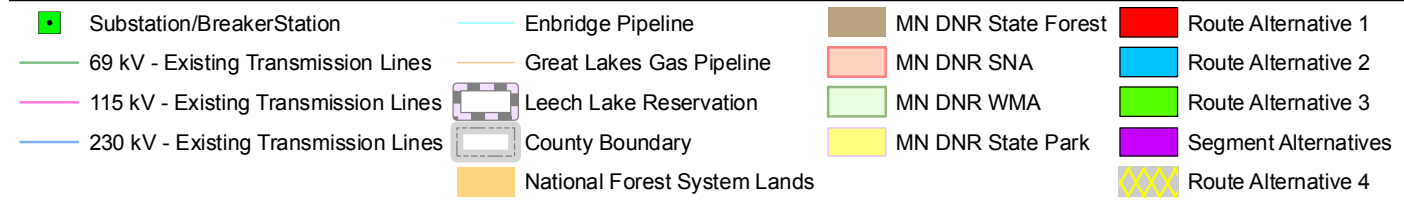
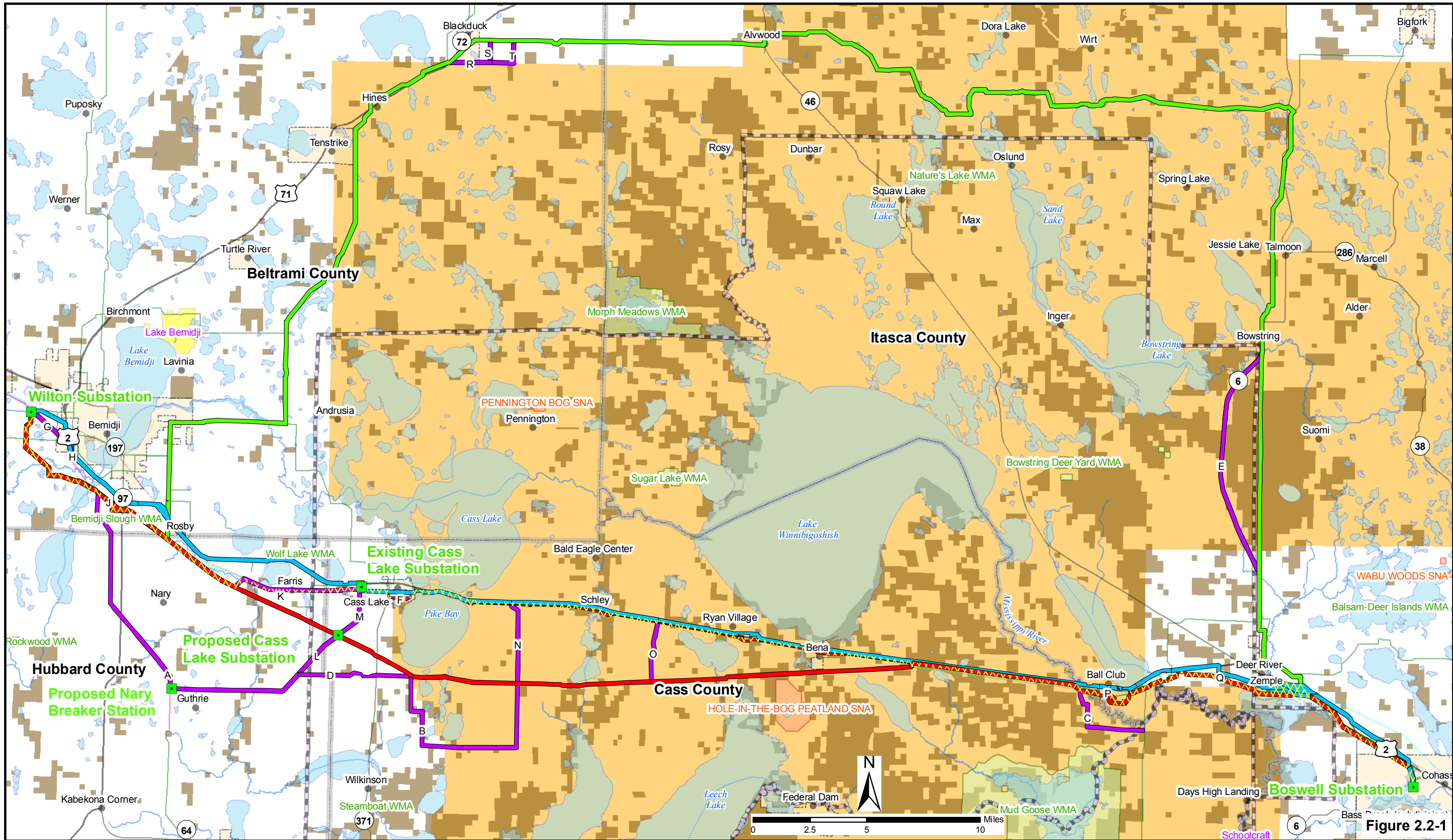


## **Appendix C**

### **Resource Maps/Figures**



**Alternative Overview Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010

**Figure 2.2-1**

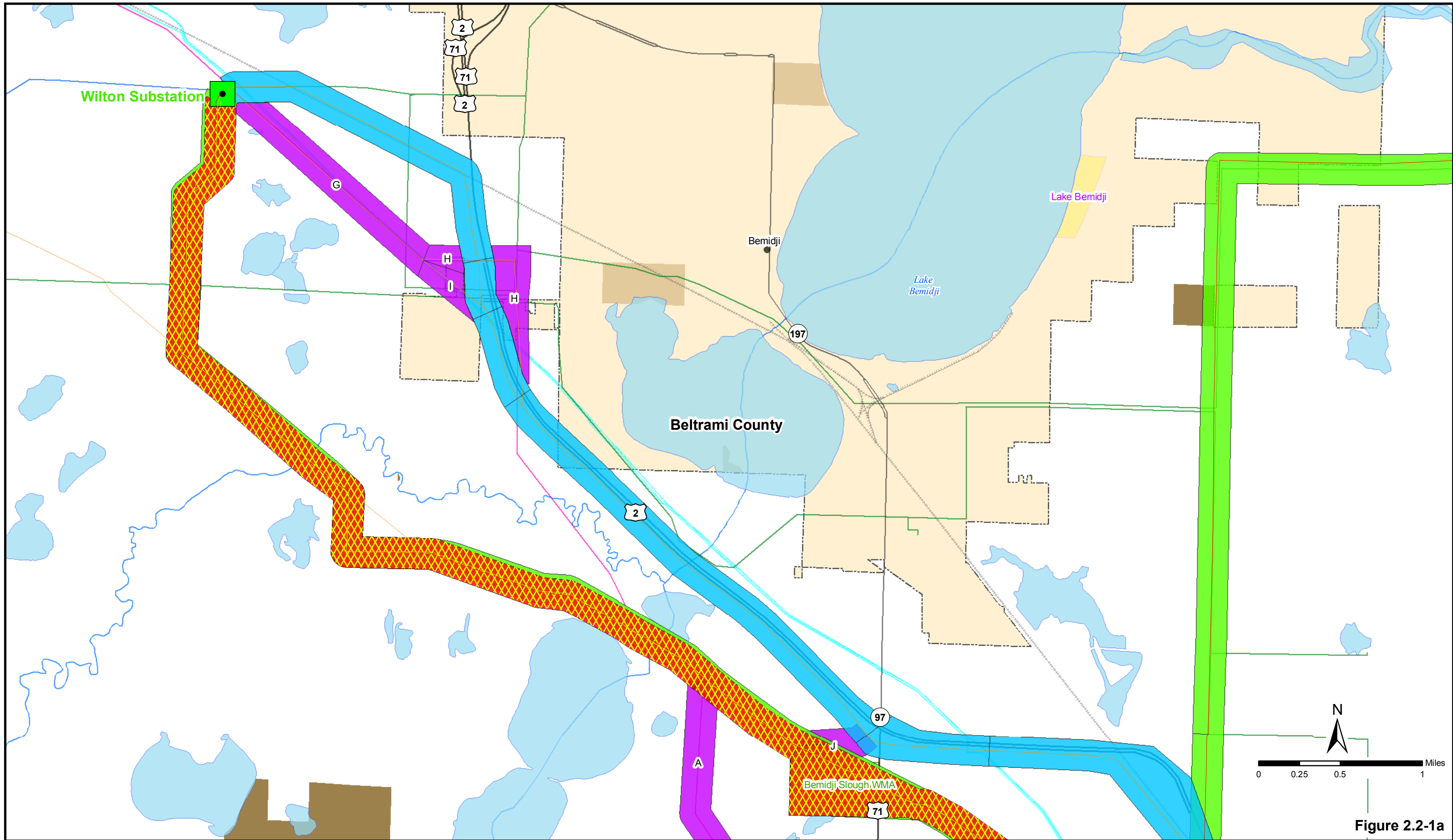
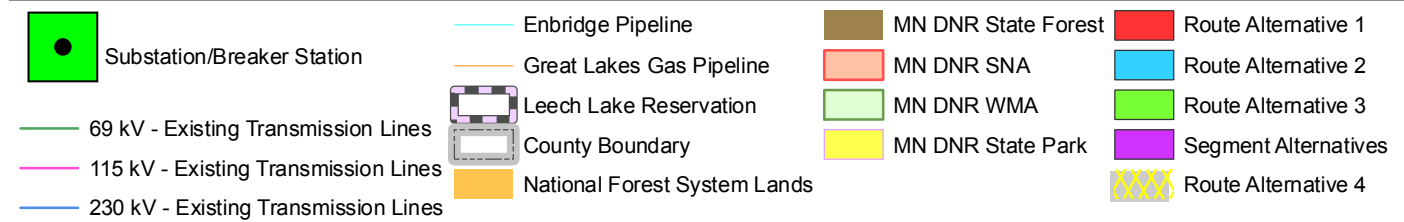
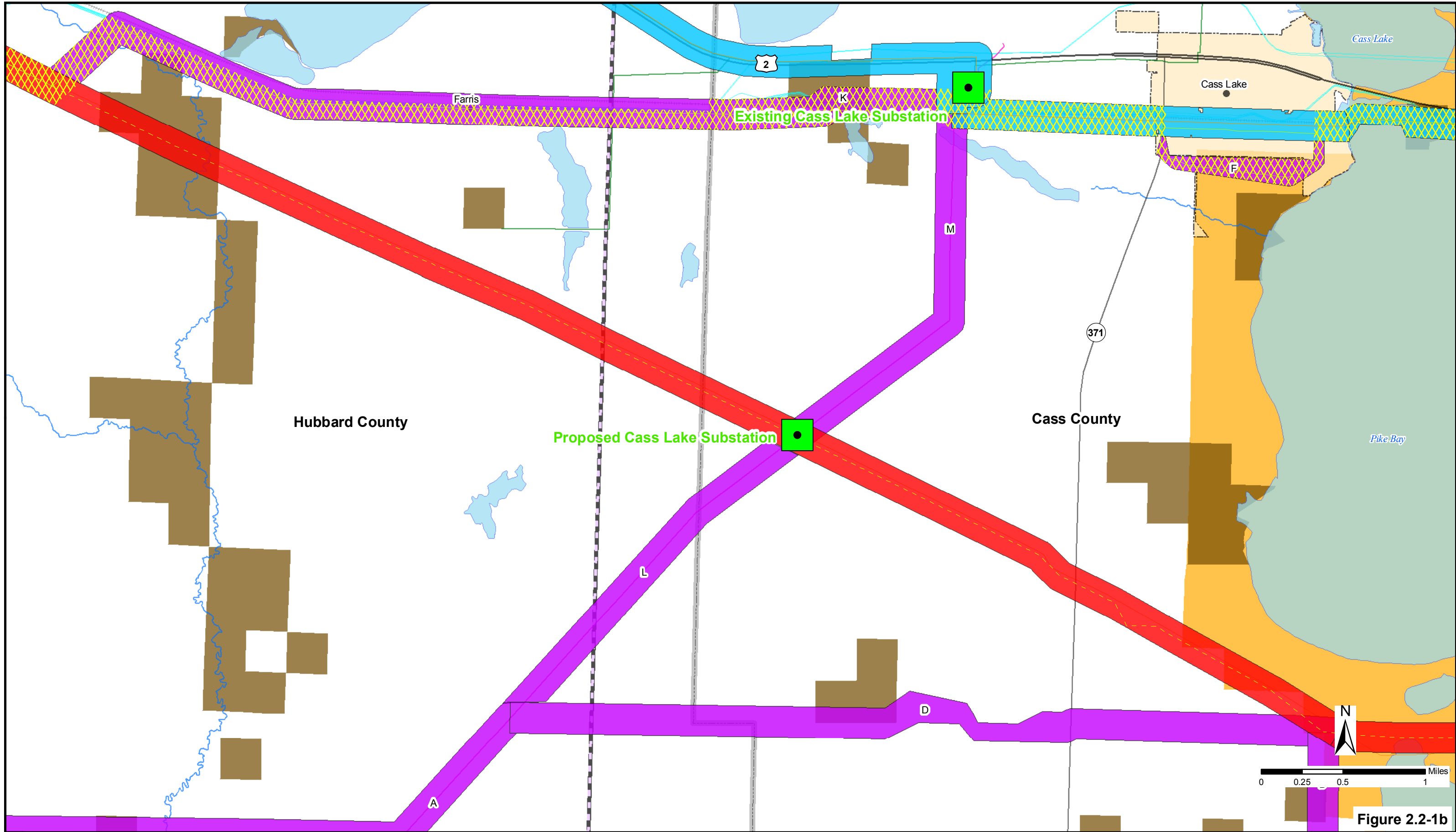


