

# The Forest Stewards Guild

## Request for Proposals

*For*

### National Park Service Resilient Forests Initiative

August 19, 2025

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# Background

The Forest Stewards Guild (the Guild) requests competitive proposals from qualified businesses, organizations, and/or individuals for the implementation of forest resilience projects at Gettysburg National Military Park, Fredericksburg and Spotsylvania National Military Park, Richmond National Battlefield Park, and Delaware Water Gap National Recreation Area. Funding for this project is made possible by an agreement between the Guild and the National Park Service to implement their Resilient Forests Initiative.

The Guild is a national organization of foresters and allied natural resource professionals and is dedicated to practicing and promoting responsible forestry as a means of sustaining the integrity of forest ecosystems and the people dependent upon them. The Guild has over 700 members, over half of whom are professionals who manage over 42 million acres of forestland in the United States and Canada.

The Guild plans to enter into a professional services agreement(s) with successful offeror(s) of this request. The Guild reserves the right to make multiple offerors in its best interest. The Guild also reserves the right to bundle specific or multiple tasks in an agreement to best serve the needs of the Guild and The National Park Service.

Copies of this Request for Proposals may be obtained from the Forest Stewards Guild's website at <https://foreststewardsguild.org/resilient-forests-initiative-rfp/>

The time frame for this agreement shall be roughly from January 1<sup>st</sup>, 2026, until December 31<sup>st</sup>, 2028. Within this time frame, the contractor will implement the specified treatments on designated parcels in the project areas as part of the *National Park Service Resilient Forests Initiative*. The schedule of work to be performed under this agreement will be established in consultation between the Guild and the successful offeror.

The administrative contact for this RFP is:

**Sarah Hagan**  
**bids@forestguild.org**  
**540-254-0320**

# Project Summary

Forests are iconic to the National Park Service’s experience, including the cultural and historic sites predominant in the Northeast. Eastern forests are threatened by a complex array of stressors that are changing the landscape and park visitor experience. Invasive plants, pests, pathogens, herbivory, and the changing climate are contributing to a forest regeneration failure across the region as documented by the National Park Service (NPS) Inventory and Monitoring Networks. There is a tremendous need to restore the ecological integrity and resiliency of these forests to help ensure that they contribute to ecosystem function and fulfill social values now and into the future.

The objective of the Resilient Forests Initiative is to remove invasive shrubs and encourage/augment native tree regeneration so that sufficient native seedlings and saplings persist to sustain these forests into the future. Priority invasive, non-native and/or nuisance species will be treated using chemical and/or mechanical control. This project will also involve collaborative site visits, project start up considerations and planning, as well as site-based reconnaissance for additional operational planning as needed.

<b>Park</b>	<b>Invasive spp mgt (acres)</b>	<b>Tree planting (acres)</b>	<b>Trees planted</b>
Gettysburg	99	0.5	50-100
Fredericksburg	32	8	3200
Richmond	50	n/a	n/a
Delaware Water Gap	256	TBD	TBD

# Submission Instructions

Responses to this RFP must be submitted via email to [bids@forestguild.org](mailto:bids@forestguild.org). The offeror's complete response packet to this Request for Proposals must be received no later than October 5, 2025. Any proposal received after the deadline will be deemed late and will not be accepted for consideration for this award. The Guild will endeavor to make the contract award(s) by November 25, 2025.

Offerors must submit via email the following: A single PDF file containing the response to specifications, signed contractor assurances, budget, and any appendices. Multiple files may be uploaded if file size is an issue.

Offerors may submit proposals for all parks or individual parks. Offerors may also submit proposals for a portion of the work in each park. For example, submitting a proposal for invasive plant control but not planting.

