Roots for Rivers Reforestation Grant and Technical Assistance Program Funded by The Nature Conservancy

2020 Application Information Package

Announcement Date:	Friday, September 27, 2019
Informational Webinar:	Wednesday, October 16, 2019
Application Due Date:	Friday, December 13, 2019
Recipient Notification:	Friday, January 24, 2020
Link to Application:	On the Grants and Resources section of sustainablejersey.com

***For questions regarding the application and online portal*:**
Kaitlyn Vollmer: Email grants@SustainableJersey.com or call 609-771-3189
For project related questions contact:
Michelle DiBlasio: Email michelle.diblasio@tnc.org or call 908-955-0342

A. Background

We are pleased to announce that The Nature Conservancy (TNC) is partnering with Sustainable Jersey and The Watershed Institute on a new **Roots for Rivers Reforestation Grant and Technical Assistance Program**. Dense development in New Jersey directly affects our water supply, and more than 85% of our rivers and streams are impaired due to factors like erosion and polluted stormwater runoff. One important way to help ensure we can continue to rely upon our precious natural water resources is to restore New Jersey's floodplains—the critical land near our rivers' banks. Throughout much of the state, our floodplains have been deforested and left without trees to help filter water, absorb flooding, or cool the river for fish.

TNC has been working over the last five years with local, state, and federal partners in northwestern New Jersey to reforest the floodplains of a key tributary to the Delaware River, the Paulins Kill. TNC has now teamed up with Sustainable Jersey to share lessons learned and to help catalyze restoration efforts across the state in order to achieve a goal of planting 100,000 trees in floodplains by 2020. Planting trees within floodplain land in places where it has been degraded is a great way to engage your community, raise awareness about the importance of freshwater conservation, and most importantly, protect the lands and waters on which we and future generations depend.

The **Roots for Rivers Reforestation Grant and Technical Assistance Program** will support municipal, school district, and local non-profit and conservation organization efforts to undertake floodplain reforestation initiatives. Program participants will receive technical assistance to design restoration projects and funding to cover the cost of tree/shrub planting, tubes, and stakes. Funding will not be awarded to individuals or private landowners. **ONLINE Applications are due by Friday, December 13 at 11:59pm. Email submissions will NOT be accepted. Selected participants will be notified by January 24, 2020. Proposed projects must be completed by July 1, 2020.**

Informational Webinar: Wednesday, October 16, 1:30PM – 3:00PM

You will learn:

- Why floodplain reforestation is important and what is involved
- How to select an appropriate site and develop a project plan
- What technical assistance and funding is available
- How to apply to be part of the program

Register here. Following the webinar, the recording and presentations will be posted on the Webinar Recordings and Presentations page.

THIS PACKET ADDRESSES THE MUNCIPALITY AND SCHOOL DISTRICT APPLICATION PROCESS. All municipalities and school districts will submit applications via Sustainable Jersey's web portal. All other applicants should apply via The Watershed Institute. For more information regarding The Watershed Institute's application process please contact Erin Landis, River-Friendly Coordinator of The Watershed Institute. She can be reached at elandis@thewatershed.org.

Municipalities and School Districts should submit an online application using the link below:

Sustainable Jersey Application: https://app.wizehive.com/appform/login/2020TNCApp

B. Municipality and School District Eligibility Requirements

To be eligible to participate in this program through Sustainable Jersey, an applicant must:

- Be a New Jersey municipal government or school district. Funding may be passed through to a non-profit, partner organization, or contractor, but the municipality or school district must be the applicant and will be responsible for the reporting requirements. Checks will be made payable to the municipality or school district and sent to its fiscal agent.
- Be registered or certified with Sustainable Jersey or Sustainable Jersey for Schools certification program.

Note: An applicant's eligibility to apply for this program is NOT limited by the status of other Sustainable Jersey grant awards. Similarly, eligibility to apply for funding in current or future Sustainable Jersey grant cycles will NOT be impacted by participation in this program.

C. Use of Grant Funding

Grant applicants can utilize the detailed project budget template available here and shown in Appendix 2 when creating their project budget.

Eligible Grant Expenses

Applicants can request funding amounts from between $1,000 and $20,000.
Eligible expenses **only** include:

- Native woody plants (trees and shrubs) that **only** include bare root stock, tublings, 1-gallon and/or 2-gallon containers
- Tubes and support stakes to protect the plantings (Deer fence and protection against weeds/invasive species are **not** covered by this grant).
- Up to two delivery fees associated with transportation of project materials

The **same number of plants as tree tubes and stakes should be included in the proposed budget**.

The purpose of this grant is to restore floodplains, and not to provide landscaping assistance for parks and playgrounds. Ornamental and large trees are not eligible grant expenses. The trees and shrubs that are eligible for this grant are small as they are meant to grow over time while helping to restore degraded floodplain areas.

Eligible protection materials (tree tubes and stakes) are provided by select vendors. **To ensure maximum survival of species, grow tubes with a fiberglass or PVC support stake must be used to protect all plantings.** Purchasing additional materials for future plantings is not an eligible expense to the grant. Applicants will be required to maintain an **average** cost per tree, tube, and support stake of **$12 or less.**

Grant recipients will be asked to submit a finalized budget for approval prior to purchasing the grant materials to ensure that all expenses using grant funds are eligible. The budget should include not only the grant expenses, but also the expenses that will be covered by other funding sources so that the entire project budget is represented.

