

ENBRIDGE LINE 5 WISCONSIN SEGMENT RELOCATION PROJECT
BALD EAGLE NEST SURVEYS REPORT
PREPARED FOR ERM

May 22, 2023



Midwest Natural Resources, Inc.
1032 West 7th Street, Suite 150
St. Paul, Minnesota 55102



Mr. Tim Drake
Technical Director
ERM
222 South 9th Street, Suite 2900
Minneapolis, MN 55402

May 22, 2023

Mr. Drake,

Midwest Natural Resources, Inc. (MNR) is pleased to provide the following report pertaining to the 2023 aerial Bald Eagle (*Haliaeetus leucocephalus*) nest surveys contracted by Environmental Resources Management (ERM) in support of environmental permitting for the proposed Line 5 Wisconsin Segment Relocation Project.

Background

In Wisconsin, the existing Line 5 pipeline owned by Enbridge Energy, Limited Partnership ("Enbridge") crosses Douglas, Bayfield, Ashland, and Iron Counties. Within Ashland County, the existing Line 5 pipeline crosses approximately 12 miles of the Bad River Reservation ("Reservation") of the Bad River Band of Lake Superior Chippewa Tribe. The Line 5 Wisconsin Segment Relocation Project ("Project") will replace approximately 20 miles of the existing Line 5 pipeline, including the approximate 12 miles of pipeline within the Reservation, with about 41.1 miles of a new, 30-inch outside diameter pipeline segment that will be located entirely outside the exterior boundaries of the Reservation (**Figure 1/Map 1**).

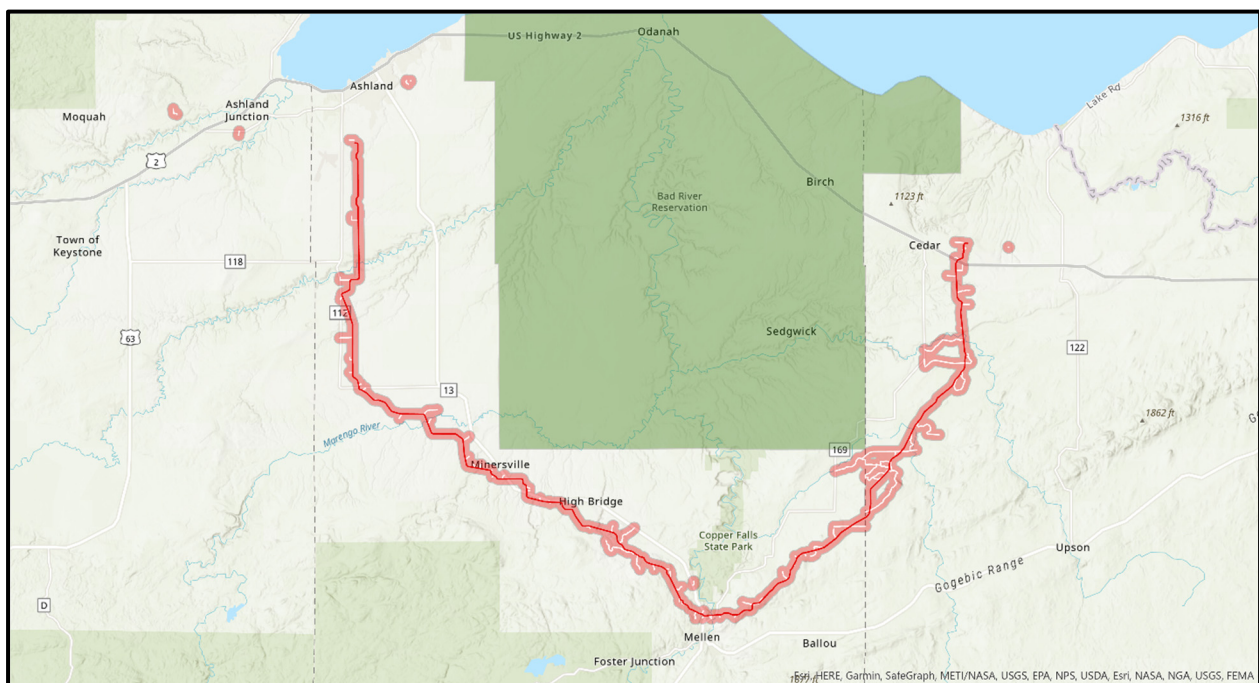


Figure 1. Project location (Mainline Centerline (red polyline), Access Roads (white polyline), and Pipeyards)