Calendar of significant events		
Event	Date	Description
RFP issued	August 19, 2025	<a href="https://foreststewardsguild.org/resilient-forests-initiative-rfp/">https://foreststewardsguild.org/resilient-forests-initiative-rfp/</a>
Site Visits	Gettysburg National Military Park	Bidders must notify Chris Davis via email prior to their visit: <a href="mailto:Chris_Davis@nps.gov">Chris_Davis@nps.gov</a> Please include the make and model of your vehicle in the email.
	Fredericksburg and Spotsylvania National Military Park	Bidders must notify Sara Strickland via email prior to their visit: <a href="mailto:Sara_Strickland@nps.gov">Sara_Strickland@nps.gov</a> Please include the make and model of your vehicle in the email.
	Richmond National Battlefield Park	This unit is not open to the public. Bidders can visit on the following dates:  August 26 at 1 PM September 3 at 10 AM

	September 9 at 1 PM  Bidders must notify Sarah Hagan and Kristen Allen at least 24 hours prior to their visit: <a href="mailto:shagan@forestguild.org">shagan@forestguild.org</a> <a href="mailto:Kristen_Allen@nps.gov">Kristen_Allen@nps.gov</a>	
Delaware Water Gap National Recreation Area	Bidders must notify Kara Deutsch via email prior to their visit: <a href="mailto:Kara_Deutsch@nps.gov">Kara_Deutsch@nps.gov</a> Please include the make and model of your vehicle in the email.	
Pre-bid meeting (virtual)	August 27, 2025 at 2 PM EST	Meeting registration is available on the Guild's website
Deadline to submit questions	September 14, 2025	Submission form is available at the Guild's website
Response to questions issued	September 19, 2025	Responses will be posted to the Guild's website
Deadline to submit response to specifications	October 5, 2025	
Review period	October 6 – November 25	
Unsuccessful offerors notified	October 31, 2025	
Protest period ends	November 9, 2025	
Offeror's notified	November 25, 2025	
Contract development period	November 2025-April 2026	
Project implementation begins	Spring 2026	

## Questions

Questions about this RFP must be submitted in writing using the form found on the Guild's website <https://foreststewardsguild.org/resilient-forests-initiative-rfp/>. The deadline to submit questions is September 14<sup>th</sup>, 2025. Questions about this RFP must be submitted in writing using the form found at the website. Only questions submitted in this form and by September 14<sup>th</sup> will be answered. Offerors are not to contact National Park Staff with questions. An addendum to this RFP with responses to all questions will be posted on the website at

<https://foreststewardsguild.org/resilient-forests-initiative-rfp/>

Responses to questions will be posted by September 19, 2025.

## Evaluation

The Guild may initiate discussions with Contractor(s) who submit responsive or potentially responsive proposals for the purpose of clarifying aspects of the bid/narratives, but proposals may also be accepted and evaluated without such discussion. The Contractor(s) SHALL NOT initiate discussions. The Guild reserves the right, however, that a serious deficiency in the response to any one factor may be grounds for rejection regardless of overall score.

Finalist Contractor(s) may be asked to submit revisions to their proposals for the purpose of obtaining best and final offers. The Guild will negotiate with the highest scoring Contractor(s) based on the evaluation criteria listed below. If the Guild cannot negotiate with the initial Contractor(s) in a reasonable timeframe, the next most advantageous Contractor(s) will be contacted without undertaking a new procurement process or the RFP will be canceled.

The Contractor will submit information sufficient to evaluate their proposal based upon the criteria listed below. Failure by a Contractor to provide the information necessary for our Committee to evaluate their proposal may result in rejection of the proposal without further discussion.

### Evaluation criteria

- Company background **(10 points)**
- Key personnel **(15 points)**
- Directly related experience and expertise with projects of similar scope and size **(30 points)**
- Ability to complete projects within time frame **(10 points)**
- Leveraged accomplishments **(15 points)**
- For planting projects, plant source and materials **(10 points)**
- Treatment methods **(20 points)**
- State licensing/local preference **(10 points)**
- Compliance with the specifications of the RFP **(10 points)**
- Budget detail and costs **(30 points)**
- Submitted proposal for the entire scope of work for park(s) i.e. invasive plant removal and planting **(Bonus 10 points)**

**Total: (170 points)**

## Protests

Unsuccessful offerors may protest the decision within 7 business days of receiving notice of their denial. Protests must be submitted via email as a PDF attachment and detail the reason for the protest, including any supporting documentation. The protest must include the name, contact information, and business name of the person submitting it. The protest must be delivered to the Forest Stewards Guild via email to Sarah Hagan at [bids@forestguild.org](mailto:bids@forestguild.org).

