

**Buncombe County FY2019 Strategic Partnership Grants
Application Summary Sheet**

Project	Hemlock Restoration Initiative –2018 Bringing Beetles to Buncombe
Organization	WNC Communities

Amount Requested	\$20,000	Strategic Priority or Sustainability Goal	Environment
New or Renewal Request	New	Area Served	District 1, 2 and 3

Organization Description	<ul style="list-style-type: none"> WNC Communities' mission is to support sustainable economic development opportunities that are unique to each community by providing a unique forum for WNC leaders to convene, collaborate and carry out innovative programs to improve the quality of life for rural communities and to enhance the economy of the agriculture and forestry sectors. One of the forestry programs, the Hemlock Restoration Initiative (HRI), is a collaborative partnership between multiple state agencies, counties, NGO's, and the federal government with the mission of ensuring that eastern & Carolina hemlocks can withstand the hemlock woolly adelgid (HWA) and survive to maturity on North Carolina's public and private lands.
Key Steps	<ul style="list-style-type: none"> Beetle collection & redistribution, with added emphasis on partner training, monitoring of beetle migration & the resulting impact on HWA & hemlock health, development of sustainable sources of Laricobius (see Sustainability section), and education of the public, which is increasingly important as predators migrate away from release sites & onto private land. Outreach & education activities occur throughout year.
People Served	<ul style="list-style-type: none"> All county citizens are vulnerable to the risks of flooding and wildfire that are exacerbated by fallen dead hemlocks and standing snags. Specific populations will receive additional direct benefits. These include: commercial and recreational fishermen, other recreational users of streams and trails, farmers and other rural landowners with hemlock resources, the plant nursery industry, visitors and managers of public lands within the county, private homeowners, and future generations who may once again experience the sensation of walking through a mature, healthy hemlock forest.
Outcomes	<ul style="list-style-type: none"> Positive recovery of beetles at each former release site, as well as the number of non-release sites that are confirmed to have a beetle presence will be key indicators of success. The level of HWA infestation & presence or absence of new growth observed on hemlock stands will indicate the extent to which untreated hemlocks are able to maintain health in the absence of chemical protection.

Budget			
Amount Funded FY2018	\$22,500	Increase Request	\$2,500 less
Administrative Budget	2% (from 2016 IRS Form 990)	Total Organization Budget	\$185,000 (projected FY2019)
Other Funding Sources: Grants, Individual donations, Government funding			

Strengths
Innovative and/or creative program design
Thoughtful plan to sustain project for future years
Well-linked, creative, and/or non-traditional partnerships

WNC Communities – Hemlock Restoration Initiative – 2018 Bringing Beetles to Buncombe

FY2019 Strategic Partnership Grants

WNC Communities

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Application Form

Question Group

Project Name*

Name of Project.

WNC Communities – Hemlock Restoration Initiative – 2018 Bringing Beetles to Buncombe

Amount Requested*

\$20,000.00

PROJECT NARRATIVE

Area Served*

Which areas of the County will be served by this project? Which Commissioner District(s) will be served?

A Buncombe County Commissioner district map is available at [THIS LINK](#).

District 1

District 2

District 3

Organization Description*

Tell us about your organization. What is your mission? Highlight two or three key facts and accomplishments that best define your organization.

WNC Communities' mission is to support sustainable economic development opportunities that are unique to each community by providing a unique forum for WNC leaders to convene, collaborate and carry out innovative programs to improve the quality of life for rural communities and to enhance the economy of the agriculture and forestry sectors. One of our forestry programs, the Hemlock Restoration Initiative (HRI), is a collaborative partnership between multiple state agencies, counties, NGO's, and the federal government with the mission of ensuring that eastern & Carolina hemlocks can withstand the hemlock woolly adelgid (HWA) and survive to maturity on North Carolina's public and private lands. Since the program's inception in 2014, HRI has facilitated the chemical protection of over 18,500 hemlock trees on state, federal, and private lands in 18 counties, released over 8,000 HWA predator beetles, and engaged hundreds of individuals through volunteer and educational activities.

Strategic Priority*

Which of the following priorities best reflects the primary goal of your project?

Buncombe County Commissioners are dedicated to strengthening the quality of life for everyone by setting new fiscally, socially and environmentally responsible goals that will guide decisions and improve our community for future generations. The Board has committed to strategic priorities as a guide to shape partnerships and investments of resources to insure a healthy, safe, well-educated, thriving and sustainable community.

