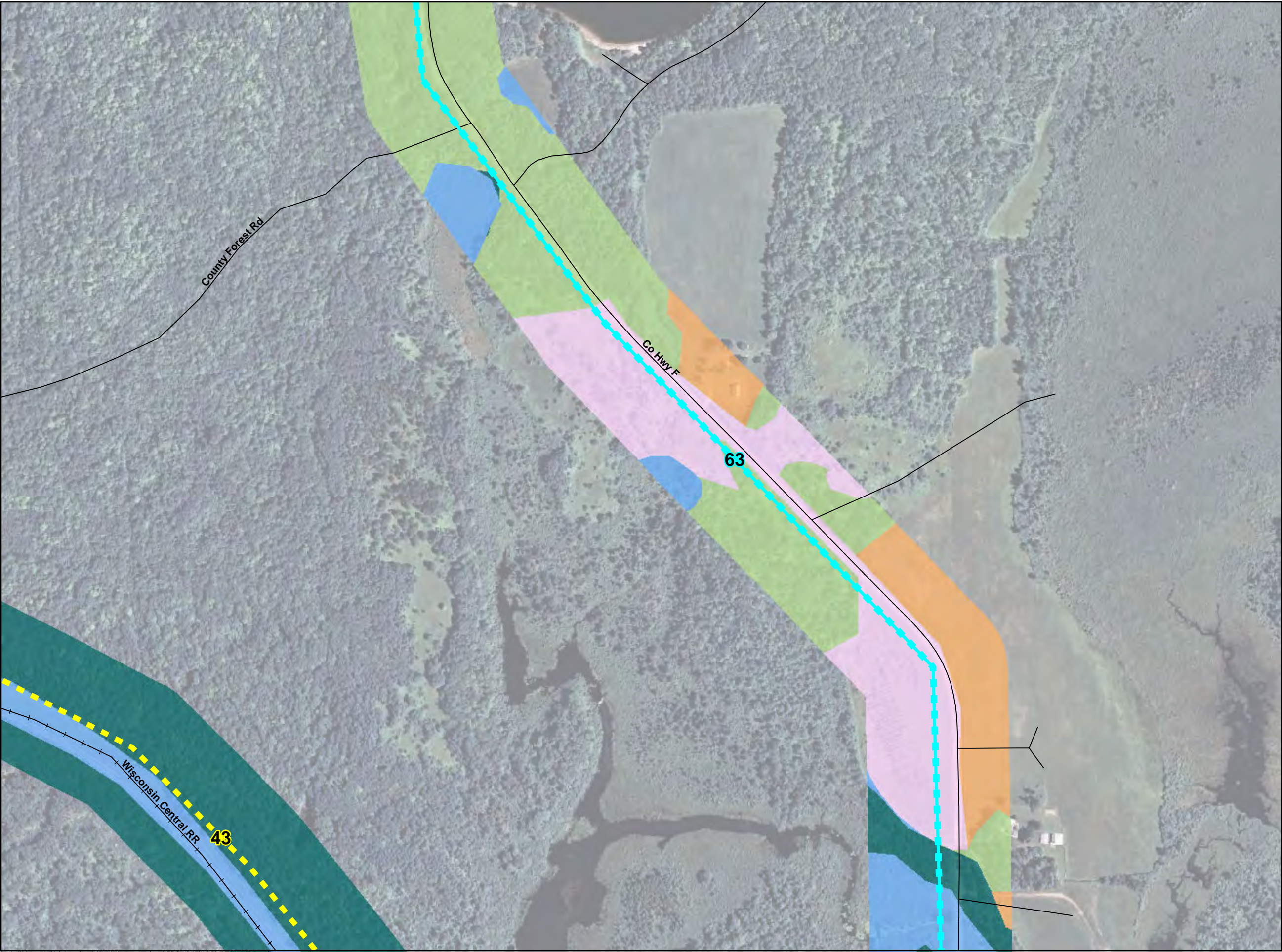
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover

Date: 8/29/2011

Page 31 of 47







Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

**Route Alternatives**  
Preferred Route 161 kV  
Preferred Route 69 kV  
Preferred Route 161/69 kV  
Alternate Route A 161 kV  
Alternate Route A 69 kV  
Alternate Route A 161/69 kV  
Alternate Route B 161 kV  
Alternate Route B 69 kV  
Alternate Route B 161/69 kV  
Route Segment Endpoint  
Radisson Substation Site

**Existing Transmission**  
69kV AC  
161kV AC  
345kV AC  
Substation (Xcel)  
Substation (Not Xcel)  
Road  
Railroad  
Commercial / Industrial  
Crop Land  
Forested Wetland  
Non-Forested Wetland  
Pasture  
Grassland  
Residential  
Upland Forest

0400

Feet

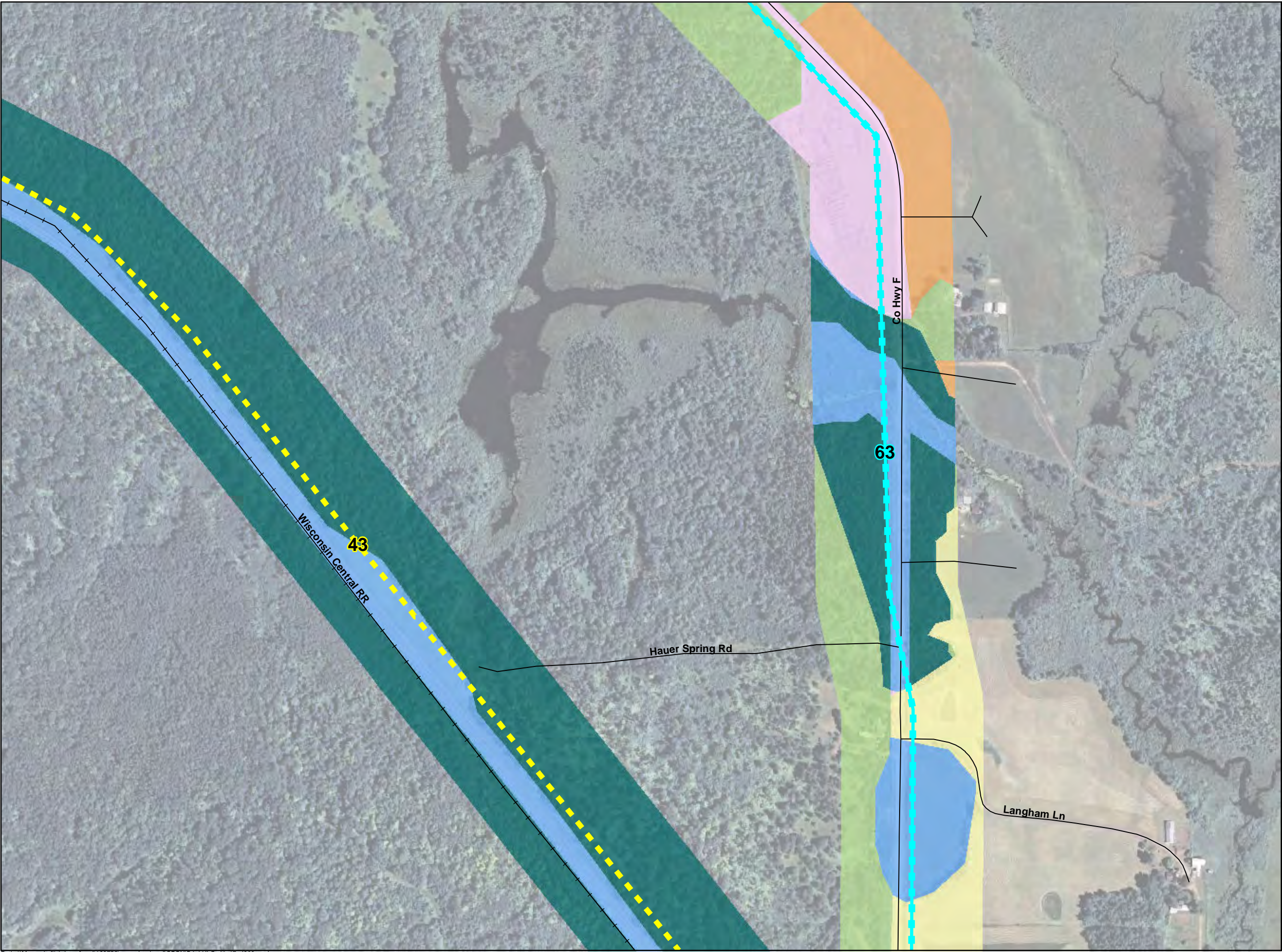
↑

N

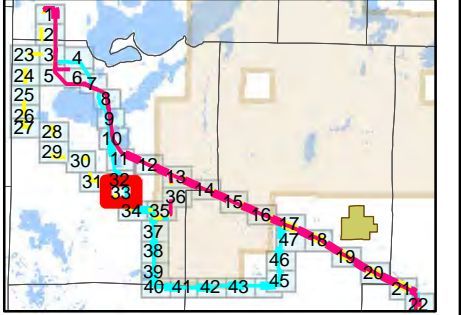
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011Page 32 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B4\_LULC\_11x17\_4800.mxd





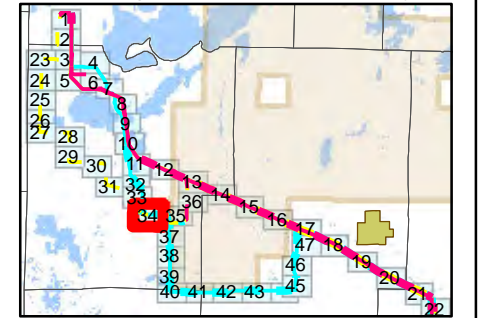
Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest



# Appendix B-4 Land Cover Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project

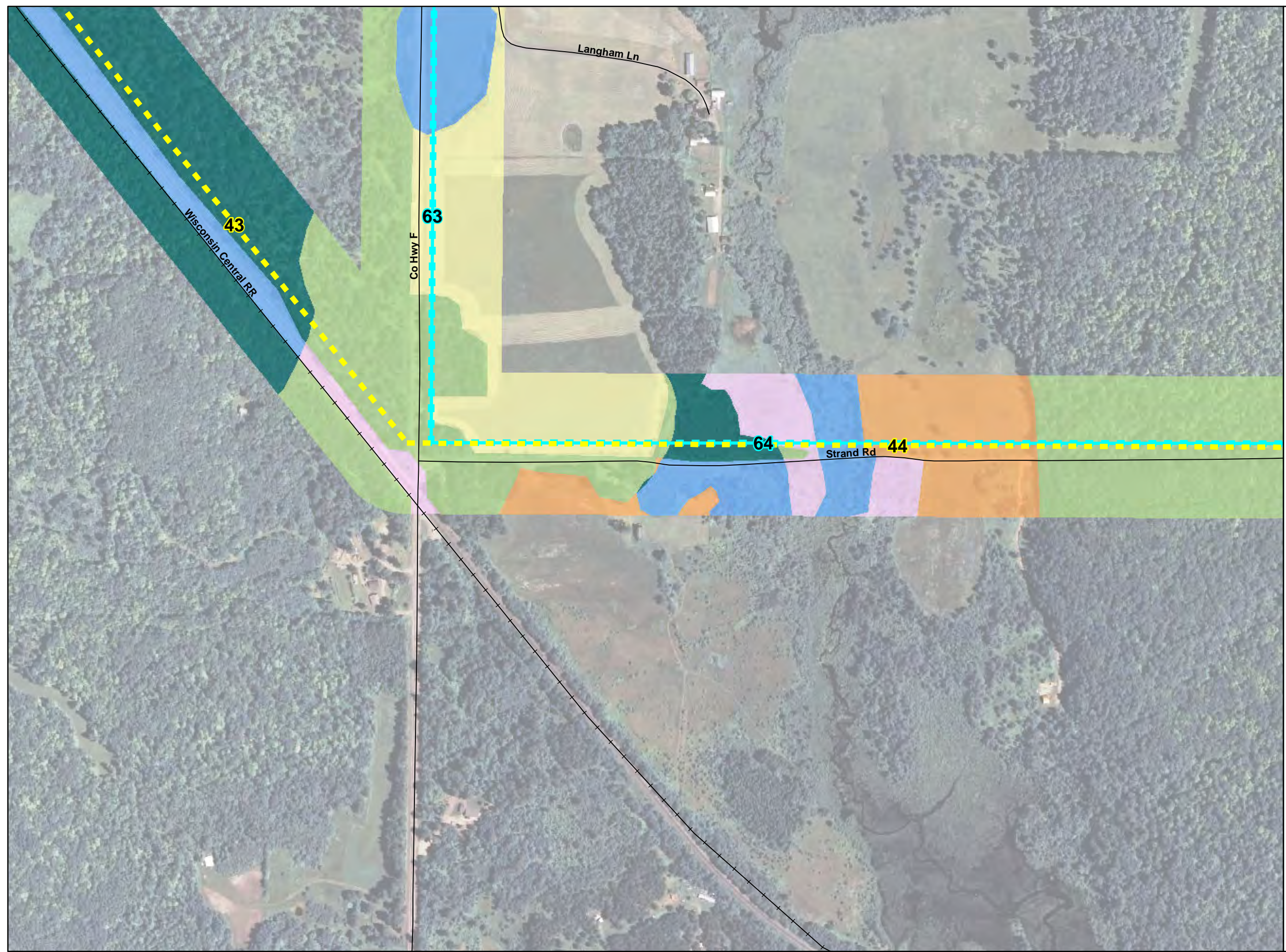


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

**XcelEnergy**  
RESPONSIBLE BY NATURE™

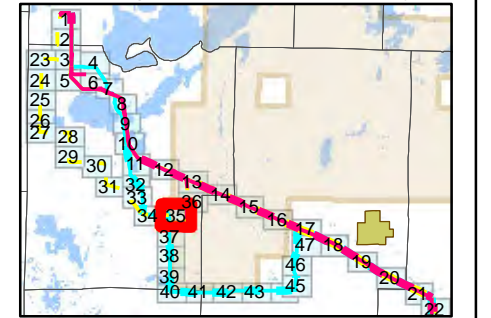
0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011 Page 34 of 47





Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

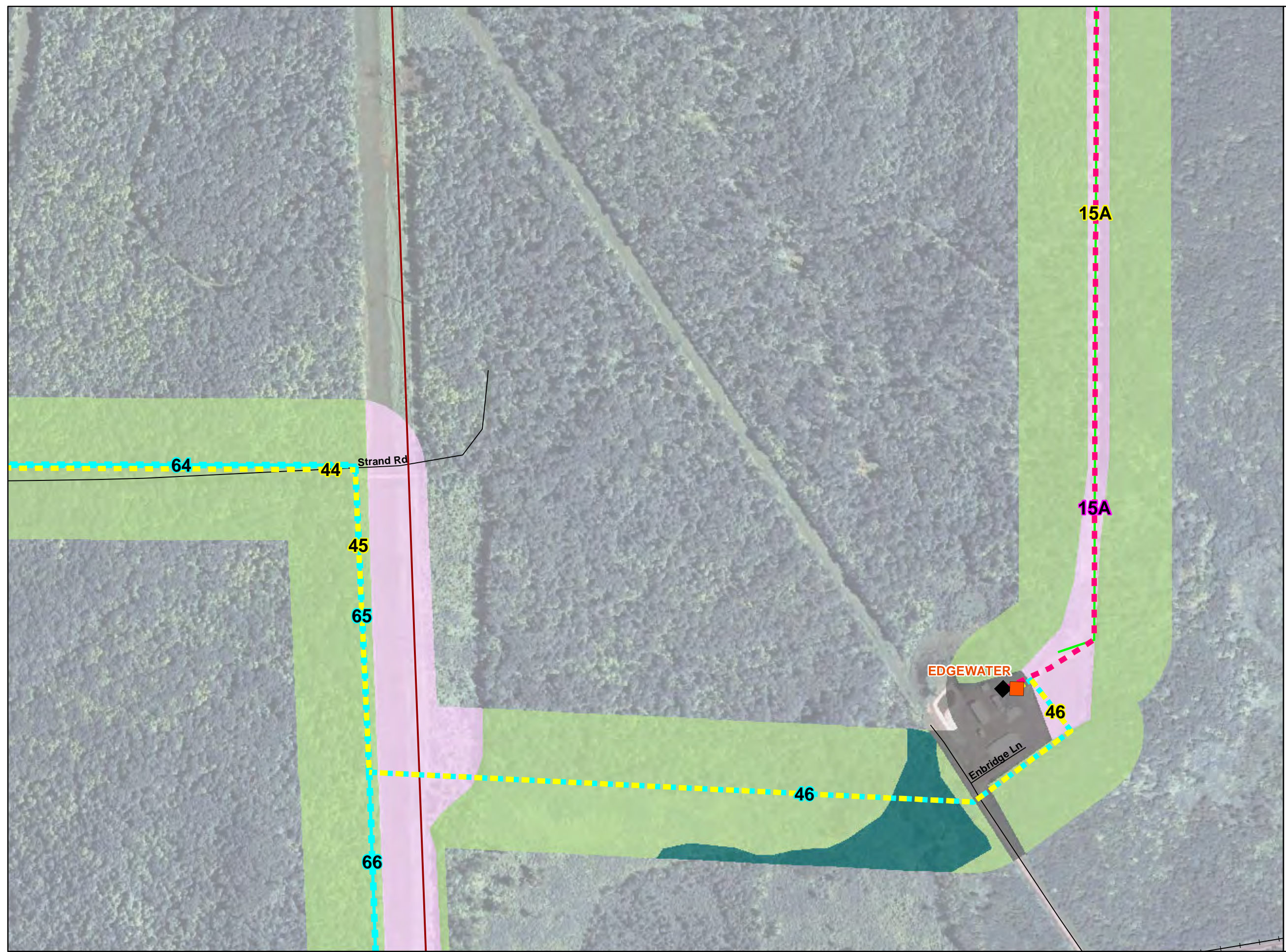


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

**XcelEnergy**  
RESPONSIBLE BY NATURE™

0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011 Page 35 of 47







Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Route Segment Endpoint

Radisson Substation Site

Existing Transmission

69kV AC

161kV AC

345kV AC

Substation (Xcel)

Substation (Not Xcel)

Road

Railroad

Commercial / Industrial

Crop Land

Forested Wetland

Non-Forested Wetland

Pasture

Grassland

Residential

Upland Forest

Xcel Energy®  
RESPONSIBLE BY NATURE™

0400

Feet

↑

N

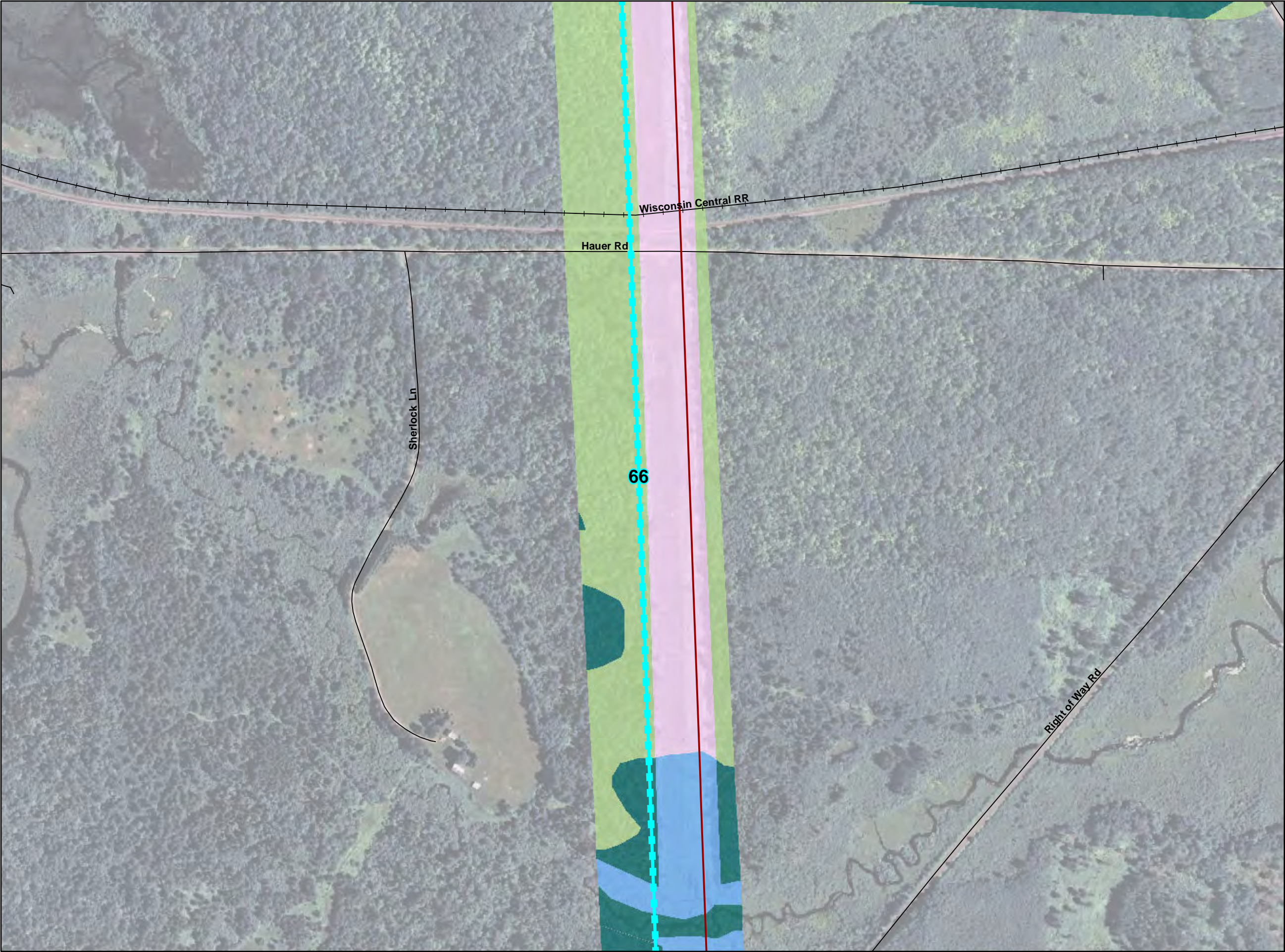
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover

Date: 8/29/2011

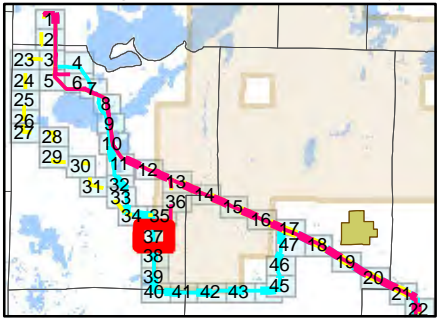
Page 36 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B4\_LULC\_11x17\_4800.mxd

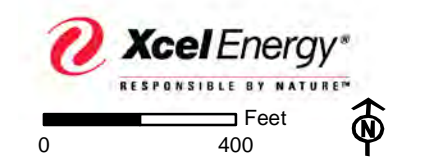




Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

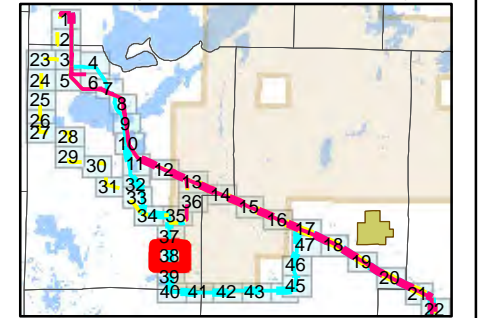


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest





# Appendix B-4 Land Cover Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project

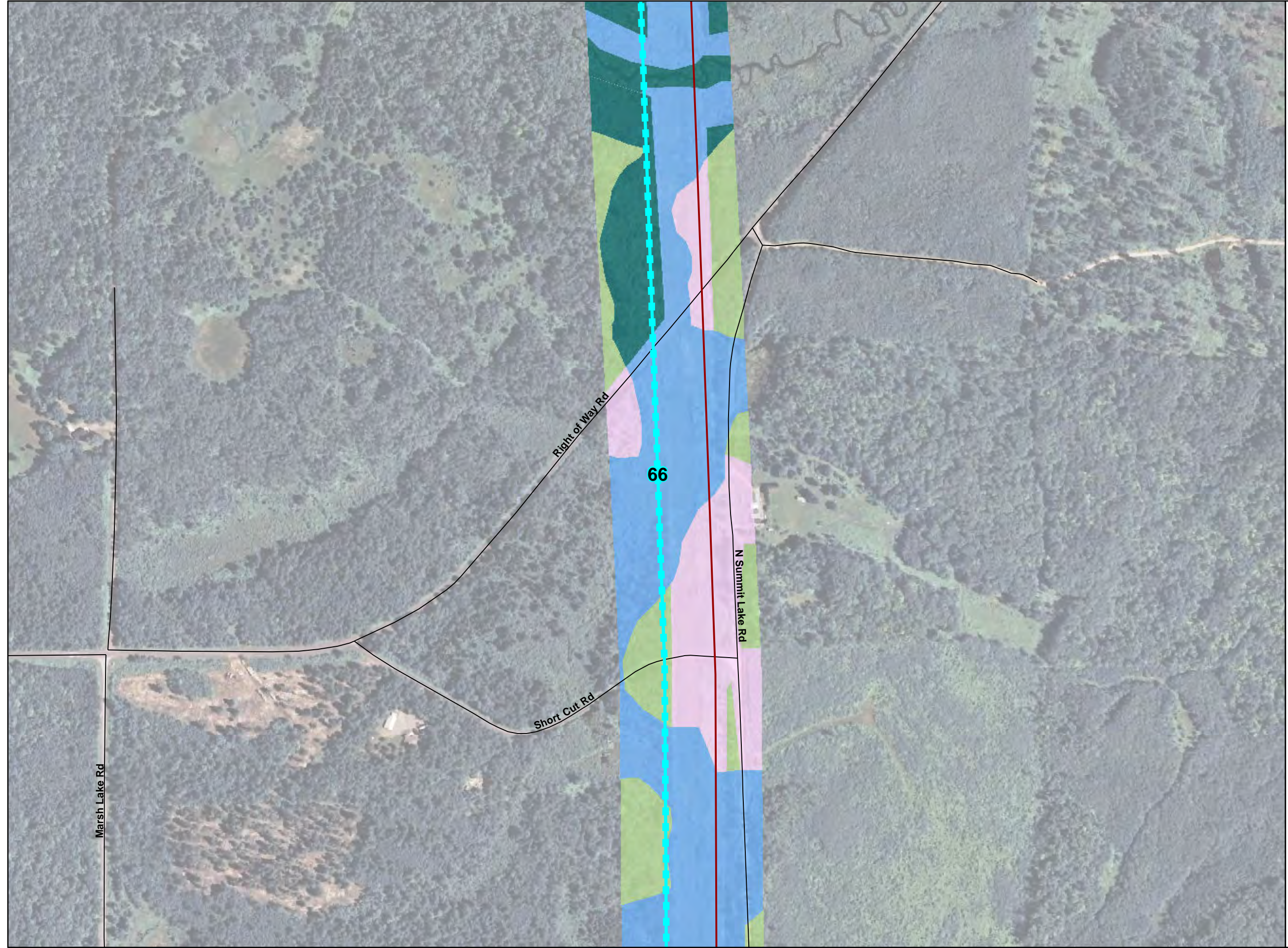


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

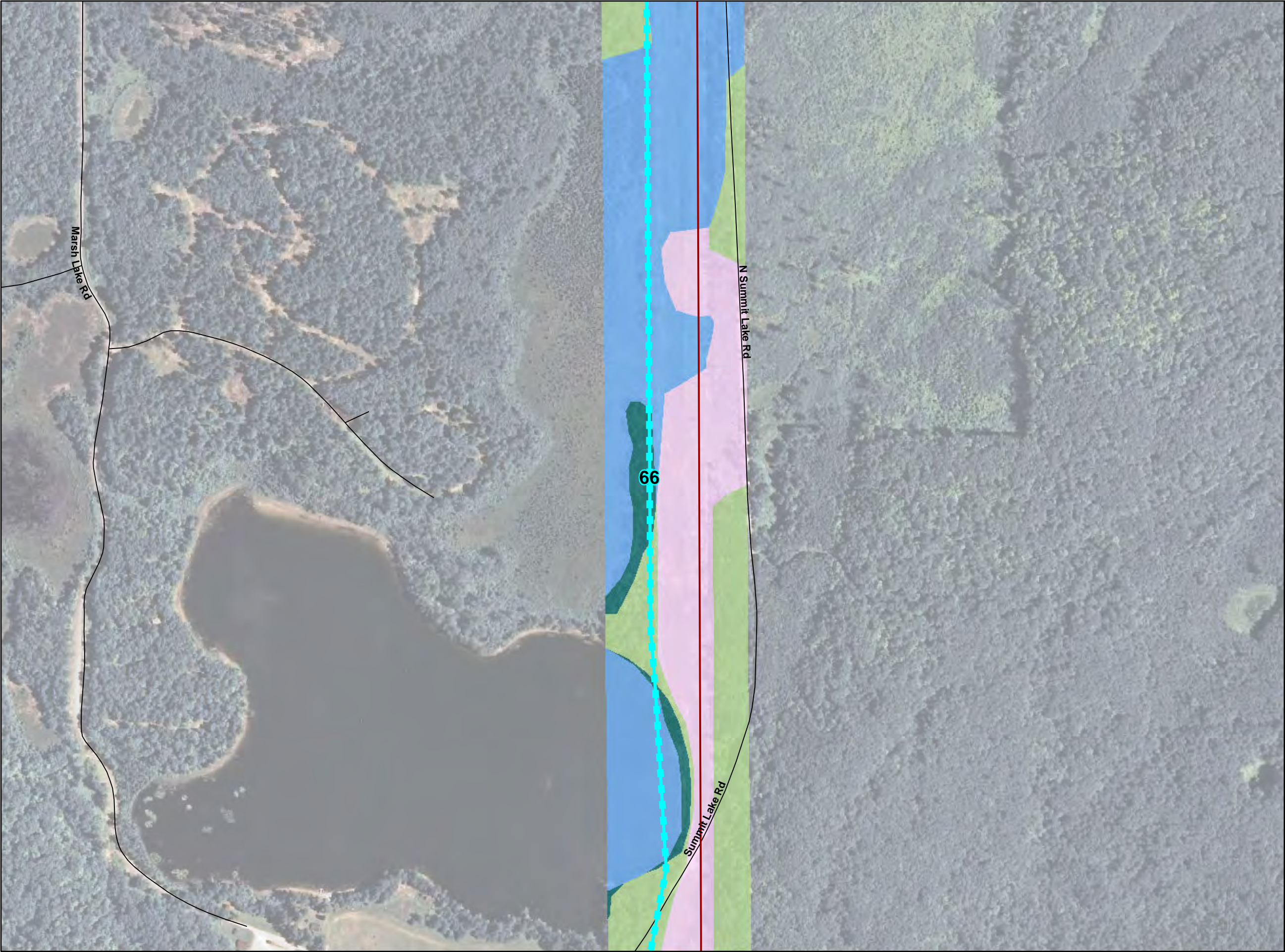
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover

Date: 8/29/2011

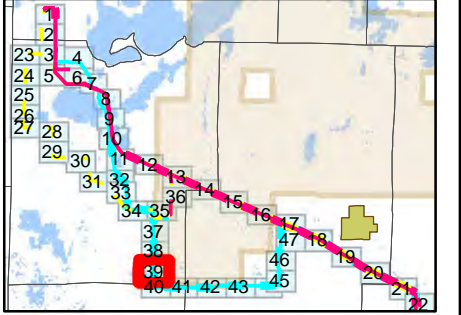
Page 38 of 47





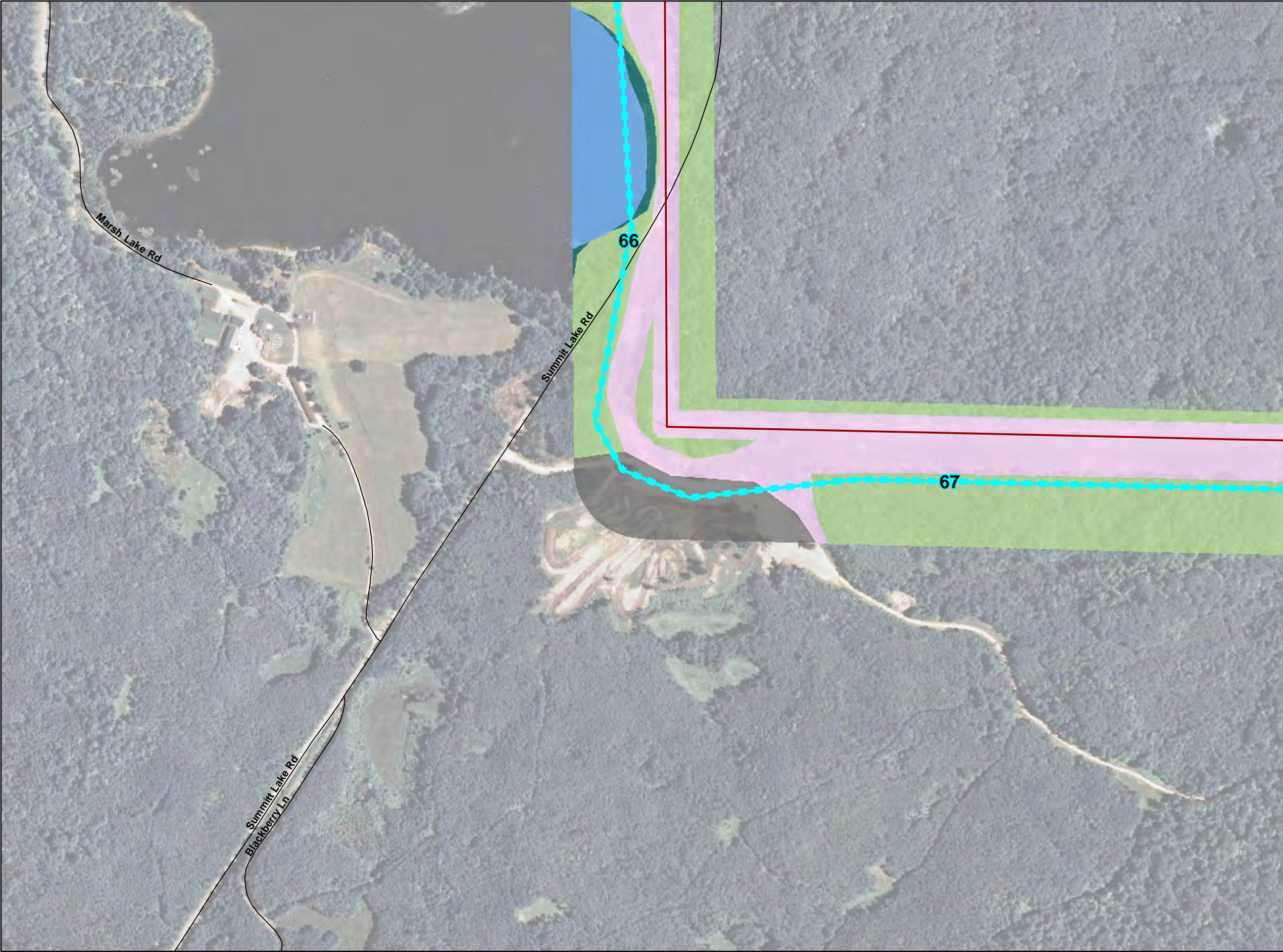


Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

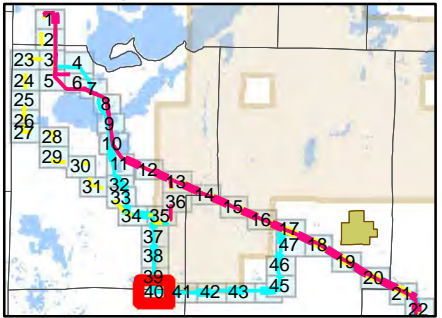


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

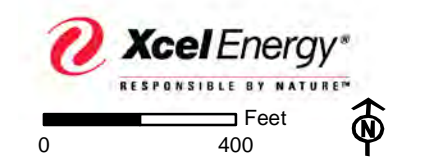




Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

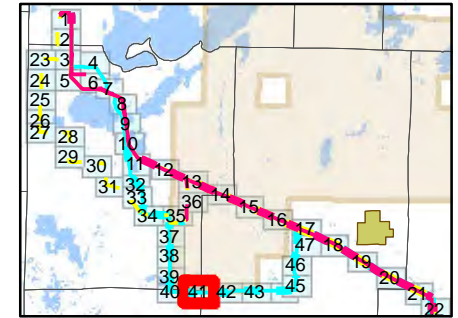


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest






Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - ◆ Route Segment Endpoint
  - ▭ Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

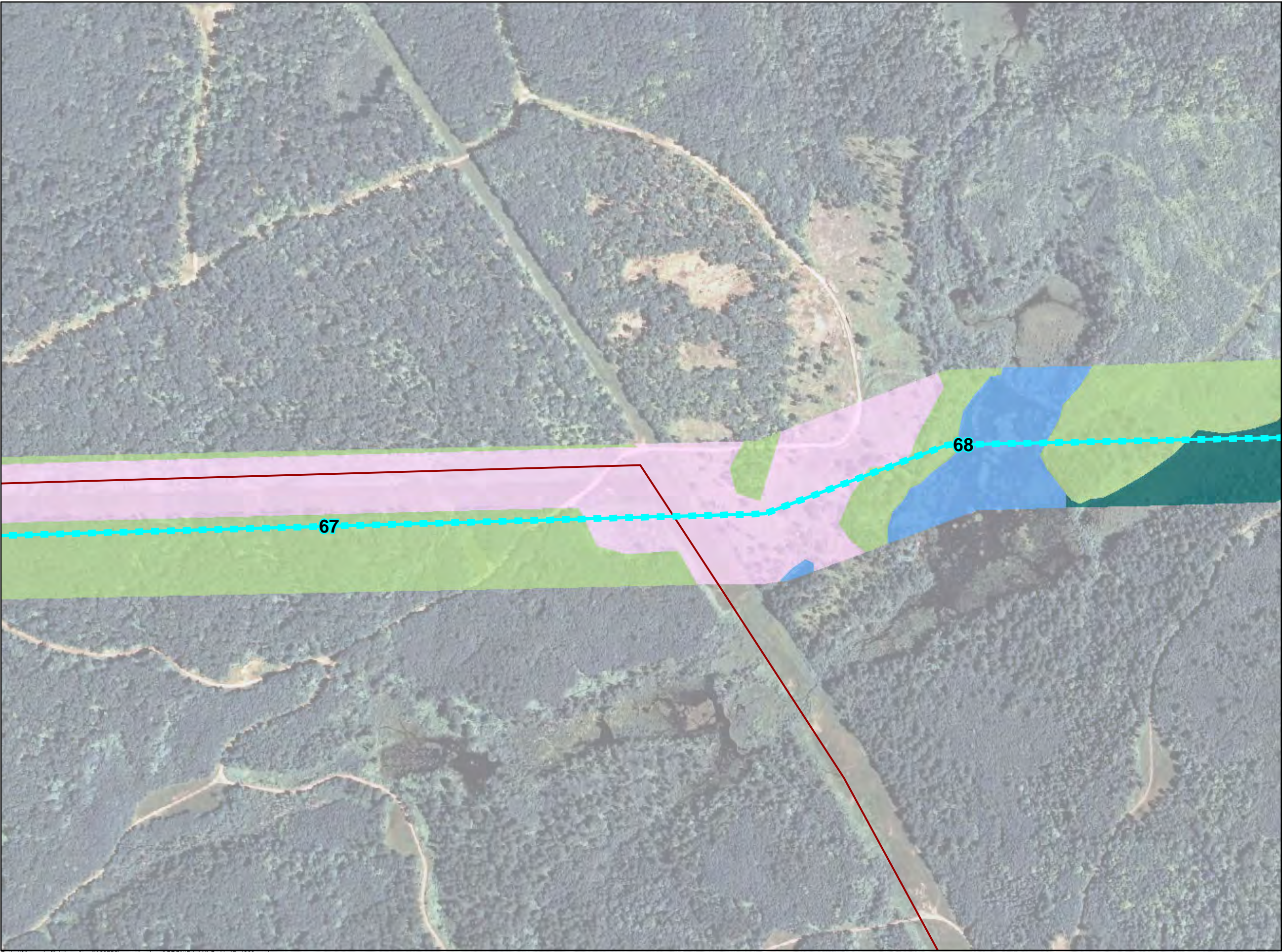
  
RESPONSIBLE BY NATURE™

0 400 Feet

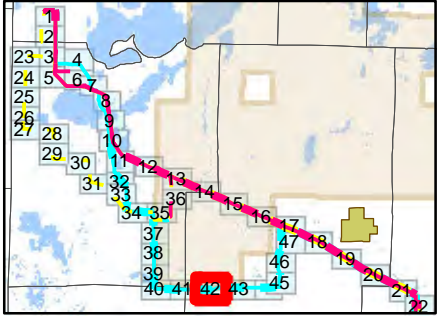
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011 Page 41 of 47





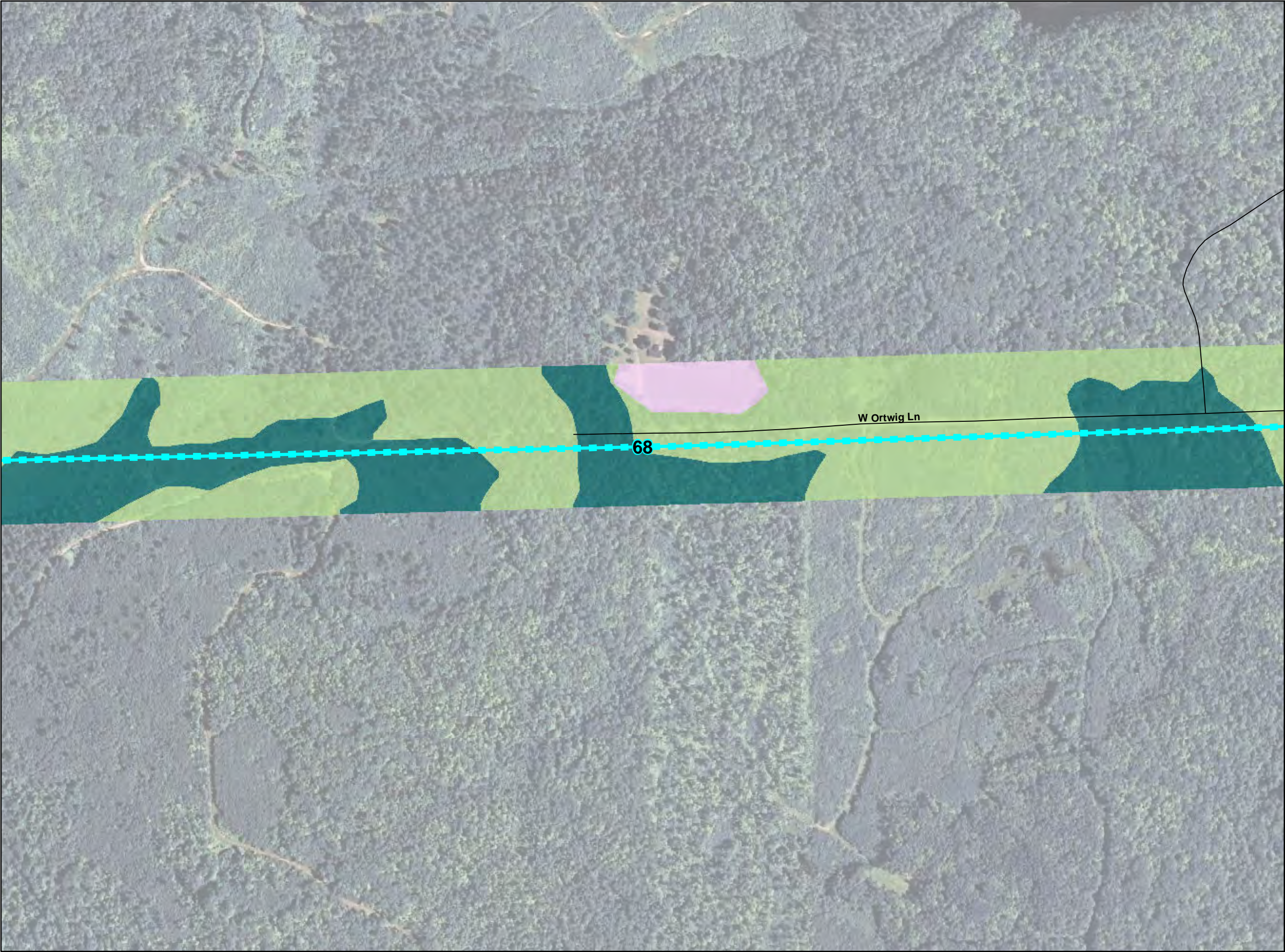


Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest





Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Route Segment Endpoint

Radisson Substation Site

Existing Transmission

69kV AC

161kV AC

345kV AC

Substation (Xcel)

Substation (Not Xcel)

Road

Railroad

Commercial / Industrial

Crop Land

Forested Wetland

Non-Forested Wetland

Pasture

Grassland

Residential

Upland Forest

RESPONSIBLE BY NATURE™

0400

Feet

↑

N

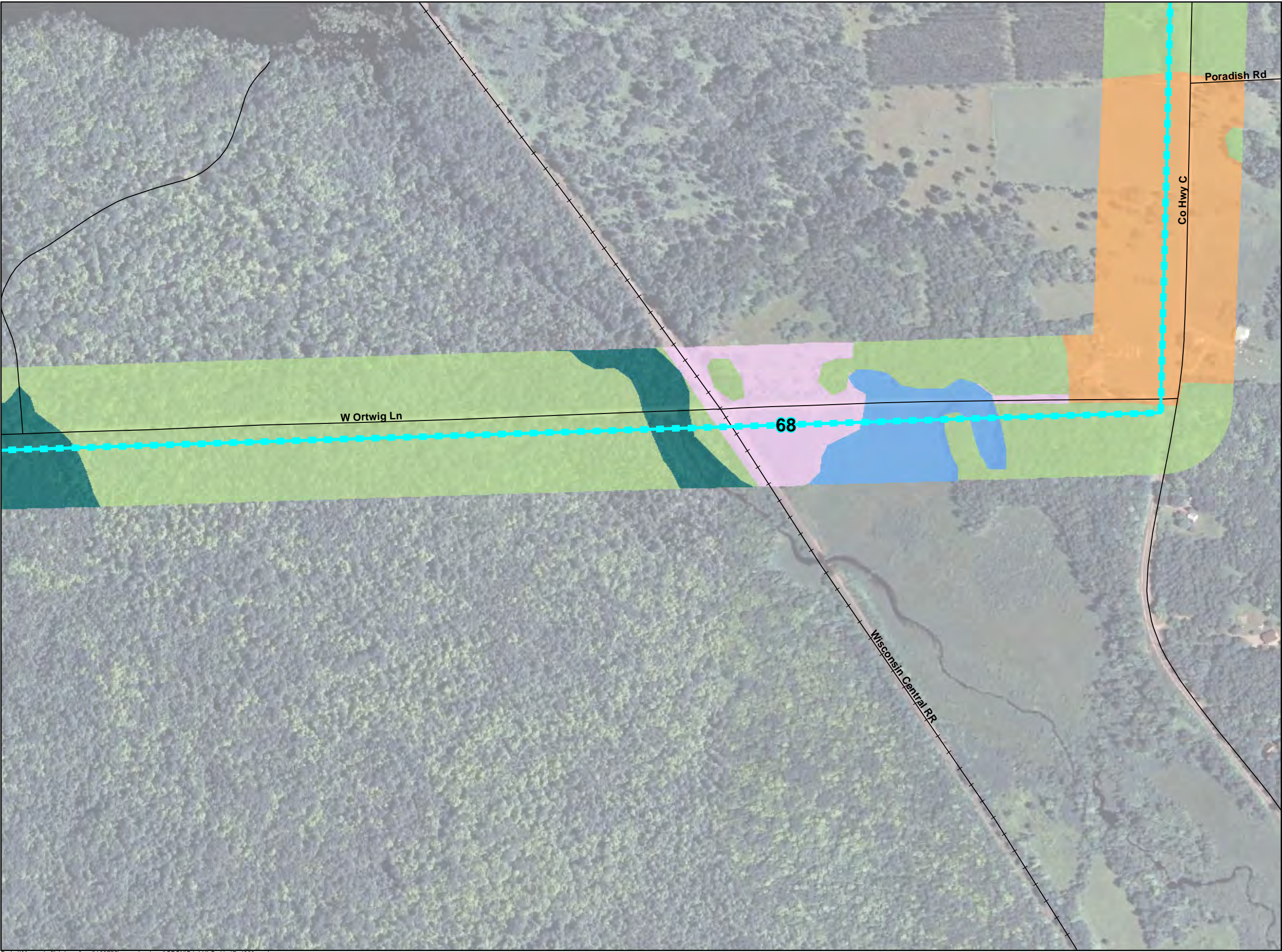
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover

Date: 8/29/2011

Page 43 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B4\_LULC\_11x17\_4800.mxd





Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Route Segment Endpoint

Radisson Substation Site

Existing Transmission

69kV AC

161kV AC

345kV AC

Substation (Xcel)

Substation (Not Xcel)

Road

Railroad

Commercial / Industrial

Crop Land

Forested Wetland

Non-Forested Wetland

Pasture

Grassland

Residential

Upland Forest

RESPONSIBLE BY NATURE™

0400

Feet

↑

N

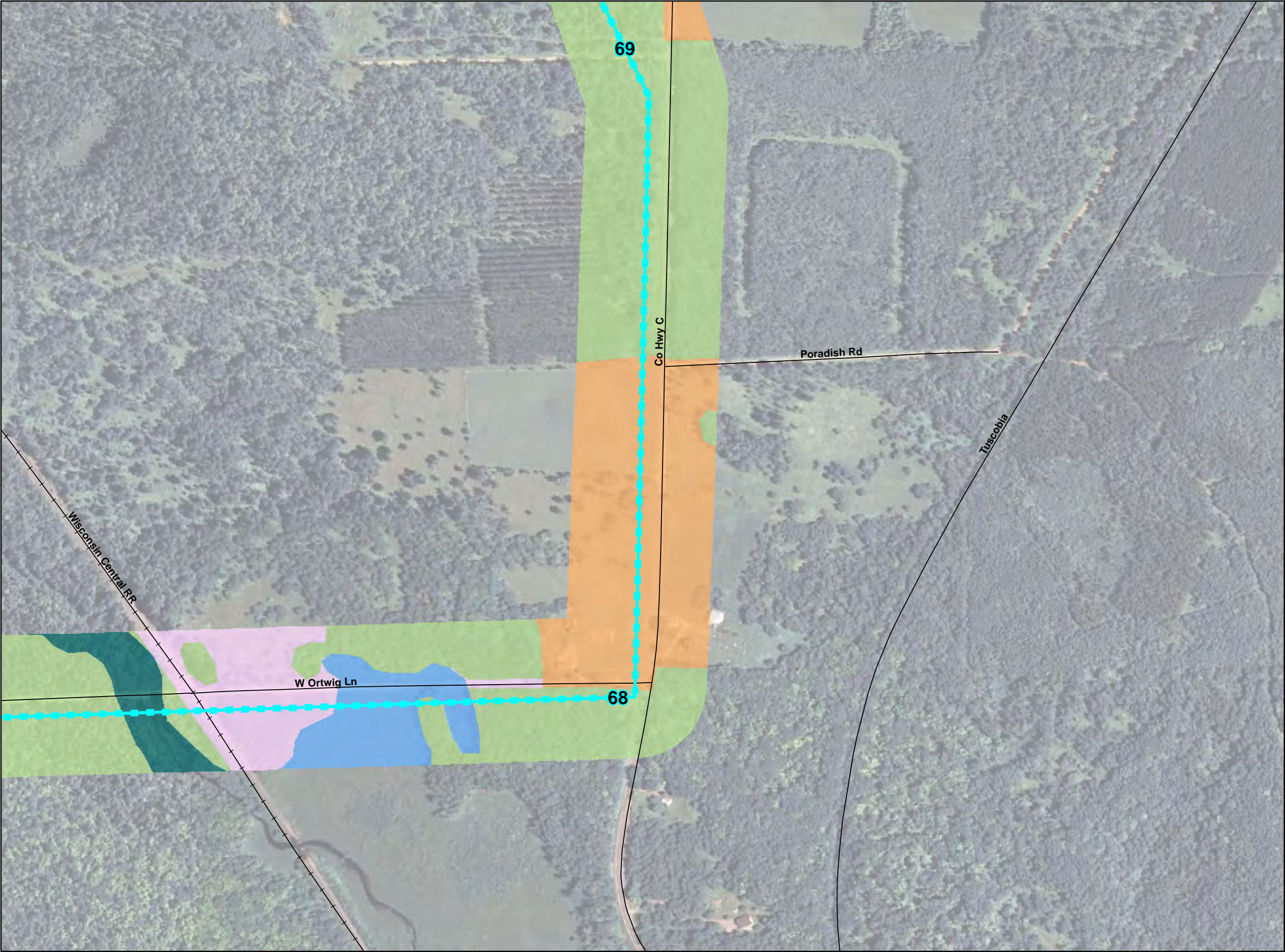
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover

Date: 8/29/2011

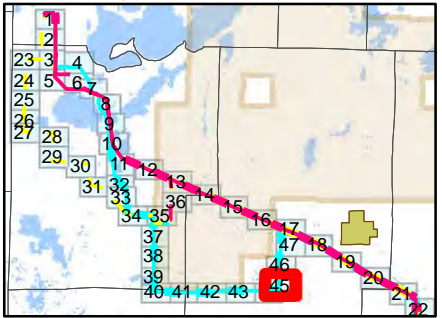
Page 44 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B4\_LULC\_11x17\_4800.mxd





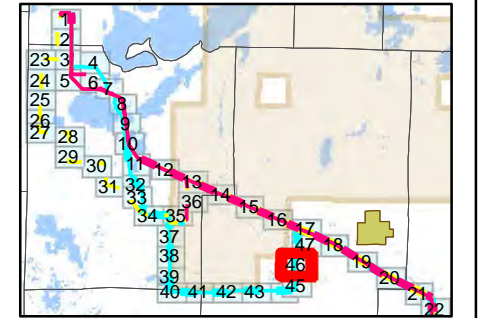
Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest



Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

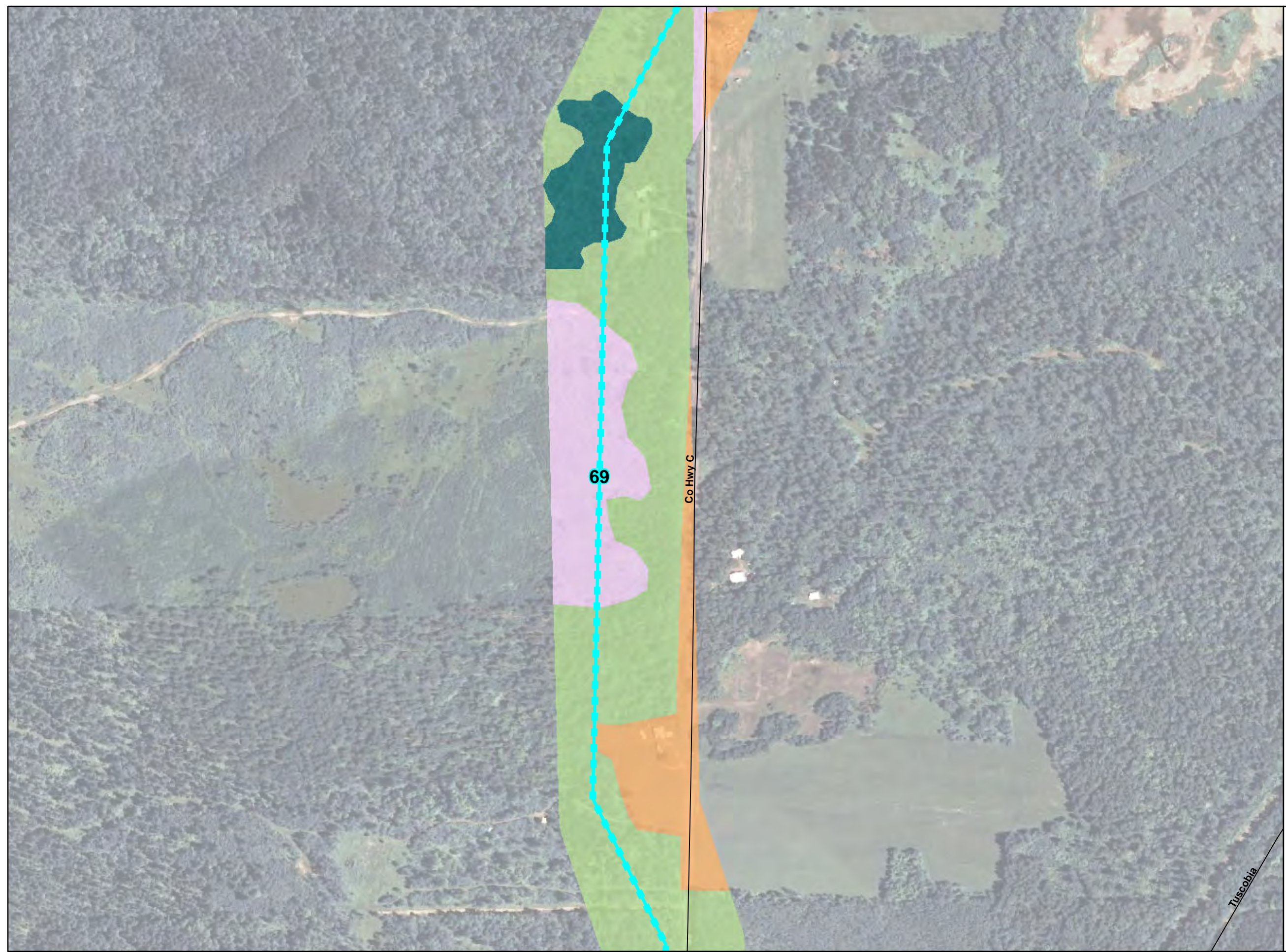


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
  - Commercial / Industrial
  - Crop Land
  - Forested Wetland
  - Non-Forested Wetland
  - Pasture
  - Grassland
  - Residential
  - Upland Forest

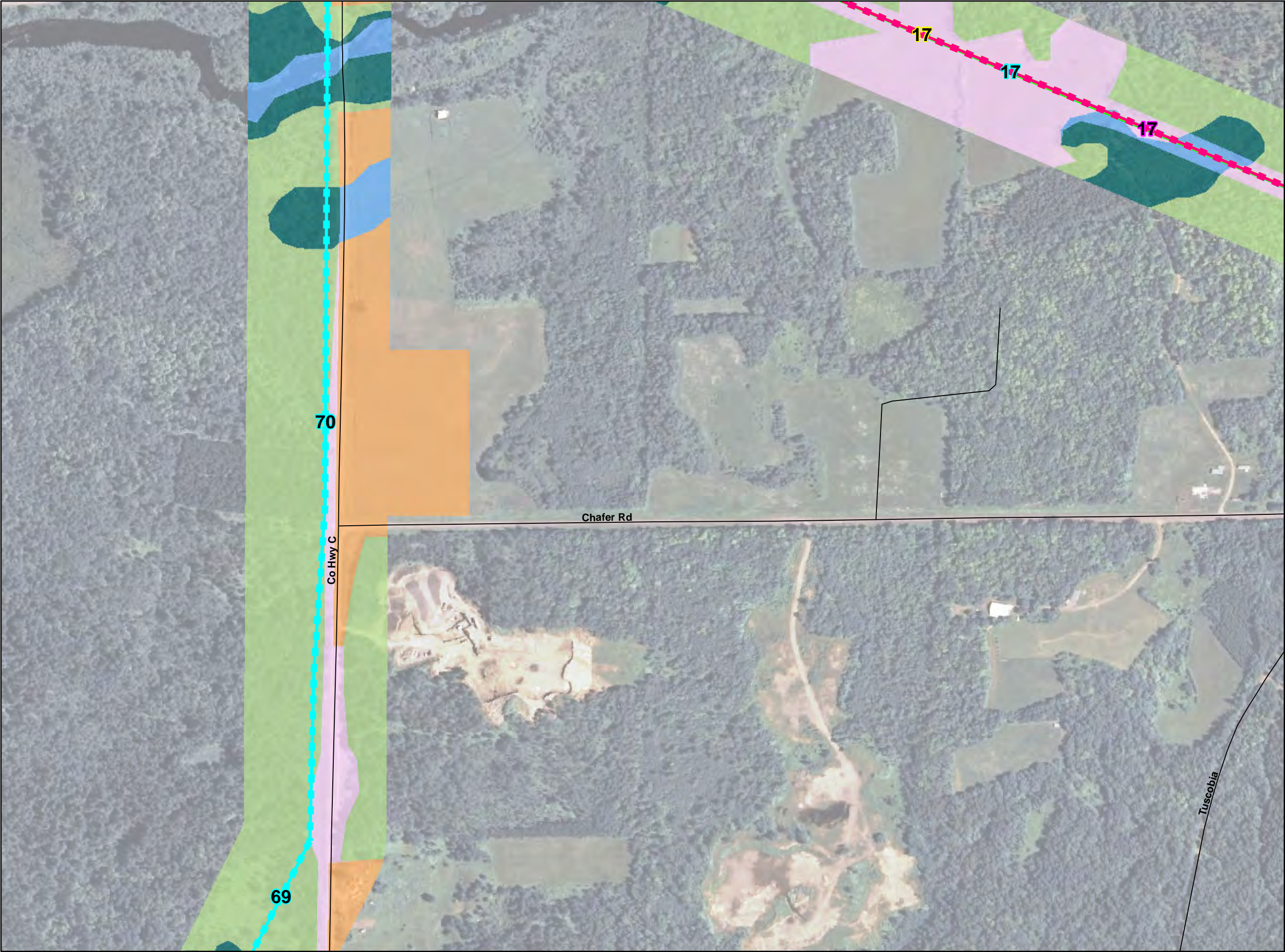
**Xcel Energy**  
RESPONSIBLE BY NATURE™

0 400 Feet

Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011 Page 46 of 47







Appendix B-4  
Land Cover  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

**Existing Transmission**

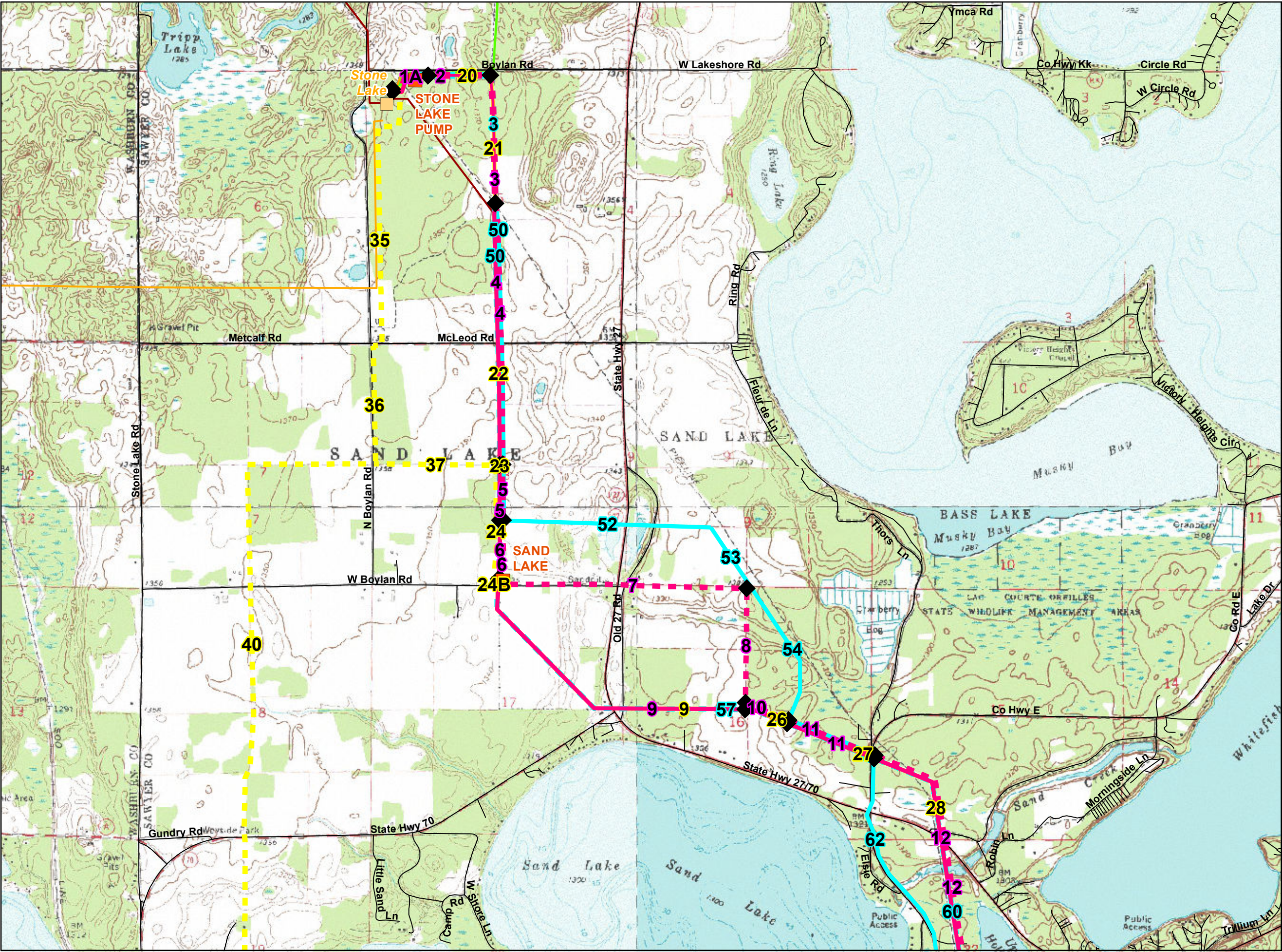
- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad
- Commercial / Industrial
- Crop Land
- Forested Wetland
- Non-Forested Wetland
- Pasture
- Grassland
- Residential
- Upland Forest

0 400 Feet

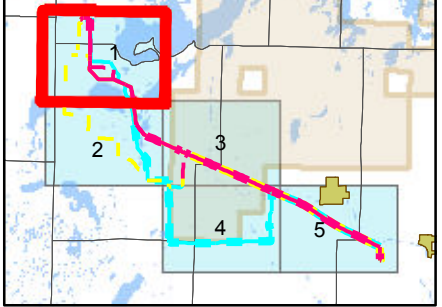
Sources: NAIP 2010, Field/Desktop Reviewed  
Land Cover  
Date: 8/29/2011

Page 47 of 47





Appendix B-5  
USGS Topography  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



