Jeopardy Assessment

Proposed Incidental Take Permit: Bourbon Ridge Development (ITP 401)

Species: Slender Glass Lizard and Ornate Box Turtle

Location: Columbia County

Background

Project Information

Bourbon Ridge Development, LLC (Bourbon Ridge) is pursuing a minor re-alignment and extension of a public road for the purpose of providing formal access to the Bourbon Ridge parcel. This will involve removing a portion of the existing paved road and gravel driveway, and shifting and extending the south end of the road to the southeast into a proposed cul-de-sac. Grading, paving, stormwater conveyance features and a proposed gravel driveway will be included in the project.

Approximately 0.33 acres of ground disturbance will result from the project, including 0.16 acres of permanent disturbance within suitable slender glass lizard (*Ophisaurus attenuatus*) and ornate box turtle (*Terrapene ornate*) habitat.

Species Information

Slender Glass Lizard (*Ophisaurus attenuatus*), listed as Endangered in Wisconsin, prefers sandy oak savannas, sand prairies, old fields with sandy soils, and woodland edges around and within all of these habitats. Glass lizards overwinter in burrows they create by forcing their bodies through lose sandy soils. This lizard is active from mid-March through October 15. Breeding occurs in May, eggs are deposited from late June to early July and hatching occurs in August.

Ornate Box Turtle (*Terrapene ornata*), listed as Endangered in Wisconsin, prefers mesic prairies, drymesic prairies, sand prairies, oak savannas, and open to semi-open woodlands. They overwinter in deep sand and/or well drained soils in open canopy microhabitats supporting sparse vegetation and in areas of disturbed soils such as the edges of sand blows. Ornates may be active from early March through mid-November. Nesting occurs in early June with hatching typically occurring in August or early September, although some hatchlings emerge the following spring.

Conservation Measures

The measures outlined below are designed to minimize and mitigate impacts to the slender glass lizard (SGL) and ornate box turtle (OBT) in suitable habitat during both their active and inactive periods.

- 1. All individuals working on the project site (e.g., engineers, construction crew, biologists) will be briefly trained on how to identify SGL/OBT and instructed on the general conservation measures associated with the Incidental Take Permit, including what to do if a SGL/OBT is observed within the project area.
- 2. To minimize potential for direct impacts from vegetation clearing and ground disturbance during the SGL and OBT active periods, a qualified environmental monitor will search areas of existing suitable habitat ahead of vegetation clearing crews. Areas that may require mowing, if any, will be cleared with an open platform or flail mower to minimize potential up-draft that can increase the risk of mower-related mortality. Mower blade height will be set at a minimum of eight inches.

3. Following vegetation clearing, reptile exclusion fencing will be installed during the active season of the SGL/OBT (activity periods are posted here: https://dnr.wisconsin.gov/topic/Wildlifehabitat/HerpRegulations.html) according the WDNR Amphibian and Reptile Exclusion Fencing Protocol along construction areas within and immediately adjacent to suitable habitat to keep SGL and OBT out of areas where construction activities are concentrated. An environmental monitor will search areas of existing suitable habitat ahead of exclusion fencing crews. During the SGL and OBT active periods, the fenced exclusion areas will be cleared by an environmental monitor at the beginning of each work day thereby, increasing the chances of detection, capture, and removal by the environmental monitor until all suitable habitat has been removed from the workspace. The walk-throughs searches will be documented on a weekly basis.

Another option would be to complete up to four survey events to survey and remove SGL and OBT over a two to three-week period, depending on suitable weather conditions, after which additional surveys and daily monitoring would be unnecessary so long as the fence is properly inspected and maintained.

- 4. Except for vegetation clearing and final grading/vegetation restoration, equipment and vehicle travel within the road construction area will be outside the exclusion fence areas regardless of time of year. Signs will be installed instructing construction crews to stay out of SGL/OBT habitat areas. Crews will be trained and instructed to watch for and immediately report to the environmental monitor all SGL and OBT observed.
- 5. The environmental monitor must possess a valid Wisconsin Endangered/Threatened (E/T) Species Permit or similar authorization for EMR removals.
- 6. Any SGL and/or OBT observed in the work area will immediately be removed from the area by a permitted environmental monitor. All individuals removed will be recorded, photographed, and reported to the Endangered Resources Review Program (DNRERReview@wi.gov) at the conclusion of construction activities.
- 7. All dead SGL and/or OBT found on site throughout the course of the project will be recorded (approximate age class, possible cause of death), photographed, and reported to Endangered Resources Review Program (DNRERReview@wi.gov) at the conclusion of construction activities.
- 8. Contact information for a wildlife rehabilitator or veterinarian will be compiled prior to the project start date for consultation should any injured SGL or OBT be encountered throughout the course of the project.
- 9. Upon completion of the Project, all areas of temporary disturbance will be restored. Surface soils will be tilled and/or raked to reduce soil compaction.
- 10. Mitigation will occur through creation and maintenance of 0.16 acres of suitable open canopy grassland habitat immediately adjacent to remaining suitable habitat at the southwest portion of the proposed cul-de-sac.
- 11. Erosion control will be implemented according to WDNR stormwater standards. Class II, Type C Erosion Control Mats will be used on the project site, which contains a woven mat of 100% organic fibers and are designated to be used in environmentally sensitive areas. Erosion matting

