

PROJECT COMMITMENTS

US 70, Havelock Bypass
Craven County
Federal Aid Project No. NHF-70(49)
WBS No. 34360
STIP ID No. R-1015

The following Project Commitments are either updated or newly-added since distribution of the ROD. Any clarifying or status comments are indicated by text in *italics*.

Project Development and Environmental Analysis Unit (PDEA)

1. After the selection of the Least Environmentally Damaging Practicable Alternative (LEDPA), NCDOT will refine the preliminary design for the selected alternative and complete a Biological Assessment (BA) concerning the red-cockaded woodpecker (RCW). The BA will be submitted to the USFWS to initiate formal consultation regarding Section 7 of the Endangered Species Act. The USFWS may request additional information and/or subsequent surveys to amend the BA before issuing their Biological Opinion (BO) to conclude formal consultation under Section 7. If an Incidental Take occurs, the USFWS will also issue an initial take statement, indicating terms and conditions, and/or reasonable and prudent measures it believes necessary to minimize the impacts to RCWs. Any such terms and conditions, and/or reasonable and prudent measures to minimize impacts to RCWs will be included in the Record of Decision (ROD).

An RCW assessment was performed, in conjunction with a NCDOT/USFS agreement of a Prescribed Burning Plan that would benefit RCW habitat. In addition, the highway footprint was reduced to less than 200-feet for 1.04 mile in the area of RCW habitat. As a result, USFWS determined that a formal consultation was not necessary. Appropriate coordination ensued with USFWS in accordance with Section 7 of the Endangered Species Act, and the USFWS concurred with the biological conclusions of "May Affect, Not Likely to Adversely Affect" for the red-cockaded woodpecker and rough-leaved loosestrife and that the project would have "No Effect" on any other federally-listed Endangered, Threatened, or Proposed plant species.

A Red Cockaded Woodpecker (RCW) foraging habitat analysis was completed in October 2018 and concluded that there were no additional conflicts with the RCW outside the original Biological Assessment/Biological Opinion. In a letter dated October 10, 2018 the USFWS re-affirmed that the biological conclusion of "May Affect, Not Likely to Adversely Affect" for the red-cockaded woodpecker is still valid.

2. Prior to construction, NCDOT will coordinate with the U. S. Forest Service (USFS) to collect spring flowering goldenrod seeds from areas to be affected by the project and distribute them in an area of the Croatan National Forest (CNF) where there is appropriate habitat, but the species does not currently occur, in coordination with the USFS.

Seed collection began in 2010 and will continue up to construction. Mitigation will include planting seeds and/or plugs as well as monitoring for successful survival. Planting failures will be replanted until USFS and NCDOT staff concur that further plantings would not be beneficial. Additional details will be finalized as part of ongoing coordination with the USFS.

3. NCDOT will collect seed from existing Leconte's thistle populations and coordinate with the USFS to develop a seed increase bed for augmentation in occupied or previously occupied habitat.

Seed collection began in 2013 and continued through 2016. Mitigation will include monitoring for success and will be accomplished by NCDOT growing plugs from collected seeds then planting at locations identified by the USFS. Mitigation will also include monitoring for successful survival. Planting failures will be replanted until USFS and NCDOT staff concur that further plantings would not be beneficial. Additional details will be finalized as part of ongoing coordination with the USFS. This commitment was implemented prior to Right of Way.

4. NCDOT will collect seed from existing awned mountain mint populations and coordinate with the USFS to identify sites to seed to establish new populations.

Seed collection began in 2014 and will continue up to construction. Mitigation will be through planting seeds at locations identified by the USFS.

5. A revised Memorandum of Understanding (MOU) between the Federal Highway Administration (FHWA), NCDOT, USACE, and USFS regarding the Croatan Wetland Mitigation Bank (CWMB) is in progress. The current MOU in effect (March 2003) is included in the ROD.
6. NCDOT will continue to coordinate appropriately with USFWS to determine if the project has the potential to affect the proposed-listed Endangered Northern long-eared bat (*Myotis septentrionalis*) and how to address these potential effects, if necessary.

Complete. The US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration (FHWA), the US Army Corps of Engineers (USACE), and NCDOT for the northern long-eared bat (NLEB) in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. 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 Craven and Carteret Counties, where project R-1015 is located.

7. Prior to construction, NCDOT will coordinate with the USFS to identify USFS Rare Plant Species on NFS lands occurring near the project's construction limits, including the powerline corridor area, and will install high visibility protective fencing to be removed after completion of construction.
8. During final design, NCDOT will coordinate with the USFS on the location of any staging areas on NFS lands to avoid impacts to USFS Rare Plant Species. Where practicable, NCDOT will require contractors to place staging areas 250 feet away from USFS Rare Plant Species occurrences. To avoid unintentional impacts to USFS Rare Plant Species within powerline corridors on NFS lands, specifications will prohibit the contractor from placing heavy equipment outside the project's construction limits without prior approval from the USFS.

