

NC 42  
From US 70 to SR 1003 (Buffalo Road)  
Johnston County  
Federal Aid Project STP-42(4)  
State Project 8.1312301  
WBS Element 34552.1.1  
TIP Project R-3825

ADMINISTRATIVE ACTION

FINDING OF NO SIGNIFICANT IMPACT

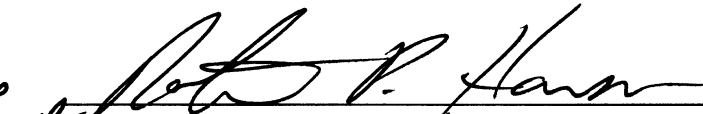
U. S. DEPARTMENT OF TRANSPORTATION

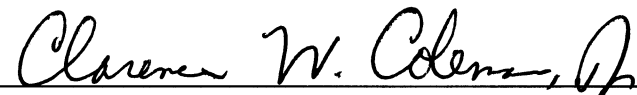
FEDERAL HIGHWAY ADMINISTRATION

AND

N. C. DEPARTMENT OF TRANSPORTATION

APPROVED:

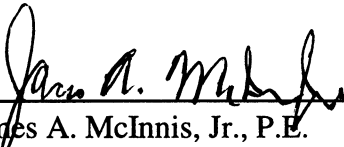
6/29/06  
Date *for*   
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Project Development and Environmental Analysis Branch

7/11/06  
Date *for*   
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FINDING OF NO SIGNIFICANT IMPACT

Documentation prepared in the Project Development and Environmental Analysis Branch  
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\_\_\_\_\_  
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## **PROJECT COMMITMENTS**

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Federal Aid Project STP-42(4)  
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### **Division Four Construction**

Notification will be sent to the NCDOT Natural Environment Unit one month prior to the start of construction, in order that mussels at the Neuse River and Mill Creek crossings can be relocated. The notification should be sent to the following address:

Natural Environment Biological Surveys Group Supervisor  
NCDOT Natural Environment Unit  
1598 Mail Service Center  
Raleigh, NC 27699-1598

Timber work pads will be used for heavy equipment within fifty feet of streams or in other areas where sediment could enter the stream.

NCDOT's Stream Crossing Guidelines for Anadromous Fish Passage will apply to the Neuse River and all stream crossings within the project area.

No in-water work will be performed in the Neuse River between February 15th and June 15th, due to the likely presence of anadromous fish.

NCDOT will implement Best Management Practices for Bridge Demolition and Removal. The asphalt-wearing surface of Bridge Number 75 and bridge rails will be removed without dropping into the water prior to bridge demolition.

During construction of the project, the driveway to Clayton Fire Station will be kept open at all times. No equipment or materials will be parked or placed in the fire station driveway at any time.

## **Roadside Environmental Unit/Division Four Construction**

Due to the existence of habitat for federally protected mussels in the Neuse River and Mill Creek, the following project commitments will be implemented:

If practical, turbidity curtains will be used during in-stream work in the Neuse River.

Sediment and erosion control measures shall adhere to the Design Standards in Sensitive Watersheds during construction of the project.

Special Sediment Control Fence will be used at the toe of slope parallel to the Neuse River and Mill Creek.

During active grading, all unstabilized areas of the project within fifty feet of streams will be temporarily stabilized prior to any rain event. This will be done utilizing erosion control blankets, fabric, plastic or other material(s) approved by the Roadside Environmental Unit and as directed by the engineer on site. The temporary stabilization should be adequately anchored and utilized to prevent the loss of sediment into the water course unless runoff from these areas can be diverted to an adequately designed sediment basin or until the area is stabilized with vegetation.

## **Structure Design Unit/Hydraulic Unit**

Deck drains for the proposed bridge carrying NC 42 over the Neuse River will be designed so that runoff is not discharged directly into the Neuse River.

Where possible, proposed bridge bents will be no closer than 10 feet from the edge of the stream bank.

## **Roadway Design Unit/Geotechnical Unit**

The proposed widening will require property from four sites potentially containing hazardous materials. A preliminary site assessment will be performed for all of the properties prior to right of way acquisition in order to determine the extent of any contamination. Right of way acquisition from the former Jimmy Flowers Store and the Percy Flowers Store will be by permanent easement rather than fee simple right of way due to the possibility of contamination on the properties. Permanent easements will be obtained from the former Peele Pesticide site and the Caterpillar site, as well, if the preliminary site assessment determines there is a possibility of contamination in areas needed for right of way.

**FINDING OF NO SIGNIFICANT IMPACT  
PREPARED BY THE  
PLANNING AND ENVIRONMENTAL BRANCH  
DIVISION OF HIGHWAYS  
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
IN CONSULTATION WITH THE  
FEDERAL HIGHWAY ADMINISTRATION**

**I. TYPE OF ACTION**

This is a Federal Highway Administration (FHWA) Finding of No Significant Impact (FONSI).

The FHWA has determined this project will have no significant impact on the human environment. This Finding of No Significant Impact is based on the August 11, 2003 Environmental Assessment (EA) which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the need, environmental issues and impacts of the proposed project and appropriate mitigation measures. The following documentation provides sufficient evidence and analysis for determining that an Environmental Impact Statement (EIS) is not required. The FHWA takes full responsibility for the accuracy, scope and content of the Environmental Assessment.

**II. DESCRIPTION OF ACTION**

The project involves widening NC 42 to a four-lane shoulder facility with a 17.5-foot raised median from US 70 to SR 1003 (Buffalo Road). The proposed project is approximately 5.7 miles long (see Figure 1). No control of access is proposed. The project is included in the 2006-2012 North Carolina Transportation Improvement Program (TIP). Right of way acquisition and construction are scheduled in the 2006-2012 TIP for federal fiscal years 2007 and 2008, respectively.

The purpose of the project is to improve the safety and traffic carrying capacity of NC 42 within the project limits.

The 2006-2012 TIP includes an estimated right of way acquisition cost of \$4,650,000 and construction cost of \$23,700,000. Total project cost included in the TIP is \$28,350,000.

The latest estimated costs for project R-3825 are shown below:

Right of Way Acquisition	\$ 4,650,000
Construction	<u>\$24,700,000</u>
Total Cost	\$29,350,000

### III. SUMMARY OF ENVIRONMENTAL EFFECTS

Two homes and two businesses will be relocated as a result of this project. Ten residential receptors are predicted to experience noise impacts. A total of 0.71 acre of wetlands and 996 feet of streams will be impacted by the project.

Habitat exists in the project area for four federally-listed endangered species. It is anticipated the proposed project will have "no effect" on Michaux's sumac and red-cockaded woodpecker and the project "may affect, but is not likely to adversely affect" dwarf wedgemussel and Tar River spiny mussel. The US Fish and Wildlife Service has concurred on these biological conclusions for these species (see Section V-A-1 of this document).

It is anticipated a US Army Corps of Engineers Individual Permit will likely be required for the project. A Section 401 Water Quality General Certification from the North Carolina Division of Water Quality will be required prior to issuance of the Section 404 Individual Permit from the Corps of Engineers.

### IV. COMMENTS AND COORDINATION

#### A. Distribution of the Environmental Assessment

Copies of the environmental assessment were made available to the public and to the following federal, state and local agencies:

- US Department of the Army - Corps of Engineers (Wilmington District)
- \*US Environmental Protection Agency
- \*US Fish and Wildlife Service - Raleigh
- NC Department of Cultural Resources
- \*NC Department of Environment, Health and Natural Resources

Asterisks (\*) indicate agencies from which comments on the environmental assessment were received. Copies of letters received are included in the Appendix of this document.

#### B. Comments on the Environmental Assessment

Substantive comments on the environmental assessment are discussed below:

##### **US Environmental Protection Agency**

**COMMENT:** "This project is a non-Merger Team project. However, based upon current Merger process improvement guidance and screening criteria, this project would

be a candidate for inclusion in the Merger process. There is no discussion in the EA concerning the coordination and determination of this issue between the U.S. Army Corps of Engineers and NCDOT. The EA addresses the fact that this project will most likely require an Individual Permit (IP) under Section 404 requirements due to potential wetland and stream impacts.”

**NCDOT RESPONSE:** Following receipt of this comment, NCDOT consulted with the Corps of Engineers, who agreed this project should be included in the multi-agency NEPA/404 merger process. At a meeting held on March 15, 2005, the merger team agreed this project should be brought into the merger process at Concurrence Point 4A (avoidance and minimization).

**COMMENT:** “The EA addresses the No-build, Alternative Modes of Transportation and the 2 construction alternatives on pages 8 and 9. However, the EA does not include an analysis of other potential alternatives, including intersection traffic improvements or other typical roadway sections (e.g. 3-lane with center turning lane).”

**NCDOT RESPONSE:** Other roadway typical sections, such as a three-lane section or intersection improvements, were not considered as alternatives for this project due to the high traffic volumes. As discussed in Section II-C-1 of the EA, even with widening to four lanes, portions of NC 42 within the project limits will operate at level of service D and two signalized intersections along the project will operate at level of service E in the year 2026. A three-lane section or intersection improvements would not have provided acceptable levels of service for the project.

**COMMENT:** “Furthermore, the EA identifies a problem involving a railroad crossing along NC 42 just east of US 70. The EA states that a needed grade separation would warrant a major reconstruction of NC 42 and the NC 42/US 70 intersection but that this issue is beyond the scope of the project. Because this intersection is utilized in the LOS analysis and is a termini for the proposed project, EPA does not concur with the finding without further information.”