Ineligible Grant Expenses (Must Be Covered By Other Funding Sources)

Any expense not listed as an eligible grant expense above will be the financial responsibility of the applicant. This includes:

- Other **supplies** (gloves, shovels, etc.)
- **Equipment** (mower, auger, etc.)
- **Ineligible shrubs and trees** (ornamental plants, trees in containers larger than 2 gallons, etc.)
- **Additional delivery fees** associated with project implementation
- Any **additional** tree protection supplies purchased for **future** planting projects
- **Alternative tree protection materials** (fencing, weed mats, etc.)
- Any **plants not protected** by either the **recommended tree protection materials** that are eligible for the grant OR by the **approved alternative protection materials** not covered by the grant
- Any costs incurred **when removing or protecting against invasive species**
- **Labor** (or contractor) costs

Alternative Methods of Protection Materials

Alternative methods of protection include mesh or wire tubing, fencing, wooden stakes, and anything other than the eligible grow tubes and fiberglass or PVC support stakes listed in the Eligible Grant Expenses section. **All alternative protection materials are the financial responsibility of the applicant and are not eligible for grant reimbursement.**

All plants must be protected with protection materials to ensure that they survive. TNC recommends using a grow tube and PVC stake has protection. These materials are can be purchased with grant funds. **If an applicant identifies that alternative methods of protection (mesh, fencing, wooden stakes, etc.) are better-suited to protect the plantings, the use of these materials must be approved prior to purchasing.**

Approval is needed to ensure that the alternative methods of protection will still yield a favorable survivability rate of the plants. Applicants who feel as though they need to use alternative methods of tree protection at their site should contact Michelle DiBlasio of The Nature Conservancy to discuss their project prior to submitting their application. **Projects with approval to use alternative protection materials to protect plants will likely be subjected to a more rigorous stewardship plan to ensure a high plant survivability rate.**

Approved alternative protection materials can be used to protect plantings but are still the financial responsibility of the applicant and are not eligible for grant reimbursement. Any plant that is protected by unapproved alternative protection materials, or not protected at all, will not be eligible for grant reimbursement and will be the financial responsibility of the applicant.

Please also note that **grant recipients will be asked to submit a finalized budget for approval prior to purchasing the project materials to ensure that all purchases of alternative protection materials have been approved by The Nature Conservancy.**

Invasive Species Removal

Invasive, non-native species removal is not required, but encouraged if necessary for project success, and the costs associated with this process will also be the financial responsibility of the applicant. If invasive species removal is needed, removal methods must be identified in the action plan, along with targeted

timelines for completion. Implementation of such plans can take a significant amount of time to complete and may require permits if work is proposed in state regulated areas. These activities can occur before the grant is awarded to ensure that the grant-funded portion of the project is completed within the grant performance period. Information on invasive, non-native species and links to New Jersey specific resources can be found here.

Labor and Contractor Costs

All labor and contractor costs are the financial responsibility of the applicant. Oftentimes, applicants list their DPW as in-kind labor or volunteers as donated labor. The value of volunteer time used to complete the project can be valued as in-kind at a rate of $24.14/hour.

D. Purchasing Project Materials

Applicants are strongly encouraged, but not required, to use select partner vendors to help ensure cost effective budgets.

Native Plantings

- Pinelands Nursery
- Forest Nursery – State of New Jersey

The Nature Conservancy has partnered with Pinelands Nursey to reserve eligible native tree and shrub species that will be available to program participants. This reserve list is available online here and provided in Appendix 3.

Tubes and Stakes

- Plantra

Instructions on how to install tree tubes and PVC stakes are available here and in Appendix 4. Plantra has agreed to extend a discounted rate of approximately $5.50 per tree tube and stake combination. Details on how to access the special pricing will be provided to selected participants in their award letter.

Requirements for Project Materials

Applicants can only purchase plants and protection materials that meet the following eligibility requirements:

- Plant orders for native trees and shrubs can **only** include bare root stock, tublings, 1-gallon and/or 2-gallon containers
- All plants purchased with grant funds for the project must be protected with the recommended tree protection materials to ensure maximum survival, thus resulting in the **same number of plants being listed in the budget as there are tree tubes and stakes**.
- A an **average** cost per tree, tube, and support stake of **$12 or less must be maintained in the budget** (securing a mix of varying species will be necessary to maintain this average)

If applicants do not want to use the recommended protection materials, alternative methods of protection must be pre-approved in order to receive funding and full reimbursement upon project completion.

Alternative protection materials approved may be subject to a more rigorous stewardship plan. Applicants will only be reimbursed for approved plant and protection materials. If applicants want to secure other funding for plant or protection materials that are ineligible for grant funding such as an in-kind match, you must list this in the 'in-kind' section of the budget form. However, we cannot guarantee project approval if desired protection materials are used.

More information on species availability and sizes will be covered in the webinar. Register here. Following the webinar, the recording and presentations will be posted on the Webinar Recordings and Presentations page.

E. Project Development

The first step in crafting a project is to **identify potential planting sites** and **determine who owns the land**.

Online resources such as Google maps, Google Earth and/or the NJ Maps Conservation Blueprint mapping tool can be helpful guides in identification of potential restoration sites**.** An informational video on how to use NJ Maps can be viewed here.

Additional assistance in the site selection process and project planning may also be available from the local watershed organization or the New Jersey Watershed Ambassadors Program. The Nature Conservancy will be training Watershed Ambassadors on how to help applicants determine ecological characteristics. They can serve as a direct reference to make sure sites will not negatively affect state/federally listed species amongst other things.

Potential Sites

Identify rivers or streams running through the municipality and look for areas at the site along the banks with the following features:

- No woody vegetation or sparse woody vegetation
- Mowed lawns or impermeable pavement
- Invasive or non-native grasses and plants (reed canary grass, loosestrife, etc.)
- Signs of erosion
- Close proximity to paved roads

Please note that the goal of this program is to increase native tree and shrub cover in floodplains. **Potential project sites must fall within the Ecological Floodplain Areas (EFA).** Use the NJ Maps Conservation Blueprint tool to verify if your site falls within the EFA reference layer. More information about the EFA layer can be found online, in the NJ Maps tool. Cutting down, removing, mowing or otherwise disturbing healthy native vegetation including, but not limited to, trees and shrubs planted or naturally growing in the project area is not consistent with this goal and **is prohibited**.

