



LWCF Proposal Description and Environmental Screening Form

The purpose of this Proposal Description and Environmental Screening Form (PD/ESF) is to provide descriptive and environmental information about a variety of Land and Water Conservation Fund (LWCF) state assistance proposals submitted for National Park Service (NPS) review and decision. The completed PD/ESF becomes part of the “federal administrative record” in accordance with the National Environmental Policy Act (NEPA) and its implementing regulations. The PD portion of the form captures administrative and descriptive details enabling the NPS to understand the proposal. The ESF portion is designed for States and/or project sponsors to use while the LWCF proposal is under development. Upon completion, the ESF will indicate the resources that could be impacted by the proposal enabling States and/or project sponsors to more accurately follow an appropriate pathway for NEPA analysis: 1) a recommendation for a Categorical Exclusion (CE), 2) production of an Environmental Assessment (EA), or 3) production of an Environmental Impact Statement (EIS). The ESF should also be used to document any previously conducted yet still viable environmental analysis if used for this federal proposal. The completed PD/ESF must be submitted as part of the State’s LWCF proposal to NPS.

Except for the proposals listed below, the PD/ESF **must** be completed, including the appropriate NEPA document, signed by the State, and submitted with each new federal application for LWCF assistance and amendments for: scope changes that alter or add facilities and/or acres; conversions; public facility exceptions; sheltering outdoor facilities; and changing the original intended use of an area from that which was approved in an earlier LWCF agreement. Consult the LWCF Program Manual (www.nps.gov/lwcf) for detailed guidance for your type of proposal and on how to comply with NEPA.

For the following types of proposals only this Cover Page is required because these types of proposals are administrative in nature and are categorically excluded from further NEPA environmental analysis. NPS will complete the NEPA CE Form. Simply check the applicable box below, and complete and submit only this **Cover Page** to NPS along with the other items required for your type of proposal as instructed in the LWCF Program Manual.

- SCORP planning proposal
- Time extension with no change in project scope or with a reduction in project scope
- To delete work **and** no other work is added back into the project scope
- To change project cost with no change in project scope or with a reduction in project scope
- To make an administrative change that does not change project scope



Name of LWCF Proposal: Cub Creek Park Conversion **Date Submitted to NPS: 5/7/2014**

Prior LWCF Project Number(s) *List all prior LWCF project numbers and all park names associated with assisted site(s):*
LWCF 37-00466 Westwood Park – Renamed to Cub Creek Park

Local or State Project Sponsoring Agency *(recipient or sub-recipient in case of pass-through grants):*
Town of Wilkesboro
North Carolina Department of Transportation

Local or State Sponsor Contact:
Name/Title: Kenneth Noland, ICMA-CM; Town Manager

Office/Address: **Town of Wilkesboro**
 203 West Main Street
 Wilkesboro, NC 28697

Phone/Fax: (336) 838-3951 / (336) 838-7616

Email: townmanager@wilkesboronorthcarolina.com

Step 1. Type of LWCF Proposal

New Project Application

- Acquisition** *Go to Step 2A* **Development** *Go to Step 2B* **Combination (Acquisition & Development)** *Go to Step 2C*

X **Project Amendment**

- Increase in scope or change in scope from original agreement.** *Complete Steps 3A, and 5 through 7.*
- 6(f) conversion proposal.** *Complete Steps 3B, and 5 through 7.*
- Request for public facility in a Section 6(f) area.** *Complete Steps 3C, and 5 through 7.*

Request for temporary non-conforming use in a Section 6(f) area.

Complete Steps 4A, and 5 through 7.

Request for significant change in use/intent of original LWCF application.

Complete Steps 4B, and 5 through 7.

Request to shelter existing/new facility within a Section 6(f) area regardless of funding source. *Complete Steps 4C, and 5 through 7.*

Step 2. New Project Application (See LWCF Manual for guidance.)

A. For an Acquisition Project

1. Provide a brief narrative about the proposal that provides the reasons for the acquisition, the number of acres to be acquired with LWCF assistance, and a description of the property. Describe and quantify the types of existing resources and features on the site (for example, 50 acres wetland, 2,000 feet beachfront, 200 acres forest, scenic views, 100 acres riparian, vacant lot, special habitat, any unique or special features, recreation amenities, historic/cultural resources, hazardous materials/ contamination history, restrictions, institutional controls, easements, rights-of-way, above ground/underground utilities, including wires, towers, etc.).
2. How and when will the site be made open and accessible for public outdoor recreation use (signage, entries, parking, site improvements, allowable activities, etc.)?
3. Describe development plans for the proposal for the site(s) for public outdoor recreation use within the next three (3) years.
4. SLO must complete the State Appraisal/Waiver Valuation Review form in Step 7 certifying that the appraisal(s) has been reviewed and meets the "Uniform Appraisal Standards for Federal Land Acquisitions" or a waiver valuation was approved per 49 CFR 24.102(c)(2)(ii). State should retain copies of the appraisals and make them available if needed.
5. Address each item in "D" below.

B. For a Development Project

1. Describe the physical improvements and/or facilities that will be developed with federal LWCF assistance, including a site sketch depicting improvements, where and how the public will access the site, parking, etc. Indicate entrances on 6(f) map. Indicate to what extent the project involves new development, rehabilitation, and/or replacement of existing facilities.
2. When will the project be completed and open for public outdoor recreation use?
3. Address each item in "D" below.

C. For a Combination Project

1. For the acquisition part of the proposal:
 - a. Provide a brief narrative about the proposal that provides the reasons for the acquisition, number of acres to be acquired with LWCF assistance, and describes the property. Describe and quantify the types of existing resources and features on the site (for example, 50 acres wetland, 2,000 feet beachfront, 200 acres forest, scenic views, 100 acres riparian, vacant lot, special habitat, any unique or special features, recreation amenities, historic/cultural resources, hazardous materials/ contamination history, restrictions, institutional controls, easements, rights-of-way, above ground/underground utilities, including wires, towers, etc.)
 - b. How and when will the site be made open and accessible for public outdoor recreation use (signage, entries, parking, site improvements, allowable activities, etc.)?
 - c. Describe development plans for the proposed for the site(s) for public outdoor recreation use within the next three (3) years.
 - d. SLO must complete the State Appraisal/Waiver Valuation Review form in Step 7 certifying that the appraisal(s) has been reviewed and meets the "Uniform Appraisal Standards for Federal Land Acquisitions" or a waiver valuation was approved per 49 CFR 24.102(c)(2)(ii). State should retain copies of the appraisals and make them available if needed.
2. For the development part of the proposal:
 - a. Describe the physical improvements and/or facilities that will be developed with federal LWCF assistance, including a site sketch depicting improvements, where and how the public will access the site, parking, etc. Indicate entrances on 6(f) map. Indicate to what extent the project involves new development, rehabilitation, and/or replacement of existing facilities.
 - b. When will the project be completed and open for public outdoor recreation use?
3. Address each item in "D" below.

D. Additional items to address for a new application and amendments

1. Will this proposal create a **new** public park/recreation area **where none previously existed** and is not an addition to an existing public park/recreation area? Yes ____ (go to #3) No **X** (go to #2)
2.
 - a. What is the name of the pre-existing public area that this new site will be added to? **Cub Creek Park**
 - b. Is the pre-existing public park/recreation area already protected under Section 6(f)? Yes **X** No ____
If no, will it now be included in the 6(f) boundary? Yes ____ No ____
3. What will be the name of this **new** public park/recreation area? **Cub Creek Park**
4.
 - a. Who will hold title to the property assisted by LWCF? Who will manage and operate the site(s)?
The Town of Wilkesboro
 - b. What is the sponsor's type of ownership and control of the property?
X Fee simple ownership
____ Less than fee simple. Explain:
____ Lease. Describe lease terms including renewable clauses, # of years remaining on lease, etc.
Who will lease area? Submit copy of lease with this PD/ESF. (See LWCF Manual for **program restrictions** for leases and further guidance.)
5. Describe the nature of any rights-of-way, easements, reversionary interests, etc. to the Section 6(f) park area? Indicate the location on 6(f) map. Do parties understand that a Section 6(f) conversion may occur if private or non-recreation activities occur on any pre-existing right-of-way, easement, leased area?
Acquisition of Right-of-way and a permanent utility easement will be required for the replacement of Bridge No. 29 on Oakwood Road. Bridge No. 29 will be replaced on a new alignment (towards the park) to improve the safety of the bridge for the vehicular use. A plan of the proposed replacement has been provided for reference. NCDOT has been working with the Town of Wilkesboro, as well as the regional LWCF coordinator, and are aware of the Section 6(f) conversion.

6. Are overhead utility lines present, and if so, explain how they will be treated per LWCF Manual.
Existing overhead power lines will need to be relocated away from the proposed alignment. A permanent easement will be used for access to the new location of the utilities.
7. As a result of this project, describe **new** types of outdoor recreation opportunities and capacities, and short and long term public benefits.
Conversion property, located along the southwest edge of the park, will be converted for use as a hiking trail as well as for recreational bicyclists.
8. Explain any existing non-recreation and non-public uses that will continue on the site(s) and/or proposed for the future within the 6(f) boundary.
None from this bridge replacement project.
9. Describe the planning process that led to the development of this proposal. Your narrative should address:
- How was the interested and affected public notified and provided opportunity to be involved in planning for and developing your LWCF proposal? Who was involved and how were they able to review the **completed** proposal, including any state, local, federal agency professionals, subject matter experts, members of the public and Indian Tribes. Describe any public meetings held and/or formal public comment periods, including dates and length of time provided for the public to participate in the planning process and/or to provide comments on the completed proposal.
Throughout the development of the bridge replacement project several newsletters and postcards were provided to the public; area businesses and residents, providing information and requesting comments. Replacement property was located and suggested for conversion by the Town of Wilkesboro.
 - What information was made available to the public for review and comment? Did the sponsor provide written responses addressing the comments? If so, include responses with this PD/ESF submission.
See above
10. How does this proposal implement statewide outdoor recreation goals as presented in the Statewide Comprehensive Outdoor Recreation Plan (SCORP) (include references), and explain why this proposal was selected using the State's Open Project Selection Process (OPSP).
This LWCF property conversion is intended to convert property for recreational activities such as walking for pleasure, running or jogging and mountain biking which are ranked activities in the SCORP as 1, 24, and 37 respectively.
11. List all source(s) and amounts of financial match to the LWCF federal share of the project. The value of the match can consist of cash, donation, and in-kind contributions. The federal LWCF share and financial matches must result in a viable outdoor recreation area and not rely on other funding not mentioned here. Other federal resources may be used as a match if specifically authorized by law.

Source	Type of Match	Value
N/A		\$
		\$
		\$

12. Is this LWCF project scope part of a larger effort not reflected on the SF-424 (*Application for Federal Assistance*) and grant agreement? If so, briefly describe the larger effort, funding amount(s) and source(s). This will capture information about partnerships and how LWCF plays a role in leveraging funding for projects beyond the scope of this federal grant.
Conversion of property for the bridge replacement project is not part of any other LWCF or other recreation effort.
13. List all required federal, state, and local permits/approvals needed for the proposal and explain their purpose and status.
Approval of the Section 6(f) conversion will be required from the National Parks Service as well as a *de minimis* determination for Section 4(f) from The Federal Highways Administration (FHWA).



Step 3. Project Amendment (See LWCF Manual for guidance.)

A. Increase/Change in Project Scope

1. **For Acquisition Projects:** To acquire additional property that was not described in the original project proposal and NEPA documentation, follow Step 2A-Acquisition Project and 2D.
2. **For Development Projects:** To change the project scope for a development project that alters work from the original project scope by adding elements or enlarging facilities, follow Step 2B-Development Project and 2D.
3. **For Combination Projects:** Follow Step 2C as appropriate.

B. Section 6(f)(3) Conversion Proposal

Prior to developing your Section 6(f)(3) conversion proposal, you must consult the LWCF Manual and 36 CFR 59.3 for complete guidance on conversions. Local sponsors must consult early with the State LWCF manager when a conversion is under consideration or has been discovered. States must consult with their NPS-LWCF manager as early as possible in the conversion process for guidance and to sort out and discuss details of the conversion proposal to avoid mid-course corrections and unnecessary delays. **A critical first step is for the State and NPS to agree on the size of the Section 6(f) park land impacted by any non-recreation, non-public use, especially prior to any appraisal activity.** Any previous LWCF project agreements and actions must be identified and understood to determine the actual Section 6(f) boundary.

The Section 6(f)(3) conversion proposal including the required NEPA environmental review documents (CE recommendation or an EA document) must focus on the loss of public outdoor recreation park land and recreational usefulness, and its replacement per 36 CFR 59, and **not** the activities precipitating the conversion or benefits thereof, such as the impacts of constructing a new school to relieve overcrowding or constructing a hotel/restaurant facility to stimulate the local economy. Rather, the environmental review must 1) focus on “resource impacts” as indicated on the ESF (Step 6), including the loss of public park land and recreation opportunities (ESF A-15), and 2) the impacts of creating new replacement park land and replacement recreation opportunities. A separate ESF must be generated for the converted park area and each replacement site. Section 6(f)(3) conversions always have more than minor impacts to outdoor recreation (ESF A-15) as a result of loss of parkland requiring an EA, except for “small” conversions as defined in the LWCF Manual Chapter 8.

For NPS review and decision, the following elements are required to be included in the State’s completed conversion proposal to be submitted to NPS:

1. A letter of transmittal from the SLO recommending the proposal.
2. A detailed explanation of the sponsor’s need to convert the Section 6(f) parkland including all efforts to consider other practical alternatives to this conversion, how they were evaluated, and the reasons they were not pursued.

The replacement of Bridge No. 29 over Cub Creek studied three alternatives for replacement: replace in-place; replace on new alignment to the east; replacement on new alignment the west. The replacement to the east alternative was dropped from consideration due to the unfavorable degree of curve which would be required on the bridge, and the replace in-place was dropped due to the proposal not rectifying a hazardous curve caused by the existing alignment.

3. An explanation of how the conversion is in accord with the State Comprehensive Outdoor Recreation Plan (SCORP).

A Statewide Comprehensive Outdoor Recreation Plan (SCORP) is required in order for states to be eligible for LWCF acquisition and development assistance. The *North Carolina Outdoor Recreation Plan 2009-2013*, prepared by the North Carolina Division of Parks and Recreation, provides a framework for addressing the state’s problems, needs, and opportunities for improved public outdoor recreation. The SCORP notes the goal of

conserving land under the North Carolina One Million Acres Efforts. The proposed conversion would result in a net gain of 1.62 acres for the Cub Creek Park, a small step toward that goal, but a valuable one in an urban area.

The SCORP also identifies a need to increase the availability of active outdoor recreational options for NC residents of all ages. The proposed conversion will use only 0.52 acre of non-developed land. No trails, ball fields, or areas planned for active use will be converted to non-recreational uses. The replacement land would be used for outdoor recreational activities such as walking for pleasure, running or jogging and mountain biking which are included in the NC SCORP and ranked at 1, 24 and 37 respectively.

4. Completed "State Appraisal/Waiver Valuation Review form in Step 7 for each of the converted and replacement parcels certifying that the appraisals meet the "Uniform Appraisal Standards for Federal Land Acquisitions." States must retain copies of the appraisals/waiver valuations and make them available for review upon request.

Attached

5. For the park land proposed for conversion, a detailed description including the following:
 - a. Specific geographic location on a map, 9-digit zip code, and name of park or recreation area proposed for conversion.

Cub Creek Park is located in the northeastern portion of the Town of Wilkesboro at 206 S. Bridge Street, Wilkesboro NC 28697.

- b. Description of the area proposed for the conversion including the acreage to be converted and any acreage remaining. For determining the size of the conversion, consider not only the physical footprint of the activity precipitating the conversion, but how the precipitating activity will impact the entire 6(f) park area. In many cases the size of the converted area is larger than the physical footprint. Include a description of the recreation resources, facilities, and recreation opportunities that will be impacted, displaced or lost by the proposed conversion. For proposals to partially convert a Section 6(f) park area, the remaining 6(f) park land must remain recreationally viable and not be impacted by the activities that are precipitating the conversion. If it is anticipated that the precipitating activities impact the remaining Section 6(f) area, the proposed area for the conversion should be expanded to encompass all impacted park land.

The proposed replacement site is currently defined as open space and is a young growth forested area within the 100 year floodplain associated with Cub Creek. The land area in question is positioned to the southwest of the confluence of Cub Creek stream and an unnamed waterway flowing in from the west (ref. attached maps).

The proposed replacement site contains a Wilkesboro sewer main and easement which is shown on the attached maps. A water main is located to the south of the replacement area in question, but not within the proposed replacement area. Although not within the replacement site area, there is a National Wetland Inventory site approximately 1,000 feet to the south which is also shown on the attached maps. Cub Creek Park land area is located to the north and east of the proposed replacement site. In addition and located within Cub Creek Park, the Wilkesboro Community Garden and Hidden Oaks Dog Park are located to the north of the replacement site. A recycling center, which is also contained within Cub Creek Park, is located to the east near the loop walking trail. Also notable is the ongoing Cub Creek stream restoration. The restoration of the stream as well as the riparian zones within Cub Creek Park are complete. Future planned phases of the stream restoration project are located outside the park system. The NC Fish and Wildlife Commission regularly stocks Cub Creek as part of their Hatchery Supported Trout Waters.

The replacement land area will be equal to or greater than 2.14 acres. This estimate is based on replacement of 0.51 acres (0.52 acres are protected by section 6F of the Land and Water Conservation Act of 1965) at the Bridge No. 29 project site. A small portion of right-of-way acquisition related to the Bridge No. 29 project also falls within PARTF land associated with Cub Creek Park. The PARTF land needing to be replaced was estimated at less than 0.01 acres during discussions with NCDOT, NC Division of Parks and Recreation, and the Town of Wilkesboro.

- c. Description of the community and population served by the park, including users of the park and uses.
2010 Census Population: Wilkesboro: 3,428

The Town of Wilkesboro, renowned for its scenic beauty, is located along the Yadkin River in the foothills of both the Blue Ridge Mountains and Brushy Mountains, is home to MerleFest and is the county seat of Wilkes County.

The park land and recreational opportunities provided by the Town of Wilkesboro at Cub Creek Park are utilized by Wilkesboro citizens as well as many Wilkes County residents and visitors. Cub Creek provides a multifaceted approach in terms of recreational opportunities and amenities, which include but are not limited to:

- **Basketball Courts**
- **Baseball/softball fields**
- **Community Nursery**
- **Community Garden**
- **Community Dog Park**
- **Cub Creek Access (restored stream/creek)**
- **Hatchery Supported Trout Waters (NC Fish Wildlife Commission)**
- **Playground**
- **Walking Trails**
- **Recycling Center**
- **Informational Kiosks (i.e., system restoration, trout, biological systems, etc.)**

**2010 Census Population
Wilkes County: 69,340**

Nestled within the picturesque setting of the Blue Ridge Mountains, Wilkes County offers a delightful adventure for both the young and the young at heart. Located just 80 miles from Charlotte, 45 miles from Winston-Salem, 45 miles from Hickory, and 35 minutes from Boone, Wilkes County remains an ideal location for those looking to escape the fast paced world of city living, while remaining close enough to commute for a night out on the town. Wilkes County offers the best of both worlds, presented with the flair of true southern hospitality.

- d. For partial conversions, a revised 6(f) map clearly indicating both the portion that is being converted and the portion remaining intact under Section 6(f).

See attached map(s)

6. For each proposed replacement site:

- a. Specific geographic location on a map, 9-digit zip code, and geographical relationship of converted and replacement sites. If site will be added to an existing public park/outdoor recreation area, indicate on map.

Reference attached map for geographic location, zip code and geographical relationship to project site (Bridge No. 29 replacement). Maps also depict the existing Cub Creek Park area in green.

- b. Description of the site's physical characteristics and resource attributes with number and types of resources and features on the site, for example, 15 acres wetland, 2,000 feet beachfront, 50 acres forest, scenic views, 75 acres riparian, vacant lot, special habitat, any unique or special features, structures, recreation amenities, historic/cultural resources, hazardous materials/contamination history, restrictions, institutional controls, easements, rights-of-way, overhead/underground utilities including overhead wires, towers, etc.

