## FORSYTH COUNTY BOARD OF COMMISSIONERS

| MEETING DATE: FEBRUARY 9, 2015   | AGENDA ITEM NUMBER: _  | 8  |
|--|--|--|
|  |  |  |
| SUBJECT:   |  |  |
| RESOLUTION AUTHORIZING SUBMISSION NORTH CAROLINA FOREST SERVICE, UPROGRAM TO DEVELOP A STREAMBAN AND PROJECT IN FORSYTH COUNTY (FORSYTH COUNTY COOPERATIVE EXT   | RBAN AND COMMUNIT<br>K STABILIZATION GU  | TY FORESTRY GRANT  |
| COUNTY MANAGER'S RECOMMENDATION O  | R COMMENTS: Reco   | mmend Approval   |
|  |  |  |
|  |  |  |
| SUMMARY OF INFORMATION:  |  |  |
| The North Carolina Forest Service, Urban and Commute the benefits and sustainable management of urban forest has developed a grant application in the amount of \$10 small-scale solutions to streambank erosion problems. stabilization guide, conduct hands-on workshops, and it | its. The Forsyth County Co<br>,000 to conduct educational<br>These grant funds will be u | operative Extension Service<br>workshops to understand<br>used to develop a streambank |
| No additional County funds are requested as a part of the  | nis grant.   |  |
| The Urban and Community Forestry Grant period is fro   | om March 1, 2015 to July 3   | 1, 2015.   |
|  | et e   |  |
|  |  |  |
|  |  |  |
|  |  |  |
| ATTACHMENTS: X YES NO  |  |  |
| SIGNATURE: A Kluden Watto is Jodh County Manager of  | DATE:February_5,   | 2015   |
|  |  |  |

# RESOLUTION AUTHORIZING SUBMISSION OF A GRANT APPLICATION TO THE NORTH CAROLINA FOREST SERVICE, URBAN AND COMMUNITY FORESTRY GRANT PROGRAM TO DEVELOP A STREAMBANK STABILIZATION GUIDE, WORKSHOPS, AND PROJECT IN FORSYTH COUNTY (FORSYTH COUNTY COOPERATIVE EXTENSION SERVICE)

WHEREAS, the Forsyth County Cooperative Extension Service requests authorization to apply for a \$10,000 grant from the North Carolina Forest Service, Urban and Community Forestry Grant Program, to develop a streambank stabilization guide, conduct workshops, and implement a streambank stabilization project;

NOW, THEREFORE, BE IT RESOLVED by the Forsyth County Board of Commissioners that the Chairman or County Manager and the Clerk to the Board are hereby authorized to execute, on behalf of Forsyth County and the Forsyth County Cooperative Extension Service, necessary documents to apply for grant funds from the North Carolina Forest Service, Urban and Community Forestry Grant Program in the amount of \$10,000 to develop a streambank stabilization guide, conduct workshops, and implement a streambank stabilization project, subject to a pre-audit certificate thereon by the Chief Financial Officer, where applicable, and approval as to form and legality by the County Attorney.

Adopted this 9<sup>th</sup> day of February 2015.

#### **U&CF 2015 APPLICATION FORM** North Carolina Urban and Community Forestry Grant Project Title: Cooperative Extension Leading Innovative Streambank Stabilization Efforts in NC Project Location (City): (County): Kernersville, Winston Salom Forsyth Applicant (Organization) Name: Forsyth County Cooperative Extension Address: 1450 Fairchild Rd City: State: Zip Code: Winston Salem NC Primary Contact Person/Title: Wendl Hartup Phone: Fax: E-mall: 336-703-2850 336-767-3557 wendl\_hartup@ncsú.edu Employer Identification Number (EIN) (Required): 56-6000450 Fiscal Year End (month/day): 6 \_\_\_\_/ 30 DUNS Number: 071569586 Brief List of Project Objectives: Understand why buffers filled with native plants are important. Learn how to properly select appropriate vegetation and manage non-native, invasive species. Understand small-scale solutions to healthler buffers which can improve stream water quality. Project Type (check one that best applies) Grant Funds Requested \$ 10000 U&CF Program Development Cash Match **U&CF** Program Improvement In-Kind Match \$ 8107 Education & Information/Training Total Amount of Project \$ 18107 Non-Profit Program Development Tree Planting Demonstration & Site Specific Applicant Description local govt. non-profit 501(c)(3) educational institution state govt. other (describe) Is this community a Tree City USA?\_YES \_\_ Community population 260008 Is the organization a member of the NC Urban Forest Council? Yes No Pending Has this organization received a U&CF grant in the past? Yes No If yes, what grant year(s)? As a duly authorized representative of the organization making this application, I hereby certify that, to the best of my knowledge, all information provided herein is true and represents the desires of this organization. I further certify that I understand the purpose and rules of the program as outlined in the Application Package. Wendi Hartup Natural Resources Extension Agent Printed Name of Authorized Representative Title/Position 1/22/2015 Signature of Authorized Representative Date