Applicants must visit their project sites in-person. Looking up your site on one of the online tools is not enough.

The application will ask you to use NJ Maps to identify information on your project site to be included in the application. Please review the instructions document here and template here (also in Appendix 5) to find the requested information to ensure complete and accurate project tracking and ecological characterization of project site.

Land Ownership

Eligible project sites include:

- Municipal or school district owned land
- Other public land (preserved land, open space, etc.) owned by the county or state, provided the application includes a letter from the property owner supporting the project and granting permission to implement the project.
- Non-profit organization owned land, provided that the application includes a letter from the property owner supporting the project and granting permission to implement the project.

Project sites on private land are NOT eligible.

F. Application

All municipalities and school districts will submit applications via Sustainable Jersey's web portal. The online application is designed to collect the information needed to evaluate a proposal without overburdening the applicant.

Program Application: https://app.wizehive.com/appform/login/2020TNCApp
The following sections outline the information needed to complete the online application.

1. Eligibility Inquiry

The applicant must registered in the Sustainable Jersey or Sustainable Jersey for Schools certification program.

2. Applicant Information

- Municipality or School District
- County
- Employer Identification Number (EIN)

3. **Grant Proposal**

- **Grant Funding Requested:** Projects costing between $1,000 and $20,000 are eligible
    - Amount of Grant Funding Requested
    - Number of Plant & Protection Materials
    - Average Cost of Materials

- **Project Title and Brief Description**: Provide a name for the proposed project and a short description of the floodplain reforestation project's goals.

- **Information on Project Site:** Provide information on the project site using NJ Maps. Use the instructions document here and template here (also in Appendix 5) to find the following information to ensure complete and accurate project tracking and ecological characterization of project site:

    - **Location Information**
        - River/stream Name
        - Watershed
        - Street Address of Parking Location for Site Access. Please provide accurate street locations for easy navigation to project site.

        - GPS Coordinates (Latitude and Longitude) of targeted planting area(s). **NOTE**: These coordinates may differ from parking access location listed above.
        - PAMS_PIN Number
        - Tax ID Parcel Number (Block(s), Lot(s))

    - **Dimensions of Project Site**
        - Proposed Project Site (Square Feet)
        - Proposed Planting Area (Acres)
        - River/Stream Length of planting reach (Feet)
        - River/Stream Length of planting reach (Miles)

- **Condition of Project Site:** Answer the following questions on the physical conditions of the project site
    - Current cover in project area (trees, shrubs, grasses, bare, or other; if other, please specify)
    - River/streambank erosion (yes or no)
    - Presence of invasive species (yes, no, unknown; if yes please list species)

- **Ecological Conditions:**
    - Presence of Rare Species and Natural Communities (yes or no)
        - If yes, what Landscape Project ranking(s) number is present (Rank #1 - #5)? Contact your local Watershed Ambassador for any rankings 4 and/or 5.
    - Natural Heritage Site (yes or no)
        - If yes, contact your local Watershed Ambassador

- **Map of Project Site:** Use NJ Map to map your project site and show the proposed planting area(s) boundaries targeted by the project. Upload a screenshot (pdf or photo file) of the project map with planting area(s) clearly delineated. You can print or screenshot maps directly from NJ Map's online landing page. Or, upload a more detailed, technical map that includes a rough layout of your planting plan and species selection. Please see Section E and Appendix 5 for mapping information.

- **2-3 Current Photos of Project Site:** At least one of the three photos must include the stream or river. In addition to these "Before" photos, "After" photos of the site taken after the project has been completed will be required in grant recipients' final report. **To ensure consistencies between "Before" and "After" photos, it is recommended to use a vantage point for easy reference of where to take pre and post photos.** Beyond just showing the new plantings, these "After" photos should also include photos of site prep, volunteers, etc*. Sustainable Jersey and The Nature Conservancy reserve the right to use these photographs in reports to the grant program sponsors, presentations, social media posts, and other program-related materials*

- **Stewardship Commitment:** Indicate who (municipal department, partner organization, volunteer group, green team, etc.) that will be in charge of stewardship of the project site. Please see Section H for more information on the stewardship expectations.

- **Project Team Members and Duties**: Upload a pdf that provides the name, title, organization, contact information (email or phone), and duties of the key people who will be involved in completing the project.

- **Action Plan and Timeline**: Outline the specific steps your team will take to complete the proposed project. Each member listed as a Team Member should be identified in the Action Plan. This includes project planning steps, invasive species removal steps (if applicable), implementation steps, community engagement steps, and stewardship and reporting steps. It should also include any plans

and events where the project and its sponsors will be promoted, such as a ribbon cutting ceremony. Identify the timeline for each step to ensure the project can be accomplished by **July 1, 2020**. An action plan template is available here and is shown in Appendix 1.

4. **Application Contacts:**
   - **Contact information including name, title or affiliation, email address and phone numbers will be requested for the following people:**
     - Primary Contact
       The primary contact must be a municipal or school district employee.
     - Project Management Contact
       The project management contact should be whoever is taking the lead on managing the project and can answer project-related questions
     - Mayor/District Superintendent
     - Fiscal Contact
       The fiscal contact must be a person (typically the Business Administrator) authorized to manage official municipal funds.

5. **Required Attachments and Information:**
   Note: All files uploaded into the online grant application must be in PDF format.

   - **Authorization to Submit Application:** In order to participate in this program, the applicant must upload documentation that it is authorized to apply for this grant by the appropriate authority (i.e. mayor, district superintendent, business administrator, or other designated authority). Click here for a sample School Board Resolution and here for a sample Municipal Resolution. **Note: this is different than the resolution needed to register in the Sustainable Jersey or Sustainable Jersey for Schools certification program.** Questions regarding this requirement can be directed to Kaitlyn Vollmer at 609-771-3189 or emailed to grants@sustainablejersey.com.

