

# Complete 540 Settlement Agreement

NCTA Board of Directors

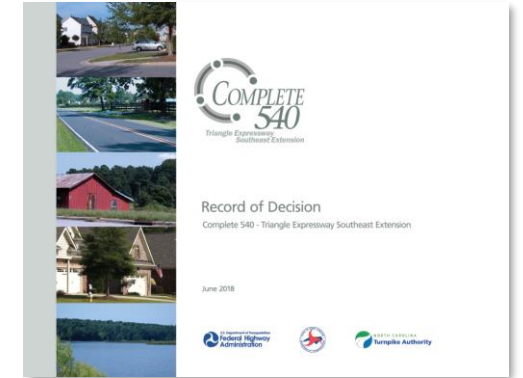
November 15, 2021

Rodger Rochelle, P.E.



# Complete 540 Legal Challenges

- Federal lawsuit filed in May 2018
  - Challenging National Environmental Policy Act (NEPA) approvals
  - Challenging Section 7 of Endangered Species Act approvals
    - US Fish and Wildlife Service
    - National Marine Fisheries Service
- Challenge filed with the North Carolina Office of Administrative Hearings in April 2019
  - Challenging Section 401 Water Quality Certification issued in February 2019



Dwarf Wedgemussel



Atlantic Pigtoe



Carolina Madtom



Atlantic Sturgeon



Neuse River Waterdog



Yellow Lance

# Settlement Agreement

# Complete 540

## Settlement Agreement

- Settlement agreement executed August 22, 2019
- All claims against all parties dismissed
  - Federal court
  - NC Office of Administrative Hearings
- Enacts protections for clean air, clean water and endangered aquatic species
- Eliminates costs associated with ongoing litigation, interest rate risk, and project delays
- Allowed Phase 1 of Complete 540 to move forward to construction
- Includes covenants not to sue on other Phase 1 approvals and Phase 2

# Land Acquisition

Items 1-3

# Support Wake County Open Space Program

## Settlement Agreement Item #1

Commitment Lead: Turnpike Authority (Rodger Rochelle, David Roy)

Funding Source: Phase 1 Project Funds

- Commit to support Wake County's goal of 30% open space by matching 25 cents per dollar that Wake County spends through its Open Space Program
  - Wake County Public Open Space Preservation Program Policy dated February 18, 2008
  - Funding commitment is for four years of program (2020, 2021, 2022, 2023)
- Status
  - Agreement #9060 with Wake County executed in May 2020
  - Turnpike provided funding to Wake County in February 2021 (\$5M) based on their expected investment of \$20M over the four-year period
  - Provided all funding up front so Wake County could leverage funds to pursue more properties and pursue them at a more rapid pace
- Future Activity
  - Turnpike and Wake County to "settle up" at the end of the four-year period (December 31, 2023) based on actual expenditures

# High Quality Land Acquisition

## Settlement Agreement Item #2

Commitment Lead: NCDOT (Leilani Paugh) and Turnpike Authority (Rodger Rochelle, David Roy)

Funding Source: Phase 1 Project Funds

- Expend \$5M on high quality land acquisition to provide benefit for certain aquatic species within prioritized aquatic habitats
- Ensure lands' preservation in perpetuity through mutually agreed upon preservation method
- Status
  - SELC and stakeholders agreed to satisfy the entirety of the \$5M acquisition through a proposal from the Tar River Land Conservancy (TRLC)
  - Agreement #9770 with TRLC executed in May 2021
  - Turnpike provided funding to TRLC in June 2021 (\$5M)
  - Proposal includes TRLC Stewardship Endowment
- Future Activities
  - TRLC to use best efforts to expend funds by December 31, 2022
  - TRLC reports on progress – quarterly and annually
  - NCDOT to provide status updates to SELC
  - TRLC to provide copies of deeds, survey plats and other real estate instruments associated with each closing

# Preservation of Remnant Property

Settlement Agreement Item #3

Commitment Lead: Turnpike Authority (Dennis Jernigan)

Funding Source: Phase 1 Project Funds

- After completion of Complete 540 Phase 1, preserve in an undeveloped state 50% by acre of all remnant property acquired for these projects
- Status
  - Not yet started; to begin when construction is complete/nearly complete
- Future Activities
  - Inventory and identify remnant property within 12 months of completion of projects
  - Develop recommendations for retention of properties
  - Confirm retention parcels with SELC and Plaintiffs
  - Transfer ownership to NCWRC or determine other preservation method mutually agreed upon by NCDOT, SELC and Plaintiffs