The proposed replacement site is currently defined as open space and is a young growth forested area within the 100 year floodplain associated with Cub Creek. The land area in question is positioned to the southwest of the confluence of Cub Creek stream and an unnamed waterway flowing in from the west (ref. attached maps).

The proposed replacement site contains a Wilkesboro sewer main and easement which is shown on the attached maps. A water main is located to the south of the replacement area in question, but not within the proposed replacement area. Although not within the replacement site area, there is a National Wetland Inventory site approximately 1,000 feet to the south which is also shown on the attached maps. Cub Creek Park land area is located to the north and east of the proposed replacement site. In addition and located within Cub Creek Park, the Wilkesboro Community Garden and Hidden Oaks Dog Park are located to the north of the replacement site. A recycling center, which is also contained within Cub Creek Park, is located to the east near the loop walking trail. Also notable is the ongoing Cub Creek stream restoration. The restoration of the stream as well as the riparian zones within Cub Creek Park are complete. Future planned phases of the stream restoration project are located outside the park system. The NC Fish and Wildlife Commission regularly stocks Cub Creek as part of their Hatchery Supported Trout Waters.

The replacement land area will be equal to or greater than 1.7 acres. This estimate is based on replacement of 0.410 acres (0.31 acres are protected by section 6F of the Land and Water Conservation Act of 1965) at the Bridge No. 29 project site. A small portion of right-of-way acquisition related to the Bridge No. 29 project also falls within PARTF land associated with Cub Creek Park. The PARTF land needing to be replaced was estimated at less than 0.1 acres during discussions with NCDOT, NC Division of Parks and Recreation, and the Town of Wilkesboro.

- c. Identification of the owner of the replacement site and its recent history of use/function up to the present.
The proposed replacement site is currently owned by Wilkes County and prior to the current ownership the land was used for agricultural purposes as part of the Call estate. The site is also located adjacent to a municipal park (Cub Creek Park). Reference attached maps for geographic relationship to Cub Creek Park land.

As indicated in the above answer 6 (b), the land is now a young growth forested area, which is also identified as 100 year floodplain on the 2009 floodplain mapping completed by the North Carolina Floodplain Mapping Program.

- d. Detailed explanation of how the proposed replacement site is of reasonably equivalent usefulness and location as the property being converted, including a description of the recreation needs that will be met by the new replacement parks, populations to be served, and new outdoor recreation resources, facilities, and opportunities to be provided.

In similar fashion to the land being taken by the Bridge No. 29 project, the proposed replacement land will serve as additional land for Cub Creek Park. The following benefits demonstrate the reasonably equivalent usefulness of the proposed replacement land area:

- **park open space as well as possible area for amenity expansion**
- **stream and fishing access for Cub Creek Hatchery Supported Waters**
- **future trail possibilities and connections**
- **protected stream and riparian zones/areas**

- e. Identification of owner and manager of the new replacement park?

Ken Noland, Town Manager
Town of Wilkesboro
336.838.3951
townmanager@wilkesboronorthcarolina.com

Cliff Gardener, Superintendent
Town of Wilkesboro Parks and Recreation Department
cell #: 336.927.3193
cgardner8804@yahoo.com

- f. Name of the new replacement park. If the replacement park is added to an existing public park area, will the existing area be included within the 6(f) boundary? What is the name of the existing public park area?

Yes, Cub Creek Park

- g. Timeframe for completing the new outdoor recreation area(s) to replace the recreation opportunity lost per the terms of conversion approval and the date replacement park(s) will be open to the public.

The proposed replacement site should be accessible and groomed for recreational use and stream access one year after the land ownership has been transferred to the Town of Wilkesboro.

- h. New Section 6(f) map for the new replacement park.

Reference attached maps for existing Cub Creek Park and proposed replacement site.

7. NEPA environmental review, including NHPA Section 106 review, for both the converted and replacement sites in the same document to analyze how the converted park land and recreational usefulness will be replaced. Except for “small” conversions (see LWCF Manual Chapter 8), conversions usually require an EA.

The proposed conversion meets the criteria for a “small conversion.” Therefore, under LWCF guidelines, an Environmental Assessment is not required.

Environmental Screening Forms (ESF) for both the conversion and replacement lands are attached. No impacts are expected to result from the conversion that would exceed the “minor impacts” category.

Proceed to Steps 5 through 7



C. Proposal for a Public Facility in a Section 6(f) Area

Prior to developing this proposal, you must consult the LWCF Manual for complete guidance. In summary, NPS must review and decide on requests to construct a public indoor and/or non-recreation facility within a Section 6(f) area. In certain cases NPS may approve the construction of public facilities within a Section 6(f) area where it can be shown that there will be a net gain in **outdoor recreation** benefits and enhancements for the entire park. In most cases, development of a non-recreation public facility within a Section 6(f) area constitutes a conversion. For NPS review, the State/sponsor must submit a proposal to NPS under a letter of transmittal from the SLO that:

1. Describes the purpose and all proposed uses of the public facility such as types of programming, recreation activities, and special events including intended users of the new facility and any agency, organization, or other party to occupy the facility. Describe the interior and exterior of the facility, such as office space, meeting rooms, food/beverage area, residential/lodging area, classrooms, gyms, etc. Explain how the facility will be compatible with the outdoor recreation area. Explain how the facility and associated uses will significantly support and enhance existing and planned outdoor recreation resources and uses of the site, and how outdoor recreation use will remain the primary function of the site. (The public’s outdoor recreation use must continue to be greater than that expected for any indoor use, unless the site is a single facility, such as a swimming pool, which virtually occupies the entire site.)
2. Indicates the exact location of the proposed public facility and associated activities on the site’s Section 6(f) map. Explain the design and location alternatives considered for the public facility and why they were not pursued.
3. Explains who will own and/or operate and maintain the facility? Attach any 3rd party leases and operation and management agreements. When will the facility be open to the public? Will the facility ever be used for private functions and closed to the public? Explain any user or other fees that will be instituted, including the fee structure.
4. Includes required documents as a result of a completed NEPA process (Steps 5 – 7).



Step 4. Proposals for Temporary Non-Conforming Use, Significant Change in Use, and Sheltering Facilities (See LWCF Manual for guidance.)

A. Proposal for Temporary Non-Conforming Use

Prior to developing this proposal, you must consult the LWCF Manual for complete guidance. NPS must review and decided on requests for temporary uses that do not meet the requirements of allowable activities within a Section 6(f) area. A temporary non-conforming use is limited to a period of six months (180 days) or less. Continued use beyond six-months will not be considered temporary, and may result in a Section 6(f)(3) conversion of use requiring the replacement of converted parkland. For NPS review, describe the temporary non-conforming use (activities other than public outdoor recreation) in detail including the following information:

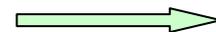
1. A letter of transmittal from the SLO recommending the proposal.
2. Describe in detail the proposed temporary non-conforming use and all associated activities, why it is needed, and alternative locations that were considered and why they were not pursued.
3. Explain length of time needed for the temporary non-conforming use and why.
4. Describe the size of the Section 6(f) area affected by the temporary non-conforming use activities and expected impacts to public outdoor recreation areas, facilities and opportunities. Explain efforts to keep the size of the area impacted to a minimum. Indicate the location of the non-conforming use on the site's 6(f) map.
5. Describe any anticipated temporary/permanent impacts to the Section 6(f) area and how the sponsor will mitigate them during and after the non-conforming use ceases.
6. Consult the LWCF Manual for additional requirements and guidelines before developing the proposal.



B. Proposal for Significant Change in Use

Prior to developing the proposal, you must consult the LWCF Manual for complete guidance. NPS approval must be obtained prior to any change from one eligible use to another when the proposed use would significantly contravene the original plans or intent for the area outlined in the original LWCF application for federal assistance. Consult with NPS for early determination on the need for a formal review. NPS approval is only required for proposals that will **significantly** change the use of a LWCF-assisted site (e.g., from passive to active recreation). The proposal must include and address the following items:

1. A letter of transmittal from the SLO recommending the proposal.
2. Description of the proposed changes and how they significantly contravene the original plans or intent of LWCF agreements.
3. Explanation of the need for change in use and how the change is consistent with local plans and the SCORP.
4. Consult the LWCF Manual for additional requirements and guidelines before developing the proposal.



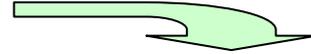
C. Proposal for Sheltering Facilities

Prior to developing this proposal, you must consult the LWCF Manual for complete guidance. NPS must review and decide on all proposals to shelter an existing outdoor recreation facility or construct a new sheltered recreation facility within a Section 6(f) area regardless of funding source. The proposal must demonstrate that there is an increased benefit to public recreation opportunity. Describe the sheltering proposal in detail, including the following:

1. A letter of transmittal from the SLO recommending the proposal.
2. Describe the proposed sheltered facility, how it would operate, how the sheltered facility will include recreation uses that could typically occur outdoors, and how the primary purpose of the sheltered facility is recreation.

3. Explain how the sheltered facility would not substantially diminish the outdoor recreation values of the site including how the sheltered facility will be compatible and significantly supportive of the outdoor recreation resources present and/or planned.
4. Explain how the sheltered facility will benefit the total park's outdoor recreation use.
5. Describe efforts provided to the public to review the proposal to shelter the facility and has local support.
6. Document that the sheltered facility will be under the control and tenure of the public agency which sponsors and administers the original park area.
7. Consult the LWCF Manual for additional requirements and guidelines before developing the proposal.

Proceed to Steps 5 through 7



Step 5. Summary of Previous Environmental Review (including E.O. 12372 - Intergovernmental Review)

To avoid duplication of effort and unnecessary delays, describe any prior environmental review undertaken at any time and still viable for this proposal or related efforts that could be useful for understanding potential environmental impacts. Consider previous local, state, federal (e.g. HUD, EPA, USFWS, FHWA, DOT) and any other environmental reviews. At a minimum, address the following:

1. Date of environmental review(s), purpose for the environmental review(s) and for whom they were conducted.
2. Description of the proposed action and alternatives.

The replacement of Bridge No. 29 over Cub Creek studied three alternatives for replacement: replace in-place; replace on new alignment to the east; replacement on new alignment the west. The replacement to the east alternative was dropped from consideration due to the unfavorable degree of curve which would be required on the bridge, and the replace in-place was dropped due to not having an acceptable route to detour traffic, leaving only the replace to the west alternative which impacts the 6(f) property.
3. Who was involved in identifying resource impact issues and developing the proposal including the interested and affected public, government agencies, and Indian tribes.

NCDOT and the Town of Wilkesboro
4. Environmental resources analyzed and determination of impacts for proposed actions and alternatives.

See attached Natural Resource Technical Report
5. Any mitigation measures to be part of the proposed action.

To compensate for Section 6(f) property affected by the proposed bridge replacement project, a portion of property currently owned by Wilkes County will be purchased and designated as part of Cub Creek Park.
6. Intergovernmental Review Process (Executive Order 12372): Does the State have an Intergovernmental Review Process? Yes _____ No **X**. If yes, has the LWCF Program been selected for review under the State Intergovernmental Review Process? Yes _____ No _____. If yes, was this proposal reviewed by the appropriate State, metropolitan, regional and local agencies, and if so, attach any information and comments received about this proposal. If proposal was not reviewed, explain why not.
7. Public comment periods (how long, when in the process, who was invited to comment) and agency response.

A "Project Update" postcard was mailed to residents and businesses in the area of Cub Creek Park specifying a proposed impact to Section 6(f) of the Land and Water Conservation Fund Act of 1965, as amended, properties and noting intention to seek a *de minimis* determination from FHWA for Section 4(f) of the Department of Transportation Act of 1966 impacts. The postcard requested interceded parties to comment within a 30 day period which ended at March 1, 2014. No comments were received concerning Section 6 (f) impacts.

8. Any formal decision and supporting reasons regarding degree of potential impacts to the human environment. **Coordination with the Town of Wilkesboro as well as Cub Creek Park management has indicated that the proposed bridge replacement project and Section 6(f) impacts will not have a measurable degree of impact to the human environment (See appendices). Replacement property offers potential benefit to the human environment by offering additional recreational area and possibly bicycle trails.**

9. Was this proposed LWCF federal action and/or any other federal actions analyzed/reviewed in any of the previous environmental reviews? If so, what was analyzed and what impacts were identified? Provide specific environmental review document references.

No

Use resource impact information generated during previous environmental reviews described above and from recently conducted site inspections to complete the Environmental Screening Form (ESF) portion of this PD/ESF under Step 6. Your ESF responses should indicate your proposal's potential for impacting each resource as determined in the previous environmental review(s), and include a reference to where the analysis can be found in an earlier environmental review document. If the previous environmental review documents contain proposed actions to mitigate impacts, briefly summarize the mitigation for each resource as appropriate. The appropriate references for previous environmental review document(s) must be documented on the ESF, and the actual document(s) along with this PD/ESF must be included in the submission for NPS review.

Proceed to Steps 6 through 7



Step 6. Environmental Screening Form (ESF)

This portion of the PD/ESF is a working tool used to identify the level of environmental documentation which must accompany the proposal submission to the NPS. By completing the ESF, the project sponsor is providing support for its recommendation in Step 7 that the proposal either:

1. meets criteria to be categorically excluded (CE) from further NEPA review and no additional environmental documentation is necessary; or
2. requires further analysis through an environmental assessment (EA) or an environmental impact statement (EIS).

An ESF alone does not constitute adequate environmental documentation unless a CE is recommended. If an EA is required, the EA process and resulting documents must be included in the proposal submission to the NPS. If an EIS may be required, the State must request NPS guidance on how to proceed.

The scope of the required environmental analysis will vary according to the type of LWCF proposal. For example, the scope for a new LWCF project will differ from the scope for a conversion. Consult the LWCF Manual for guidance on defining the scope or extent of environmental analysis needed for your LWCF proposal. As early as possible in your planning process, consider how your proposal/project may have direct, indirect and cumulative impacts on the human environment for your type of LWCF action so planners have an opportunity to design alternatives to lessen impacts on resources, if appropriate. When used as a planning tool in this way, the ESF responses may change as the proposal is revised until it is ready for submission for federal review. Initiating or completing environmental analysis after a decision has been made is contrary to both the spirit and letter of the law of the NEPA.

The ESF should be completed with input from resource experts and in consultation with relevant local, state, tribal and federal governments, as applicable. The interested and affected public should be notified of the proposal and be invited to participate in scoping out the proposal (see LWCF Manual Chapter 4). At a minimum, a site inspection of the affected area must be conducted by individuals who are familiar with the type of affected resources, possess the ability to identify potential resource impacts, and to know when to seek additional data when needed.

At the time of proposal submission to NPS for federal review, the completed ESF must justify the NEPA pathway that was followed: CE recommendation, production of an EA, or production of an EIS. The resource topics and issues identified on the ESF for this proposal must be presented and analyzed in an attached EA/EIS. Consult the LWCF Manual for further guidance on LWCF and NEPA.

The ESF contains two parts that must be completed:

Part A. Environmental Resources

Part B. Mandatory Criteria

Part A: For each environmental resource topic, choose an impact estimate level (none, negligible, minor, exceeds minor) that describes the degree of potential negative impact for each listed resource that may occur directly, indirectly and cumulatively as a result of federal approval of your proposal. For each impacted resource provide a brief explanation of how the resource might be affected, how the impact level was determined, and why the chosen impact level is appropriate. If an environmental review has already been conducted on your proposal and is still viable, include the citation including any planned mitigation for each applicable resource, and choose an impact level as mitigated. If the resource does not apply to your proposal, mark NA in the first column. Add any relevant resources (see A.24 on the ESF) if not included in the list.

Use a separate sheet to briefly clarify how each resource could be adversely impacted; any direct, indirect, and cumulative impacts that may occur; and any additional data that still needs to be determined. Also explain any planned mitigation already addressed in previous environmental reviews.

Part B: This is a list of mandatory impact criteria that preclude the use of categorical exclusions. If you answer “yes” or “maybe” for any of the mandatory criteria, you must develop an EA or EIS regardless of your answers in Part A. Explain all “yes” and “maybe” answers on a separate sheet.

For conversions, complete one ESF for each of the converted and replacement sites.

Environmental Screening Form for converted property

A. ENVIRONMENTAL RESOURCES Indicate potential for adverse impacts. Use a separate sheet to clarify responses per instructions for Part A on page 9.	Not Applicable- Resource does not exist	No/Negligible Impacts- Exists but no or negligible impacts	Minor Impacts	Impacts Exceed Minor EA/EIS required	More Data Needed to Determine Degree of Impact EA/EIS required
1. Geological resources: soils, bedrock, slopes, streambeds, landforms, etc.	X				
2. Air quality	X				
3. Sound (noise impacts)	X				
4. Water quality/quantity	X				
5. Stream flow characteristics	X				
6. Marine/estuarine	X				
7. Floodplains/wetlands	X				
8. Land use/ownership patterns; property values; community livability	X				
9. Circulation, transportation		X			
10. Plant/animal/fish species of special concern and habitat; state/federal listed or proposed for listing	X				
11. Unique ecosystems, such as biosphere reserves, World Heritage sites, old growth forests, etc.	X				
12. Unique or important wildlife/ wildlife habitat	X				
13. Unique or important fish/habitat	X				
14. Introduce or promote invasive species (plant or animal)	X				
15. Recreation resources, land, parks, open space, conservation areas, rec. trails, facilities, services, opportunities, public access, etc. <i>Most conversions exceed minor impacts. See Step 3.B</i>		X			
16. Accessibility for populations with disabilities	X				
17. Overall aesthetics, special characteristics/features	X				

18. Historical/cultural resources, including landscapes, ethnographic, archeological, structures, etc. Attach SHPO/THPO determination.	X				
19. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure	X				
20. Minority and low-income populations	X				
21. Energy resources (geothermal, fossil fuels, etc.)	X				
22. Other agency or tribal land use plans or policies	X				
23. Land/structures with history of contamination/hazardous materials even if remediated	X				
24. Other important environmental resources to address.	X				

Environmental Screening Form for converted property – continued

- A-9** The Section 6(f) property proposed to be converted from Cub Creek Park property to NCDOT Right-of-Way is currently not being used, nor functioning, as property contributing to the function of the park. This is property formerly converted for park use, but has never been developed.
- A-15** The property being converted from Cub Creek Park to NCDOT Right-of Way does not contain recreational resources, conversation areas, recreational trail, facilities, or service. Area proposed to be converted contains only park land which could also be considered open space, and could be considered public access via short cut from the town sidewalk to the park entrance. The area impacted by the conversion is minimal in comparison to the size of the park; therefore, is considered to be negligible. FHWA has agreed that the same area of park should be considered as a *de minimis* impact as it applies to Section 4(f) of the Department of Transportation Act of 1966.

Environmental Screening Form for replacement property

A. ENVIRONMENTAL RESOURCES Indicate potential for adverse impacts. Use a separate sheet to clarify responses per instructions for Part A on page 9.	Not Applicable- Resource does not exist	No/Negligible Impacts- Exists but no or negligible impacts	Minor Impacts	Impacts Exceed Minor EA/EIS required	More Data Needed to Determine Degree of Impact EA/EIS required
1. Geological resources: soils, bedrock, slopes, streambeds, landforms, etc.	X				
2. Air quality	X				
3. Sound (noise impacts)	X				
4. Water quality/quantity	X				
5. Stream flow characteristics	X				
6. Marine/estuarine	X				
7. Floodplains/wetlands	X				
8. Land use/ownership patterns; property values; community livability	X				
9. Circulation, transportation	X				
10. Plant/animal/fish species of special concern and habitat; state/federal listed or proposed for listing	X				
11. Unique ecosystems, such as biosphere reserves, World Heritage sites, old growth forests, etc.	X				
12. Unique or important wildlife/ wildlife habitat	X				
13. Unique or important fish/habitat	X				
14. Introduce or promote invasive species (plant or animal)	X				
15. Recreation resources, land, parks, open space, conservation areas, rec. trails, facilities, services, opportunities, public access, etc. <i>Most conversions exceed minor impacts. See Step 3.B</i>	X				
16. Accessibility for populations with disabilities	X				
17. Overall aesthetics, special characteristics/features	X				
18. Historical/cultural resources, including landscapes, ethnographic, archeological, structures, etc. Attach SHPO/THPO determination.	X				
19. Socioeconomics, including employment, occupation, income changes, tax base, infrastructure	X				
20. Minority and low-income populations	X				
21. Energy resources (geothermal, fossil fuels, etc.)	X				
22. Other agency or tribal land use plans or policies	X				
23. Land/structures with history of contamination/hazardous materials even if remediated	X				
24. Other important environmental resources to address.	X				

B. MANDATORY CRITERIA If your LWCF proposal is approved, would it...	Yes	No	To be determined
1. Have significant impacts on public health or safety?		X	
2. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands, wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (E.O. 11990); floodplains (E.O 11988); and other ecologically significant or critical areas.		X	
3. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102(2)(E)]?		X	
4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?		X	
5. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?		X	
6. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?		X	
7. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office.(Attach SHPO/THPO Comments)		X	
8. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.		X	
9. Violate a federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment?		X	
10. Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898)?		X	
11. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007)?		X	
12. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area, or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?		X	

Environmental Reviewers

The following individual(s) provided input in the completion of the environmental screening form. List all reviewers including name, title, agency, field of expertise. Keep all environmental review records and data on this proposal in state compliance file for any future program review and/or audit. The ESF may be completed as part of a LWCF pre-award site inspection if conducted in time to contribute to the environmental review process for the proposal.