Details about the Strategic Priorities are available at [THIS LINK](#).

Other Sustainability Goal

Strategic Priority - Other Sustainability Goal

If you selected "Other Sustainability Goal" from the list of Strategic Priorities, please list it here.

Details about the Sustainability Goals are available at [THIS LINK](#).

Hemlock Restoration Initiative works in the sustainability goal of ENVIRONMENT in the Conservation & Restoration of Natural Resources

Shared Vision*

What critical community problem or challenge are you hoping to improve through this project?

Native eastern and Carolina hemlock trees throughout the eastern U.S. have been decimated by the hemlock woolly adelgid (HWA). As a foundation species, hemlocks fundamentally shape the ecosystems and ecosystem processes in the areas where they occur. Their loss has had major ramifications on the composition of our forests, which negatively impacts water quality, wildlife, plant nurseries, homeowners, and the tourism industry. Carolina hemlocks face extinction due to their limited range (the largest known population is located in Buncombe County). Many remaining mature hemlock trees are only alive today because they have received chemical pesticide treatments that have acted as an immediate life-support system. While chemical treatment is still an effective method of preserving a single tree, establishing a natural predator-prey balance is the only known way to ensure long-term survival of hemlocks on a landscape level, which requires a sustainable, reliable, local source of predators.

Key Steps*

How will the project work? What are specific activities and milestones that your project entails?

Laricobius nigrinus is one of a suite of biological controls that have been approved for release in NC and has been shown to do well in our region. During the first 3 years of this project ~ 13,300 beetles have been released in the county by HRI & partners. *Laricobius* have been successfully recovered at all release sites, as well as on non-release sites, indicating that they are surviving, reproducing, and dispersing on their own. Year 4 of this project will continue previous activities (beetle collection & redistribution), with added emphasis on partner training, monitoring of beetle migration & the resulting impact on HWA & hemlock health, development of sustainable sources of *Laricobius* (see Sustainability section), and education of the public, which is increasingly important as predators migrate away from release sites & onto private land. Beetle collection, redistribution, and monitoring occur between late October & April. Outreach & education activities occur throughout year.

People Served*

Who are the members of our community this project will serve? How many people will be served? Include demographics, including age, area median income, race, neighborhood and/or school.

This project will serve everyone in Buncombe County because we all benefit from a healthy environment with clean water, stable streams, intact ecological systems, the preservation of rare species and natural vegetation communities, and a reduction in dependence on chemicals. All county citizens are vulnerable to the risks of flooding and wildfire that are exacerbated by fallen dead hemlocks and standing snags. However, specific populations will receive additional direct benefits. These include: commercial and recreational fishermen, other recreational users of streams and trails, farmers and other rural landowners with hemlock resources, the plant nursery industry, visitors and managers of public lands within the county, private homeowners, and future generations who may once again experience the sensation of walking through a mature, healthy hemlock forest. It will also benefit those property owners who cannot afford to pay for extensive, repeated chemical treatments, or tree removal.

Partners*

Which other organizations are you working with to reach your goals? What other local organizations provide similar services or serve similar beneficiaries, and how do you work together?

NCDA&CS: primary state partner & funding source; direct collaboration on chemical & biological control components of program (NCFS, Plant Industry)

USFS: provides funding, technical and scientific advice, support & training

MountainTrue: identification of hemlock stands; outreach

BRRCD: Non-profit implementing similar program on regional level; collaboration on trainings, outreach & procurement of beetles

City of Asheville: provides access & facilitates releases on city properties, including Asheville Watershed

Town of Montreat: Municipal partner participating in program & augmenting county beetle releases with additional funds

NCWRC: State partner representing wildlife game lands/release site at the western edge of the county

Warren Wilson College: Established BRRCD partner currently participating in program, insectary site

SAHC: Land trust holding easements on beetle release sites & co-host of outreach events

Biltmore Estate: Established BRRCD partner with current Ln population

Personnel*

Who is responsible for the project? Briefly describe project leaders and the role each will play in the project. How do these leaders reflect the population or community that you serve?

VICE PRESIDENT: LT Ward has served as a Board Member in numerous capacities for over 35 years and offers guidance and problem-solving and fundraising expertise.

EXECUTIVE DIRECTOR: Linda Lamp has served in this capacity for over 10 years and has a significant background in non-profit program management

PROJECT COORDINATOR: Margot Wallston has successfully managed the HRI for 2.5 years and has a lengthy background in land conservation, restoration, plant ecology, and volunteer management. She oversees all aspects of the Bringing Beetles to Buncombe program, including seasonal technicians who support monitoring, HWA & beetle collection and distribution.