## Cost considerations

Offerors must use the budget spreadsheet available at <https://foreststewardsguild.org/resilient-forests-initiative-rfp/> top document all costs associated with the proposal. Please identify and describe which treatment categories/methods will be used and when they will be implemented. Only treatment categories and expenses described in the budget are eligible for reimbursement. Please provide detail in the description for what is included in each treatment category. For example, if the cost for site prep is included in planting costs, make that clear in the description.

## Performance Considerations

Contractors must be able to work safely and effectively with all equipment required for job performance, i.e. vehicle, chainsaw, chipper, safety equipment, masticator, wench, herbicide applicator, etc. Contractors must adhere to aesthetic and safety considerations for thinning per the specifications in the scope of work. The Contractor shall not release any hazardous or toxic materials such as fuel or hydraulic fluid into the soil surface, water or vegetation on the project sites. Contractor will ensure that all gasoline and diesel equipment used on site is equipped with approved spark arrestors. Contractors must be readily available to receive mailed, electronic and/or telephone communications from the Guild and will be responsible for providing frequent informal discussions with the Guild regarding a project's progress, any issues that come up, as well as transmission of report/invoice upon the full completion of each project.

## Insurance Considerations

Contractor's liability insurance and automobile liability insurance shall be written for not less than limits of liability as follows:

### Commercial General Liability:

1. Each Occurrence - \$1,000,000
2. Medical Expenses (any one person) \$15,000
3. General Aggregate – \$2,000,000
4. Products - Comp/Op Agg - \$1,000,000

### Comprehensive Automobile Liability

1. \$100,000.00 Each Person
2. \$300,000.00 Each Occurrence
3. Property Damage \$50,000.00 Each Occurrence

## Scopes of Work

### Gettysburg National Military Park

Four historic woodlots were identified as having high ecological and cultural importance within Gettysburg National Military Park. This project will include the treatment of invasive plant species and the planting of native trees within existing canopy gaps in these woodlots. The goal

is to restore and enhance forest structure and diversity while preserving the historic and ecological integrity of these priority sites.

<b>Woodlot</b>	<b>Total Acres</b>	<b>Canopy Gap Acres</b>	<b>*Trees Planted</b>
Herbst	19	0.33	1-30
Culp's Hill	6	0.13	13-25
Rose	49	n/a	n/a
Little Round Top East	25	0.05	2-6
<b>TOTAL</b>	<b>99</b>	<b>0.5</b>	<b>50-100</b>

*\*Tree size will determine the number of trees planted*

**Herbst Woodlot (18.6 acres)**

The Herbst Woodlot is a Dry Oak – Mixed Hardwood Forest bisected by Stone-Meredith Avenue and one of the first stops of the park’s auto tour. The western portion of the woodlot has strong oak regeneration and very low abundance of invasive shrubs. The eastern portion of the woodlot has an open understory with less natural tree regeneration and low density invasive shrubs. Treating the invasive shrubs will maintain the forest integrity and supplemental planting in canopy gaps will increase native tree regeneration. Access through this area is generally easy.

**Culp’s Hill (6 acres)**

Culp’s Hill is a frequently visited area dominated by Dry Oak – Mixed Hardwood Forest that contains the historically-important Forbes Rock. This area contains low natural regeneration and some sizeable canopy gaps. Invasive shrubs are moderate to dense, and abundant Japanese stiltgrass surrounding Forbes Rock. Treating the invasive shrubs will allow for natural tree regeneration to establish, while supplemental planting in canopy gaps will augment native tree regeneration. This woodlot is unique in that it requires targeted Japanese stilgrass treatments between Slocum Avenue and the open area surrounding Forbes Rock. Access through this rolling terrain is generally feasible with low to moderate downed woody debris.