Figure 2.2-1a

- |  |                                      |  |                              |  |                     |  |                      |
|--|--------------------------------------|--|------------------------------|--|---------------------|--|----------------------|
|  | Substation/Breaker Station           |  | Enbridge Pipeline            |  | MN DNR State Forest |  | Route Alternative 1  |
|  | Great Lakes Gas Pipeline             |  | Leech Lake Reservation       |  | MN DNR SNA          |  | Route Alternative 2  |
|  | 69 kV - Existing Transmission Lines  |  | County Boundary              |  | MN DNR WMA          |  | Route Alternative 3  |
|  | 115 kV - Existing Transmission Lines |  | National Forest System Lands |  | MN DNR State Park   |  | Segment Alternatives |
|  | 230 kV - Existing Transmission Lines |  |                              |  |                     |  | Route Alternative 4  |

**Wilton Area Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010



**Alternative Route Segments D, F, K, L, and M**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**

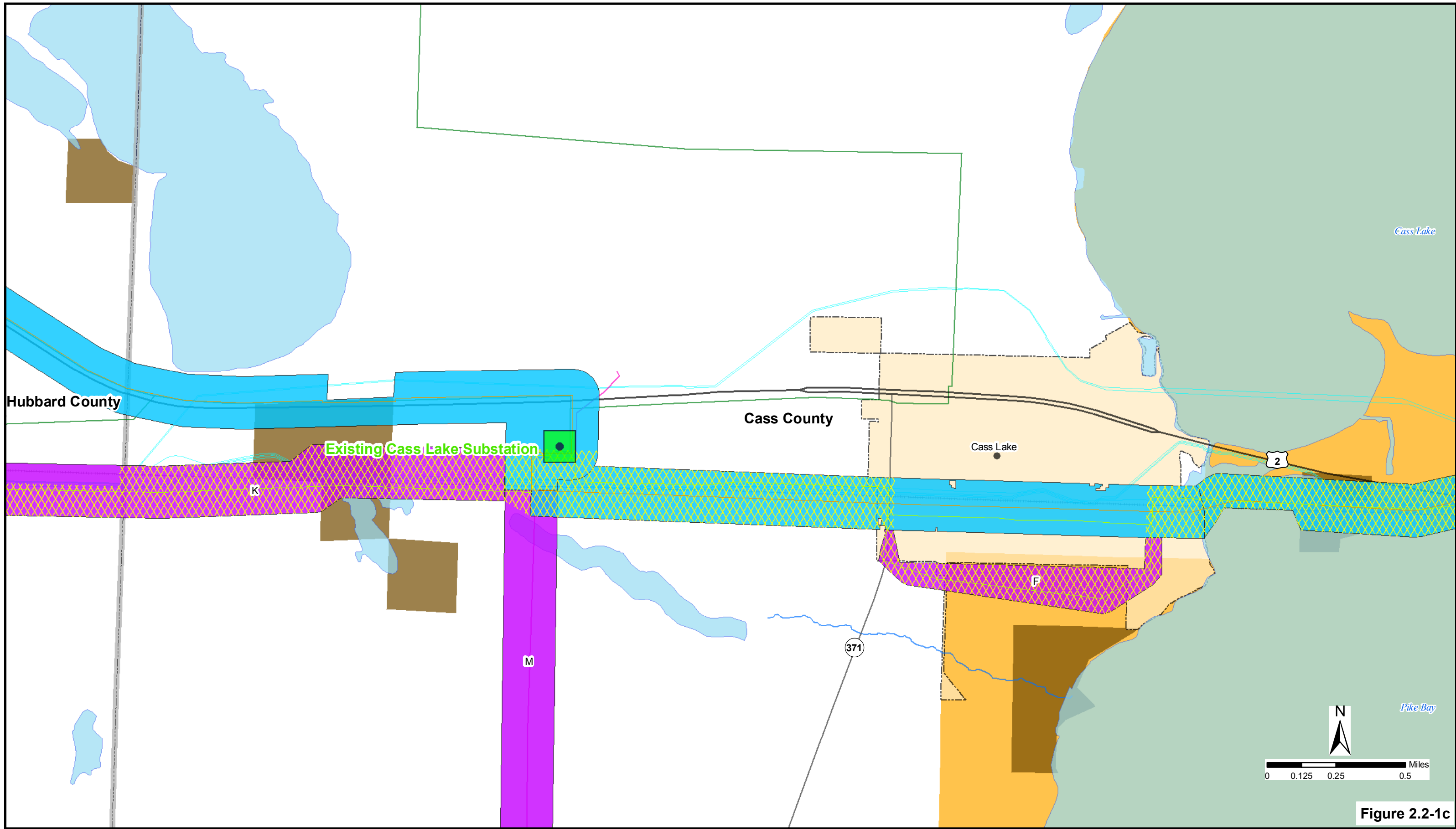
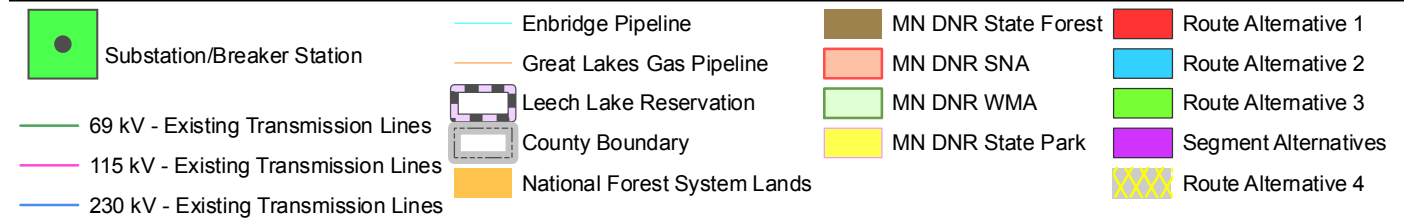
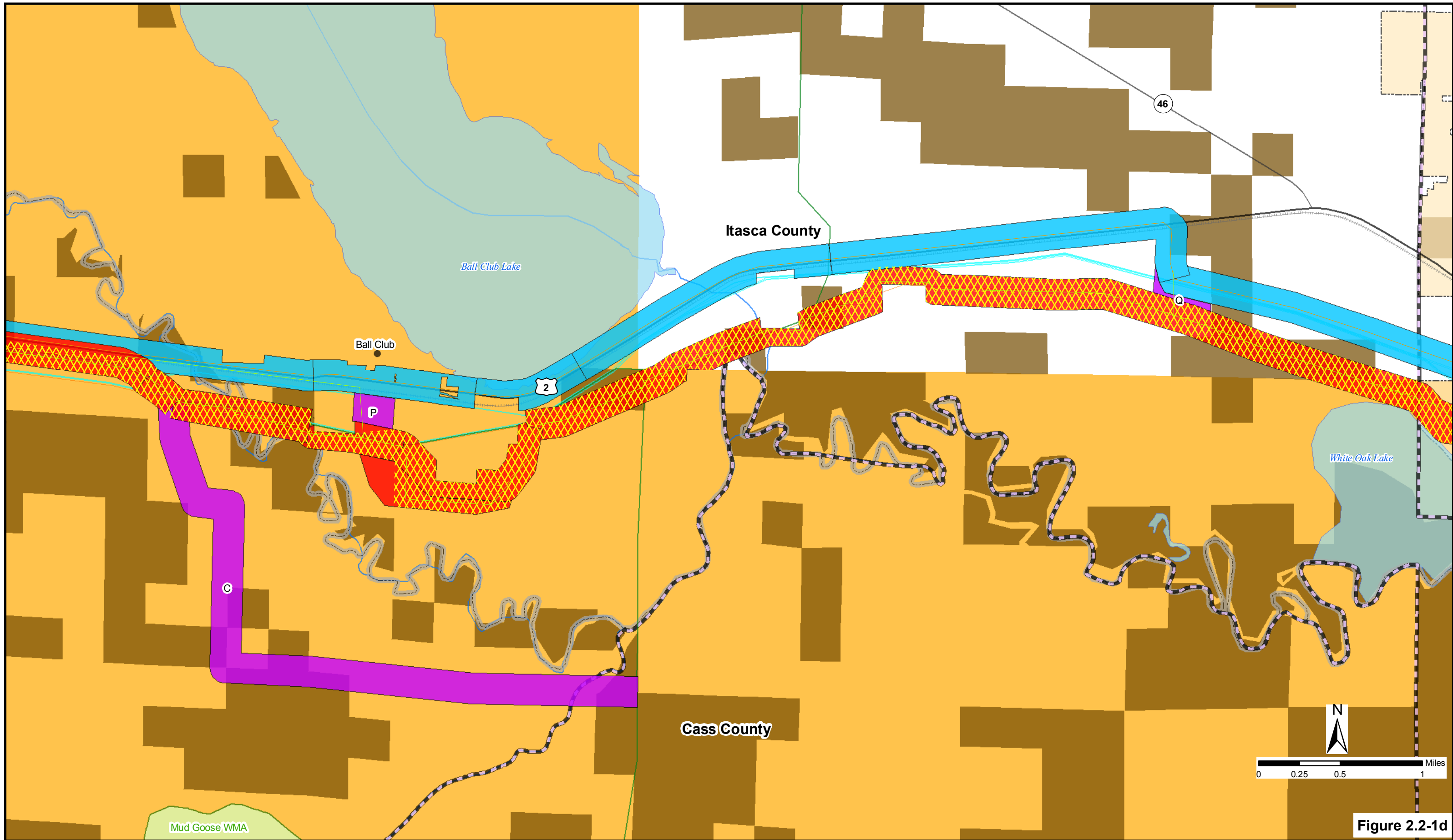