Substation (Xcel)  
Substation (Not Xcel)  
Route Segment Endpoint


**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC

Radisson Substation Site  
Road  
Railroad

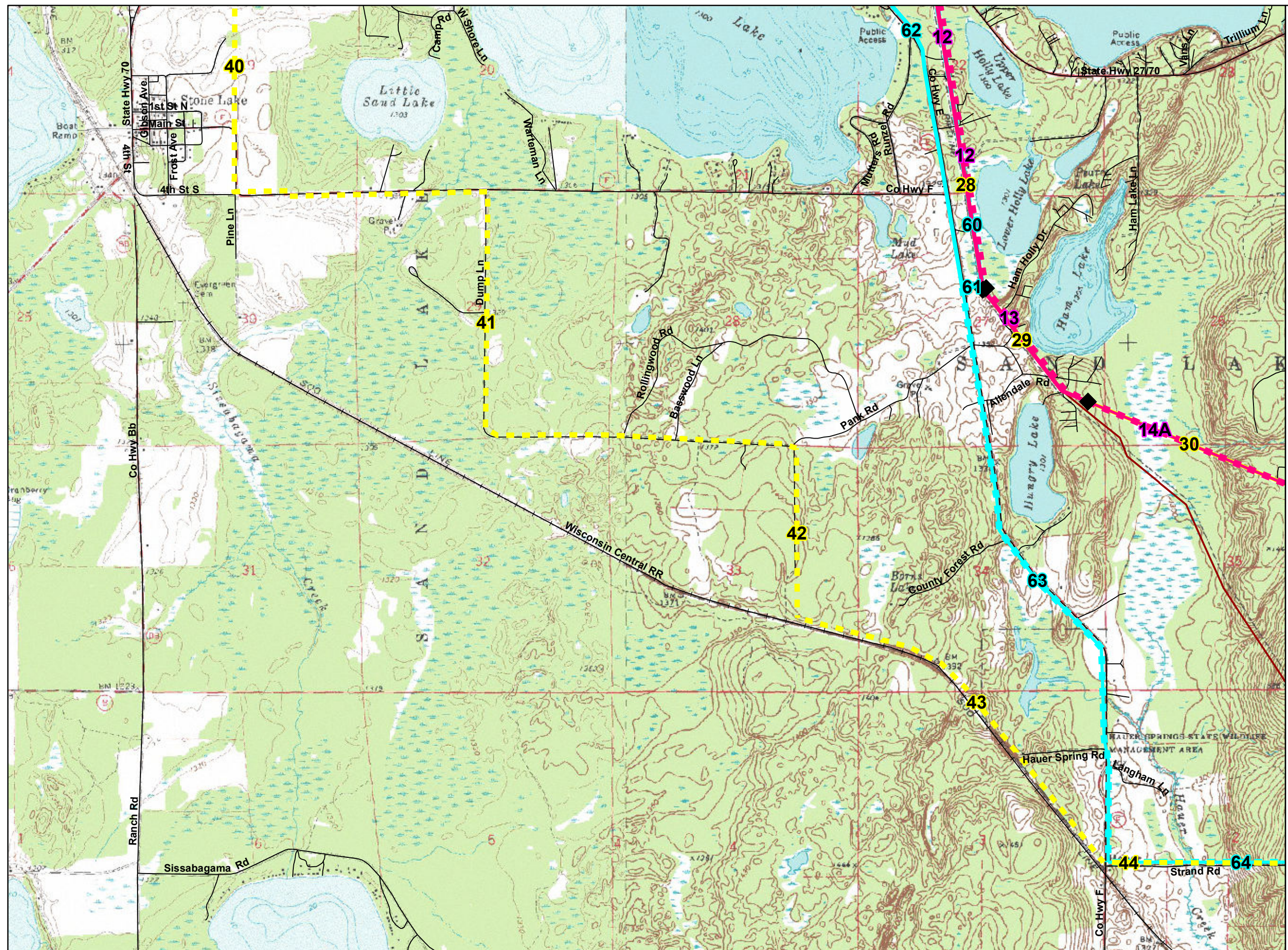


0 1,000 2,000 Feet

Source: USGS 1971  
Date: 8/29/2011

Page 1 of 5





Appendix B-5  
USGS Topography  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Substation (Xcel)  
Substation (Not Xcel)  
Route Segment Endpoint

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC

Radisson Substation Site  
Road  
Railroad

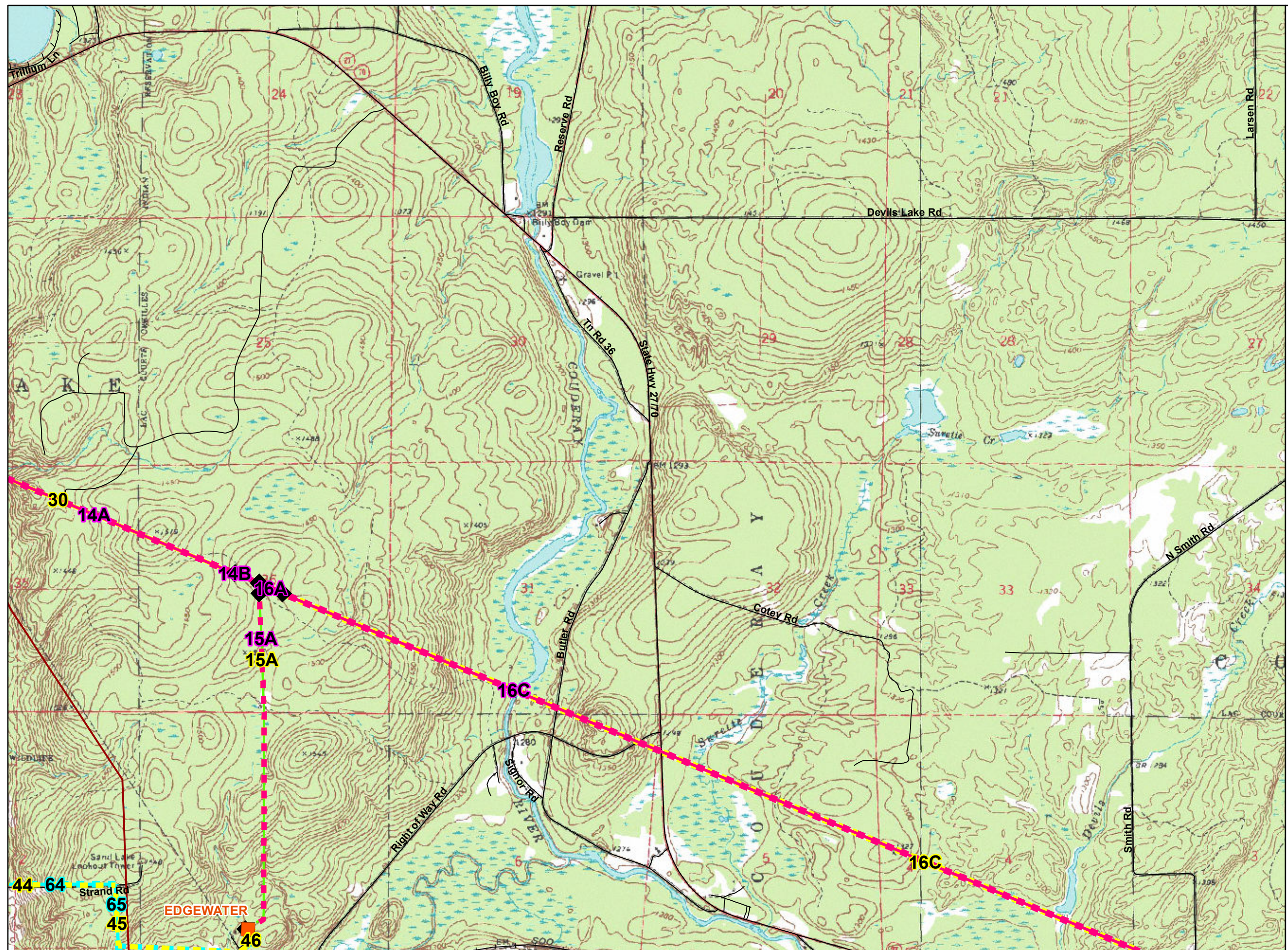
**Xcel Energy**  
RESPONSIBLE BY NATURE™

0 1,000 2,000 Feet

Source: USGS 1971  
Date: 8/29/2011

Page 2 of 5





### Appendix B-5

#### USGS Topography

#### Stone Lake to Couderay

69 kV Rebuild /  
161kV Upgrade Transmission Project

- Substation (Xcel)
- Substation (Not Xcel)
- Route Segment Endpoint

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC

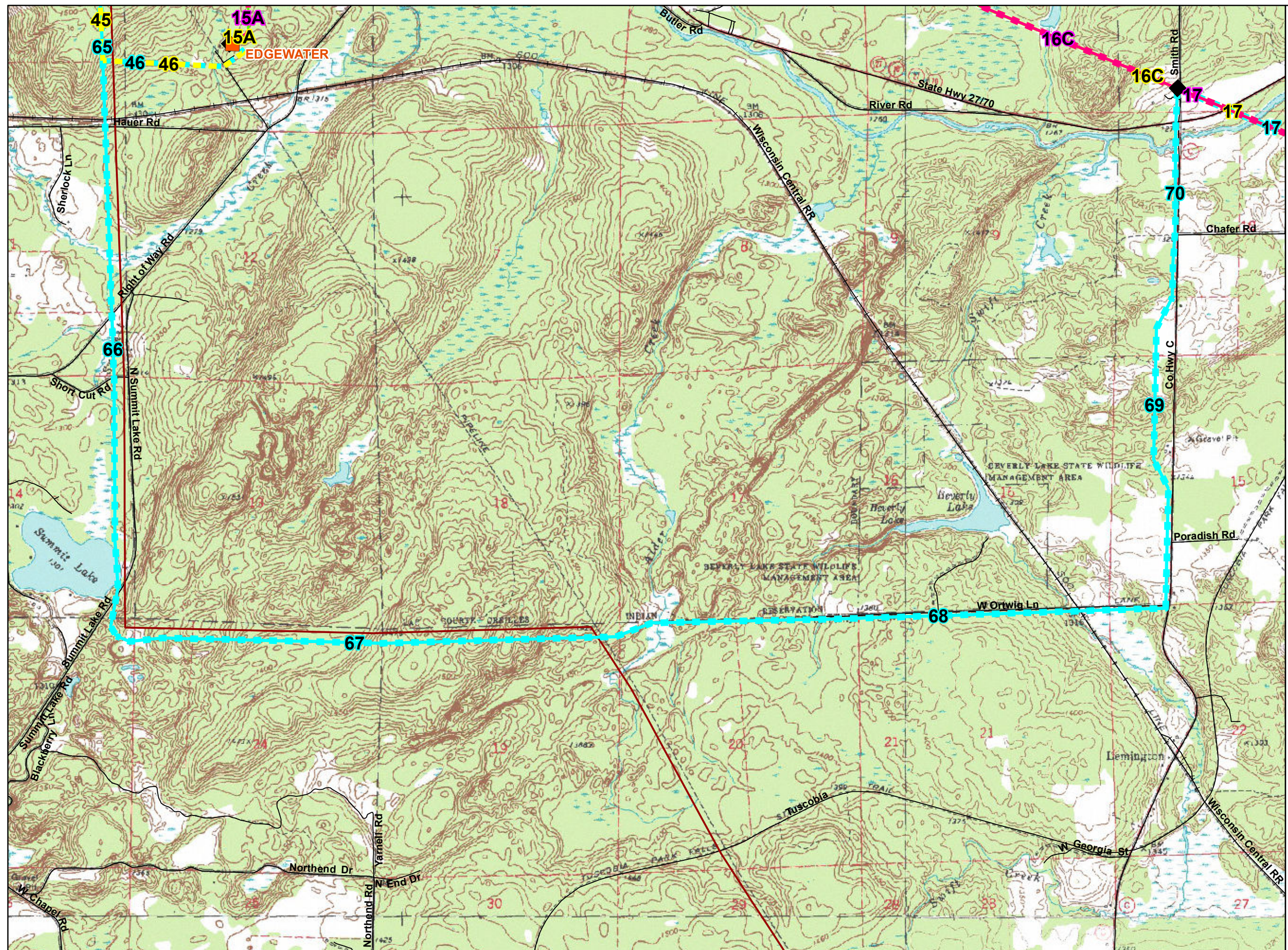
- Radisson Substation Site
- Road
- Railroad

0 1,000 2,000 Feet

Source: USGS 1971  
Date: 8/29/2011

Page 3 of 5





Appendix B-5  
USGS Topography  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

■ Substation (Xcel)  
 ■ Substation (Not Xcel)  
 ◆ Route Segment Endpoint

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC

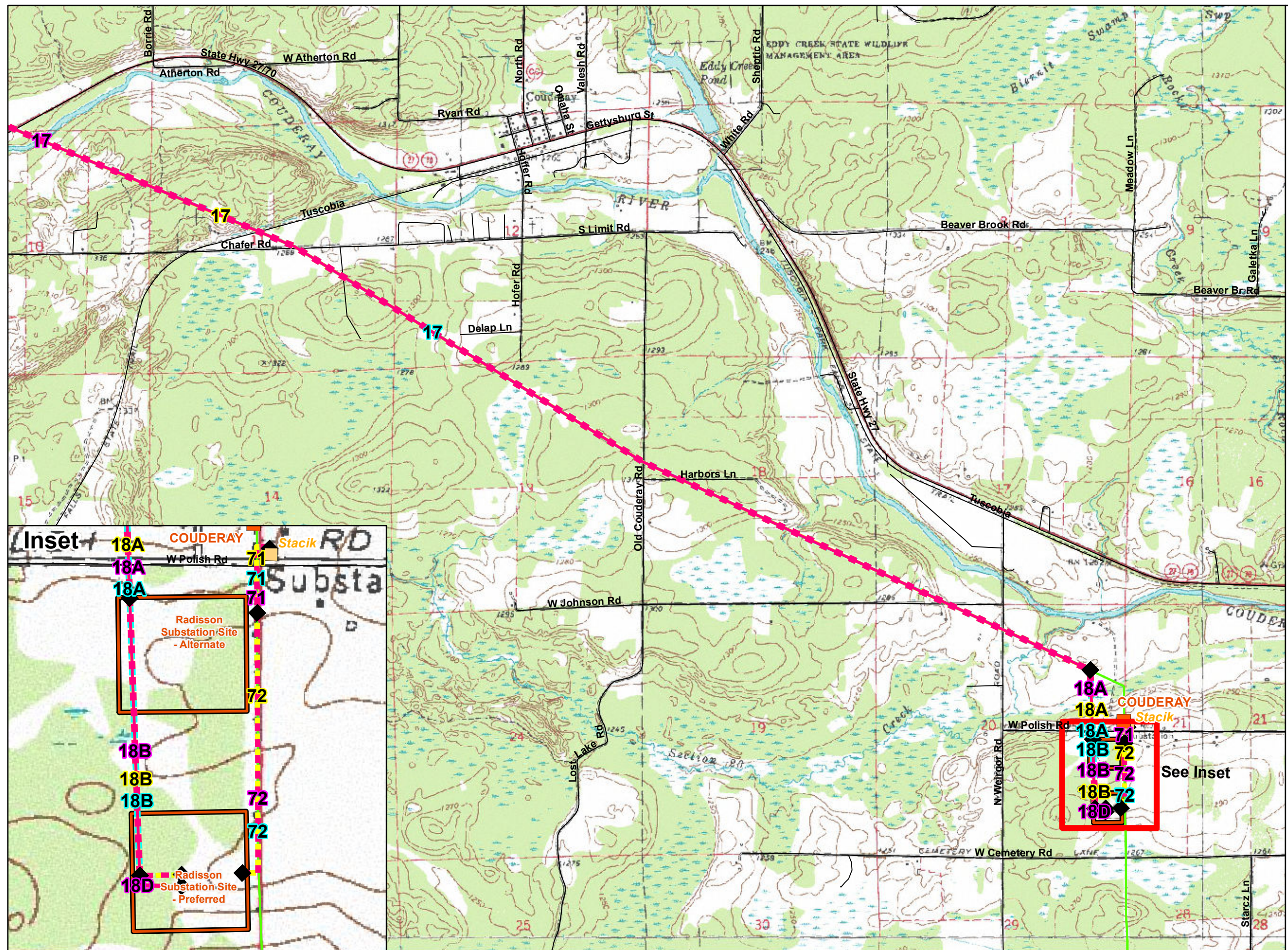
■ Radisson Substation Site  
 — Road  
 — Railroad

**Xcel Energy**  
 RESPONSIBLE BY NATURE™

0 1,000 2,000 Feet  
 Source: USGS 1971  
 Date: 8/29/2011

Page 4 of 5





Appendix B-5  
USGS Topography  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Substation (Xcel)

Substation (Not Xcel)

Route Segment Endpoint

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Existing Transmission

69kV AC

161kV AC

345kV AC

Radisson Substation Site

Road

Railroad

**Xcel Energy**  
RESPONSIBLE BY NATURE™

01,0002,000

Feet

Source: USGS 1971

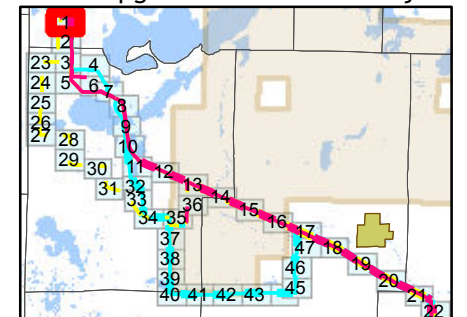
Date: 8/29/2011

Page 5 of 5

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCNIB5\_USGS\_11x17\_24k.mxd



# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

◆ Route Segment Endpoint

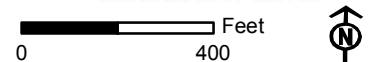
▭ Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

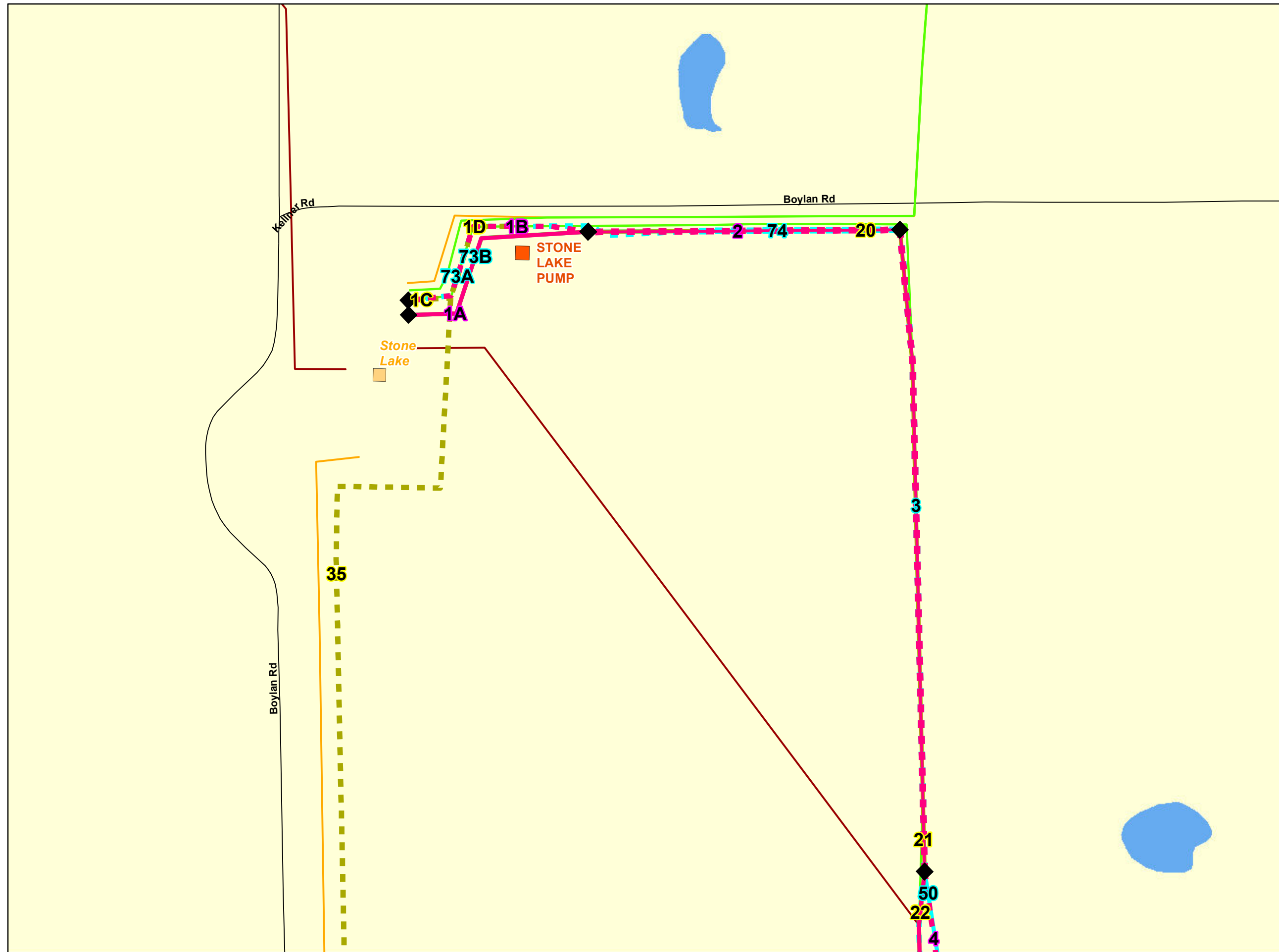
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



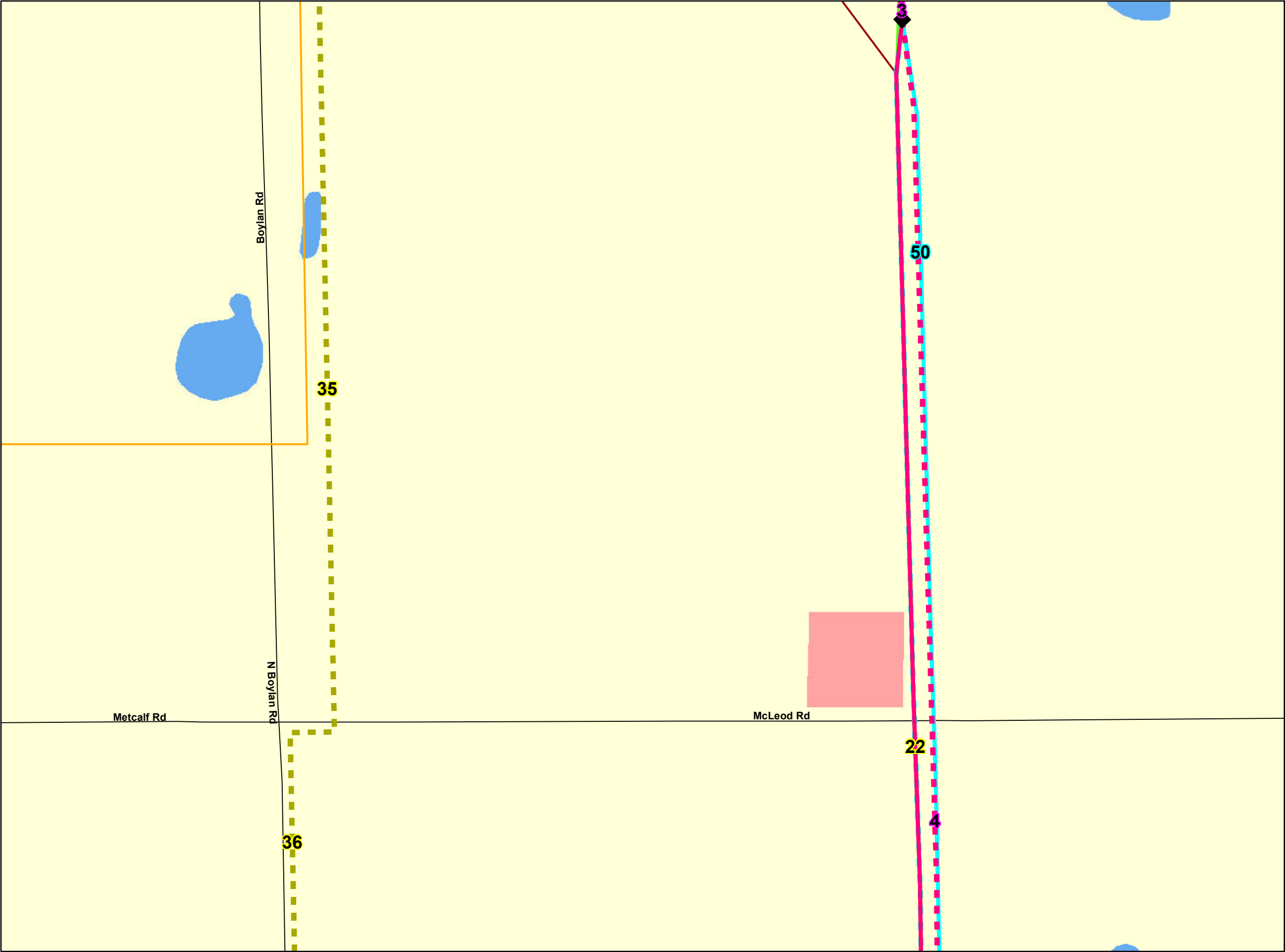
Sources: Sawyer County - July, 2010

Date: 8/29/2011

Page 1 of 47







Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

**Sawyer County Zoning**

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

**Xcel Energy**  
RESPONSIBLE BY NATURE™

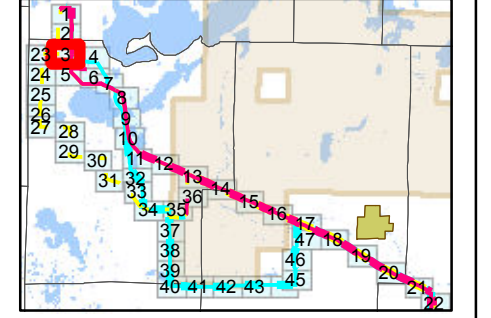
0 400 Feet

Sources: Sawyer County - July, 2010  
Date: 8/29/2011Page 2 of 47

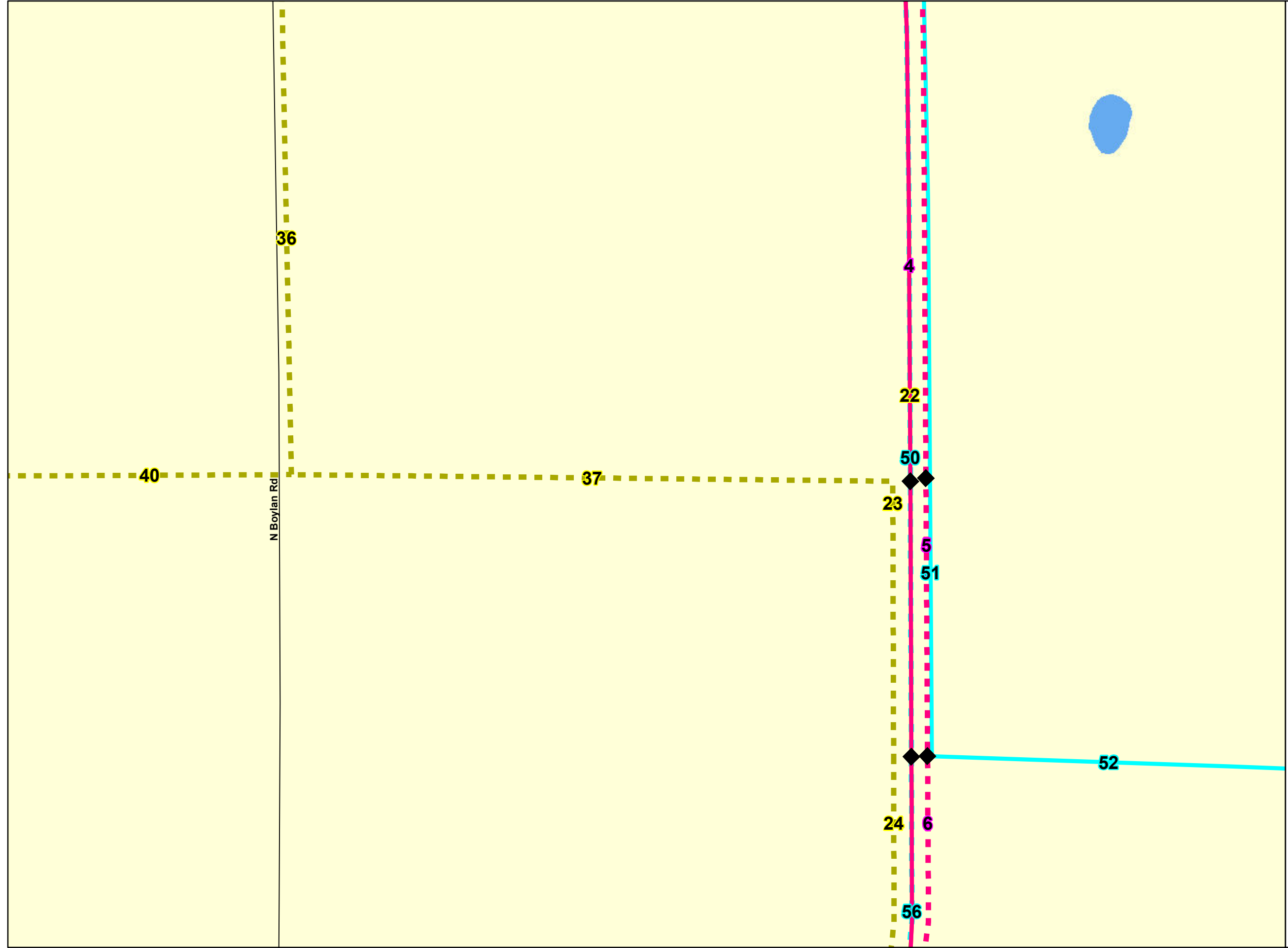
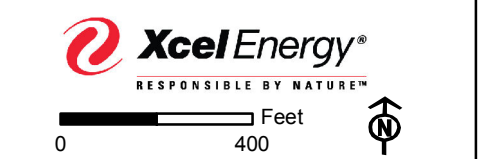
Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCNB6\_Zoning\_11x17\_4800.mxd



Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

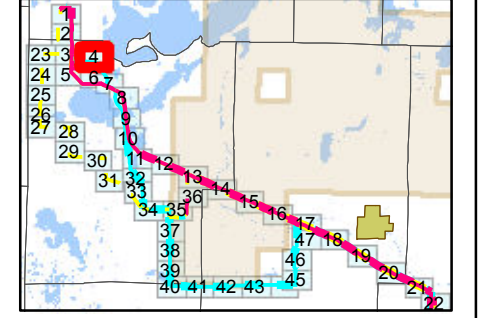


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
- Sawyer County Zoning**
- Agriculture
  - Commerical
  - Forestry
  - Industrial
  - ROW
  - Recreational/Residential
  - Residential
  - Village
  - Water





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project

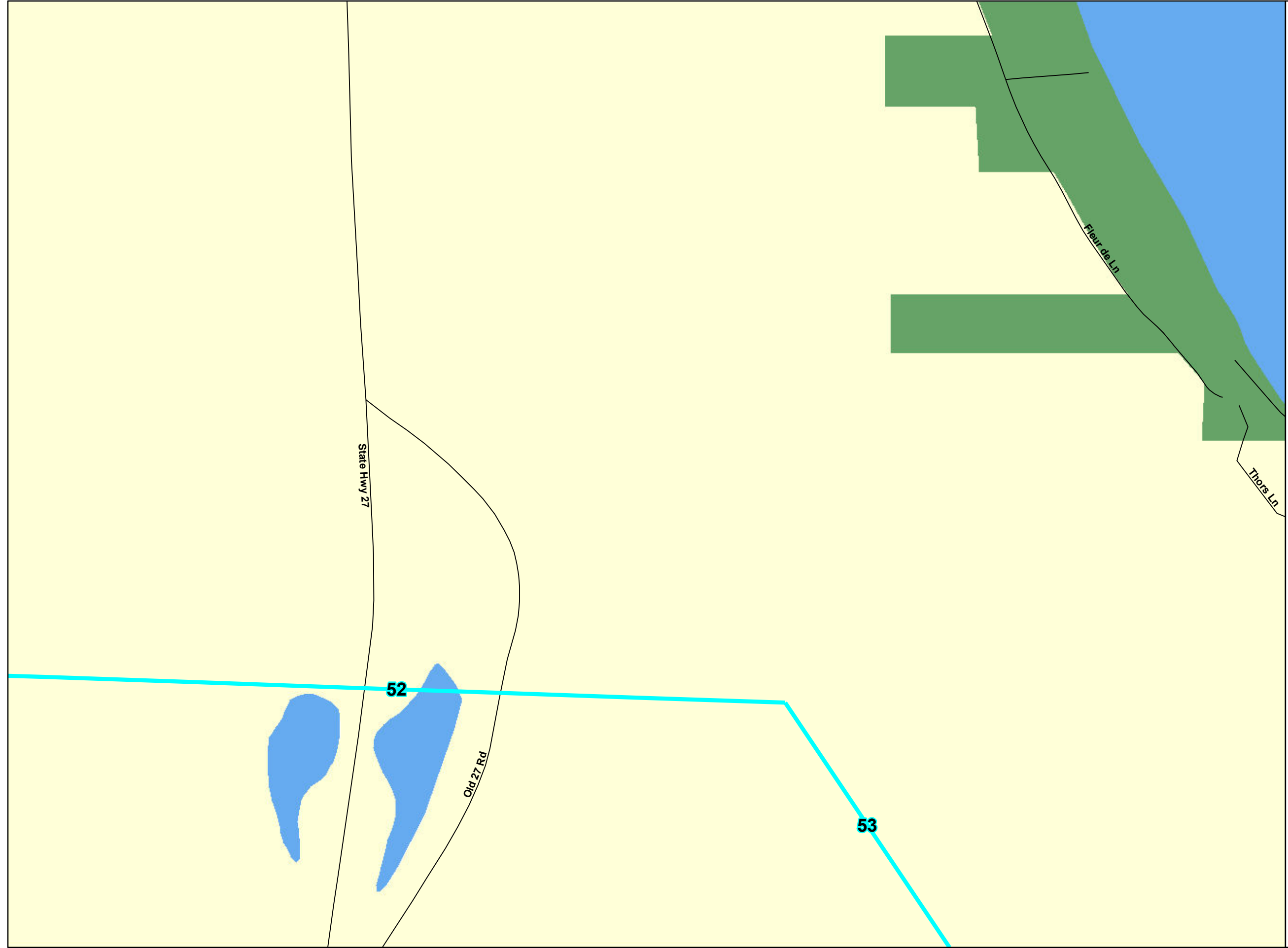


- Route Alternatives**
  - Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
  - 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
- Sawyer County Zoning**
  - Agriculture
  - Commerical
  - Forestry
  - Industrial
  - ROW
  - Recreational/Residential
  - Residential
  - Village
  - Water