**Rose Woodlot (49 acres)**

The Rose woodlot contains Bottomland Mixed Hardwood Forest surrounding tributaries to Plum Run and Dry Oak – Mixed Hardwood Forest on higher ground. Previous invasive shrub treatments have succeeded at reducing invasive shrub abundance to low levels, but continued management is necessary to maintain forest integrity. Many sections of this woodlot contain native tree saplings, however, additional planting in canopy gaps or areas of dense invasive shrub removal will enhance forest resilience. There are several official trials through the woodlot and access through the wood is generally feasible to low density of downed woody debris.

**Little Round Top East (25 acres)**

This woodlot along Skyes Road contains Tuliptree-dominated forest with moderately to dense invasive shrub cover. Treating the invasive shrubs will allow for natural tree regeneration to establish, while supplemental planting in canopy gaps will augment native tree regeneration. There are some areas of moderate to dense downed

**Park Contact**

<b>Park contact name &amp; title</b>	Chris Davis, Park Biologist
<b>Park contact phone</b>	N/A
<b>Park contact email</b>	Chris_Davis@nps.gov

**Invasive Species Management**

Using the attached spatial data and treatment specifications, the Contractor shall develop a three-year invasive species treatment plan. The plan must include both initial treatments and follow-up treatments necessary to meet the treatment standards outlined in the specifications below.

Japanese stiltgrass (*Microstegium vimineum*) is excluded from treatment in Herbst Woodlot, Rose Woodlot, and Little Round Top East. Treatment of stiltgrass at Culps Hill should be included in the treatment plan.

The target species for treatment include but are not limited to:

<b>Latin Name</b>	<b>Common Name</b>
<i>Acer platanoides</i>	Norway Maple
<i>Ailanthus altissima</i>	Tree of Heaven
<i>Albizia julibrissin</i>	Mimosa
<i>Paulownia tomentosa</i>	Princess Tree
<i>Pyrus calleryana</i>	Callery Pear
<i>Berberis thunbergii</i>	Japanese Barberry
<i>Celastrus orbiculatus</i>	Oriental Bittersweet
<i>Eleagnus spp.</i>	Autumn Olive
<i>Euonymus alatus</i>	Winged Burning Bush
<i>Ligustrum spp.</i>	Chinese Privet
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>Lonicera spp.</i>	Shrub Honeysuckle
<i>Rosa multiflora</i>	Multiflora Rose
<i>Rubus phoenicolasius</i>	Wineberry
<i>Spiraea japonica</i>	Japanese Spirea
<i>Alliaria petiolata</i>	Garlic Mustard
<i>Arthraxon hispidus</i>	Arthraxon
<i>Carduus nutans</i>	Musk Thistle
<i>Centaurea stoebe</i>	Spotted Knapweed
<i>Cirsium arvense</i>	Canada (or Creeping) Thistle
<i>Cirsium vulgare</i>	Bull Thistle

<i>Microstegium vimineum</i>	Japanese Stiltgrass
<i>Persicaria perfoliata</i>	Mile-a-Minute
<i>Phalaris arundinacea</i>	Reed Canarygrass
<i>Sorghum halepense</i>	Johnson Grass