**NCDOT RESPONSE:** The EA does not identify the existing railroad crossing as being problematic, the EA merely states the exposure index at this crossing exceeds the warrant for a grade separation. No accidents involving a train at this crossing were reported during the accident study period. This railroad crossing is less than 100 feet from the intersection of NC 42 with US 70. Providing a grade separation at this location would be very expensive and disruptive to the area. Gates and signals exist at this crossing. These protective devices will be upgraded to current standards as part of this project.

**COMMENT:** “The recommended alternative for the proposed project will impact approximately 0.71 acres of jurisdictional wetlands. There are approximately 11



wetland systems which will be impacted from the project. However, compensatory mitigation is not proposed to be addressed until final design for the project. EPA recommends that NCDOT begin consultation with USACE and North Carolina Division of Water Quality (DWQ) as soon as possible for mitigation requirements. According to a recent Environmental Enhancement Program (EEP) summary of wetland and stream mitigation needs, the Central Piedmont area is in significant need of mitigation studies for non-riparian wetlands and streams.”

**NCDOT RESPONSE:** The EA states , “Final decisions concerning compensatory mitigation for project impacts on wetlands will be made during the design phase of the project.” This statement is not intended to imply work on mitigation plans will not begin until the final design phase. Discussions with the permitting agencies regarding mitigation requirements will be held at the appropriate time.

**COMMENT:** “EPA concurs fully with the September 29, 2003, U.S. Fish and Wildlife Service letter to the NCDOT concerning threatened and endangered species. NCDOT needs to adequately address federally protected species including further documentation of biological assessments and survey methodologies.”

**NCDOT RESPONSE:** See response to US Fish and Wildlife Service comments below.

**COMMENT:** “EPA believes that an Indirect and Cumulative Impact (ICI) analysis [should] be performed with regard to increased capacity of the proposed roadway and its relationship to sprawl and future water quality impacts within this watershed sub-basin.”

**NCDOT RESPONSE:** An indirect and cumulative impact analysis will be conducted and submitted to the NC Division of Water Quality as part of the Section 401 Water Quality Certification application.

**COMMENT:** “The Merger process improvement guidance addresses the need for NCDOT to identify potential impacts resulting from the relocation of utilities prior to final design and as early in the planning process as possible. The EA identifies numerous jurisdictional wetland systems along the NC 42 corridor. NCDOT needs to identify what potential impacts to the human and natural environment will occur as a result of relocating all or some of these utilities (i.e. Fiber optics, sewer, gas, water, cable, electric, and telephone) and any additional compensatory mitigation requirements.”

**NCDOT RESPONSE** Anticipated impacts due to utility relocations are included in the impacts listed for the project in the EA.

**COMMENT:** “The EA does not discuss soils information within the project area. It would be helpful to EPA to identify what percentage of each soil (type) series is located within the proposed right of way.”

**NCDOT RESPONSE:** See Section V-B of this document.

**COMMENT:** “EPA does not recommend burning of vegetative matter generated during clearing and grubbing operations. Burning is EPA’s least preferred option, especially considering the close proximity to urban and suburban populations. NCDOT should consider more environmentally-friendly options, such as shredding and mulching and making these recycled materials available to the public.”

**NCDOT RESPONSE:** Trees and other debris to be cleared from the proposed right of way will become the property of the contractor. The contractor is responsible for disposing of such material properly and obtaining any necessary permits for the burning or disposal of the material.

#### **US Fish and Wildlife Service**

**COMMENT:** “There are four federally-protected species listed for Johnston County. The EA renders a biological conclusion of “no effect” for the red-cockaded woodpecker (*Picoides borealis*), dwarf wedgemussel (*Alasmidonta heterodon*), Tar spiny mussel (*Elliptio steinstansana*) and Michaux’s sumac (*Rhus michauxii*). The Service does not concur with any of the “no effect” conclusions for the following reasons:”

“The EA states on page 21 that “potential habitat for the RCW is located within the project study area.” A “no effect” conclusion should not be rendered if potential habitat exists. The EA does not give an adequate description of the potential habitat, nor does it differentiate between nesting and foraging habitat. There is insufficient information on the March 8, 2001 survey.”

“The EA states on page 22 that “habitat for Michaux’s sumac is present within the project study area.” Therefore, the “no effect” conclusion is inappropriate. No details of the survey methodology are provided in the EA.”

“Since the dwarf wedgemussel is known to occur within the Neuse River Basin and potential habitat exists in the Neuse River and possibly in Mill Creek, the “no effect” conclusion is inappropriate. The EA lacks any details on the mussel survey methodologies. Mussel surveys should extend a minimum of 100 meters upstream and 400 meters downstream of road crossings.”

“Based on a tentative identification, the Tar spiny mussel was recently collected within the Neuse River Basin in White Oak Creek. Therefore, its presence near

the project area cannot be ruled out, and thus the “no effect” conclusion is inappropriate.”

“The service does not believe that this EA adequately addresses the federally protected species within the project area. Future documentation should reassess the biological conclusions and provide additional details, especially regarding survey methodologies. The Service may be able to concur with a “may affect, not likely to adversely affect” conclusion on some or all of the four listed species in Johnston County, provided that adequate justification and documentation is provided.”

**NCDOT RESPONSE:** At the time threatened and endangered species surveys were originally conducted for this project, the accepted protocol was to render a conclusion of “No Effect” for a species if no specimens were found, even if habitat existed in the area. Between the time of the survey and the publication of the EA, the protocol had changed to rendering a conclusion of “May Affect, Not Likely to Adversely Affect” if no specimens were found and habitat existed. Concurrence from the Fish and Wildlife Service is required on a biological conclusion of “May Affect, Not Likely to Adversely Affect.” The original biological conclusion was included in the EA and the Fish and Wildlife Service was not contacted regarding the survey results and the appropriate biological conclusion. However, at the present time, a biological conclusion of “No Effect” is once again appropriate in certain cases, even if habitat is present.

Since publication of the EA, new surveys have been conducted for all of the threatened and endangered species listed for Johnston County. The results of these surveys are discussed in Section V-A-1 of this document.

**NC Department of Environment and Natural Resources  
Division of Water Quality (DWQ)**

**COMMENT:** “Table 3, on Page 9 does not present any anticipated impacts to Neuse Riparian Buffers. Future documentation for a 401 Water Quality Certification, or any application for a Neuse River Riparian Buffer Authorization will need to include proposed impacts to these resources.”

**NCDOT RESPONSE:** This information will be provided as part of the application for a Neuse River Riparian Buffer Authorization.

**COMMENT:** “Review of Table 3 on page 9 indicates that Alternative 1 has anticipated impacts to 0.82 acres of wetlands and 1,096 linear feet of streams. It also indicates anticipated impacts to 0.71 acres of wetlands and 1,079 linear feet of streams for Alternative 2. Table three identifies Alternative 2 as preferred. However, review of Table 5 indicates 1,096 linear feet of anticipated stream impacts, which would be consistent with Alternative 1. Where as, Table 6

indicates anticipated impacts to 0.71 acres of wetlands, which would be consistent with Alternative 2. Therefore, in reviewing Tables 3, 5, and 6, there appears to be a discrepancy with the presented data. Please clarify information in the FONSI and environmental permit applications.”

**NCDOT RESPONSE:** See Section V-D of this document for corrected versions of Tables 3 and 5 from the EA.

**COMMENT:** “The section of the Neuse River that [the] project impacts is an anadromous fish spawning area. As such the 401 Water Quality Certification will [include] conditions that require an in-water work moratorium from February 15<sup>th</sup> through June 15<sup>th</sup>.”

**NCDOT RESPONSE:** The list of project commitments in the EA included a commitment that no in-water work would be performed in the Neuse River between February 15<sup>th</sup> and June 15<sup>th</sup> (see the list of project commitments in this document).

**COMMENT:** “The document proposes impacts to waters classified as Water Supply IV. Given the presence of Water Supply Waters in the project area, the DWQ requests that DOT strictly adhere to North Carolina regulations entitled “Design Standards in Sensitive Watersheds” throughout design and construction of the project. This would apply for any area that drains to streams having WS (Water Supply) classifications.”

**NCDOT RESPONSE:** "Design Standards in Sensitive Watersheds" apply to water supply watersheds classified as WS-I or WS-II. These design standards do not apply to waters classified as WS-IV. However, these standards are proposed for the project due to the existence of habitat for federally-protected mussels in the Neuse River and Mill Creek (see list of project commitments).

**COMMENT:** “Where are the nearest water supply intake(s) to the project located? Please provide information that displays all the municipal water supply intakes in the project area. Given the uncertainty associated with the location of water supply intakes in the area, DWQ cannot support the selection of a preferred alternative until the information is supplied. In addition, issuance of the 401 Water Quality Certification can only occur when the DWQ can make the determination that the project will not adversely impact drinking water supplies.”

**NCDOT RESPONSE:** The nearest water supply intake to the project is on the Neuse River, over six miles downstream of the NC 42 crossing of the Neuse. See Figure 2 of this document.

**COMMENT:** “The document does not discuss the need for a Neuse River Riparian Buffer Authorization. DOT is advised that final project approvals cannot occur

without a submittal for, and a receipt of, a Neuse River Riparian Buffer Authorization.

**NCDOT RESPONSE:** NCDOT will request a Neuse River Riparian Buffer Authorization prior to construction.

**COMMENT:** “There should be a discussion on mitigation plans for unavoidable impacts. If mitigation is required, it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. While the NCDWQ realizes that this may not always be practical, it should be noted that for projects requiring mitigation, appropriate mitigation plans will be required in conjunction with the issuance of a 401 Water Quality Certification.”