PDEA Human Environment Section, Archaeology Group

Archaeological Site 31CV302 is approximately 300 feet away from the project limits and for added protection of the site during construction, the NCDOT will:

1. Before final design is completed, Roadway Design will verify that Site 31CV302 is avoided by any right-of-way or easement. If final design plans change, thereby causing R-1015 FEIS Sheet 3 of 7 July 2016 an adverse impact to the site, then Roadway Design will immediately notify the PDEA project manager and the NCDOT Archaeologist to initiate additional coordination to comply with historic preservation laws.
2. Final design plans identify the installation of high-visibility fencing around Site 31CV302, which is to be labeled as: "PROTECTED AREA." Final design plans will indicate the fence boundary and also provide an adjacent table of Northing and Easting coordinates. Project specifications should indicate that high-visibility fencing will be installed along the site boundary, prior to any clearing and grubbing operations. The contractor must precoordinate with NCDOT Archaeology (tel. 919-707-6000) so that an archaeologist field verifies fence location or is on-site when the fence is installed. The fence will be maintained for the construction duration and will be removed by the HES Archaeology Group only just before final project inspection. No construction equipment or personnel shall enter the fenced area.

Roadway Design & PDEA & Structures Management Unit

1. The Preferred Alternative includes a grade-separated crossing of the Camp Lejeune Railroad on NFS lands (operated by the Norfolk Southern Corporation). Final design will be developed to provide a 23 foot vertical clearance and adequate horizontal clearances; however, should the railroad desire additional clearances, NCDOT will coordinate with the USFS, US Government, and Norfolk-Southern regarding the review of the final design plans for this crossing.

Right-of-Way Unit & Location and Surveys & Roadway Design & Construction

1. NCDOT will pay the USFS, or their approved contractor, to measure to USFS specifications, the volume of timber on NFS lands within the proposed right-of-way limits. NCDOT will then pay the USFS for the measured timber volume at which time the timber will become property of the NCDOT. The USFS and NCDOT will agree on the precise monetary value of the timber through appraisal at rates effective at the time of the timber sale contract.

2. No borrow or disposal sites related to this project are to be located on NFS lands without express written permission from the USFS and completion of all required environmental studies.
3. Before construction, a preconstruction conference will be held involving the contractor, pertinent local officials, the U.S. Forest Service, and NCDOT Division of Highways to discuss various construction procedures, including precautionary steps to be taken during construction that will minimize the interruption of public utility and traffic services.

Utilities & Right-of-Way Unit

1. NCDOT will coordinate with the USFS if previously undisclosed utilities are encountered during the right-of-way acquisition and construction phases of the project.

Roadway Design & Hydraulics Unit & PDEA & Construction & Division 2

1. *As agreed upon by the NEPA/404 Merger Team [Concurrence Meeting for Corridor Selection (Concurrence Point 3 Revisited) Meeting Summary, 10/23/2012], the East Prong of Slocum Creek will be crossed with a minimum 1,620-foot bridge. The Tucker Creek tributary will be crossed with a double 10-foot by 8-foot reinforced concrete box culvert that is 400 feet in length perpendicular to the proposed roadway. The Southwest Prong of Slocum Creek will be crossed with a minimum 945-foot bridge. Existing triple R-1015 FEIS Sheet 4 of 7 July 2016 9-foot by 7-foot reinforced concrete box culvert on Tucker Creek will be extended approximately 25 feet upstream and 78 feet downstream with a triple 9-foot by 7-foot reinforced concrete box culvert. Temporary work bridges will be required to construct the proposed bridge structures, which will be addressed in the Permit Application Package.*
2. In order to minimize the fragmentation of red-cockaded woodpecker (RCW) habitat, plan sheets will show that the right-of-way limits (and clearing limits) do not exceed 200-feet wide for the 5,500-foot (1.04-mile) section from Station 338+00 to Station 393+00. In addition, and to avoid clearing trees outside the 200-foot limits, only hand clearing will occur at the edge of the right-of-way limits of this section.
3. Project special provisions should indicate an in-water work moratorium for February 15 to June 15 for East Prong Slocum Creek, Southwest Prong Slocum Creek, and Tucker Creek at the proposed extension of the existing culvert at US 70. The unnamed tributaries within the project study alignments are not considered anadromous fish habitat and are not subject to anadromous fish moratoria. Design of these structures will adhere to Stream Crossing Guidelines for Anadromous Fish Passage (NCDOT, 2012).
4. "NCDOT will coordinate with the NEPA/404 Merger Team at Concurrence Point 4C to identify additional measures that would avoid, minimize, or otherwise mitigate direct and indirect project impacts to important groundwater resources within the project study area."