Bald Eagles are protected by the Bald and Golden Eagle Protection Act, therefore, Enbridge conducted Bald Eagle nest surveys to identify Bald Eagle nests in the vicinity of the Project. Nest surveys were first conducted in 2020 by MNR due to a known element occurrence record in the vicinity of the Project. The 2020 survey effort located one new active Bald Eagle nest within the buffered survey area (1000'). Surveys were conducted again by MNR in 2023, covering the same route and other project-affected areas (pipe yards/access roads). Enbridge will continue to coordinate with the US Fish and Wildlife Service regarding Bald Eagle nests identified during these surveys. The following describes the survey limits, survey methods, and results of this most recent effort.

Survey Limits and Existing Data

The survey area is located along the proposed pipeline route. A 1,000-foot-wide buffer was applied to the project centerline (Rev H) and access roads to create a survey corridor. From there, predetermined routes were generated, as depicted in **Figure 2/Map 2**. The routes involved flying the entire centerline along with parallel routes on either side of the centerline at a distance of 675 feet from the centerline.

A current review of Wisconsin's Natural Heritage Inventory (NHI) Program database was conducted by ERM prior to the 2023 efforts to determine if there were any new nest locations since the 2020 survey effort. There were no new records according to a review of the database.

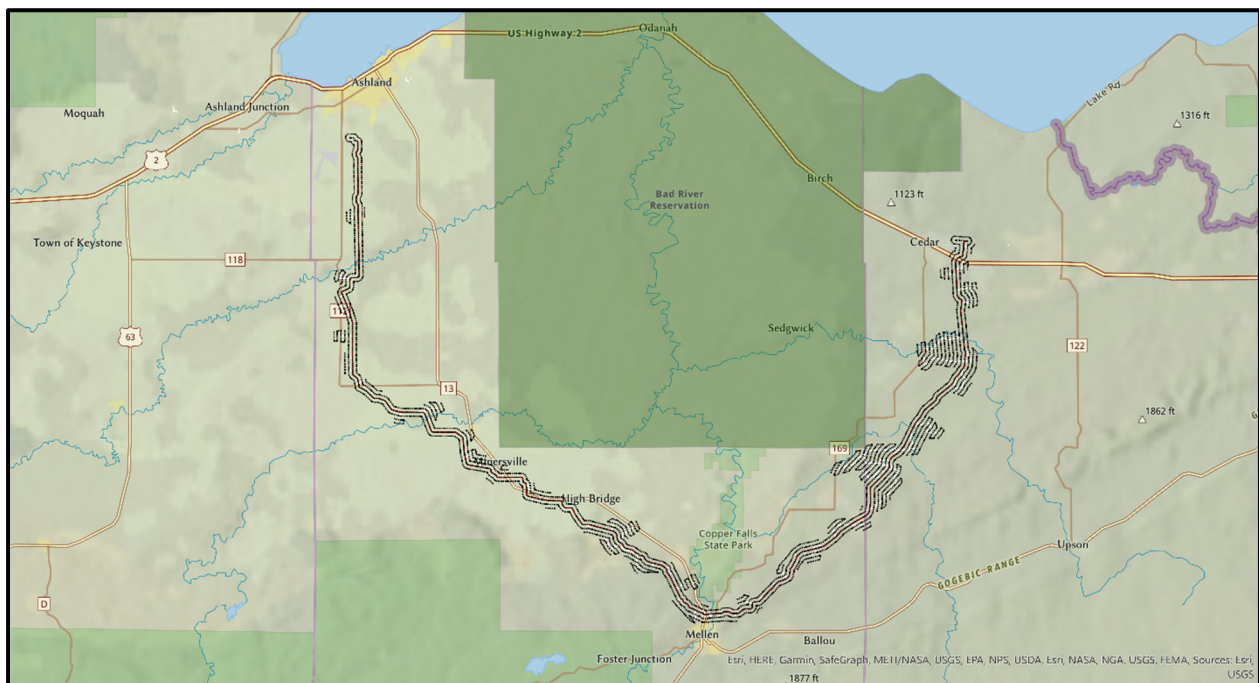


Figure 2. Predetermined survey routes

Methods

Nest surveys were conducted prior to leaf-out when nests would be highly visible, particularly those nests within deciduous tree species. Surveys were conducted aerially (via helicopter), allowing for visual observations from above the tree line within the survey corridor. Helicopter services were provided by Brainerd Helicopter Service, Inc., out of Brainerd, Minnesota. A flight plan was determined prior to survey efforts, with the survey area uploaded on the craft's navigation system. The flight routes were collected using a handheld GPS unit, and the routes are depicted in **Figure 3/Map 3**.



Figure 3. Field flight routes (symbolized in yellow)