**NCDOT RESPONSE:** On-site mitigation will be provided, where possible. The Ecosystem Enhancement Program (EEP) will provide required mitigation beyond what can be provided on-site.

**NC Department of Environment and Natural Resources  
Wildlife Resources Commission**

**Comment:** “The project will cross Mill Creek and the Neuse River. We request NCDOT follow the Stream Crossing Guidelines for Anadromous Fish Passage at both of these sites, with a standard anadromous fish moratorium, February 15 to June 15, at the Mill Creek crossing and the Neuse River crossing. NCDOT should also conduct a mussel survey at all stream crossings prior to construction.”

**NCDOT Response:** A moratorium on anadromous fish will be enacted from February 15 to June 15 (see list of project commitments in this document). Mussel surveys have been conducted at all stream crossings. A biological conclusion of “May Affect, Not Likely to Adversely Affect” has been requested for the dwarf wedgemussel, and the Tar River spynymussel.

**C. Public Hearing**

In accordance with 23 U.S.C. 128, the North Carolina Department of Transportation certifies that a public hearing for the subject project has been held and the social, economic, and environmental impacts, consistency with local community planning goals and objectives, and comments from individuals have been considered in the selection of the preferred alternative for the project

A formal public hearing was held for the project on September 30, 2004 at East Clayton Elementary School.

Residents living in the subdivisions of Bennett Place, Neuse Colony and Neuse Colony Estates requested the widening of NC 42 take place on the north side of the road.

This shift would keep the road from coming in closer proximity to their homes, which are on the south side of NC 42.

Concerns were also expressed by residents regarding traffic noise. A second traffic noise analysis was conducted for the project following completion of the environmental assessment. Traffic noise is expected to impact ten homes with construction of the project. Noise abatement measures were not recommended in the traffic noise study conducted for the environmental assessment. Noise abatement measures were reexamined during the new study and no noise abatement measures are recommended or proposed as a result of the latest traffic noise study (see Section V-C of this document).

## V. REVISIONS TO THE ENVIRONMENTAL ASSESSMENT

### A. Protected and Rare Species

#### 1. Federally-Protected Species

As of March 8, 2006, one additional species has been added to the list of federally-protected species for Johnston County since completion of the environmental assessment. Table 1 below presents the list of federally-protected species in Johnston County.

**Table 1**  
**Federally-Protected Species in Johnston County**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Status</b>	<b>Habitat?</b>	<b>Biological Conclusion</b>
Bald eagle	<i>Haliaeetus leucocephalus</i>	T	Yes	May Affect, Not Likely to Adversely Affect
Red-cockaded woodpecker	<i>Picoides borealis</i>	E	Yes	No Effect
Dwarf wedgemussel	<i>Alasmidonta heterodon</i>	E	Yes	May Affect, Not Likely to Adversely Affect
Tar spiny mussel	<i>Elliptio steinstansana</i>	E	Yes	No Effect
Michaux's sumac	<i>Rhus michauxii</i>	E	Yes	No Effect

Habitat exists in the project area for all of the federally-protected species listed for Johnston County. Surveys for all of these species, except the Bald eagle, were conducted prior to completion of the environmental assessment. The Bald eagle was added to the list of federally protected species in Johnston County following completion of the environmental assessment. No specimens of any of these species were observed during the surveys. The environmental assessment presented a biological conclusion of "No Effect" for all of these species.

As discussed in Section IV-A of this document, in a letter dated September 29, 2003, the US Fish and Wildlife Service did not concur with any of the biological conclusions presented in the EA. At the time threatened and endangered species surveys were originally conducted for this project, the accepted protocol was to render a conclusion of "No Effect" for a species if no specimens were found, even if habitat existed in the area. Between the time of the survey and the publication of the EA, the protocol had changed to rendering a conclusion of "May Affect, Not Likely to Adversely Affect" if no specimens were found and habitat existed. Concurrence from the Fish and Wildlife Service is required on a biological conclusion of "May Affect, Not Likely to Adversely Affect." However, at the present time, a biological conclusion of "No Effect" is once again appropriate in certain cases, even if habitat is present.

Since publication of the EA, new surveys have been conducted for all of the threatened and endangered species listed for Johnston County. New surveys for Michaux's sumac were conducted in July 2003 and new surveys for red-cockaded woodpecker were conducted in December 2004. Based on the results of these surveys, it is expected the project will have no effect on these species. In a letter dated April 6, 2005, the US Fish and Wildlife Service concurred on a finding of "No Effect" for Michaux's sumac and red-cockaded woodpecker (see Appendix).

New mussel surveys in the Neuse River and Mill Creek were conducted for the project in November 2005. No dwarf wedgemussels or Tar River spinyussels were found, but potential habitat exists in the project area. The proposed project may affect, but is not likely to adversely effect these species. In a letter dated June 29, 2006, the US Fish and Wildlife Service concurred with a biological conclusion of "May Affect, Not Likely to Adversely Affect" for the dwarf wedgemussel and the Tar River spiny mussel (see Appendix).

Surveys for Bald eagle were conducted for the project in the spring of 2006. No Bald eagles were found, but potential habitat exists in the project area. The proposed project may affect, but is not likely to adversely effect this species. In a letter dated June 29, 2006, the US Fish and Wildlife Service concurred with a biological conclusion of "May Affect, Not Likely to Adversely Affect" for the Bald eagle (see Appendix).

## **2. Federal Species of Concern**

As of March 8, 2006, changes have occurred to the list of Federal Species of Concerns (FSC) for Johnston County since completion of the environmental assessment. The Tar River crayfish, Carolina asphodel, Sandhills bog lilly and Long Beach seedbox are no longer included on the list of Federal Species of Concern for Johnston County. The bog spicebush, Cerulean warbler, Roanoke bass and American eel have all been added to the list of Federal Species of Concern since completion of the environmental assessment.

Table 2 below presents the list of Federal Species of Concern in Johnston County.

**Table 2**  
**Federal Species of Concern in Johnston County**

<b>Common Name</b>	<b>Scientific Name</b>
Atlantic pigtoe	<i>Fusconaia masoni</i>
Bog spicebush	<i>Lindera subcoriacea</i>
Carolina bogmint	<i>Macbridea caroliniana</i>
Carolina madtom	<i>Noturus furiosus</i>
Carolina trillium	<i>Trillium pusillum var. pusillum</i>
Cerulean warbler	<i>Dendroica cerulea</i>
Green floater	<i>Lasmigona subviridis</i>
Pinewoods shiner	<i>Lythrurus matutinus</i>
Roanoke bass	<i>Ambloplites cavifrons</i>
Spring-flowering goldenrod	<i>Solidago verna</i>
Yellow lampmussel	<i>Lampsilis cariosa</i>
Yellow lance	<i>Elliptio lanceolata</i>
American eel	<i>Anguilla rostrata</i>

Surveys for Federal species of concern have not been conducted. A review of the NHP database of Rare Species and unique habitats did not reveal the presence of these species or unique habitats in or near the project study area.

**B. Soils**

Table 3 below describes soil characteristics of the 14 series that are located in the project area and separates out the 17 soil map units into the appropriate series. The soil map units are defined following the table.



**Table 3**  
**Soil Series and Characteristics of the Project Area**

<b>Soil Series</b>	<b>Soil Map Unit in Series<sup>1</sup></b>	<b>Topographic Location</b>	<b>Drainage</b>	<b>Permeability</b>	<b>Hydric/Non Hydric</b>
Appling	AmB	uplands between Coastal Plain and Piedmont	well	moderate	non-hydric
Bibb	Bb	flood plains along streams in the Coastal Plain	poor	moderate	hydric
Cecil	CeB, CeC	hillslopes in Piedmont	well	moderate	non-hydric
Chewacla	Ch	level flood plains	poor	moderate	hydric inclusions: Wehadkee
Cowarts	CoB	uplands	well	moderate-slow	non-hydric
Gilead	GeB	uplands in Coastal Plain	moderate-well	moderate-slow	non-hydric
Marlboro	MaB, AmB	interstream divides in uplands of Coastal Plains	well	moderate	non-hydric
Norfolk	NoB, NoA	broad interstream divides in Coastal Plains	well	moderate	non-hydric
Pacolet	PaD, PaE	hillslopes of Piedmont	well	moderate	non-hydric
Rains	Ra	interstream divides	poor	moderate	hydric
Rion	RnF	steep uplands in Piedmont	well	slow-moderate	non-hydric
Toisnot	Tn	uplands of Coastal Plains	poor	moderate-slow	hydric
Varina	VrA	broad upland areas of Coastal Plain	well	moderate	non-hydric
Wehadkee	Wt	floodplains	poor	moderate	hydric

<sup>1</sup> **AmB**: Appling-Marlboro Complex, 1-6% slopes

**Bb**: Bibb sandy loam, frequently flooded

**CeB**: Cecil loam 2-6% slopes; **CeC**: Cecil loam 6-10% slopes

**Ch**: Chewacla clay loam, frequently flooded

**CoB**: Cowarts loamy sand, 6-10% slopes

**GeB**: Gilead sandy loam, 2-8% slopes

**MaB**: Marlboro sandy loam, 2-8% slopes

**NoA**: Norfolk loamy sand 0-2% slopes; **NoB**: Norfolk loamy sand 2-6% slopes

**PaD**: Pacolet loam, 10-15% slopes; **PaE**: Pacolet loam, 15-25% slopes

**Ra**: Rains sandy loam

**RnF**: Rion sandy loam, 15-40% slopes

**Tn**: Toisnot loam

**VrA**: Varina loamy sand, 0-2% slopes

**Wt**: Wehadkee loam, frequently flooded

### **C. Highway Traffic Noise Analysis**

The NCDOT Traffic Noise Abatement Policy has been revised since completion of the environmental assessment. The 2004 Noise Abatement Policy has changed the criteria for determining a “substantial increase” in noise levels. Under the new noise abatement policy, noise abatement must be considered when a land use is exposed to noise levels approaching or exceeding the FHWA noise abatement criteria and/or the predicted design year noise levels substantially exceed existing noise levels as defined below:

<b>Existing Leq(h)</b>	<b>Substantial Increase if Receptor Experiences Increase of:</b>
50 or less dBA	15 or more dBA
51 dBA	14 or more dBA
52 dBA	13 or more dBA
53 dBA	12 or more dBA
54 dBA	11 or more dBA
55 or more dBA	10 or more dBA

Additional residential development has also occurred along the project since the original traffic noise analysis was conducted. Because of the revision to the noise policy and this new development, a new traffic noise analysis was conducted for the project. This new analysis found that ten homes would be impacted by traffic noise with construction of the proposed project. If NC 42 was not widened, three homes would be impacted by traffic noise.

