



# ENVIRONMENTAL ANALYSIS UNIT

NCDOT Technical Services Division



**The Environmental Analysis Unit (EAU) is a one-stop shop for supporting development of sustainable transportation infrastructure that minimizes impacts on the human and natural environment.**

EAU staff bring broad experience, solid relationships with regulatory agencies and a network of on-call engineering firms that support NCDOT units at every project phase. EAU ensures projects comply with all state and federal regulations, minimize environmental impacts and meet delivery timelines.

In the planning phase, EAU ensures appropriate studies are conducted to determine cultural and environmental impacts. During design, EAU ensures projects minimize environmental impacts

and acquire necessary permits from state and federal regulatory agencies.

During construction and beyond, EAU manages permit modifications, as changes occur, and ensures required mitigations are implemented and monitoring is conducted.

EAU teams provide guidance, agreements, procedures and templates for streamlined project delivery.

## Contact

Contact EAU early in your project to identify steps that can avoid project delays.

**Find EAU contacts, policies, procedures, templates and more on the EAU Connect site.**

[connect.ncdot.gov/resources/Environmental/EAU/Pages/](https://connect.ncdot.gov/resources/Environmental/EAU/Pages/)



## Services

- Air quality analysis and compliance
- Community studies and impact assessments
- Cultural resources analysis and compliance
- Environmental impact assessment and compliance
- Environmental research and training
- Mitigation planning, design, modeling, monitoring and stewardship
- Permitting coordination
- Public involvement coordination and visualization
- Study scoping, estimates and negotiations with private firms
- Threatened and endangered species surveys, analysis and compliance
- Traffic noise studies and analysis
- Water quality analysis
- Wetland, stream and habitat modeling projects



# PROJECT EXAMPLES



## ASSESSMENT OF IMPACTS TO CULTURAL RESOURCES

Cultural Resources staff worked to map the archaeological sites and mitigate vibratory effects to an 18th Century grist mill and pond structure during the replacement of a bridge near Yates Mill Pond in Wake County.



## MITIGATION OF TRAFFIC NOISE IMPACTS

The Traffic Noise and Air Quality Group oversaw the modeling, analysis and recommendations of 10 noise walls along 13 miles of I-40 widening in Wake County. The group ensured the placement of the walls complied with federal law and state policy while providing a substantial traffic noise reduction for more than 400 homes.



## MITIGATION OF JURISDICTIONAL IMPACTS

The Mitigation and Modeling Group and Stewardship and Monitoring Group worked with state and federal agencies to develop and implement the Beane Wetland Mitigation Site in New Hanover County. The Beane Site will restore hydrology and native species vegetation in an altered wetland and provide mitigation for jurisdictional impacts associated with the Hampstead Bypass.



## STATE AND FEDERAL REGULATORY COORDINATION

The Biological Surveys and Environmental Coordination and Permitting Groups coordinated with state and federal regulatory agencies to thread the Wayah Road bridge replacement design around many environmentally sensitive areas in Macon County. Wayah Road has five crossings of the Nantahala River and is naturally constrained in the Nantahala Gorge. The road must remain open to traffic during construction.



## ENGAGING THE PUBLIC

The Public Involvement, Community Studies and Visualization Group held specialized meetings to engage the public for the Kinston Bypass. Staff identified and assisted with outreach to traditionally underserved communities as well as the general public to facilitate understanding and encourage participation in the project selection process.

