

North Carolina Department of Transportation
Project Development and Environmental Analysis Branch



Citizens Informational Workshop

NC 143
From West Buffalo Creek
To NC 143 Business West of Robbinsville
Graham County
TIP Project R-2822 B

May 15, 2008

TIP PROJECT R-2822 B
Citizens Informational Workshop
Proposed Improvements to NC 143
Graham County

PROJECT COORDINATION WITH CITIZENS

Public involvement is an integral part of the North Carolina Department of Transportation's project development process. The concerns of citizens and interest groups are considered during project development studies. Often, additional project alternatives are studied or recommended alternatives are changed based on comments received from the public and/or local officials.

NCDOT realizes individuals living close to a proposed project want to be informed of the possible effects of the project on their homes and businesses. However, exact information is not available at this stage of the project development process. For example, additional design work is necessary before the actual right of way limits can be established. This type of detailed information will be available at a later date. The purpose of this workshop is to receive your comments *before* final design decisions are made.

Written comments on this project may be left with Federal Highway Administration or NCDOT representatives at tonight's meeting or mailed to the address below. Please note that comment sheets are included in this information packet (last two sheets). If you need additional information, or if you would like to submit comments after the meeting, please address requests and comments to:

Write to: Dr. Gregory Thorpe, Manager
Attention: Wilson Stroud, Project Planning Engineer
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Call: Wilson Stroud, Project Planning Engineer
(919) 733-7844 x 310

Email: wstroud@dot.state.nc.us

THE PROJECT DEVELOPMENT PROCESS

Planning and environmental studies for federally funded highway projects are conducted in order to comply with the National Environmental Policy Act (NEPA). The type of document published

following the planning study depends on the magnitude of the project and its expected environmental impact. NCDOT is preparing an Environmental Assessment (EA) for this project.

The Environmental Assessment will discuss the purpose and need for the proposed improvements, evaluate alternatives, and analyze the project's impact on both the human and natural environment. The document will address the following areas of concern:

Efficiency and safety of travel	Wildlife and plant communities
Neighborhoods and communities	Water quality
Relocation of homes and businesses	Floodplains and streams
Economy of project area	Farmland
Land use plans	Archaeological sites
Historic properties	Hazardous materials
Wetlands	Traffic noise
Endangered species	Air quality

Following the completion of the EA, NCDOT will conduct a Public Hearing to present the preliminary designs for the alternatives that are selected for more detailed study.

OPPORTUNITIES FOR PUBLIC INVOLVEMENT

SCOPING LETTER - Published in the NC Environmental Bulletin. This letter notifies agencies and groups on the State Clearinghouse mailing list that a project study has been initiated and solicits comments from them.

CITIZENS INFORMATIONAL WORKSHOP – Informal meeting with the public. NCDOT staff conducts these workshops to speak one-on-one with citizens about projects. Comment sheets are provided for citizens to write down their questions, comments, and concerns. The number of workshops scheduled for a project depends on the scope and anticipated impact of the project.

DOCUMENT DISTRIBUTION – Copies of environmental documents are submitted to the State Clearinghouse for distribution and a notice is published in the NC Environmental Bulletin. Upon request, NCDOT will provide copies of the document to the public. Copies are available for public viewing at NCDOT Raleigh and Division offices, the State Clearinghouse office, local government offices, including the local council of government office, and local public libraries.

PUBLIC HEARING – One or more formal public hearings are held and public comments are recorded. Format typically involves a short presentation followed by an opportunity for citizens to comment.

CITIZEN LETTERS – Citizens are encouraged to write to NCDOT and provide information and express concerns regarding proposed improvements at anytime during the process. Correspondence from citizens and interest groups is considered during the course of planning study and is placed in the project file.

PROPOSED IMPROVEMENTS AND PRELIMINARY ALTERNATIVES

TIP Project R-2822 B proposes improvements to NC 143 from West Buffalo Creek to NC 143 Business west of Robbinsville in Graham County. The project is approximately 4.5 miles in length and is shown in Figure 1 (vicinity map – see attached).