Surveys involved flying the predetermined routes, covering the centerline and two exterior routes as well as pipeyards and access roads. Additional time was spent focused on major waterbody features (perennial) on the second day of surveys. Two MNR field biologists completed this effort in addition to the pilot from Brainerd Helicopter Service, Inc. Once identified, potential Bald Eagle nests were further examined to determine if the nests were still active (and if inhabited by Bald Eagle), and whether eggs or eaglets were present. Nest detections were then documented spatially and via representative photographs. Unoccupied nests were visited on the second flight day as well to confirm absence (adults/eggs).

Results and Discussion

Aerial Bald Eagle nest surveys were conducted on April 12-13, 2023, by Otto Gockman and the undersigned. The overall project area generally comprises forest fragmented by agricultural and residential development as well as infrastructure such as roads and maintained utility corridors. Agricultural land use is typically hay and pasture land with a few areas of row crop agriculture and abandoned apple orchards. Upland forested systems include quaking aspen (*Populus tremuloides*), big-toothed aspen (*Populus grandidentata*), paper birch (*Betula papyrifera*), sugar maple (*Acer saccharum*), balsam fir (*Abies balsamea*), eastern hemlock (*Tsuga canadensis*), and eastern white pine (*Pinus strobus*). Forested wetlands within the project area include black ash (*Fraxinus nigra*), white cedar (*Thuja occidentalis*), yellow birch (*Betula alleghaniensis*), and American elm (*Ulmus americana*).

Surveys resulted in the documentation of four nest locations (**Table 1/Figure 4/Map 4**). This included three Bald Eagle nests and one Great Horned Owl (*Bubo virginianus*) nest. All four locations were identified on the first flight day. Those nests that appeared unoccupied were revisited on the second day. Bald Eagle Nest **psebeb001**, originally documented in 2020, is no longer an active nest. Additionally, a second nest was built in the same tree between 2021 and 2022. This nest was also unoccupied, with no signs of activity. The second Bald Eagle nest (**psbeb002**) was active, with one adult Bald Eagle nesting. However, this nest was immediately outside of the 1000-foot buffer area. The third nest (**psgob001**) observed was a known nest location first observed by MNR in 2020, previously inhabited by a Great Horned Owl. This nest was also immediately outside of the survey buffer. The 2023 nest surveys confirmed that this nest was active

and still inhabited by a Great Horned Owl individual. The fourth nest (**psbeb003**), located outside of the survey buffer, also appears to be a bald eagle nest. This nest was unoccupied, with no signs of recent activity. Photos of all documented nests are provided in **Appendix A**.