Noise abatement measures were not recommended in the traffic noise study conducted for the environmental assessment. Noise abatement measures were reexamined during the new study and no noise abatement measures are recommended or proposed as a result of the latest traffic noise study.

In accordance with the NCDOT 2004 Traffic Noise Abatement Policy, the Federal/State governments are not responsible for providing noise abatement measures for new development which building permits are issued within the noise impact area of a proposed highway after the Date of Public Knowledge. The Date of Public Knowledge of the location of a proposed highway project will be the approval date of CEs, FONSI, RODs, or the Design Public Hearing, whichever comes later. In the case of this project, the Date of Public Knowledge is the approval date of this document. For development occurring after this public knowledge date, local governing bodies are responsible to insure that noise compatible designs are utilized along the proposed facility.

**D. Corrections to Environmental Assessment**

**Table 3-Alternative Comparison**

Table 3 of the EA stated Alternative 1 would impact 335 meters (1,096 feet) of streams and Alternative 2 would impact 329 meters (1,079 feet) of streams. These numbers are incorrect. The correct stream impacts are presented on Table 3 below.

**Table 4  
Correction to Table 3 of the Environmental Assessment**

<b>DESCRIPTION</b>	<b>ALTERNATIVE 1</b>	<b>ALTERNATIVE 2 "Recommended"</b>
Residential Relocates	2	2
Business Relocates	2	2
Wetland Impacts	0.331 ha (0.82 ac)	0.288 ha (0.71 ac)
Surface Waters	298 meters (979 feet)	304 meters (996 feet)
Construction Cost	\$23,000,000	\$22,500,000
Right of Way Cost	\$ 5,047,400	\$ 4,624,500
Total Cost	\$28,047,400	\$27,124,500

**Table 5-Stream Impacts Within the Project Study Area**

Table 5 of the EA stated the project would impact 100 linear feet (30.5 meters) of the Neuse River. This is incorrect. The Neuse River will be bridged by the project. The correct stream impacts are shown on Table 5 below.

**Table 5**  
**Correction to Table 5 of the Environmental Assessment**

<b>Stream</b>	<b>Tributary of:</b>	<b>Class</b>	<b>Impacts m / ft<sup>†</sup></b>
Neuse R	-	perennial	0 m / 0 ft
UT #N1	Neuse River	intermittent	8.5 m / 28 ft
UT #N2	Neuse River	intermittent	9.8 m / 32 ft
UT #N3	Neuse River	intermittent	4.3 m / 14 ft
UT #N3	Neuse River	perennial	3.7 m / 12 ft
UT #N4	Neuse River	perennial	10.1m / 33 ft
UT #N5	Neuse River	intermittent	100 m / 327 ft
UT #N6	Neuse River	perennial	12 m / 38 ft
UT #N7	Neuse River	perennial	4 m / 14 ft
UT #N8	Neuse River	perennial	7 m / 23 ft
UT #N9	Neuse River	intermittent	9.4 m / 31 ft
UT #N10	Neuse River	perennial	0 m / 0 ft
Mill Cr	Neuse River	perennial	8.8 m / 29 ft
UT #M1	Mill Creek	perennial	127 m / 415 ft
UT #M2	Mill Creek	intermittent	0 m / 0 ft
UT #M3	Mill Creek	perennial	0 m / 0 ft
<b>Total</b>			<b>304 m / 996 ft</b>

## **VI. BASIS FOR FINDING OF NO SIGNIFICANT IMPACT**

Based upon environmental studies and coordination with appropriate federal, state, and local agencies, it is the finding of the Federal Highway Administration and the North Carolina Department of Transportation that the proposed action will have no significant impact upon the quality of the human environment. Therefore, an environmental impact statement will not be required.

The following persons can be contacted for additional information concerning this proposal and statement:

Mr. Gregory J. Thorpe, Ph..D., Environmental Management Director  
Project Development and Environmental Analysis Branch  
NC Department of Transportation  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548  
(919) 733-3141

John F. Sullivan, III, P.E.  
Division Administrator  
Federal Highway Administration  
310 New Bern Avenue  
Raleigh, North Carolina 27601-1442