Proposal Narrative

Project Title: Cooperative Extension Leading Innovative Streambank Stabilization Efforts in NC

Background: Cooperative Extension in Forsyth County offers many education opportunities to teach about tree care and selection; the Tanglewood Arboretum is maintained by Cooperative Extension volunteers and is used as an outdoor classroom for children. An urban tree foundation grant to provide canopy trees to homeowners and community groups is housed with Forsyth County Cooperative Extension. Kernersville and Winston Salem are both Tree City USA communities and have done many programs in the past to promote tree planting.

#### Objectives:

Understand why buffers filled with native plants are important.

Learn how to properly select appropriate vegetation and manage non-native, invasive species. Understand small-scale solutions to healthier buffers which can improve stream water quality.

Statement of Need: Nonpoint source pollution is recognized as the leading contributor to water quality degradation in the United States. Additionally, the effectiveness of streamside vegetated buffers in reducing pollutant loads to streams is well known. It is common for natural resource professionals and municipalities to receive requests for assistance to correct severe stream erosion that has resulted from a variety of causes including removal of vegetation, invasive plants grow out of control but do not stabilize the land and an increase in impervious surfaces in the watershed. These concerns are communicated after the problem is so advanced that it is beyond the technical expertise of local staff to provide assistance. Traditional methods of streambank stabilization (walls, rip rap, gabion baskets, etc.) are failure prone and cost prohibitive as well as counter productive to ecosystem health. These established, successful programs will target High Rock Lake Watershed citizens and empower them with ideas on how to improve streambank health, water quality and wildlife habitat within their own communities as well as provide a local demonstration site to visit.

Strategy/Methods: Conduct 3 established workshops for homeowners, local government personnel, landscapers, utility workers, park managers and target folks within the High Rock Lake Watershed (working with local Cooperative Extension offices, Soil and Water Conservation Districts and municipalities).

Workshop 1: Invasive Species Identification and Management Methods

This will be a hands-on, interactive class (3 hr class). Samples of 20 plants known to be invasive in natural ecosystems, right of ways, farm land, and landscapes will be examined for identification characteristics, significance, historical impacts, and best management strategies. Emphasis will be on woody plants listed by the US Forest Service and NC Dept of Agriculture as being invasive and/or plants of concern. Attendees will learn techniques to properly manage common invasives (cut and wipe, scrape and squirt, etc.) as well as get to remove some invasives.

1 hr Participants identify and discuss invasive samples.

1.5 hrs Participants learn removal methods and remove species.

0.5 hr Participants plant seedlings near newly removed species. (species: Amelanchier canadensis, Asimina triloba, Betula nigra, Celtis occidentalis, Diospyros virginiana, Magnolia virginiana)

Workshop 2: Backyard Buffer

Citizens learn the benefits of buffers, common native plants and go to the field to plant cuttings of woody shrubs and trees.

1 hr Discussion

1 hr Plant livestakes and seedlings (species: Cornus amomum, Sambucus canadensis, Amelanchier canadensis, Asimina triloba, Betula nigra, Celtis occidentalis, Diospyros virginiana, Magnolia virginiana)