# Stream Protection/Mitigation/Stormwater

Items 4-9

# Additional Stream Mitigation

## Settlement Agreement Item #4

Commitment Lead: NCDOT (Leilani Paugh) and Turnpike Authority (Rodger Rochelle, David Roy)

Funding Source: Phase 1 Project Funds

- Secure an additional 47,000 linear feet (LF) of stream mitigation beyond permitting requirements
  - Commitment was to secure stream mitigation in 2 batches
    - 35,000 LF by August 22, 2020 (within 12 months of Effective Date)
    - 12,000 LF with R-2829 (was scheduled for FY 2029 when Settlement Agreement was executed)
- Status
  - Advertised for private mitigation banks to provide stream mitigation along the priority aquatic habitat areas in the Neuse River Basin
  - Determined priorities with Neuse and Tar-Pamlico River Basin partnership
    - Secured more than original commitment (~51,000 LF)
    - Results in nearly 10 miles of stream buffers with 200 to 300 foot buffers on both sides of the bank
    - Purchased in one batch instead of two
  - Three contracts executed with providers
  - Turnpike making payments to providers and to Triangle Land Conservancy (TLC) for stewardship (~\$12M paid to date out of total anticipated total expenditures of \$12.6M)
- Future Activity
  - Complete payments to providers and TLC

# Johnston County Stormwater Management Program

Settlement Agreement Item #5

Commitment Lead: Turnpike Authority (Rodger Rochelle)

Funding Source: Phase 1 Project Funds

- Provide funding to Johnston County for its stormwater management program
- Status
  - Agreement #9059 with Johnston County executed in May 2020
  - Turnpike provided funding (\$500,000) to Johnston County in June 2020
  - Funding provided 8 months early
- Future Activity
  - None

# Model Runoff Discharge Volume and Peak Flow

Settlement Agreement Item #6

Commitment Lead: NCDOT (Andy McDaniel) and Turnpike Authority (Rodger Rochelle)

Funding Source: Phase 1 Project Funds

- For Complete 540 Phase 1, model runoff discharge volume and peak flow in three drainage areas
  - Model pre-highway construction and expected conditions post-construction based on design plans
  - Determine total cumulative runoff discharge volume for the two projects for pre- and post-construction land cover conditions
  - Model differences to pollutant loadings, including copper, zinc, total nitrogen, total phosphorus, and total suspended solids
- Status
  - Work under contract with VHB
  - Selected drainage areas, received agreement from SELC and Plaintiffs in September 2021
- Future Activity
  - Complete modeling and reporting
  - Share model results with SELC and concur on funding levels for additional stormwater control measures
  - Install additional stormwater control measures within three years after completion of Complete 540 Phase 1
  - Use the pollutant loading data to inform future pollutant loading mitigation strategies on NCDOT projects

# Research on Peer States' Use of Low Impact Development Guidelines

Settlement Agreement Item #7

Commitment Lead: NCDOT (Andy McDaniel)

Funding Source: Phase 1 Project Funds

- By the end of 2022, award a contract for research funding in the amount of \$200,000 for research on examination of peer states' use of Low Impact Development guidelines and how these guidelines could be used to enhance the NCDOT Best Management Practices (BMP) toolbox
- Status
  - Coordinated with SELC regarding use of private engineering firm in lieu of research partner
  - Work under contract with KCI
  - Project kicked off; project plan and outline complete
- Future Activity
  - Draft Report and Draft BMP Toolbox Chapters
  - Final Report and Final BMP Toolbox Chapters
  - Training presentation

# Stormwater Management Policy Updates

Settlement Agreement Item #8

Commitment Lead: NCDOT (Andy McDaniel)

Funding Source: NPDES Program Funds

- Develop and implement a new policy regarding stormwater management by June 2022
  - Work with United States Geological Survey (USGS) to establish a risk assessment matrix
  - Categorize projects by type and sensitivity to more appropriately assign Best Management Practices (BMP) to all projects
- Status
  - Completed BMP decision support matrix
  - Completed the risk assessment matrix and integrated into a software product prepared by USGS (official USGS data release under final stages of internal technical review process)
  - Completed integration of updated Post-Construction Stormwater Program (PCSP) workflows into PDN v2.0
  - Work being contracted with AECOM; scope of work being drafted for updating the PCSP document
- Future Activity
  - Initial Draft PCSP
  - Final Draft PCSP
  - PCSP Approval
  - PCSP Implementation

# Fund Post-Construction BMP Implementation

Settlement Agreement Item #9

Commitment Lead: NCDOT (Andy McDaniel) and Turnpike Authority (Dennis Jernigan)

