

- Incursion of invasive, “competitive” species on the refuge
- Habitat destruction on the refuge

The Service has already expressed concerns about how a previous mining proposal near Okefenokee could negatively affect the refuge environment, waters, aquifers, air, species, habitat, and wilderness experience.¹¹⁸

The potential effects of mining on water chemistry and availability in the refuge could have disastrous consequences on fish, migratory birds, reptiles, amphibians, invertebrate species and other animals and plants that depend on the Okefenokee Swamp. Understanding these effects is critical to analysis of this permit application. Along with conducting comprehensive groundwater modeling and surface water flow analyses, experts recommend making “careful assessment of [even] small-scale drainage patterns” in the area and determining a “water budget [based on] recent climate, vegetation and evapotranspiration patterns, [which] can then be used to predict [development] effects on the mosaic of aquatic communities in the swamp.”¹¹⁹

D. Twin Pines did not adequately consider alternatives.

Under the 404(b)(1) Guidelines, the Corps may not grant a Section 404 permit if there is a practicable alternative that would have less environmental impact.¹²⁰ An alternative is practicable if “it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose.”¹²¹ For non-water-dependent projects like this one, the presumption is that there is a less damaging alternative.¹²² That presumption is difficult to overcome. To do so, an applicant must show that there are no other sites that can accommodate, or are available for, the project purpose.¹²³

Twin Pines did not even try to meet its burden. Instead, the company artificially limited its search criteria to a site “within 50 miles of Jacksonville” having “direct access to a rail line.” Twin Pines does not explain why a rail line is necessary (simply stating that “cost . . . is reduced” is insufficient)¹²⁴ or why another port would not do. Because of these hypothetical restraints, all

¹¹⁸ U.S. Fish & Wildlife Serv., Okefenokee National Wildlife Refuge 1997 Annual Narrative Report at 53 (1998).

¹¹⁹ Berstedt and Porter at 268.

¹²⁰ 40 C.F.R. § 230.10(a). The purpose of the alternatives analysis, as stated in the preamble to the Guidelines, is “to recognize the special value of wetlands and to avoid their unnecessary destruction, particularly when practicable alternatives were available in non-aquatic areas to achieve the basic purposes of the proposal.” 33 C.F.R. § 230.10(a)(2).

¹²¹ *Id.*

¹²² 40 CFR § 230.10(a)(3); *see also Shoreline Assocs. v. Marsh*, 555 F. Supp. 169, 180 (D. Md. 1983), *aff’d*, 725 F.2d 677 (4th Cir. 1984).

¹²³ *Bersani v. U.S. Environmental Protection Agency*, 850 F.2d 36, 44 (2d Cir. 1988); *see also Hough v. Marsh*, 557 F. Supp. 74, 84 (D. Mass. 1982).

¹²⁴ Permit Application at 5. We are aware of multiple mines that have or continue to use trucks to transport their minerals, often significant distances. Iluka Resources trucked roughly a hundred miles from Lulaton to Green Cove Springs. Maria Mange and David Wright, Eds.,