### **Tree Planting**

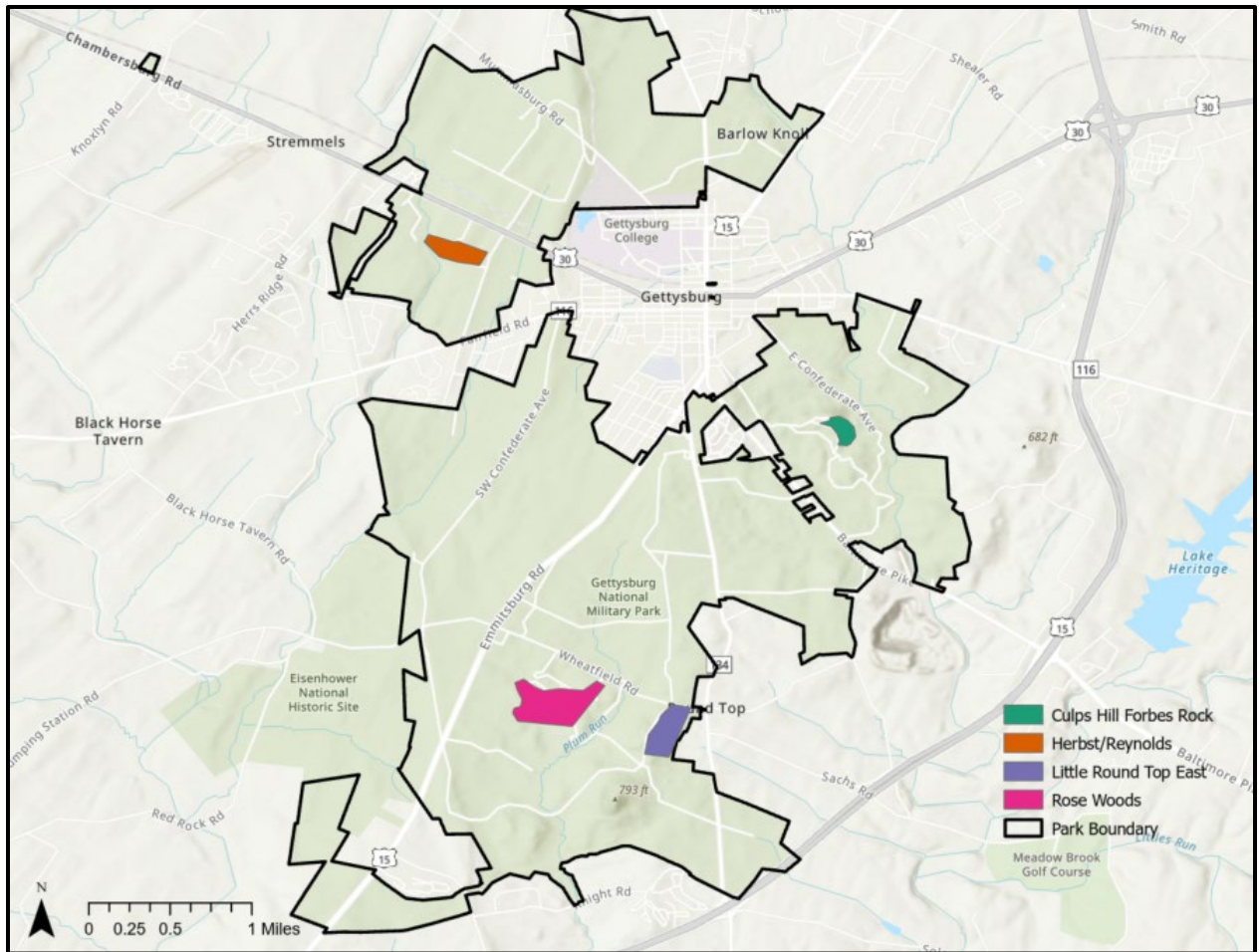
Earlier this year, existing canopy gaps were identified as suitable locations for tree planting in four historic woodlots within Gettysburg National Military Park. Using the attached spatial data and planting specifications, the contractor will develop a tree planting plan for each gap using the specifications and the species list provided below. Any substitutions must be approved by the project manager in advance.

Bidders should include plans and cost estimates for planting the following:

- **Seedlings or tublings** at a density of 200 trees per acre, each protected with a wire cage.
- **Containerized trees** (1-inch caliper minimum, up to 15-gallon size) at a density of 100 trees per acre. Proposals must include initial installation of watering bags and one year of watering bag maintenance.