Funding Source: Phase 1 Project Funds

- NCDOT to reserve \$3M in project funds to either
  - Perform post-construction water quality monitoring on the project and implementation of future BMPs to supplement existing BMPs and further enhance water quality regarding the project
- OR
- Supplement the NCDOT National Pollutant Discharge Elimination System (NPDES) funds to specifically implement retrofit BMPs in the project corridor's watersheds
- Status
  - Project funds are included in the plan of finance for this purpose
- Future Activity
  - Implement BMPs post construction

# Air Quality/Climate Change

Items 10-20



# Toll-Free Use by Public Transit Buses of all Managed Lanes Projects

Settlement Agreement Item #10

Commitment Lead: Turnpike Authority (Rodger Rochelle)

Funding Source: N/A

- NCDOT commits to allowing toll-free use by public transit buses of all managed lanes projects
  - Projects in 2018-2029 STIP, as last amended July 2019
  - In future STIPs
- Status
  - Current managed lanes projects on I-485 and US 74 include toll-free use by transit buses
  - Incorporated into NCTA's draft business rules
- Future Activity
  - Finalize NCTA's business rules

# Support GoTriangle's use of NC 540

Settlement Agreement Item #11

Commitment Lead: Turnpike Authority (Rodger Rochelle)

Funding Source: Phase 1 Project Funds

- NCDOT will support GoTriangle's use of NC 540 through funding partnerships for calendar years 2020, 2021, 2022
- NCDOT to report annually to Clean Air Carolina (CAC) and SELC on those support efforts
- Status
  - Identified tolls in prior years incurred by GoTriangle (2017, 2018, 2019, 2020)
  - The Regional Transportation Alliance presented the Freeway and Street-based Transit network study ("FAST Study") to the NCTA Board
  - NCTA offered to support GoTriangle's participation in the "FAST Study"
  - Agreement #9599 with GoTriangle executed in January 2021
  - Turnpike provided funding to GoTriangle in February 2021 (\$10,000)
- Future Activity
  - Annual reporting to CAC and SELC

# Quantitative Analysis of Greenhouse Gas Emissions for EISs and EAs

Settlement Agreement Item #12

Commitment Lead: NCDOT (Derrick Weaver, Colin Mellor)

Funding Source: PE Funds

- NCDOT will complete a quantitative analysis of greenhouse gas (GHG) emissions for all projects where a Preferred Alternative has not been identified prior to January 1, 2021 and which require completion of an EIS or EA under NEPA
- Status
  - Coordinated with FHWA on guidance and GHG analysis method
  - Prepared a draft scope and method for GHG analysis
  - Maintaining a list of potential projects needing GHG analysis and monitor status to ensure completion of this task
- Future Activity
  - Finalize and circulate the draft scope and method for GHG analysis once the first candidate project is completed
  - Track completion of quantitative analyses on EISs and EAs

# Vehicle Miles Travelled Study, Toolkit, Task Force

## Settlement Agreement Item #13

Commitment Lead: NCDOT (VMT Study - Derrick Weaver & Colin Mellor; Toolkit & Task Force - Ryan Brumfield & Heather Hildebrandt)

Funding Source: Current work - Phase 1 Project Funds; Future work - NCDOT Funds

- NCDOT will hire a firm to conduct a study to identify strategies specific to North Carolina to reduce vehicle miles travelled (VMT) in urban, rural and regional areas of the state
- Create toolkit for VMT reduction strategies
- Establish VMT reduction task force
- Status
  - Contracted with Stantec to conduct VMT Reduction Study, facilitate development of the toolkit and coordinate initial task force meetings
  - VMT Reduction Study Report
    - Completed April 29, 2021
    - Shared with SELC
    - Posted on NCDOT website; webpage dedicated to emission reduction projects under development
    - Shared with MPOs and RPOs
  - VMT Task Force
    - Task force formed and will inform development of toolkit
    - Initial meeting held October 8, 2021
- Future Activity
  - Create toolkit for local governments and MPOs regarding VMT reduction strategies
  - NCDOT to set targets for reduction in ratio of VMT per NC licensed driver in conjunction with Item #15 (collect and monitor VMT data)

# Develop and Host Breakout Session at Transportation Summits

Settlement Agreement Item #14

Commitment Lead: NCDOT (Chris Werner, Greer Beaty)