1. Kenneth Nowland; Town of Wilkesboro Town Manager
2. LuAnn Bryan; NC Division of Parks and Recreation / NCSU -Recreation Resources Service agent
- 3.

The following individuals conducted a site inspection to verify field conditions.

List name of inspector(s), title, agency, and date(s) of inspection.

- 1.
- 2.
- 3.

State may require signature of

LWCF sub-recipient applicant here: _____ Date _____

**National Environmental Policy Act
National Park Service-Land and Water Conservation Fund State Assistance Program
Categorical Exclusions for Which a Record is Needed**

Note: The following are the NEPA Categorical Exclusions approved for use with all NPS programs. Only the unshaded categories apply to LWCF proposals. Before selecting a categorical exclusion (CE), complete the PD/ESF for the LWCF proposal to support the CE selection.

A. Actions related to general administration

(1) Changes or amendments to an approved action when such changes would cause no environmental impact. *LWCF actions that are covered include amendments for:*

- time extensions with no change in project scope or with a reduction in project scope;*
- deleting work and no other work is added back into the project scope;*
- changing project cost with no change in project scope or with a reduction in project scope;*
- making administrative changes that do not affect project scope.*

F. Actions related to grant programs

(1) Proposed actions essentially the same as those listed in paragraphs A-E above *not shaded in gray.*

(2) Grants for acquisition to areas that will continue in the same use or lower density use with no additional disturbance to the natural setting or type of use.

(3) Grants for replacement or renovation of facilities at their same location without altering the kind and amount of recreational, historical, or cultural resources of the area or the integrity of the existing setting.

(4) Grants for construction of facilities on lands acquired under a previous NPS or other federal grant, provided that the development is in accord with plans submitted with the acquisition grant, and that environmental documents have been completed on the impacts of the proposal funded by the original grant.

(5) Grants for the construction of new facilities within an existing park or recreation area, provided that the facilities will not:

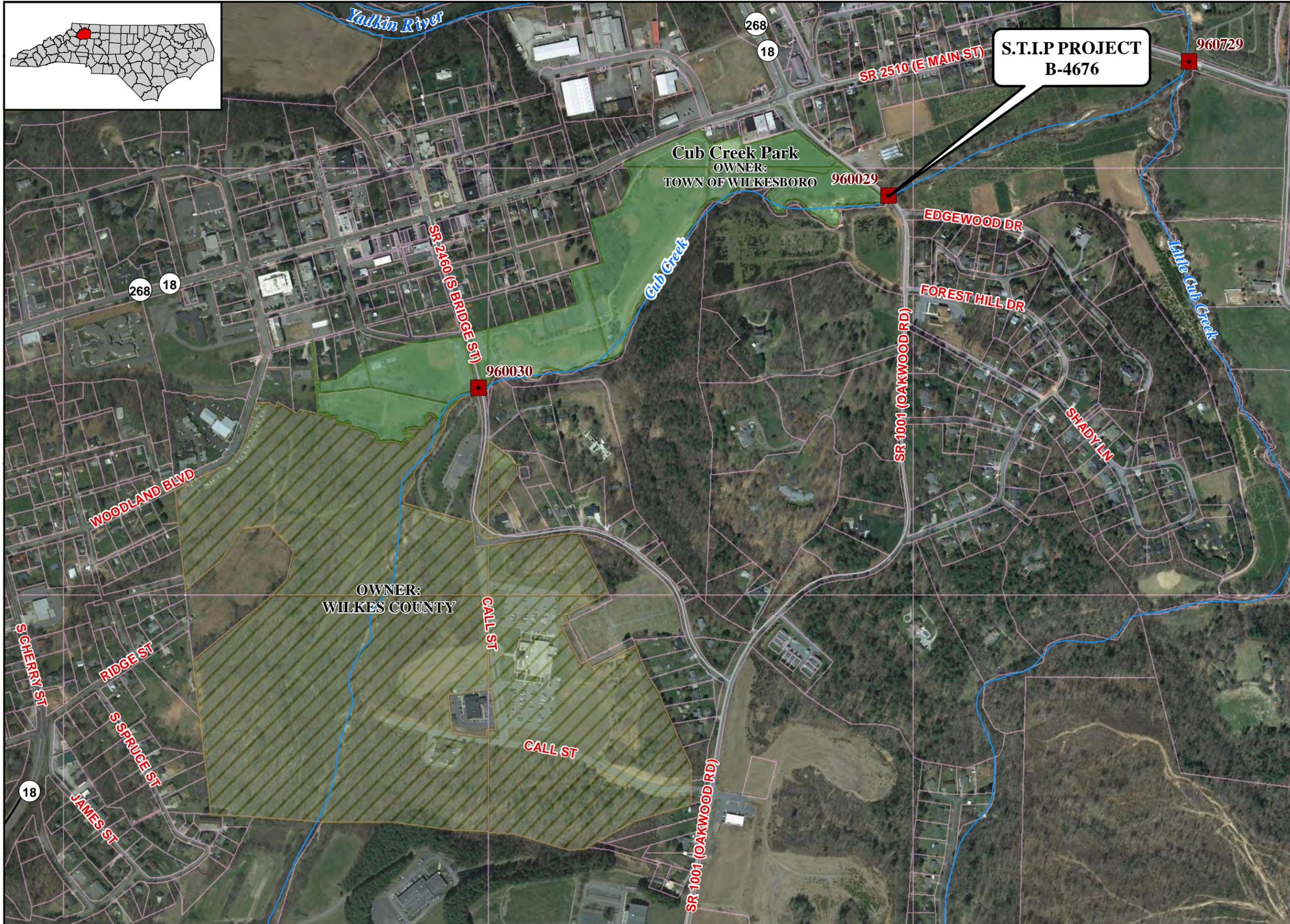
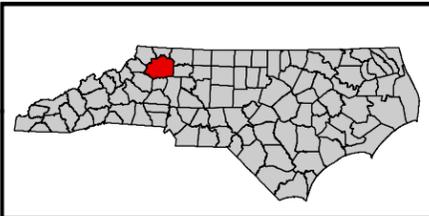
(a) conflict with adjacent ownerships or land use, or cause a nuisance to adjacent owners or occupants, such as would happen if use were extended beyond daylight hours.

(b) introduce motorized recreation vehicles, including off-road vehicles, personal water craft, and snowmobiles.

(c) introduce active recreation pursuits into a passive recreation area.

(d) increase public use or introduce non-compatible uses to the extent of compromising the nature and character of the property or causing physical damage to it.

(e) add or alter access to the park from the surrounding area.



By: J.TORTORELLA



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

REPLACEMENT OF BRIDGE NO. 29
OVER CUB CREEK
SR 1001 (OAKWOOD ROAD)
WILKES COUNTY
STIP PROJECT B-4676



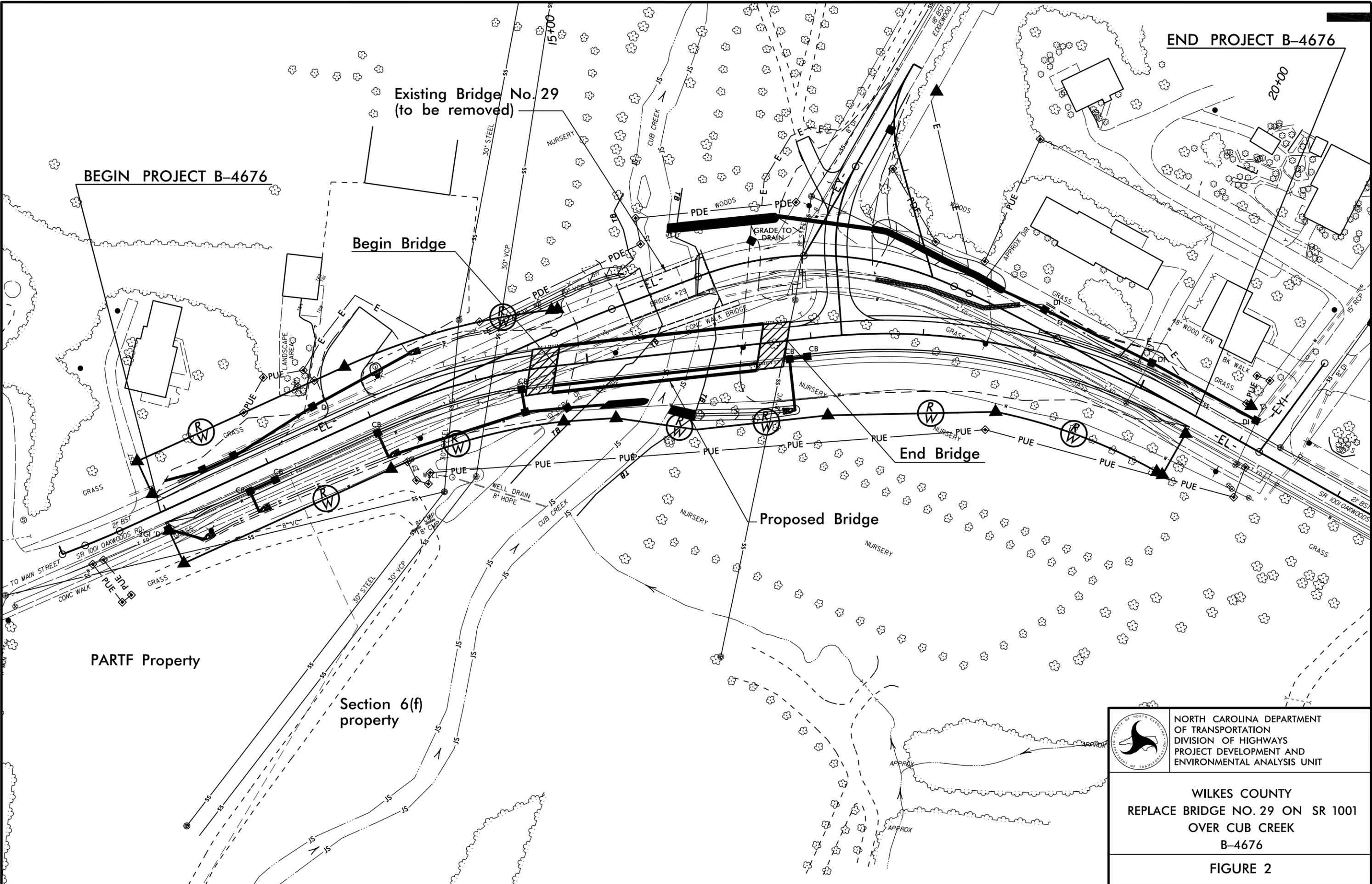
County:
WILKES

Div: 11 TIP# B-4676

WBS:
33831.1.1

Date:
SEPTEMBER 2012

Figure
2



END PROJECT B-4676

BEGIN PROJECT B-4676

Existing Bridge No. 29
(to be removed)

Begin Bridge

End Bridge

Proposed Bridge

PARTF Property

Section 6(f)
property



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

WILKES COUNTY
REPLACE BRIDGE NO. 29 ON SR 1001
OVER CUB CREEK
B-4676

FIGURE 2

REQUEST FOR R/W COST ESTIMATE

DATE RECEIVED: **04/29/14**

DISTRIBUTED: **04/29/14**

REVISION / **Update**
UPDATE : _____

I.D.NO./
BREAK

DESCRIPTION

SCHEDULE

B-4676 **Replace Bridge # 29 over Cub Creek on SR 1001**

R/W FY _____
CONST FY _____

UNFUND POST YRS

ACCESS: FULL C/A PARTIAL C/A NO CONTROL

WBS ELEMENT NUMBER: **33831.1.1**

COUNTY: **Wilkes**

ENGINEER: **Tracy Walter**

DEPT.: **PDEA**

DIV.: **11**

APPRAISAL OFFICE.: **3**

TYPE OF PLANS FURNISHED FOR ESTIMATE: _____

DATE DUE: **05/06/14**

PRIOR ESTIMATES OF LAND AND DAMAGES (WITH DATES):

October 2012 Tony Adams: Alt 1) Total \$6,750

BASED ON PAST PROJECT HISTORICAL DATA, THE LAND AND DAMAGE FIGURES HAVE BEEN ADJUSTED BY A FACTOR OF **50%** TO INCLUDE CONDEMNATION AND ADMINISTRATIVE INCREASES THAT OCCUR DURING SETTLEMENT OF ALL PARCELS. THESE FIGURES PROJECT THE MOST ACCURATE ACQUISITION ESTIMATES **FOR 2 (TWO) YEARS** FROM THE DATE OF THIS ESTIMATE.

ESTIMATED BY: A. Adams TIME SPENT: 8hrs COMPLETED DATE: 5/5/2014 EXTENSION REQ.: No

ALTERNATES

	A1				
ESTIMATED NO. OF PARCELS:	1				
RESIDENTIAL RELOCATIONS:	0				
BUSINESS RELOCATIONS:	0				
GRAVES	0				
LAND AND DAMAGE:	\$8,475				
ACQUISITION:	\$5,000				
TOTAL ESTIMATED R/W COST:	\$13,475				

**** TOTALS/VALUES ****

PLEASE PROVIDE ONLY BASE NUMBERS. ALL TOTALING CALCULATIONS WILL BE COMPLETED BY THE ESTIMATE COORDINATOR, SARAH D. WHITE.

THERE ARE NO FIGURES FOR UTILITY INVOLVEMENT ON THIS ESTIMATE AND NO PUE's.

NOTES: This estimate is limited to a 5,000 acre tract owned by the Town of Wilkesboro. The price per acre of \$10,890 remains the same as the last estimate as there has been limited sales activity in the Wilkes County area.

**Wilkes County
Bridge No. 29 on SR 1001 (Oakwood Rd.)
over Cub Creek
Federal Aid Project No. BRZ-1001(29)
W.B.S. No. 33831.1.1
State Project No. 8.2761801
S.T.I.P. No. B-4676**

CATEGORICAL EXCLUSION

UNITED STATES DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

AND

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

4/7/14
DATE

Richard W. Hancock
for Richard W. Hancock
Manager, Project Development & Environmental Analysis Unit

4-8-14
DATE

John F. Sullivan, III
for John F. Sullivan, III, Division Administrator
Federal Highway Administration

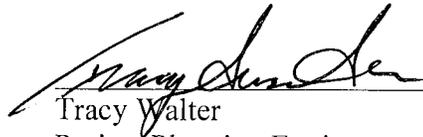
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CATEGORICAL EXCLUSION

Documentation Prepared in
Project Development and Environmental Analysis Unit By:

4/7/2014

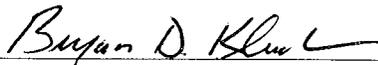
DATE



Tracy Walter
Project Planning Engineer
Bridge Project Development Section

4-7-2014

DATE



Bryan D. Kluchar, PE
Project Engineer
Bridge Project Development Section



PROJECT COMMITMENTS:

**Wilkes County
Bridge No. 29 on SR 1001 (Oakwood Rd.)
Over Cub Creek
Federal Aid Project No. BRZ-1001 (29)
State Project No. 8.2761801
W.B.S. No. 33831.1.1
S.T.I.P. No. B-4676**

Structure Design – Sidewalk

The proposed structure should be designed to provide a vertical barrier between the vehicular and pedestrian traffic.

Roadway Design, Division 11 – Future Greenway

Allowance will be made for a future ten-foot greenway path under the bridge on the north side of Cub Creek.

Roadway Design, Division 11 – Road Closure

Division has committed to not closing SR 1001 for more than a six month period during the replacement project. All efforts should be made to minimize the road closure period.

PDEA Bridge Section – Section 6(f)

The replacement project will require conversion of property protected under Section 6(f) of the Land and Water Conservation Fund (LWCF) Act of 1965 as well as PARTF of the NCDENR Parks and Recreation Trust Fund. Appropriate Section 6(f) documentation shall be complete prior to purchase of Right-of-Way for this project.

Hydraulic Unit – FEMA Coordination

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).

Division Construction-FEMA

This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, 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.

Wilkes County
Bridge No. 29 on SR 1001 (Oakwood Rd.)
over Cub Creek
Federal Aid Project No. BRZ-1001(29)
W.B.S. No. 33831.1.1
State Project No. 8.2761801
S.T.I.P. No. B-4676

INTRODUCTION: Bridge No. 29 is included in the latest approved North Carolina Department of Transportation (NCDOT) Transportation Improvement Program and is eligible for the Federal-Aid Highway Bridge Program. The location is shown in Figure 1. No substantial environmental impacts are anticipated. The project is classified as a Federal “Categorical Exclusion”.

I. PURPOSE AND NEED STATEMENT

NCDOT Bridge Management Unit records indicate Bridge No. 29 has a sufficiency rating of 8.89 out of a possible 100 for a new structure. The bridge is considered structurally deficient due to Superstructure and Substructure ratings of 4 out of 9 as well as a Structural Evaluation of 3 out of 9 according to Federal Highway Administration (FHWA) standards and therefore eligible for FHWA’s Highway Bridge Program. The structure is also considered to be functionally obsolete due to Structural Evaluation and Deck Geometry evaluations of 2 out of 9.

Components of the concrete superstructure as well as the concrete and timber substructure have experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities. The posted weight limit on the bridge is down to 25 tons for single vehicles and 29 tons for truck-tractor semi-trailers. The bridge has reached the end of its useful life. Replacement of the bridge will result in safer traffic operations.

II. EXISTING CONDITIONS

The project is located within the town limits of Wilkesboro in Wilkes County, near the intersection of SR 1001 (Oakwood Rd.) and SR 2557 (Old US 421/East Main Street); see Figure 1. Development in the area is commercial and residential in nature.

SR 1001 is classified as a urban local route in the Statewide Functional Classification System and is not a National Highway System Route.

In the vicinity of the bridge, SR 1001 has a 21-foot pavement width with 2-foot grass shoulders (see Figure 3). The roadway grade is in a sag vertical curve through the project area. The existing bridge is on a tangent. The roadway is situated approximately 14.0 feet above the creek bed.

Bridge No. 29 is a three-span structure that consists of precast, prestressed concrete channels with an asphalt-wearing surface. The end bents and interior bents consist of precast

prestressed concrete caps on timber piles. The existing bridge (see Figure 3) was constructed in 1969. The overall length of the structure is 81 feet. The clear roadway width is 29.7 feet.

There are utilities attached to the existing structure as well as overhead power lines cross the branch just south of the bridge. Utility impacts are anticipated to be low.

The current traffic volume of 7,200 vehicles per day (VPD) is expected to increase to 9,000 VPD by the year 2035. The projected volume includes one percent truck-tractor semi-trailer (TTST) and three percent dual-tired vehicles (DT). The posted speed limit is 35 miles per hour in the project area. Two school buses cross the bridge daily on their morning and afternoon routes.

There were five accidents reported in the vicinity of Bridge No. 29 during a recent five-year period. None of the five accidents were associated with the alignment or geometry of the bridge or its approach roadway. All five were either driver related error or animal caused accident.