Workshop 3: Backyard Stream Repair

Budget Proposal Form

| Itemize each expenditure or match value under Grant,<br>Cash Match or In-kind Match categories  | Detailed Explanation of Expenditures and Match Values   |                   | Cash<br>Match                | In-Kind<br>Match |
|---|---|-------------------|------------------------------|------------------|
| Component 1: Enhance workshop materials, conduct hands-on programs  |   |                   | a ar 1 <sub>4</sub> 15 1 4 . | denistra i       |
| Grant Funding   |   | l a darken in     |                              |                  |
| Publications (Backyard Stream Repair Tips and Tricks)   | 150 copies on 80lb gloss paper from Alpha Graphics, Winston Salem   | \$2,400           |                              | <del>-</del>     |
| Stabilization materials (matting, straw, seed, stakes)  | 2 coir rolls @ \$165, 1 box ecostakes @\$89, bundle 25 2' wood stakes @ \$15.50, 60 bales @ \$8, 3lbs cover seed @ \$6, 3lbs flower seed @ \$29 | \$1,020           |                              |                  |
| Plants (livestakes, herbaceous, shrubs, trees)  | 6 bundles livestakes @ \$40, 300 plugs @ \$1, 400 perennials @ \$3, 120 shrubs @ \$20, 32 trees @ \$75, 20 tree seedlings @ \$2                 | \$6,580           |                              |                  |
| Cash Match  |   |                   |                              |                  |
| None expected   |   | !                 |                              | <del></del>      |
| In-Kind Match   |   |                   |                              |                  |
| Project coordinator to create publication and oversee project   | 40hrs @ \$25  |                   |                              | \$1,00           |
| Kernersville vegetation removal and grading   | Crew of 6 @ \$15/hr @ 40hrs   | <u> </u>          |                              |                  |
| Volunteer invasive removal and planting   | 35 volunteers @ 22.55 @4hrs   | <b></b>           |                              | \$3,60           |
| Beautyberry shrubs donated  | 20 @ \$5 each   |                   |                              | \$3,15<br>\$10   |
| and with the secretary of the second of the | _ <br>  | 240.000           |                              |                  |
| Component 2: Evaluate results and send in rep   | ort   | \$10,000          | \$0[                         |                  |
| Grant Funding   |   | Part South States |                              |                  |
| Cash Match  |   |                   |                              |                  |
| In-Kind Match   |   |                   |                              |                  |
| Project coordinator   | 10 hrs @ \$25   |                   |                              |                  |
|   |   |                   |                              | \$250            |
|   |   |                   |                              |                  |
|   | Subtotals<br>TOTALS   | \$0               | \$0                          | \$250            |
| · · · · · · · · · · · · · · · · · · ·   | TOTALS  | \$10,000          | \$0                          | \$8,107          |

Photocopy if additional space is needed. Form may be downloaded at: http://ncforestservice.gov/Urban/urban\_grant\_applying.htm

### Schedule/Timeline

This form, at minimum, must include the key or milestone activities of the project. These activities should also be addressed in the budget, that is, all elements included in the budget as grant or match; this includes the paid activities and volunteer or staff estimates.

| What will be done  | Who will do it                        | When will it be<br>started and<br>completed | Evaluation/ Documentation  |
|--|---------------------------------------|---|--|
| Create publications for print                                      | Project lead                          | March 2015                                  | invoices and final documents   |
| Submit Army Corps of<br>Engineers PCN Permit                       | U                                     | March 2, 2015                               | approved letter for work   |
| Order materials and plants for workshops                           | n                                     | March 23, 2015                              | invoices   |
| Backyard Buffer<br>Workshop  | II.                                   | April 1, 2015                               | List of attendees, installed livestakes  |
| Begin grading on<br>streambank                                     | U                                     | April 6, 2015                               | Town of Kernersville grades (in-kind match)  |
| Invasive Plant ID and<br>Removal                                   | п                                     | April 8, 2015                               | List of attendees  |
| Backyard Stream Repair<br>Workshop                                 | н                                     | April 9, 2015                               | List of attendees, surveys, installed practice   |
| Survey participants  | 11                                    | August 2015                                 | Compile survey results   |
| Reporting  | · · · · · · · · · · · · · · · · · · · | <del>  -</del>                              | · · · · · · · · · · · · · · · · · · ·  |
| Submit Mid-Year Status<br>Report                                   | Project<br>Coordinator                | March 1, 2015                               | Mid-Year Status Report form  |
| Submit Final Accomplishment Report and final Reimbursement Request | Project<br>Coordinator                | July 31, 2015                               | Final Accomplishment Report form; Accomplishment Narrative; additional required documentation; Request for Reimbursement form with invoices. |