must also contain strands that are able to move independently of each other ("leno" or "gauze" weave) to prevent lizards from becoming trapped in the netting.

12. Minor changes can be made to this Conservation Plan due to unforeseen circumstances if first agreed upon in writing (e.g., email correspondence) by the applicant and the Incidental Take Coordinator (rori.paloski@wi.gov). If prior approval is not received, the work is not legally covered by the Incidental Take Permit. The only exception to this is emergency projects, which are defined for Incidental Take Permits/Authorizations as "an actual or imminent threat of significant harm to the environment or to public health or safety."

Ongoing Project Maintenance

Bourbon Ridge will conduct vegetation management/maintenance, as needed to establish the proposed SGL/OBT habitat restoration, for three consecutive years following initial upland habitat mitigation/restoration activities.

Maintenance of the site will be necessary to promote successful establishment of the intended habitat community. Monitoring efforts will be conducted twice annually during the first six years to identify any issues with native vegetation establishment and help determine proper maintenance methods as the project progresses. Maintenance activities may include, but are not limited to:

- Replanting of species that do not survive initial plantings,
- Implementation of invasive and non-native species control methods,
- Mowing and or mechanical hand-trimming,
- Herbicide application via spot spray, broadcast or wicking.

Regarding the open canopy grassland community, it is proposed to be mowed at a height of approximately 8-12 inches several times during the first growing season to help suppress any fast-growing weeds and limit their seed production. Selective hand-pulling of weeds will be conducted during the second growing season, being careful not to uproot the native seedlings. Manual application of appropriate herbicides will be conducted through spot spraying and/or wicking in each habitat community, as necessary.

All management activities will follow the Grassland and Savanna Protocols for the SGL/OBT: https://dnr.wisconsin.gov/topic/erreview/itgrasslands.html.

Long-Term Management Plan

Following the initial six years of habitat mitigation effort, and concurrence from WDNR that the habitat is sufficiently established, a long-term management regiment of the SGL/OBT habitat will continue thereafter to sustain the suitability of the site. Maintenance measures may include, but are not limited to periodic inspections of the site to document native plant species continue to thrive, and invasive/non-native species do not become dominant

Currently, Bourbon Ridge intends to be the long-term owner and steward of the mitigation site. Upon completion of monitoring and establishment if suitable SGL/OBT habitat, long-term protection and ownership of the site will be further discussed with the WDNR.

Effort will be made to conduct vegetation management activities during the SGL/OBT inactive periods to avoid the minimum active period (approximately March 15– October 15 and mid-April through early September respectively). There may be exceptions for the treatment of invasive plant species outside of

the inactive period for problematic species. In such cases, Bourbon Ridge or its contractors will coordinate with WDNR staff for appropriate schedules to conduct spot treatments.

All future management will also follow the Grassland and Savanna Protocols for the SGL/OBT: https://dnr.wisconsin.gov/topic/erreview/itgrasslands.html. Dates for active seasons for the SGL/OBT are updated every spring and fall to adjust for annual weather variations: https://dnr.wisconsin.gov/topic/Wildlifehabitat/HerpRegulations.html.

Bourbon Ridge will advise contractors that construction and vegetation management equipment should be cleaned and free of weed seeds or propagating plant parts before being brought onto the job site. Workers shall also be vigilant not to transport weed seeds from other job sites in pant cuffs, or on footwear, tools, and equipment.

Jeopardy Assessment

The proposed activity will minimize and mitigate impacts to the ornate box turtle and slender glass lizard and as a result, we anticipate that take of these species will be low. The department has determined that the proposed activity is not likely to appreciably reduce the likelihood of the survival or recovery of the ornate box turtle and slender glass lizard within the state, the whole plant-animal community of which they are a part or the habitat that is critical to their existence.