It is anticipated NC 143 will be widened to provide two 11-foot lanes and 4-foot grassed shoulders. Horizontal and vertical alignment improvements may also be made in order to provide a minimum 30 mph design speed. These improvements will require the acquisition of additional rights of way and easements throughout the project. Consideration is being given to designing the project so as to provide a facility similar to the nearby Cherohala Skyway, which consists of two 11-foot lanes and 6-foot grassed shoulders and which has a design speed of 35 mph.

Four preliminary alternatives have been developed for upgrading NC 143. Those four alternatives are described below and are shown in Figure 2. Please note that larger versions of Figure 2 are on display at this workshop. Please note also that while a 1000-foot wide study corridor is shown for each alternative, the actual area of impact would be substantially less.

- **Alternative 1** - Widen existing NC 143 with vertical and horizontal alignment improvements from West Buffalo Creek to NC 143 Business (total length: approximately 4.3 miles)
- **Alternative 2** - Widen existing NC 143 with vertical and horizontal alignment improvements from West Buffalo Creek to near Carver Cemetery; construct NC 143 along a new alignment to the north and east of the existing road beginning near Carver Cemetery; this new alignment would then turn southward to parallel Buchanan Branch Road (SR 1125) on the east side, crossing Santeetlah Lake and rejoining existing NC 143 near the waste disposal convenience site approximately 0.6 mile west of NC 143 Business; widen existing NC 143 with vertical and horizontal alignment improvements from that point to NC 143 Business (total length: approximately 3.1 miles)
- **Alternative 3** - Widen existing NC 143 with vertical and horizontal alignment improvements from West Buffalo Creek to near Carver Cemetery; construct NC 143 along a new alignment to the north and east of the existing road beginning near Carver Cemetery; this new alignment would then cross Santeetlah Lake, rejoining existing NC 143 just north of Jackson Branch Road (SR 1149) (total length: 2.5 miles)
- **Alternative 4** - Widen existing NC 143 with no vertical and horizontal alignment improvements from West Buffalo Creek to NC 143 Business (total length: approximately 4.5 miles)

Although all four preliminary alternatives begin at the same point (just east of the West Buffalo Creek bridge), they end at different points. So that the total driving distances for the four alternatives can be compared, the distance along each alternative from West Buffalo Creek to the point at which Alternative 2 (the alternative that ends closest to Robbinsville) rejoins existing NC 143 (just north of Jackson Branch Road, SR 1149) is presented below in Table 1. The length of each alternative is also presented in Table 1.

Table 1 – Comparison of Preliminary Alternatives		
Alternative	Length (miles)	Driving distance from West Buffalo Creek to just north of SR 1149 Jackson Branch Road (miles)
1	4.3	5.0
2	3.1	3.8
3	2.5	2.5
4	4.5	5.3

Comments received at tonight’s workshop will be considered in selecting the alternatives to be carried forward for more detailed design and environmental studies. FHWA and NCDOT will work closely with local, state, and federal government agencies, including the Tribal Historic Preservation Office and the Eastern Band of the Cherokee Indians, in selecting the alternatives to be carried forward.

PROJECT PURPOSE AND NEED

Project Purpose

The purpose of the proposed project is to improve safety along NC 143 using *context sensitive solutions*. A context sensitive solution is a solution that achieves the following goals:

- Addresses the transportation need
- Is an asset to the community
- Is compatible with the natural and human environments

Route Designations

NC 143 is the primary east-west corridor in Graham County and is designated as a rural major collector. It is a narrow, winding two-lane facility passing through mountainous terrain.

NC 143 begins at NC 28 at Stecoah, passes through Robbinsville, and continues through the Nantahala National Forest, ending at the Tennessee State Line. The 18-mile segment of NC 143 beginning at Santeetlah Gap, near Joyce Kilmer Road (SR 1159), and ending at the Tennessee state line is known as the Cherohala Skyway (this segment of NC 143 is located to the west of TIP Project R-2822 B). The Cherolala Skyway continues into Tennessee as State Route 165, ending at Tellico Plains.