Completed. Concurrence Point 4C meeting held April 26, 2018.

Roadside Environmental Unit & Roadway Design

1. NCDOT will continue to coordinate with the USFS to address landscaping, fencing, and access needs on NFS lands.
 - Detailed plans for these design elements will be included in the ROD.
 - The Landscaping Plan will, among other normal aspects, detail appropriate native seeding mixes for erosion control and site-specific control methods for nonnative invasive species (NNIS), including a suite of acceptable herbicides for the corridor and adjacent natural habitats.
 - The Landscaping Plan will also outline a plan for ongoing coordination between NCDOT and USFS personnel to maintain vegetation diversity and ensure no long-term impacts to rare species along the bypass corridor.
2. NCDOT will utilize a natural fiber mesh or weed-free mulch for erosion control and revegetation on NFS lands. If erosion becomes problematic in any area postconstruction, turfgrass may have to be judiciously utilized to limit soil disturbance.
3. No borrow or disposal sites related to this project are to be located on NFS lands without express written permission from the USFS and completion of all required environmental reviews. Contractors will coordinate with regulatory and resource agencies during the final permitting stage to ensure that other areas of non-disturbance (i.e., borrow pits, temporary access roads, staging areas, etc.) are set to minimize impacts to natural and cultural resources.

Roadside Environmental Unit & Division 2

1. *Management of Non-Native Invasive Species (NNIS): NCDOT will work within adjacent NCDOT right-of-way to prevent the encroachment of NNIS onto NFS lands and commits to the following measures:*
 - *Native vegetation will be retained as much as possible. Exposed soils would be promptly revegetated to avoid re-colonization by NNIS or potential soil erosion. Only approved seed mixtures and weed seed-free mulch would be*

used. In consultation with the USFS, NCDOT will use seed mixes of native grasses and forbs or other non-native, non-invasive species on NFS lands for erosion control and revegetation.

- To prevent the spread of NNIS on NFS lands, NCDOT will require contractors to pressure wash all off-road equipment, including cranes, graders, pavers, excavators, and loaders, prior to being brought into the CNF construction areas. Equipment would be cleaned thoroughly before moving from treatment sites to ensure that seeds or other propagules are not transported to other sites.
- To control the spread of NNIS on NFS lands, NCDOT, in coordination with the USFS, will locate and flag areas of targeted NNIS. If any of these areas are within areas of proposed fill, those areas will be cleared and grubbed, and the material disposed of outside the limits of the CNF. If NNIS are located in areas of proposed cuts, then the material and actual thickness of root mat or other defined amount will be disposed of outside the limits of the CNF.
- Use of mowing as a control method for NNIS should be timed to avoid spreading seeds (e.g. before seed set) to the extent possible.
- Herbicide Treatments:
 - NCDOT will only use herbicides in specific areas on National Forest System lands in consultation with the USFS. All guidelines and mitigation measures presented in Forest Manual 2150, Pesticide-Use Management and Coordination, and Forest Service Handbook 2109.14, Pesticide Use Management and Coordination Handbook would be followed. If any new herbicides come onto the market, NCDOT will coordinate with USFS before using on NFS lands.
 - NCDOT will contact the USFS for non-routine maintenance and use of herbicides on NFS lands.
 - Prior to treatment, proposed actions will be reviewed by forest resource specialists in the areas of wildlife biology, botany, aquatics, soils, recreation, and heritage resources.
 - NCDOT will not use broadcast sprays for herbicides and pesticides on NFS lands. Herbicides and pesticides will only be used in specific areas on National Forest System lands in consultation with the USFS. In addition, NCDOT will coordinate with the USFS on any mechanical methods that would be allowed.
 - Along stream edges and banks, wide-angle cone tip nozzle guards will be used on the end of herbicide applicator wands. All herbicides will be sprayed away from any water in ephemeral and perennial streams, vernal pools, or lakes.

Aquatic-labeled herbicides will be used when within 150 feet of any live water. Only surfactants/adjuvants with low toxicity to aquatic species, such as Agri-dex, will be used in these areas.