     *Please note that it would be best to start the process of obtaining this resolution **as early as possible** to allow enough time to have the resolution adopted. The approved resolution should be submitted with the application by the December 13, 2019 deadline. However, applications will be accepted with a proposed resolution and the date that it will be presented to the governing body. The adopted resolution must then be emailed to grants@sustainablejersey.com **no later than January 17, 2020 in order for an application to still be considered.***

   - **Project Budget:** A sample budget template is available here and is shown in Appendix 2. Eligible expenses include native woody plants, protection materials (grow tube tree shelters and support stakes), and up to two delivery fees **only**. Other supplies, equipment, alternative protection materials and the labor costs associated with the project is the responsibility of the applicant. The project can be accomplished through the use of volunteers, employees, or a contractor paid for by the applicant using other funding sources. Please see Section C for more information on eligible expenses. *Please note that the informational webinar on October 10/16 is intended to provide guidance on tree selection and planting layout, which will help in determining costs for the budget.*

   - **Landowner Support:** Please identify the landowner of the project site. If the proposed project site is owned by a governmental unit other than the municipality, school district or a non-profit organization, a letter from the property owner supporting the application and granting permission for project implementation is required. **Project sites on private land are NOT allowed.**

6. Optional Information

This can include letters of commitment or support from project partners or more detailed project information (i.e., targeted means of communications).

G. Online Application Portal

The application can be accessed using the link below. Applications must be submitted using the online application portal by **11:59 PM on December 13, 2019**. Only online application submissions will be considered for participation in the grant and technical assistance program.

Application: https://app.wizehive.com/appform/login/2020TNCApp

H. Selection Process

Applications will be screened using the following criteria:

- Project budget is within the allowable grant amount ($1,000 - $20,000), grant funds are only being requested for eligible expenses (native trees/shrubs, tree tubes, stakes), and the average cost per plant (including tube and stake) is $12.00 or less. Other funding sources, in-kind contributions, and donations are identified (if applicable).
- Accuracy and completeness of project tracking and location table (defined acreage of planting area, linear feet of stream to be planted, etc.). Map and photos of site are used to enhance reviewers' understanding of project.
- The relative impact of the proposed project on restoring floodplains and protecting water resources.
- Likelihood of success as demonstrated the strength of the project team and action plan.

I. Terms and Conditions

Program participants will receive half of the grant award upon approval of their proposal. The remaining balance will be paid upon satisfactory completion of the project and approval of the final fiscal and project report, due no later than **July 31, 2020.**

Recipients are responsible for:

- Planting all trees/shrubs with tubes and stakes (installed on each plant) no later than **July 1, 2020** to ensure maximum survival.
- Selecting and purchasing all plant and protection materials (tree tubes and stakes) and scheduling of deliveries.
- Ensuring that these activities are prohibited: cutting down, removing, mowing or otherwise disturbing healthy native vegetation including, but not limited to, trees and shrubs planted or naturally growing on the project site.
- Protection of newly planted materials by installing protective tree tubes and support stakes.

- Obtaining any necessary permits and/or permissions from state, federal, or local agencies that may be required to implement restoration activities in regulated areas or areas that could affect listed species.
- Meeting the stewardship expectations outlined below.

Stewardship Expectations

In order to maintain the integrity of your project sites, routine stewardship will be needed at least once annually to inspect all planted materials for survivability and to identify which tubes and/or support stakes require maintenance because they have been compromised from wind damage, flooding and/or wildlife. Trees and shrubs will outgrow their protective tubes and will no longer need support stakes **within 4 to 5 years** after initial planting. Tubes and support stakes must be removed once the diameter of the tree is big enough to break open the tube.

Annual stewardship activities include:

- Visual inspection of plant and protection materials (tree tubes and stakes) for damage or mortality
- Securing tree tubes properly around the tree/shrub
- Straightening support stakes
- Removing vines or debris away from the tree tube

These activities can be performed by employees, volunteer groups or students, or local non-profits and are critical to the long-term success of the plantings. To learn more about the importance of good site stewardship, read the article available here.

Recycling Protection Materials

It is important that the tree tubes and stakes be properly disposed of, as we aspire to a 'leave no trace' motto at all project sites. Tree tubes and fiberglass stakes purchased from Plantra **can** be recycled at select waste management facilities. Alternative materials for protection may not be accepted as recycled materials. We strongly encourage applicants to use recommended protection materials to ensure materials are properly disposed of. TNC is currently investigating potential partnerships with companies that will repurpose and/or recycle large quantities of protection materials as well as ways to help facilitate clean-up/easy removal of these materials.

Project Site Monitoring

The Nature Conservancy reserves the right to monitor project sites and request photo documentation annually, years 2-4, to track progress of stewardship activities and gather lessons learned from funded projects. Recipients will be asked to renew stewardship commitment in the final report. It is imperative that site location information is accurate in the project tracking table to ensure TNC and respective funders can safely access project sites to assess long term survival or species and overall project success.

J. Program Participant Reporting Requirements

Program participants will be required to complete a final report using an online report form by **July 31, 2020**. Reminders will be emailed to the primary project contact at least 30 days prior to the report deadline. The final report must document the completion of the floodplain reforestation initiative described in the application.