JAM

## **APPENDIX**

### **Agency Comments on the Environmental Assessment**

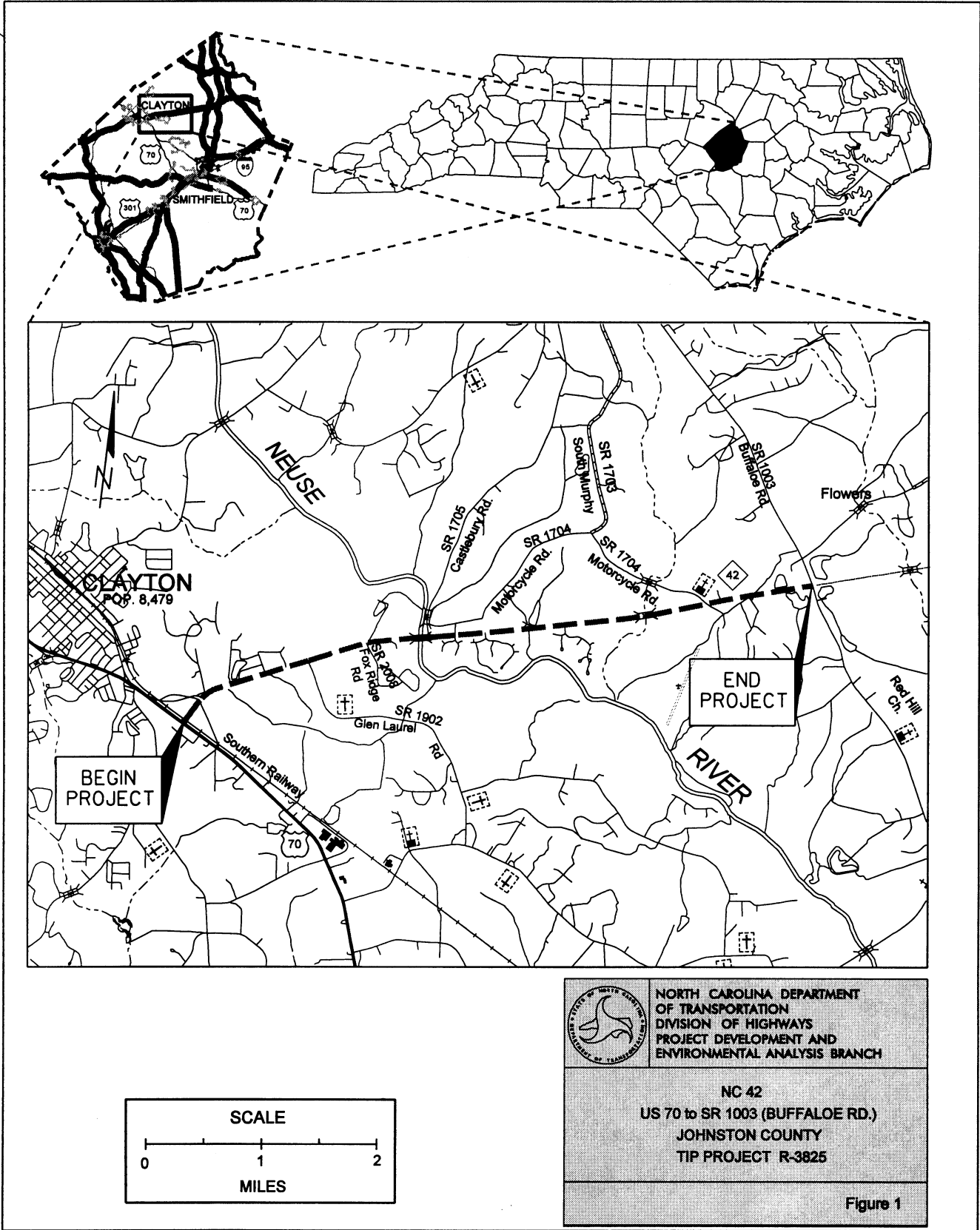
## **APPENDIX**

### **Agency Comments on the Environmental Assessment**

## **APPENDIX**

### **Agency Comments on the Environmental Assessment**

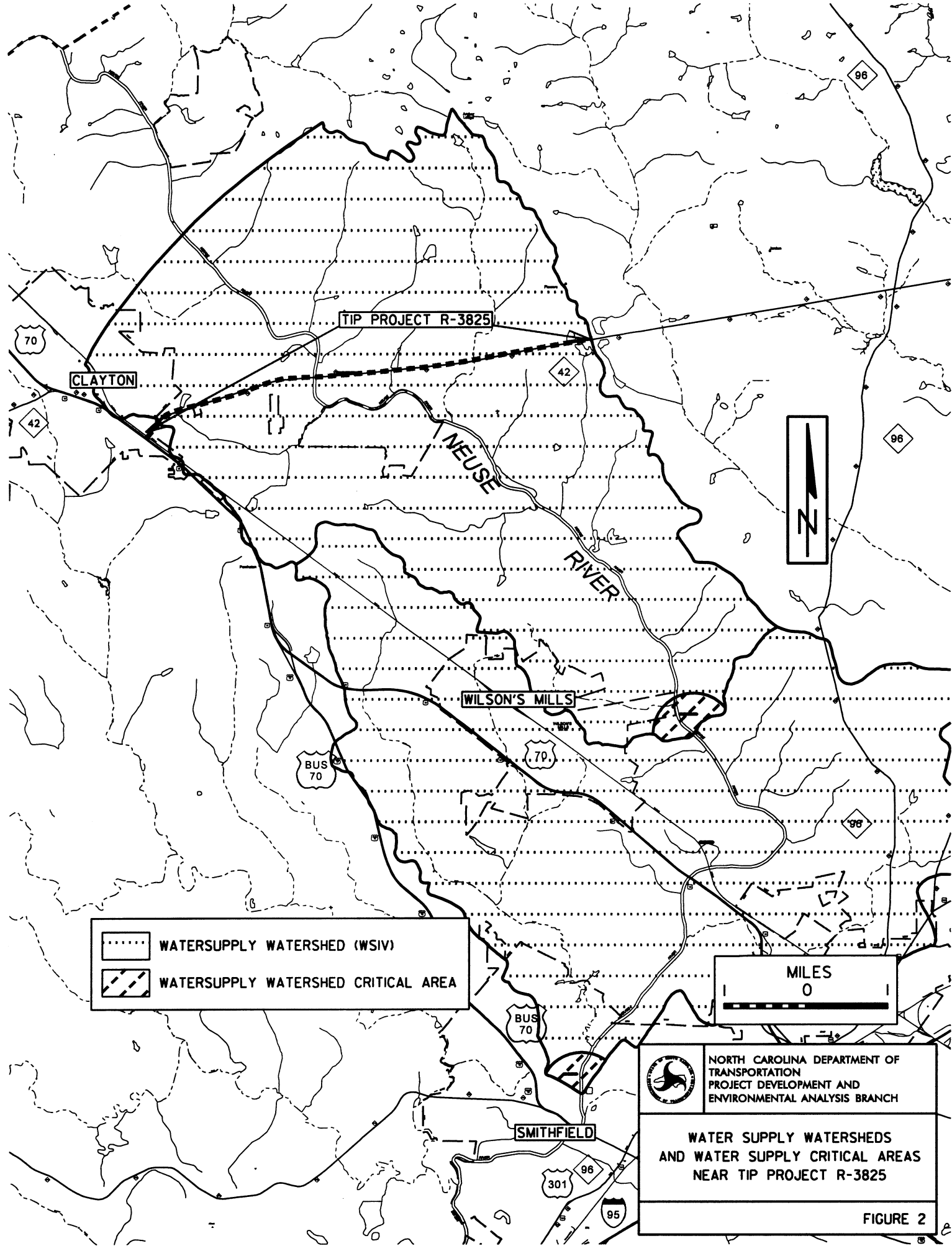




NORTH CAROLINA DEPARTMENT  
 OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 PROJECT DEVELOPMENT AND  
 ENVIRONMENTAL ANALYSIS BRANCH

NC 42  
 US 70 to SR 1003 (BUFFALOE RD.)  
 JOHNSTON COUNTY  
 TIP PROJECT R-3825

Figure 1





TIP PROJECT R-3825


CLAYTON


NEUSE RIVER

WILSON'S MILLS

SMITHFIELD

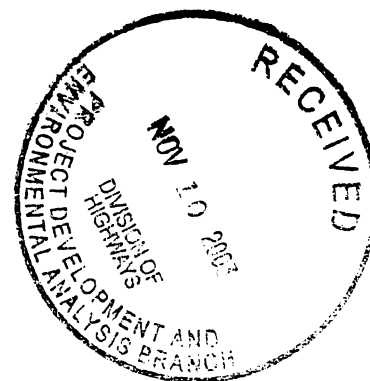
	WATERSUPPLY WATERSHED (WSIV)
	WATERSUPPLY WATERSHED CRITICAL AREA

MILES	
0	
	

	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS BRANCH
	<b>WATER SUPPLY WATERSHEDS AND WATER SUPPLY CRITICAL AREAS NEAR TIP PROJECT R-3825</b>
FIGURE 2	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960



November 4, 2003

Dr. Gregory J. Thorpe, Ph.D.  
Environmental Manager Director, Project Development and Environmental  
Analysis Branch  
N.C. Department of Transportation  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548

**SUBJ: EPA Review of the Federal Environmental Assessment for NC 42  
Improvements from US 70 to SR 1003 (Buffalo Road), Johnston County;  
Federal Aid Project No. STP-42(4), State Project No. 8.1312301, T.I.P.  
Project No. R-3825**

Dear Dr. Thorpe:

Pursuant to Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the referenced North Carolina Department of Transportation (NCDOT) Federal Environmental Assessment (EA) for NC 42 Improvements from US 70 to SR 1003 (Buffalo Road), Johnston County. The EA addresses the No-build alternative, alternative modes of transportation and two widening construction alternatives (Alternatives 1 and 2). The length of the proposed widening alternatives is approximately 5.7 miles. A 4-lane, 17.5-foot raised median with 8-foot shoulder facility is proposed. Alternative 2 is NCDOT's recommended alternative and is different from Alternative 1 in that the roadway is widened to the north between SR 2022 to Woodberry Court.

EPA offers the following comments on the EA.

This project is a non-Merger Team project. However, based upon current Merger process improvement guidance and screening criteria, this project would be a candidate for inclusion in the Merger process. There is no discussion in the EA concerning the coordination and determination of this issue between the U.S. Army Corps of Engineers and NCDOT. The EA addresses the fact that this project will most likely require an Individual Permit (IP) under Section 404 requirements due to potential wetland and stream impacts.

EPA acknowledges that NCDOT and FHWA have streamlined some of the sections of the EA which facilitated EPA's review.

#### ► PURPOSE AND NEED

The EA addresses that the project purpose is to improve safety and traffic carrying capacity of NC 42 within the project limits. Accident rates for non-fatal collisions is slightly above the State-wide average for a similar 2-lane roadway. Fatal collision rates were slightly below the State-wide average. Carrying capacity with the new roadway was primarily measured using Level of Service (LOS) at 5 key signalized intersections. LOS for the year 2006 are estimated to be functioning between LOS C, B, A, C and C for these intersections, respectively (Table 2). For the year 2026, LOS is projected to be E, B, B, C and E. Without the project, the LOS is expected to be E, F, F, F and E, respectively (from Table 1). However, the EA does address other traffic improvements (e.g. Turning lanes) and traffic system management alternatives which would not require widening the entire 5.7 miles of existing roadway.

#### ► ALTERNATIVES

The EA addresses the No-build, Alternative Modes of Transportation and the 2 construction alternatives on pages 8 and 9. However, the EA does not include an analysis of other potential alternatives, including intersection traffic improvements or other typical roadway sections (e.g. 3-lane with center turning lane). Furthermore, the EA identifies a problem involving a railroad crossing along NC 42 just east of US 70. The EA states that a needed grade separation would warrant a major reconstruction of NC 42 and the NC 42/US 70 intersection but that this issue is beyond the scope of the project. Because this intersection is utilized in the LOS analysis and is a termini for the proposed project, EPA does not concur with this finding without further information.

#### ► AFFECTED ENVIRONMENT

\* *Wetlands Impacts* - The recommended alternative for the proposed project will impact approximately 0.71 acres of jurisdictional wetlands. There are approximately 11 wetland systems which will be impacted from the project. However, compensatory mitigation is not proposed to be addressed until final design for the project. EPA recommends that NCDOT begin consultation with USACE and North Carolina Division of Water Quality (DWQ) as soon as possible for mitigation requirements. According to a recent Environmental Enhancement Program (EEP) summary of wetland and stream mitigation needs, the Central Piedmont area is in significant need of mitigation sites for non-riparian wetlands and streams.

\* *Stream Impacts* - The recommended alternative will potentially impact 1,096 linear feet of streams, including the Neuse River (Bridge No. 75 replacement) and unnamed tributaries (UTs) to the Neuse River, and Mill Creek and UTs to Mill Creek. Please see comment above concerning compensatory mitigation requirements.

\* Threatened and Endangered Species - EPA concurs fully with the September 29, 2003, U.S. Fish and Wildlife Service letter to the NCDOT concerning threatened and endangered species. NCDOT needs to adequately address federally protected species including further documentation of biological assessments and survey methodologies.

\* Forest Resources - EPA acknowledges that the recommended alternative will impact approximately 26.4 acres of different forest community types, including the loss of 18.9 acres of Mixed Hardwood forests and terrestrial wildlife habitat.