Table 1. Survey Results

Feature ID	Nest Type	Occupied (Y/N)	Observation Date	Notes
psbeb001	Bald Eagle	N	4/12/2023	Two nests located in a white pine.
psbeb002	Bald Eagle	Y	4/12/2023	One adult observed on nest.
psbeb003	Bald Eagle	N	4/12/2023	No activity observed and no eggs present.
psgob001	Great Horned Owl	Y	4/12/2023	Adult owl confirmed and two eggs present.

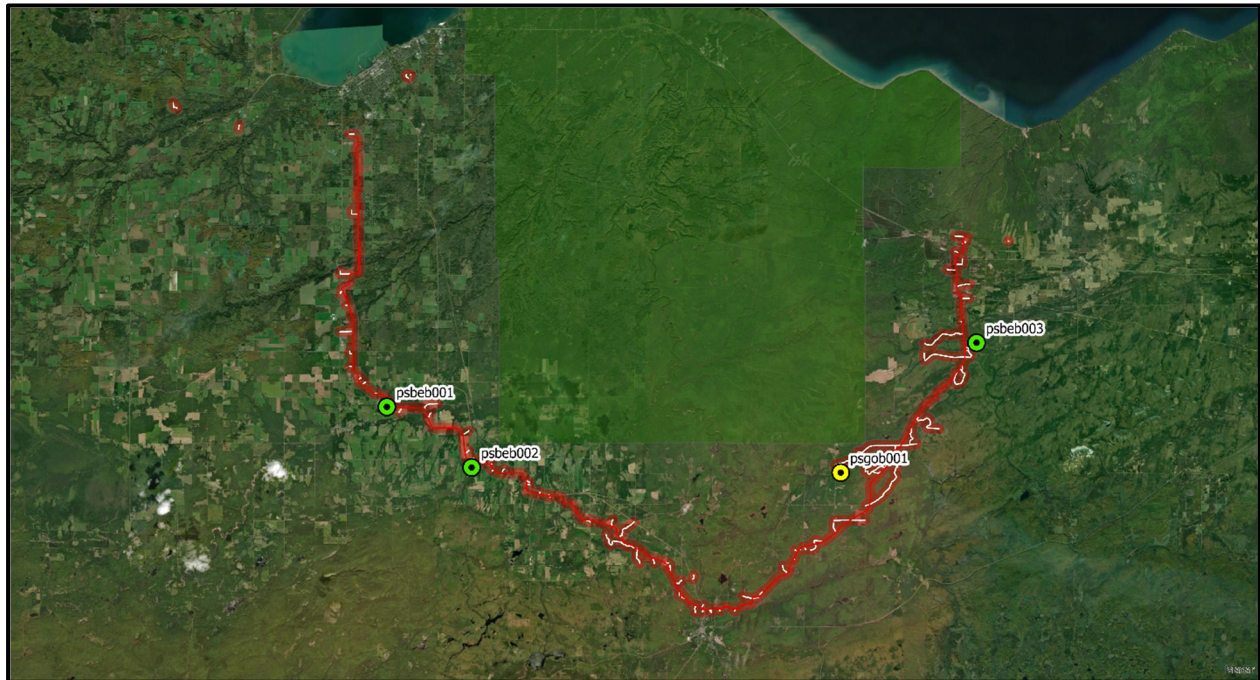
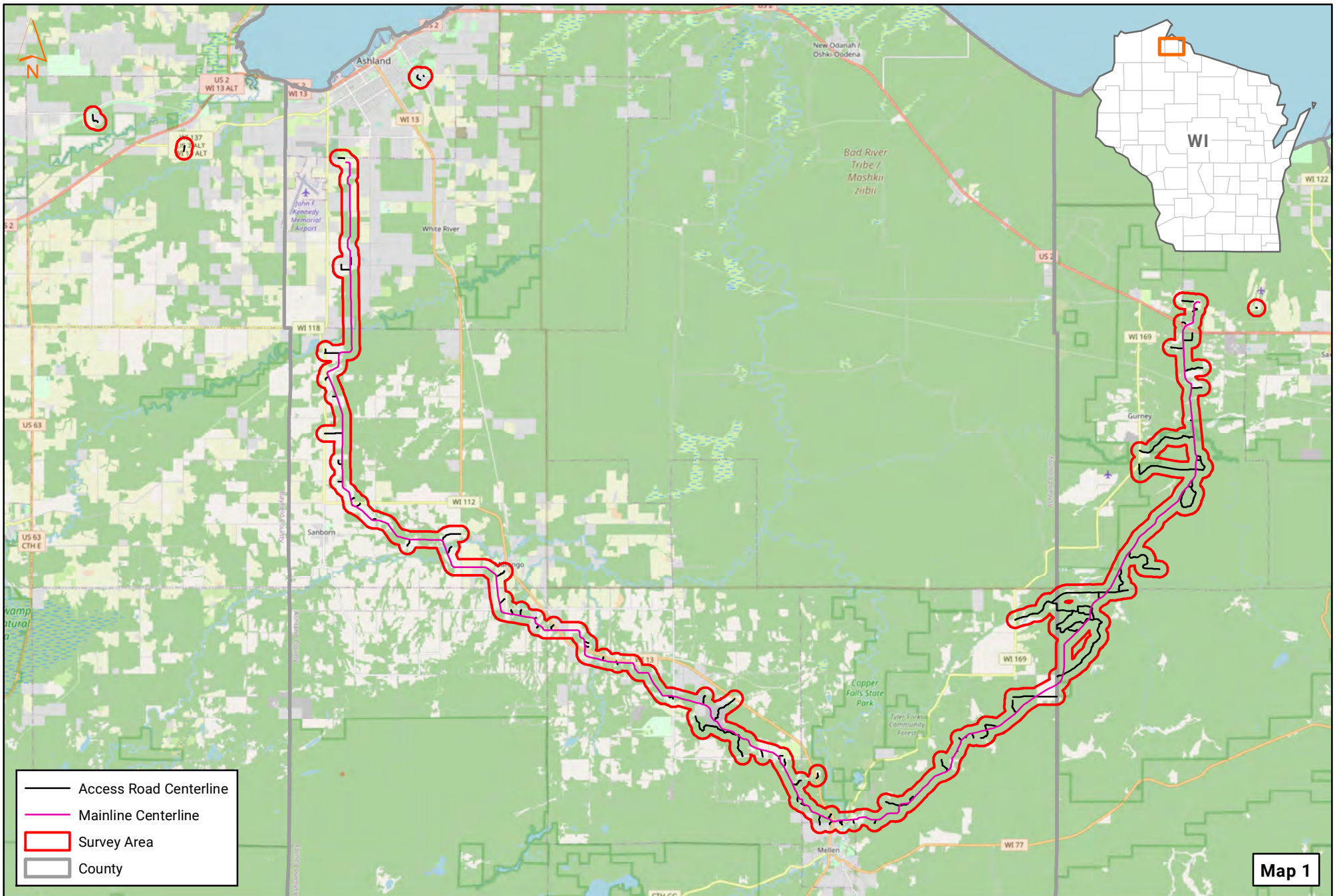