**Xcel Energy**  
RESPONSIBLE BY NATURE™

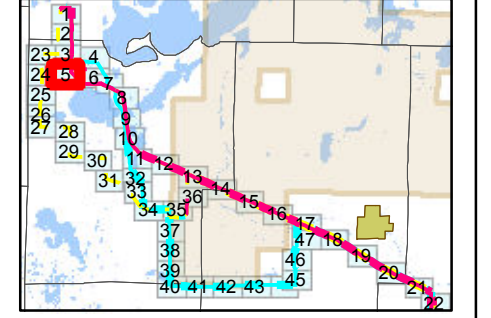
0 400 Feet

Sources: Sawyer County - July, 2010  
Date: 8/29/2011 Page 4 of 47





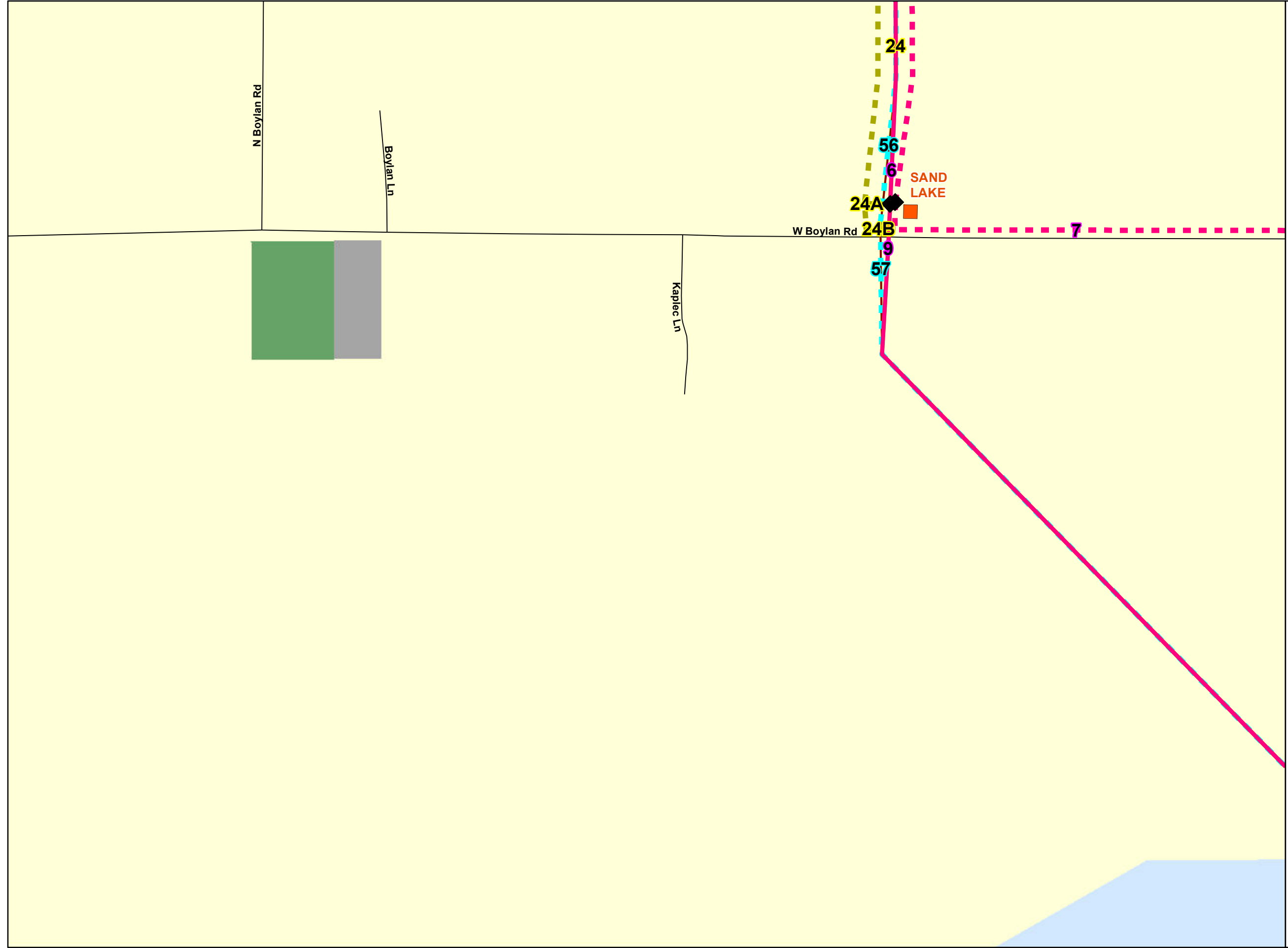
# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



- Route Alternatives**
  - Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
  - 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
- Sawyer County Zoning**
  - Agriculture
  - Commerical
  - Forestry
  - Industrial
  - ROW
  - Recreational/Residential
  - Residential
  - Village
  - Water

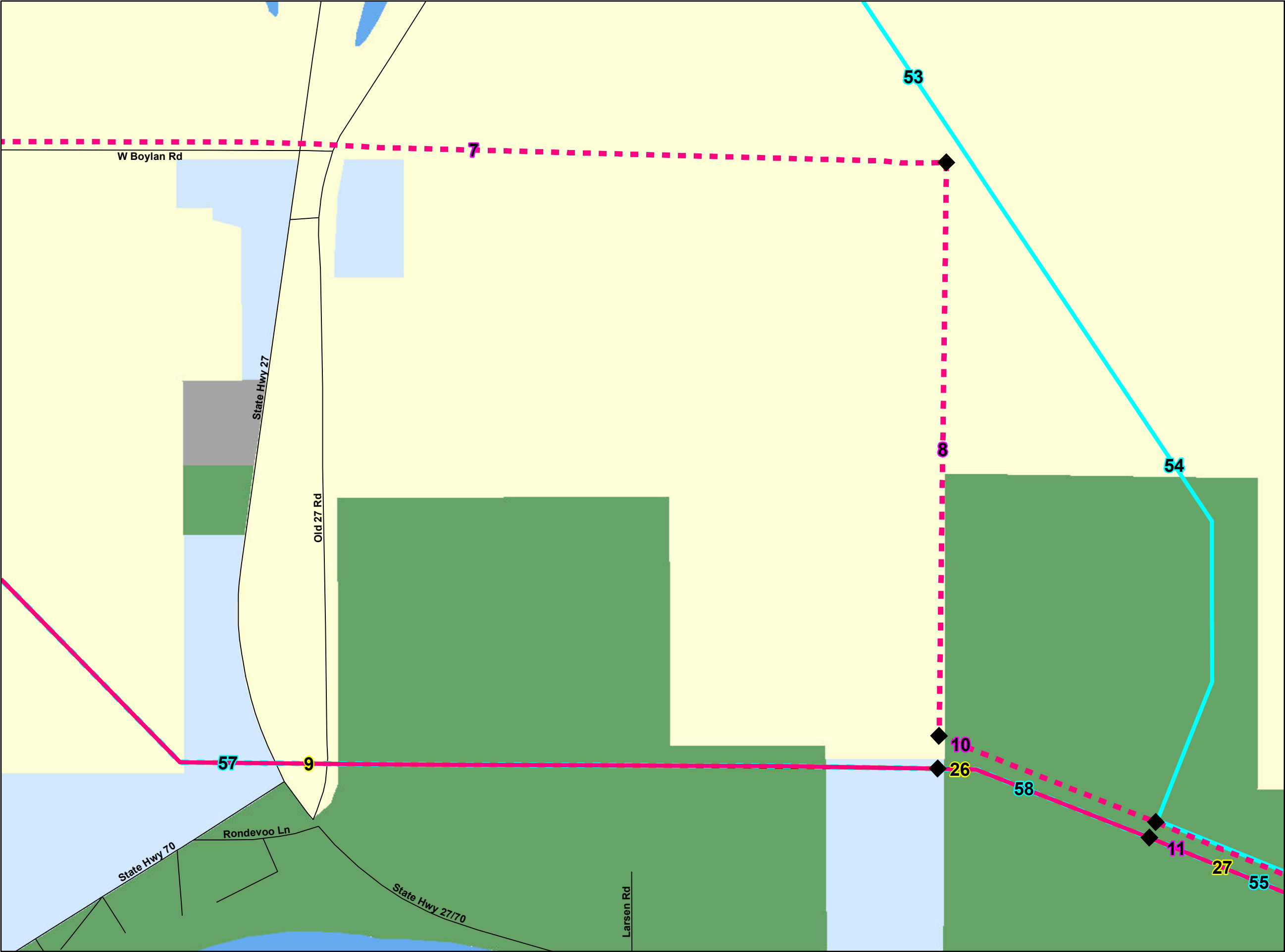
**Xcel Energy**  
RESPONSIBLE BY NATURE™

0 400 Feet



Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B6\_Zoning\_11x17\_4800.mxd





Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

**Sawyer County Zoning**

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

**Xcel Energy**  
RESPONSIBLE BY NATURE™

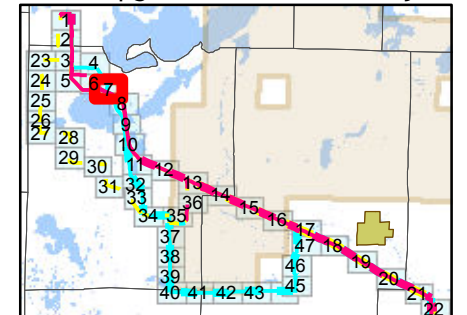
0 400 Feet

Sources: Sawyer County - July, 2010  
Date: 8/29/2011 Page 6 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B6\_Zoning\_11x17\_4800.mxd



# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

- Route Segment Endpoint

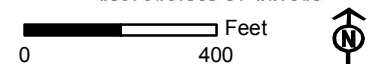
- Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

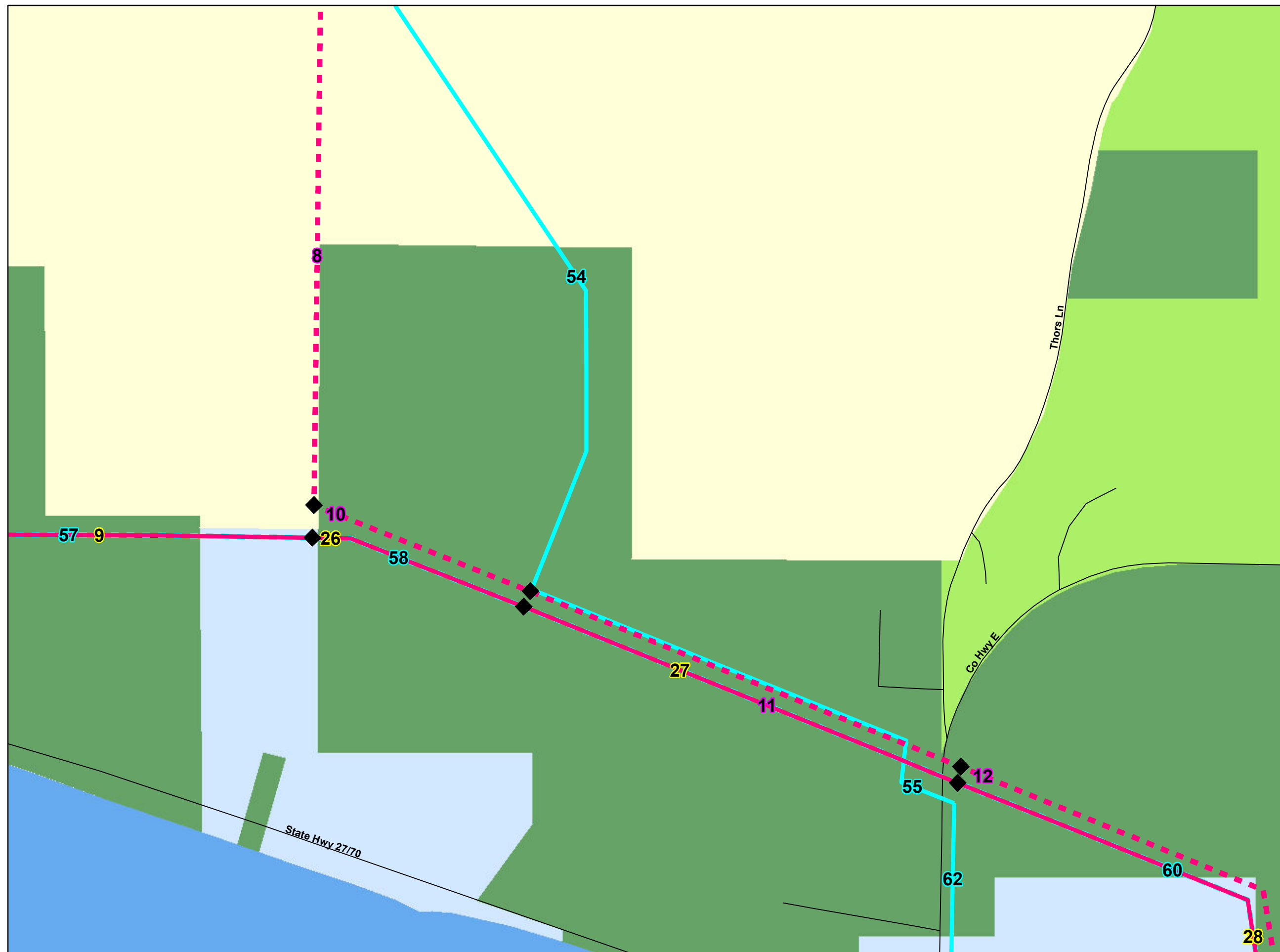
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



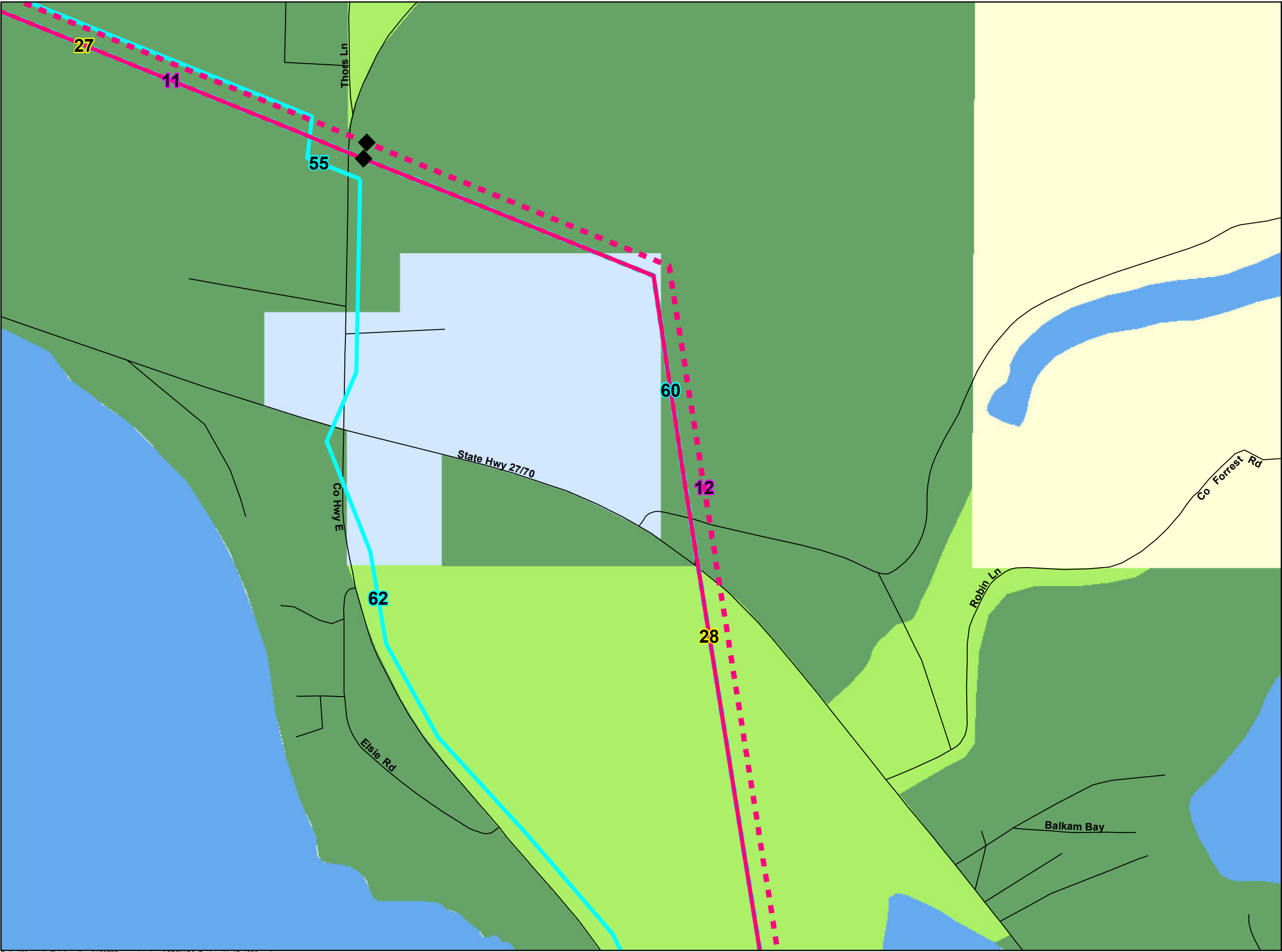
Sources: Sawyer County - July, 2010

Date: 8/29/2011

Page 7 of 47







Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

Sawyer County Zoning

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

**Xcel Energy**<sup>®</sup>  
RESPONSIBLE BY NATURE™

0400

Feet

Sources: Sawyer County - July, 2010

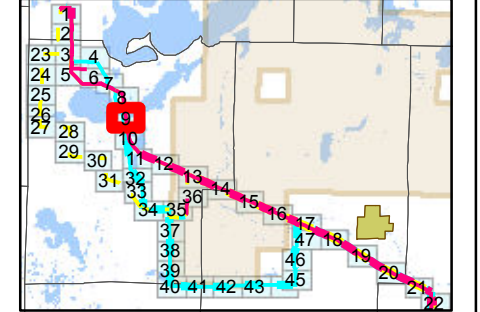
Date: 8/29/2011

Page 8 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B6\_Zoning\_11x17\_4800.mxd



# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
- Sawyer County Zoning**
- Agriculture
  - Commerical
  - Forestry
  - Industrial
  - ROW
  - Recreational/Residential
  - Residential
  - Village
  - Water

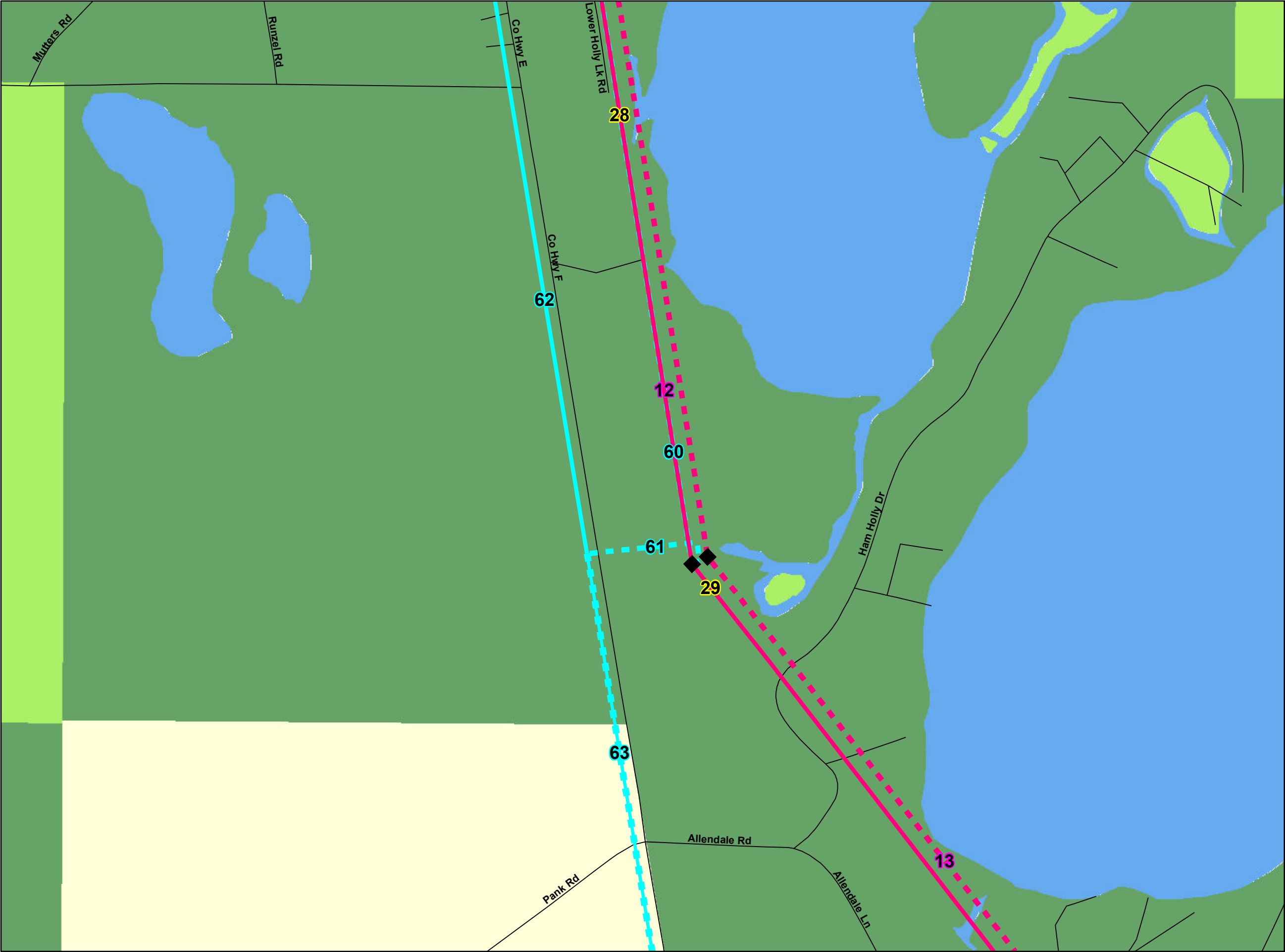
**Xcel Energy**  
RESPONSIBLE BY NATURE™

0 400 Feet

Sources: Sawyer County - July, 2010  
Date: 8/29/2011 Page 9 of 47







Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

**Route Segment Endpoint**

- Route Segment Endpoint

**Radisson Substation Site**

- Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

**Sawyer County Zoning**

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

**Xcel Energy**  
RESPONSIBLE BY NATURE™

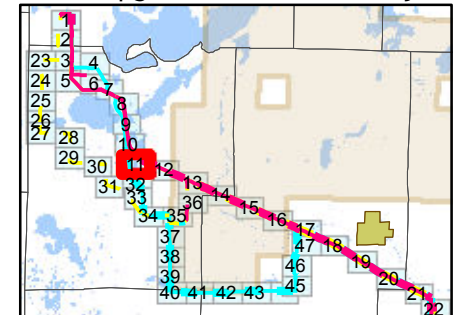
0 400 Feet

Sources: Sawyer County - July, 2010  
Date: 8/29/2011 Page 10 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B6\_Zoning\_11x17\_4800.mxd



# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

◆ Route Segment Endpoint

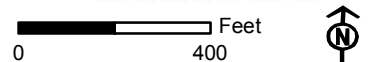
▭ Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

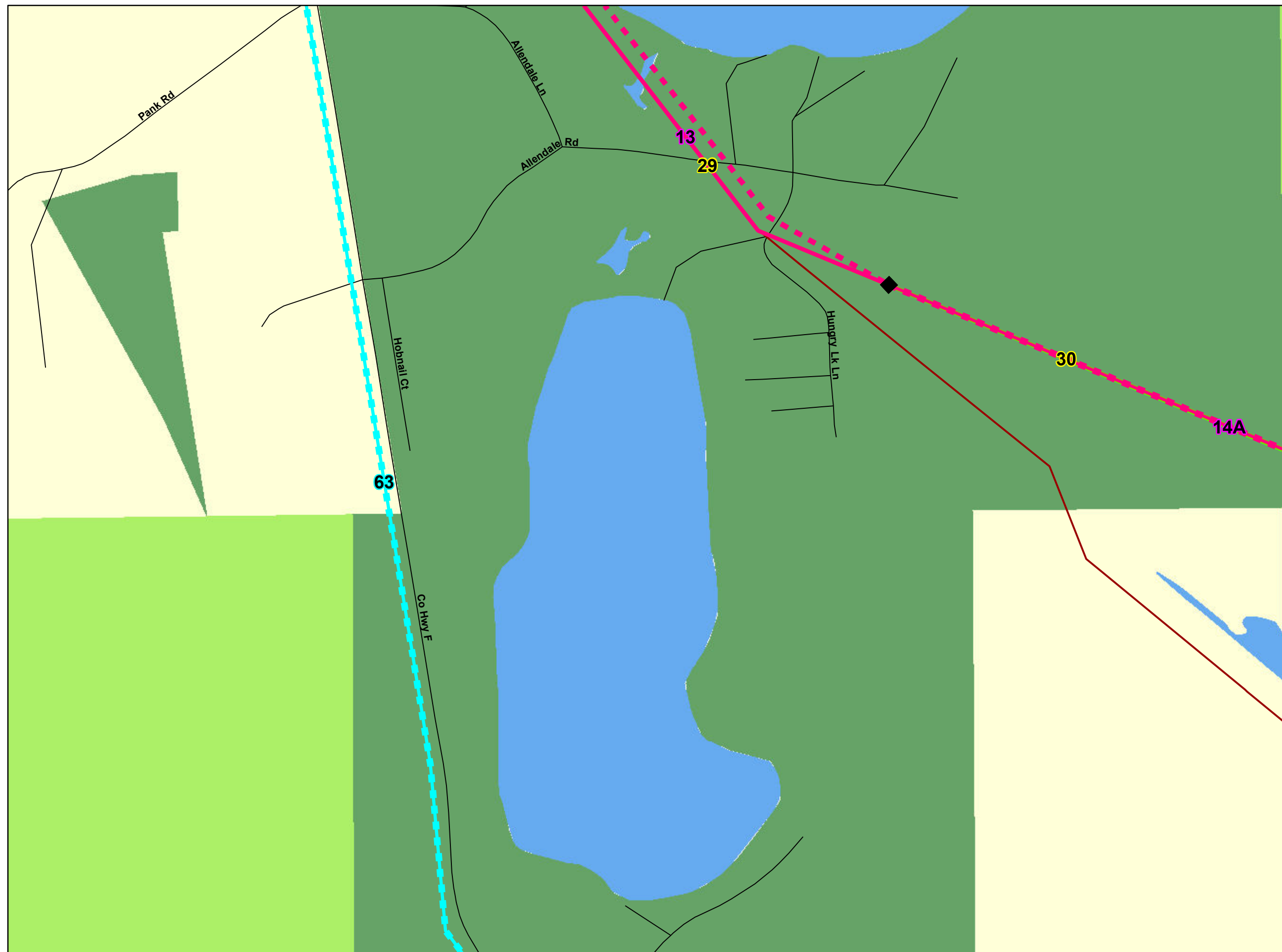
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



Sources: Sawyer County - July, 2010

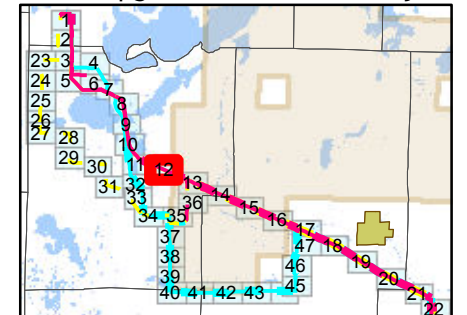
Date: 8/29/2011

Page 11 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

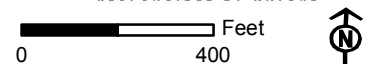
- Route Segment Endpoint
- Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

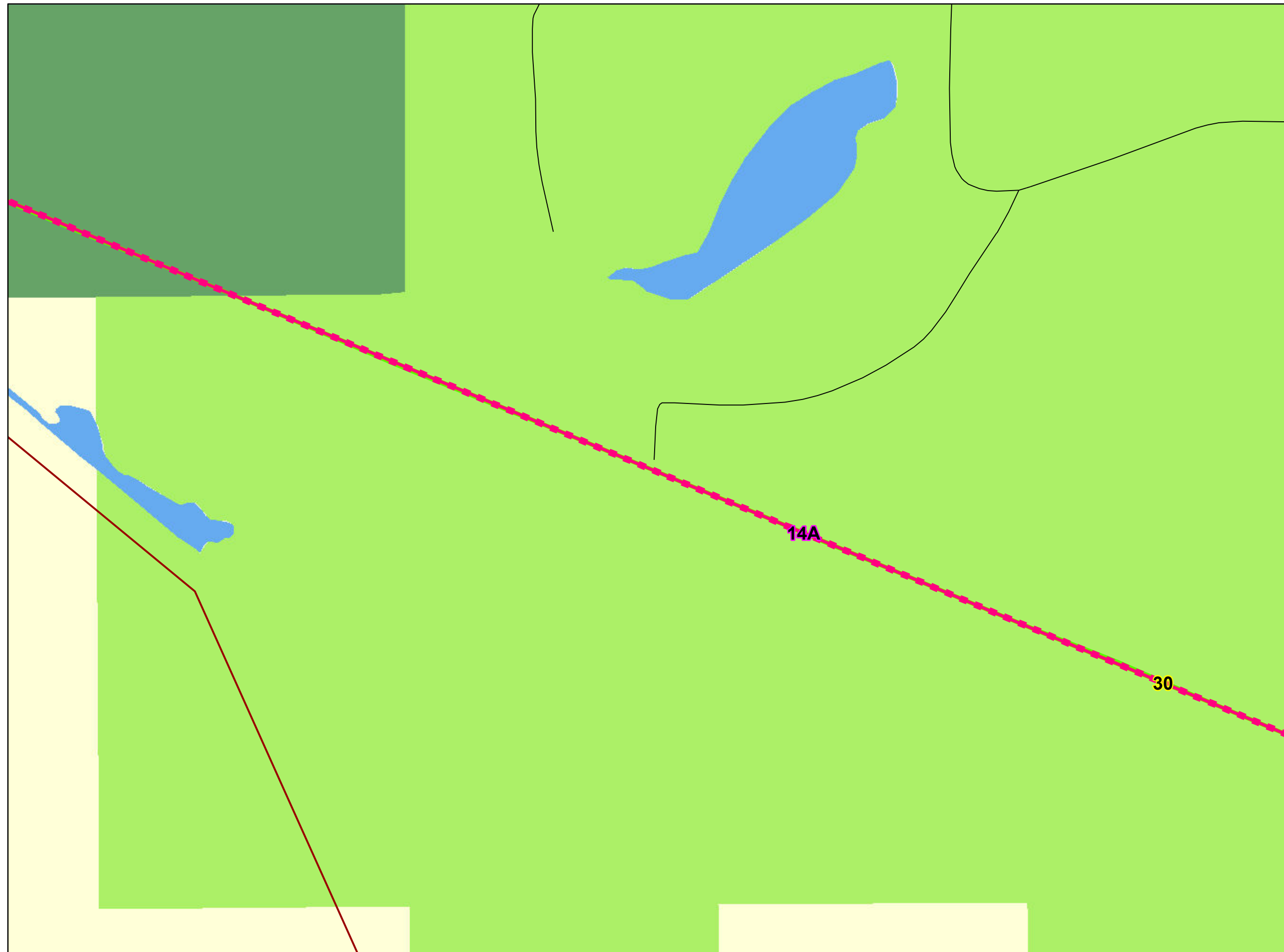
## Sawyer County Zoning

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



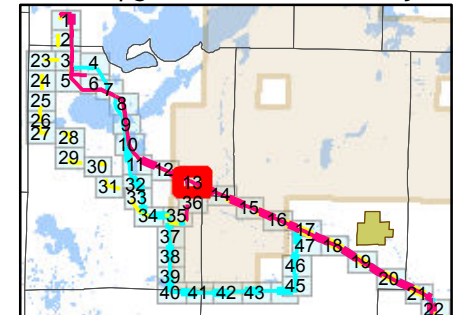
Sources: Sawyer County - July, 2010

Date: 8/29/2011 Page 12 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

Route Segment Endpoint

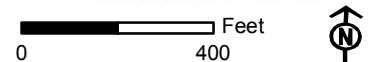
Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