Figure 2.2-1c



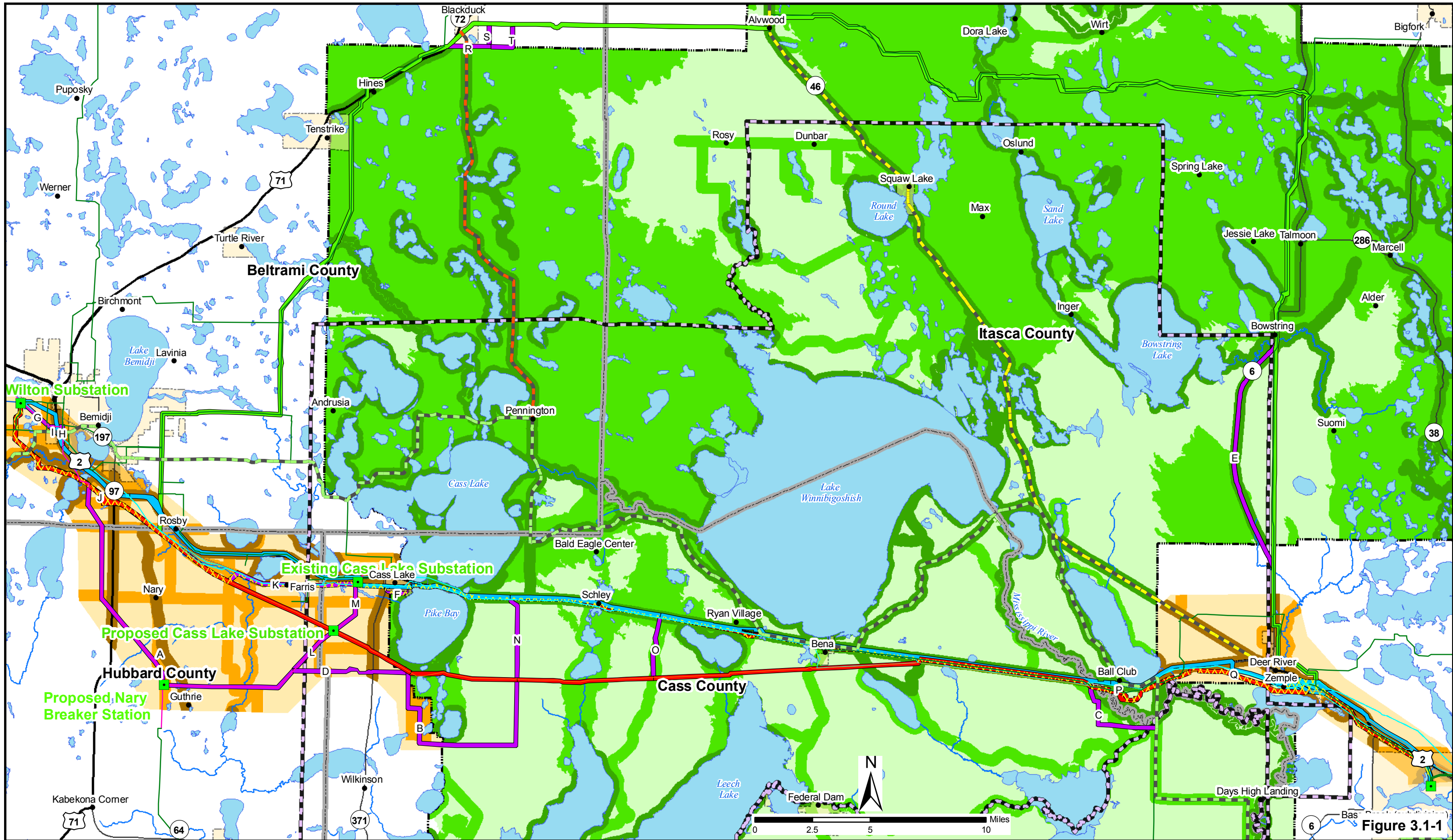
**Cass Lake Substation Area Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**



**Figure 2.2-1d**

- |  |                                |                       |                        |
|--|--------------------------------|-----------------------|------------------------|
| — 69 kV - Existing Transmission Lines  | — Great Lakes Gas Pipeline     | ■ MN DNR State Forest | ■ Route Alternative 1  |
| — 115 kV - Existing Transmission Lines | ▭ Leech Lake Reservation       | ■ MN DNR SNA          | ■ Route Alternative 2  |
| — 230 kV - Existing Transmission Lines | ▭ County Boundary              | ■ MN DNR WMA          | ■ Route Alternative 3  |
| — Enbridge Pipeline                    | ■ National Forest System Lands | ■ MN DNR State Park   | ■ Segment Alternatives |
|  |                                |                       | ■ Route Alternative 4  |

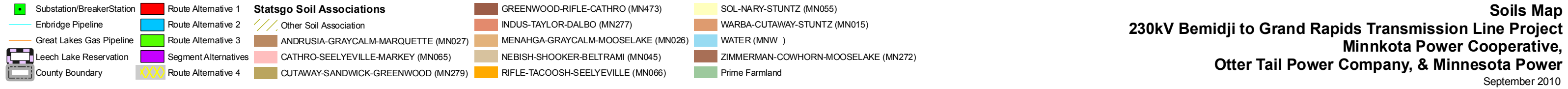
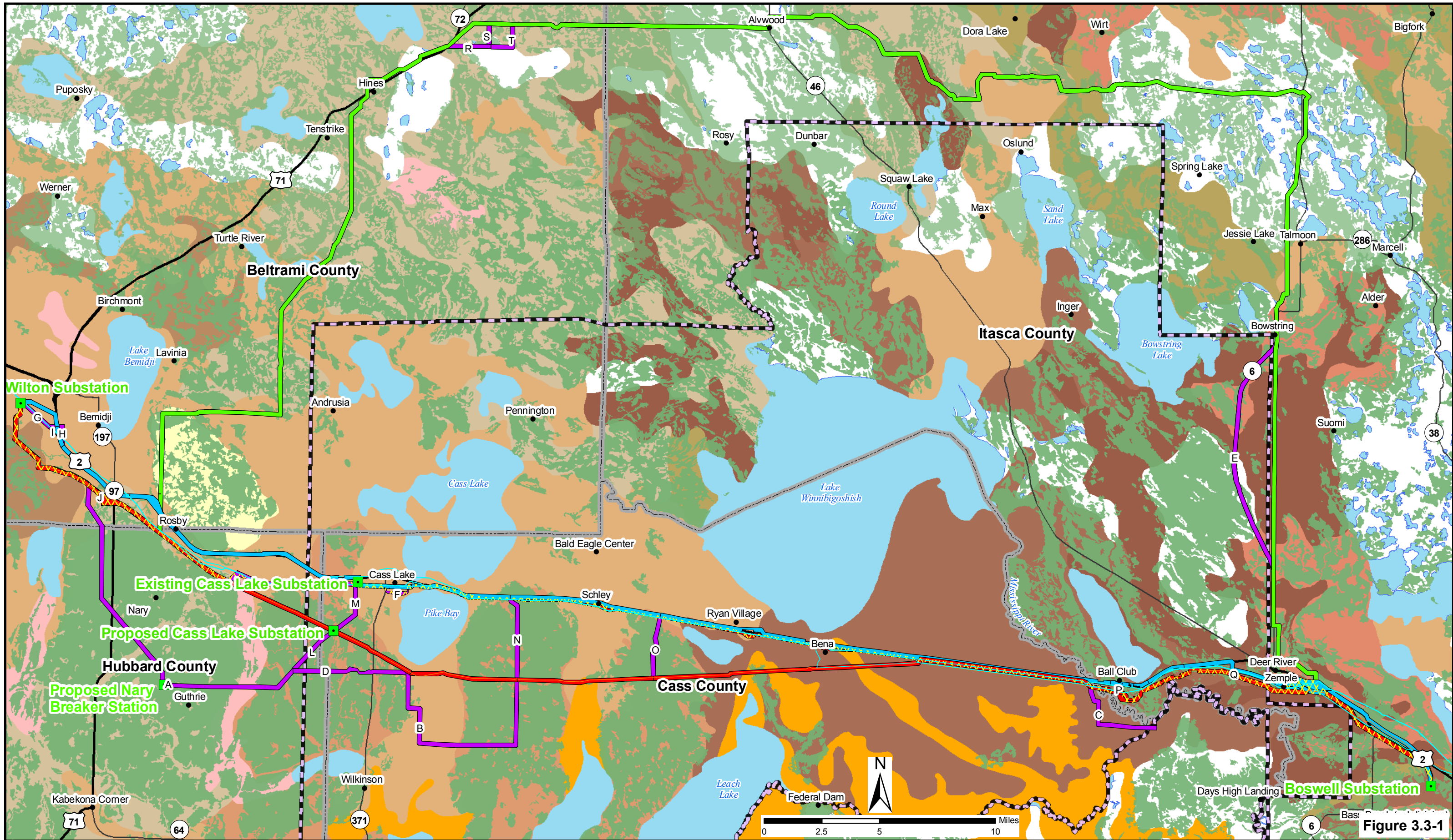
**Alternative Route Segments C, P, and Q**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010