The Cherohala Skyway is a National Scenic Byway, one of only two in North Carolina (the other being the Blue Ridge Parkway). It is marketed by local governments, businesses, and chambers of commerce as a tourist destination for its scenic views. It attracts many motorcyclists and motorists, many of whom are unfamiliar with the winding alignment along NC 143 within the project limits. NC 143 provides the principal access to the Cherohala Skyway from North Carolina

The section of NC 143 to be upgraded as part of TIP Project R-2822 B was, until the Cherohala Skyway was constructed and opened to traffic in 1996, designated as a secondary road. No major improvements to this portion of NC 143 have been performed since that time, and the facility does not meet typical NC route design standards.

“The Tail of the Dragon”, a nearby section of US 129 that attracts motorcyclists from all over the country, is located approximately 7 miles (map distance) northwest of the project. “The Tail of the Dragon” follows US 129 in Graham and Swain Counties in North Carolina and Blount County in Tennessee. This route begins at the Cheoah Dam in Graham County and ends near at Tabcat Creek in Blount County, a distance of 14 miles. It is likely that many of the motorcyclists who travel on “The Tale of the Dragon” also travel on the subject section of NC 143 while in the area.

Crash History

Twenty-five crashes were reported along the project during the period from February 1, 2002 to January 31, 2005. As shown below in Table 2, the crash rates for the subject section of NC 143 exceeded not only the statewide rates for rural two-lane NC routes in all categories (total, fatal, non-fatal, night, and wet), but also the critical rate for total and non-fatal injury crashes. Fourteen of the crashes (56 percent) involved motorcycles, the majority of which were single-vehicle run off road or overturning vehicle crashes. Sixty-four percent of the motorcycle crashes occurred on Saturday or Sunday, and 93 percent of the motorcyclists involved in the accidents held out-of-state driver’s licenses. Nine of the fourteen motorcycle crashes (and eleven of the 25 total crashes) occurred within a half-mile section of the project ending approximately 0.4 mile west of the NC 143 intersection with SR 1125 (Buchanan Branch Road). This section of the project has several horizontal curves on fairly steep grades. The remainder of the crashes were spread evenly along the length of the project. Overall, approximately 94 percent of the crashes were of the run-off-road accidents type, with approximately 35 percent occurring during darkness.

Table 2 - Crash Rate Comparisons				
Rate	Number of Crashes	Crashes per 100 Million Vehicle Miles	Statewide Rate	Critical Rate
Total	25	277.75	184.65	264.71
Fatal	1	11.11	2.31	16.20
Non-Fatal	14	155.54	73.77	126.42
Night	8	88.88	62.66	111.62
Wet	4	44.44	33.28	70.47

Traffic Volumes

Current traffic volumes on this section of NC 143 (year 2003) range from 940 vehicles per day (vpd) near the west project terminal to 1900 vpd near the east terminal. The anticipated maximum traffic demand in the year 2025 is 3300 vpd, based upon a 2.5 percent yearly increase in traffic volumes. If the proposed improvements to NC 143 are performed, traffic volumes could increase at a higher rate due to improved access and increased tourism. Traffic projections will be updated as part of the project study, and consideration will be given to obtaining seasonal traffic projections, as well.

EXISTING CONDITIONS

Existing NC 143

The subject segment of NC 143 consists of a two-lane pavement approximately 18 feet in width with grassed shoulders 1 to 4 feet in width. It includes numerous sharp curves, including two with advisory speed limits of 15 mph. Several roadway grades along the project are fairly steep, but none have advisory postings. No turn lanes are provided at any of the intersections along the project. No traffic signals exist along the project, and all intersections are at-grade and stop sign-controlled. The posted speed limit ranges from 35 to 45 mph, although those speeds are attainable in only a few areas. The average running speed within the project limits, assuming clear and dry conditions, is approximately 25 to 30 mph. No access control is provided along the project, although the mountainous terrain and the presence of federally-owned lands (Nantahala National Forest) tends to control roadside development. Passing is allowed in only one area, the 0.6-mile section where NC 143 parallels Snowbird Creek on the north side from Snowbird Road (SR 1115) to approximately 0.2 mile west of the Snowbird Creek bridge. Pull-off areas for slower vehicles are provided (but not signed as such) at three locations within the project limits.