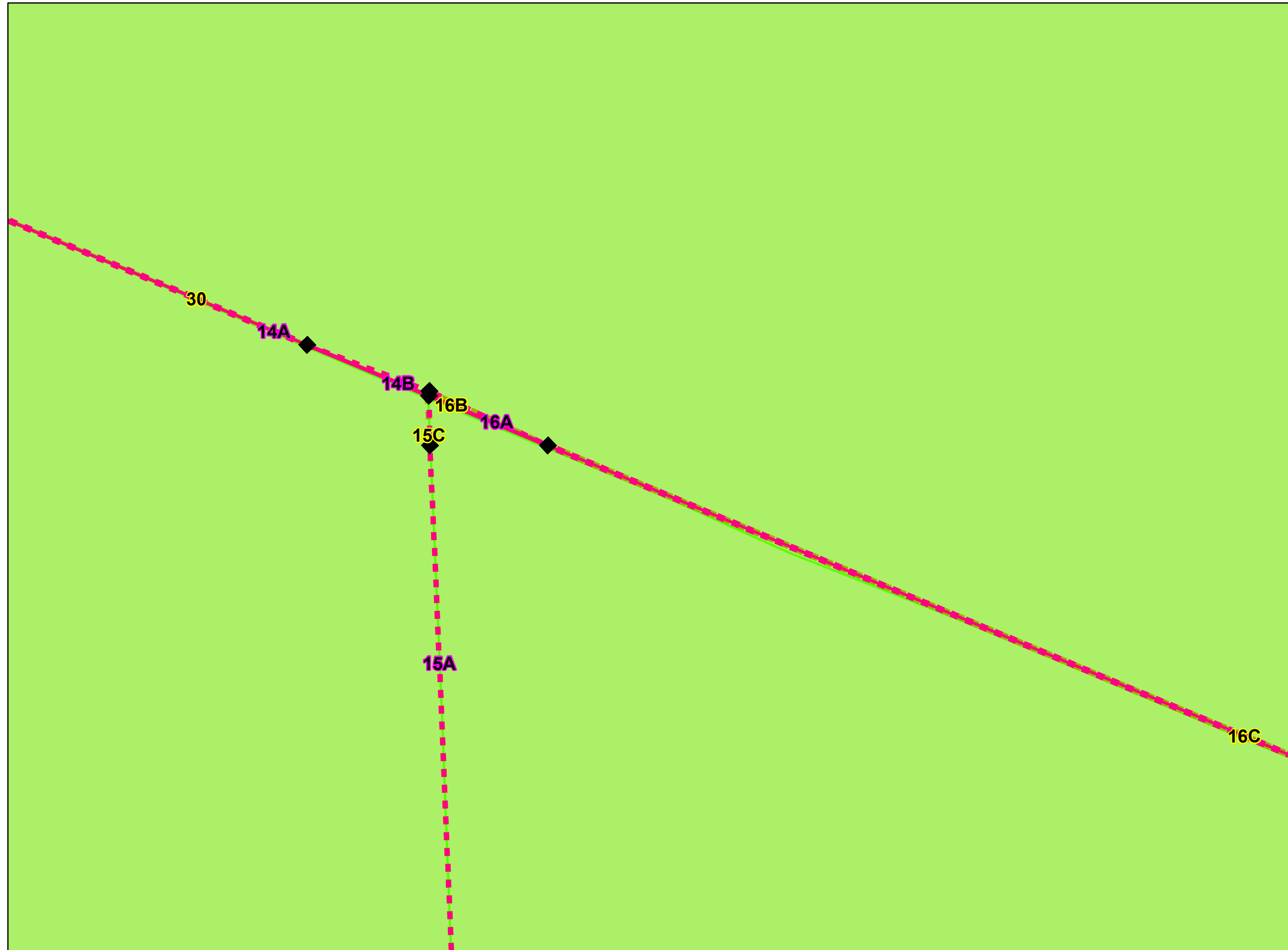
## Sawyer County Zoning

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



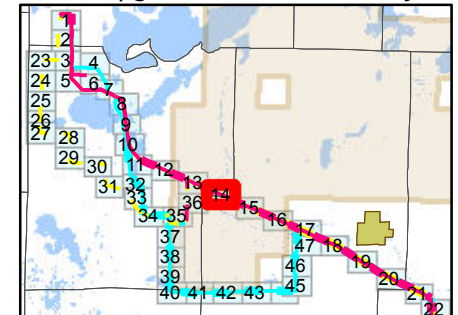
Sources: Sawyer County - July, 2010

Date: 8/29/2011 Page 13 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

- Route Segment Endpoint
- Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



Sources: Sawyer County - July, 2010

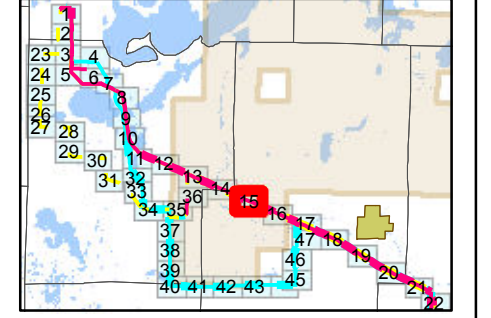
Date: 8/29/2011

Page 14 of 47

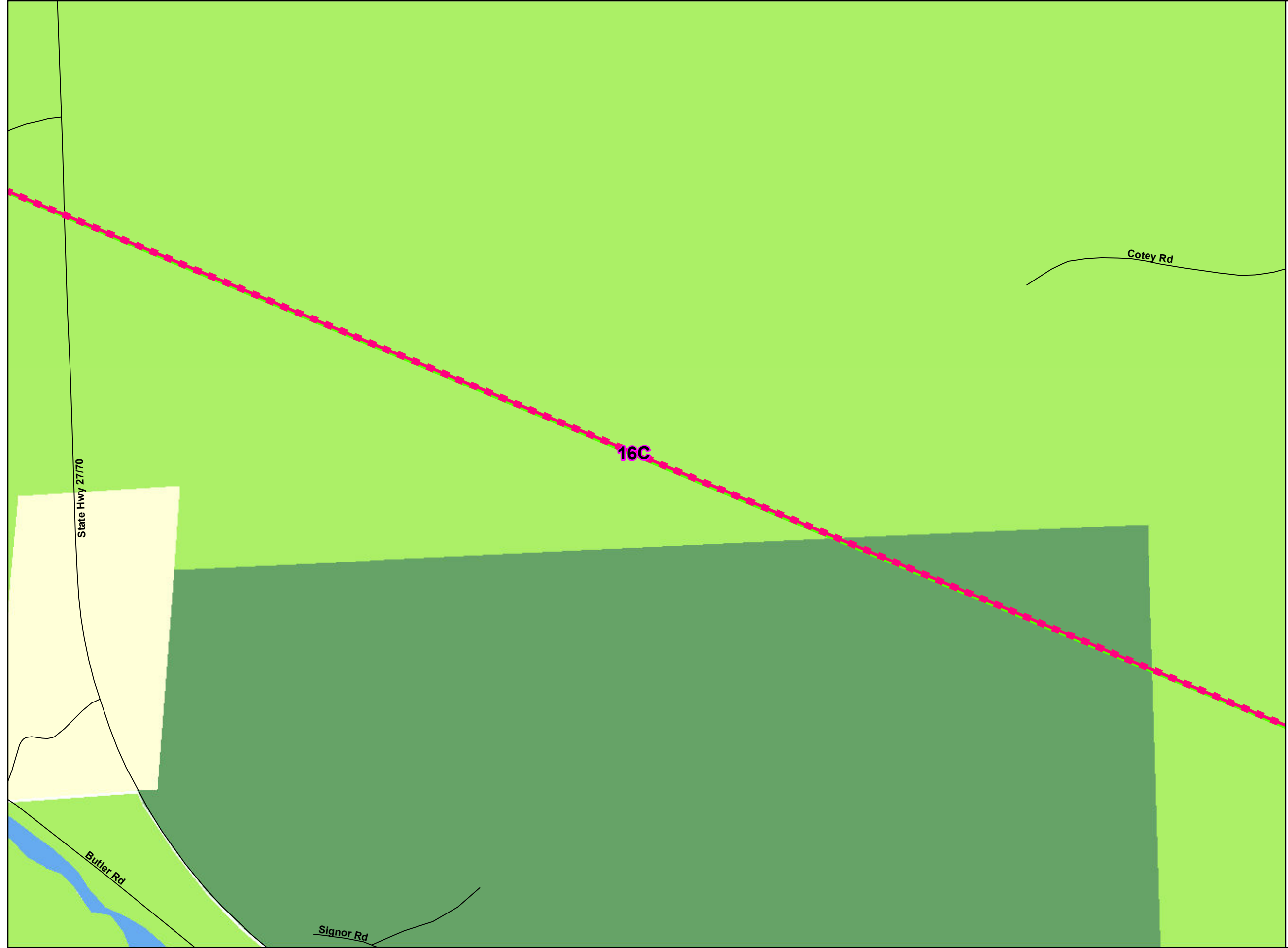
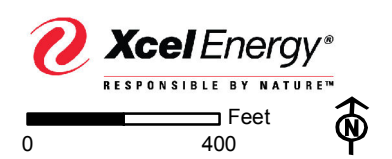




# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



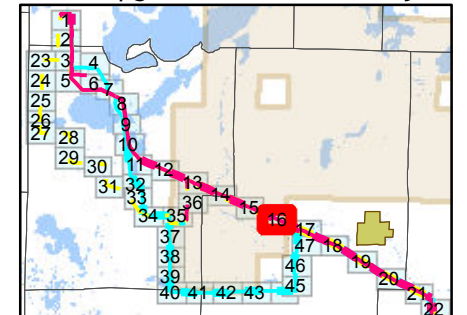
- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
- Sawyer County Zoning**
- Agriculture
  - Commerical
  - Forestry
  - Industrial
  - ROW
  - Recreational/Residential
  - Residential
  - Village
  - Water



Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCNB6\_Zoning\_11x17\_4800.mxd



Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

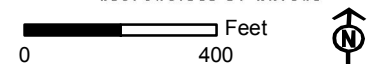
- ◆ Route Segment Endpoint
- ▣ Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- + Railroad

**Sawyer County Zoning**

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



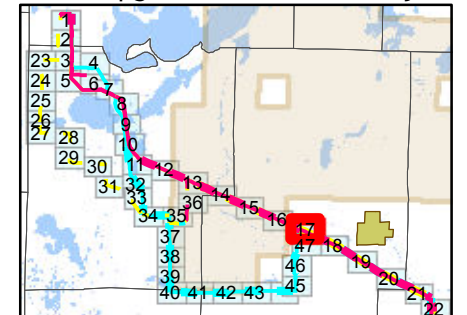
Sources: Sawyer County - July, 2010

Date: 8/29/2011 Page 16 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

◆ Route Segment Endpoint

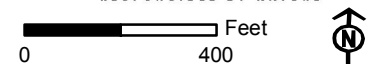
▭ Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

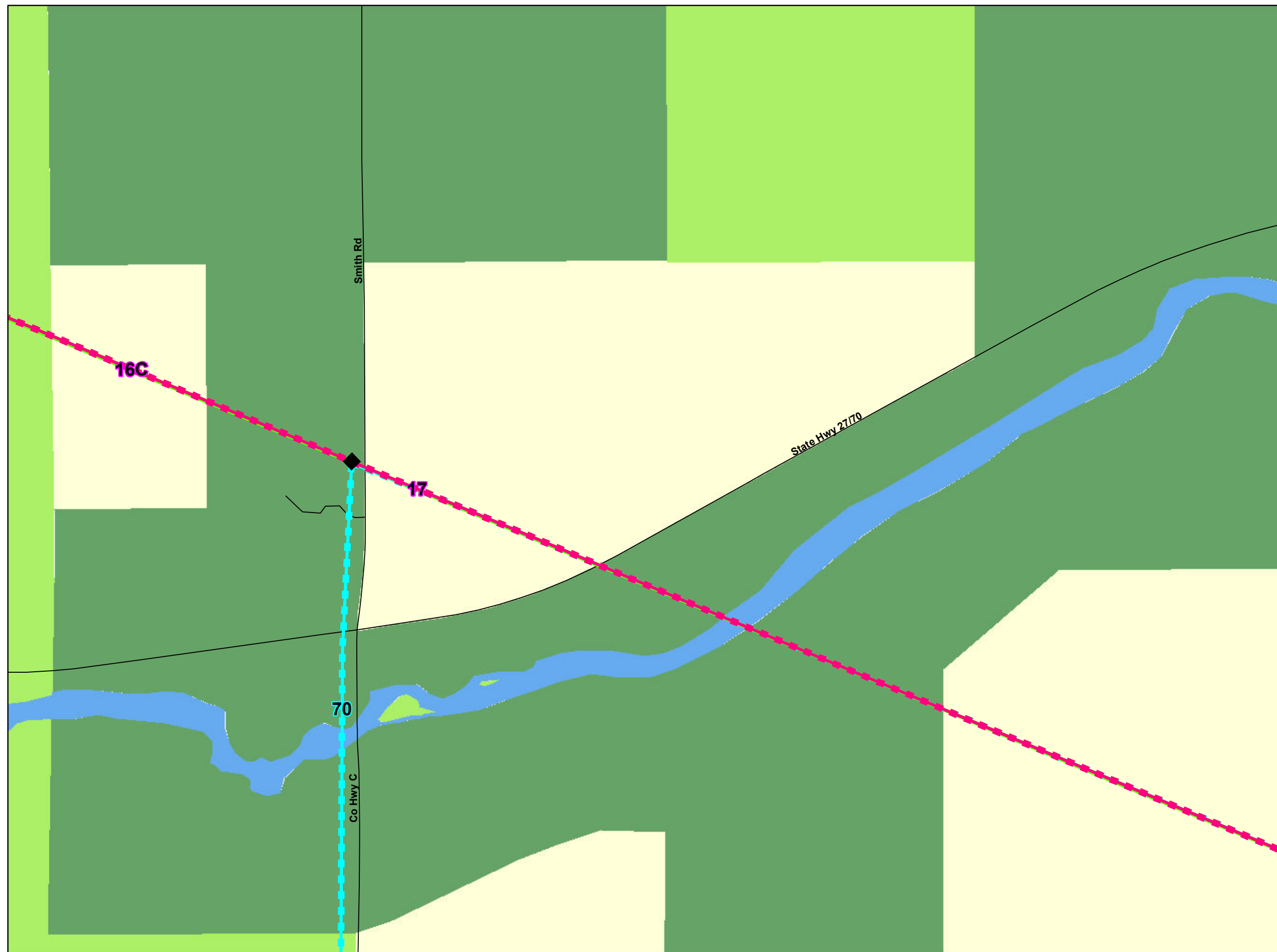
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



Sources: Sawyer County - July, 2010

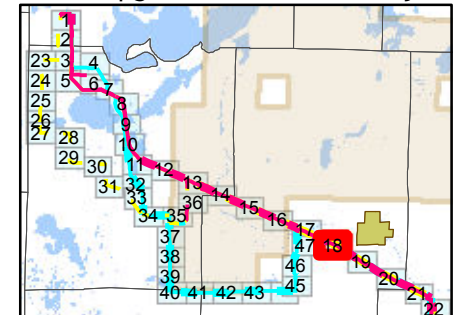
Date: 8/29/2011

Page 17 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

◆ Route Segment Endpoint

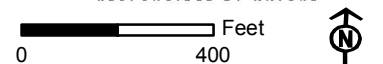
▣ Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

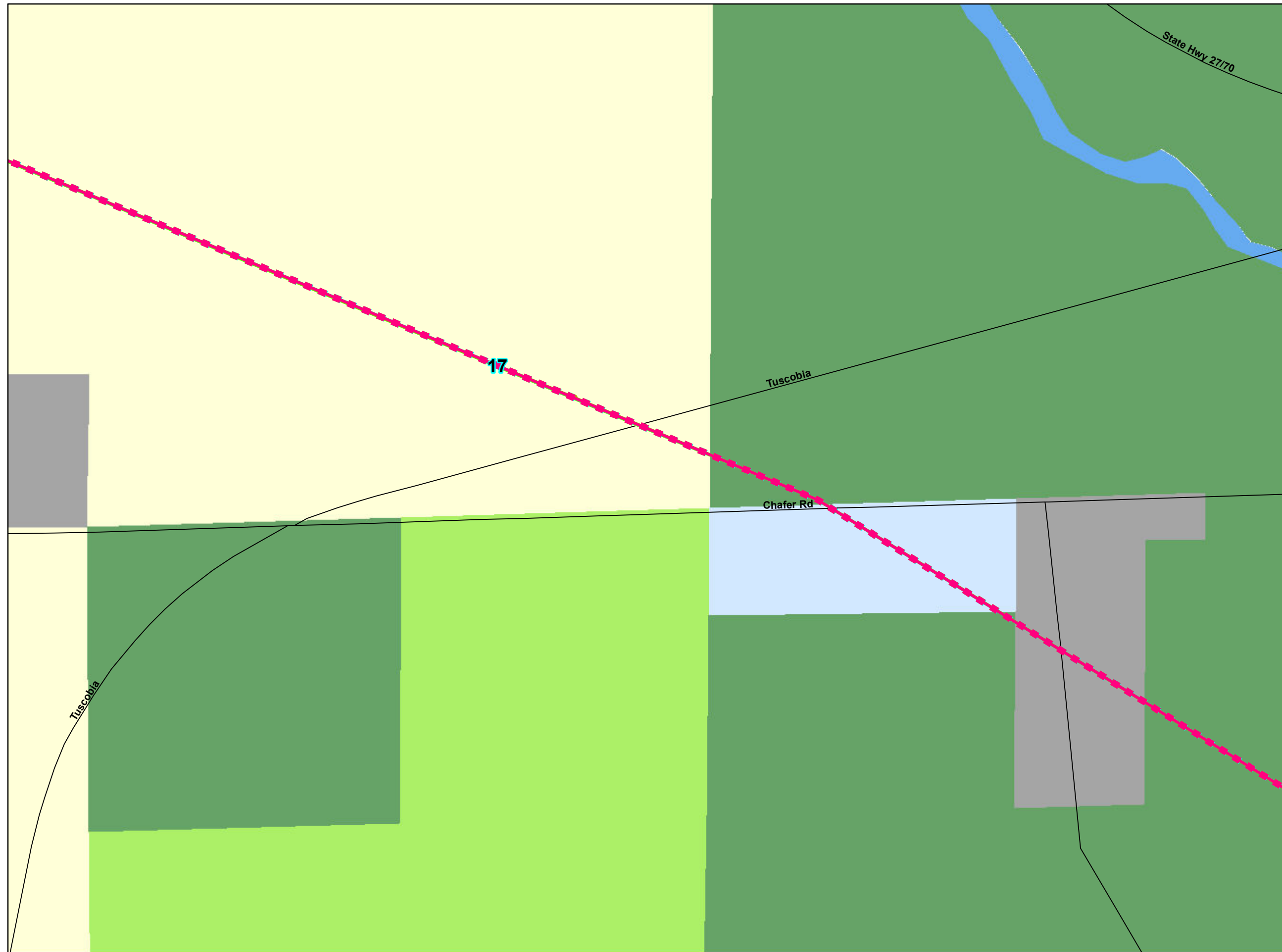
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



Sources: Sawyer County - July, 2010

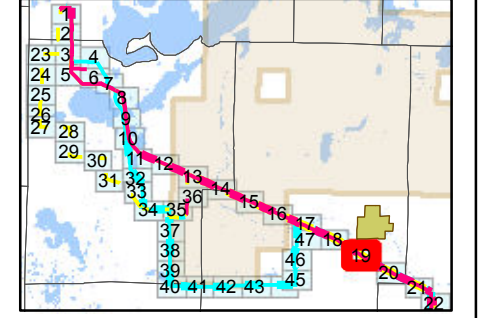
Date: 8/29/2011

Page 18 of 47

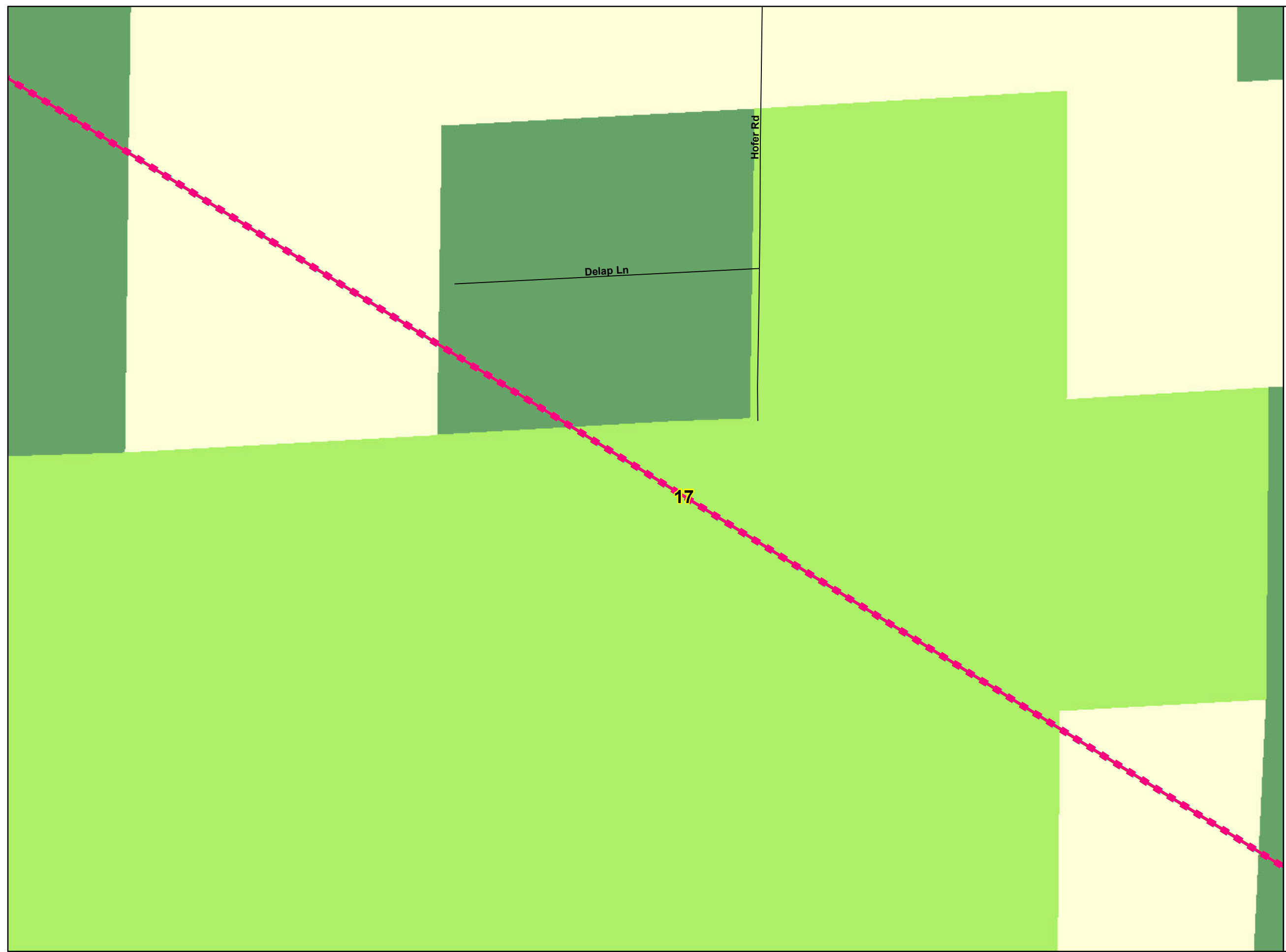
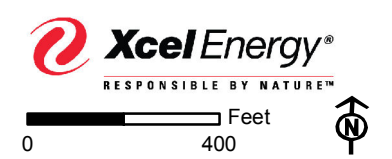




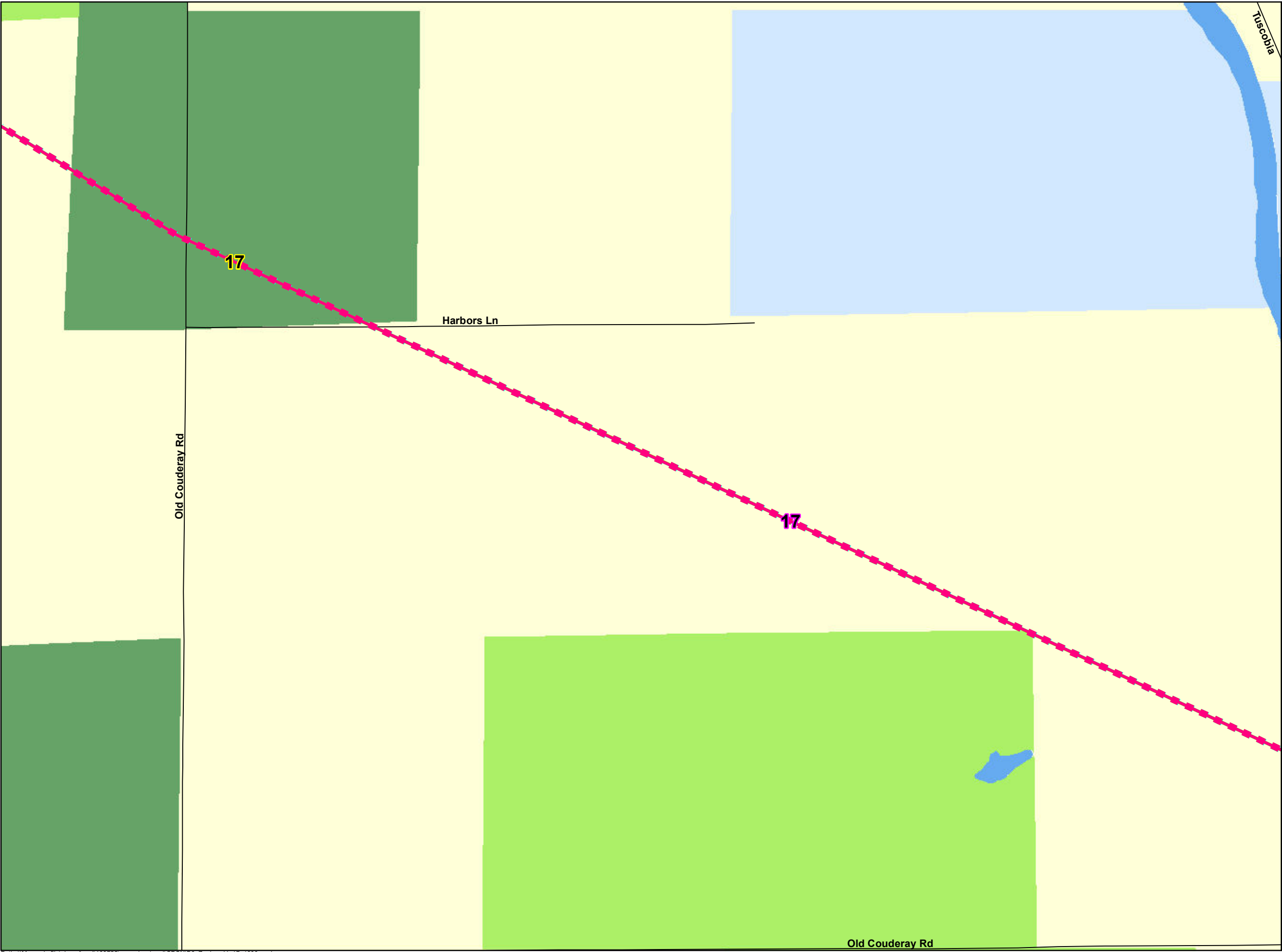
Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - ◆ Route Segment Endpoint
  - ▭ Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
- Sawyer County Zoning**
- Agriculture
  - Commerical
  - Forestry
  - Industrial
  - ROW
  - Recreational/Residential
  - Residential
  - Village
  - Water







Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Route Segment Endpoint

Radisson Substation Site

Existing Transmission

69kV AC

161kV AC

345kV AC

Substation (Xcel)

Substation (Not Xcel)

Road

Railroad

Sawyer County Zoning

Agriculture

Commerical

Forestry

Industrial

ROW

Recreational/Residential

Residential

Village

Water

RESPONSIBLE BY NATURE™

0400

Feet

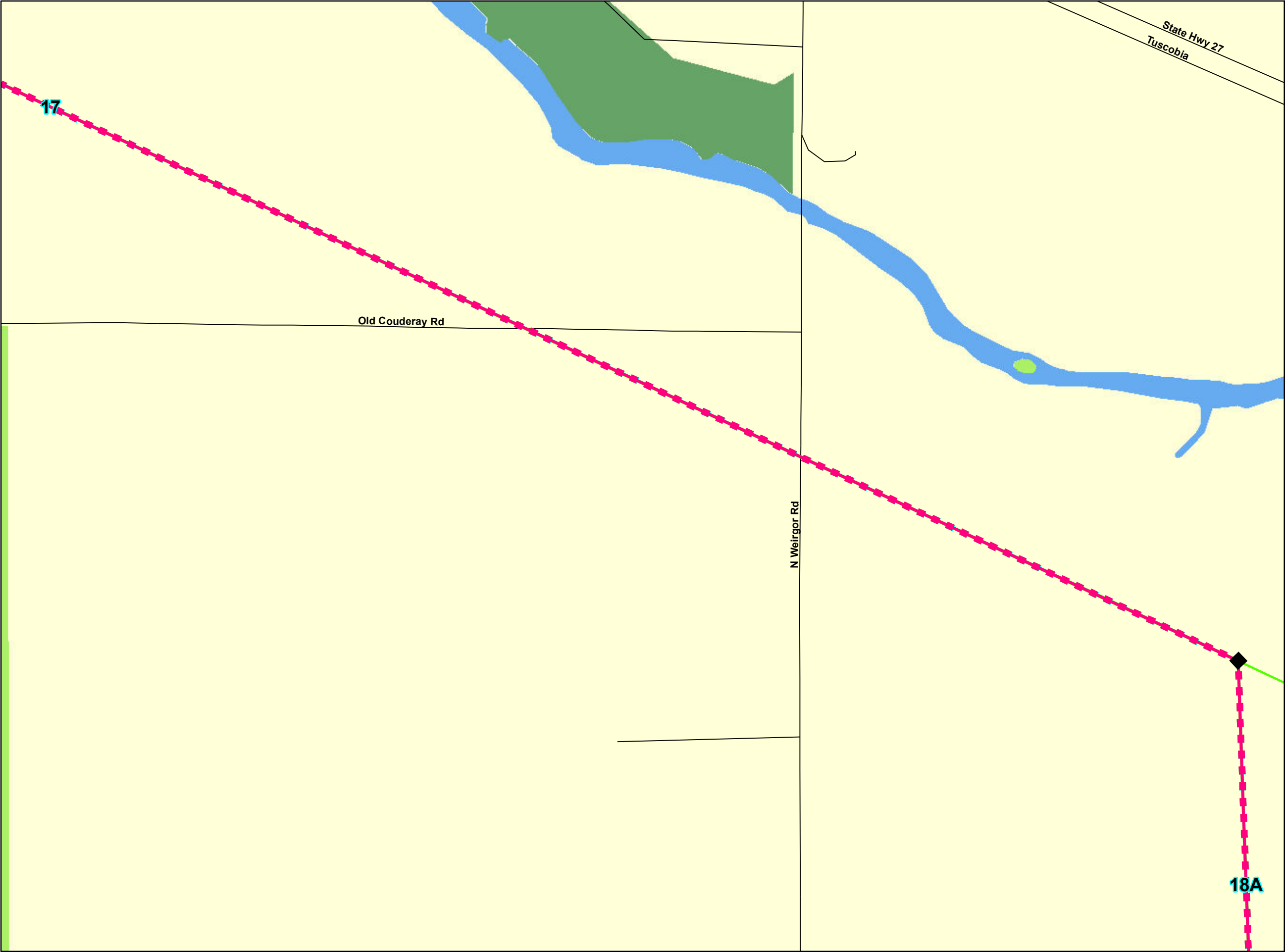
Sources: Sawyer County - July, 2010

Date: 8/29/2011

Page 20 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCNB6\_Zoning\_11x17\_4800.mxd





### Appendix B-6

## Zoning and Land Use

### Stone Lake to Couderay

69 kV Rebuild /  
161kV Upgrade Transmission Project

#### Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

#### Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

#### Sawyer County Zoning

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

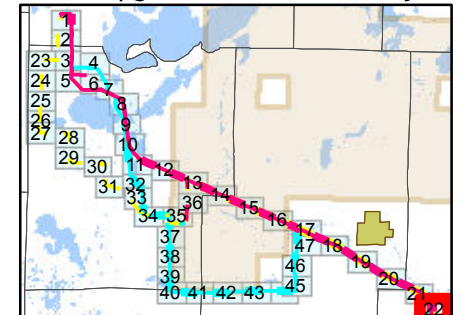
0 400 Feet

Sources: Sawyer County - July, 2010

Date: 8/29/2011 Page 21 of 47



# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

◆ Route Segment Endpoint

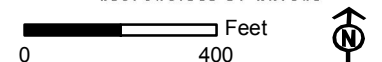
▭ Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