<b>Latin Name</b>	<b>Common Name</b>
<i>Quercus alba</i>	White oak
<i>Quercus rubra</i>	Northern red oak
<i>Quercus velutina</i>	Black oak
<i>Quercus muehlenbergii</i>	Chinkapin oak
<i>Oxydendron arboreum</i>	Sourwood
<i>Sassafrass albidum</i>	Sassafrass
<i>Nyssa sylvatica</i>	Blackgum
<i>Carya cordiformis</i>	Bitternut hickory
<i>Carya ovalis</i>	Red hickory
<i>Carya alba</i>	Mockernut hickory
<i>Carya ovata</i>	Shagbark hickory
<i>Carya glabra</i>	Pignut hickory
<i>Prunus serotina</i>	Black cherry
<i>Quercus palustris</i> *	Pin oak
<i>Quercus bicolor</i> *	Swamp white oak
<i>Quercus shumardii</i> *	Shumard oak
<i>Prunus serotina</i> *	Black cherry
<i>Acer saccharinum</i> *	Silver maple

\* Planting in mesic to wet areas



## Fredericksburg Spotsylvania National Military Park

Fredericksburg and Spotsylvania National Military Park is located in the northern Piedmont region of Virginia. The native vegetation of the Piedmont Plateau has been significantly altered over time due to clearing, agriculture, logging, and other human disturbances. Several open fields within the park, presently under an agricultural use permit, were originally part of the region's native forest. As part of the park's long-term resource management strategy, these fields are being targeted for reforestation to restore native forest cover.

In addition to supporting forest restoration, this project contributes to water quality improvement through the establishment of riparian forest buffers. The 100 foot buffer established as part of this contract will be planted along a drainage that flows into Wilderness Run, a tributary of the Rapidan River. This vegetated buffer will help filter agricultural runoff, stabilize soils, and reduce the flow of nutrients and sediments into the Chesapeake Bay watershed.

### Park Contact

<b>Park contact name &amp; title</b>	Sara Strickland, Natural Resources Program Manager
<b>Park contact phone</b>	540-760-7938
<b>Park contact email</b>	Sara_Strickland@nps.gov

### Riparian Forest Buffer Establishment

#### **Invasive plant management**

Invasive plant species pose a significant threat to the successful establishment and long-term survival of newly planted trees. Effective invasive species control within and around the proposed riparian forest buffer is essential to the success of this reforestation effort.

The project site includes a drainage that flows through a predominantly fescue hay field and into a small pond. Invasive species are currently present within the designated 100 foot riparian buffer zone, and their removal is required as part of site preparation for tree planting. In addition, approximately 24 acres of adjacent land will be treated to reduce seed sources and prevent re-infestation of the buffer area.

Using the attached spatial data and treatment specifications, the Contractor shall develop a three-year invasive species treatment plan. The plan must include both initial treatments and follow-up treatments necessary to meet the treatment standards outlined in the specifications. Treatments shall be timed and applied in a manner that supports native tree establishment and long-term buffer function.

Japanese stiltgrass (*Microstegium vimineum*) is excluded from treatment and should not be included in the plan.

Target invasive species include but are not limited to:

<b>Latin Name</b>	<b>Common Name</b>
<i>Ailanthus altissima</i>	Tree of Heaven
<i>Albizia julibrissin</i>	Mimosa
<i>Paulownia tomentosa</i>	Princess Tree
<i>Pyrus calleryana</i>	Callery Pear
<i>Berberis thunbergii</i>	Japanese Barberry
<i>Celastrus orbiculatus</i>	Oriental Bittersweet
<i>Eleagnus spp.</i>	Autumn Olive
<i>Ligustrum spp.</i>	Chinese Privet
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>Lonicera spp.</i>	Shrub Honeysuckle
<i>Rosa multiflora</i>	Multiflora Rose
<i>Rubus phoenicolasius</i>	Wineberry
<i>Microstegium vimineum</i>	Japanese Stiltgrass
<i>Wisteria sinensis</i>	Chinese Wisteria

