

**North Carolina Department of Transportation**  
**PROJECT ENVIRONMENTAL CONSULTATION FORM**  
**I. D. No. I-5700**

**I. GENERAL INFORMATION**

- a. Consultation Phase: Construction
- b. Project Description: I-40 and SR 3015 (Airport Boulevard) Revise Interchange and Construct Auxiliary Lane on I-40 Westbound from SR 3015 (Airport Boulevard) to I-540.
- c. State Project: 50118.1.FS1  
Federal Project: NHPP-040-1(259)286
- d. Document Type: CE TYPE III      5/31/2018  
Date

**II. CONCLUSIONS**

The above environmental document has been reevaluated as required by 23 CFR 771. It was determined that the current proposed action is essentially the same as the original proposed action. Proposed changes, if any, are noted below in Section III. It has been determined that anticipated social, economic, and environmental impacts were accurately described in the above referenced document(s) unless noted otherwise herein. Therefore, the original Administration Action remains valid.

**III. CHANGES IN PROPOSED ACTION AND ENVIRONMENTAL CONSEQUENCES**

The improvements to the I-40 Interchange and Airport Boulevard as proposed in the CE Type III involve the conversion of the existing interchange to a diverging diamond interchange. Auxiliary lanes will be constructed on I-40 between the westbound entrance ramp from SR 3015 (Airport Boulevard) and the exit ramp to I-540 and the eastbound entrance ramp from SR 3015 (Airport Boulevard) and the exit ramp to SR 1002 (Aviation Parkway). Improvements also include the relocation of Pleasant Grove Church Road. Additional right of way will be required to accommodate the proposed improvements. Control of access will be adjusted and maintained to accommodate the proposed improvements.

**DESIGN CHANGES**

Since the signing of the CE no substantial changes have occurred.

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**WATER RESOURCES**

Water resources have not changed since the NRTR and CE were completed in 2018.

**FEDERALLY PROTECTED SPECIES**

As of June 27, 2018, the U.S. Fish and Wildlife Service (USFWS) lists seven federally protected species for Wake County and two federally protected species for Durham. Also, the National Marine Fisheries Service (NMFS) list one protected species. Table 3 provides information for each species specific to the study area. Habitat requirements for each species are based on the current best available information as per referenced literature and USFWS and NMFS.

**Table 3. Federally protected species listed for Wake and Durham Counties.**

Scientific Name	Common Name	Federal Status	Habitat Present	County	Biological Conclusion
<i>Acipenser oxyrinchus oxyrinchus</i>	Atlantic sturgeon*	E	No	Wake	No Effect
<i>Alasmidonta heterodon</i>	Dwarf wedgemussel	E	Yes	Durham/ Wake	MANLAA
<i>Echinacea laevigata</i>	Smooth coneflower	E	No	Durham	No Effect
<i>Elliptio lanceolata</i>	Yellow lance	T	Yes	Wake	MANLAA
<i>Notropis mekistocholas</i>	Cape Fear Shiner	E	No	Wake	No Effect
<i>Parvaspina steinstansana</i>	Tar River spinymussel	E	No	Wake	No Effect
<i>Picoides borealis</i>	Red-cockaded woodpecker	E	Yes	Wake	No Effect
<i>Rhus michauxii</i>	Michaux's sumac	E	Yes	Durham / Wake	No Effect

E – Endangered; T –Threatened; \* – species listed by NMFS only, MANLAA – May Affect Not Likely to Adversely Affect

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**Dwarf wedgemussel Biological Conclusion:** May Affect Not Likely to Adversely Affect

**Yellow lance Biological Conclusion:** May Affect Not Likely to Adversely Affect

**Tar River spiny mussel Biological Conclusion:** No Effect

Based on the July 11, 2018 Aquatic Species Survey Report results, impacts to the Dwarf wedgemussel, Yellow Lance, and Tar River spiny mussel are unlikely to occur in the study area. The closest extant populations of the Dwarf wedgemussel and Yellow lance are in Swift Creek, greater than 50 miles downstream of the project area. These populations are not expected to be affected by the project action. Based on the survey results on not finding any Dwarf wedgemussel or Yellow lance, it is very unlikely that these two species are present within the action area streams; however, suitable habitat is present; thus, their presence cannot be completely discounted. The Tar River spiny mussel is not known in this portion of the Neuse River Basin and is not found in the USFWS Environmental Conservation Online System (ECOS) range by basin area as of March 15, 2019 for this project. A review of NCNHP records, updated January 2, 2019, indicated no known occurrences. Biological conclusions on potential impacts from the project to the target species are provided above.

**Cape Fear shiner Biological Conclusion:** No Effect

While the Cape Fear Shiner is listed for Wake County, the species is not known to occur in the Neuse River basin. A review of NCNHP records, updated January 2, 2019, was performed. Also, the Cape Fear shiner was not found in the USFWS ECOS range by basin area as of March 15, 2019.

