

Alternative 6, the no action alternative, mainly discusses the negative effects of certain forestry practices such as “intensive herbicide use,”<sup>142</sup> but fails to consider that the continuing use of the project site for forestry would leave the subsurface intact.<sup>143</sup>

Put simply, Twin Pines’ alternatives analysis fails on every level: it artificially eliminates off-site alternatives, fails to critically consider on-site alternatives, and dismisses otherwise valid alternatives based on premature contractual commitments. At a minimum, Twin Pines should have considered off-site locations where economically viable concentrations of heavy minerals occur and all 12,000 acres of the proposed site. For those sites, Twin Pines should have analyzed the amount and quality of aquatic resources located in heavy mineral concentration areas and provided a fully explanation of why mining must occur in wetlands and streams.

**E. The proposed project does not adequately avoid and minimize impacts to wetlands and other aquatic resources.**

The 404(b)(1) Guidelines require applicants to avoid discharges of dredged or fill material to the extent practical, then minimize any unavoidable impacts, and then mitigate for any impacts that could not be minimized.<sup>144</sup> Twin Pines does none of these things.

**1. Avoidance**

To demonstrate that it has avoided discharges to the extent practical, a permit applicant must discuss the “original site development plan and why this plan was not the least environmentally damaging practicable plan.”<sup>145</sup> Then, the applicant must compare the original plan to the final plan to demonstrate “how many acres of wetland and/or linear feet of stream were avoided.”<sup>146</sup> Twin Pines does neither.

In 2018 Twin Pines proposed “to operate a 12,000-acre sand-derived minerals mine ... [which] would be mined in 1,000-acre phases...”<sup>147</sup> Twin Pines then undertook preliminary site analysis of the Loncala tract, before submitting the Phase One application. To the extent Twin Pines’ Phase One “test site” was originally the Loncala tract, pushing the mining of that location to a later phase of the project is hardly avoidance.

Further, ninety percent of Twin Pines’ avoidance is effectively a sham. Of the 613.098 acres of wetlands Twin Pines claims to have avoided, 554 are in the western-most portion of the

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<sup>142</sup> Twin Pines does not address whether there could be any potential effects of mining and replacing herbicide impacted soils.

<sup>143</sup> Permit Application at 13–15.

<sup>144</sup> 33 C.F.R. § 320.4(r); 40 C.F.R. § 230.10(d).

<sup>145</sup> Guidelines for Preparation of Analysis of Section 404 Permit Applications Pursuant to the Section 404(b)(1) Guidelines of the Clean Water Act, at 9, available at [https://www.sas.usace.army.mil/Portals/61/docs/regulatory/IP\\_SAS\\_404\\_b\\_1\\_Guidelines.pdf](https://www.sas.usace.army.mil/Portals/61/docs/regulatory/IP_SAS_404_b_1_Guidelines.pdf).

<sup>146</sup> *Id.*

<sup>147</sup> USACE Issue Paper at 1.