This section of SR 1001 is not part of a designated bicycle route nor is it listed in the S.T.I.P. as needing incidental bicycle accommodations. However, it is located within the Urban Area Boundary of the Town of Wilkesboro and is a popular route for a local bike association. A separate pedestrian bridge exists alongside the existing structure which will be incorporated into the proposed design. The Town of Wilkesboro has stated temporary pedestrian accommodations will not be required during construction (see letter).

A feasibility study indicates that SR 1001 (Oakwood Road) would need to be upgraded to a four lane facility in the future. However, upgrading to a four lane divided facility is not included in the 20 year Long Range Transportation Plan (LRTP).

The Town of Wilkesboro has recently completed a stream restoration for Cub Creek which began at the intersection of Cub Creek and Bridge Street and continued east along Cub Creek to Oakwood Road.

III. ALTERNATIVES

A. Project Description

The replacement structure will consist of a bridge approximately 182-foot long. The bridge length is based on preliminary design information and is set by hydraulic requirements. The bridge will be of sufficient width to provide for one 12-foot lane with a minimum of 4-foot offset (left side) and a 14'-9" lane with a minimum of 2'-0" offset (right side). The roadway grade of the new structure will be approximately seven-foot higher than the existing grade. A five-foot sidewalk, on the west side of the proposed bridge, will be separated from the travel lanes by a vertical barrier.

The existing roadway will be widened to a 32-foot pavement width to provide two 12-foot lanes. Six-foot shoulder will be provided along west side, four feet of which will be paved in

accordance with the current NCDOT Design Policy (The shoulder will include three additional feet where guardrail is required); eight-foot shoulder will be provided along the east side with 2'-6" curb and gutter. This roadway will be designed as a local route.

B. Reasonable and Feasible Alternatives

Two alternatives for replacing Bridge No. 29 that were studied in detail are described below.

Alternate 1

Alternate 1 involves replacement of the structure along the existing roadway alignment. Improvements to the approach roadways will be required for a distance of approximately 300 feet to the west and 330 feet to the east of the new structure. This alternate would be designed using subregional tier guidelines with a design speed of 35 miles per hour. A vertical and horizontal curve design exception would be required. Traffic would need to be detoured offsite during the construction period (see figure 1).

Alternate 2 (Preferred)

Alternate 2 involves replacement of the structure along a new roadway alignment to the south. Improvements to the approach roadways will be required for a distance of approximately 377 feet to the west and 395 feet to the east of the structure. This alternate will be designed using sub-regional tier guidelines with a design speed of 40 miles per hour. Traffic would need to be detoured offsite during the construction period (see figure 1).

NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include US 421 Bypass, NC18, and NC18/NC268. The majority of traffic on the road is through traffic. The detour for the average road user would result in 4 minutes additional travel time (2.5 miles additional travel). Use of the offsite detour is anticipated up to a six-month duration during the construction of this project.

Based on the Guidelines, the criteria above indicate that on the basis of delay alone the detour is acceptable. NCDOT Division 11 has indicated the condition of all roads, bridges and intersections on the offsite detour are acceptable without improvement and concur with the use of the detour.

C. Alternatives Eliminated From Further Consideration

The "do-nothing" alternative will eventually necessitate closure of the bridge. This is not acceptable due to the traffic service provided by SR 1001.

"Rehabilitation" of the old bridge is not practical due to it being functionally obsolete. The superstructure components do not lend for widening; therefore, meeting FHWA requirements would require complete structure replacement.

Staged Construction is not feasible for this bridge because of the superstructure components. An Alternate involving replacement of the structure along a new roadway alignment to the north was proposed. Traffic would be maintained along the existing structure during the construction period. Improvements to the approach roadways will be required for a distance of approximately 400 feet to the west and 420 feet to the east of the structure. This alternate would have been designed using sub-regional tier guidelines with a design speed of 25 miles per hour. A vertical and horizontal curve design exception as well as a horizontal sight distance design exception would be required. This alternate would decrease horizontal sight distance as well as require the posted speed limit to be decreased. This alternate was determined not to improve travel conditions at the location of the bridge; therefore, was determined not to be feasible and was removed from further study.

D. Preferred Alternative

Bridge No. 29 will be replaced along a new alignment as shown by Alternative 2 in Figure 2a. Although cost and impacts to park property are higher than Alternate 1, Alternative 2 is considered to be a better replacement alternative than Alternate 1.

NCDOT Division 11 concurs with the selection of Alternative 2 as the preferred alternative.

IV. ESTIMATED COSTS

The estimated costs, based on 2014 prices, are as follows:

	Alternative 2 Preferred
Structure	\$ 829,000
Roadway Approaches	\$ 540,000
Detour Structure and Approaches	N/A
* Structure Removal	\$ 29,000
Misc. & Mob.	\$ 218,000
Eng. & Contingencies	\$ 254,000
Total Construction Cost	\$ 1,850,000
** Right-of-way Costs	\$ 88,000
Utility Costs	\$ 99,000
Total Project Cost	\$ 2,037,000

* Structure Removal cost includes existing bridge and existing pedestrian bridge.

** The Right-of-way costs include an additional cost for the conversion of Section 6(f) and PARTF property for Alternate 2.

V. NATURAL ENVIRONMENT

Physical Characteristics

The study area lies in the northern mountains physiographic region of North Carolina. Topography in the project vicinity is comprised of gently rolling hills with narrow, level floodplains along most streams and a more substantial floodplain along the Yadkin River. Elevations in the study area range from 950 to 1050 foot above sea level. Land use in the project vicinity consists primarily of residential and industrial development interspersed with forestland and some agriculture.

Water Resources

Water resources in the study are part of the Yadkin River basin [U.S. Geological Survey (USGS) Hydrologic Unit 03040101]. One stream; Cub Creek, was identified in the study area. Cub Creek is identified by a NCDWQ Index Number of 12-41 and has a Best Usage Classification (BUC) of "C".

There are no designated High Quality Waters (HQW), Outstanding Resource Waters (ORW) or water supply watersheds (WS-I or WS-II) within 1.0 mile downstream of the study area. Cub Creek is not designated as a North Carolina Wildlife Resources Commission (WRC) trout stream. The North Carolina Final 2012 303(d) list does not identify Cub Creek as impaired water and there are no 303(d) streams within 1.0 mile of the study area.

Biotic Resources

Two terrestrial communities were identified in the study area: maintained/disturbed and alluvial forest. The majority of the study area consists of habitat that is considered maintained/disturbed where the vegetation is periodically mowed, such as roadside shoulders and residential lawns. Alluvial forest communities occur along the floodplain of Cub Creek where periodic overbank flooding occurs.

Terrestrial communities in the study area may be impacted by project construction as a result of grading and paving of portions of the study area.

Jurisdictional Topics

One jurisdictional stream was identified in the study area; Cub Creek, and is classified as a perennial stream. Cub Creek is not subject to river basin buffers. No jurisdictional wetlands were identified in the study area.

Permits

In accordance with provisions of Section 404 of the Clean Water Act (33 USC 1344), a section 404 Nationwide Permit (NWP) 23 from the USACE is likely to be applicable for all impacts to Waters of the United States resulting from this project. A NWP 33 may be required for this project. A North Carolina Division of Water Quality (DWQ) Section 401 Water Quality General Certification is required prior to the issuance of the Section 404 NWP 23 and/or NWP 33.

Federally Protected Species

Plants and animals with a federal classification of Endangered or Threatened are protected under the provisions of Section 7 and Section 9 of the Endangered Species Act of 1973. As of September 10, 2010, the United States Fish and Wildlife (USFWS) list one federally protected species for Wilkes County.

Bog turtle

Biological Conclusion: Not Required

The Bog turtle has been assigned a classification of T(S/A); Threatened due to similarity of appearance, by the USFWS. Species listed as threatened due to similarity of appearance do not require Section 7 consultation with the USFWS. However, this project is not expected to affect the bog turtle because no suitable habitat is present within the study area. A review of NCNHP records on August 1, 2011 indicates no known bog turtle occurrence within 1.0 mile of the study area.

Bald and Golden Eagle Protection Act

Habitat for the bald eagle primarily consists of mature forest in proximity to large bodies of open water for foraging. Large dominate trees are utilized for nesting sites, typically within 1.0 mile of open water. Suitable habitat for the bald eagle is not present in the study area or within a distance of 660 feet on all sides.

VI. HUMAN ENVIRONMENT

Section 106 Compliance Guidelines

This project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and implemented by the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106, codified at Title 36 CFR Part 800. Section 106 requires Federal agencies to take into account the effect of their undertakings (federally funded, licensed, or permitted) on properties included in or eligible for inclusion in the National Register of Historic Places and afford the Advisory Council a reasonable opportunity to comment on such undertakings.

Historic Architecture

NCDOT – Human Environment Unit, under the provisions of a Programmatic Agreement with FHWA, NCDOT, HPO, OSA and the Advisory Council on Historic Preservation (effective July 1, 2009), reviewed the proposed project and determined that no surveys are required.

Archaeology

NCDOT – Human Environment Unit, under the provisions of a Programmatic Agreement with FHWA, NCDOT, HPO, OSA and the Advisory Council on Historic Preservation (effective July 1, 2009), reviewed the proposed project and determined that no surveys are required.

Community Impacts

No adverse impact on families or communities is anticipated. Right-of-way acquisition will be limited. No relocatees are expected with implementation of the proposed alternative.

No adverse effect on public facilities or services is expected. The project is not expected to adversely affect social, economic, or religious opportunities in the area.

The project is not in conflict with any plan, existing land use, or zoning regulation. No change in land use is expected to result from the construction of the project.

The Farmland Protection Policy Act requires all federal agencies or their representatives to consider the potential impact to prime farmland of all land acquisition and construction projects. There are no soils classified as prime, unique, or having state or local importance in the vicinity of the project. Therefore, the project will not involve the direct conversion of farmland acreage within these classifications.

The project will not have a disproportionately high and adverse human health and environmental effect on any minority or low-income population.

Noise & Air Quality

The project is located in Wilkes County, which has been determined to comply with the National Air Quality Standards. The proposed project is located in an attainment area; therefore, 40 CFR Parts 51 and 93 are not applicable. This project is not anticipated to create any adverse effects on the air quality of this attainment area.

This project will not result in any meaningful changes in traffic volume, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. As such FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently this effort is exempt from analysis for MSAT's.

Noise levels may increase during project construction; however, these impacts are not expected to be substantial considering the relatively short-term nature of construction noise and the limitation of construction to daytime hours. The transmission loss characteristics of nearby natural elements and man-made structures are believed to be sufficient to moderate the effects of intrusive construction noise.

VII. GENERAL ENVIRONMENTAL EFFECTS

The project is expected to have an overall positive impact. Replacement of an inadequate bridge will result in safer traffic operations.

The bridge replacement will not have an adverse effect on the quality of the human or natural environment with the use of the current North Carolina Department of Transportation standards and specifications.

The proposed project will require right-of-way acquisition or easement from land protected under Section 4(f) of the Department of Transportation Act of 1966. Acquisition of Right-of-Way will not result in an adverse effect to the activities, features, or attributes of Cub Creek Park; therefore, by virtue of approval of this Categorical Exclusion the FHWA has made a de minimus call for this park (see Town of Wilkesboro letter(s)); impacts to the park will no longer subject to Section 4(f) requirements of avoidance or minimization.

NC Division of Parks & Recreation (on behalf of US Department of Interior – National Park Service (USDOI – NPS)) and the Town of Wilkesboro has identified the Cub Creek Park property being impacted by the NCDOT project as property protected by Section 6(f) of the Land and Water Conservation Fund (LWCF) Act of 1965 as well as PARTF of NCDENR Parks and Recreation Trust Fund. NCDOT is working with the Town of Wilkesboro as well as NCDENR to establish a compensatory area of property of equal or greater value for the conversion of Section 6(f) property. The conversion property areas as well as the replacement property area will be defined in the required USDOI-NPS LWCF Proposal Description and Environmental Screening Form.

An examination of records at the North Carolina Department of Environment and Natural Resources, Division of Environmental Management, Groundwater Section and the North Carolina Department of Human Resources, Solid Waste Management Section revealed no underground storage tanks or hazardous waste sites in the project area.

Wilkes County is a participant in the National Flood Insurance Program. There are no practical alternatives to crossing the floodplain area. Any shift in alignment will result in an impact area of about the same magnitude. The proposed project is not anticipated to increase the level or extent of upstream flood potential.

The US Coast Guard has determined that a US Coast Guard Permit is not required for this project.

VIII. COORDINATION & AGENCY COMMENTS

NCDOT has sought input from the following agencies as a part of the project development: U.S. Army Corps of Engineers, NC Department of Natural Resources, US Fish & Wildlife Service, NC Wildlife Resource Commission, NC Division of Parks & Recreation, North Carolina State Historic Preservation Office, Wilkes County Planning Department, and Town of Wilkesboro.

The NC Wildlife Resource Commission and U.S. Fish & Wildlife Service in standardized letters provided a request that they prefer any replacement structure to be a spanning structure.

Response: NCDOT will be replacing the existing structure with a new bridge.

The Town of Wilkesboro requested NCDOT provide a hard separation between vehicular traffic and pedestrian traffic on the bridge.

Response: NCDOT will provide a vertical barrier to provide a separation between vehicular and pedestrian traffic.

The Town of Wilkesboro requested the road remain open during construction.

Response: NCDOT will minimize the road closure to no more than a six month period.

NC Division of Water Quality requested discussion of a four lane facility be provided in the document.

Response: A feasibility study indicates that SR 1001 (Oakwood Road) will need to be upgraded to a four lane facility in the future. Funding for upgrading the existing facility to four lanes is not currently provided within the 20 year LRTP. Therefore, the widening of SR 1001 to a four lane facility is considered to be beyond the planning horizon for this action.

The Army Corps of Engineers and Wilkes County Planning Department had no special concerns for this project.

IX. PUBLIC INVOLVEMENT

A letter was sent by the Location & Surveys Unit to all property owners affected directly by this project. Property owners were invited to comment. No comments have been received to date.

A newsletter was sent in 2007 to businesses and residents living along SR 1001 to provide information concerning the proposed project. Responses provided gave additional area information as well as favor for the project. No comments received were in opposition of the project.

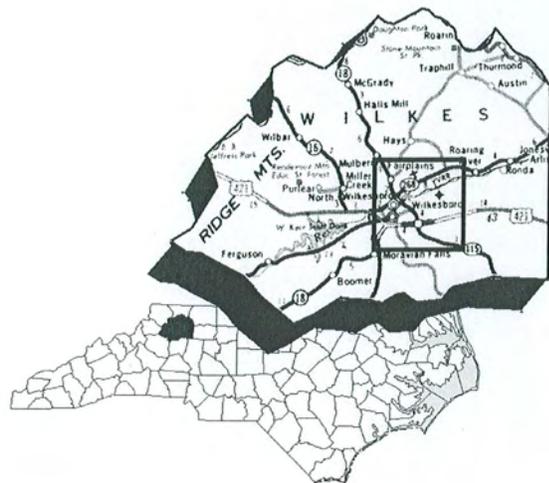
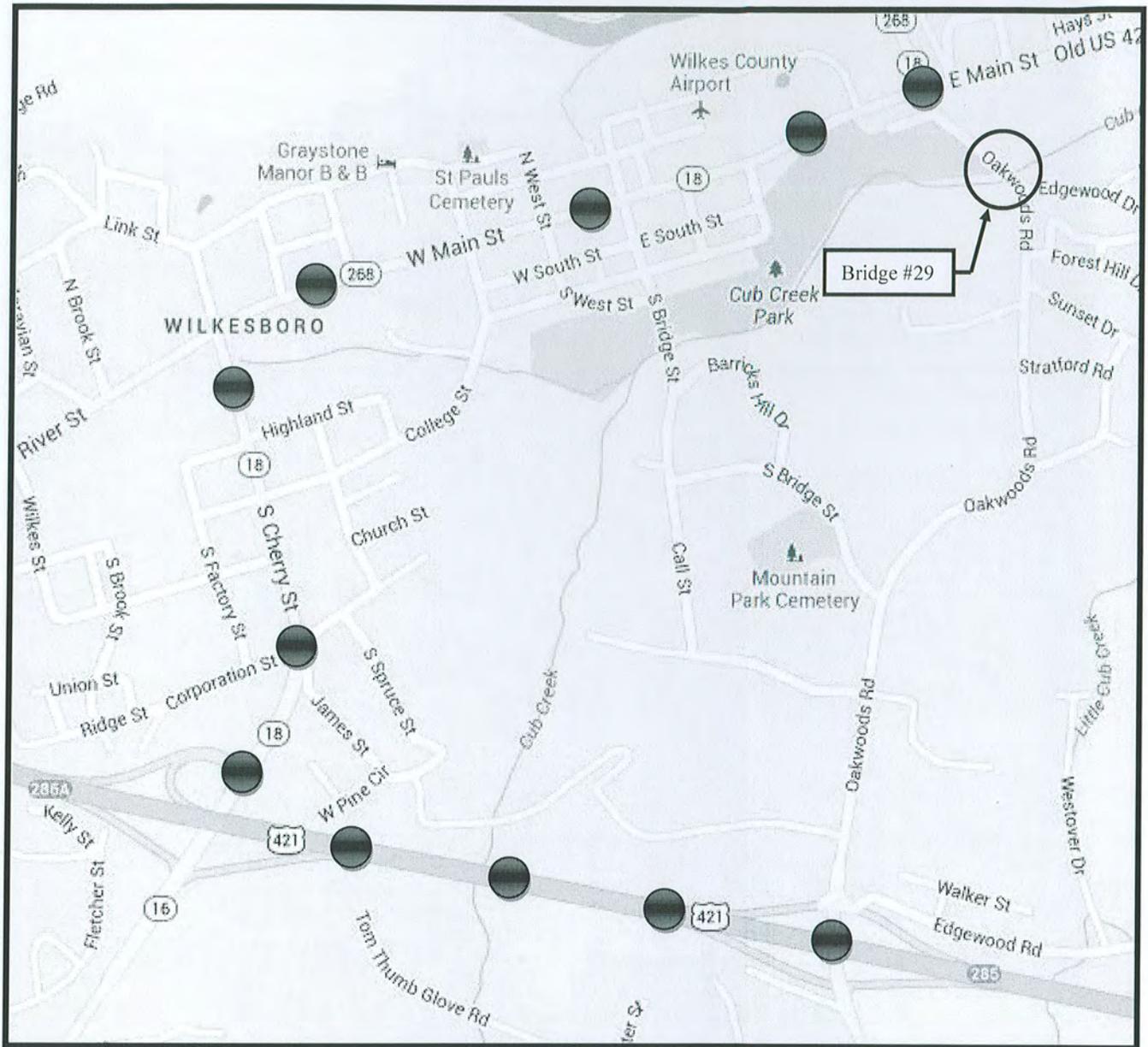
A postcard was sent in 2012 to businesses and residents living along SR 1001 in the area of the project to notify residents of impacts to property protected by Section 6(f) of the Land and Water Conservation Fund Act of 1965, as amended, as well as intent to request *de minimus* for impacted property protected by Section 4(f) of the Department of Transportation Act of 1966, as amended. Subject postcard provided information stating the existing road would not be closed to traffic during construction; however, this method of construction has since changed and the road will now be closed for construction. No comments were received due to this mailer.

A postcard was sent in January 2014 to businesses and residents living along SR1001 as well as the proposed detour route to notify residents of the proposed road closure as part of the project as well as impacts to property protected by Section 6(f) and Section 4(f). One resident returned comment stating his concern that our current proposal for the existing bridge replacement would create a greater hazard with any future widening of SR 1001 when a second bridge is constructed across Cub Creek.

There is not substantial controversy on social, economic, or environmental grounds concerning the project.