Funding Source: N/A

- NCDOT will work with SELC and Clean Air Carolina (CAC) to develop and host a breakout session at each of the next three Transportation Summits on the VMT Reduction Study and other topics related to the intersection of transportation and the environment, as agreed upon by NCDOT, SELC and CAC
- In the event the summit series does not continue, NCDOT will commit to working with SELC and CAC to develop and host a standalone event on the VMT Reduction Study or other topics related to the intersection of transportation and the environment, as agreed upon by NCDOT, SELC and CAC
- Status
  - Transportation Summit held January 8-9, 2020
    - Session titled “Reducing Vehicle Miles Traveled” held January 8, 2020
    - Moderator – Thomas Taft (NCDOT Board of Transportation)
    - Panelist – Beth Osborne (Transportation for America, Director)
  - No Transportation Summit held in 2021
  - Confirmed session being planned for the Transportation Summit to be held in 2022
- Future Activity
  - Participate in two more events by hosting session(s) at upcoming Transportation Summits and/or hosting standalone event(s)

# Collect and Monitor VMT Data

## Settlement Agreement Item #15

Commitment Lead: NCDOT (Derrick Weaver, Colin Mellor, Ryan Brumfield, Heather Hildebrandt)

Funding Source: N/A

- Within 3 months of Effective Date of the Agreement, NCDOT will begin to collect and monitor data regarding the ratio of VMT per NC licensed driver
  - Initial data will be collected prior to the start of the VMT Reduction Study (Item #13), produced concurrent with the start of the study, and data will be monitored and collected concurrent with the study
- Status
  - Historic data has been obtained to calculate VMT per NC licensed driver through 2020
  - Trend information will be shared with VMT Task Force to begin discussions of target setting
  - Data for 2021 will be included in the analysis once that data is available
- Future Activity
  - Continue to monitor and collect VMT and NC licensed driver data
  - NCDOT to set targets for reduction in the ratio of VMT per NC licensed driver in conjunction with VMT Reduction Study (Item #13)

# Contract Specification for Lower Emissions on Construction Equipment – Triangle Area Projects in 2020, 2021 and 2022

## Settlement Agreement Item #16

Commitment Lead: NCDOT (Lamar Sylvester, Ron Davenport) and Turnpike Authority (Rodger Rochelle)

Funding Source: N/A

- Develop and implement a contract specification for lower emission construction equipment that will require use of Tier 4 construction equipment and/or incentivize the use of Tier 4 construction equipment for certain new contracts in the Triangle area (Wake, Durham, Orange, and Chatham Counties)
- This specification will apply only to Triangle area contracts for projects that, at the time of letting, are valued over \$50M and require at least 1M cubic yards of earth moving
- Status
  - Coordinated with the contracting industry regarding draft emissions specification in October and November 2019
  - Coordinated with SELC regarding draft emissions specification and use of “letting date” (in lieu of “award date) in November 2019 and January 2020
  - Final emissions specification for 2020, 2021 and 2022 have been provided to Contracts Unit for their use and placement on contracts website
- Future Activity
  - Evaluate reporting data from 2020, 2021, 2022 and set new goals based on that data for applicable contracts awarded in 2023 and later; re-evaluate incentive thresholds
  - Coordinate with contracting industry regarding revised draft emissions specification for 2023 and later
  - Develop final emissions specification for 2023 and beyond
  - Draft goals for Tier 4 construction equipment usage statewide

# Annual Updates to Equipment Inventory with Tier Level

Settlement Agreement Item #17

Commitment Lead: NCDOT (Daniel Keel)

Funding Source: N/A

- By April 1, 2020, NCDOT will examine the specifications for each piece of construction equipment in its inventory and include Tier level in the inventory going forward
- NCDOT will update the inventory annually that reflects these Tier levels and provide this information to third-parties upon request
- Once more data is available through the Triangle area projects and concurrent with the goal setting timeframe noted in Item #16d (end of 2023), NCDOT will draft goals for implementing Tier 4 requirements for all NCDOT construction equipment in its inventory
- Status
  - Obtained equipment inventory with Tier levels in October 2019
  - Coordinated in May 2020; no equipment bought in 2020 due to budget restrictions
  - Obtained equipment inventory with Tier levels in September 2021
- Future Activity
  - Continue to update the inventory annually that reflects Tier levels and provide information to third-parties upon request
  - Draft goals for implementing Tier 4 requirements for all NCDOT construction equipment in its inventory (also see Item #16d)



# Standardized Documentation for Construction Equipment

Settlement Agreement Item #18

Commitment Lead: NCDOT (Lamar Sylvester and Wiley Jones)