West of the project, from the eastern terminal of the Cherohala Skyway to the West Buffalo Creek bridge, NC 143 consists of a two-lane, 22-foot roadway with 4-foot useable shoulders. East of the project, from NC 143 Business to US 129, NC 143 consists of a two-lane, 20-foot roadway with 2 to 4-foot grassed shoulders.

Existing Bridges on NC 143

Two bridges are located within the project study area. Bridge number 131, which carries NC 143 over West Buffalo Creek (Santeetlah Lake) just east of SR 1148 (West Buffalo Road), is 320 feet in length, has a bridge roadway width of 30 feet, was constructed in 1971, and has a sufficiency rating of 91.5 (out of a possible maximum score of 100.0). Bridge number 13 (Doctors Richard and Nettie C. Parrette Memorial Bridge), which carries NC 143 over Snowbird Creek just west of SR 1118 (I.U. Gap Road), is 180 feet in length, has a bridge roadway width of 25 feet, was constructed in 1982, and has a sufficiency rating of 79.4.

The project begins just east of the West Buffalo Creek bridge (bridge number 131); in addition, that bridge has an acceptable clear roadway width and sufficiency rating. Therefore, no improvements to bridge number 131 are recommended as part of this project. Although the Snowbird Creek bridge (bridge number 13) is located within the project limits, it also has an acceptable clear roadway width and sufficiency rating; therefore, no improvements to bridge number 13 are recommended as part of this project, either.

Project Setting

The project area is mostly rural and wooded, with occasional residences, businesses, churches, and cemeteries. Lands managed by the U. S. Forest Service (Nantahala National Forest) border the project for approximately 70 percent of its length. Tribal lands of the Eastern Band of the Cherokee Indians are present at several locations within the project study area. NC 143 parallels Snowbird Creek and Santeetlah Lake from Snowbird Road (SR 1115) to approximately 0.4 mile west of NC 143 Business, a distance of approximately 1.7 miles. Other features within the project area include, beginning at the west project terminal:

- Blue Boar Inn, located on the north side of NC 143 just west of West Buffalo Creek
- Bridge number 131, carrying NC 143 over West Buffalo Creek (Santeetlah Lake)
- Carver Cemetery, located on the north side of NC 143 approximately 0.7 mile east of the West Buffalo Creek bridge
- Fish hatchery, located on the south side of Snowbird Creek just east of Snowbird Road (SR 1115)

- Snowbird Suspension Bridge (private bridge), located on the south side of NC 143 (crosses Snowbird Creek) just west of the Snowbird Creek bridge
- Bridge number 13 (Doctors Richard and Nettie C. Parrette Memorial Bridge), carrying NC 143 over Snowbird Creek
- Snowbird Loop Nature Trail, south side of NC 143 just east of the Snowbird Creek bridge (U. S. Forest Service)
- Snowbird Picnic Area, north side of NC 143 just west of I. U. Gap Road (SR 1118)
- Waste disposal convenience site, north side of NC 143 approximately 0.6 mile west of NC 143 Business
- Buffalo Independent Baptist Church, north side of NC 143 just west of NC 143 Business
- New Hope Missionary Baptist Church, north side of NC 143 Business just east of NC 143
- Eastern Band of the Cherokee Indians Snowbird Senior Center, located on the north side of Jackson Branch Road (SR 1149) east of NC 143

ENVIRONMENTAL RESOURCES

The proposed improvements to NC 143 are expected to result in impacts to both the human and natural environments. Detailed planned studies and surveys will be conducted within the coming months by field personnel to determine the extent of those impacts. Known environmental resources are presented below.

Natural Environment Resources

The project is located within the Cheoah sub basin of the Little Tennessee River basin and crosses the following streams: West Buffalo Creek (Santeetlah Lake), Long Hungry Branch, and Snowbird Creek.