The following information is required in the final report:

- A brief description of the floodplain reforestation initiative that highlights the project outcomes and impact.
- A renewed commitment of stewardship of the project site. Indicate who (municipal/school department, partner organization, volunteer group, green team, etc.) will be in charge of stewardship of the project site. Please see Section I for more information on the stewardship expectations.
- A summary of any modifications to the proposed project outlined in the original application (i.e., changes in sizes, quantities or costs of tree species or tree tubes). ***All project modifications, including changes to budget must be approved by Sustainable Jersey before being implemented. Full reimbursement of funding is not guaranteed for non-approved modifications. Failure to seek approval for any changes that ensued during project implementation may affect full reimbursement for incurred project costs.***
- Samples of communications such as press releases, news articles, and program information distributed to the community related to the initiative that also highlight TNC and Sustainable Jersey as project funders. Sponsor logos will be provided to all grant recipients.
- At least **TWO** photographs of the site after completion of the project
- Lessons learned in completing the project, including challenges faced and advice that would be given to others undertaking a similar project.
- A summary of expenses charged to the grant with supporting documentation (e.g., invoices, financial ledger). Must include final paid invoices from vendors in order to receive full reimbursement for materials
- Grantee's Certification and Declaration signed by the business administrator or other authorized representative.

Appendix 1 – Action Plan and Timeline Template

Grant Application
Proposed Project Action Plan

Please use this form to outline the specific steps needed to complete the proposed project. It should begin with the key planning tasks and end with the completion of the final grant report. Per the terms of the grant, the project needs to be completed within the grant performance period. Plans to remove invasive species must be included in this timeline and show that this process will not prevent the project from being completed within the grant performance period. Invasive species removal can begin before the grants are awarded and is the financial responsibility of the applicant. Community engagement steps can include plans to use volunteers to complete the project. Project promotion steps can also include any plans to issue press releases.

Steps/Tasks that the Project Team will take to Complete the Proposed Grant Project	Team Member Responsible	Target Completion Date
Planning Steps		
1.		
2.		
3.		
Invasive Species Removal (If Applicable; Can Occur Before Grant Is Awarded)		
1.		
2.		
3.		
Implementation Steps		
1.		
2.		
3.		
Community Engagement Steps		
1.		
2.		
3.		
Stewardship and Reporting Steps		
1.		
2.		
3.		

Project Promotion – Events Where Promotional Materials With Sponsor Recognition Are Distributed		
Name of Event	**Materials**	**Date**
1.		
2.		
3.		
Proposed Date of Ribbon Cutting Ceremony (If Applicable)		

Appendix 2 – Budget Template

Roots for River Reforestation Grant and Technical Assistance Program

Budget Template

Please use this template to outline your budget for your project

Eligible Grant Expenses

ONLY includes eligible protection supplies (tree tubes and stakes,) eligible native woody trees and shrubs, and up to two delivery fees associated with eligible materials. Information on eligible prices and sizes for tree protection materials and plantings can be found in Section C and D of the Application Information Package and in the webinar. You are encouraged to use select partner vendors, but you are not required to. Average costs of a single plant and its respective tree tube and stake should not exceed $12. Applicants can request any amount of funding between **$1,000 and $20,000.**

A. PROTECTION SUPPLIES: Eligible Expenses **ONLY** include protection supplies (tree tubes and support stakes).

Item	Unit Cost	Quantity	Total Cost
		Total Cost of Supplies	$0.00

B. TREES AND SHRUBS: Plants cannot exceed a #2-gallon container size. Total plantings must **match** total tree protection supplies. Individual species names are not required but total number of species (quantity) with anticipated costs for that size must be included. Please identify the size in the tree/shrub column (i.e., tublings, #1 container, etc.).

Tree/Shrub	Unit Cost	Quantity	Total Cost
		Total Cost of Plantings	$0.00

C. SHIPPING COSTS: Will reimburse **up to 2** delivery fees associated with eligible purchases made with grant funds (eligible tree protection materials AND trees and shrubs). Shipping costs will vary depending on site locations. Average shipping costs from Pinelands Nursery can range from $200 - $400 per delivery. Plantra uses standard free shipping.

Shipping Vendor Name	Items Being Shipped	Additional Information	Total Cost
		Total Cost of Shipping	$0.00

TOTAL AMOUNT OF GRANT FUNDING REQUEST	$0.00

Ineligible Grant Expenses (Must Be Covered By Other Sources Of Funding)

Other supplies (gloves, shovels, etc.), equipment (mower, auger, etc.), labor (or contractor) costs, ineligble tree protection (fencing, weed mats, etc.), ineligible shrubs and trees (ornanmental, trees in containers larger than 2 gallons, etc.), and/or additional delivery fees associated with project implementation are **ineligible grant expenses** and will be the financial responsibility of the applicant. **Invasive, non-native species removal is not required, but encouraged, and costs associated with this process will also be the financial responsibility of the applicant.** All in-kind contributions should have an associated cost include in the budget (i.e. volunteer time is valued at a rate of $24.14/hour). Any donated items that you cannot assign monetary value to can be included in the donations section.

D. INVASIVE SPECIES REMOVAL: All costs associated with invasive species removal is the financial responsibility of the applicant. These include equipment, labor, and prevention materials.

Supply Item/Equipment/Contractor	Unit Cost/Rate Per Hour	Quantity/Total Hours	Total Cost
		Total Cost of Removal	$0.00

E. TREE PLANTING EQUIPMENT: Any equipment, such as augers and mowers that is needed to prep the project site and plant the trees and shrubs is the financial responsibility of the applicant.

Equipment	Unit Cost/Rental Fee	Quantity	Total Cost
		Total Equipment Costs	$0.00

F. PROJECT SUPPLIES: Other supplies such as gloves, shovels, refreshments, fencing, etc. are the financial responsibility of the applicant.

Supply Item	Unit Cost	Quantity	Total Cost
		Total Project Supplies Cost	$0.00

G. LABOR AND CONTRACTORS: All labor and contractor costs required to complete the project are the financial responsibility of the applicant.