Funding Source: N/A

- NCDOT will produce standardized documentation of construction equipment used on all applicable NCDOT Triangle Area projects (meeting Item #16 thresholds) to be shared with CAC and SELC
- Status
  - Developed the construction equipment emissions contractor reporting tool in January 2020
  - Shared the construction equipment emissions contractor reporting tool with SELC in May 2020
  - Monitor monthly lettings for Triangle Area projects to identify projects requiring this documentation
  - No projects requiring this documentation to date
- Future Activity
  - Continue to monitor monthly lettings for Triangle Area projects to identify projects requiring this documentation
  - Update contents of the construction equipment emissions contractor reporting tool for eligible projects

# Implement Anti-idling Guidelines

Settlement Agreement Item #19

Commitment Lead: NCDOT (Lamar Sylvester, Ronnie Keeter)

Funding Source: N/A

- By the end of 2020, NCDOT will design and implement anti-idling guidelines for NCDOT construction workers and contractors
- Status
  - Equipment Idling Guidelines memo issued from Chief Engineer's office on December 3, 2020
  - Distributed within NCDOT and to ACEC
- Future Activity
  - None

# Join Transportation and Climate Initiative

Settlement Agreement Item #20

Commitment Lead: NCDOT (Chris Werner, Heather Hildebrandt)

Funding Source: N/A

- NCDOT will join Transportation and Climate Initiative as an observer within six months of Effective Date of Agreement
- Status
  - NCDOT (Chris Werner, Heather Hildebrandt) participated in kick off meeting on January 24, 2020 for NC's engagement to the TCI's Regional Policy Design Process
  - Meetings attended regularly by NCDOT staff
- Future Activity
  - None

# Species

Items 21-27

# Additional Funding for Propagation Facility Operations

Settlement Agreement Item #21

Commitment Lead: NCDOT (Jared Gray) and Turnpike Authority (Rodger Rochelle, David Roy)

Funding Source: Phase 1 Project Funds

- Fund the operations and maintenance of the North Carolina Non-Game Aquatic Species Program at the Yates Mill Aquatic Conservation Center (YMACC) for an additional 5 years beyond the current commitment
- Status
  - Agreement #9290 with NC Wildlife Resources executed in June 2020
  - Due to cost increases, the contract for construction was delayed; Wake County awarded contract in July 2021 for \$3.94M
  - Construction of facility underway
- Future Activity
  - Pay annual invoices

# Research Projects for Aquatic Species

Settlement Agreement Items #22-27

Commitment Lead: NCDOT (Neil Mastin, John Kirby, Jared Gray, Marissa Cox) and Turnpike Authority (Rodger Rochelle)

Funding Source: SPR Funds

Item #	Commitment	Funding	Research Proposal
22	Commit to provide research funding to a research partner and/or institution for propagation of the magnificent ramshorn (aquatic snail)	\$25,000/year for 10 years = \$250,000	Research Proposal 2022-044
23	Commit to provide research funding to a research partner and/or institution for research on and development of an in-vitro mussel propagation technique	\$100,000/year for 10 years = \$1M	Research Proposal 2022-045
24	Commit to provide research funding to a research partner and/or institution for a water quality testing program for re-introduction sites in the Neuse and Tar River Watersheds	\$200,000/year for 10 years = \$2M	Research Proposal 2022-050
25	Commit to provide research funding to a research partner and/or institution for a genetic study of imperiled freshwater mussel species in the Project area	\$175,000/year for 3 years = \$525,000	Bundled into Research Proposal 2022-043
26	Commit to provide research funding to a research partner and/or institution for imperiled freshwater mussel fitness experiments for propagated versus wild individuals	\$125,000/year for 3 years = \$375,000	
27	Commit to provide research funding to a research partner and/or institution for a study whose purpose is to set quantitative conservation targets for imperiled freshwater mussel populations	\$150,000/year for 3 years = \$450,000	

# Research Projects for Aquatic Species, continued

Settlement Agreement Items #22-27

Commitment Lead: NCDOT (Neil Mastin, John Kirby, Jared Gray, Marissa Cox) and Turnpike Authority (Rodger Rochelle)

Funding Source: SPR Funds

- Status
  - Idea statements developed and submitted as part of the FY 2022 State Planning and Research (SPR) funding cycle in July 2020
  - Funding letter indicating award to NC State University (W. Gregory Cope, Ph.D.) on February 23, 2021
  - Contract awards in advance of Settlement requirement of committing to award contracts for research funding “by the end of 2022”
  - Funding for all research secured through Research and Development’s annual work plan
- Future Activity
  - Prepare R&D Project Authorizations under the Master Agreement with NCSU
    - 2022-044 and 2022-043A to begin January 1, 2022
    - Other projects (2022-045, 2022-043B, 2022-043C, 2022-050) to begin later (2023, 2025) to coincide with the completion of the propagation facility construction



**Thank you!**