Both West Buffalo Creek and Snowbird Creek are hatchery-supported trout streams and contain wild rainbow trout. A construction moratorium for rainbow trout will be required between January 1 and April 15. No in-stream work or land disturbance will be allowed within a 25-foot buffer zone around either creek or their tributaries during the moratorium. Snowbird Creek is also stocked with brown/brook trout, but since very few of those trout will survive to spawn, the main concern is with wild rainbow trout. The spawning moratorium period for brown/brook trout is October 15-April 15.

Santeetlah Lake is located within the project study area (primarily north of NC 143) and is managed by the Tennessee Valley Authority.

Six federally-protected species are listed in Graham County, including four endangered species (E) and two threatened species (T), as listed below:

- Carolina northern flying squirrel (E)
- Indiana bat (E)
- Appalachian elktoe (E)
- Rock gnome lichen (E)
- Bog turtle (T)
- Virginia spiraea (T)

Snowbird Creek is the only stream within the project limits with suitable habitat for the Appalachian elktoe. No mussels were found during a survey of that stream conducted in May 2005. No other surveys of federally-protected species have been conducted.

Acidic rock is present in the project area. Precautions will need to be taken to prevent exposing the acidic rock, especially in the vicinity of streams.

Human Environment Resources

The Snowbird Mountain Lodge, which is listed on the National Register of Historic Places, adjoins NC 143 on the south side just east of the Cherohala Skyway. That property is located outside the project study area and will not be impacted by the project.

The Snowbird Suspension Bridge is located on the south side of NC 143 approximately 0.1 mile east of the Snowbird Creek bridge (bridge number 13). This private bridge spans Snowbird Creek and provides access to a residence from NC 143. This bridge will be evaluated to determine if it is eligible for listing on the National Register.

As part of the project studies, all structures over fifty years of age within the project study area will be identified and evaluated to determine if they are eligible for listing on the National Register. The results of those studies will be reported to the North Carolina Department of Cultural Resources (State Historic Preservation Office).

There is a high probability of significant archaeological resources in the project area, given the topographic and hydrologic setting. Thus, a comprehensive archaeological survey will be conducted for the project. Several sites identified in previous studies within the project limits were determined to have the potential to contain significant information. The results of those studies will be reported to the North Carolina Department of Cultural Resources (State Historic Preservation Office) and the Tribal Historic Preservation Office.

Traditional cultural properties may also be located within the project area. Such properties are eligible for inclusion in the National Register because of their association with cultural practices or beliefs of a living community that are (1) rooted in that community's history and (2) important in maintaining the continuing cultural identity of the community. Coordination with the Eastern Band of the Cherokee Indians and the Tribal Historic Preservation Office with regard to these properties will be performed during the project development process. As appropriate, coordination with other Native American nations will be performed, as well.

Tribal lands of the Eastern Band of the Cherokee Indians tribal lands are located at several locations within the project study area. In addition, the Eastern Band of the Cherokee Snowbird Senior Center is located on SR 1149 (Jackson Branch Road), which intersections NC 143 approximately 0.6 mile east of NC 143 Business.

Other features related to the human environment are noted above under the *Existing Conditions* Section (see *Project Setting*).

PROJECT SCHEDULE AND COSTS

Currently, NCDOT is scheduled to complete an Environmental Assessment (EA) for the project by January 2010. A public hearing, during which more detailed design information will be presented, will be held after the completion of the EA. The final environmental document (anticipated to be a Finding of No Significant Impact, or FONSI) is scheduled for completion by November 2012. An additional public hearing will likely be held following completion of the anticipated FONSI.

Right of way acquisition for the project is scheduled to begin in fiscal year 2013, and construction is scheduled to begin in fiscal year 2014. Please note these schedules are subject to the availability of

sufficient Public Lands Discretionary Funding. As noted below in Table 3, the total funding included for the project in the NCDOT Draft 2009-2015 Transportation Improvement Program (TIP) is \$12,649,000, including \$500,000 for right of way acquisition, \$1,049,000 for mitigation of environmental impacts, and \$11,100,000 for construction.