**Red-cockaded woodpecker Biological Conclusion:** No Effect

Suitable forage (Pine/Hardwood Mid-Successional) habitat for the red-cockaded woodpecker was found within the study area. Upon establishment of suitable habitat within the study area, historical aerial imagery was used to identify potential suitable nesting habitat within 0.5 mile of the study area habitat. All potential nesting habitat was field assessed to determine suitability, including tree age and stand composition. Potential nesting habitat is present within 0.5 mile of the study area habitat. Field surveys were conducted in all identified potential nesting habitat within the study area and a 0.5-mile radius of study area on November 13 and 17, 2017. No red-cockaded woodpeckers or nesting trees were found. A review of NCNHP data, updated January 2, 2019, indicated no known RCW occurrence within 1.0 mile of the study area.

**Michaux's Sumac Biological Conclusion:** No Effect

Suitable habitat for Michaux's sumac is present in the study area along roadside shoulders and utility rights of way. Surveys of potential habitat were conducted on July 21, 2016. No individuals of Michaux's sumac were observed. A review of NCNHP records, updated January 2, 2019, indicated no known occurrences within 1.0 mile of the study area.

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**Smooth coneflower Biological Conclusion:** No Effect

Suitable habitat for smooth coneflower is not present in the study area. Areas along road shoulders within Durham County, which consists of only 0.03 acre, are maintained regularly to the edge of surrounding forested areas. A review of NCNHP records, updated January 2, 2019, indicated no known occurrences within 1.0 mile of the study area.

**Atlantic sturgeon Biological Conclusion:** No Effect

On August 17, 2017 the National Marine Fisheries Service (NMFS) designated critical habitat (DCH) for Atlantic Sturgeon in the Neuse River (Carolina Unit 3), which includes a portion of the river in Wake County and the entire river in Johnston County. NCDOT project I-5700 is located within Wake County. The project does not cross the Neuse River and is approximately 13 miles from DCH. As of March 15, 2019, NCNHP database revealed no populations of Atlantic Sturgeon within Wake County. Therefore, a biological conclusion of No Effect is given for the Atlantic Sturgeon for this project. The NCDOT has also determined that I-5700 will have no effect on DCH based on the absence of critical habitat in the project area and being approximately 13 miles away from DCH.

**Northern long-eared bat Biological Conclusion:** May Affect, Likely to Adversely Affect

The NCDOT recognizes the Northern long-eared bat (NLEB) programmatic biological opinion between the US Fish and Wildlife Service, Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT in eastern North Carolina. The programmatic determination for NLEB for the NCDOT program is “May Affect, Likely to Adversely Affect”. The PBO provides incidental take coverage for NLEB and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Wake and Durham Counties

**IV. LIST OF ENVIRONMENTAL COMMITMENTS**

NCDOT will implement all practical measures and procedures to minimize and avoid environmental impacts.

See attached Project Commitments sheet.

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**V. COORDINATION**

PMU personnel have discussed current project proposals with others. Please note who was coordinated with and the date. This section is to be filled out by the project manager and does not require signatures.

Design Engineer:	<u>Bob A. May, PE</u>	<u>8/15/2019</u> Date
FHWA Engineer:	<u>Joseph Geigle, P.E.</u>	<u>9/3/2019</u> Date
NEU-PM:	<u>Deanna Riffey</u>	<u>3/19/2019</u> Date

**VI. NCDOT CONCURRENCE**

<div>DocuSigned by: <i>Allison White</i> 727044FC17FE404...</div> <div>_____ Allison K. White Senior Project Manager</div>	<u>9/9/2019</u> Date
<div>DocuSigned by: <i>Pamela R. Williams</i> 48B1AAF4334B463...</div> <div>_____ Pamela R. Williams Team Lead Project Management Unit</div>	<u>9/11/2019</u> Date

**VII. FHWA CONCURRENCE**

<div>DocuSigned by: <i>Joseph P Geigle</i> 6AEDC65DA9E14C7...</div> <div>_____ Joseph Geigle, P.E. Federal Highway Administration Division Administrator</div>	<u>9/9/2019</u> Date
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**PROJECT COMMITMENTS**

Wake County  
Improvements to I-40 at the Interchange with SR 3015 (Airport Boulevard)  
Federal Project No. NHPP-040-1(259)286  
WBS No. 50118.1.FS1  
**TIP No. I-5700**

**Hydraulics Unit**

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP) to determine status of project with regard to applicability of NCDOT's Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

*This commitment is being addressed. A CLOMR is needed for Brier Creek.*

**Division 5**

The Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

*This is a standard project commitment.*

**Biological Surveys Group**

The NCDOT Biological Surveys Group will perform screening for potential habitat for the dwarf wedgemussel and the yellow lance mussel.

*This survey was completed before the CE and is a No Effect. See Biological Conclusion in signed CE.*

**Environmental Coordination and Permitting Group**

The proposed project will require a permit from the US Army Corps of Engineers for Section 404 wetland and stream impacts, but it is not yet determined whether the permit would be an Individual Permit, Nationwide Permit or General Permit. The USACE holds the final discretion as to what type of permit will be required to authorize project construction. If an Individual Section 404 permit is required, then a Section 401 Water Quality Certification (WQC) from the NCDWR would be needed.

*This section is standard practice.*

**Mitigation and Modeling Group**

Streamside riparian zones within the study area are protected under provisions of the Neuse River Buffer Rules administered by the North Carolina Division of Wildlife Resources (NCDWR). Potential impacts to protected stream buffers will be determined once the final design has been prepared. *This section is standard practice.*