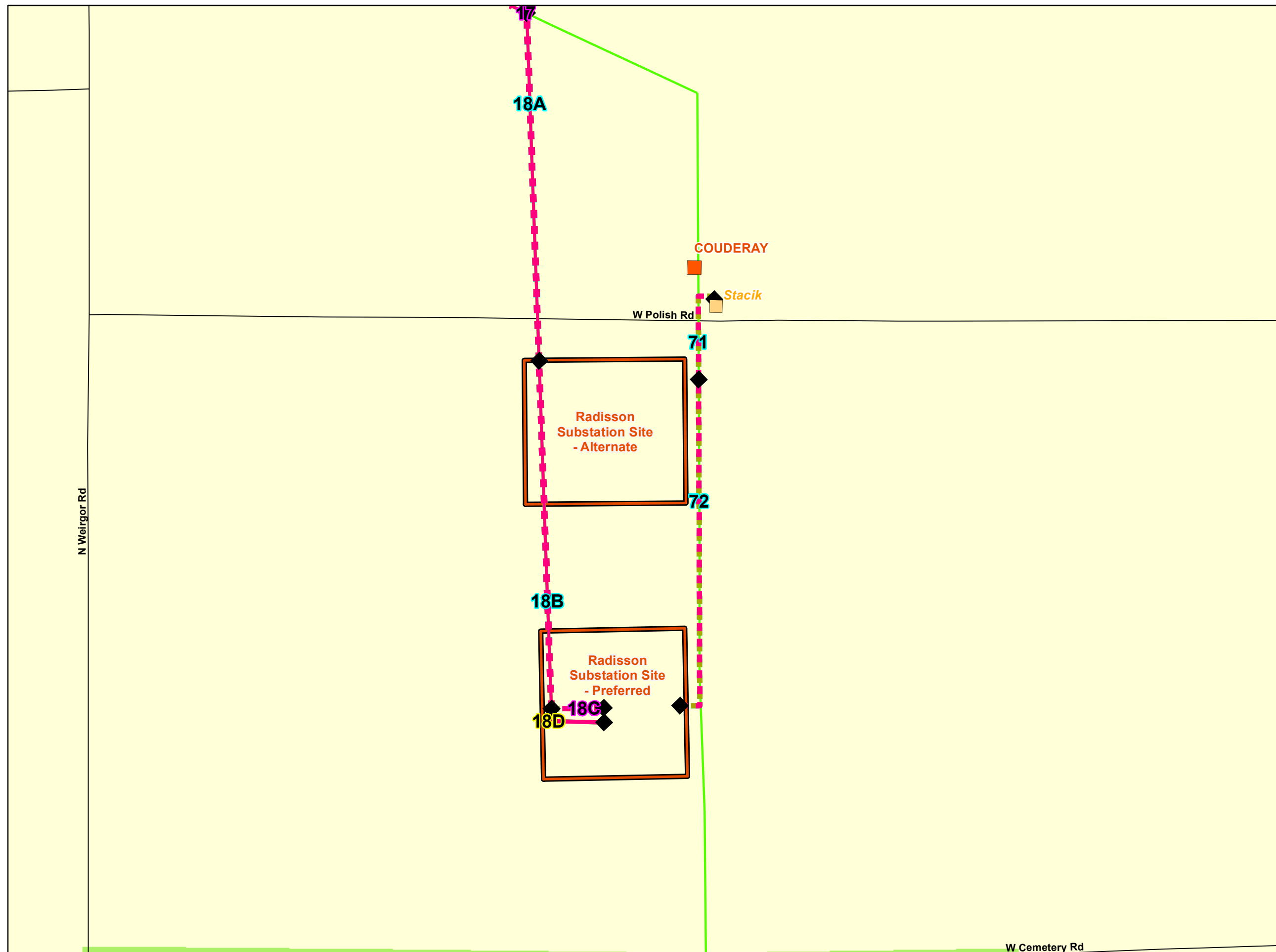
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



Sources: Sawyer County - July, 2010

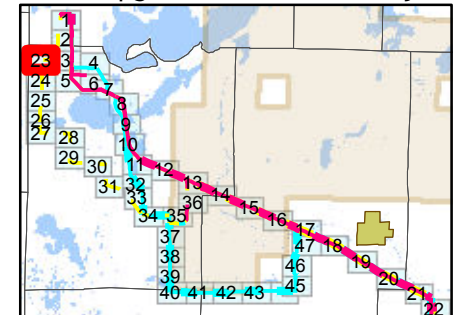
Date: 8/29/2011

Page 22 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

- Route Segment Endpoint

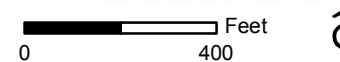
- Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



Sources: Sawyer County - July, 2010

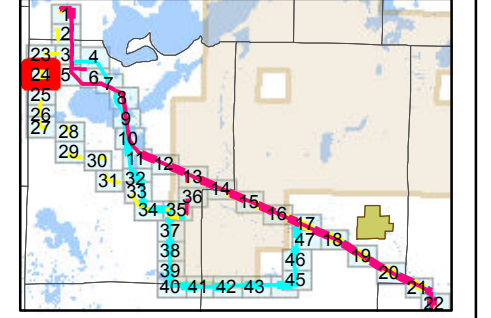
Date: 8/29/2011 Page 23 of 47

Stone Lake Rd

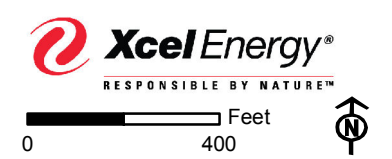
40



Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - ◆ Route Segment Endpoint
  - ▭ Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
- Sawyer County Zoning**
- Agriculture
  - Commerical
  - Forestry
  - Industrial
  - ROW
  - Recreational/Residential
  - Residential
  - Village
  - Water



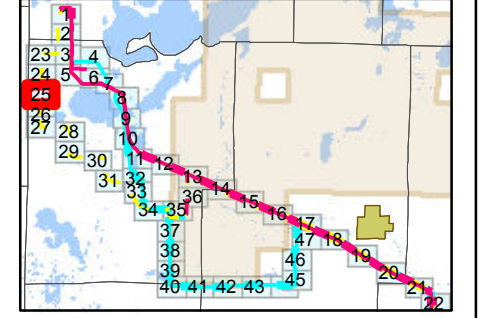
Stone Lake Rd

W Boylan Rd


40



Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

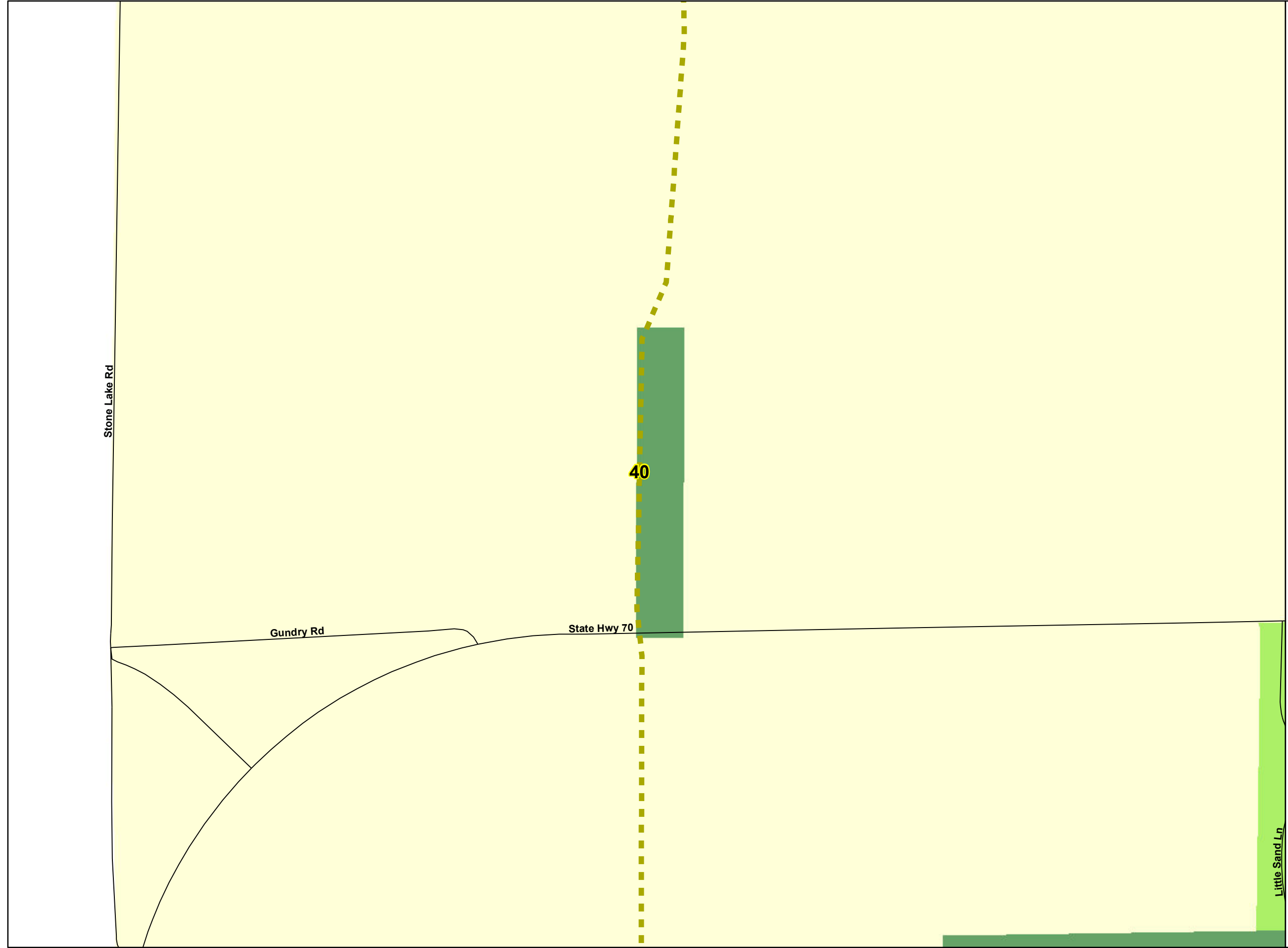


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
- Sawyer County Zoning**
- Agriculture
  - Commerical
  - Forestry
  - Industrial
  - ROW
  - Recreational/Residential
  - Residential
  - Village
  - Water

 **Xcel Energy**  
RESPONSIBLE BY NATURE™

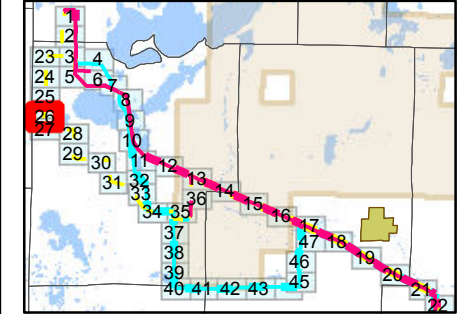
0 400 Feet

Sources: Sawyer County - July, 2010  
Date: 8/29/2011 Page 25 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

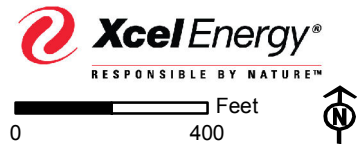
- Route Segment Endpoint
- Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

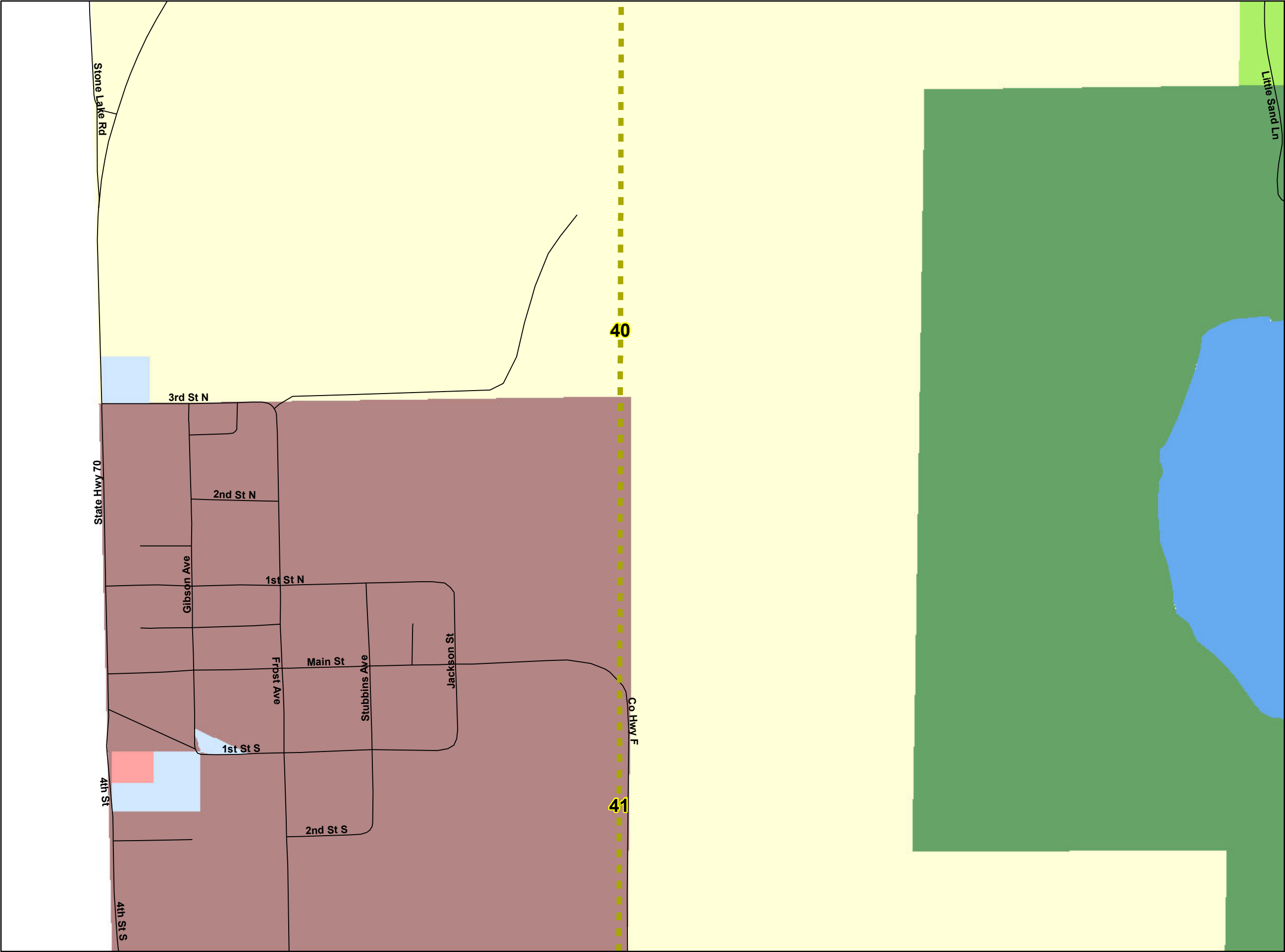
## Sawyer County Zoning

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



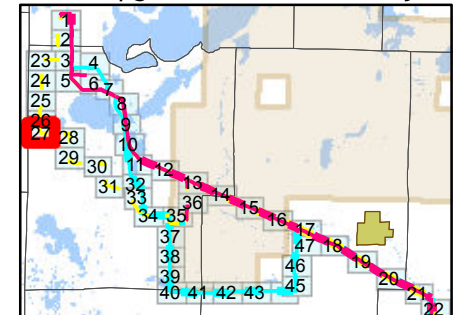
Sources: Sawyer County - July, 2010

Date: 8/29/2011      Page 26 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

◆ Route Segment Endpoint

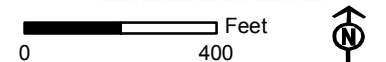
▣ Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

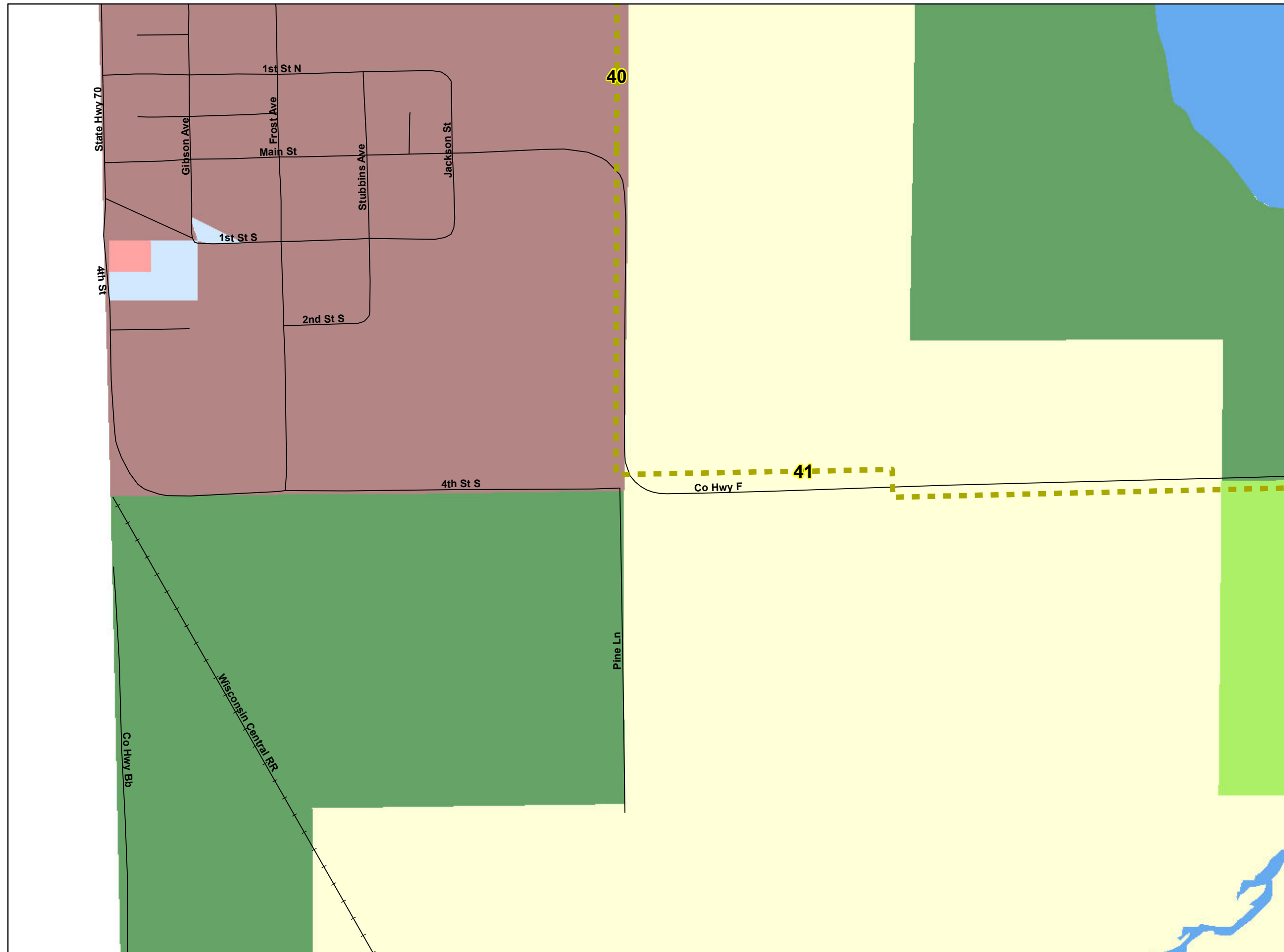
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



Sources: Sawyer County - July, 2010

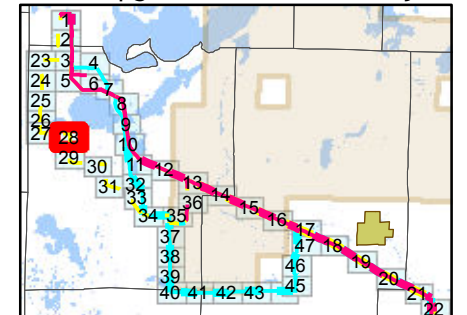
Date: 8/29/2011

Page 27 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

◆ Route Segment Endpoint

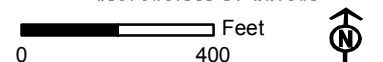
▣ Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

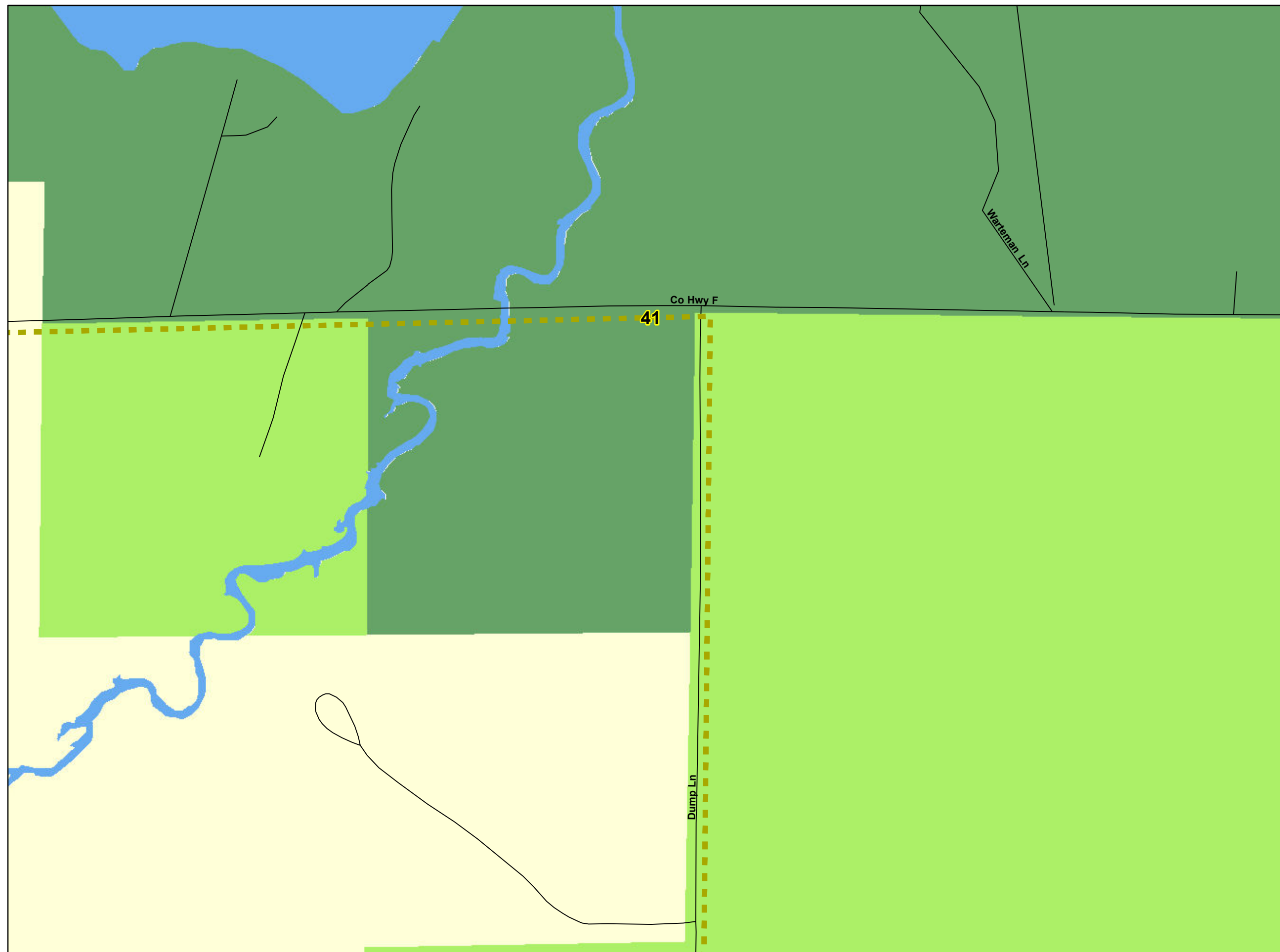
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



Sources: Sawyer County - July, 2010

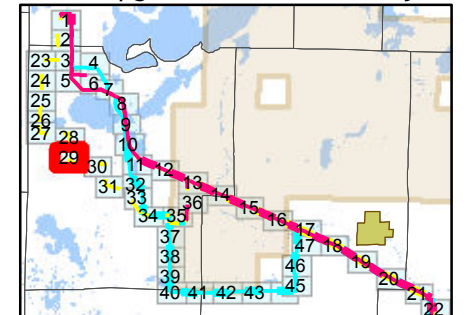
Date: 8/29/2011

Page 28 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

◆ Route Segment Endpoint

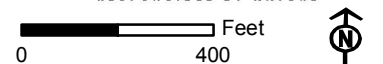
▣ Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

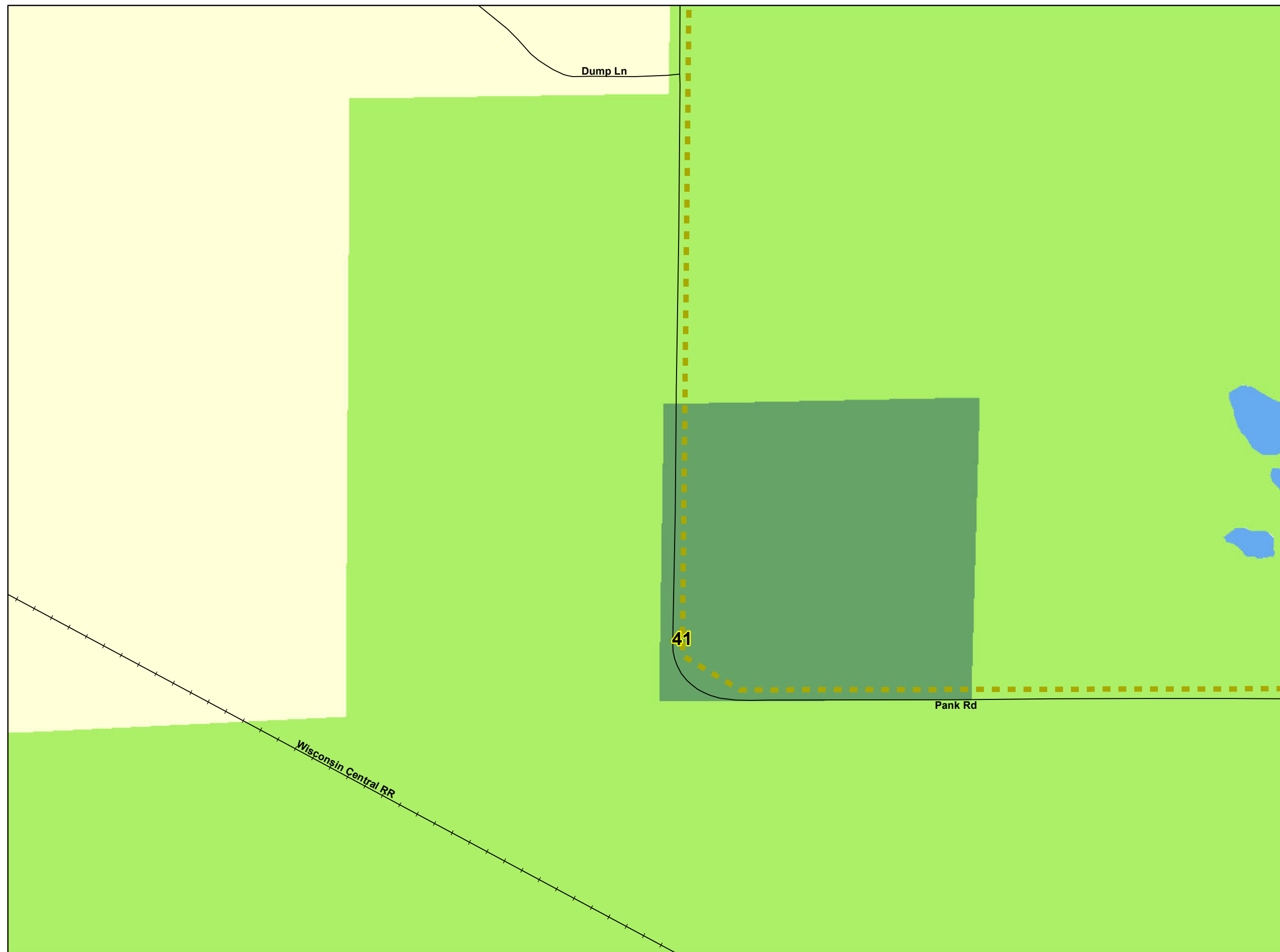
## Sawyer County Zoning

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



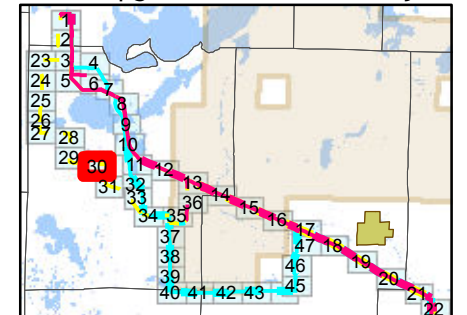
Sources: Sawyer County - July, 2010

Date: 8/29/2011 Page 29 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

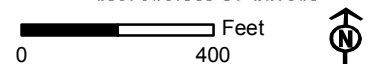
- Route Segment Endpoint
- Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

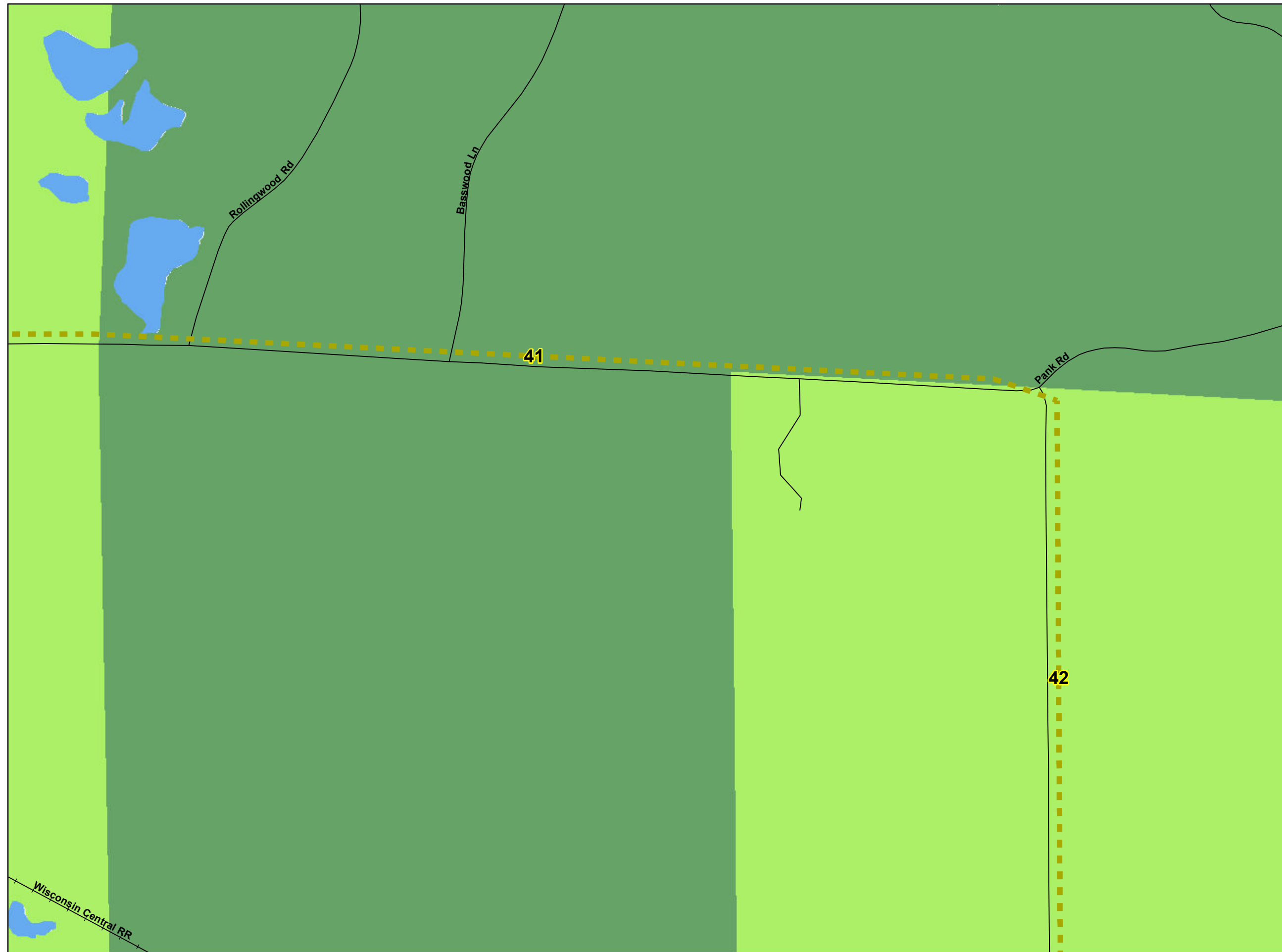
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



Sources: Sawyer County - July, 2010

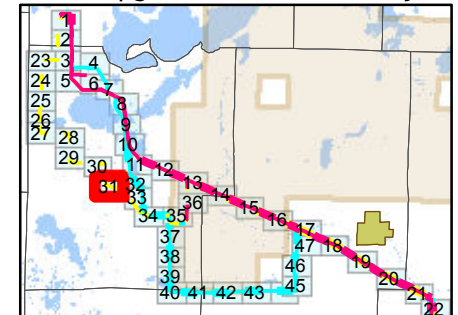
Date: 8/29/2011

Page 30 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

◆ Route Segment Endpoint

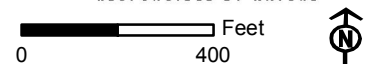
▣ Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