X. CONCLUSION

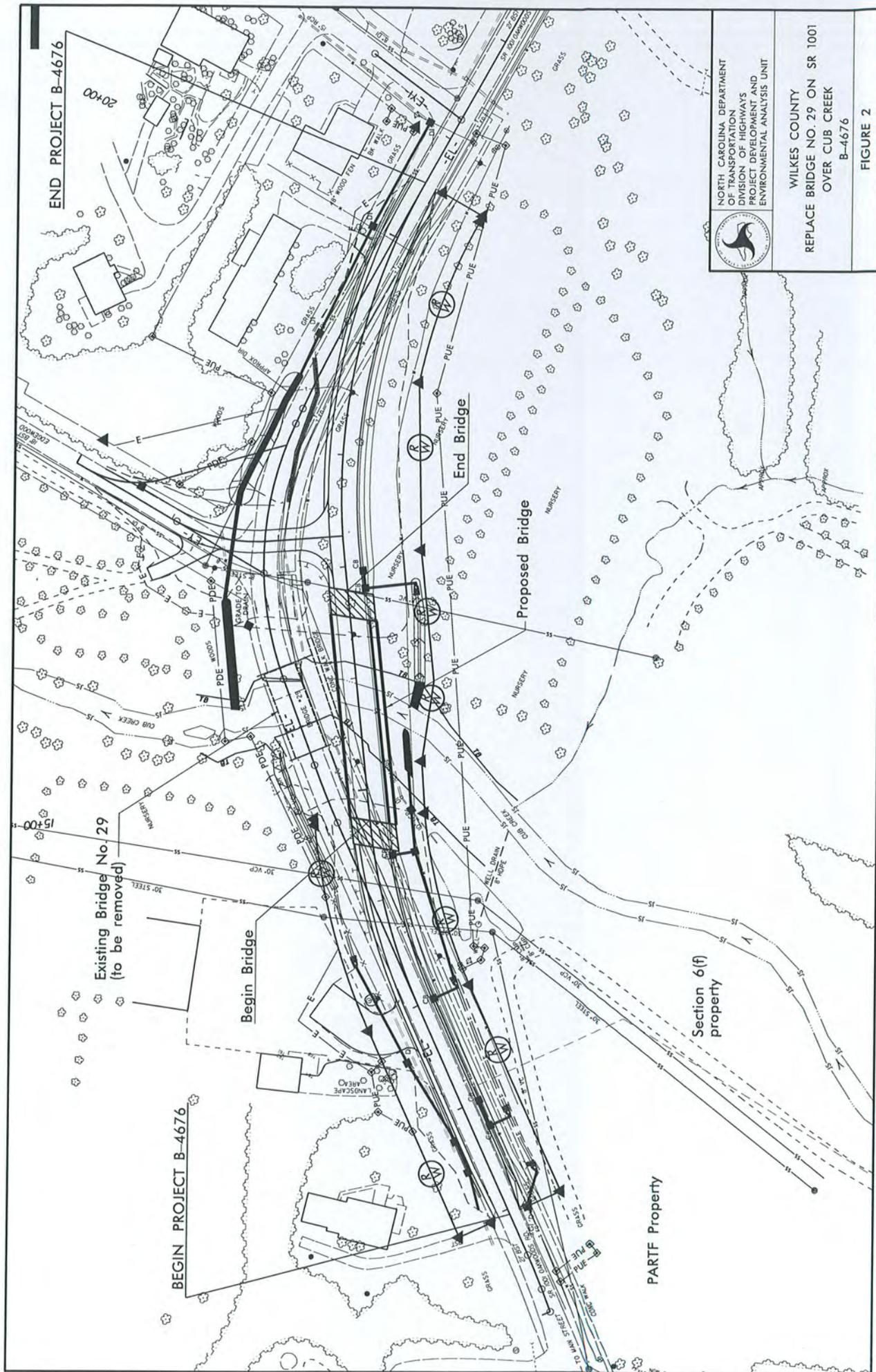
On the basis of the above discussion, it is concluded that no substantial adverse environmental impacts will result from implementation of the project. The project is therefore considered to be a federal “Categorical Exclusion” due to its limited scope and lack of substantial environmental consequences.



Studied detour Route

	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS UNIT
	<p align="center"> WILKES COUNTY REPLACE BRIDGE NO. 29 ON SR 1001 OVER CUB CREEK B-4676 </p>

Figure 1



END PROJECT B-4676

20+00

Existing Bridge No. 29
(to be removed)

BEGIN PROJECT B-4676

Begin Bridge

End Bridge

Proposed Bridge

Section 6(f)
property

PART Property



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

WILKES COUNTY
REPLACE BRIDGE NO. 29 ON SR 1001
OVER CUB CREEK
B-4676

FIGURE 2

**Bridge No. 29
looking west**



**Bridge No. 29
looking south**



	<p>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PROJECT DEVELOPMENT & ENVIRONMENTAL ANALYSIS UNIT</p>
<p>WILKES COUNTY REPLACE BRIDGE NO. 29 ON SR 1001 OVER CUB CREEK B-4676</p>	
<p>Figure 3</p>	

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
United States Coast Guard
Fifth Coast Guard District

431 Crawford Street
Portsmouth, Va. 23704-5004
Staff Symbol: obr
Phone: (757) 398-6422
Fax: (757) 398-6334
Email: Bill.H.Brazier@uscg.mil

Mr. Gregory J. Thorpe, PhD.
Environmental Management Director
Project Development and Environmental
Analysis Branch
North Carolina Department of Transportation (NCDOT)
Raleigh, North Carolina 27699-1548



Dear Mr. Thorpe:

This is in response to your letter of May 10, 2005, requesting comments for the NCDOT Bridge Replacement Projects over Asheworth Creek, Meat Camp Creek, US 221 over A Creek, US 1317 over A Creek, Reedy Creek, Twelve Mile Creek, Lane Creek and Cub Creek.

Since the above-mentioned waterways are subject to tidal influence, they are considered legally navigable for Bridge Administration purposes. These waterways also meet the criteria for advanced approval waterways outlined in Title 33, Code of Federal Regulations, Section 115.70. Advance approval waterways are those that are navigable in law, but not actually navigated by other than small boats. The Commandant of the Coast Guard has given his advance approval to the construction of bridges across such waterways. Recent visits of the waterways by our staff member confirmed such conditions for these bridge sites. Therefore, Coast Guard Bridge permits will not be required for these proposed projects.

If you have any questions regarding this matter, please contact Mr. Bill H. Brazier, at the phone number or address shown above.

Sincerely,

A handwritten signature in cursive that reads "Waverly W. Gregory, Jr.".

WAVERLY W. GREGORY, JR.
Chief, Bridge Administration Branch
By direction of the Commander
Fifth Coast Guard District



North Carolina Department of Cultural Resources
State Historic Preservation Office

Peter B. Sandbeck, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

August 5, 2005

MEMORANDUM

TO: Gregory J. Thorpe
Division of Highways
Department of Transportation

FROM: Peter Sandbeck *PBS for Peter Sandbeck*

SUBJECT: Bridge 29 on SR 1001 over Cub Creek, B-4676, Wilkes County, ER 05-1044

Thank you for your letter of May 10, 2005 concerning the above project.

There are no recorded archaeological sites within the proposed project area. If the replacement is to be located along the existing alignment and there is no onsite detour, it is unlikely that significant archaeological resources will be affected and no investigation is recommended. However, if the replacement is to be in a new location, or an onsite detour is proposed, an archaeological survey is recommended.

We have determined that the project as proposed will not affect any historic structures.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919/733-4763. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Mary Pope Furr, NCDOT
Matt Wilkerson, NCDOT

	Location	Mailing Address	Telephone/Fax
ADMINISTRATION	507 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-4763/733-8653
RESTORATION	515 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6547/715-4801
SURVEY & PLANNING	515 N. Blount Street, Raleigh, NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6545/715-4801

10-12-0004

NO HISTORIC PROPERTIES PRESENT/AFFECTED FORM**PROJECT INFORMATION**

Project No: B-4676 County: Wilkes
WBS No: 33831.1.1 Document:
F.A. No: Funding: State Federal

Federal (USACE) Permit Required? Yes No Permit Type:

Project Description:

Replace Bridge No 29 over Cub Creek on SR 1001 (Oakwoods Rd) in Wilkesboro.

SUMMARY OF FINDINGS

The North Carolina Department of Transportation (NCDOT) reviewed the subject project and determined:

- There are no properties over fifty years old within the project's area of potential effects.
- There are no properties less than fifty years old which are considered to meet Criteria Consideration G within the project's area of potential effects.
- There are no National Register-listed or Study Listed properties within the project's area of potential effects.
- All properties greater than 50 years of age located in the APE have been considered and all compliance for historic architecture with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.
- There are no historic properties present or affected by this project. (*Attach any notes or documents as needed*)

SUMMARY OF CULTURAL RESOURCES REVIEW

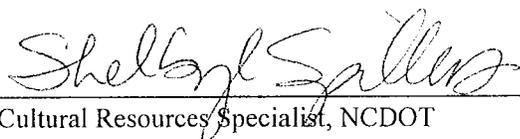
Brief description of review activities, results of review, and conclusions:

Review of HPO quad maps, historic designations roster, and indexes was undertaken on January 3, 2011. Based on this review, there were no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects. The bridge is located near the Wilkesboro Historic District but not within or adjacent to the district boundaries. There are two properties at the intersection of Oakwood Road (SR 1001) and Main Street; a commercial block c. 1910 and a house c. 1940. Neither of these properties meet the criteria for National Register Eligibility. No historic properties will be affected by the construction of this bridge.

SUPPORT DOCUMENTATION

See attached: Map and photos.

Signed:



1-3-2011

Cultural Resources Specialist, NCDOT

Date

Representative, HPO

Date

HPO/OSA Comments:

10-12-0004

NO PREHISTORIC OR HISTORIC PROPERTIES PRESENT/AFFECTED FORM

PROJECT INFORMATION

Project No: B-4676 County: Wilkes
 WBS No: 33831.1.1 Document: Minimum Criteria Sheet
 F.A. No: BRZ-1001(29) Funding: State Federal
 Federal (USACE) Permit Required? Yes No Permit Type: USACE

Project Description:

The project calls for the replacement of Bridge No. 29 over Cub Creek on SR 1001 (Oakwoods Road). The archaeological Area of Potential Effects (APE) for the project is defined as a 300-foot (91.44 m) wide corridor that extends 150 feet (45.72 m) east and 150 feet (45.72 m) west from the present center of SR 1001. The APE begins at the intersection of SR 1001 with NC 18/SR 2510 (Old US 421/East Main Street) and runs south for a distance of 0.27 miles (0.43 km) to the intersection of SR 1001 with Forest Hill Drive.

SUMMARY OF FINDINGS

The North Carolina Department of Transportation (NCDOT) reviewed the subject project and determined:

Archaeology

- There are no National Register-listed or Study Listed properties within the project's area of potential effects.
- No subsurface archaeological investigations are required for this project.
- Subsurface investigations did not reveal the presence of any archaeological resources.
- Subsurface investigations did not reveal the presence of any archaeological resources considered eligible for the National Register.
- All identified Archaeological sites located within the APE have been considered and all compliance for archaeological resources with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.
- There are no historic properties present or affected by this project. (Attach any notes or documents as needed)

SUMMARY OF CULTURAL RESOURCES REVIEW

Brief description of review activities, results of review, and conclusions:

The project area is situated in the town of Wilkesboro, North Carolina, and south of the Yadkin River in Wilkes County. The project area is located on the Wilkesboro quad (Figure 1).

A map review and site file search was conducted at the Office of State Archaeology (OSA) on December 21, 2010. No previously recorded archaeological sites have been identified within the presently defined APE or adjacent to the APE, but eight sites (31WK14, 31WK15, 31WK71, 31WK184–31WK186, 31WK197, and 31WK198) have been recorded within a mile radius of the project area. In addition, there are no existing National Register (NR), State Study List (SL), Locally Designated (LD), Determined Eligible (DE), or Surveyed Site (SS) properties within or adjacent to the APE. Topographic maps, USDA soil survey maps, aerial photographs (Google and NCDOT), historic maps (North Carolina maps website) and Google street view application were utilized/inspected to gage environmental factors that may have contributed to historic or prehistoric settlement within the project limits, and to assess the level of modern, residential, hydrological, and other erosive type disturbances within the surrounding archaeological APE. An archaeological reconnaissance and field survey of the project area was conducted on January 4–5, 2010, to help assess the project area.

SR 1001 and Bridge No. 29 run roughly north to south and are situated in the Cub Creek/Yadkin River floodplain (Figures 2 and 3). Cub Creek is a tributary for the Yadkin River, which is part of the Yadkin-Pee Dee drainage basin (Figure 4). Development is generally light toward the northern and southern ends of the APE with residential houses and businesses. The majority of the undeveloped project area to the south of Cub Creek is used for a plant nursery to grow evergreen shrubs known as arborvitae (Figures 5 and 6). To the north of Cub Creek and west of SR 1001, the project area primarily consists of Cub Creek park (Figures 7 and 8). The area to the east of SR 1001 and north of Cub Creek consist of houses situated on graded hillslope and a gravel parking lot for the nursery (Figure 9). Disturbance from the nursery is greater than originally expected. The nursery property is pot marked from the removal of shrubs. The excavated shrubs leave holes that measure about 50 to 60 cm (20 to 24 in) in diameter and extend 30 to 50 cm (12 to 20 in) in depth (Figure 10). The removal of this much soil would impact possible subsurface archaeological features considering the top layer of soil extends on average 25 cm (10 in) below the surface before subsoil is encountered. Other disturbances include a sewer corridor that runs parallel to Cub Creek on its north side (Figures 11 and 12). The sewer corridor also extends south of Cub Creek. It appears from recent ground disturbance that the sewer corridor was improved.

A review of the USDA soil survey maps indicates the soil series within the APE is primarily Toccoa sandy loam (ToA) (see Figure 2). This series consists of deep, well-drained, and very permeable soils with a slope of 0 to 3 percent. A total of ten shovel test pits (STPs) were excavated on this soil within the APE. From these excavations, the upper layer or A horizon is 25 cm (10 in) thick and is dark yellowish brown (10YR 4/4) sandy loam. Any cultural material would have been found within this horizon. It is followed by a sterile C horizon, which is strong brown (7.5YR 4/6) or dark yellowish brown (10YR 4/6) sandy clay loam that extends at least 50 cm (20 in) below the surface. Other potential soil series within the APE that could have yield cultural material are Masada sandy clay loam (MaC2) and Rion fine sandy loam (RnE). These two soil series are located at the southern end of the APE. Four STPs were excavated on the Masada sandy clay loam. This soil series consists of well-drained but eroded soils with moderate permeability on 8 to 15 percent slope. The A horizon is approximately 25 to 30 cm (10 to 12 in) thick and is dark yellowish brown (10YR 4/4) sandy clay loam. The second layer is a sterile B horizon that is strong brown (7.5YR 5/6) clay that extends at least 50 cm (20 in) below the surface. The Rion soil series also consists of well-drained soils, but this particular Rion soil type is located on 25 to 60 percent slope. No

STPs were excavated on this soil series due to the steep slope. The remaining three soil series are Masada-Urban land complex (MuC), Pacolet-Urban land complex (PrC), and Udorthents-Urban land complex (UfB). They are plotted at the northern and southern ends of the APE. These soils are associated with urban development and are unlikely to yield intact prehistoric archaeological deposits. No STPs were excavated on these soils due to disturbance from development and steep hillslope.

The site file search revealed eight sites within a mile of the APE. Five of these sites (31WK14, 31WK15, 31WK71, 31WK197, and 31WK198) are situated north of the Yadkin River. Sites 31WK184–31WK186 are located to the southwest along Cub Creek. Six of the sites (31WK14, 31WK15, 31WK185, 31WK186, 31WK197, and 31WK198) yielded only prehistoric artifacts. Site 31WK14 contains Late Archaic and Late Woodland period components. The site's eligibility for the National Register of Historic Places (NRHP) is unassessed, and it appears to have been impacted by urban development according to aerial photographs. Site 31WK15 is a large prehistoric site that dates to the Early Archaic, Late Archaic, and Woodland periods. Its eligibility has not been assessed as well; however it appears to be currently located under a shopping center and parking lot. Site 31WK185 is a small Late Woodland period site that is considered ineligible for the NRHP. Site 31WK186 dates to an unidentified prehistoric period, and it too is recommended ineligible for the NRHP. Site 31WK197 yielded artifacts from an undefined Woodland period, and its eligibility is unassessed. Likewise, site 31WK198 dates from undefined Archaic and Woodland periods and is unassessed. One site, 31WK184, yielded both prehistoric and historic artifacts. The prehistoric component dates to the Middle Archaic period, while the historic component dates from the mid 19th through mid 20th centuries. The site is not eligible for the NRHP. The final site, 31WK71, has no available information other than its location. The site form is missing at OSA. In addition, four of the sites (31WK15, 31WK71, 31WK185, and 31WK186) are situated upon Toccoa sandy loam. A review of previous archaeological surveys in the area revealed only one recent study near the project area. In 1986, DOT archaeologist investigated the replace of Bridge No. 53 over the Yadkin River along NC-18 (TIP B-1432). Due to nearby disturbances, only three STPs could be excavated and no archaeological sites were identified during the study.

During the current investigation, an archaeological survey consisting of 14 STPs was conducted along either side of SR 1001 within the APE (see Figure 2). Seven STPs were excavated north of Cub Creek with all seven being located on the west side of SR 1001. No STPs were excavated on the east side due to disturbance, slope, and a gravel parking lot. To the south of Cub Creek, another seven STPs were excavated with five to the east and two to the west. Slope and houses limited the number of STP on the west side. All STPs were initially excavated at 30-m intervals. A possible quartz flake was recovered from STP 3. Three additional STPs were excavated at 15-m intervals in relation to the angle of SR 1001 in order to delineate the possible prehistoric site. All three were negative. Upon further analysis of the possible flake in the office, it was determined that the artifact was a small piece of broken quartz and non-cultural. None of the other STPs excavated at 30-m intervals yielded cultural material.

A review of historic maps of the region show only general features concerning the surrounding countryside. It is not until 1918 with the Hearn, Journey, and Perkins' soil map for Wilkes County that the project area is depicted in any great detail (Figure 13). According to an overlay of this map with a modern map provided by the North Carolina maps website, a bridge has been at this location since at least the early 20th century. However, the road layout south of Cub Creek is altered with the main route heading east instead of south. The current alignment does not appear on maps until the 1960s. The 1918 map along with other early 20th century maps show no structures along Cub Creek except for the old bridge. The other structures that appear within the APE on the early maps are situated to the north along Old US 421/East Main Street. These structures would be located within the developed portion of the APE, and it appears unlikely any historic archaeological remains are still present.

The archaeological investigations along the SR 1001 for the replacement of Bridge 29 consisted of 11

STPs excavated at 30-m intervals with additional three STPs excavated at 15-intervals within the APE. No cultural material was recovered from any of the STPs. A review of the previously identified sites in the area show no known archaeological sites within or adjacent to the APE. Historic maps for the region also suggest no remains are present for significant historic structures within the APE. In addition, disturbance from the removal of shrubs from the nursery property has hindered the likelihood of encountering a significant and intact archaeological site. Therefore, it is unlikely any archaeological sites that are potentially eligible for the NRHP are present within the project area. No further archaeological work is recommended within the APE for the replacement of Bridge No. 29 and subsequent improvement to SR 1001. If the project expands and impacts subsurface areas beyond the defined APE, further archaeological consultations might be necessary.

SUPPORT DOCUMENTATION

See attached: Map(s), Previous Survey Info, Photos, Correspondence, Photocopy of notes from survey.

Signed:



Cultural Resources Specialist, NCDOT

11/07/11

Date



TOWN OF WILKESBORO

"Where the Mountains Begin"

P.O. Box 1056 • 203 West Main Street
Wilkesboro, North Carolina 28697

www.wilkesboronc.org

Phone (336) 838-3951 • Fax (336) 838-7616

September 24th, 2012

Tracy A. Walter
Project Planning Engineer
Project Development and Environmental Analysis Unit
1548 Mail Service Center
Raleigh, NC 27699 – 1548

Re: Bridge No. 29 – Pedestrian Access Comments

Mr. Walter,

This letter is to inform the North Carolina Department of Transportation that the Town of Wilkesboro will not require alternative pedestrian access along Oakwoods Road during Bridge no. 29 construction. We understand, and agree with, the importance of providing safe options for bicyclist and pedestrian traffic. However, we also understand the difficulty and potential cost in providing alternative access at this particular location.

Although the pedestrian bridge in question, which is constructed directly to the east of Bridge no. 29, provides an access point into Cub Creek Park, there are many other options within close proximity. Moreover, the new design for Bridge no. 29 will provide pedestrian access for walkers, bikers, and users of future greenway segments. The Town of Wilkesboro believes that the brief disruption for pedestrians during construction is substantially outweighed by the end results and additional pedestrian accommodations provided by the new bridge design.