\* Indirect and Cumulative Impacts - NCDOT does not propose any control of access along the improved facility. The Town of Clayton and Johnston County propose continued development in this area, including predominantly single-family, residential development. There are no identified or proposed 'greenways', 'greenspaces', parks or conservation easements along the transportation corridor or within the project study area. EPA believes that an Indirect and Cumulative Impact (ICI) analysis be performed with regard to increased capacity of the proposed roadway and its relationship to sprawl and future water quality impacts within this watershed sub-basin.

The Merger process improvement guidance addresses the need for NCDOT to identify potential impacts resulting from the relocation of utilities prior to final design and as early in the planning process as possible. The EA identifies that numerous utilities are present in the existing right of way. The EA identifies numerous jurisdictional wetland systems along the NC 42 corridor. NCDOT needs to identify what potential impacts to the human and natural environment will occur as a result of relocating all or some of these utilities (i.e., Fiber optics, sewer, gas, water, cable, electric and telephone) and any additional compensatory mitigation requirements.

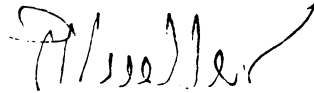
\* Soils Information: The EA does not discuss soils information within the project area. It would be helpful to EPA to identify what percentage of each soil (type) series is located within the proposed right of way.

\* Other impacts - EPA acknowledges the other impacts resulting from the proposed project, including relocations (2 residences, 2 businesses), noise (4 receptors impacted), and construction related impacts. EPA does not recommend burning of vegetative matter generated during clearing and grubbing operations. Burning is EPA's least preferred option, especially considering the close proximity to urban and suburban populations. NCDOT should consider more environmentally-friendly options, such as shredding and mulching and making these recycled materials available to the public.

► **SUMMARY OF ENVIRONMENTAL CONSEQUENCES**

EPA requests some clarification of issues for the proposed project, including consistency with Merger process improvement guidance, soils and compensatory mitigation for wetland and stream impacts. Furthermore, additional environmental analyses are being requested for threatened and endangered species impacts, utility relocation impacts, and for potential indirect and cumulative impacts to water quality. We appreciate the opportunity to comment on this EA. Should you have questions regarding these comments, please feel free to contact Christopher Militscher of my staff at 919-856-4206.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Mueller", with a long, sweeping flourish extending to the right.

Heinz J. Mueller, Chief  
NEPA Program Office  
Office of Policy and Management

cc: J. Thomas, USACE Raleigh



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Raleigh Field Office  
Post Office Box 33726  
Raleigh, North Carolina 27636-3726

June 29, 2006

Phil S. Harris, III, P.E.  
North Carolina Department of Transportation  
Project Development and Environmental Analysis  
1598 Mail Service Center  
Raleigh, North Carolina 27699-1598

Dear Mr. Harris:

This letter is in response to your letter of June 19, 2006 which provided the U.S. Fish and Wildlife Service (Service) with the biological determination of the North Carolina Department of Transportation (NCDOT) that the proposed widening of NC 42 from US 70 to SR 1003 (Buffalo Road), the replacement of Bridge No. 75 over the Neuse River and the extension of the existing NC 42 culvert on Mill Creek in Johnston County (TIP No. R-3825) may affect, but is not likely to adversely affect the federally threatened bald eagle (*Haliaeetus leucocephalus*) and federally endangered dwarf wedgemussel (*Alasmidonta heterodon*). These comments are provided in accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

According to information provided, an eagle survey was conducted within one mile of the project area on April 14, 2006. No eagles or eagle nests were observed. Based on the survey results, the Service concurs with your determination that the proposed project may affect, but is not likely to adversely affect the bald eagle.

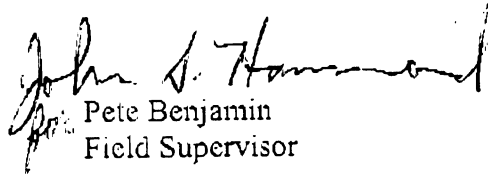
According to information provided, mussel surveys were conducted at the project site on November 19 and 30, 2001; December 7, 2001; August 14, 2002; and November 4, 2005. The 2005 survey extended 100 meters upstream and 400 meters downstream of the Neuse River and Mill Creek crossings. No dwarf wedgemussels were observed in any of the surveys, although several specimens of six other species were observed. Through informal section 7 consultation, NCDOT and the Service have agreed to several conservation measures. These measures are listed in your June 19, 2006 letter. Based on the survey results and NCDOT's commitment to implement these conservation measures, the Service concurs with your determination that the project may affect, but is not likely to adversely affect the dwarf wedgemussel.

As stated in your letter, the Service has previously concurred with your determination that the proposed project will have no effect on the federally endangered Tar River spiny mussel (*Elliptio steinstansana*), red-cockaded woodpecker (*Picoides borealis*) and Michaux's sumac (*Rhus michauxii*). We believe that the requirements of section 7(a)(2) of the ESA have been satisfied.

We remind you that obligations under section 7 consultation must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered in this review; (2) this action is subsequently modified in a manner that was not considered in this review; or (3) a new species is listed or critical habitat determined that may be affected by this identified action.

The Service appreciates the opportunity to review this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520 (Ext. 32).

Sincerely,



Pete Benjamin  
Field Supervisor

cc: William Wescott, USACE, Washington, NC  
Rob Riding, NCDWQ, Raleigh, NC  
Travis Wilson, NCWRC, Creedmoor, NC  
Chris Militscher, USEPA, Raleigh, NC  
John Sullivan, FHWA, Raleigh, NC



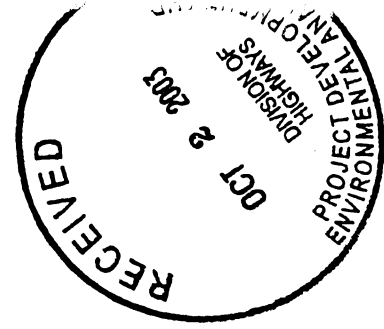


# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Raleigh Field Office  
Post Office Box 33726  
Raleigh, North Carolina 27636-3726

September 29, 2003



Gregory J. Thorpe, Ph.D.  
Project Development and Environmental Analysis  
North Carolina Department of Transportation  
1548 Mail Service Center  
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

This letter is in response to your September 3, 2003 letter requesting comments from the U.S. Fish and Wildlife Service (Service) on the Environmental Assessment (EA) for the proposed widening of NC 42 from US 70 to SR 1003 in Johnston County, North Carolina (TIP No. R-3825). These comments are provided in accordance with provisions of the Fish and Wildlife Coordination Act (16 U.S.C. 661-667d) and section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

According to the EA, the North Carolina Department of Transportation (NCDOT) proposes to widen a 5.7 mile portion of NC 42 from two lanes to four lanes with a 17.5 foot raised median. The existing bridge over the Neuse River will be replaced and two box culverts on smaller streams will be retained and extended. There are two build alternatives, with the preferred alternative (Alternative 2) having the least impacts to wetlands and streams.

The EA states that 1096 linear feet of streams and 0.71 acres of wetlands will be impacted by the preferred alternative. In addition, up to 26.4 acres of forest habitat of various types will be impacted. This is a significant amount of forest habitat impact, but the impacts will be occurring along the edges of already fragmented habitat. It is understood that the ability to avoid impacts to forest wildlife habitat is limited when widening an existing road.

There are four federally-protected species listed for Johnston County. The EA renders a biological conclusion of "no effect" for the red-cockaded woodpecker (*Picoides borealis*), dwarf wedgemussel (*Alasmidonta heterodon*), Tar spiny mussel (*Elliptio steinstansana*) and Michaux's sumac (*Rhus michauxii*). **The Service does not concur with any of the "no effect" conclusions for the following reasons:**

The EA states on page 21 that "potential habitat for the RCW is located within the project study area." A "no effect" conclusion should not be rendered if potential habitat exists. The EA does not give an adequate description of the potential habitat, nor does it differentiate between nesting

and foraging habitat. There is insufficient information on the March 8, 2001 survey. If foraging habitat exists within the project area, a survey for cavity trees should extend out for a 0.5 mile radius from the project site, within suitable habitat.

Since the dwarf wedgemussel is known to occur within the Neuse River Basin and potential habitat exists in the Neuse River and possibly in Mill Creek, the "no effect" conclusion is inappropriate. The EA lacks any details on the mussel survey methodologies. Mussel surveys should extend a minimum of 100 meters upstream and 400 meters downstream of road crossings.

Based on a tentative identification, the Tar spiny mussel was recently collected within the Neuse River Basin in White Oak Creek. Therefore, its presence near the project area cannot be ruled out, and thus the "no effect" conclusion is inappropriate.

The EA states on page 22 that "habitat for Michaux's sumac is present within the project study area." Therefore, the "no effect" conclusion is inappropriate. No details of the survey methodology are provided in the EA.

The Service does not believe that this EA adequately addresses the federally protected species within the project area. Future documentation should reassess the biological conclusions and provide additional details, especially regarding survey methodologies. The Service may be able to concur with a "may affect, not likely to adversely affect" conclusion on some or all of the four listed species in Johnston County, provided that adequate justification and documentation is provided.

The Service appreciates the opportunity to review this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520, ext. 32.