Labor Source/Contractor	Rate Per Hour	Total Hours	Total Cost
		Total Labor/Contractor Costs	$0.00

TOTAL AMOUNT OF OTHER FUNDING NEEDED TO COMPLETE THE PROJECT	$0.00

DONATIONS

	TOTAL PROJECT COST	$0.00

Appendix 3 – Pinelands Nursery & Supply Reserved Species List

TREE AND SHRUB SPECIES ON RESERVE AT PINELANDS NURSERY & SUPPLY

The Nature Conservancy has partnered with Pinelands Nursery to reserve over 13,011 trees and shrubs for the 2020 Roots for Rivers Reforestation Grants and Technical Assistance Program. These reserved trees and shrubs will be available to participants in the program. Oftentimes, nurseries will be out of stock of the species participants want to use. Using this reserved species list will help ensure that participants have a wide variety of species to choose from when constructing their planting plan without the fear that they will be out of stock. Use the Unit Price for developing the project budget. Reserved species will be allocated to selected applicants on a first come, first served basis. **Participants are strongly encouraged to place their orders no later than March 1st, 2020.**

Salesperson	Shipping Method	Shipping Terms	Delivery Date	Payment Terms
FC	PINELANDS	Tentative	3/1/2020	Net 30

Item Description	QTY ORD	QTY ACK	Unit Price	Line Total
ACRUBTJ00 (ACER RUBRUM TUBELING)	700	700	$1.10	$770.00
ACSACTJ00 (ACER SACCHARINUM TUBELING)	800	800	$1.10	$880.00
ALSERTJ00 (ALNUS SERRULATA TUBELING)	300	300	$1.10	$330.00
AMCANTJ00 (AMELANCHIER CANADENSIS TUBELING)	390	390	$1.10	$429.00
BAHALTJ00 (BACCHARIS HALIMIFOLIA TUBELING)	50	50	$1.10	$55.00
BAHAL1J18 (BACCHARIS HALIMIFOLIA #1)	50	50	$5.50	$275.00
BEALLTJ00 (BETULA ALLEGHANIENSIS TUBELING)	100	100	$1.10	$110.00
BELENJ00 (BETULA LENTA TUBELING)	100	100	$1.10	$110.00
BENIG1J12 (BETULA NIGRA #1)	155	155	$5.50	$852.50
BEPOPTJ00 (BETULA POPULIFOLIA TUBELING)	200	200	$1.10	$220.00
CACAR2J36 (CARPINUS CAROLINIANA #2)	100	100	$9.00	$900.00
CEOCCTJ00 (CELTIS OCCIDENTALIS TUBELING)	250	250	$1.10	$275.00
CPOCCTJ00 (CEPHALANTHUS OCCIDENTALIS TUBELING)	150	150	$1.10	$165.00
CPOCC1J18 (CEPHALANTHUS OCCIDENTALIS #1)	150	150	$5.50	$825.00
CECAN2J12 (CERCIS CANADENSIS #2)	100	100	$9.00	$900.00
CHTHY2J48 (CHAMAECYPARIS THYOIDES #2)	100	100	$9.00	$900.00
CLALNTJ00 (CLETHRA ALNIFOLIA TUBELING)	450	450	$1.10	$495.00
COPER1J18 (COMPTONIA PEREGRINA #1)	50	50	$6.75	$337.50
COAMO1J18 (CORNUS AMOMUM #1)	50	50	$5.50	$275.00
CORAC1J18 (CORNUS RACEMOSA #1)	250	250	$5.50	$1,375.00
COSERTJ00 (CORNUS SERICEA TUBELING)	300	300	$1.10	$330.00
COSER1J18 (CORNUS SERICEA #1)	200	200	$5.50	$1,100.00
DIVIRTJ00 (DIOSPYROS VIRGINIANA TUBELING)	150	150	$1.10	$165.00
HAVIRTJ00 (HAMAMELIS VIRGINIANA TUBELING)	50	50	$1.10	$55.00
ILVERTJ00 (ILEX VERTICILLATA TUBELING)	300	300	$1.10	$330.00
ILVER1J18 (ILEX VERTICILLATA #1)	200	200	$5.50	$1,100.00
ITVIRTJ00 (ITEA VIRGINICA TUBELING)	250	250	$1.10	$275.00

