

6.0 TYPES OF IMPACTS

The current design for the proposed project would impact waters of the U.S. by dragline mining and subsequent placement of approximately 33,182,677 cubic yards of fill material in wetlands, and streams, as well as the construction of the associated facilities and roads which would involve the placement of fill material in wetlands and streams. The impacts to wetlands from the mining activities are considered permanent for the purposes of mitigation due to the unknown, long-term timeline associated with restoring previously mined areas. However, the mined area will be reclaimed with the excavated material and, once minerals are extracted, restored. Restoring wetlands will minimize the temporal loss of wetland function and provide data to demonstrate the time necessary to complete wetland restoration activities after HMS mining. Mitigation for impacts will be provided through the purchase of wetland and stream credits from an approved commercial mitigation bank, because of this and the proposed reclamation activities there will be no net loss of waters of the U.S. in these areas. Associated infrastructure facilities of the mine that will be constructed will result in permanent impacts to waters of the U.S. Stream SB will be permanently impacted by the placement of a culvert and associated outfall protection in an existing low-water road crossing, detailed drawings for the culverted locations and cross-sections are included in Appendix E.

The waters proposed to be impacted include wetlands and intermittent streams. The streams are generally part of the tributary system of the St. Mary’s River. On-site aquatic features and proposed impacts are shown on Figure 75. The review area contains approximately 1,202.399 acres of wetlands and approximately 11,587 linear feet of stream channel. Aquatic resources quantities, proposed impacts, and mining summary are provided in the tables below. All activities will be performed in a manner to minimize turbidity in the stream.

Proposed Mining Summary by Property					
Property	Mining Method	Total Area to be mined (ac)	Mining Depth	Total Wetland to be Mined (ac)	Total Upland to be Mined (ac)
TIAA	Dragline	233.315	25	83.511	149.804
Keystone	Dragline	644.566	50	369.60	294.966
TOTAL		897.881		453.111	444.77

The following table provides a summary of the proposed mining volumes by property area.

Proposed Mining Volume Summary				
Property	Total Volume to be Mined		Total Wetland to Be Mined	
	Cubic feet	Cubic yards	Cubic feet	Cubic yards
TIAA	254,080,050 ±	9,410,372 ±	90,943,484	3,368,277
Keystone	1,447,424,750 ±	53,608,324 ±	804,988,801	29,814,400
TOTAL	1,701,504,800 ±	63,410,372 ±	895,932,285	33,182,677

There will be no oils or other pollutants released from the proposed activities which will reach the stream.