Sincerely,



*for* Garland B. Pardue, Ph.D.  
Ecological Services Supervisor

cc: Mike Bell, USACE, Washington, NC  
David Franklin, Wilmington, NC  
Chris Militscher, USEPA, Raleigh, NC  
Travis Wilson, NCWRC, Creedmore, NC  
John Hennessy, NCDWQ, Raleigh, NC

*Jim Mc Knight*

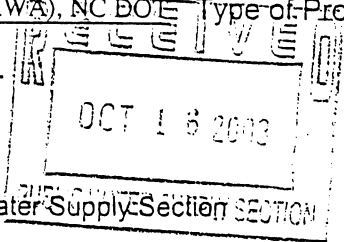
DEPARTMENT OF ENVIRONMENT AND  
NATURAL RESOURCES  
DIVISION OF ENVIRONMENTAL HEALTH

Project Number
04-0064
County
Johnston

Inter-Agency Project Review Response

Project Name Fed. Hwy Admin. (FHWA), NC DOE Type of Project Widen NC 42 to a four-lane shoulder facility with a 5.3 meter raised median from US 70 to SR 1003 (Buffalo Rd)

Comments provided by:



- Regional Program Person
- Regional Engineer for Public Water Supply Section
- Central Office program person

Name: Michael L. Douglas Date: 10/13/03

Telephone number: 919-571-4700

Program within Division of Environmental Health:

- Public Water Supply
- Other, Name of Program: \_\_\_\_\_

Response (check all applicable):

- No objection to project as proposed *(Comments below)*
- No comment
- Insufficient information to complete review

*If water mains are relocated in conjunction w/ the widen of NC Highway, plans must be approved by Technical Services Branch.*

Return to:

Public Water Supply Section  
Environmental Review Coordinator  
for the  
Division of Environmental Health

DEPARTMENT OF ENVIRONMENT AND  
NATURAL RESOURCES  
DIVISION OF ENVIRONMENTAL HEALTH

Project Number
County

Inter-Agency Project Review Response

Project Name Fed Hwy Admin (FHWA) Type of Project Widen NC 42 to a 4 lane shoulder facility from US 70 to SR 2003 (Burlington)  
NC Dept of Transportation

- The applicant should be advised that plans and specifications for all water system improvements must be approved by the Division of Environmental Health prior to the award of a contract or the initiation of construction (as required by 15A NCAC 18C .0300et. seq.). For information, contact the Public Water Supply Section, (919) 733-2321.
- This project will be classified as a non-community public water supply and must comply with state and federal drinking water monitoring requirements. For more information the applicant should contact the Public Water Supply Section, (919) 733-2321.
- If this project is constructed as proposed, we will recommend closure of \_\_\_\_\_ feet of adjacent waters to the harvest of shellfish. For information regarding the shellfish sanitation program, the applicant should contact the Shellfish Sanitation Section at (252) 726-6827.
- The soil disposal area(s) proposed for this project may produce a mosquito breeding problem. For information concerning appropriate mosquito control measures, the applicant should contact the Public Health Pest Management Section at (252) 726-8970.
- The applicant should be advised that prior to the removal or demolition of dilapidated structures, a extensive rodent control program may be necessary in order to prevent the migration of the rodents to adjacent areas. For information concerning rodent control, contact the local health department or the Public Health Pest Management Section at (919) 733-6407.
- The applicant should be advised to contact the local health department regarding their requirements for septic tank installations (as required under 15A NCAC 18A. 1900 et. sep.). For information concerning septic tank and other on-site waste disposal methods, contact the On-Site Wastewater Section at (919) 733-2895.
- The applicant should be advised to contact the local health department regarding the sanitary facilities required for this project.
- If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Environmental Health, Public Water Supply Section, Technical Services Branch, 1634 Mail Service Center, Raleigh, North Carolina 27699-1634, (919) 733-2321.
- For Regional and Central Office comments, see the reverse side of this form.

[Signature]  
Reviewer

PWS/Technical Services  
Section/Branch Branch

10/16/03  
Date

### INTERGOVERNMENTAL REVIEW - PROJECT COMMENTS

After review of this project it has been determined that the DENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of this form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (Statutory Time Limit)
<input type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters.	Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual.	30 days (90 days)
<input type="checkbox"/>	NPDES-permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begin activity. On-site inspection preapplication conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit- whichever is later.	90 - 120 days (N/A)
<input type="checkbox"/>	Water Use Permit	Preapplication technical conference usually necessary	30 days (N/A)
<input type="checkbox"/>	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a well.	7 days (15 days)
<input checked="" type="checkbox"/>	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Preapplication conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/>	Permit to construct & operate Air Pollution Abatement Facilities and/or Emission Sources as per 15 A NCAC (2Q.0100, 2Q.0300, 2H.0600)	N/A	60 days
<input checked="" type="checkbox"/>	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900	N/A	60 days (90 days)
<input checked="" type="checkbox"/>	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 2D.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-733-0820.		
<input type="checkbox"/>	Complex Source Permit required under 15 A NCAC 2D.0800		
<input checked="" type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres to be disturbed. Plan filed with proper Regional Office (Land Quality Section) at least 30 days before beginning activity. A fee of \$40 for the first acre or any part of an acre.		20 days (30 days)
<input type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be addressed with respect to the referenced Local Ordinance.		30 days
<input type="checkbox"/>	Mining Permit	On-site inspection usual. Surety bond filed with DENR. Bond amount varies with type mine and number of acres of affected land. Any acre mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/>	North Carolina Burning permit	On-site inspection by N.C. Division of Forest Resources if permit exceeds 4 days	1 day (N/A)
<input type="checkbox"/>	Special Ground Clearance Burning Permit-22 counties in coastal N.C. with organic soils.	On-site inspection by N.C. Division of Forest Resources required "if more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual burn is planned."	1 day (N/A)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90 - 120 days (N/A)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, certify construction is according to DENR approved plans. May also require permit under mosquito control program, and a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage of the total project cost will be required upon completion.	30 days (60 days)

PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (Statutory Time Limit)
<input type="checkbox"/> Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with DENR running to State of N.C. conditional that any well opened by drill operator shall, upon abandonment, be plugged according to DENR rules and regulations.	10 days (N/A)
<input type="checkbox"/> Geophysical Exploration Permit	Application filed with DENR at least 10 days prior to issue of permit. Application by letter. No standard application form.	10 days (N/A)
<input type="checkbox"/> State Lakes Construction Permit	Application fees based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property.	15 - 20 days (N/A)
<input type="checkbox"/> 401 Water Quality Certification	N/A	55 days (130 days)
<input type="checkbox"/> CAMA Permit for MAJOR development	\$250.00 fee must accompany application	60 days (130 days)
<input type="checkbox"/> CAMA Permit for MINOR development	\$50.00 fee must accompany application	22 days (25 days)
<input type="checkbox"/> Several geodetic monuments are located in or near the project area. If any monument needs to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687 Raleigh, N.C. 27611		
<input checked="" type="checkbox"/> Abandonment of any wells, if required must be in accordance with Title 15A, Subchapter 2C.0100.		
<input type="checkbox"/> Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.		
<input type="checkbox"/> Compliance with 15A NCAC 2H 1000 (Coastal Stormwater Rules) is required.		45 days (N/A)
* Other comments (attach additional pages as necessary, being certain to cite comment authority)		
<p><i>OK LQs: SEDIMENT CONTROL MUST BE DESIGNED TO EFFECTIVELY CONTAIN THE PERIMETER OF THE PROPOSED LAND-DISTURBING ACTIVITY. PROVISIONS MUST BE MADE FOR STABLE STORMWATER CONVEYANCES TO OUTLETS. RIPARIAN BUFFERS MUST BE PROVIDED ON ALL STREAMS IN THE PROJECT AREA.</i></p>		

### REGIONAL OFFICES

Questions regarding these permits should be addressed to the Regional Office marked below.

**Asheville Regional Office**

59 Woodfin Place  
Asheville, N.C. 28801  
(828) 251-6208

**Mooreville Regional Office**

1919 North Main Street  
Mooreville, N.C. 28115  
(704) 663-1699

**Wilmington Regional Office**

127 Cardinal Drive Extension  
Wilmington, N.C. 28405  
(910) 395-3900

**Fayetteville Regional Office**

225 Green Street, Suite 714  
Fayetteville, N.C. 28301  
(910) 486-1541

**Raleigh Regional Office**

3800 Barrett Drive, P.O. Box 27687  
Raleigh, N.C. 27611  
(919) 571-4700

**Winston-Salem Regional Office**

585 Waughtown Street  
Winston-Salem, N.C. 27107  
(336) 771-4600

**Washington Regional Office**

943 Washington Square Mall  
Washington, N.C. 27889  
(252) 946-6481



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

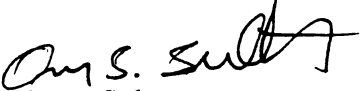
1501 MAIL SERVICE CENTER, RALEIGH, N.C. 27699-1501

LYNDO TIPPETT  
SECRETARY

November 3, 2003

MEMORANDUM

TO: Ray Lofti  
PDEA

FROM:   
Omar Sultan  
Project Management/Scheduling Unit

SUBJECT: SCH File# 04-E-4220-0064; Environmental Assessment/Finding of No Significant Impact; proposed project is to widen NC 42 to a 4-lane shoulder facility 17.5 ft. raised median from US 70 to SR 1003 (Buffalo Rd). TIP# R-3825.

Attached are the comments from the State Clearinghouse Intergovernmental Review Process. These comments have been entered into our records and the attached copy is for your personal records.

Should you have any questions, please do not hesitate to call Omar Sultan at (919) 733-3690 ext. 334.

