

hydrologic balance of the site; ii) identified potential impacts (both direct and indirect); iii) developed a reclamation plan; and iv) developed a monitoring program. If Twin Pines has not completed any of these plans, Twin Pines should explain whether it plans to complete them before the permit is issued. In response to Dr. Rheinhardt's concerns, Twin Pines should explain what experience it has in creating wetlands on top of homogenized sandy soils in an area that has been mined.

B. The proposed project would harm threatened and endangered species and their critical habitat.

The Corps should also deny the permit because the proposed mine would harm threatened and endangered species and their habitat. The 404(b)(1) guidelines and the Endangered Species Act prohibit the Corps from issuing a Section 404 permit if the proposed project would jeopardize the continued existence of a threatened or endangered species, or would result in the likely "destruction or adverse modification" of critical habitat.¹⁰⁹

In assessing the project's impact on endangered species, the Corps may not limit its review to the direct impacts of the proposed fill, as Twin Pines has done in its application. The Corps must also consider the secondary or indirect impacts to the surrounding habitat and the endangered and threatened species that live there. For example, in *Riverside Irrigation District v. Andrews*¹¹⁰ an applicant sought a Section 404 permit to deposit dredge and fill material to build a dam and reservoir. Although the applicant and the Corps agreed that the fill itself would not degrade an endangered species' habitat, the Corps found that the indirect impacts of building the dam – for example, depleted stream flow – would adversely affect the habitat. The applicant argued the Corps should not be permitted to consider this type of indirect impacts to endangered species. The court disagreed, explaining that the Corps was required to consider direct *and* indirect impacts to endangered species.

Here, the Okefenokee Swamp and its surrounding ecosystems are home to over 620 species of plants, 233 species of birds, 39 species of fish, 37 amphibians, 64 reptiles, and 50 mammals,¹¹¹ many of which are threatened or endangered, including the red-cockaded woodpecker, the wood stork, and the eastern indigo snake. The project area and the neighboring Okefenokee Swamp provides a unique and important habitat to these species.¹¹² As discussed in Section VI, the proposed mine is likely to harm threatened and endangered species and their habitat.

C. The proposed mine may significantly degrade Okefenokee National Wildlife Refuge.

¹⁰⁹ 40 C.F.R. § 230.10(b)(3).

¹¹⁰ 758 F.2d 508, 513 (10th Cir. 1985).

¹¹¹ U.S Fish & Wildlife Service, Okefenokee National Wildlife Refuge: Amphibians, Fish, Mammals, and Reptiles List, available at <https://www.fws.gov/southeast/pubs/okfmam.pdf>.

¹¹² See, e.g., U.S Fish & Wildlife Service, Species Status Assessment Report for the Eastern Indigo Snake (Nov. 5, 2018) at 157, available at <https://ecos.fws.gov/ServCat/DownloadFile/157073>.