HRI OUTREACH ASSOCIATE: Offers educational presentations and technical assistance to individual landowners, college partners, community groups & organizations.

NCDA&CS Biological Control Administrator: Steven Turner runs the beneficial insect lab rearing HWA predators for the state; will serve as long-term, sustainable source of beetles.

Success*

How will you measure results? What will success look like? How will you document the impact of your project? Include whether there is a model that serves as basis for project design.

Positive recovery of beetles at each former release site, as well as the number of non-release sites that are confirmed to have a beetle presence will be key indicators of success. The level of HWA infestation & presence or absence of new growth observed on hemlock stands will indicate the extent to which untreated hemlocks are able to maintain health in the absence of chemical protection. Emergence of lab-reared beetles in the fall will determine whether additional collections outside of the county or region are necessary. Results to be documented through data collection & reports. The project is informed by a national-level partnership on HWA control, including federal & academic researchers, entomologists, & natural resource managers. A similar 11-yr old program in the Banner Elk/Grandfather Mountain high country is the model for all states. UT Knoxville & Virginia Tech labs have well-established rearing protocols for *Laricobius* that have been incorporated into NCDA&CS lab protocols.

Funding*

What is your plan for finding the balance of the project budget? What is your funding timeline and what are your other sources of support?

Funding for the balance of the project budget to run the Beneficial Insect Lab will come from NCDA&CS. HRI personnel and complimentary HRI projects in Buncombe County and other NC counties are supported by the NCDA&CS, the USDA-FS, and private donations, which will extend to the end of FY2019, with the possibility to carry over unused funds into FY2020. WNC Communities and HRI continually seek new funding opportunities through federal and state programs and private foundations.

Sustainability*

How will this project be maintained? Please describe funding sources and how you plan to sustain the project in future years.

Now that it has been verified that the beetles survive, reproduce, and disperse well in our local environment, we intend to increase insurance that long-term objectives of maintaining population levels adequate to keep HWA thresholds low enough to promote hemlock health. This requires developing an on-going, sustainable, quality source of beetles to augment wild populations. HRI is partnering with the NCDA&CS Plant Industry Division Beneficial Insect Lab to rear and maintain a *Laricobius* colony. HRI will support the lab through food and substrate collection (necessary to maintain the beetles), occasional wild beetle harvests to infuse the colony with fresh genetic material, and limited equipment maintenance. In return, a portion of successive generations will be available to release back into the county. The NCDA&CS is committed to the biocontrol program and has provided funding to support the HRI and the lab in the coming year. Another interested party is pursuing additional funds.

ATTACHMENTS

Project Budget*

Download the budget form at [THIS LINK](#).

Complete the budget form for this project and the overall organization.

Save it to your computer, then upload it.

HRI_strategic-partnership-grants-FY2019-budget-template.xlsx

Financial Statements*

Upload a copy of the most recently completed financial statements.

All financial statements must be audited, reviewed or compiled by a certified public accountant and include a full balance sheet, income statement, and cash flow statement.

If your organization does not have financial statements, briefly state the reason.

WNC Communities Audit FYE 6.30.2017.pdf

Hemlock Restoration Initiative is a program of WNC Communities. The WNC Communities audit fiscal year ending June 30, 2017 is attached.

IRS Form 990*

Upload a copy of the 990 nonprofit tax reporting form that you most recently completed.

If your organization does not have a 990, briefly state the reason.

WNC Communities 990 FYE 6.30.2017.pdf

Hemlock Restoration Initiative is a program of WNC Communities. The WNC Communities 990 fiscal year ending June 30, 2017 is attached.

Board of Directors List*

Upload a current list of your organization's Board of Directors.

If your organization does not have a board of directors, briefly state the reason.

Board of Directors FYE 6.30.2018.pdf

Hemlock Restoration Initiative is a program of WNC Communities. The WNC Communities Board of Directors list is attached.

Authorized Signatory

By typing in below the name of the authorized signatory and date of submittal, you acknowledge that your governing body has authorized this application, that it is true and current to your knowledge. As a condition of any

grant awarded, this organization will provide all information in the manner described in the contract to be executed between the organization and Buncombe County or its designee, including program and financial reporting.

Name & Date

Linda L. Lamp, February 9, 2018