- |                                      |                             |                      |                  |                |  |
|--------------------------------------|-----------------------------|----------------------|------------------|----------------|--|
| Substation/Breaker Station           | Enbridge Pipeline           | Route Alternative 1  | <b>SIO Model</b> | Non-CNF High   | Great River Road, National Scenic Byway    |
| 69 kV - Existing Transmission Lines  | Great Lakes Gas Pipeline    | Route Alternative 2  | CNF High         | Non-CNF Medium | Ladyslipper Scenic Byway                   |
| 115 kV - Existing Transmission Lines | Leech Lake Reservation      | Route Alternative 3  | CNF Medium       | Non-CNF Low    | Avenue of the Pines Minnesota Scenic Byway |
| 230 kV - Existing Transmission Lines | County Boundary             | Segment Alternatives | CNF Low          |                |  |
|                                      | CNF Administrative Boundary | Route Alternative 4  |                  |                |  |

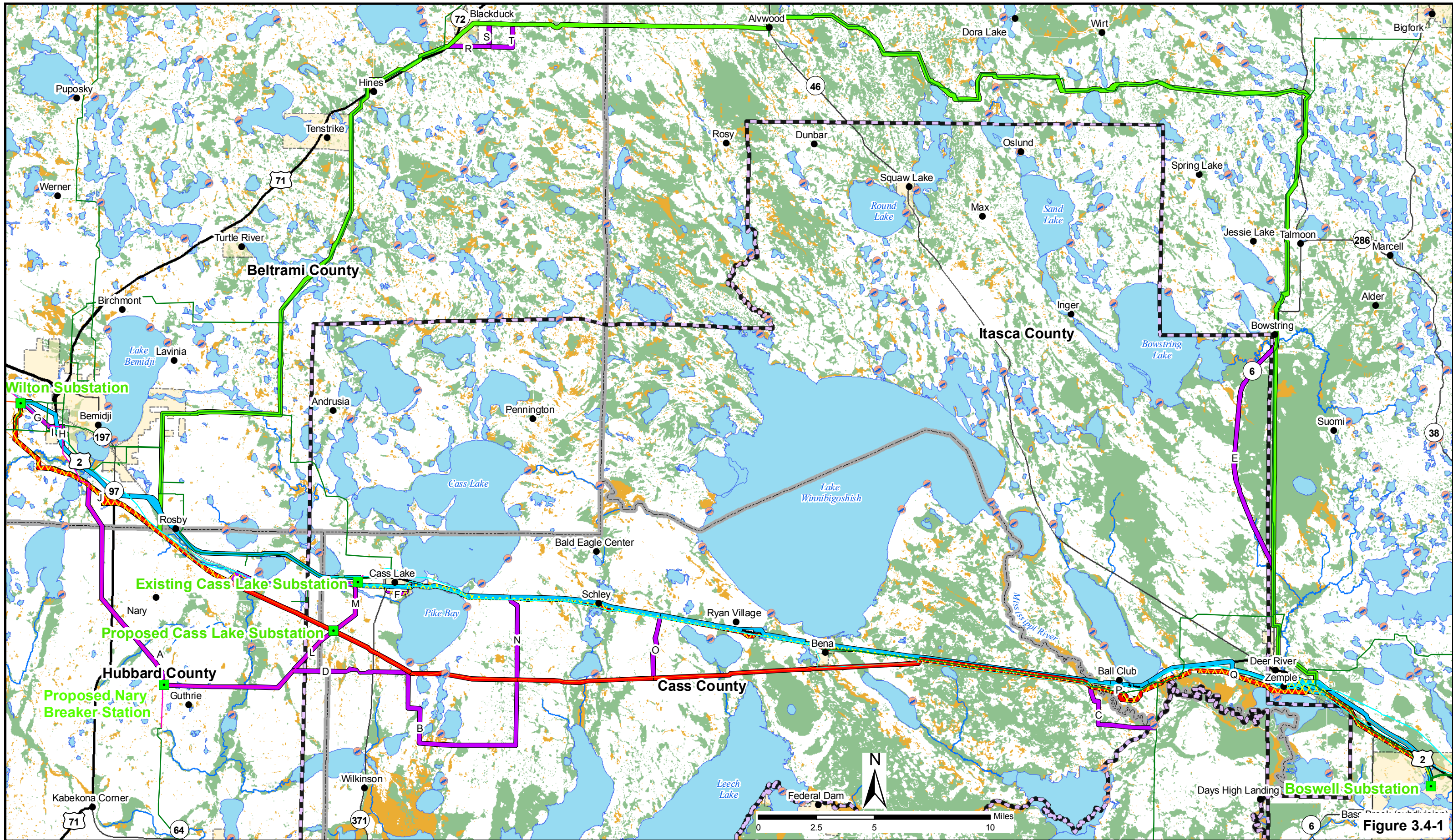
**Scenic Integrity Objectives Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010

**Figure 3.1-1**



**Soils Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010

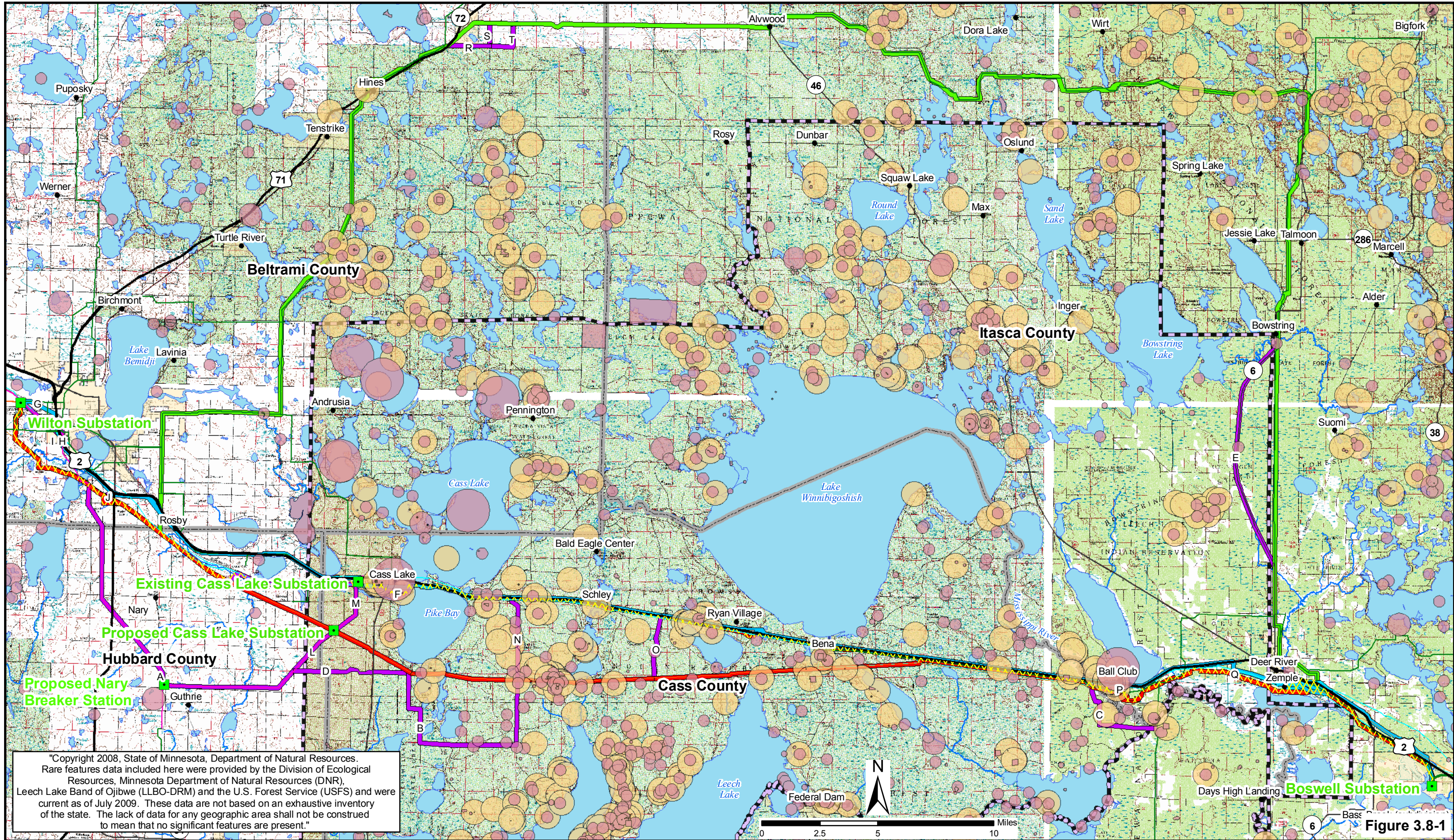




- |                                      |                          |                      |                        |
|--------------------------------------|--------------------------|----------------------|------------------------|
| Substation/Breaker Station           | Enbridge Pipeline        | Route Alternative 1  | Water Access           |
| 69 kV - Existing Transmission Lines  | Great Lakes Gas Pipeline | Route Alternative 2  | MN DNR PWI Streams     |
| 115 kV - Existing Transmission Lines | Leech Lake Reservation   | Route Alternative 3  | MN DNR PWI Basins      |
| 230 kV - Existing Transmission Lines | County Boundary          | Segment Alternatives | Emergent Wetland       |
| Urban Area                           | Urban Area               | Route Alternative 4  | Forested/Shrub Wetland |

**Surface Waters / Wetlands Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010

**Figure 3.4-1**

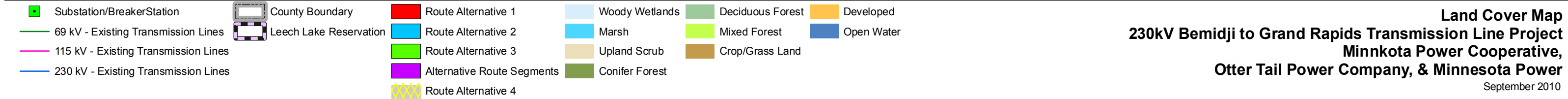


"Copyright 2008, State of Minnesota, Department of Natural Resources. Rare features data included here were provided by the Division of Ecological Resources, Minnesota Department of Natural Resources (DNR), Leech Lake Band of Ojibwe (LLBO-DRM) and the U.S. Forest Service (USFS) and were current as of July 2009. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present."