Table 3 - NCDOT Draft 2009-2015 TRANSPORTATION IMPROVEMENT PROGRAM TIP Project R-2822 B Schedule and Funding		
PROJECT STAGE	SCHEDULE	FUNDING
RIGHT OF WAY	Fiscal Year 2011	\$500,000
MITIGATION	Fiscal Year 2012	\$1,049,000
CONSTRUCTION	Fiscal Year 2013	\$11,100,000
Total project funding		\$12,649,000

Other Nearby NCDOT Projects

NCDOT plans to improve, as a separate project, the adjacent segment of NC 143 to the west of TIP Project R-2822 B, from the eastern terminal of the Cherohala Skyway at Joyce Kilmer Road (SR 1159) to the West Buffalo Creek bridge, a distance of approximately 2.4 miles. That project calls for the following improvements to NC 143: (1) resurfacing the existing pavement, (2) replacing existing guardrail that is in poor condition, (3) installing guardrail in new areas, and (4) possible shoulder grading to accommodate the proposed new guardrail. The project will be administered by NCDOT’s Division 14 office rather than as a TIP project. The project has not yet been scheduled for construction.

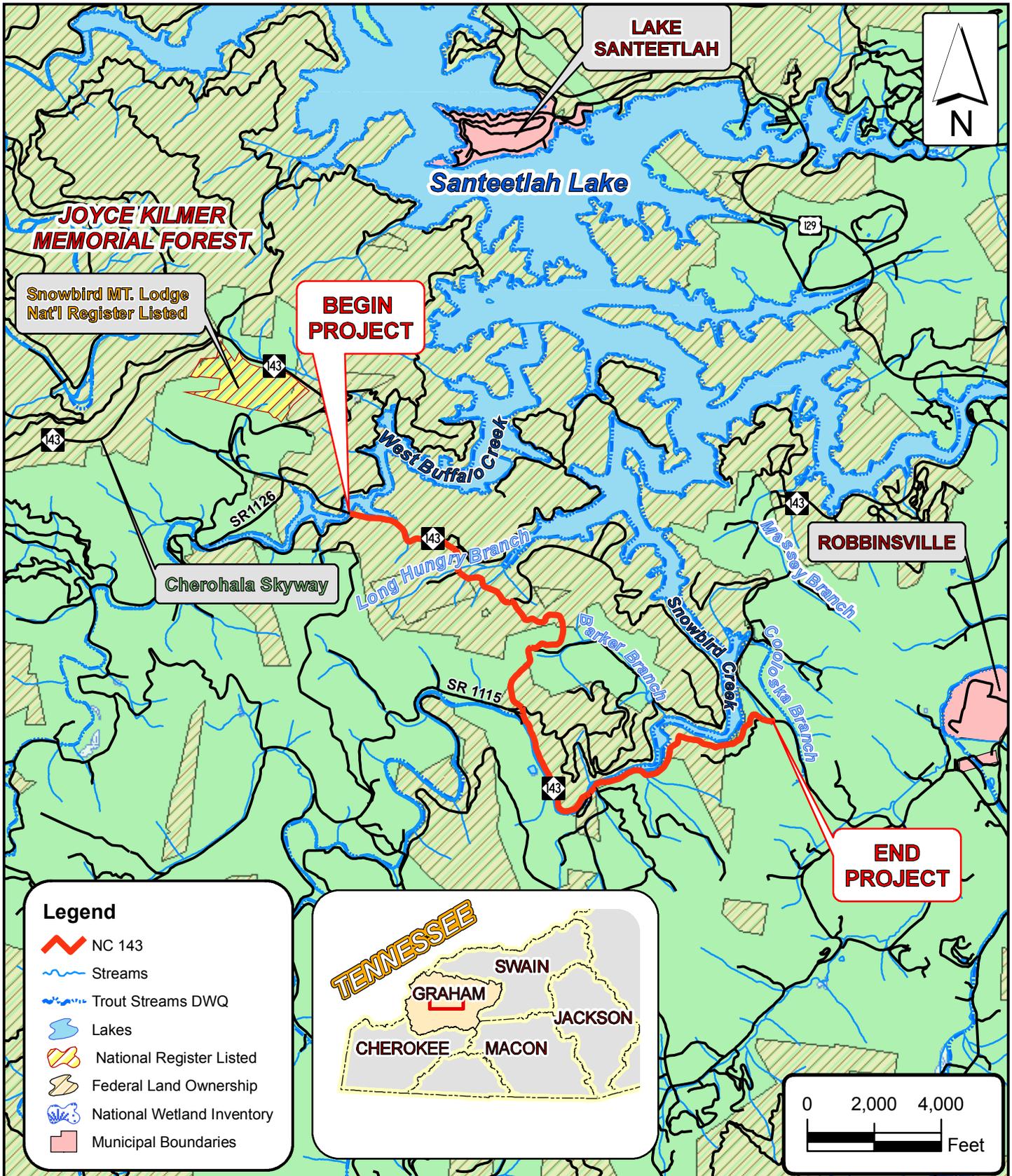
The following nearby Graham County projects are included in the Draft 2009-2015 NCDOT Transportation Improvement Program:

TIP Project A-9 - Corridor “K” of the Appalachian Development Highway System, from US 19-74-129 at Andrews to NC 28 east of Almond. Construct a four-lane divided facility, primarily on new location, 27.1 miles. Right of way acquisition – Fiscal Year 2011, construction – fiscal year 2013.

TIP Project B-4122 – SR 1117, replace bridge number 81 over Long Creek. Right of way acquisition – fiscal year 2009, construction – fiscal year 2010.

TIP Project B-4123 – SR 1123, replace bridge number 117 over West Buffalo Creek. Right of way acquisition – fiscal year 2009, construction – fiscal year 2010.

TIP Project B-3335 – SR 1134, replace bridge number 70 over the Cheoah River. Right of way acquisition – fiscal year 2009, construction – fiscal year 2010.



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

VICINITY MAP
NC 143 FROM
WEST BUFFALO CREEK TO
NC 143 BUSINESS WEST OF
ROBBINSVILLE
GRAHAM COUNTY
TIP PROJECT R-2822B

County: GRAHAM
Div: 14 TIP# R-2822B
WBS: 34508.1.1
Date: APRIL 2008 BY: JT

Figure
1



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

**PROJECT STUDY AREA -
PRELIMINARY ALTERNATIVES MAP
NC 143 FROM
WEST BUFFALO CREEK TO
NC 143 BUSINESS WEST OF
ROBBINSVILLE
GRAHAM COUNTY
TIP PROJECT R-2822B**