Figure 4. Nest Locations (Bald Eagle nests symbolized in green; Great Horned Owl nest symbolized in yellow)

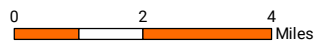
In closing, please let us know if you have any questions pertaining to our field findings.

Respectfully submitted,

Scott A. Milburn, M.S.
Principal Botanist/Founder
Midwest Natural Resources, Inc.



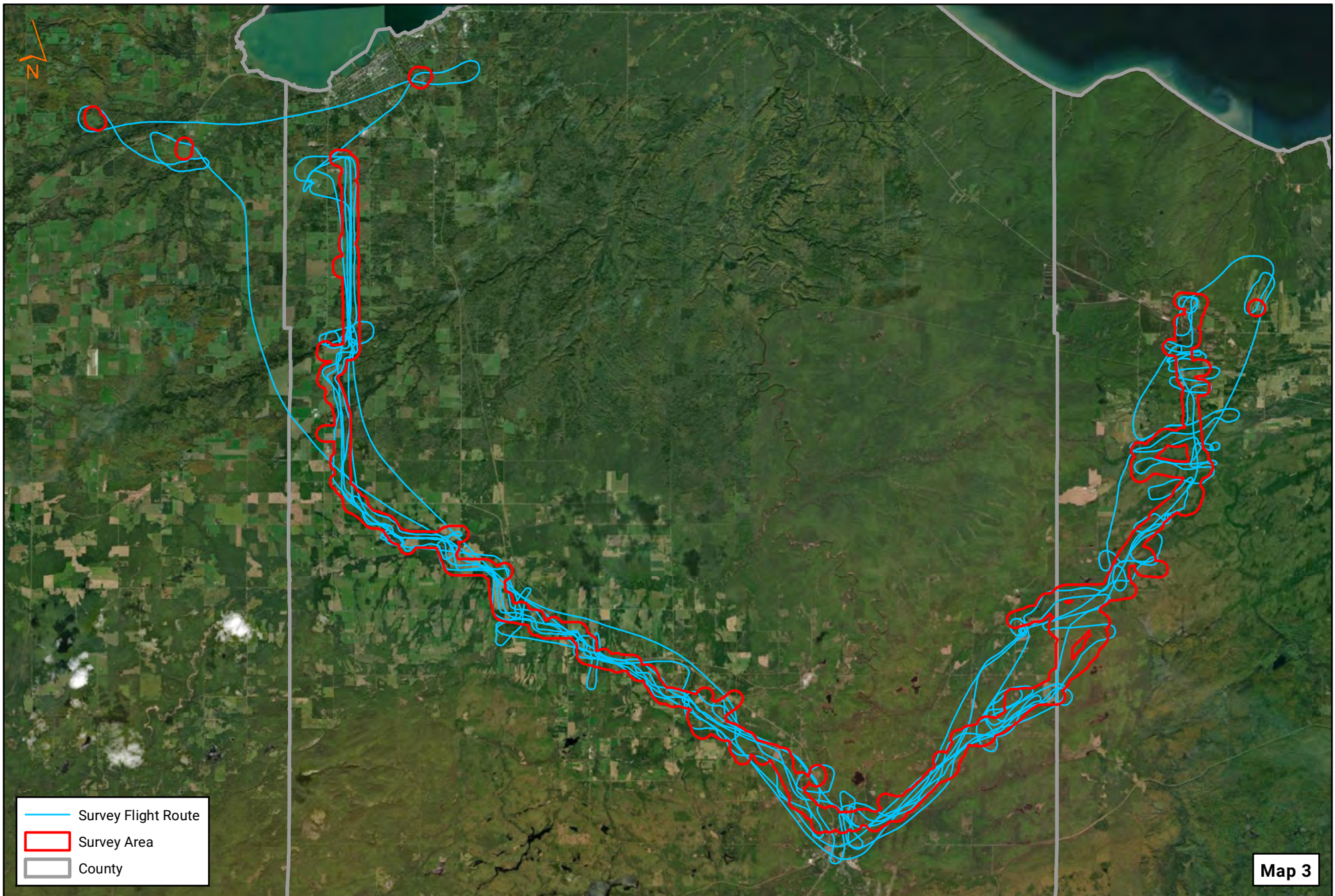
Project Overview
Aerial Bald Eagle Nest Surveys
Line 5 WI Segment Relocation Project
Enbridge
Ashland County, Wisconsin





**Predetermined Survey Routes
Aerial Bald Eagle Nest Surveys
Line 5 WI Segment Relocation Project
Enbridge
Ashland County, Wisconsin**