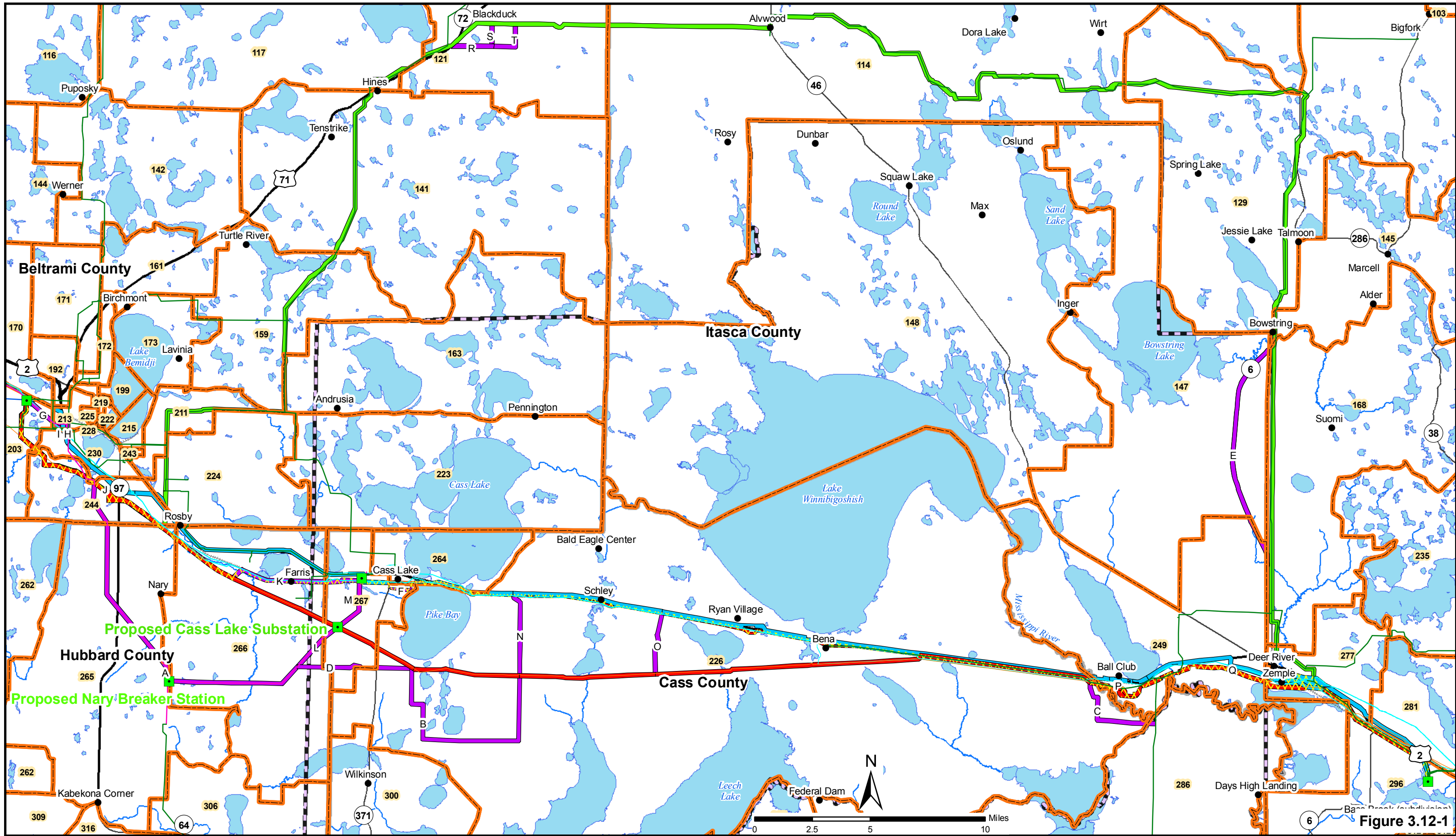
- |                                      |                      |                                       |
|--------------------------------------|----------------------|---------------------------------------|
| Substation/Breaker Station           | Route Alternative 1  | MN DNR PWI Basins                     |
| 69 kV - Existing Transmission Lines  | Route Alternative 2  | Sensitive Resource (USFS & LLBO-DRM)  |
| 115 kV - Existing Transmission Lines | Route Alternative 3  | Sensitive Resource (MNDNR & LLBO-DRM) |
| 230 kV - Existing Transmission Lines | Segment Alternatives |                                       |
| MN DNR PWI Streams                   | Route Alternative 4  |                                       |

**Sensitive Resources Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010

Figure 3.8-1

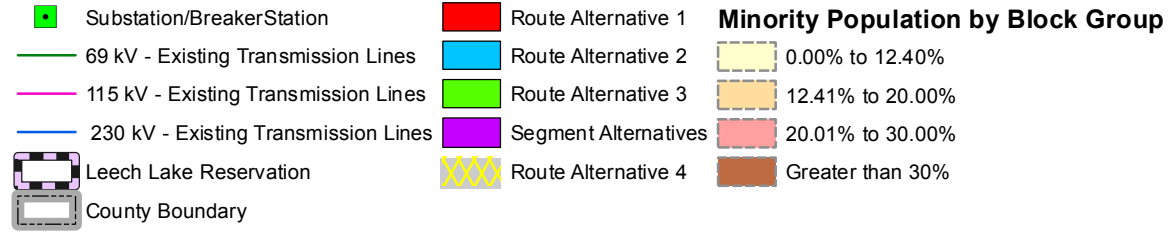
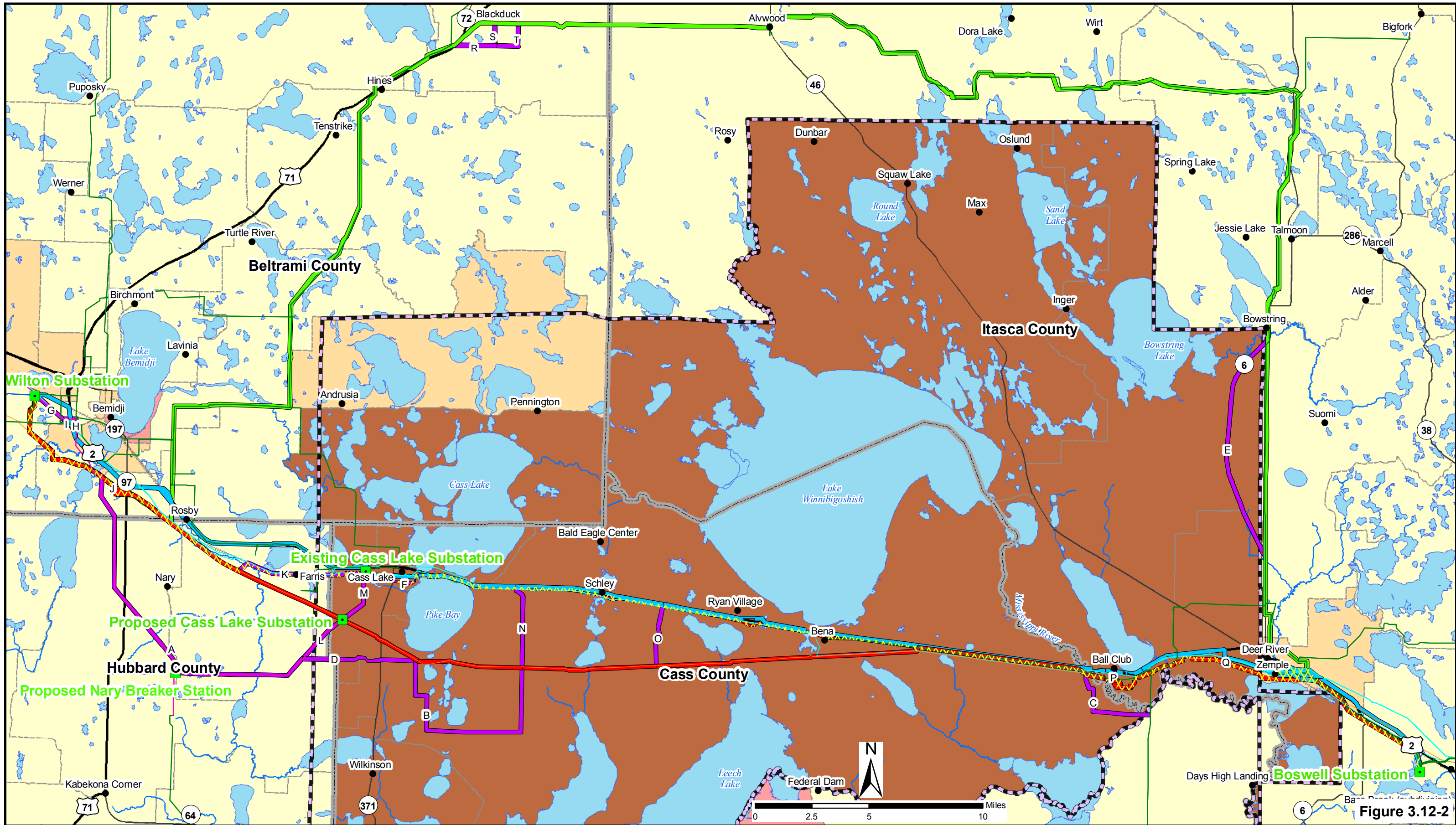