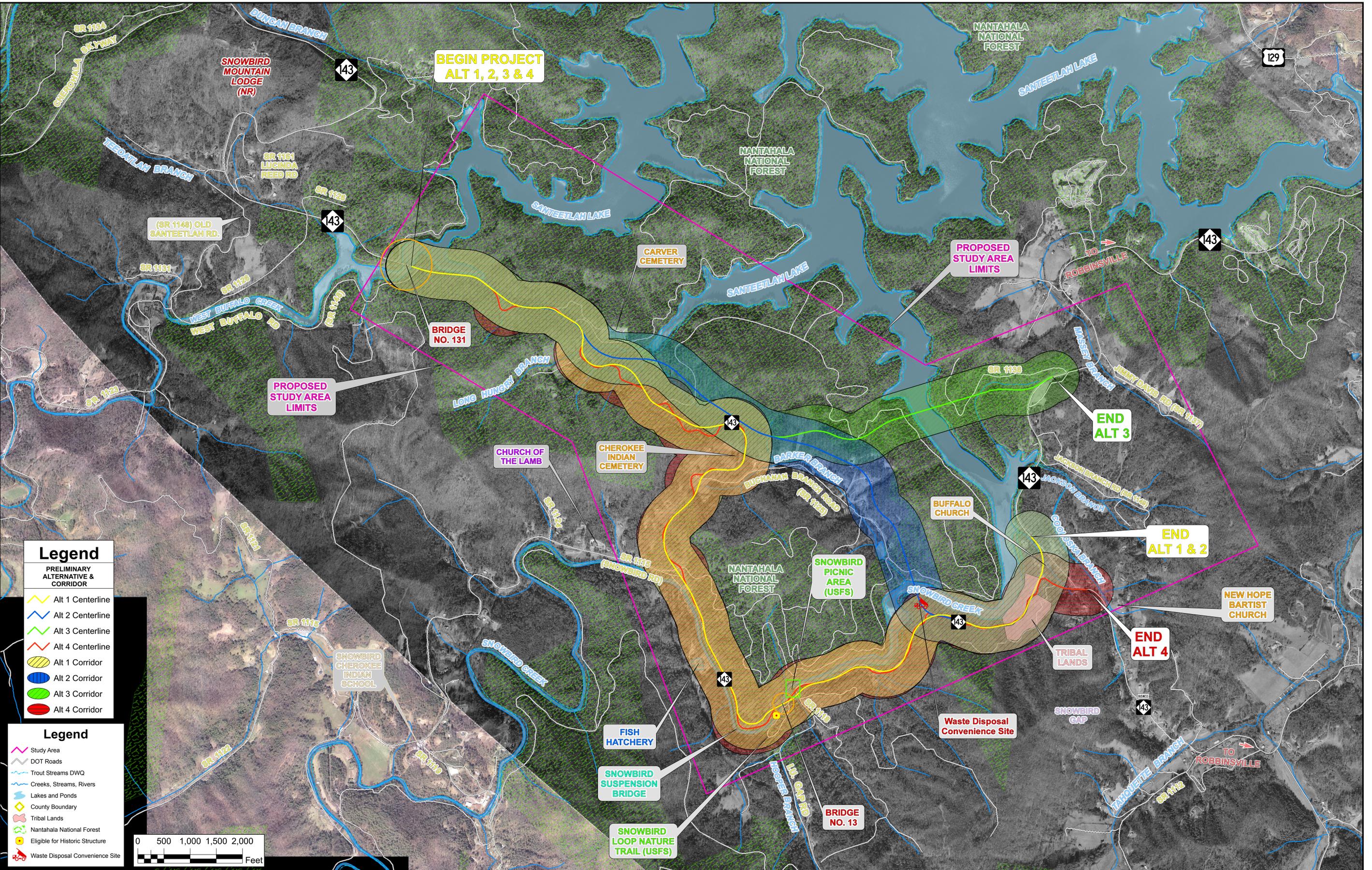
County:
GRAHAM

Div: **14** TIP#
R-2822B

WBS:
34508.1.1

APRIL 2008

**Figure
2**

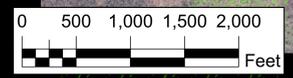


Legend

- Alt 1 Centerline
- Alt 2 Centerline
- Alt 3 Centerline
- Alt 4 Centerline
- Alt 1 Corridor
- Alt 2 Corridor
- Alt 3 Corridor
- Alt 4 Corridor

Legend

- Study Area
- DOT Roads
- Trout Streams DWQ
- Creeks, Streams, Rivers
- Lakes and Ponds
- County Boundary
- Tribal Lands
- Nantahala National Forest
- Eligible for Historic Structure
- Waste Disposal Convenience Site



**Citizens Informational Workshop
Comment Sheet (Continued)
TIP Project R-2822 B**

Was the project adequately explained to you? Yes _____ No _____

Were NCDOT representatives understandable and clear in their explanations?
Yes _____ No _____ Further comments: _____

Were NCDOT representatives courteous and helpful? Yes _____ No _____

Were display maps and handouts easy to read and understand? Yes _____ No _____

How might we better present proposed projects and address citizens' concerns in future informational workshops?

How did you hear about this meeting today?

Based on the information available, were all substantial questions answered?
Yes _____ No _____

What was the most helpful aspect about the workshop today? What was the least helpful?

THANK YOU FOR ATTENDING THE WORKSHOP
YOUR COMMENTS ARE VERY IMPORTANT IN THE PROJECT PLANNING PROCESS