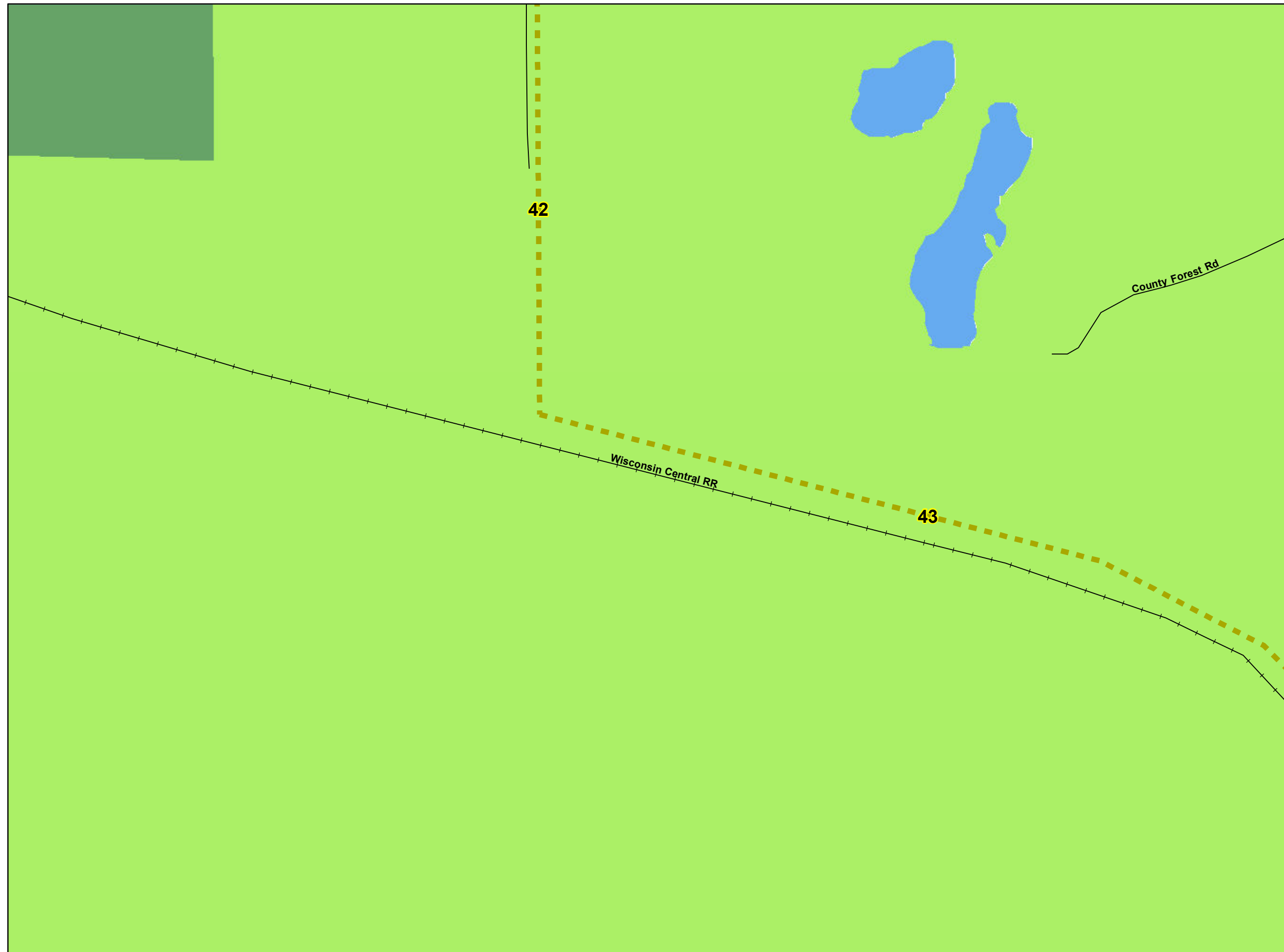
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



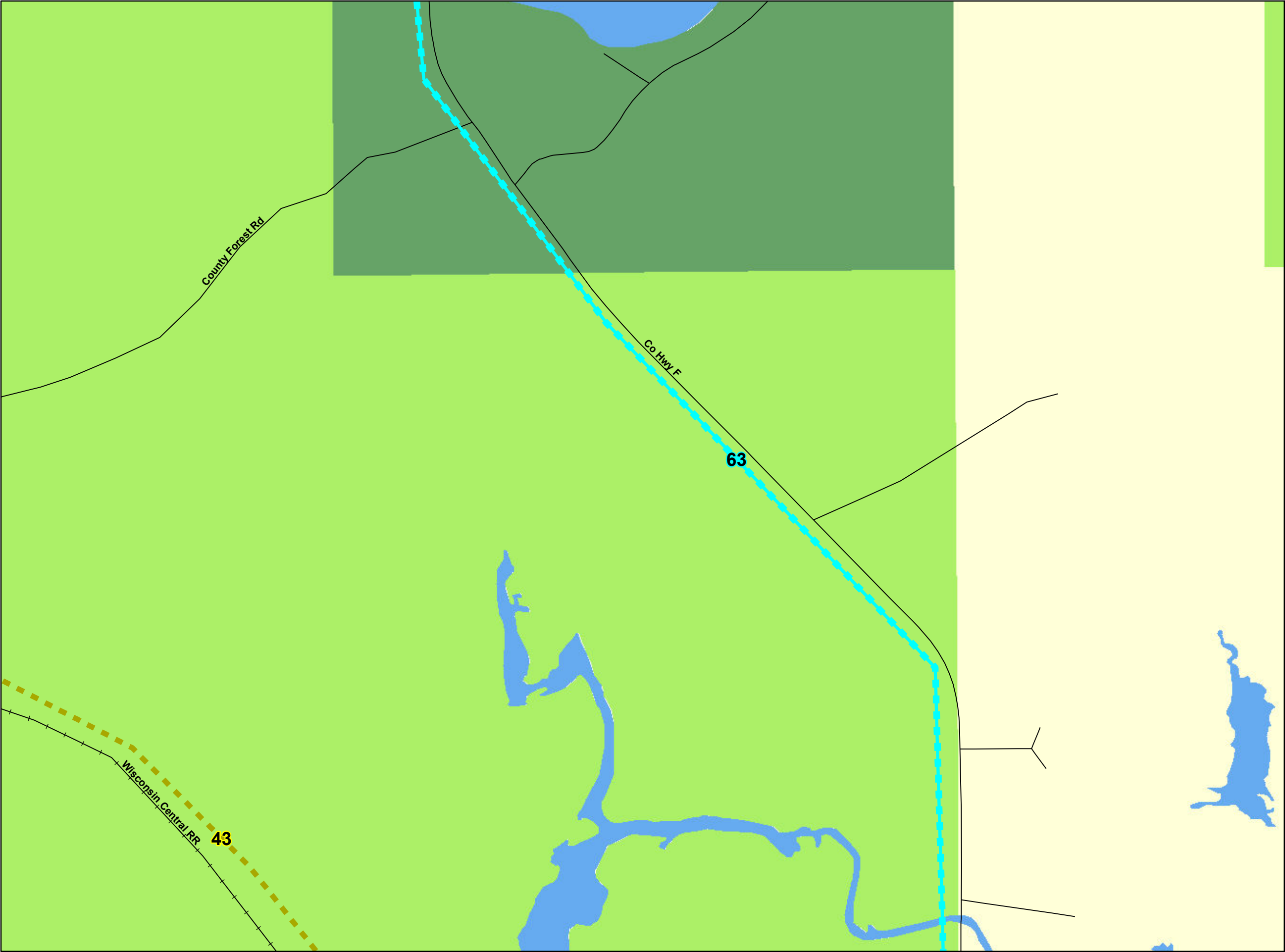
Sources: Sawyer County - July, 2010

Date: 8/29/2011

Page 31 of 47







### Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

**Sawyer County Zoning**

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

**Xcel Energy**  
RESPONSIBLE BY NATURE™

0 400 Feet

Sources: Sawyer County - July, 2010  
Date: 8/29/2011 Page 32 of 47





Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

**Sawyer County Zoning**

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

**Xcel Energy**  
RESPONSIBLE BY NATURE™

0400

Feet

Sources: Sawyer County - July, 2010

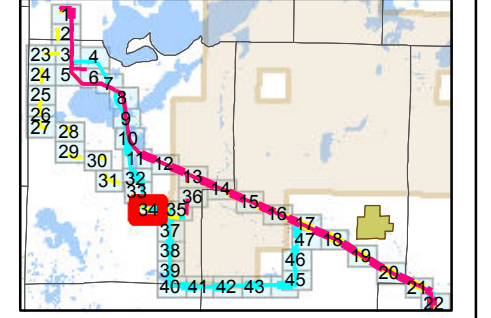
Date: 8/29/2011

Page 33 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B6\_Zoning\_11x17\_4800.mxd



# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project

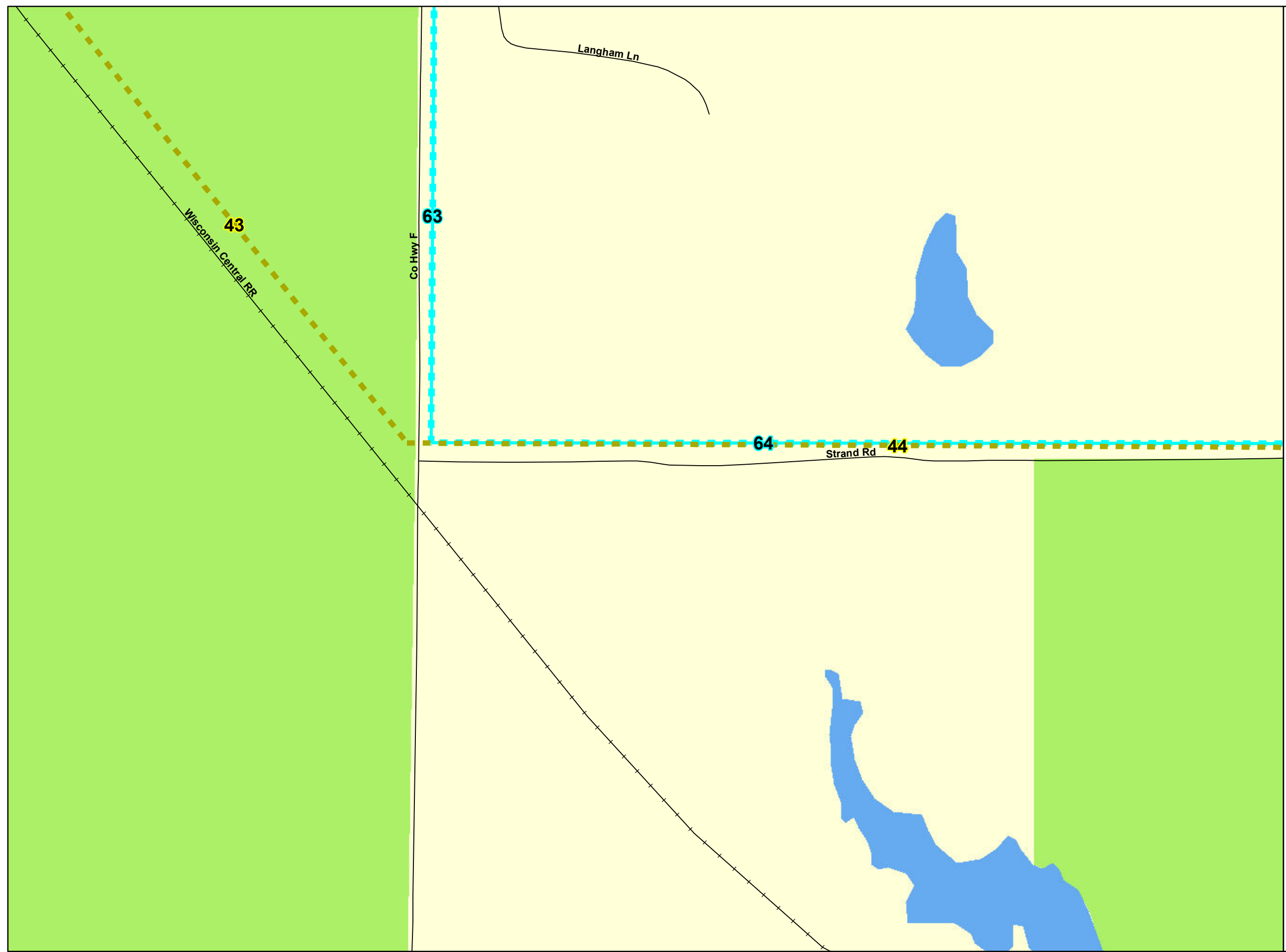


- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
- Sawyer County Zoning**
- Agriculture
  - Commerical
  - Forestry
  - Industrial
  - ROW
  - Recreational/Residential
  - Residential
  - Village
  - Water

**Xcel Energy**  
RESPONSIBLE BY NATURE™

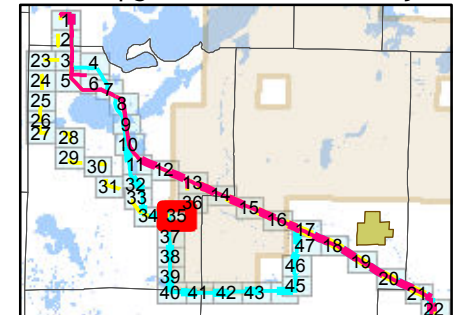
0 400 Feet

Sources: Sawyer County - July, 2010  
Date: 8/29/2011 Page 34 of 47





# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

◆ Route Segment Endpoint

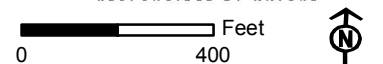
▣ Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

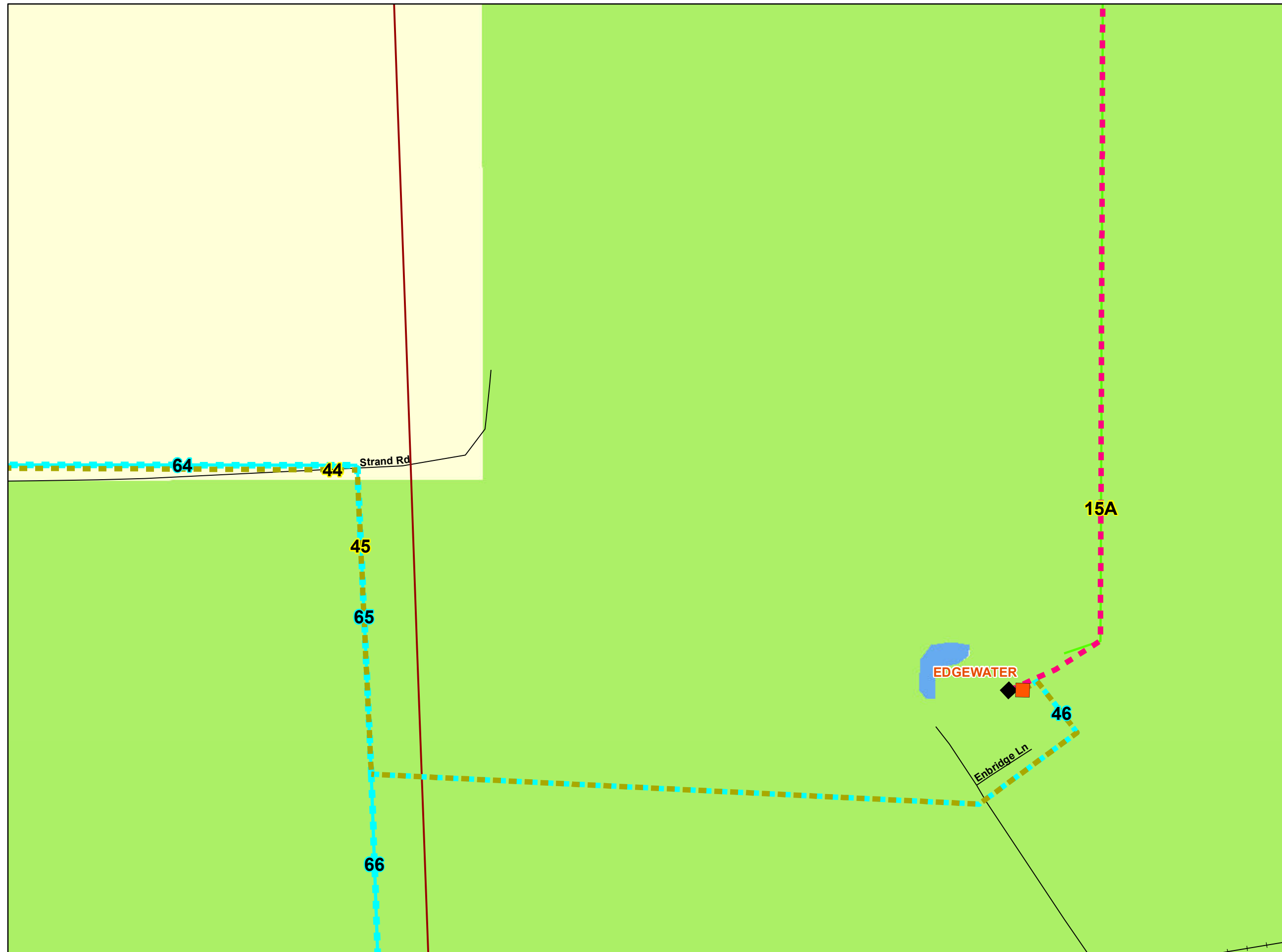
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



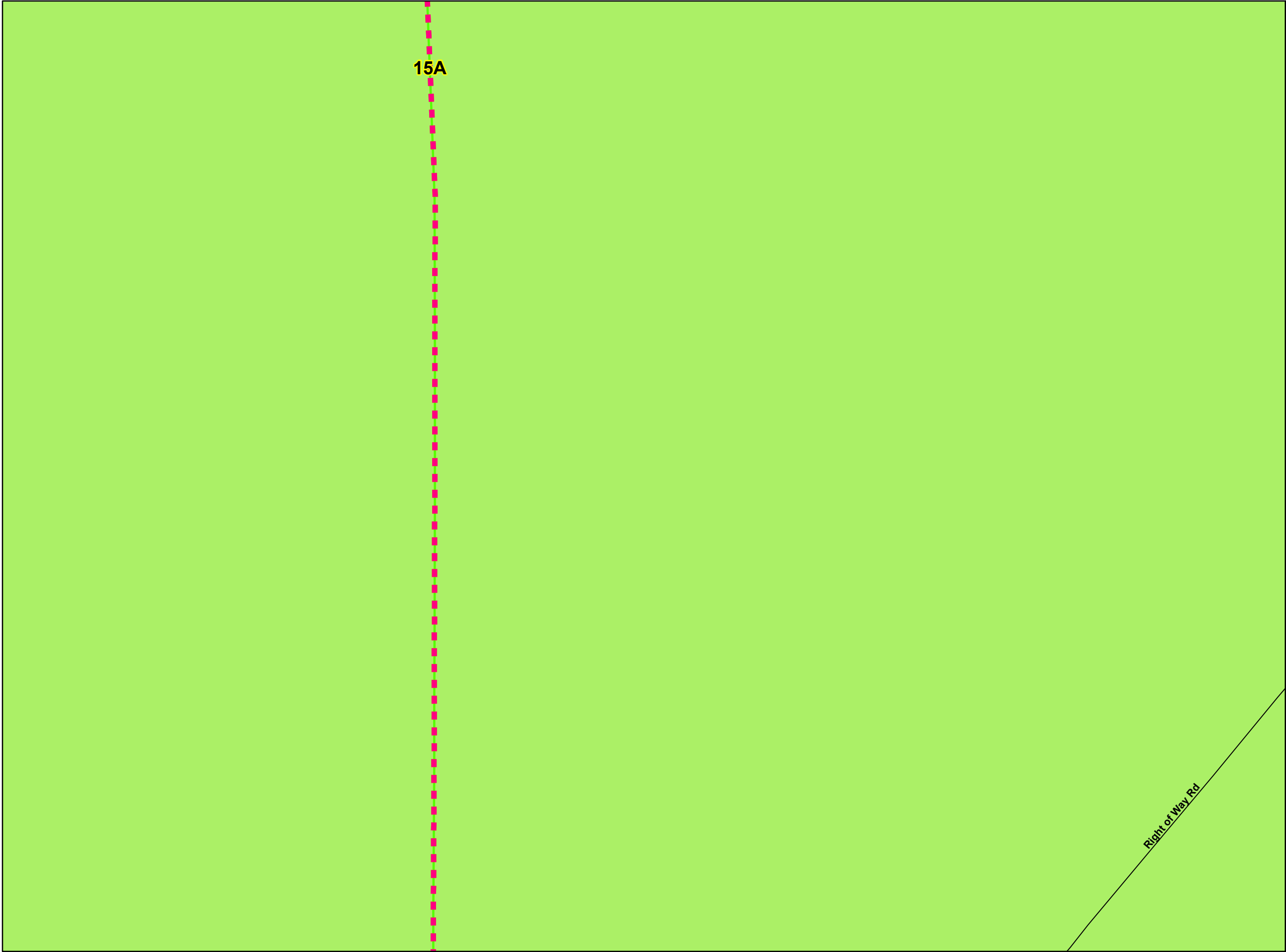
Sources: Sawyer County - July, 2010

Date: 8/29/2011

Page 35 of 47







Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

**Sawyer County Zoning**

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

**Xcel Energy**  
RESPONSIBLE BY NATURE™

0400

Feet

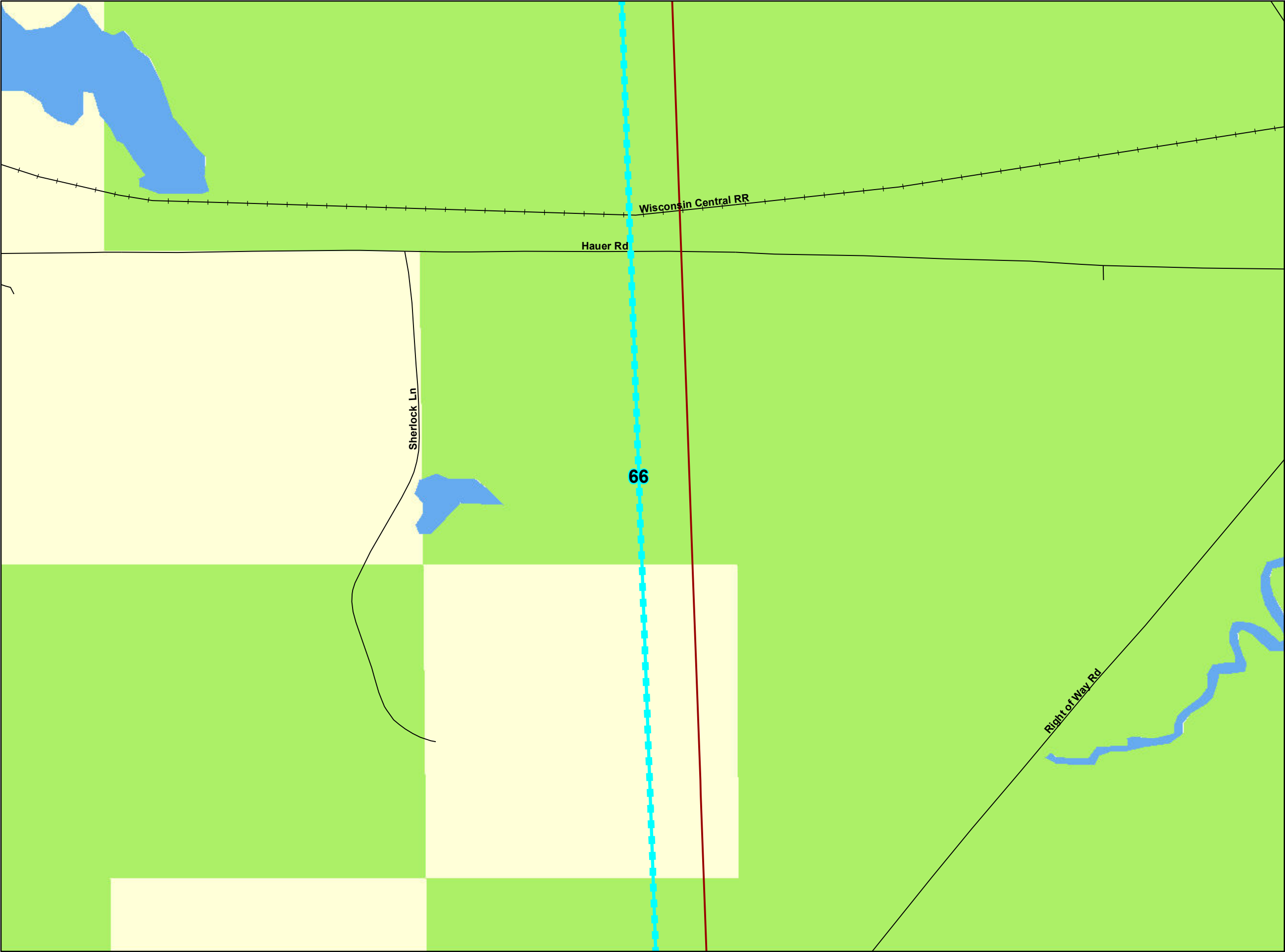
Sources: Sawyer County - July, 2010

Date: 8/29/2011

Page 36 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B6\_Zoning\_11x17\_4800.mxd





Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

**Sawyer County Zoning**

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

**Xcel Energy**  
RESPONSIBLE BY NATURE™

0400

Feet

Sources: Sawyer County - July, 2010

Date: 8/29/2011

Page 37 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B6\_Zoning\_11x17\_4800.mxd



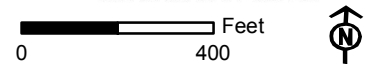
- Preferred Route 161 kV
- - Preferred Route 69 kV
- — Preferred Route 161/69 kV
- Alternate Route A 161 kV
- - Alternate Route A 69 kV
- — Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- - Alternate Route B 69 kV
- — Alternate Route B 161/69 kV

- ### Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC

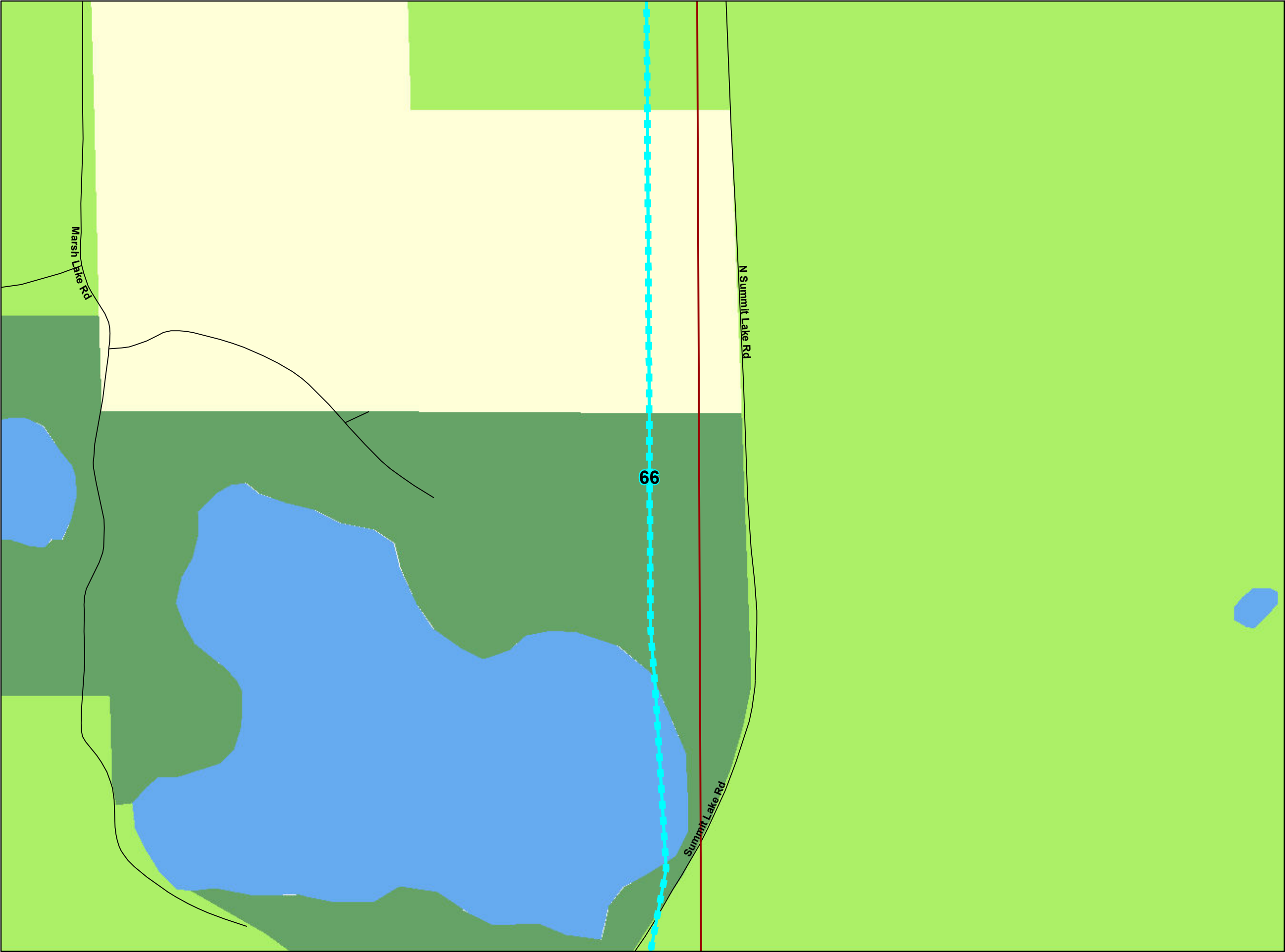
- ## Sawyer County Zoning

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

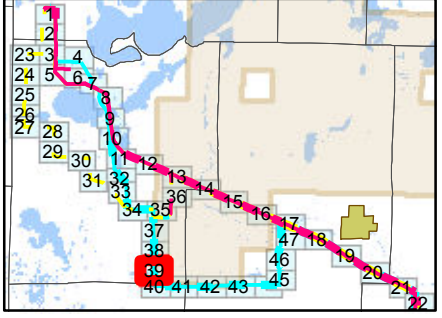


Date: 8/29/2011      Page 38 of 47

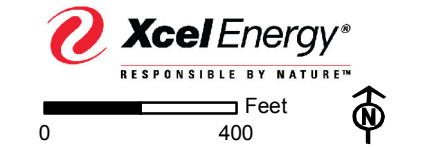




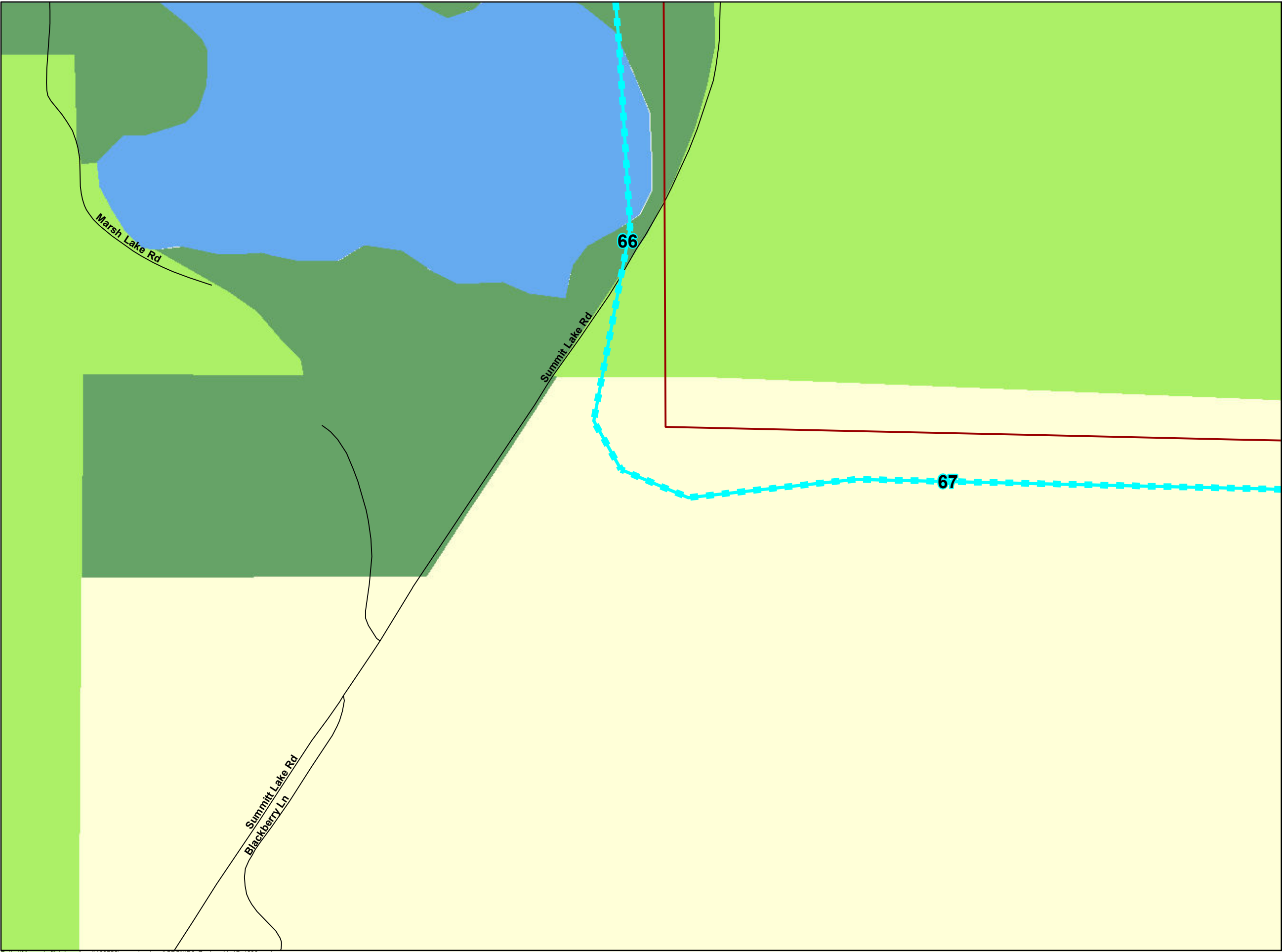
Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
- 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
- Sawyer County Zoning**
- Agriculture
  - Commerical
  - Forestry
  - Industrial
  - ROW
  - Recreational/Residential
  - Residential
  - Village
  - Water







Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

**Route Segment Endpoint**

**Radisson Substation Site**

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

**Sawyer County Zoning**

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

**Xcel Energy**  
RESPONSIBLE BY NATURE™

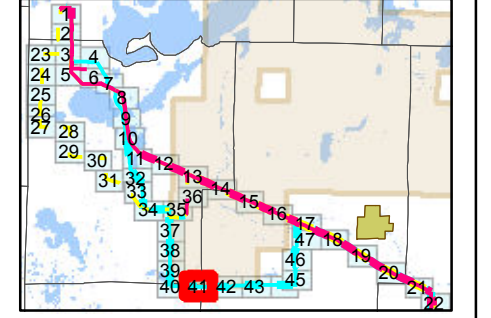
0 400 Feet

Sources: Sawyer County - July, 2010  
Date: 8/29/2011 Page 40 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\mxd\CPN\B6\_Zoning\_11x17\_4800.mxd



# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



- Route Alternatives**
- Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV

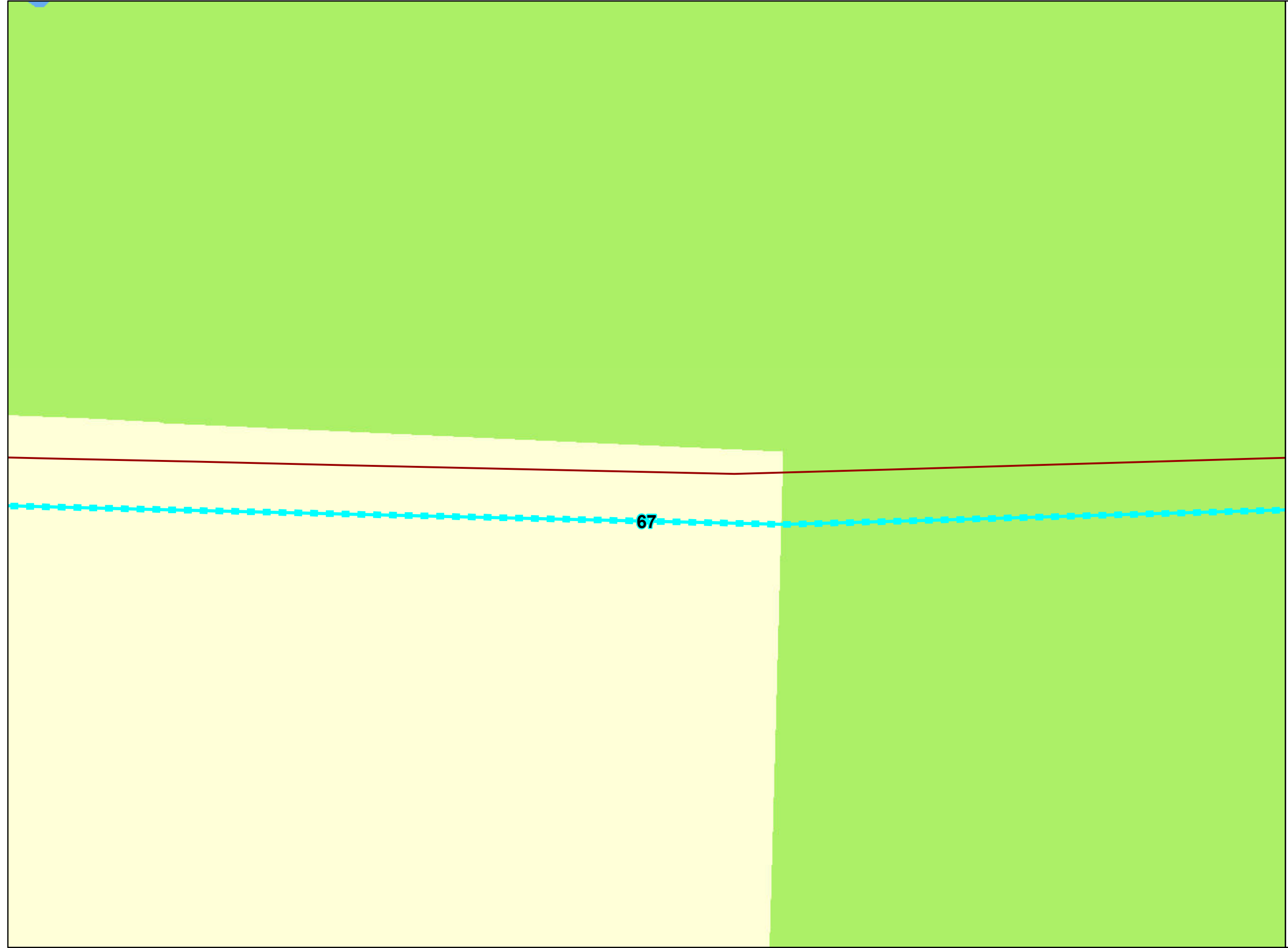
- Route Segment Endpoint
- Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

**Sawyer County Zoning**

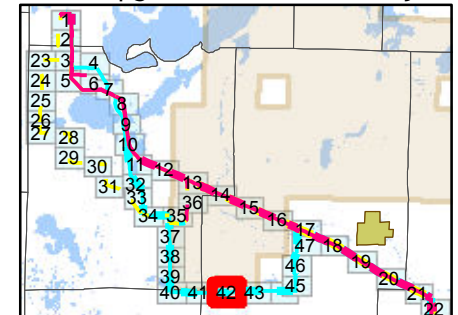
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCNB6\_Zoning\_11x17\_4800.mxd



# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

- Route Segment Endpoint

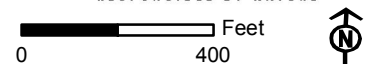
- Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

## Sawyer County Zoning

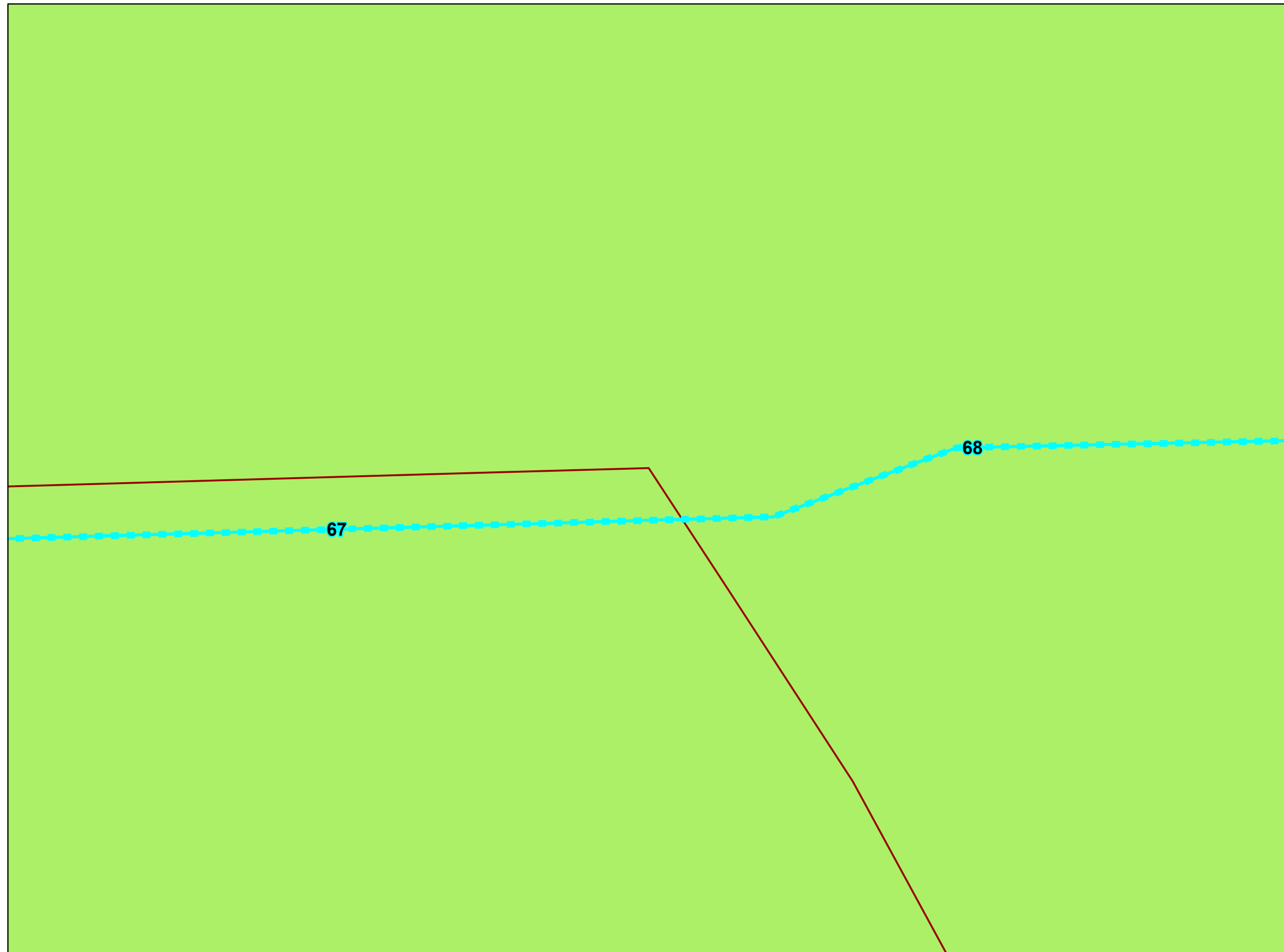
- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water



Sources: Sawyer County - July, 2010

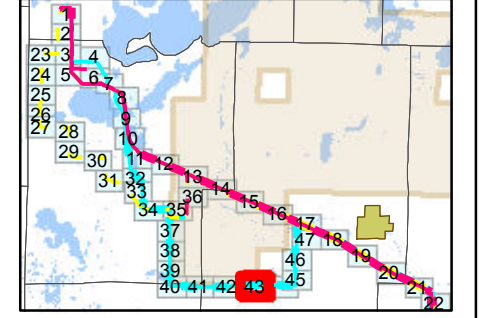
Date: 8/29/2011

Page 42 of 47

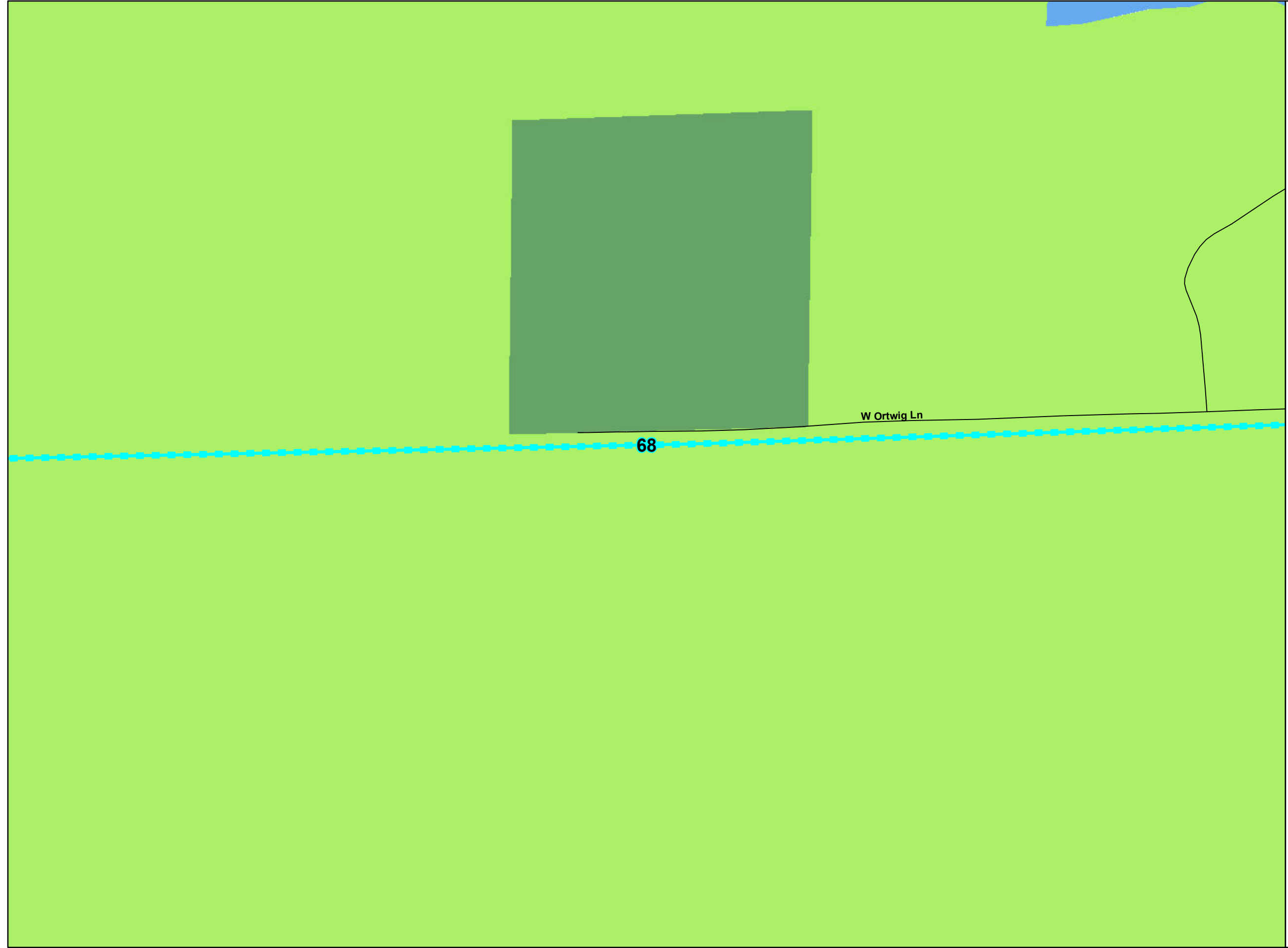




# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project

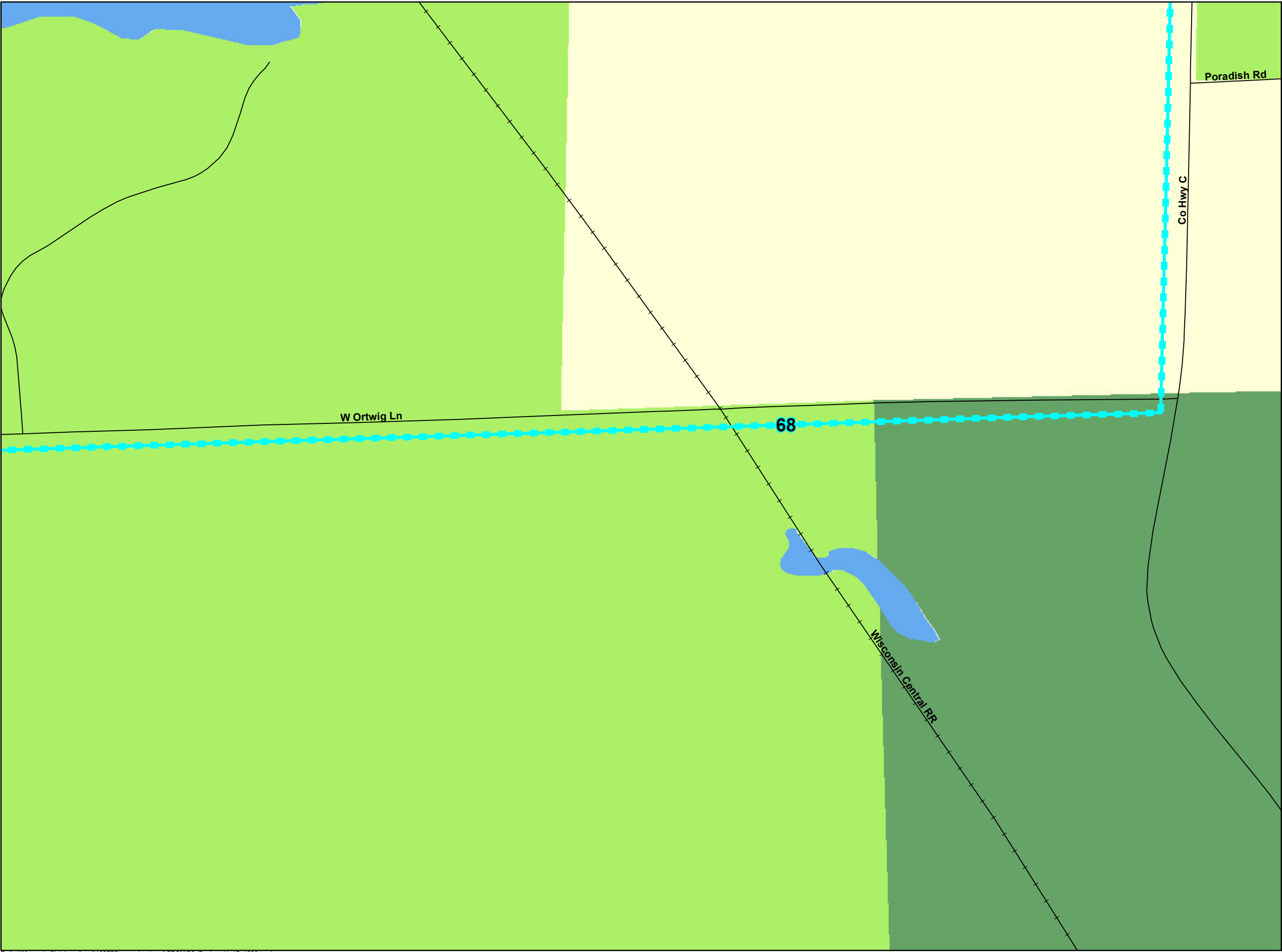


- Route Alternatives**
  - Preferred Route 161 kV
  - Preferred Route 69 kV
  - Preferred Route 161/69 kV
  - Alternate Route A 161 kV
  - Alternate Route A 69 kV
  - Alternate Route A 161/69 kV
  - Alternate Route B 161 kV
  - Alternate Route B 69 kV
  - Alternate Route B 161/69 kV
  - Route Segment Endpoint
  - Radisson Substation Site
- Existing Transmission**
  - 69kV AC
  - 161kV AC
  - 345kV AC
  - Substation (Xcel)
  - Substation (Not Xcel)
  - Road
  - Railroad
- Sawyer County Zoning**
  - Agriculture
  - Commerical
  - Forestry
  - Industrial
  - ROW
  - Recreational/Residential
  - Residential
  - Village
  - Water



Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B6\_Zoning\_11x17\_4800.mxd





Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Route Segment Endpoint

Radisson Substation Site

Existing Transmission

69kV AC

161kV AC

345kV AC

Substation (Xcel)

Substation (Not Xcel)

Road

Railroad

Sawyer County Zoning

Agriculture

Commerical

Forestry

Industrial

ROW

Recreational/Residential

Residential

Village

Water

RESPONSIBLE BY NATURE™

0400

Feet

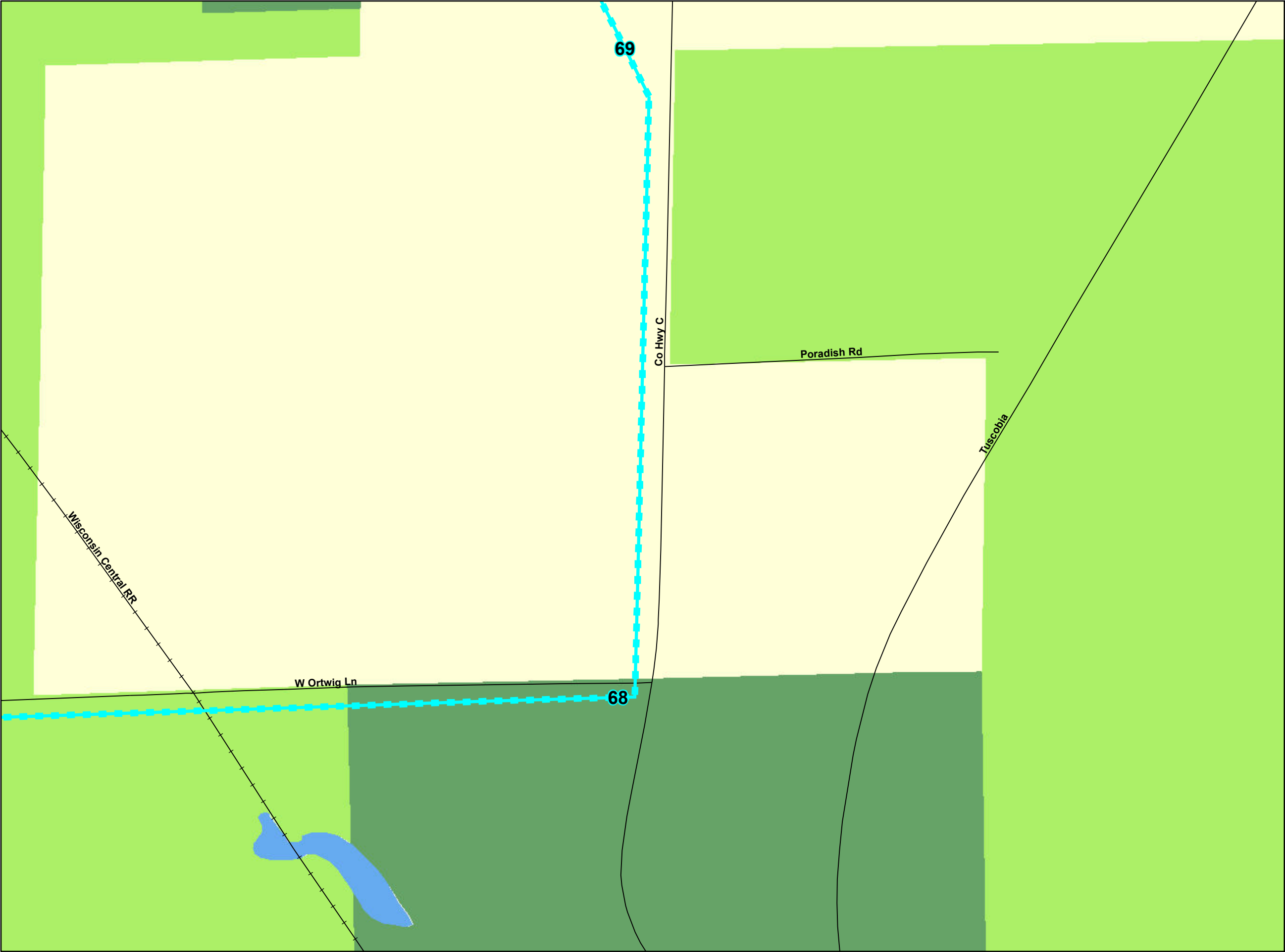
Sources: Sawyer County - July, 2010

Date: 8/29/2011

Page 44 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B6\_Zoning\_11x17\_4800.mxd





Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

Route Alternatives

Preferred Route 161 kV

Preferred Route 69 kV

Preferred Route 161/69 kV

Alternate Route A 161 kV

Alternate Route A 69 kV

Alternate Route A 161/69 kV

Alternate Route B 161 kV

Alternate Route B 69 kV

Alternate Route B 161/69 kV

Route Segment Endpoint

Radisson Substation Site

Existing Transmission

69kV AC

161kV AC

345kV AC

Substation (Xcel)

Substation (Not Xcel)

Road

Railroad

Sawyer County Zoning

Agriculture

Commerical

Forestry

Industrial

ROW

Recreational/Residential

Residential

Village

Water

RESPONSIBLE BY NATURE™

0400

Feet

Sources: Sawyer County - July, 2010

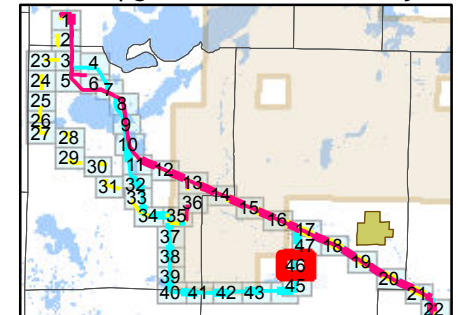
Date: 8/29/2011

Page 45 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B6\_Zoning\_11x17\_4800.mxd



# Appendix B-6 Zoning and Land Use Stone Lake to Couderay 69 kV Rebuild / 161kV Upgrade Transmission Project



## Route Alternatives

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV

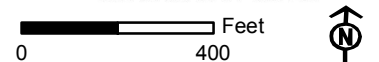
- Route Segment Endpoint
- Radisson Substation Site

## Existing Transmission

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

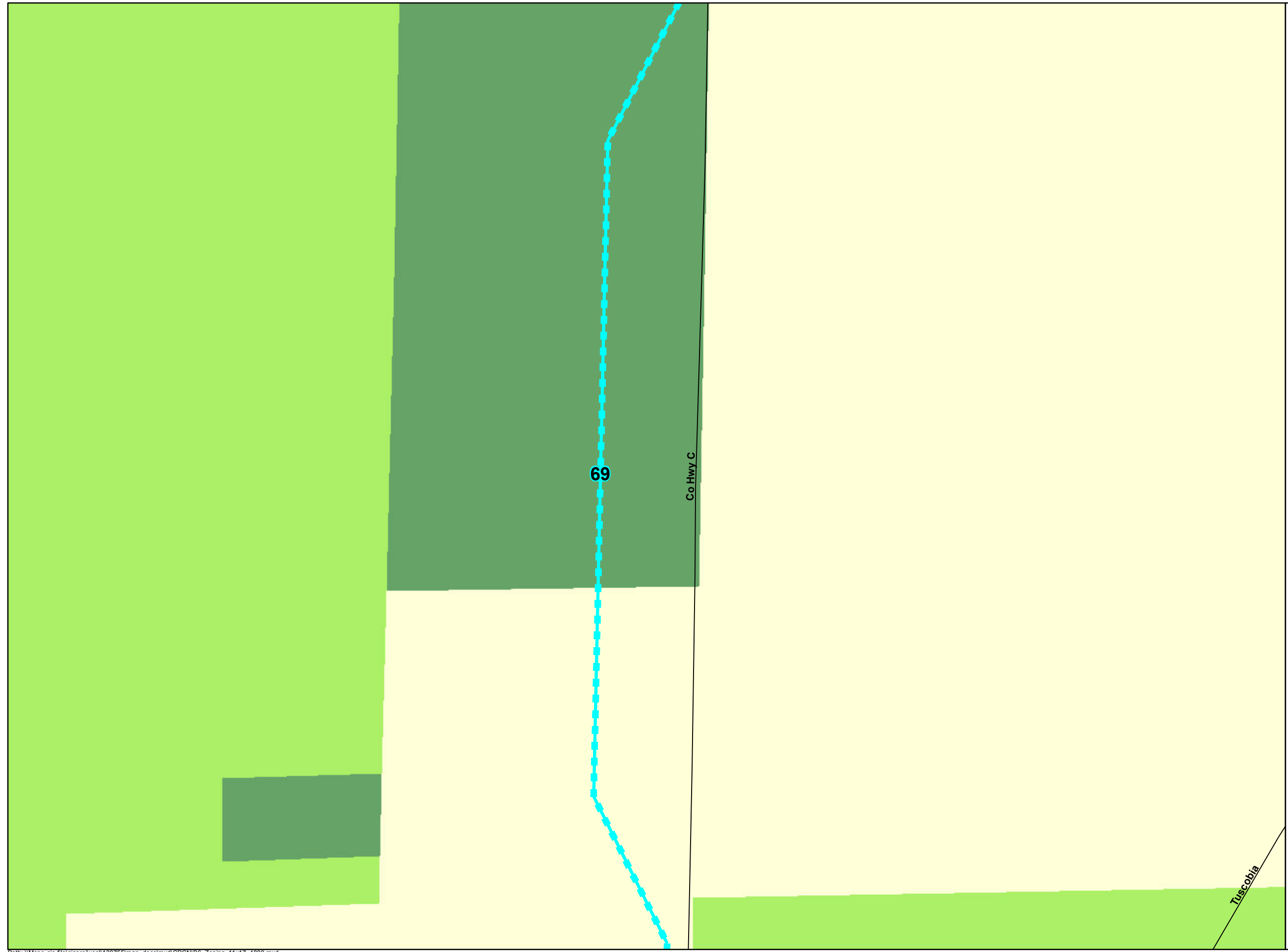
## Sawyer County Zoning

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

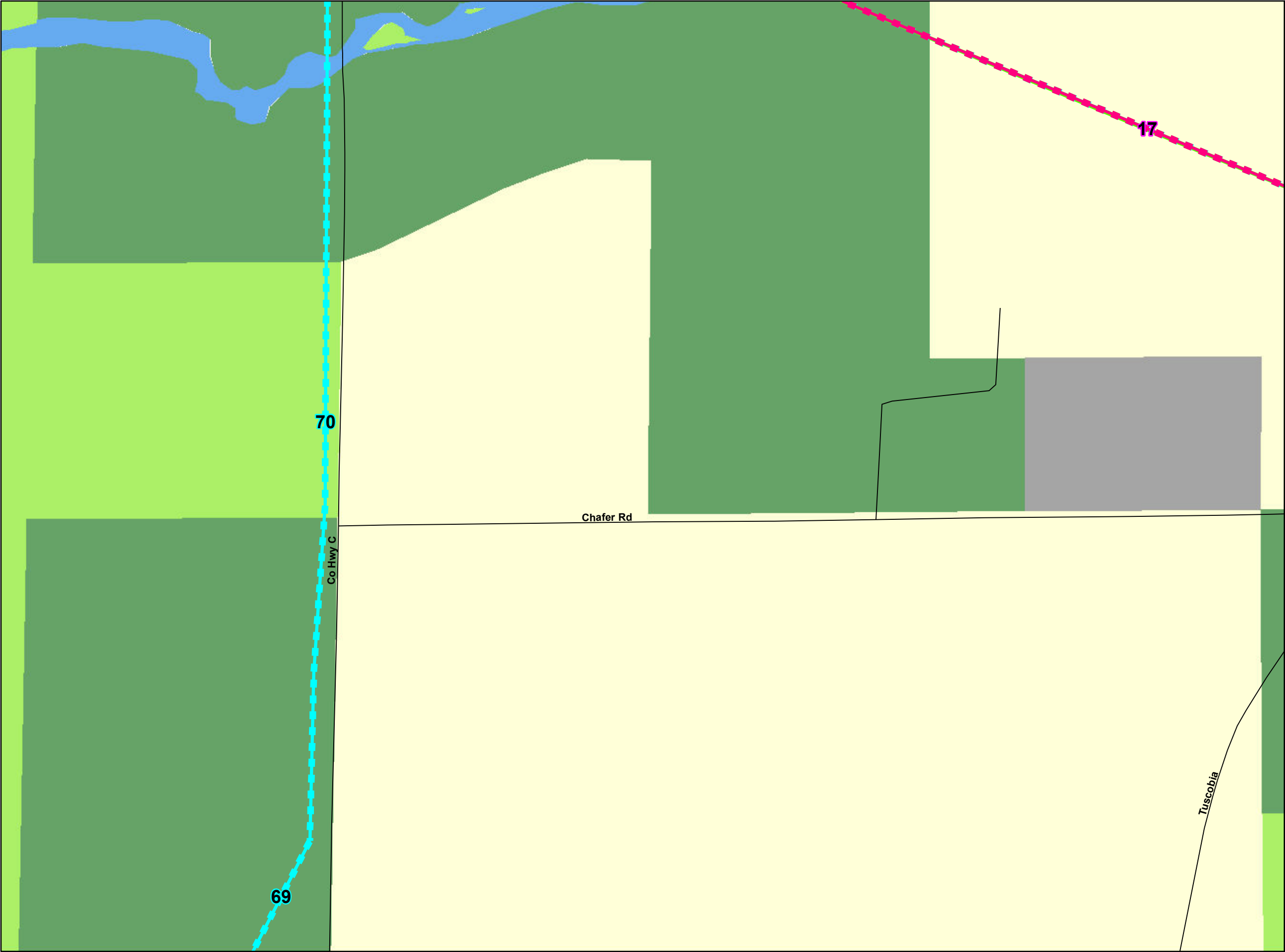


Sources: Sawyer County - July, 2010

Date: 8/29/2011      Page 46 of 47







Appendix B-6  
Zoning and Land Use  
Stone Lake to Couderay  
69 kV Rebuild /  
161kV Upgrade Transmission Project

**Route Alternatives**

- Preferred Route 161 kV
- Preferred Route 69 kV
- Preferred Route 161/69 kV
- Alternate Route A 161 kV
- Alternate Route A 69 kV
- Alternate Route A 161/69 kV
- Alternate Route B 161 kV
- Alternate Route B 69 kV
- Alternate Route B 161/69 kV
- Route Segment Endpoint
- Radisson Substation Site

**Existing Transmission**

- 69kV AC
- 161kV AC
- 345kV AC
- Substation (Xcel)
- Substation (Not Xcel)
- Road
- Railroad

**Sawyer County Zoning**

- Agriculture
- Commerical
- Forestry
- Industrial
- ROW
- Recreational/Residential
- Residential
- Village
- Water

**Xcel Energy**  
RESPONSIBLE BY NATURE™

0400

Feet

Sources: Sawyer County - July, 2010

Date: 8/29/2011

Page 47 of 47

Path: \\Mspe-gis-file\gisproj\excel\139755\map\_docs\vmxd\CPCN\B6\_Zoning\_11x17\_4800.mxd