At current, the pedestrian route along Oakwoods Road is not considered to be a major pedestrian route in the Town of Wilkesboro, but with proposed expansion plans for Oakwoods Road, which will include additional sidewalk as well as bike lanes, the town anticipates that the route will experience higher pedestrian traffic during future years.

The main access point to Cub Creek Park is located at a trailhead and parking area located at the intersection of Cub Creek and South Bridge Street - a short distance from the bridge construction site. Again, we feel that the temporary closure of pedestrian traffic near Bridge no. 29 will only affect a small group of citizens and does not establish the need for alternative access during construction. If you have any questions or concerns, please do not hesitate in contacting my office.

Sincerely,

Kenneth Noland, ICMA-CM

Town Manager

Town of Wilkesboro

(336) 838-3951

townmanager@wilkesboronorthcarolina.com

MIKE INSCORE
Mayor

KENNETH D. NOLAND
Town Manager
townmanager@wilkesboronc.org

JAMES K. BYRD
Town Clerk

COUNCIL MEMBERS
NELLIE ARCHIBALD
GARY JOHNSON
MICHAEL TESTERMAN

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JIMMY HAYES



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September 24th, 2012

Tracy A. Walter
Project Planning Engineer
Project Development and Environmental Analysis Unit
1548 Mail Service Center
Raleigh, NC 27699 – 1548

Re: Bridge No. 29 – Pedestrian Access Comments

Mr. Walter,

On behalf of the Town of Wilkesboro's Parks and Recreation Department, this letter is to inform the North Carolina Division of Transportation that it is acceptable to not have pedestrian access at Bridge no. 29 during construction. While allowing the use of pedestrian and non-motorized transportation, especially their safety, is of the utmost importance to the Town of Wilkesboro, we feel that there are more than sufficient alternate routes within a reasonable distance from Bridge no. 29. At current, this route is not considered a major pedestrian route in and around the Town of Wilkesboro.

We feel that the temporary closure for pedestrian traffic during Bridge no. 29 construction is necessary to facilitate the much needed improvements to the bridge, which will in turn greatly increase the pedestrian access and safety into and around Cub Creek Park.

Sincerely,

Cliff Gardner
Director of Parks and Recreation
Town of Wilkesboro
(336) 667.8804
cgardner8804@yahoo.com

MIKE INSCORE
Mayor

KENNETH D. NOLAND
Town Manager
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March 21, 2013

Tracy Walter
NCDOT - Project Planning Engineer
Project Development and Environmental Analysis Unit
1548 Mail Service Center
Raleigh, NC 27699-1548

REF: NCDOT STIP Project B-4676

Dear Mr. Walter:

This letter shall serve as the Town of Wilkesboro's response to the NCDOT "no adverse effect" evaluation for the above referenced project.

The Wilkesboro Park and Recreation Department has reviewed the proposed Acquisition Plan of approximately .5 acre adjoining SR 1001 at Cub Creek. Based on the review we concur with NCDOT in finding that there will be no adverse effect to our park facilities and operations.

If you need further clarification please do not hesitate in contacting me.

Sincerely,

Cliff Gardner
Director of Parks and Recreation

MIKE INSCORE
Mayor

KENNETH D. NOLAND
Town Manager
townmanager@wilkesboronc.org

JAMES K. BYRD
Town Clerk

COUNCIL MEMBERS
NELLIE ARCHIBALD
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**NATURAL RESOURCES TECHNICAL REPORT
UPDATE**

**Replace Bridge 29 on SR 1001 (Oakwoods Road) over Cub Creek
Wilkes County, North Carolina**

**TIP B-4676
Federal Aid Project No. BRZ -1001(29)
WBS Element No. 33831.1.1**



**THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Project Development and Environmental Analysis Branch
Natural Environment Unit**

August 2011

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1.0 INTRODUCTION

The North Carolina Department of Transportation (NCDOT) proposes to replace bridge number 29 on SR 1001 (Oakwoods Road) over Cub Creek (TIP B-4676) in Wilkes County (Figure 1). A Natural Resources Technical Report (NRTR) was originally completed for this project in May 2006. Since then, the width of the study area has been reduced, but the northern limits have been expanded to the intersection of SR 1001 and NC 18/268 (Main Street). The following NRTR Update addresses this new study area in its entirety, and replaces the 2006 NRTR. This update has been prepared to assist in the preparation of a Categorical Exclusion (CE) for the proposed project.

2.0 METHODOLOGY AND QUALIFICATIONS

All work was conducted in accordance with the NCDOT Natural Environment Unit standard operating procedures and December 2010 NRTR template. Field work was conducted on June 28, 2011. Verification of jurisdictional areas within the study area by the U.S. Army Corps of Engineers (USACE) and North Carolina Division of Water Quality (NCDWQ) is not needed at this time as there is only one perennial stream. A jurisdictional determination for this project will be obtained at the time of permitting. The principal person contributing to this document was:

Principal

Investigator: Erin K. Cheely
Education: B.S. Biology, Winthrop University, 2002
Experience: Environmental Specialist, NCDOT, June 2006 – Present.
Research Technician, NC State University, March 2004 – May 2006.
Environmental Specialist, FL Department of Environmental Protection,
July 2002 – July 2003.
Responsibilities: Document preparation, stream and wetland assessment, natural
communities and T/E species assessment

Additional personnel who contributed to portions of the field work and/or documentation for this project were Jennifer Harrod and Jeremy Leamer. Appendix C lists the qualifications of these contributors.

3.0 PHYSICAL RESOURCES

The study area lies in the northern mountains physiographic region of North Carolina (Figure 2). Topography in the project vicinity is comprised of gently rolling hills with narrow, level floodplains along most streams and a more substantial floodplain along the Yadkin River. Elevations in the study area range from 950 to 1050 ft. above sea level. Land use in the project vicinity consists primarily of residential and industrial development interspersed with forestland and some agriculture.

3.1 Soils

The Wilkes County Soil Survey identifies six soil types within the study area (Table 1).

Table 1. Soils in the study area.

Soil Series	Mapping Unit	Drainage Class	Hydric Status
Dan River and Comus soils	DaA	Well Drained	Nonhydric
Danripple sandy clay loam	DpC2	Well Drained	Nonhydric
Danripple-Irban land complex	DuC	Well Drained	Nonhydric
Fairview-Urban land complex	FrC	Well Drained	Nonhydric
Rhodhiss fine sandy loam	RdE	Well Drained	Nonhydric
Udorthents-Urban land complex	UfB	Well Drained	Nonhydric

3.2 Water Resources

Water resources in the study area are part of the Yadkin River basin [U.S. Geological Survey (USGS) Hydrologic Unit 03040101]. One stream was identified in the study area (Table 2). The location of this water resource is shown in Figure 3. The physical characteristics of this stream is provided in Table 3.

Table 2. Water resources in the study area.

Stream Name	Map ID	NCDWQ Index Number	Best Usage Classification
Cub Creek	Cub Creek	12-41	C

Table 3. Physical characteristics of water resources in the study area.

Map ID	Bank Height (ft)	Bankful Width (ft)	Water Depth (in)	Channel Substrate	Velocity	Clarity
Cub Creek	8-10	20	12	Sand, Gravel	Fast	Slightly Turbid

There are no designated High Quality Waters (HQW), Outstanding Resource Waters (ORW) or water supply watersheds (WS-I or WS-II) within 1.0 mile downstream of the study area. Cub Creek is not designated as a North Carolina Wildlife Resources Commission (WRC) trout stream. The North Carolina 2010 Final 303(d) list does not identify Cub Creek as an impaired water and there are no 303(d) stream within 1.0 mile of the study area.

No recent fish or benthic surveys have been conducted within 1.0 mile of the project area

4.0 BIOTIC RESOURCES

4.1 Terrestrial Communities

Two terrestrial communities were identified in the study area: maintained/disturbed and alluvial forest. Figure 3 shows the location and extent of these terrestrial communities in the study area. A brief description of each community type follows. Scientific names of all species identified are included in Appendix B.

4.1.1 Maintained/Disturbed

The majority of the study area consists of habitat that is considered maintained/disturbed where the vegetation is periodically mowed, such as roadside shoulders and residential lawns. The vegetation in this community is comprised of low growing grasses and herbs with some small trees and shrubs, including fescue, white clover, wild onion, plantain, wood sorrel, woolly mullein, morning glory, wingstem, Japanese stilt grass, Japanese honeysuckle, greenbriar, English ivy, Virginia creeper, kudzu, smartweed, poison ivy, pokeweed, Chinese privet, tree-of-heaven, redbud, silver maple, eastern red cedar, honey locust, American sycamore, red maple, dogwood, box elder, tulip poplar and black walnut.

4.1.2 Alluvial Forest

The alluvial forest community occurs along the floodplain of Cub Creek where periodic overbank flooding occurs. The canopy consists of moderately well-developed trees including tulip poplar, American sycamore, black walnut, red maple and box elder. The sapling and understory layer consists of black cherry, blackberry, grapevine, trumpet creeper, jewelweed, wingstem, deer tongue and Queen Anne's lace.

4.1.3 Terrestrial Community Impacts

Terrestrial communities in the study area may be impacted by project construction as a result of grading and paving of portions of the study area. At this time, decisions regarding the final location and design of the proposed bridge replacement have not been made. Therefore, community data are presented in the context of total coverage of each type within the study area (Table 4). Once a final alignment and preliminary design have been determined, probable impacts to each community type will be calculated.

Table 4. Coverage of terrestrial communities in the study area.

Community	Coverage (ac.)
Maintained/ Disturbed	9.4
Alluvial Forest	0.4
Total	9.8

4.2 Terrestrial Wildlife

Terrestrial communities in the study area are comprised of both natural and disturbed habitats that may support a diversity of wildlife species (those species actually observed are indicated with *). Mammal species that commonly exploit forested habitats and stream corridors found within the study area include species such as eastern cottontail, raccoon, Virginia opossum, gray squirrel and white-tailed deer. Birds that commonly use maintained and forest edge habitats include the American crow*, blue jay*, American robin*, Carolina chickadee, tufted titmouse, northern cardinal* and prairie warbler*. Reptile and amphibian species that may use terrestrial communities located in the study area include the eastern garter snake, black rat snake, eastern box turtle and dusky salamander.

4.3 Aquatic Communities

Aquatic communities in the study area consist of a single perennial stream, Cub Creek. Cub Creek in the study area could support animals such as crayfish, bluehead chub, central stoneroller, rosyzide dace, piedmont darter, swallowtail shiner, green sunfish, northern water snake, green frog and spring peeper.

4.4 Invasive Species

Six species from the NCDOT Invasive Exotic Plant List for North Carolina were found to occur in the study area. The species identified were Chinese privet (Threat), Japanese honeysuckle (Moderate Threat), Japanese stilt grass (Threat), kudzu (Threat), tree-of-heaven (Threat) and English ivy (Moderate Threat). NCDOT will manage invasive plant species as appropriate.

5.0 JURISDICTIONAL ISSUES

5.1 Clean Water Act Waters of the U.S.

One jurisdictional stream was identified in the study area (Table 5). The location of this stream is shown on Figure 3. The physical characteristics and water quality designations of this jurisdictional stream are detailed in Section 3.2. Within the study area, Cub Creek has been designated as a cool water stream for the purposes of stream mitigation.

Table 5. Jurisdictional characteristics of water resources in the study area.

Map ID	Length (ft.)	Classification	Compensatory Mitigation Required	River Basin Buffer
Cub Creek	395	Perennial	Yes	Not Subject
Total	395			

No jurisdictional wetlands were identified within the study area

5.2 Clean Water Act Permits

The proposed project has been designated as a Categorical Exclusion (CE) for the purposes of National Environmental Policy Act (NEPA) documentation. As a result, a Nationwide Permit (NWP) 23 will likely be applicable. A NWP No. 33 may also apply for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge construction or rehabilitation. The USACE holds the final discretion as to what permit will be required to authorize project construction. If a Section 404 permit is required then a Section 401 Water Quality Certification (WQC) from the NCDWQ will be needed.

5.3 Construction Moratoria

In a letter dated October 27, 2005, the NCWRC identified no special concerns for Cub Creek. Therefore, no moratoria are anticipated for this project.

5.4 N.C. River Basin Buffer Rules

Cub Creek is not located within any of the NCDWQ River Basins with required buffer rules.

5.5 Rivers and Harbors Act Section 10 Navigable Waters

Cub Creek is not considered Navigable Waters under Section 10 of the Rivers and Harbors Act, per communication with the USACE Asheville Regional Office.

5.6 Wetland and Stream Mitigation

5.6.1 Avoidance and Minimization of Impacts

The NCDOT will attempt to avoid and minimize impacts to streams and wetlands to the greatest extent practicable in choosing a preferred alternative and during project design. At this time, no final decisions have been made with regard to the location or design of the preferred alternative.

5.6.2 Compensatory Mitigation of Impacts

The NCDOT will investigate potential on-site stream and wetland mitigation opportunities once a final decision has been rendered on the location of the preferred

alternative. If on-site mitigation is not feasible, mitigation will be provided by North Carolina Department of Environment and Natural Resources Ecosystem Enhancement Program (EEP).

5.7 Endangered Species Act Protected Species

As of September 22, 2010 the United States Fish and Wildlife (USFWS) lists one federally protected species for Wilkes County (Table 6). A brief description of this species’ habitat requirements follows, along with the Biological Conclusion rendered based on survey results in the study area. Habitat requirements for this species are based on the current best available information from referenced literature and/or USFWS.

Table 6. Federally protected species listed for Wilkes County.

Scientific Name	Common Name	Federal Status	Habitat Present	Biological Conclusion
<i>Glyptemys muhlenbergii</i>	Bog turtle	T(S/A)	No	Not Required

T(S/A) - Threatened due to similarity of appearance

Bog turtle

USFWS optimal survey window: April 1 – October 1 (visual surveys); April 1-June 15 (optimal for breeding/nesting); May 1-June 30 (trapping surveys)

Habitat Description: Bog turtle habitat consists of open, groundwater supplied (springfed), graminoid dominated wetlands along riparian corridors or on seepage slopes. These habitats are designated as mountain bogs by the NCNHP, but they are technically poor, moderate, or rich fens that may be associated with wet pastures and old drainage ditches that have saturated muddy substrates with open canopies. Plants found in bog turtle habitat include sedges, rushes, marsh ferns, herbs, shrubs (tag alder, hardhack, blueberry, etc.), and wetland tree species (red maple and silky willow). These habitats often support sphagnum moss and may contain carnivorous plants (sundews and pitcherplants) and rare orchids. Potential habitats may be found in western Piedmont and Mountain counties from 700 to 4500 feet elevation in North Carolina. Soil types (poorly drained silt loams) from which bog turtle habitats have been found include Arkaqua, Chewacla, Dellwood, Codorus complex, Hatboro, Nikwasi, Potomac – Iotla complex, Reddies, Rosman, Tate – Cullowhee complex, Toxaway, Tuckasegee – Cullasaja complex, Tusquitee, Watauga, and Wehadkee.

Biological Conclusion: Not Required

Species listed as threatened due to similarity of appearance do not require Section 7 consultation with the USFWS. However, this project is not expected to affect the bog turtle because no suitable habitat (in the form of wetlands or wet areas) is present within the study area. A review of NCNHP records on August 1, 2011 indicates no known bog turtle occurrence within 1.0 mile of the study area.

5.8 Bald Eagle and Golden Eagle Protection Act

Habitat for the bald eagle primarily consists of mature forest in proximity to large bodies of open water for foraging. Large, dominant trees are utilized for nesting sites, typically within 1.0 mile of open water. There are no large bodies of open water within 1.0 mile of the project study area. Suitable habitat for bald eagle does not exist within the project study area. Additionally, a review of the NCNHP database on August 1, 2011 revealed no known occurrences of this species within 1.0 mile of the project study area. Due to the lack of habitat, known occurrences, and minimal impact anticipated for this project, it has been determined that this project will not affect this species.

5.9 Endangered Species Act Candidate Species

As of September 22, 2010 the USFWS lists no Candidate species for Wilkes County.

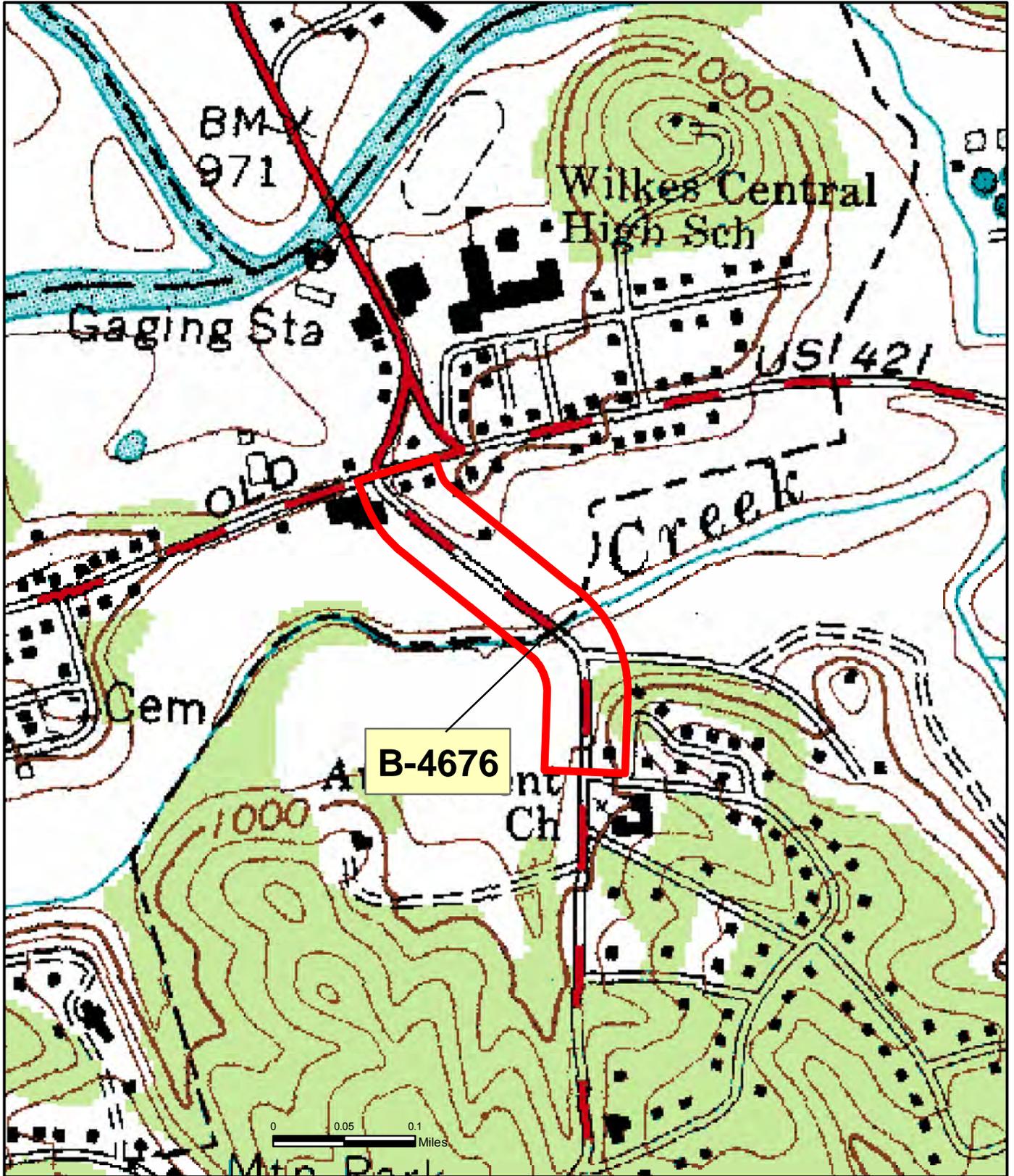
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Appendix A

Figures



B-4676

Wilkes County

Replacement of Bridge No. 29 over Cub Creek
on SR 1001 (Oakwoods Road)