– When conducting chemical control of targeted NNIS within 10 feet of any identified USFS Rare Plant Species populations, the following guidelines apply:

- All the rare plant species occurrences would be flagged or marked prior to treatment to avoid any off-target effects.
 - No chemical treatment will occur within 1 foot of the rare plant.
 - Prior to applying herbicide within 1-10 feet of these plants cover the rare plants or place an appropriate barrier adjacent to them.
 - For vining species, pull the vines outside one foot of adjacent rare plants.
 - For larger woody stems, diameters 1 inch or greater, apply herbicide to cut stem surfaces. Apply herbicides to the cut stems with a small wick applicator if possible or with a small spray bottle to minimize drift.
 - For smaller woody NNIS stems, if broadcast treatment is the only feasible treatment, cut the stems and only treat after re-sprouting from 6-inches to 1 foot in height.
 - While spraying the re-sprouting foliage, place a barrier (such as an appropriately sized cardboard sheet) next to the rare plant species or cover the rare plant species with an appropriate container.
 - NCDOT will post “No Treatment” signs at rare plant sites along the roadway.
- When conducting mechanical control by hand, NNIS capable of starting new plants (seeds, rhizomes, root mats, etc.) require proper disposal outside the limits of the CNF. Plants should be bagged and moved off site. Bagged plants will receive standard garbage disposal. For large woody bushes that would be difficult to move, treatments will be scheduled prior to seed set as practical. NCDOT will coordinate with the USFS on any mechanical methods that would be allowed for NNIS.
 - NCDOT commits to treating roadside NNIS in the CWMB prior to turning over the site to USFS. An initial treatment, followed by a second spot application, will address NNIS growing along or adjacent to the existing roads within the CWMB and will cover species on the USFS list of NNIS.
 - NCDOT Division 2 will work with USFS staff on a periodic basis to control the presence of priority NNIS along the NCDOT right-of-way on NFS lands. In turn, USFS will work cooperatively with NCDOT to identify and effectively control prioritized NNIS. The current list of prioritized NNIS species is below; it is subject to change as new plant threats are identified.

- *Lespedeza cuneata*, *Sericea Lespedeza*
 - *Lespedeza bicolor*, *Bicolor Lespedeza*
 - *Albizia julibrissin*, *Mimosa*
 - *Ligustrum sinense*, *Privet*
 - *Rosa multiflora*, *Multiflora Rose*
 - *Ailanthus altissima*, *Tree-of-Heaven*
 - *Miscanthus sinensis*, *Chinese Silver Grass*
 - *Lonicera maackii* or *morrowii*, *Amur or Morrow's Honeysuckle*
 - *Lonicera japonica*, *Japanese Honeysuckle*
 - *Sorghum halepense*, *Johnson Grass*
 - *Arthraxon hispidus*, *Basket Grass*
 - *Elaeagnus umbellata*, *Autumn Olive*
 - *Pueraria montana* var. *lobata*, *Kudzu*
 - *Hedera helix* var. *helix*, *English Ivy*
 - *Vinca minor*, *Periwinkle*
 - *Kummerowia striata*, *Japanese-clover*
 - *Youngia japonica*, *Asiatic Hawk's-beard*
 - *Wisteria sinensis*, *Chinese Wisteria*
 - *Verbena brasiliensis*, *Brazilian vervain*
 - *Imperata cylindrica*, *Cogongrass*
 - *Persicaria perfoliata*, *Mile-a-minute*
 - *Cayratia japonica*, *Bushkiller*
 - *Pyrus calleryana*, *Bradford Pear*
 - *Solanum viarum*, *Tropical Soda Apple*
 - *Centaurea stoebe* ssp. *micranthos*, *Spotted Knapweed*
 - *Commelina communis*, *Common Dayflower*
 - *Baccharis hamimifolia*, *Eastern baccharis**
- * Native but considered invasive

Geotechnical Engineering Unit

1. If excavation work is required at the Craven County Waste Transfer Site, NCDOT will collect and analyze background soil samples to confirm the presence or absence of soil impact from arsenic, in accordance with NCDOT Policy on hazardous materials.

Hydraulics Unit

1. The NCDOT Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine the status of the 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).

Completed. An MOA was signed with the NCFMP on November 26th, 2018. No further action required.

Hydraulics Unit & Construction & Division 2

1. As this project involves construction activities on or adjacent to FEMA-regulated streams, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon the completion of project construction, certifying that the drainage structures and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.
2. Fueling or oiling of mechanical equipment would occur away from aquatic habitats.

Division 2

1. NCDOT Division 2 staff will coordinate in future years with the USFS to allow for prescribed burns on NFS lands during construction and in the future, as detailed in Appendix A of this FEIS. Details of the prescribed burn plan will also be documented in the ROD.

Completed. On June 27, 2016 the Secretary of Transportation Nicholas Tennyson signed a letter committing to closing the Havelock Bypass during prescribed burns. On July 25, 2016 the USFS responded with a letter agreeing to prepare Prescribed Burn Plans for the area in accordance with USFS regulations and to provide advanced notice to the public and to NCDOT prior to any closure requests.