

8.9 Gopher tortoise

Suitable habitat for gopher tortoise is present in the review area. Open canopy pine forests with abundant herbaceous understory are the preferred habitat for gopher tortoises and this habitat was present within the review area. Approximately four areas within the proposed project site were identified during surveys that contained gopher tortoise burrows (Appendix D)

From pedestrian surveys, all gopher tortoise burrows were located and each individual burrow classified as “active” or “inactive” (based on presence or absence of fresh tracks, respectively). Also, each burrow was classified as that of an “adult”, “subadult”, or “juvenile” tortoise (based on burrow width). Gopher tortoise burrow widths were classified as follows: juvenile burrows are 0-7.85 cm in width; subadult burrows 7.86- 25.7 cm wide; adult burrows are 25.8+ cm wide (these widths correspond to carapace lengths of 0-12 cm, 12.1-24 cm, and 24+ cm, respectively). Note: 19 burrows that were less than 14 cm in burrow width were not scoped because of their small size; however, they were closely examined using a mirror or flashlight and in doing so we observed tortoises in 5 of these burrows; we scoped all remaining burrows. A total of 118 active/inactive tortoise burrows comprised of 59 adult burrows, 9 subadult burrows, and 26 juvenile burrows were identified during the surveys. In an effort to determine burrow occupancy in spring, 2019, a tortoise burrow camera was used to scope all adult/subadult burrows. (Juvenile burrows were assumed to be occupied by tortoises if fresh tracks were present). These activities assisted in developing a very precise estimate of just how many gopher tortoises are present on-site.

On the site, the sandy, well-drained environments that support gopher tortoises have historically been site-prepped and bedded and are now in planted pine, usually slash pine. Tortoises are not especially common or widespread on the site, occurring only in 4-5 fairly small and discrete areas of sandy, open-canopied plantation habitat; individual tortoise colonies support ca. 10-15 adult tortoises, or less.

With the burrow camera (or using flashlights/mirrors), we observed gopher tortoises in 23 adult-sized burrows, 11 subadult-sized burrows, and in 1 juvenile-sized burrow. For another 4 active adult-sized burrows, 11 active subadult-sized burrows, and 2 active juvenile burrows, we could not determine conclusively whether or not the burrow was in fact occupied by a tortoise. Tortoise survey data is provided in Appendix A.

Based on the limits of the first mining block, approximately 7 active adult, 10 active subadult, 6 inactive adult and 7 inactive subadult burrows may be impacted by the project.

Conservation measures include avoidance, translocation and /or habitat management to reduce the adverse impacts and potentially benefit the gopher tortoise population. Gopher tortoise burrows will be avoided to the maximum extent practicable at the site. For the gopher tortoise burrows that cannot be avoided, a translocation project will be conducted for the gopher tortoise in these areas. Prior to construction, all gopher tortoise burrows will be camera scoped to determine the occupancy status of the burrow. Occupied burrows will be trapped and captured gopher tortoise will be relocated to an area identified in coordination with Georgia DNR. Upon project completion, gopher tortoise will be relocated to the project site

The applicant has successfully trapped and relocated gopher tortoise for its mining operation in Starke, Florida. The applicant, through its consultant, successfully obtained permits to capture by using bucket traps, live traps, hand shovel and backhoe excavation of tortoise burrows. The animals were relocated to a donor site by non-harmful means. The permit was obtained through the Florida Fish and Wildlife Commission, Division of Habitat and Species Conservation. Additionally, the gopher tortoise has successfully recolonized areas that were previously mined for heavy mineral sands. With the implementation of these mitigation measures, the proposed project is not likely to have an effect