JUVIRTJ00 (JUNIPERUS VIRGINIANA TUBELING)	50	50	$1.10	$55.00
LIBENTJ00 (LINDERA BENZOIN TUBELING)	200	200	$1.10	$220.00
LIBEN1J18 (LINDERA BENZOIN #1)	100	100	$5.50	$550.00
LISTYTJ00 (LIQUIDAMBAR STYRACIFLUA TUBELING)	300	300	$1.10	$330.00
LITULTJ00 (LIRIODENDRON TULIPIFERA TUBELING)	300	300	$1.10	$330.00
MAVIR2J18 (MAGNOLIA VIRGINIANA #2)	200	200	$9.00	$1,800.00
MOPENTJ00 (MORELLA PENSYLVANICA TUBELING)	50	50	$1.10	$55.00
NYSYLTJ00 (NYSSA SYLVATICA TUBELING)	350	350	$1.10	$385.00
NYSYL2J36 (NYSSA SYLVATICA #2)	50	50	$9.00	$450.00
PHMEL1J18 (PHOTINIA MELANOCARPA #1)	50	50	$5.50	$275.00
PHPYRTJ00 (PHOTINIA PYRIFOLIA TUBELING)	200	200	$1.10	$220.00
PHPYR1J18 (PHOTINIA PYRIFOLIA #1)	200	200	$5.50	$1,100.00
PIRIGTJ00 (PINUS RIGIDA TUBELING)	50	50	$1.10	$55.00
PLOCCTJ00 (PLATANUS OCCIDENTALIS TUBELING)	550	550	$1.10	$605.00
PLOCC1J18 (PLATANUS OCCIDENTALIS #1)	41	41	$5.75	$235.75
PLOCC2J36 (PLATANUS OCCIDENTALIS #2)	50	50	$9.00	$450.00
QUALBTJ00 (QUERCUS ALBA TUBELING)	100	100	$1.10	$110.00
QUBICTJ00 (QUERCUS BICOLOR TUBELING)	350	350	$1.10	$385.00
QUBIC2J36 (QUERCUS BICOLOR #2)	50	50	$9.00	$450.00
QUCOCTJ00 (QUERCUS COCCINEA TUBELING)	50	50	$1.10	$55.00
QUPAL2J36 (QUERCUS PALUSTRIS #2)	300	300	$9.00	$2,700.00
QUPHETJ00 (QUERCUS PHELLOS TUBELING)	200	200	$1.10	$220.00
QUPRITJ00 (QUERCUS PRINUS TUBELING)	50	50	$1.10	$55.00
QURUBTJ00 (QUERCUS RUBRA TUBELING)	200	200	$1.10	$220.00
RHGLATJ00 (RHUS GLABRA TUBELING)	50	50	$1.10	$55.00
ROPAL1J18 (ROSA PALUSTRIS #1)	200	200	$5.50	$1,100.00
SADISTJ00 (SALIX DISCOLOR TUBELING)	500	500	$1.10	$550.00
SADIS2J48 (SALIX DISCOLOR #2)	50	50	$9.00	$450.00
SANIG2J36 (SALIX NIGRA #2)	400	400	$9.00	$3,600.00
SACANTJ00 (SAMBUCUS CANADENSIS TUBELING)	300	300	$1.10	$330.00
SPLATTJ00 (SPIRAEA LATIFOLIA TUBELING)	100	100	$1.10	$110.00
SPTOM1J18 (SPIRAEA TOMENTOSA #1)	125	125	$5.50	$687.50
VACORTJ00 (VACCINIUM CORYMBOSUM TUBELING)	400	400	$1.10	$440.00
VACOR1J18 (VACCINIUM CORYMBOSUM #1)	100	100	$5.50	$550.00
VIDENTJ00 (VIBURNUM DENTATUM TUBELING)	400	400	$1.10	$440.00
VILEN1J18 (VIBURNUM LENTAGO #1)	200	200	$5.50	$1,100.00
VITRI1J18 (VIBURNUM TRILOBUM #1)	200	200	$5.50	$1,100.00

Participants must order the same number as trees as you do tree protection (tubes and stakes) and will be required to maintain an **average** cost per tree, tube, and support stake of **$12 or less.** Trees and shrubs cannot exceed a #2-gallon container size and securing a mix of varying species sizes will also be necessary to maintain this average. More information on species availability and sizes will be covered in the webinar. Register here. Following the webinar, the recording and presentations will be posted on the Webinar Recordings and Presentations page. Grant recipients will be asked to submit a finalized budget for approval prior to purchasing the grant materials to ensure that all expenses using grant funds are eligible.

Plantra
Plant Like You Mean It

INSTALLATION INSTRUCTIONS:

SunFlex™ Greenhouse Grow Tube System for Trees

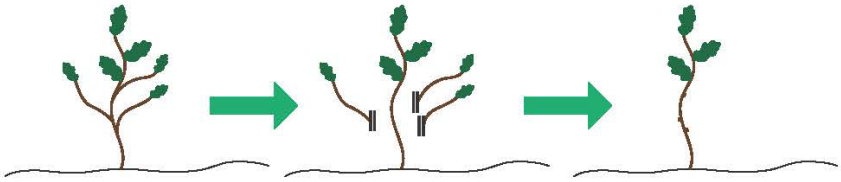
STEP 1 Plant seedling

STEP 2 Prepare the seedling for "tubing"

If your seedlings have side (lateral) branches please remove them carefully using sharp pruning shears before installing the grow tube ***(see figure 1).***

NOTE: Do NOT bend side branches to squeeze or otherwise force them into the grow tube. Doing so will encourage weak branching and other problems as the tree matures.

FIGURE 1



STEP 3 Install SunFlex™ Grow Tube & Trunk Builder Stake

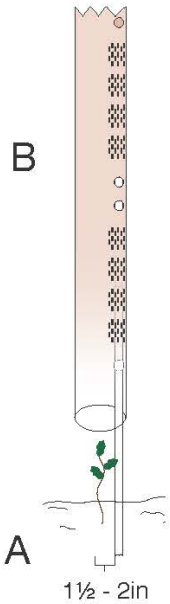
(Stake Entirely Inside Grow Tube) ***(see figure 2)***

A. Position stake 1.5 – 2 inches from the seedling with ground-line marker towards the ground. Use Plantra Stake Driver **(do not use a hammer or mallet)** and drive stake until ground-line marker reaches the the soil surface.

B. Pop grow tube open by flattening tube its entire length in opposite direction as packed. Next, slide the grow tube over the top of the stake and down to the ground while carefully guiding both the seedling and the stake entirely inside the grow tube.

NOTE: This method of installing support stake inside the grow tube is recommended for Trunk-Builder stakes only. The Trunk-Builder Stake has a rounded top to avoid stem abrasion and a small diameter to avoid crowding the seedling inside the grow tube. Other stake materials should never be installed inside grow tubes as their sharp edges could damage stems that come in contact with the stake top and have large diameters which will occupy important growing volume inside the tube the tree should have.

FIGURE 2



For more product information including specifications, images & user tips please visit: **PLANTRA.COM**

STEP 3 Continued...

(see figure 3)

C. Position the grow tube so a flat side of the stake is snug against the side of the tube and in-line between the paired tie-holes.