**Land Cover Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010



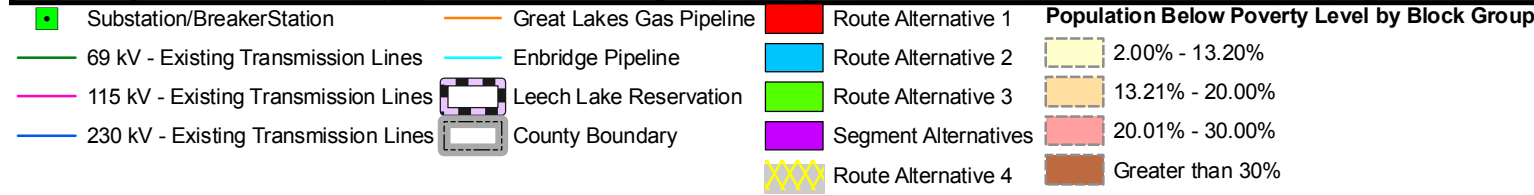
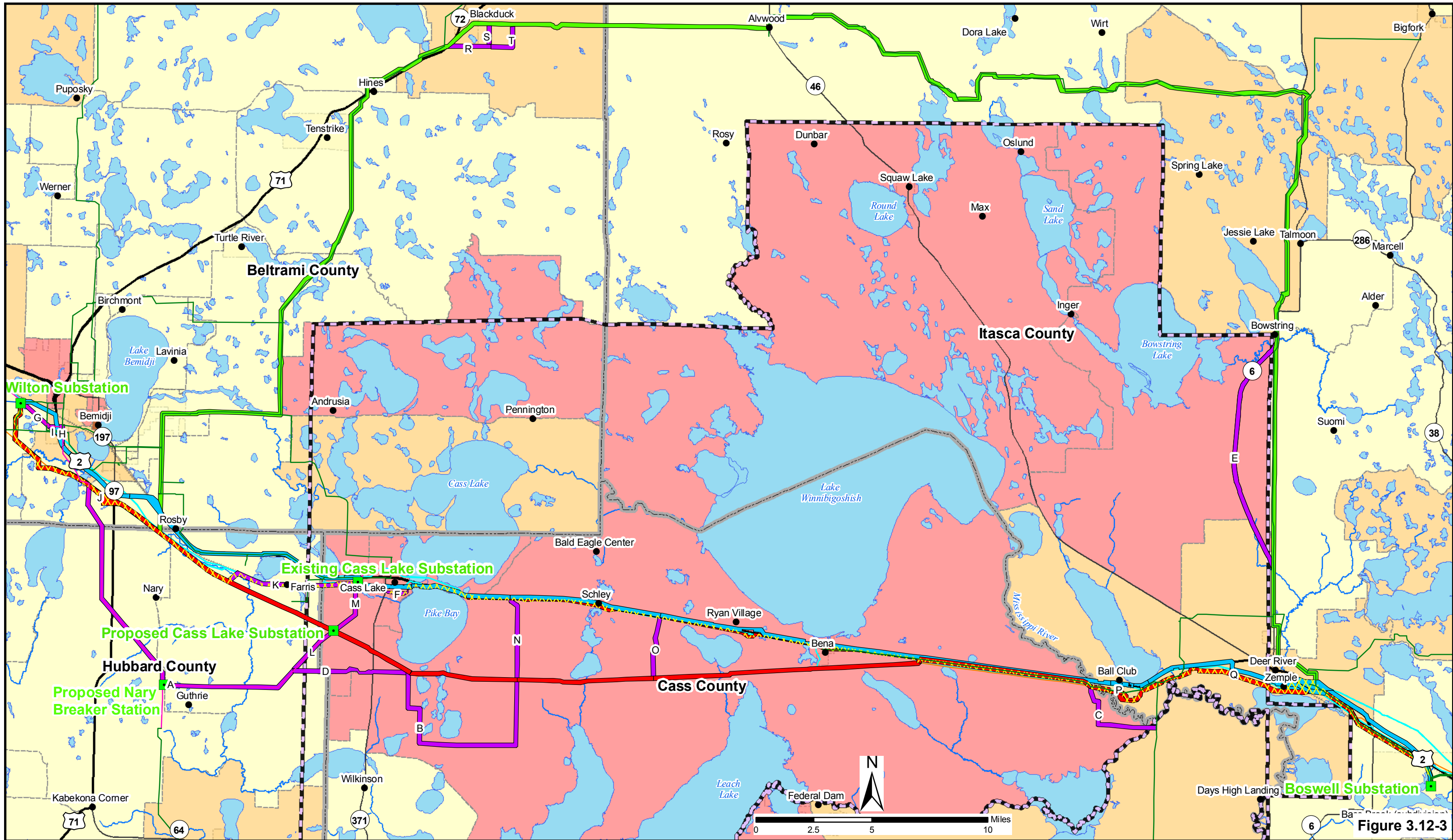
- Substation/Breaker Station
- Route Alternative 1
- Census Block Group
- 69 kV - Existing Transmission Lines
- Route Alternative 2
- 115 kV - Existing Transmission Lines
- Route Alternative 3
- 230 kV - Existing Transmission Lines
- Segment Alternatives
- Leech Lake Reservation
- Route Alternative 4
- County Boundary

**Figure 3.12-1**  
**Census Block Group Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**



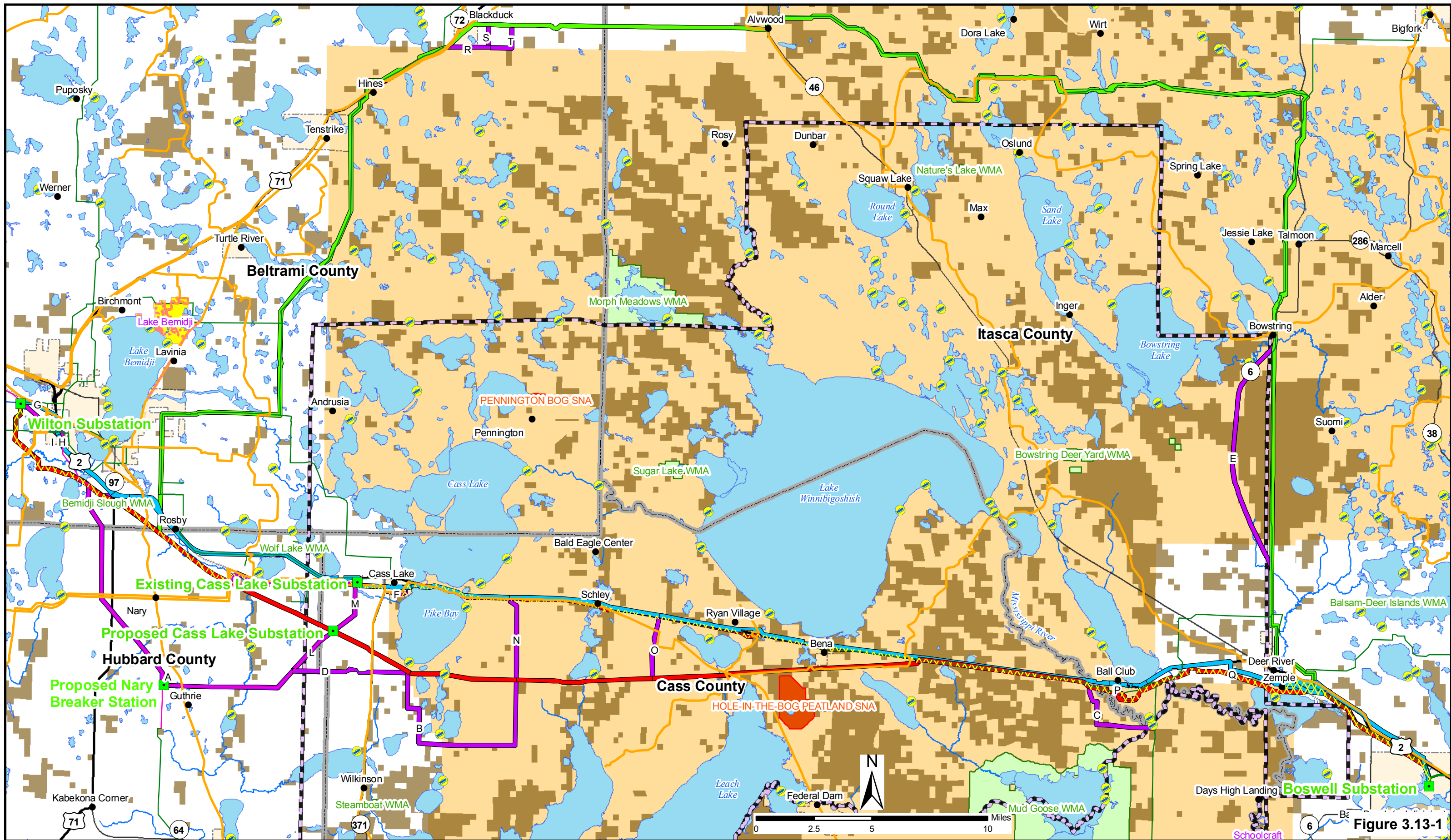
**Minority Population Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**

