

(3.75 square miles) would be mined. Similarly, in Phase One, there are 8,349 linear feet of stream, of which 4,644 feet would be mined. Proportionally, on the 12,000 acres, over **23,000 linear feet of stream** would be mined.

These numbers far exceed (by nearly five-fold) the impacts discussed in the application. It is our understanding that the Savannah District has never permitted a project in Georgia with anything close to this much aquatic impact.

Twin Pines' application also misrepresents the proximity of the proposed mine to the Okefenokee Swamp. Twin Pines repeatedly states that the proposed site would be approximately 3.73 miles from Okefenokee National Wildlife Refuge, thus "providing a substantial buffer of protection for this sensitive resource."<sup>94</sup> Setting aside that the boundary of the Swamp spills outside of the Refuge's boundaries, and may even be on Twin Pines' property, later phases of mining would occur on property located within a half mile of the Refuge—over seven times closer than the application suggests.<sup>95</sup> In other words, Twin Pines strategically chose the portion of the 12,000-acre site that is furthest from the Swamp as its test site for permitting purposes. The Corps cannot turn a blind eye to this gamesmanship.

**b. The application does not consider the cumulative impacts of past, present, and future mines.**

The application also ignores the impacts of past, present, and reasonably foreseeable future heavy mineral mines on Trail Ridge. Like NEPA, the 404(b)(1) Guidelines require the Corps to consider "cumulative impacts," or changes that "are attributable to the collective effort of a number of individual discharges of dredged or fill material."<sup>96</sup> This is because "the cumulative effect of numerous...changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems."<sup>97</sup>

Here, Twin Pines should have considered the cumulative impacts of past, present, and reasonably foreseeable future mines in the region.

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It is also likely that more than 40% of the mining area will be wetlands. First, 522 acres is 41.17% of the Phase One mining area of 1,268 acres. (One or two percent adds up at this scale; if Twin Pines mines 52.52% of the project area and that area is 41.17% wetlands, we are talking direct impacts to 2,595 acres of wetlands, almost 200 acres more than assumed above). Further, Twin Pines will impact more than 522 acres in Phase One: counting processing facilities and other structures, there will be 587 acres of wetlands affected (46.29%). It is unclear whether those structures will need to be moved to new wetlands to keep pace with the phases of the mining project. Finally, National Wetland Inventory maps show more wetlands on Trail Ridge along future phase sites than on Phase One, and as seen with Phase One, NWI often underestimates the extent of federally protected wetlands.

<sup>94</sup> Permit Application at 5.

<sup>95</sup> *Id.* at 15.

<sup>96</sup> 40 C.F.R. § 230.11

<sup>97</sup> *Id.*