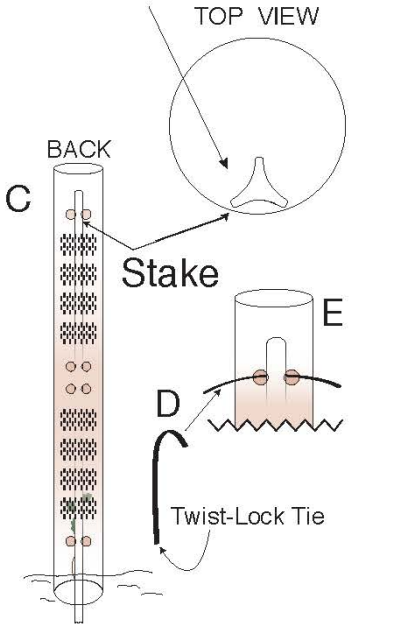
D. Firmly tap the top of the tube to seat the tube base into the soil. Mound additional soil around tube base as needed to reduce entry by rodents. When completed, the tip of the Trunk-Builder stake should be at least 1-2 inches above the top tie hole and below the top of the grow tube.

E. Attach the grow tube to the stake with three Twist-Lock™ Double Wire Twist Ties. Begin by inserting the first twist-tie through the top tie hole, guiding it around the stake and back out the paired tie hole. Twist the ends firmly so that the tube and stake are tight together to prevent the grow tube from sliding up from contact by animals. Repeat steps for one set of middle tie holes and for the bottom set of tie holes.

TIP: Bend the Twist-Lock tie about 2 inches from one end to make a "curl." Use this end to thread the tie into one tie hole, around the stake and out the other tie hole.

FIGURE 3

Stake Completely Inside Tube With Flat Side Of Stake Snug Against Tube



STEP 4 Install bird exclusion mesh top

(see figure 4)

Simply stretch the netting over the tube top like pulling on a sock. Pull the netting down to the top tie and gently insert one or both ends of the twist ties through the mesh to keep it from blowing off in the wind.

When installed, approximately 1 inch of mesh cap should remain closed at the top as shown in Figure 4A and 4B. For 47-in and 58-in grow tube heights the mesh tops should be pulled down to height of tie holes. For 71-in SunFlex Grow Tube installation the mesh cap will only extend about half-way down between the top of the tube the tie holes. In this instance the tie ends will need to reach up to hook the netting in place to allow enough netting above tube top to remain closed.

FIGURE 4A

47-in & 58-in Grow Tube Heights

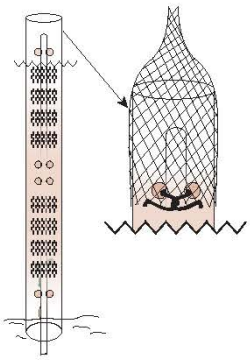
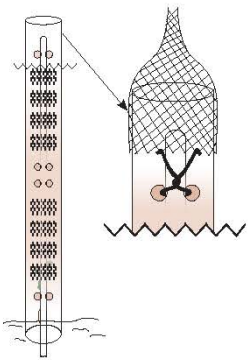


FIGURE 4B

71-in Grow Tube Heights



Appendix 5 – Instructions on How to Find Project Site Information

Sustainable Jersey or Watershed Institute Applicant (SJ or WI)?	Enter abbreviation of host agency web portal you will apply to
Name of Applicant Lead Organization	Name of entity (municipality, school, organization) responsible for financial and final reporting
Project ID	Organization_County'
Contact Responsible for Project Management	Name of person responsible for project implementation, ordering materials, etc.
Contact Responsible for Project Management	Email address or phone number of contact listed above
Watershed	Check the 'Watershed' box under the **Reference Layer** to determine watershed name
Stream Name	Check the 'River' & 'Stream' boxes under the **Reference Layer** to determine stream name
Township	Check the 'Municipality' box under the **Boundary Layer** to determine which township/municipality your project is in
County	Check the 'County' box under the **Boundary Layer** to determine which county your project is in
Street Address of nearest Parking Location (*may be different than actual planting location)	Use Google Maps, Google earth or NJ Maps to determine nearest street address of closest **parking location** to project site. Street Address must be an accessible location and allow for easy access to planting site(s).
PAMS_PIN	Check the 'parcel' box under the **Boundary Layer** to determine your unique PAMS_PIN. This number will appear after 'PARCEL:' (i.e. 0307_1000_1) for each individual parcel
Block (s)	Use the NJ Maps Parcel Explorer Data to determine unique Block(s) number. List all Blocks that fall within your planting area
Lot (S)	Use the NJ Maps Parcel Explorer Data to determine individual Lot(s) number. List all Blocks that fall within your planting area
Latitude	Use the **Measuring Tool** in NJ Maps to determine site coordinates by drawing a polygon of targeted planting area. Coordinates are used to identify **exact** planting locations for project impact assessments.
Longitude	Use the **Measuring Tool** in NJ Maps to determine site coordinates by drawing a polygon of targeted planting area. Coordinates are used to identify **exact** planting locations for project impact assessments.
Acres Planted	Estimate planting area in acres using the **Measuring Tool in NJ Maps**. If using the Measuring Tool; you must draw a complete polygon around the area for accurate measurement of acres (i.e., draw the entire polygon around the proposed area). For more accurate measurements, use ArcGIS or a handheld GPS and walk the entire area proposed for plantings.
Stream Feet	Estimated stream feet to be determined by walking the entire length of planting area along the stream. For more accurate measurements, use ArcGIS or licensed mapping software.
Stream Miles	Automated calculation once linear feet are entered
# of Trees	Estimated number of plant materials to be installed
Total Project Cost	Total Project Cost (includes all plant and protection material costs)
Average cost of materials	Use number of trees/total project cost to determine average. Do not double count protection and trees (i.e., 300 trees + 300 tubes + 300 stakes = 300 materials/total project cost).

Appendix 6 – Native Species Identification Guide & FAQ sheet?

Please see the Native Species Identification Guide here that can be used when deciding on what trees and shrubs to choose for your project. This will also help with identifying already-existing species. You can view the guide here.