Figure 3.12-2



**Population Below Poverty Level Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
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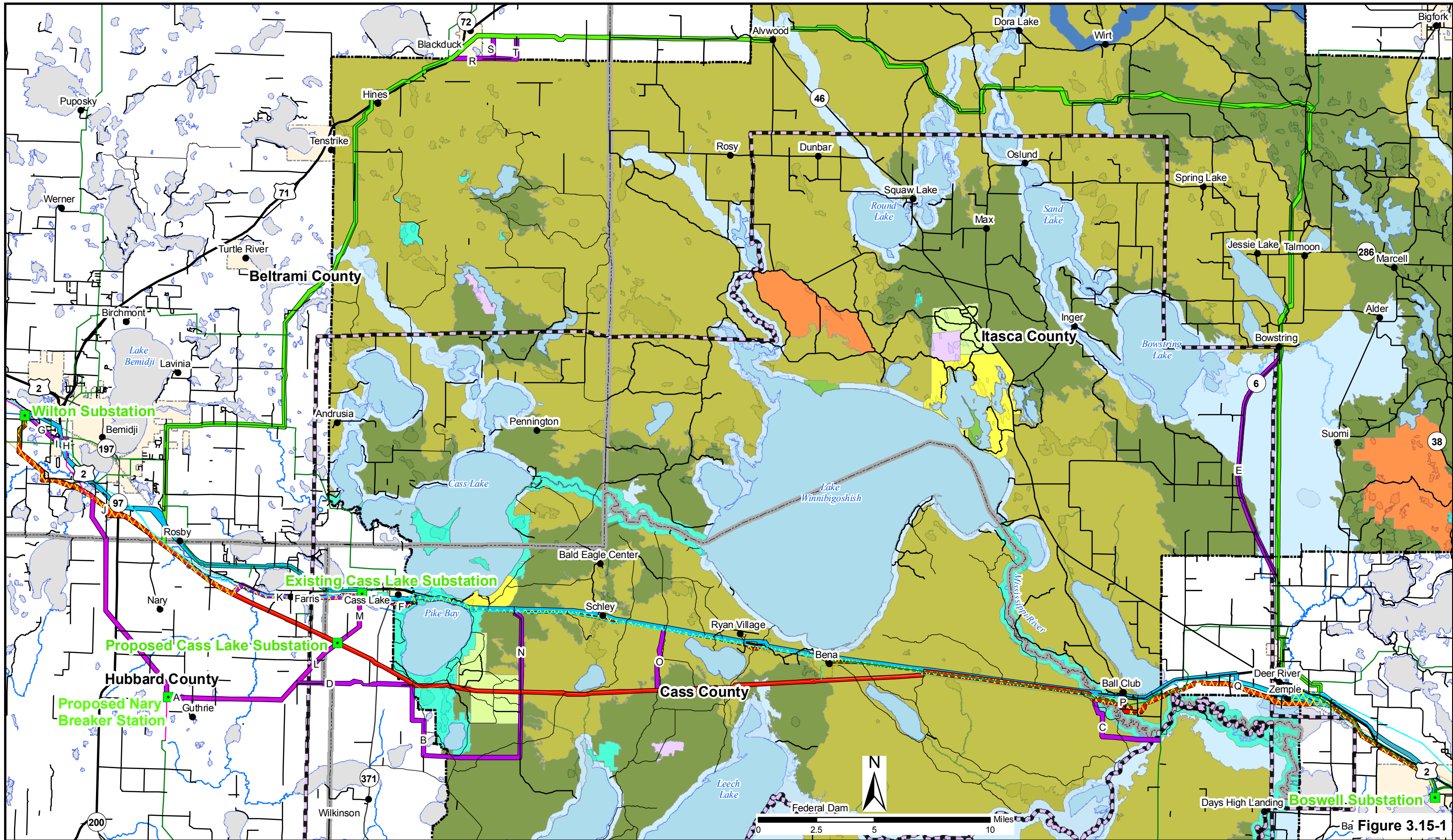
Figure 3.12-3



Substation/Breaker Station	County Boundary	Route Alternative 1	National Forest System Lands	Snowmobile Trail
69 kV - Existing Transmission Lines	Leech Lake Reservation	Route Alternative 2	MN DNR State Forest	Recreational Trails
115 kV - Existing Transmission Lines		Route Alternative 3	MN DNR SNA	Water Access
230 kV - Existing Transmission Lines		Alternative Route Segments	MN DNR WMA	
		Route Alternative 4	MN DNR State Park	

**Recreational Areas Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010

Figure 3.13-1



- |                                       |                      |                             |     |       |
|---------------------------------------|----------------------|-----------------------------|-----|-------|
| Substation/Breaker Station            | Route Alternative 1  | <b>Management Area Code</b> | LR  | SPNM  |
| Leach Lake Reservation                | Route Alternative 2  | CRNA                        | RE  | UB    |
| National Forest System Lands Boundary | Route Alternative 3  | EF                          | RNA | WATER |
| County Boundary                       | Segment Alternatives | GF                          | RU  | WSR   |
|                                       | Route Alternative 4  |                             |     |       |

**CNF Management Areas Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010

Figure 3.15-1



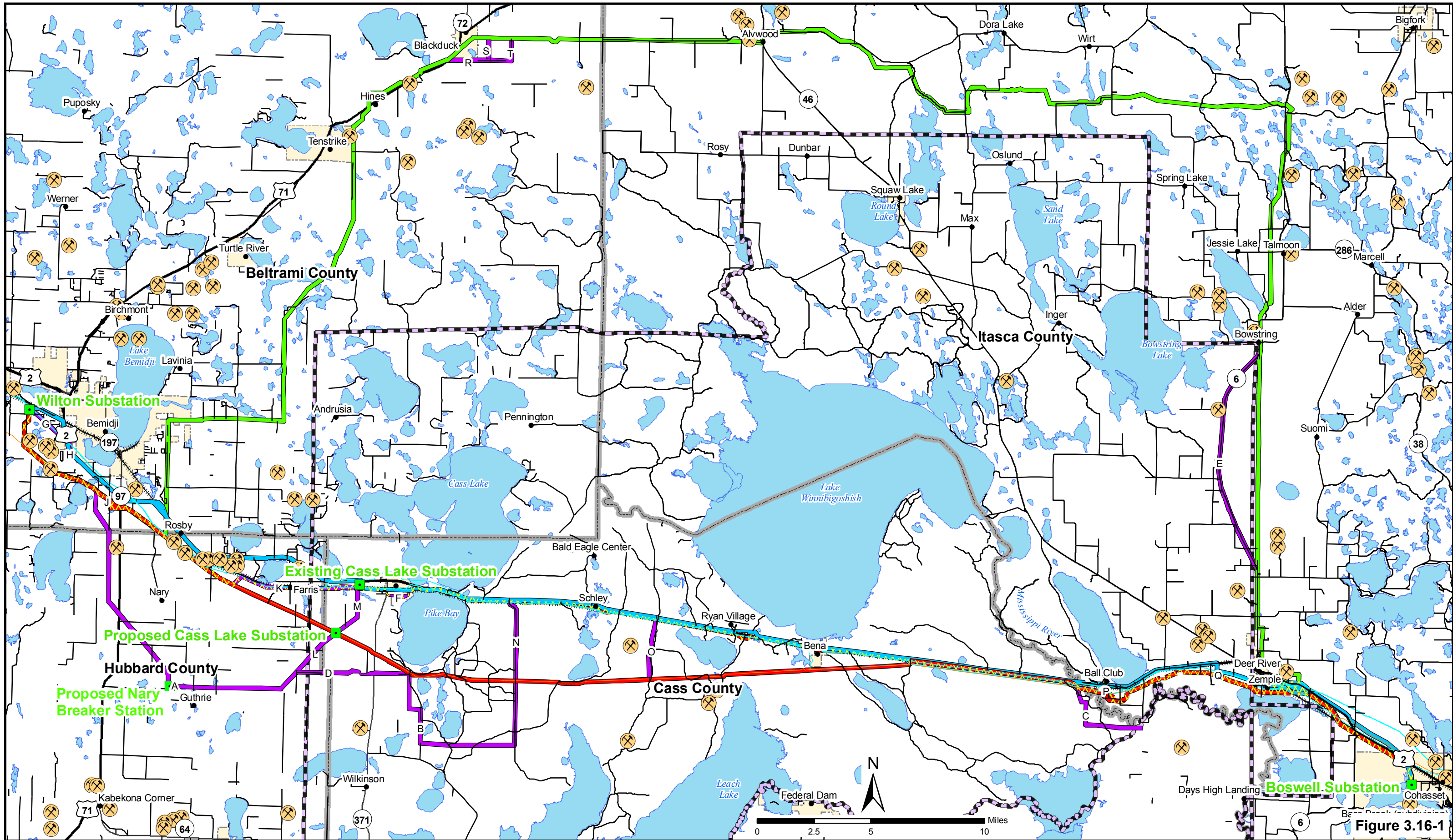
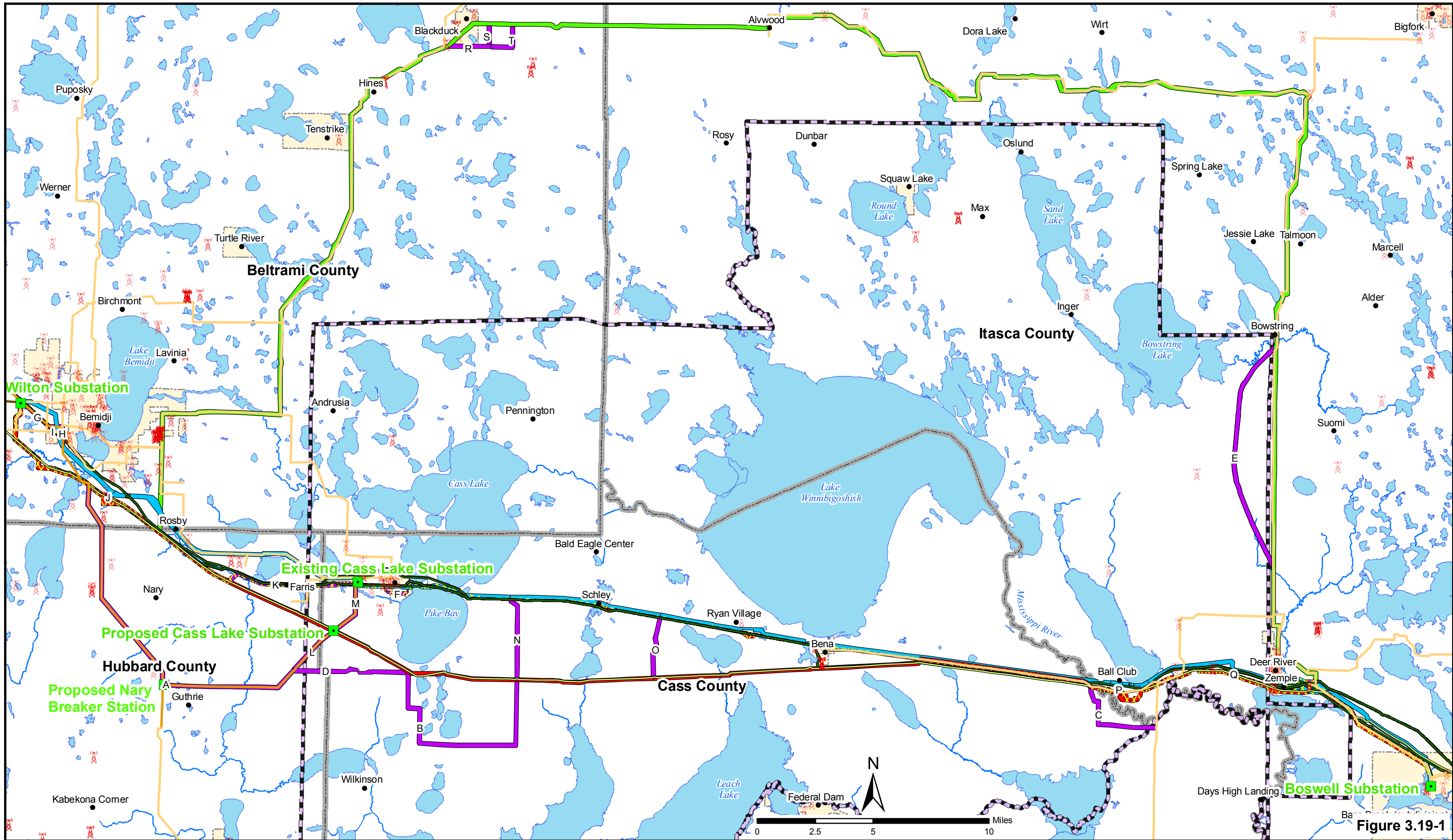