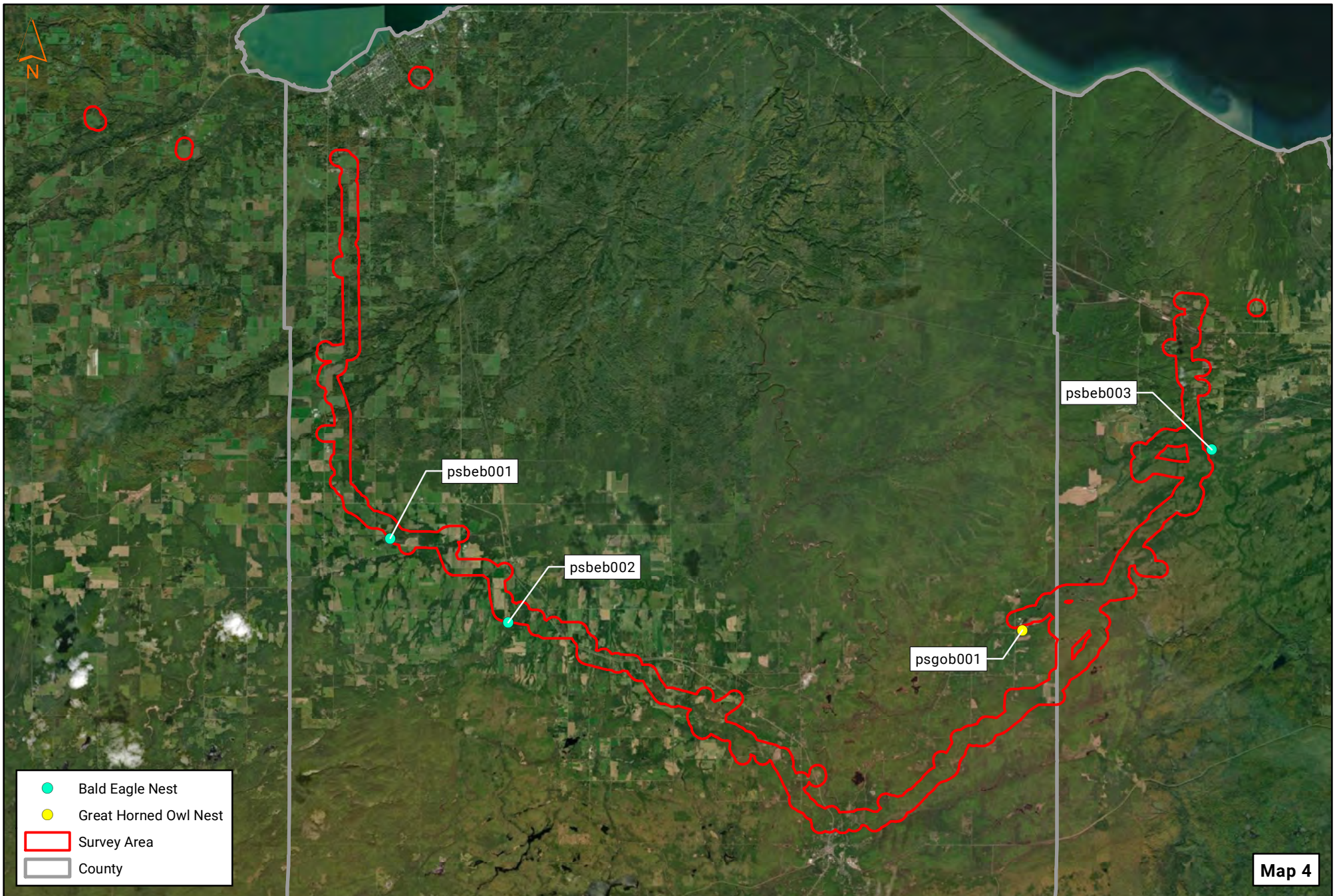


Sources: Esri World Imagery, US Census Bureau, Date: 5/22/2023

Survey Flight Routes
Aerial Bald Eagle Nest Surveys
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Enbridge
Ashland County, Wisconsin



0 2 4 Miles



Sources: Esri World Imagery, US Census Bureau, Date: 5/22/2023

Survey Results
Aerial Bald Eagle Nest Surveys
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Ashland County, Wisconsin



Appendix A – Nest Photos





Image 1. Feature psbeb001



Image 2. Feature psbeb002



Image 3. Feature psbeb003



Image 4. Feature psgob001