OS/sp



North Carolina  
Department of Administration

Michael F. Easley, Governor

Gwynn T. Swinson, Secretary

October 29, 2003

Mr. Omar Sultan  
N.C. Dept. of Transportation  
Project Dev. & Env. Analysis Branch  
Transportation Bldg. - 1554 MSC  
Raleigh, NC 27699-1554

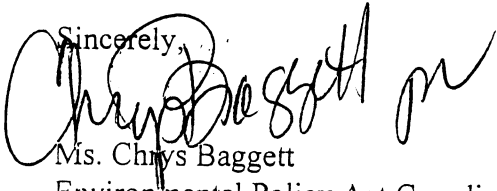
Dear Mr. Sultan:

Re: SCH File # 04-E-4220-0064; Environmental Assessment/Finding of No Significant Impact;  
Proposed project is to widen NC 42 to a 4-lane shoulder facility 17.5ft. raised median from US  
70 to SR 1003 (Buffalo Road). TIP R-3825

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are the comments made by agencies in the course of this review.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,  
  
Ms. Chrys Baggett  
Environmental Policy Act Coordinator

Attachments

cc: Region J

**Mailing Address:**  
1301 Mail Service Center  
Raleigh, NC 27699-1301

**Telephone:** (919)807-2425  
Fax (919)733-9571  
State Courier #51-01-00  
e-mail [Chrys.Baggett@ncmail.net](mailto:Chrys.Baggett@ncmail.net)

**Location Address:**  
116 West Jones Street  
Raleigh, North Carolina





North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary



MEMORANDUM

TO: Chrys Baggett  
State Clearinghouse

FROM: Melba McGee *mcgee*  
Environmental Review Coordinator

RE: 04-0064 EA for the Proposed Improvements to NC 42 in  
Johnston County

DATE: October 23, 2003

The department asks that careful consideration be given to the attached comments. The applicant is encouraged to work directly with our commenting agencies prior to finalizing project plans.

Thank you for the opportunity to respond.

Attachments



October 9, 2003

WETLANDS / 401 GROUP

MEMORANDUM

OCT 15 2003

To: Melba McGee

From: John Hennessy *JH*

WATER QUALITY SECTION

Subject: Comments on the EA for the widening of NC 42 from US 70 to SR 1003 (Buffalo Road) in Johnston County, Federal Aid Project No. STP-42(4), State Project No. 8.1312301, TIP Project No. R-3825, DENR Project Number 04-0064.

This office has reviewed the referenced document. The Division of Water Quality (DWQ) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. It is our understanding that the preferred alternative, as presented in the EA, will result in impacts to 0.71 acres of jurisdictional wetlands and 1,079 linear feet of streams. The DWQ offers the following comments based on review of the aforementioned document:

- A) Table 3, on Page 9 does not present any anticipated impacts to Neuse Riparian Buffers. Future documentation any for a 401 Water Quality Certification, or any application for a Neuse River Riparian Buffer Authorization will need to include proposed impacts to these resources.
- B) Review of Table 3 on page 9 indicates that Alternative 1 has anticipated impacts to 0.82 acres of wetlands and 1,096 linear feet of streams. It also indicates anticipated impacts to 0.71 acres of wetlands and 1,079 linear feet of streams for Alternative 2. Table three identifies Alternative 2 as preferred. However, review of Table 5 indicates 1,096 linear feet of anticipated stream impacts, which would be consistent with Alternative 1. Where as, Table 6 indicates anticipated impacts to 0.71 acres of wetlands, which would be consistent with Alternative 2. Therefore, in reviewing Tables 3, 5, and 6, there appears to be a discrepancy with the presented data. Please clarify information in the FONSI and environmental permit applications.
- C) The section of the Neuse River that project impacts is an anadromous fish spawning area. As such, the 401 Water Quality Certification will conditions that require an in-water work moratorium from February 15<sup>th</sup> through June 15<sup>th</sup>.
- D) The document proposes impacts to waters classified as Water Supply IV. Given the presence of Water Supply Waters in the project area, the DWQ requests that DOT strictly adhere to North Carolina regulations entitled "Design Standards in Sensitive Watersheds" throughout design and construction of the project. This would apply for any area that drains to streams having WS (Water Supply) classifications.
- E) Where are the nearest water supply intake(s) for the to the project located? Please provide information that displays all the municipal water supply intakes in the project area. Given the uncertainty associated with the location of water supply intakes in the area, DWQ cannot support the selection of a preferred alternative until the information is supplied. In addition, issuance of the 401 Water Quality Certification can only occur when the DWQ can make the determination that the project will not adversely impact drinking water supplies.



- F) Until the location of the water supply intakes are verified, the potential for hazardous spill catch basins is present. DWQ will make a determination about the need for hazardous spill basins after the location(s) of water supply intakes is finalized.
- G) The document does not discuss the need for a Neuse River Riparian Buffer Authorization. DOT is advised that final project approvals cannot occur without a submittal for, and a receipt of, a Neuse River Riparian Buffer Authorization.
- H) After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the NCDOT is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands (and streams) to the maximum extent practical. Based on the impacts described in the document, wetland mitigation may be required for this project. Should the impacts to jurisdictional wetlands exceed 1.0 acres, mitigation may be required in accordance with NCDWQ Wetland Rules {15A NCAC 2H.0506 (h)(2)}.
- I) In accordance with the NCDWQ Wetlands Rules {15A NCAC 2H.0506(b)(6)}, mitigation will be required for impacts of greater than 150 linear feet to any single perennial stream. In the event that mitigation is required, the mitigation plan should be designed to replace appropriate lost functions and values. In accordance with the NCDWQ Wetlands Rules {15A NCAC 2H.0506 (h)(3)}, the Wetland Restoration Program may be available for use as stream mitigation.
- J) Where streams must be crossed, the DWQ prefers bridges be used in lieu of culverts. However, we realize that economic considerations often require the use of culverts. Please be advised that culverts should be countersunk to allow unimpeded passage by fish and other aquatic organisms. Moreover, in areas where high quality wetlands or streams are impacted, a bridge may prove preferable. When applicable, DOT should not install the bridge bents in the creek, to the maximum extent practicable.
- K) Sediment and erosion control measures should not be placed in wetlands.
- L) Borrow/waste areas should avoid wetlands to the maximum extent practicable. Impacts to wetlands in borrow/waste areas could precipitate compensatory mitigation.
- M) The 401 Water Quality Certification application will need to specifically address the proposed methods for stormwater management. More specifically, stormwater should not be permitted to discharge directly into the creek. Instead, stormwater should be designed to discharge as diffuse flow at non-erosive velocities.
- N) There should be a discussion on mitigation plans for unavoidable impacts. If mitigation is required, it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. While the NCDWQ realizes that this may not always be practical, it should be noted that for projects requiring mitigation, appropriate mitigation plans will be required in conjunction with the issuance of a 401 Water Quality Certification.
- O) Future documentation should include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.



- P) Based on the information presented in the document, the magnitude of impacts to wetlands and streams will require an Individual Permit application to the Corps of Engineers and corresponding 401 Water Quality Certification. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards are met and no wetland or stream uses are lost. Final permit authorization will require the submittal of a formal application by the NCDOT and written concurrence from the NCDWQ. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable stormwater management plan, and the inclusion of appropriate mitigation plans where appropriate.

The NCDWQ appreciates the opportunity to provide comments on your project. Should you have any questions or require any additional information, please contact John Hennessy at (919) 733-5694.

cc: Eric Alsmeyer, Corps of Engineers  
Gary Jordan, USFWS  
Travis Wilson, NCWRC  
John Hennessy, NCDWQ  
File Copy

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 North Carolina Wildlife Resources Commission 

Charles R. Fullwood, Executive Director

MEMORANDUM

TO: Melba McGee  
Office of Legislative and Intergovernmental Affairs, DENR

FROM: Travis Wilson, Highway Project Coordinator  
Habitat Conservation Program

DATE: October 6, 2003

SUBJECT: North Carolina Department of Transportation (NCDOT) Environmental Assessment (EA) for the proposed improvements to NC 42 in Johnston County, North Carolina. TIP No. R-3825, SCH Project No. 04-0064.



Staff biologists with the N. C. Wildlife Resources Commission have reviewed the subject EA and are familiar with habitat values in the project area. The purpose of this review was to assess project impacts to fish and wildlife resources. Our comments are provided in accordance with certain provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d).

NCDOT proposes to widen NC 42 from two lanes to a four-lane shoulder facility with a 17.5 foot raised median, from US 70 to SR 1003 (Buffalo Rd.). The total project length is approximately 5.7 miles. Estimated impacts consist of 0.71 acres of wetlands and 1096 linear feet of impacts Jurisdictional streams.

We have reviewed the data in the EA. NCDOT has proposed to widen the existing facility and utilize grass shoulders in-lieu-of curb and gutter. This alternative will minimize impacts to wetlands, streams and water quality. The project will cross Mill Creek and the Neuse River. We request NCDOT follow the Stream Crossing Guidelines for Anadromous Fish Passage at both of these sites, with a standard anadromous fish moratorium, February 15 to June 15, at the Mill Creek crossing and the Neuse River crossing. NCDOT should also conduct a mussel survey at all stream crossings prior to construction.

At this time, we concur with the EA for this project. Thank you for the opportunity to comment on this EA. If we can be of any further assistance please call me at (919) 528-9886.

cc: Gary Jordan, U.S. Fish and Wildlife Service, Raleigh  
John Hennessy, DWQ, Raleigh  
Eric Alsmeyer, U.S. Army Corps of Engineers, Raleigh