Figure 3.16-1

- Sand and Gravel Pit
- Substation/Breaker Station
- US Highway
- State/County Highway
- Railroad
- Leach Lake Reservation
- County Boundary
- Route Alternative 1
- Route Alternative 2
- Route Alternative 3
- Alternative Route Segments
- Route Alternative 4

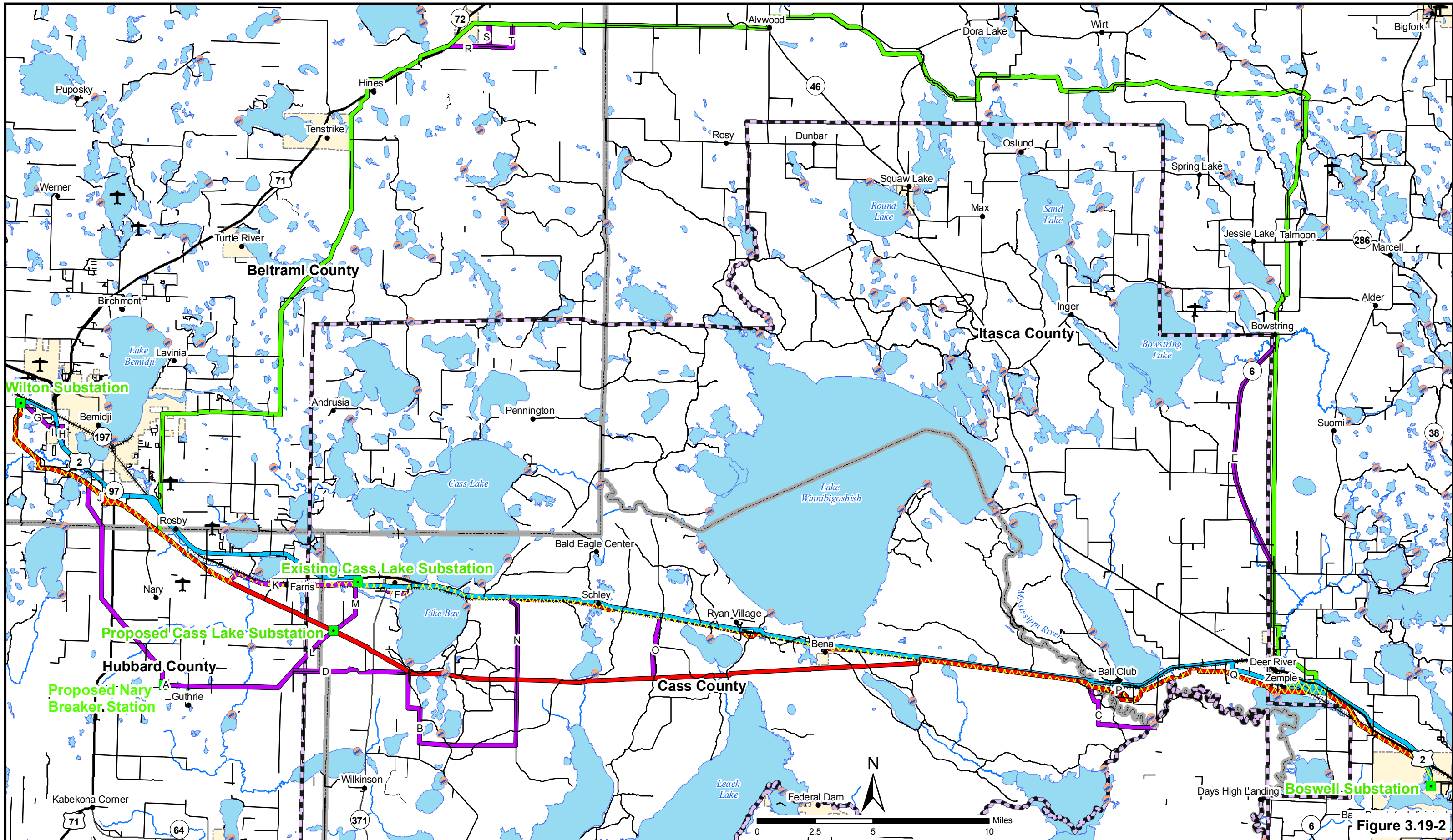
**Aggregate Resource Location Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010



- |                                      |                          |                            |
|--------------------------------------|--------------------------|----------------------------|
| Substation/Breaker Station           | Enbridge Pipeline        | Route Alternative 1        |
| FCC Communication Towers             | Great Lakes Gas Pipeline | Route Alternative 2        |
| 69 kV - Existing Transmission Lines  | Leech Lake Reservation   | Route Alternative 3        |
| 115 kV - Existing Transmission Lines | County Boundary          | Alternative Route Segments |
| 230 kV - Existing Transmission Lines | Route Alternative 4      |                            |

**Utility Infrastructure Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010

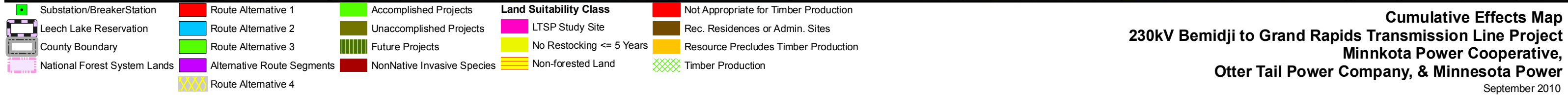
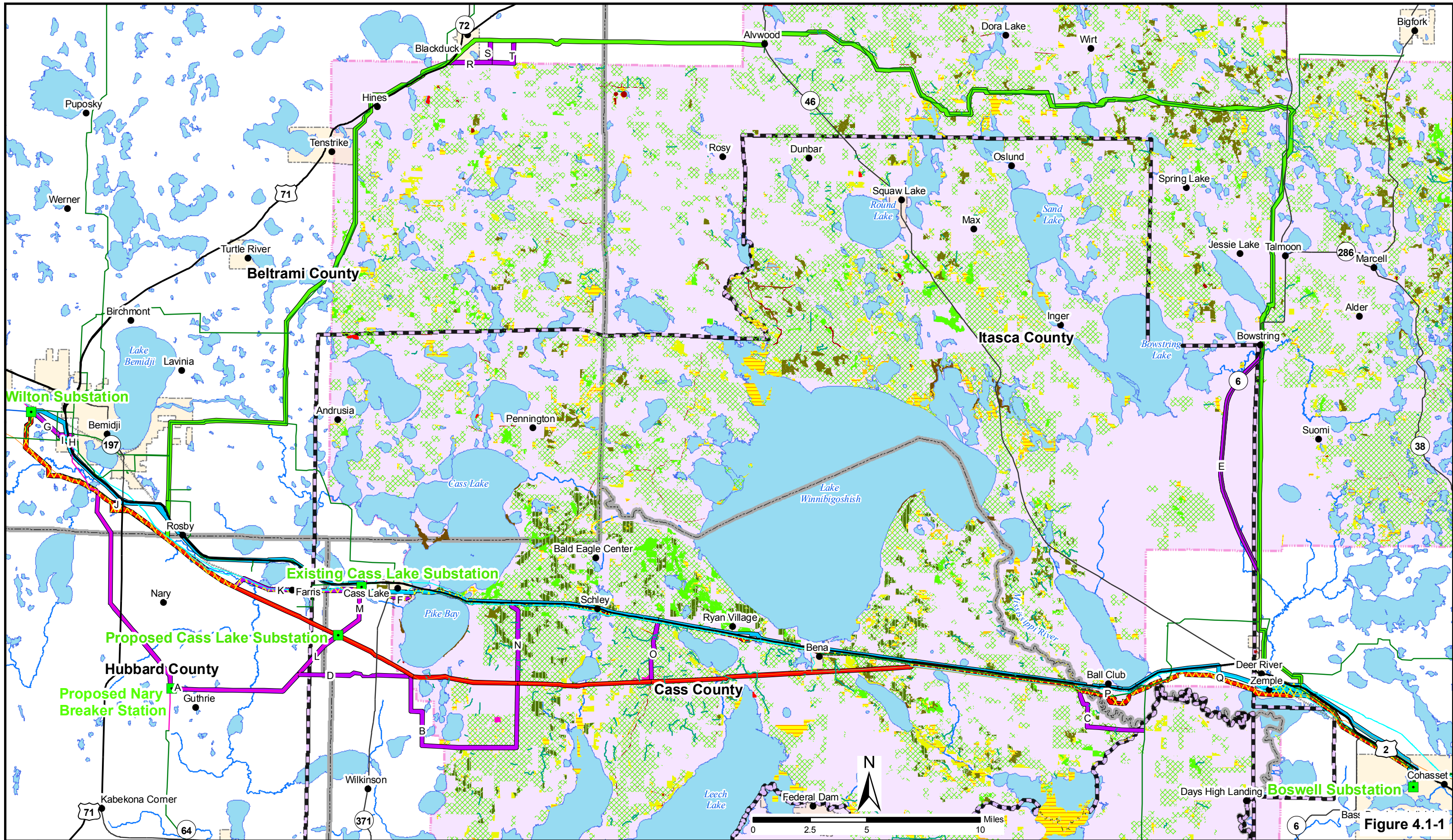
Figure 3.19-1



- Substation/Breaker Station
- US Highway
- Route Alternative 1
- Route Alternative 2
- Route Alternative 3
- Alternative Route Segments
- ▨ Route Alternative 4
- ✈ Airports/Airfields
- State/County Highway
- Leech Lake Reservation
- County Boundary
- Water Access
- Railroad

**Transportation Infrastructure Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010

**Figure 3.19-2**



**Cumulative Effects Map**  
**230kV Bemidji to Grand Rapids Transmission Line Project**  
**Minnkota Power Cooperative,**  
**Otter Tail Power Company, & Minnesota Power**  
 September 2010