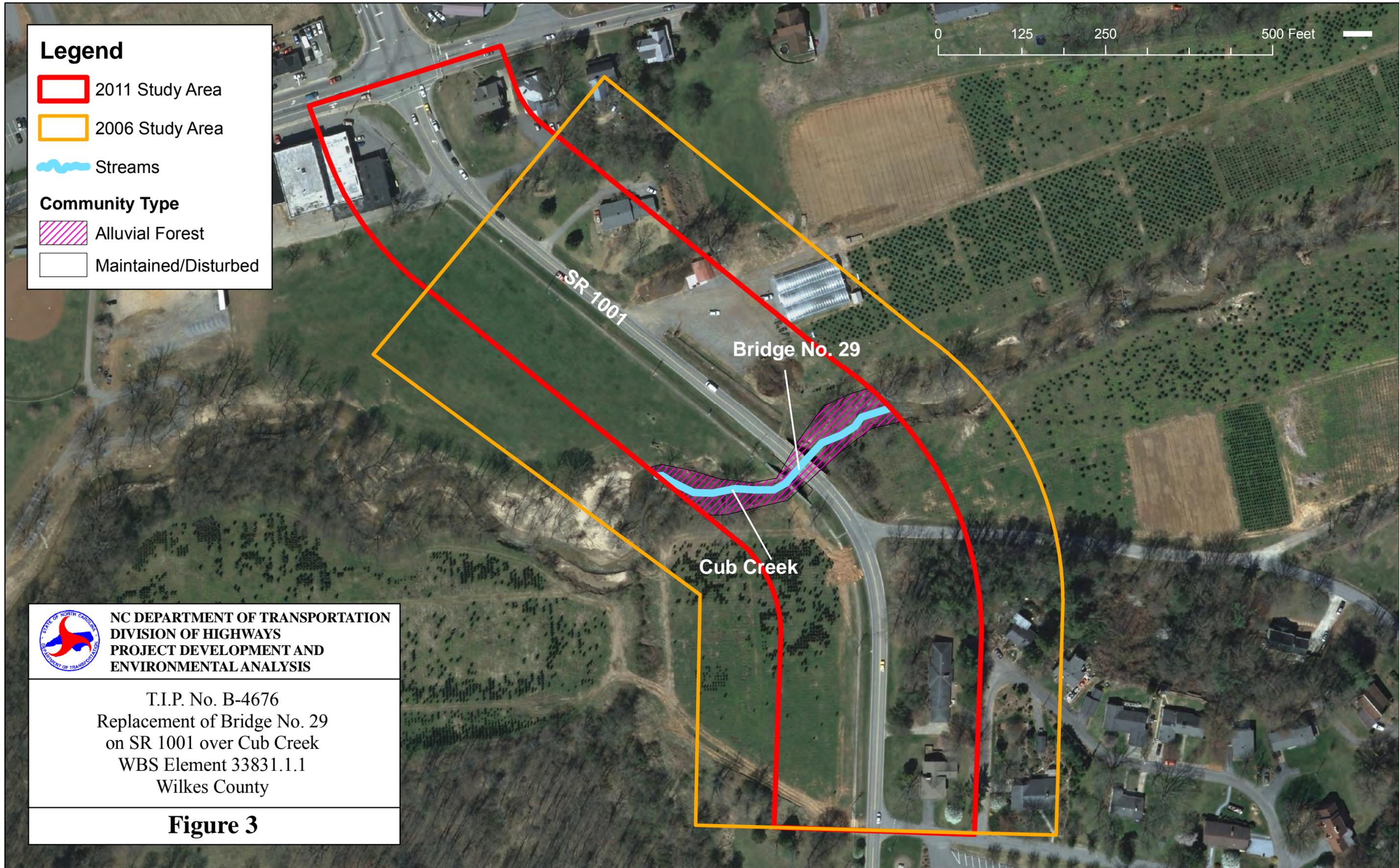


FIGURE 2



Prepared by the NCDOT
Project Development &
Environmental Analysis Branch
Natural Environment Unit

Project Study Area Map



Legend

- 2011 Study Area
- 2006 Study Area
- ~ Streams

Community Type

- Alluvial Forest
- Maintained/Disturbed



**NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS**

T.I.P. No. B-4676
Replacement of Bridge No. 29
on SR 1001 over Cub Creek
WBS Element 33831.1.1
Wilkes County

Figure 3

Jurisdictional Features and Terrestrial Communities Map

Appendix B

Scientific Names of Species Identified in Report

Plants

<u>Common Name</u>	<u>Scientific Name</u>
American sycamore	<i>Platanus occidentalis</i>
Black cherry	<i>Prunus serotina</i>
Black walnut	<i>Juglans nigra</i>
Blackberry	<i>Rubus</i> sp.
Box elder	<i>Acer negundo</i>
Chinese privet	<i>Ligustrum sinense</i>
Deer tongue	<i>Dicanthelium clandestinum</i>
Dogwood	<i>Cornus florida</i>
Eastern red cedar	<i>Juniperus virginiana</i>
English ivy	<i>Hedera helix</i>
Fescue	<i>Festuca</i> sp.
Grapevine	<i>Vitis</i> sp.
Greenbriar	<i>Smilax</i> spp.
Honey locust	<i>Gleditsia triacanthos</i>
Japanese honeysuckle	<i>Lonicera japonica</i>
Japanese stilt grass	<i>Microstegium vimineum</i>
Jewelweed	<i>Impatiens capensis</i>
Kudzu	<i>Pueraria montana</i>
Morning glory	<i>Ipomoea</i> sp.
Plantain	<i>Plantago</i> sp.
Poison ivy	<i>Toxicodendron radicans</i>
Pokeweed	<i>Phytolacca americana</i>
Queen Anne's lace	<i>Daucus carota</i>
Red maple	<i>Acer rubrum</i>
Redbud	<i>Cercis canadensis</i>
Silver maple	<i>Acer saccharinum</i>
Smartweed	<i>Polygonum</i> sp.
Tree-of-heaven	<i>Ailanthus altissima</i>
Trumpet creeper	<i>Campsis radicans</i>
Tulip poplar	<i>Liriodendron tulipifera</i>
Virginia creeper	<i>Parthenocissus quinquefolia</i>
White clover	<i>Trifolium repens</i>
Wild onion	<i>Allium</i> sp.
Wingstem	<i>Verbesina</i> sp.
Wood sorrel	<i>Oxalis</i> sp.
Wooly mullein	<i>Verbascum thapsus</i>

Animals

Common Name

American crow
American robin
Black rat snake
Blue jay
Bluehead chub
Carolina chickadee
Central stoneroller
Crayfish
Dusky salamander
Eastern box turtle
Eastern cottontail
Eastern garter snake
Gray squirrel
Green frog
Green sunfish
Northern cardinal
Northern water snake
Piedmont darter
Prairie warbler
Raccoon
Rosyside dace
Spring peeper
Swallowtail shiner
Tufted titmouse
Virginia opossum
White-tailed deer

Scientific Name

Corvus brachyrhynchos
Turdus migratorius
Elaphe obsoleta obsoleta
Cyanocitta cristata
Nocomis leptocephalus
Poecile carolinensis
Campostoma anomalum
Cambarus sp.
Desmognathus fuscus
Terrapene carolina
Sylvilagus floridanus
Thamnophis sirtalis sirtalis
Sciurus carolinensis
Rana clamitans
Lepomis cyanellus
Cardinalis cardinalis
Nerodia sipedon sipedon
Percina crassa
Dendroica discolor
Procyon lotor
Clinostomus funduloides
Pseudacris crucifer
Notropis procne
Baeolophus bicolor
Didelphis virginiana
Odocoileus virginianus

Appendix C

Qualifications of Contributors

Investigator: Jennifer Harrod, Environmental Specialist, NCDOT
Education: B.S., Fisheries and Wildlife, North Carolina State University, 2006
Experience: Environmental Specialist, NCDOT, June 2007 – present.
Park Ranger, US Army Corps of Engineers, Wake Forest, NC
June 2003 – April 2007.
Responsibilities: Stream and wetland assessment, natural communities assessment

Investigator: Jeremy T. Leamer
Education: B.S., Natural Resource Management, UNC Asheville, May 2000
Experience: Environmental Senior Technician, NCDOT, February 2007 – present.
Erosion Control Technician, Durham County Engineering, February
2005 – June, 2006.
Staff Scientist, WK Dickson, December 2003 – February 2005.
Environmental Scientist, MAA, September, 2001 – November 2002.
Naturalist, Kiawah Island Resort, SC, Summer Intern, 1998.
Responsibilities: Stream and wetland assessment, natural communities assessment

II. Demand for Outdoor Recreation

The 2002-2007 National Survey on Recreation and the Environment (NSRE) is the eighth in a series of national surveys started in 1960 by the Outdoor Recreation Resources Review Commission and now coordinated by the USDA Forest Service. The survey was accomplished by interviewing approximately 90,000 Americans aged 16 and over in random-digit-dialing telephone samplings. In 2007, the U.S. Forest Service prepared an analysis of responses to the NSRE for residents from North Carolina.

The NSRE has yielded just fewer than 3,000 total surveys for North Carolina during this period. The primary purpose of the NSRE and was to learn about approximately 85 specific outdoor recreation activities of people aged 16 and over in the United States. Questions from the NSRE broadly address areas such as outdoor recreation participation, demographics, household structure, lifestyles, environmental attitudes, natural resource values, constraints to participation, and attitudes toward management policies. The following information is a excerpted from the USFS report "National Survey of Recreation and the Environment: North Carolina and the North Carolina Market Area."

Survey Results

The first section presents of the 10 most popular outdoor recreation activities by percent participating and number of participants. By far the most popular activity is walking for pleasure, with 82 percent of state residents participating. Roughly three-quarters of the population have outdoor family gatherings at least once last year, and almost two-thirds garden or landscape for pleasure. Driving for pleasure is done by 58.2 percent of the population, while 57 percent view/photograph natural scenery. Almost 53 percent of state residents visit nature centers and go sightseeing.

Half of the population goes on picnics, while less than half attend outdoor sports events. Rounding out the top ten, 44.2 percent of residents visit a beach at least once per year (Figure 2.1).

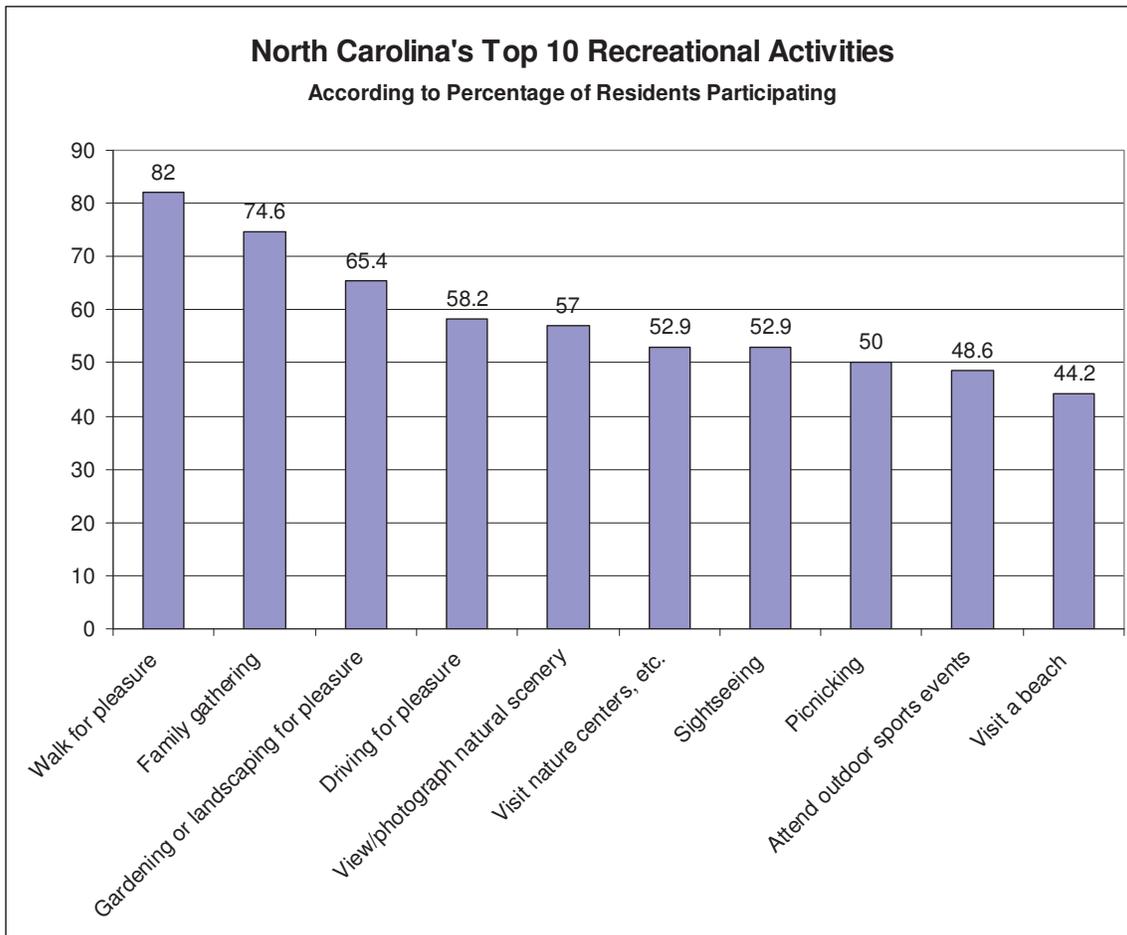


Figure 2.1: The 10 most popular Outdoor Recreation Activities for North Carolina residents

Activity Groups and Activities for North Carolina Residents

One of the most important results of the NSRE is the division of the population into groups with similar recreation interests and setting types. Very often people that share an interest in one recreation activity or settings also share interests in others.

Nature Based Land Activities

Visiting wilderness areas is the most popular nature-based land activity (29.8 percent) in the state of North Carolina. Hiking is also a popular activity (29.7 percent), with almost a third of state residents indicating participation within the last year. Visiting a farm or agricultural setting continues to be a popular activity with just under a third of residents doing this within the last year. Just over 20 percent of state residents also indicate an interest in driving off-road and

developed camping. The somewhat specialized, technical outdoor pursuits usually requiring special gear like rock climbing and mountain climbing are among the least popular nature-based land activities with 5 percent or less participating.

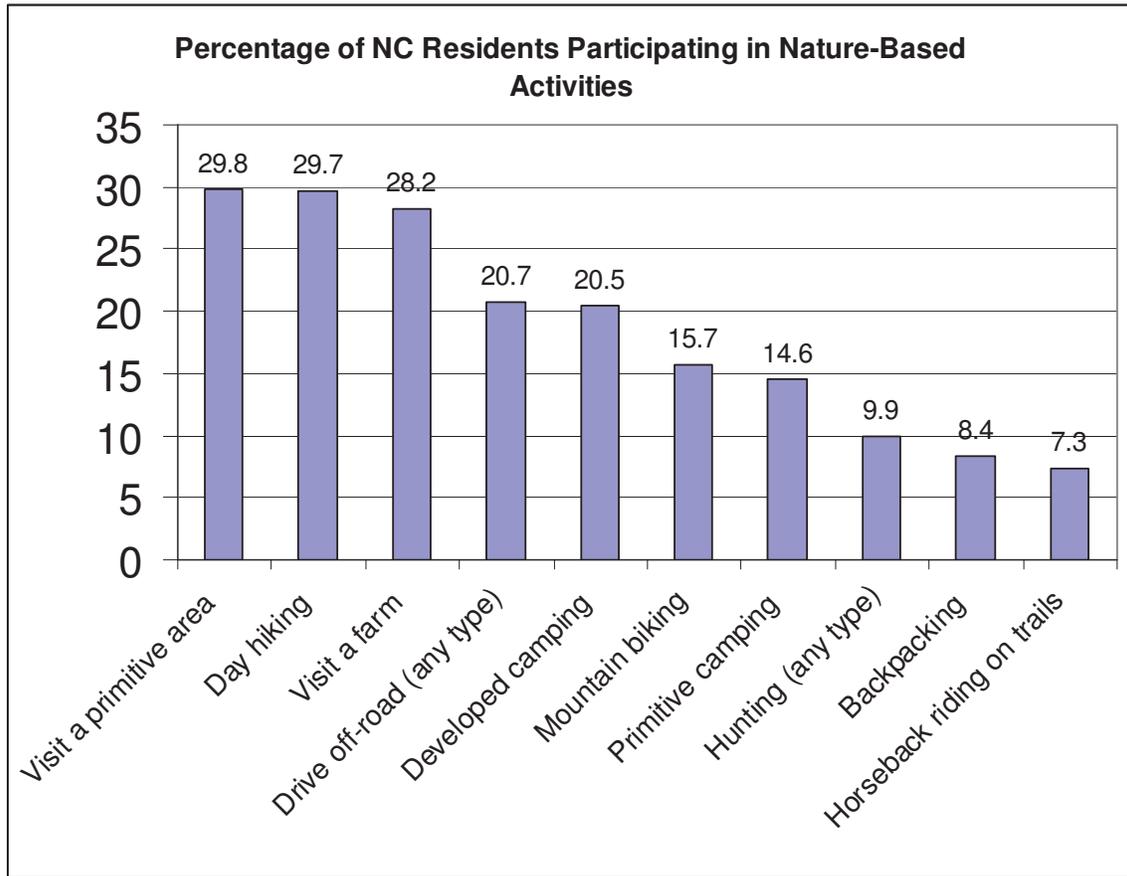


Figure 2.2: North Carolina resident participation in Nature-Based Land activities

Developed Setting Activities

Developed Setting outdoor recreation is by far the most popular form of recreation in North Carolina. More residents indicated participation in walking for pleasure (82 percent) and outdoor family gatherings (74.6 percent) than in any other overall activity. Other activities, such as gardening or landscaping (65.4 percent) or driving for pleasure (58.2 percent) are also favorites with North Carolina residents.

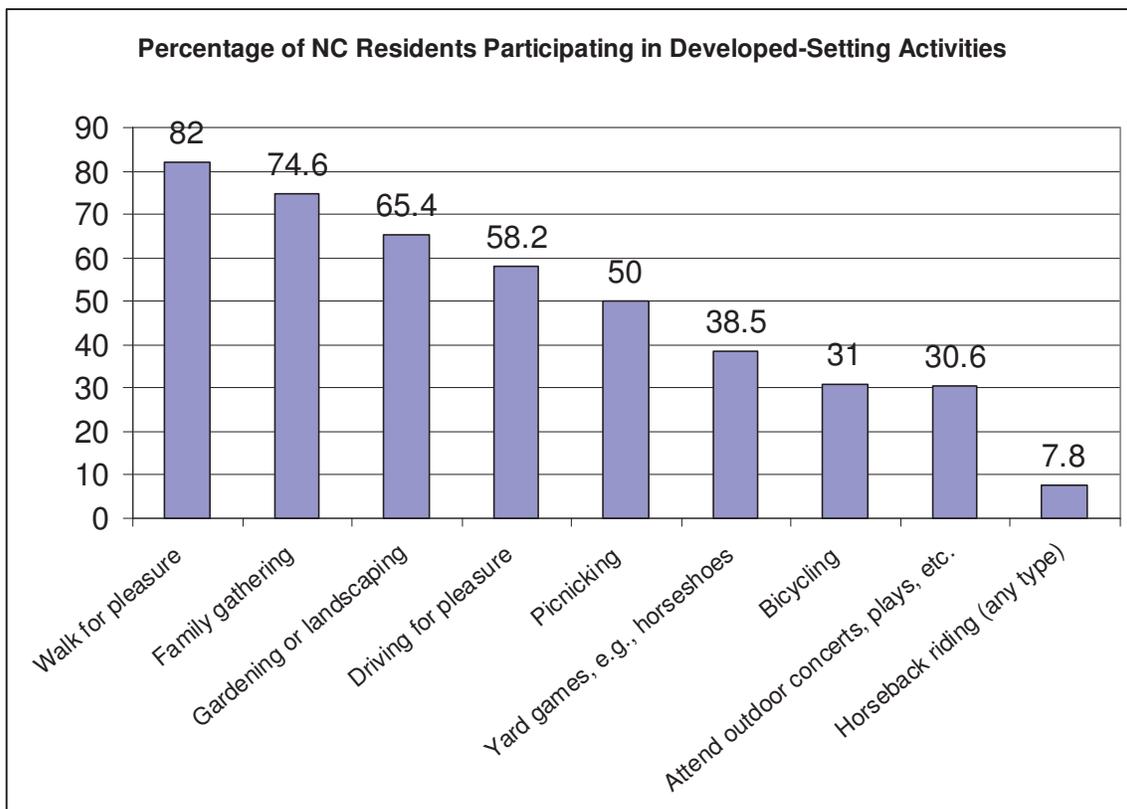


Figure 2.3: North Carolina resident participation in Developed-Setting Land activities

Water Based Activities

Figure 2.3 shows that the most popular water based activity in North Carolina is visiting a beach. Roughly 45 percent of state residents report visiting a beach at least once per year. Almost equal numbers of residents participate in swimming in an outdoor pool (39.9 percent) and swimming in lakes, streams, etc (39.7 percent), making these the second and third most popular activities. Boating of any type is another popular activity with 31 percent of state residents participating. Other types of boating include motorboating (22.5percent), rafting (9.3 percent), canoeing (6.7 percent), sailing (3.7 percent), kayaking (3.1 percent), and rowing (2.5 percent). Fishing is a popular water based activity and is broken into several categories. State residents participate in freshwater fishing (30.9 percent), followed by warmwater fishing (25.9 percent), saltwater fishing (17 percent), and coldwater fishing (11.5 percent).

