

7.0 NATURAL ENVIRONMENT OVERVIEW

An overview was conducted to determine the characteristics of the natural environment in the study area. Resources addressed in this section include: aquatic ecosystems (surface waters, wetlands, ponds, and 100-year flood plains) and terrestrial ecosystems (threatened and endangered species, floral communities, and faunal communities). Refer to Appendix D for more information and copies of agency correspondence.

7.1 Aquatic Ecosystems

Surface Water – The study area drains primarily into Truman Creek and an unnamed tributary of Mayfield Creek as shown in Figure 19 (Appendix B). All streams in the study area flow short distances into tributaries of the Mississippi River system (the Mississippi River is approximately six miles west of Bardwell). Most blueline streams and tributaries in the study area flow north. The largest is Truman Creek, which runs northeast across the center of the study area and crosses US 51 just north of Bardwell. Most of the remaining creeks and tributaries are unnamed.

Wetlands and Ponds – A total of 137 wetlands were indicated on National Wetland Inventory (NWI) mapping for the study area, however the vast majority of these (122) are impounded or diked areas (i.e farm ponds) and another eight are the result of excavation activities (see Figure 19 in Appendix B). Only seven appear to be natural wetlands based on their type and may be considered jurisdictional by USACE. All seven are located in the northeast quadrant of the study area; either along the Truman Creek floodplain or along the floodplain of an unnamed tributary of Mayfield Creek. Four of these wetlands are significant in size, ranging from approximately 8 to 32 acres. Five potential hydric soils are also found within the study area, suggesting the presence of other wetlands. In an informal interview, the Carlisle County District Conservationist noted that the alluvial bottoms in the study area are very likely to contain hydric soils.

Floodplains – Six 100-year floodplains cover over 8 percent of the study area (626 acres), with the largest being the Truman Creek floodplain (see Figure 19 in Appendix B). The other floodplains include: two unnamed tributaries of Gray Creek, Thomas Creek, an unnamed tributary of Mayfield Creek, and an unnamed tributary of Truman Creek. Significant floodplains areas also lie just north of the study area.

7.2 Terrestrial Ecosystems

Threatened and Endangered Species – Initial research indicated that a total of 12 threatened or endangered species may occur in or near the study area as listed in Table 21 (Appendix A). However, based on the available habitat, three species are not likely to be found in the study area (Alabama shad, Spotted sandpiper, and Interior least tern). Instead, these species are likely to find suitable habitat in or very near the Mississippi River. The remaining nine species may occur or have been known to occur in the area.

Floral and Faunal Communities – No major issues or concerns were identified relative to plant or animal communities in the study area, other than the potential for nine threatened or endangered species as discussed above.