

IV. Environmental Screening

In recent years, the environmental considerations associated with transportation construction have come to the forefront of the planning process. Section 102 of the National Environmental Policy Act (NEPA) requires the completion of an Environmental Impact Statement (EIS) for projects that have a significant impact on the environment. The EIS includes impacts on wetlands, wildlife, water quality, historic properties, and public lands. While this report does not cover environmental issues to the detail of an EIS consideration for many of these factors was incorporated into the development of the Comprehensive Transportation Plan and related recommended improvements. Environmental features found in the planning area are shown in **Figure 12**. The environmental data used in the evaluation of the Comprehensive Transportation Plan was obtained in 2002 from the NCDOT Geographic Information System (GIS) Unit of NCDOT and the Center for Geographic Information and Analysis (CGIA) and reflects the most current data available at that time. Prior to the implementing any transportation projects, further environmental analysis is necessary.

Wetlands

Wetlands are those lands where saturation with water is the dominant factor in determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Wetlands are crucial ecosystems in our environment. They help regulate and maintain the hydrology of our rivers, lakes, and streams by storing and slowly releasing floodwaters. Wetlands help maintain the quality of water by storing nutrients, reducing sediment loads, and reducing erosion. They are also critical to fish and wildlife populations by providing an important habitat for approximately one-third of the plant and animal species that are federally listed as threatened or endangered. The National Wetland Inventory showed several wetlands throughout the planning area.

Threatened and Endangered Species

The Threatened and Endangered Species Act of 1973 allows the U. S. Fish and Wildlife Service to impose measures on the Department of Transportation to mitigate the environmental impacts of a transportation project on endangered animal and plant species as well as critical wildlife habitats. Locating any rare species that exist within the planning area during this early planning stage will help to avoid or minimize impacts.

A preliminary review of the Federally Listed Threatened and Endangered Species in the planning area was completed to determine what effects, if any, the recommended improvements may have on wildlife. Mapping from the N.C. Department of Environment and Natural Resources revealed occurrences of threatened or endangered plant and/or animal species in the planning area which



are summarized in **Table 4**. These species are not impacted by any recommendations found in the Comprehensive Transportation Plan.

Table 4 Threatened or Endangered Species within the Planning Area				
Species	Common Name	Major Group	Status	
			NC	Federal
Etheostoma Collis	Carolina Darter	Fish	SC	FSC
Xeric Hardpan Forest	-	Natural Community	S3	-
Dry Oak - Hickory Forest	-	Natural Community	S4	-
Baptisia Alba	Thick-Pod White Wild Indigo	Vascular Plant	S2	-

* See **Appendix E** for definitions of status.

Historic Sites

Section 106 of the National Historic Preservation Act requires the Department of Transportation to identify historic properties listed in, as well as eligible for, the National Register of Historic Places (NRHP). The NCDOT must consider the impacts of transportation projects on these properties and consult with the Federal Advisory Council on Historic Preservation.

N.C. General Statute 121-12(a) requires the NCDOT to identify historic properties listed on the National Register, but not necessarily those that are eligible to be listed. The NCDOT must consider the impacts and consult with the N.C. Historical Commission, but is not bound by their recommendations.

The location of historic sites within the planning area was investigated to determine any possible impacts resulting from the recommended improvements. This investigation identified only one property listed on the NRHP, which is the Reed Gold Mine, located on Reed Mine Road. However, this historic building site will not be impacted by any of the recommended improvements.

Archaeological Sites

The location of recorded archaeological sites was researched to determine the possible impacts of proposed roadway projects. This initial investigation identified several archaeological sites outside of the planning area found in **Table 5**. All are less than a mile away from the planning boundary, but archaeological sites are often difficult to identify without actual field excavation. As a result, possible sites may not be identified during the initial planning process and each proposed project should be evaluated individually prior to construction.

Table 5 Archaeological Sites			
Site Name	Prehistoric	Historic	Status
Reed House		Yes	No above ground remains
Stirewalt	Yes	Yes	No above ground remains
Boiler Pit		Yes	Above ground Remains
Kelly House		Yes	Above ground Remains
Pleba House	Yes	Yes	No above ground remains
Pera House	Yes	Yes	No above ground remains
Reed Blacksmithy		Yes	Above ground remains
Grist	Yes	Yes	No above ground remains
Stamp Mill		Yes	No above ground remains

Educational Facilities

The location of educational facilities in the planning area was considered during the development of the transportation plan. No proposed facilities or improvements shall displace any school or other educational facility. The implementation of the Transportation Plan will result in positive effects on educational facilities in the planning area by providing access to a potential school.

Demographics

As mandated by Title VI of the Civil Rights Act of 1964 and Executive Order 12898, the proposed actions recommended in the Comprehensive Transportation Plan have been reviewed with respect to impacts to minority and low-income populations established in the 2000 U.S. Census.