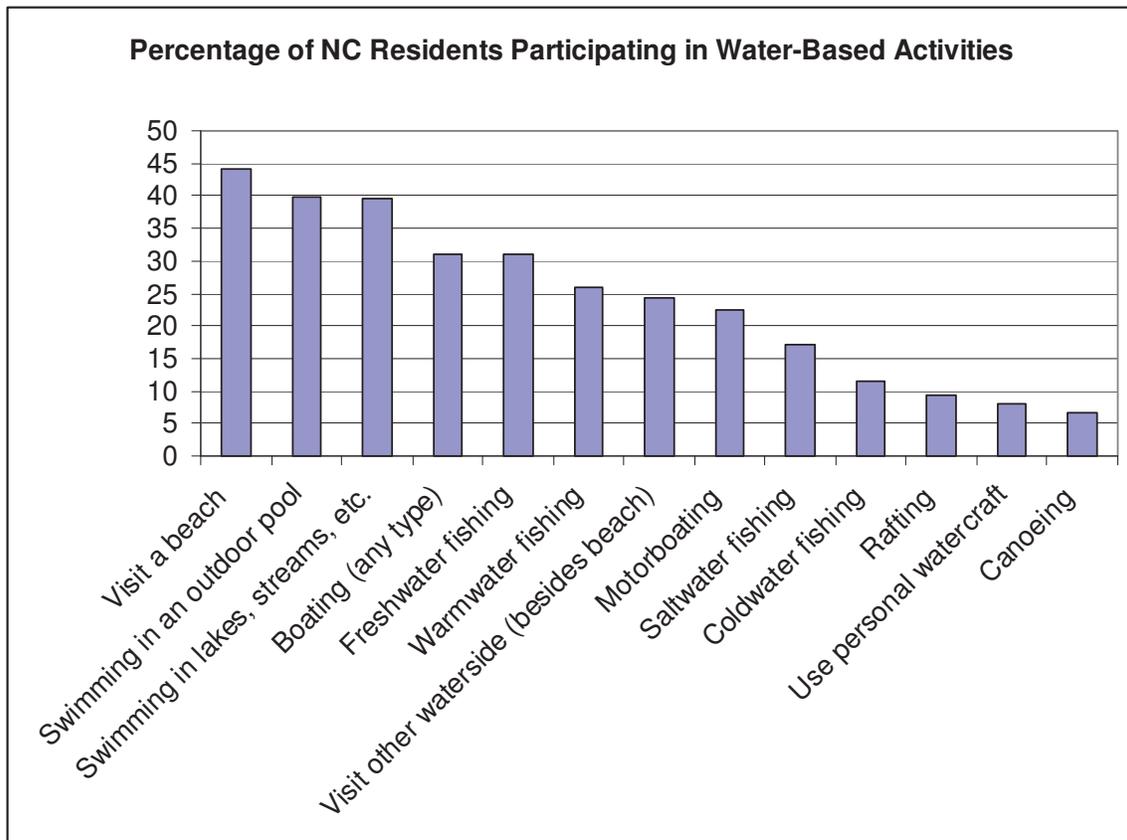


Figure 2.4: North Carolina resident participation in Water-Based activities

Team Sports Activities

The most popular team related outdoor sport for North Carolina residents is attending an outdoor sports event, with almost 50 percent of residents participating. Soccer, volleyball, and softball played outdoors is reported played by 9 percent of state residents. Just under 9 percent of residents play basketball outdoors. The two least popular outdoor sports are football (4.2 percent) and baseball (3.5 percent).

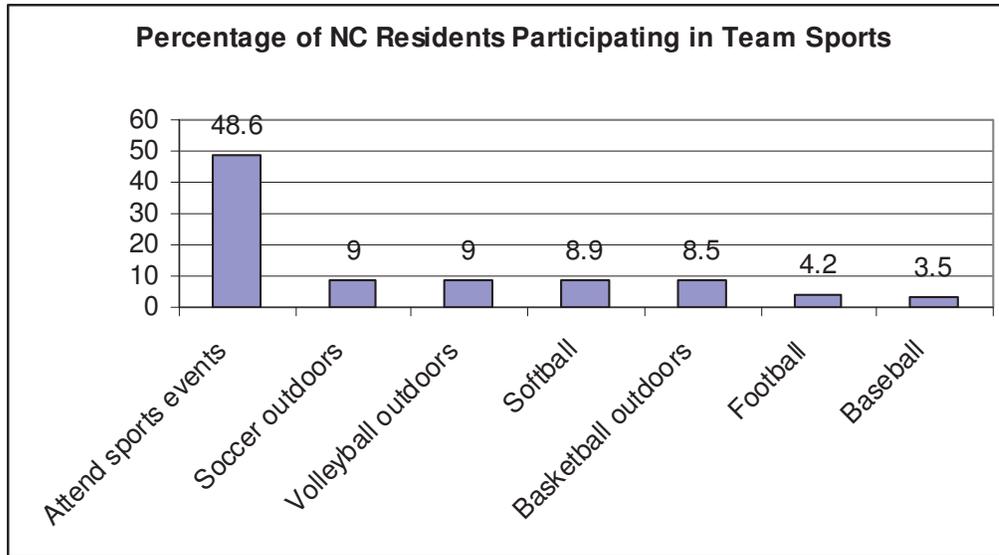


Figure 2.5: North Carolina resident participation in Team Sports activities

Viewing / Learning Activities

Table 3.5 presents resident participation in viewing and learning activities. The most popular viewing and learning activity is view/photograph natural scenery with 57 percent of North Carolina residents participating. The next two most popular activities are visiting nature centers and similar areas and sightseeing, each having 52.9 percent of residents participating. Visiting historic sites is another popular activity enjoyed by 43.1 percent of North Carolina residents, while only 18 percent of residents visit prehistoric/archeological sites. Many residents also enjoy viewing and photography a variety of objects including the following: other wildlife (43 percent); wildflowers, trees, etc. (41 percent); birds (34 percent); and fish (26.5 percent). Almost a quarter of North Carolina residents report gathering mushrooms and berries at least once a year. Less than 5 percent of residents go caving at least once a year, making it the least popular viewing/learning activity.

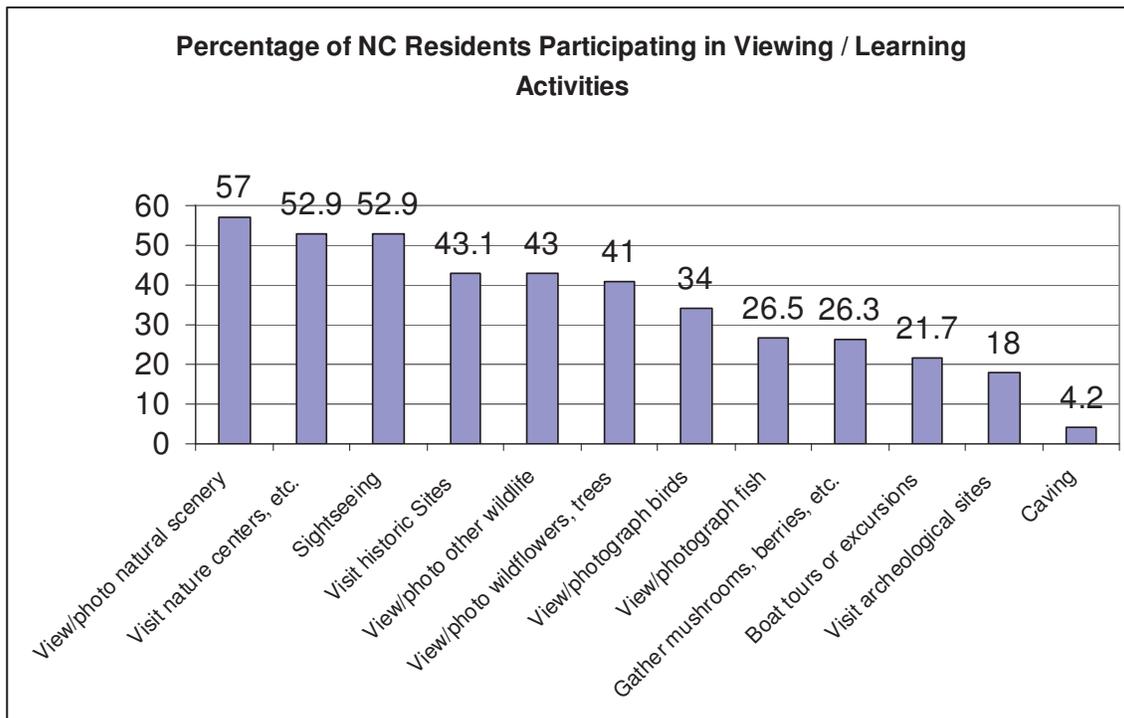


Figure 2.6: North Carolina resident participation in Viewing/Learning activities

Individual Outdoor Sports Activities

Less than one-third of North Carolina residents reported running or jogging once within the last year, making it the most popular individual outdoor sport. Outdoors tennis participants constitute 14.8 percent of the population, while almost 14 percent of residents have golfed within the last year. Less than 10 percent participated in inline skating, and only 3.1 percent played handball or racquetball outdoors, making it the least popular sport (Figure 2.7).

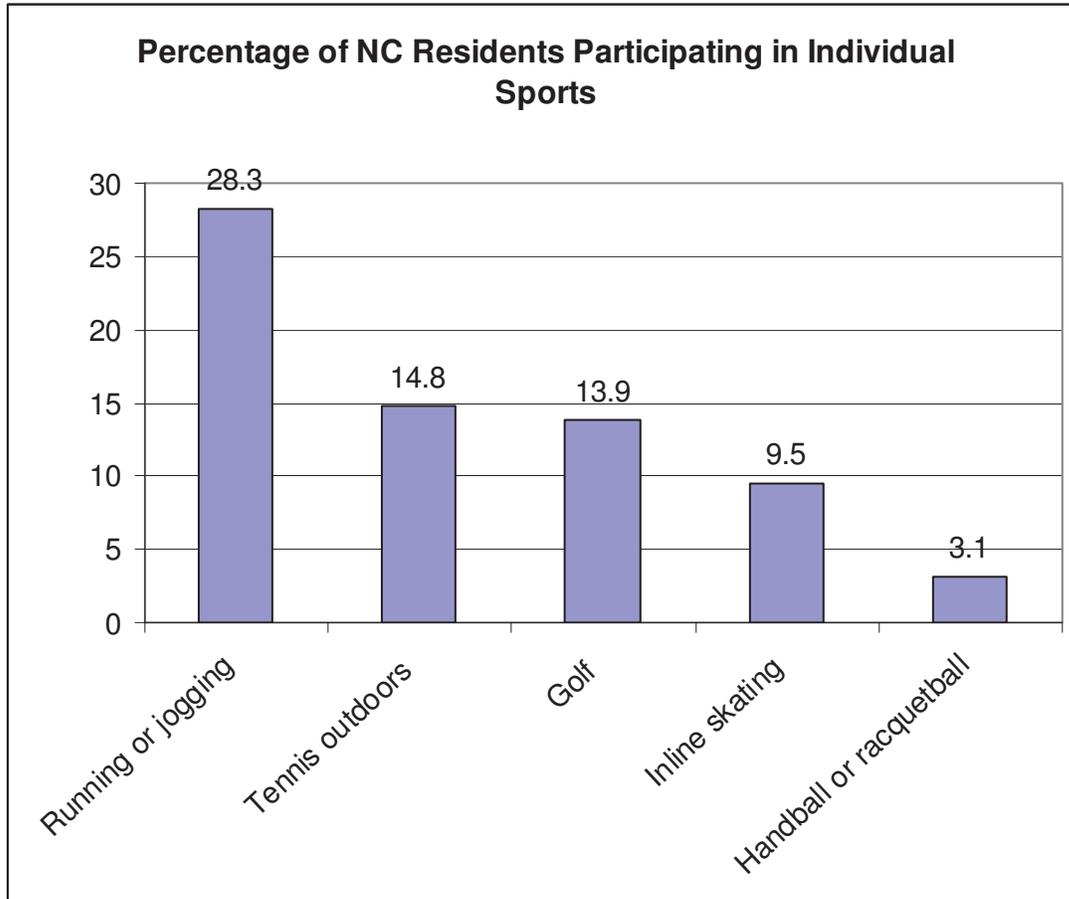


Figure 2.7: North Carolina resident participation in Individual Outdoor Sports activities

Snow and Ice Based Activities

Figure 2.8 shows that less than 20 percent of North Carolina residents participate in snow and ice based activities. Of those participating, the most popular snow and ice based activity in the state to be sledding (8 percent). Downhill skiing is the second most popular activity with 6.1 percent of state residents participating, followed by snowboarding with 3.1 percent participation. Ice skating outdoors is done by 2.1 percent of the population, while 1.5 percent of residents snowmobile. Cross country skiing is done by 1 percent of the population.

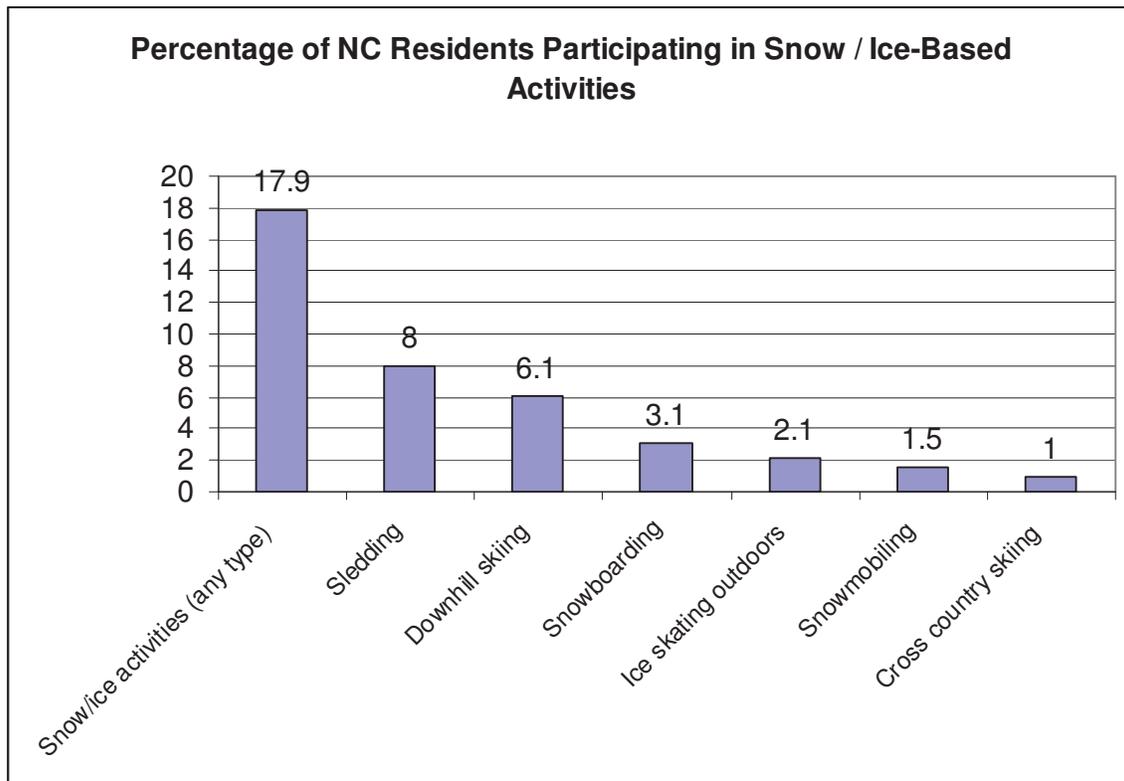


Figure 2.8: North Carolina resident participation in Snow and Ice-Based activities

The NSRE found that over 97 percent of Americans age 16 and over participated in at least one of the 80 recreation activities surveyed during the year prior to their interview. While reasons for participation are varied – for exercise and health, as part of a vacation, for team or individual competition, or just for fun – it is obvious that demand for outdoor recreation is high (Table 2.1).

Percentage of NC Residents Participating in Outdoor Recreation Activities					
Rank	Activity	Percent	Rank	Activity	Percent
1	Walk for pleasure	82	41	Coldwater fishing	11.5
2	Family gathering	74.6	42	Hunting (any type)	9.9
3	Gardening or landscaping	65.4	43	Inline skating	9.5
4	Driving for pleasure	58.2	44	Rafting	9.3
5	View/photo natural scenery	57	45	Soccer outdoors	9
6	Visit nature centers, etc.	52.9	46	Volleyball outdoors	9
7	Sightseeing	52.9	47	Softball	8.9
8	Picnicking	50	48	Basketball outdoors	8.5
9	Attend sports events	48.6	49	Backpacking	8.4
10	Visit a beach	44.2	50	Use personal watercraft	8
11	Visit historic Sites	43.1	51	Sledding	8
12	View/photo other wildlife	43	52	Horseback riding (any type)	7.8
13	View/photo wildflowers, trees	41	53	Horseback riding on trails	7.3
14	Swimming in an outdoor pool	39.9	54	Big game hunting	7.2
15	Swimming in lakes, streams, etc.	39.7	55	Canoeing	6.7
16	Yard games, e.g., horseshoes	38.5	56	Small Game hunting	6.4
17	View/photograph birds	34	57	Waterskiing	6.3
18	Bicycling	31	58	Downhill skiing	6.1
19	Boating (any type)	31	59	Mountain climbing	5.3
20	Freshwater fishing	30.9	60	Football	4.2
21	Attend outdoor concerts, plays, etc.	30.6	61	Caving	4.2
22	Visit a primitive area	29.8	62	Snorkeling	4.1
23	Day hiking	29.7	63	Sailing	3.7
24	Running or jogging	28.3	64	Baseball	3.5
25	Visit a farm	28.2	65	Anadromous fishing	3.1
26	View/photograph fish	26.5	66	Kayaking	3.1
27	Gather mushrooms, berries, etc.	26.3	67	Handball or racquetball	3.1
28	Warmwater fishing	25.9	68	Snowboarding	3.1
29	Visit other waterside (not a beach)	24.4	69	Orienteering	3
30	Motorboating	22.5	70	Rowing	2.5
31	Boat tours or excursions	21.7	71	Rock climbing	2.3
32	Drive off-road (any type)	20.7	72	Ice skating outdoors	2.1
33	Developed camping	20.5	73	Surfing	1.8
34	Visit archeological sites	18	74	Migratory bird hunting	1.7
35	Snow/ice activities (any type)	17.9	75	Snowmobiling	1.5
36	Saltwater fishing	17	76	Scuba diving	1
37	Mountain biking	15.7	77	Cross country skiing	1
38	Tennis outdoors	14.8	78	Windsurfing	0.5
39	Primitive camping	14.6	79	Snowshoeing	0.2
40	Golf	13.9	80	Ice fishing	0

Table 2.1: Percentage of NC Residents Participating in Outdoor Recreation Activities