### **Site preparation, tree planting, and maintenance**

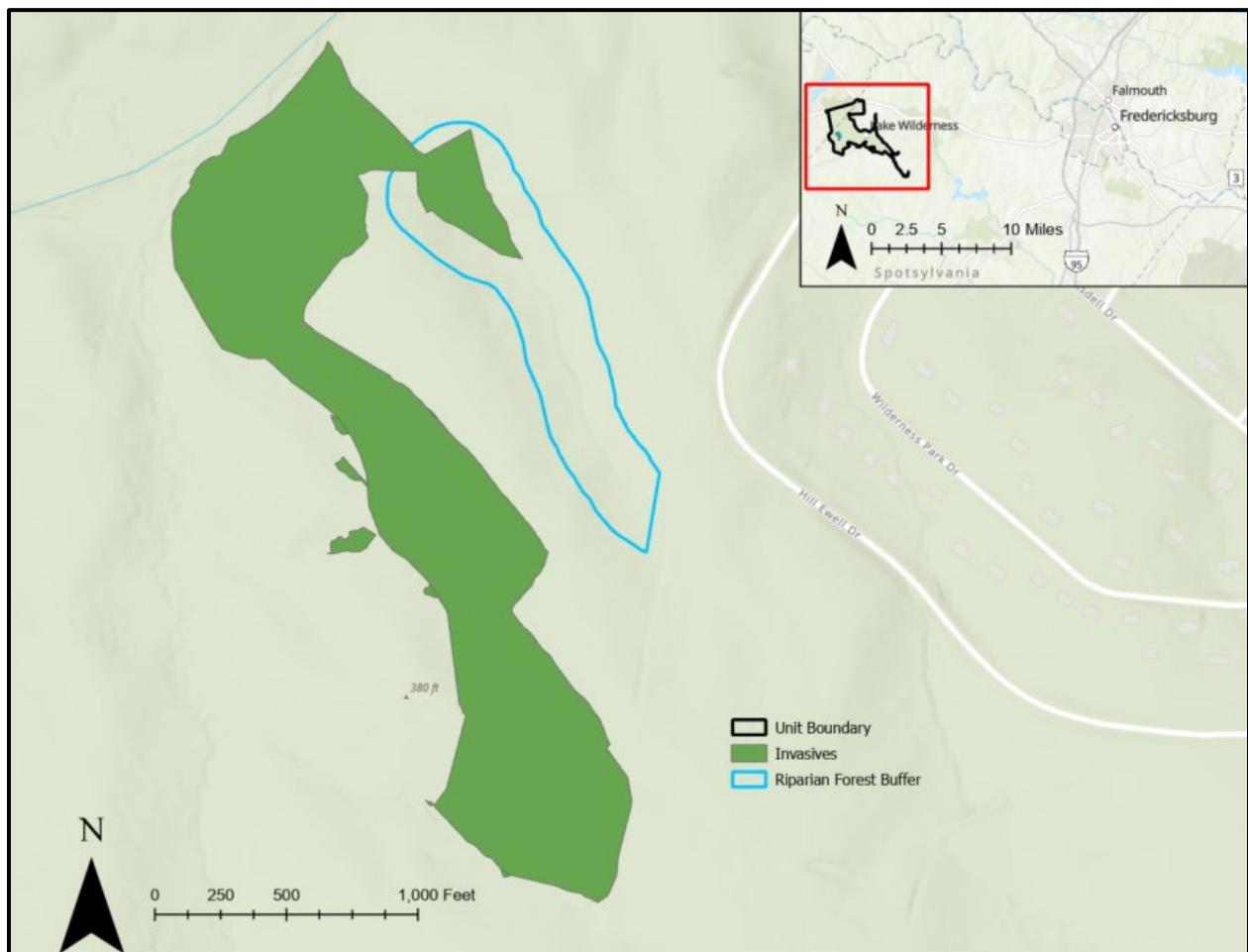
This project will establish a 100-foot, 8 acre unfenced forested buffer surrounding an unnamed drainage and adjacent pond. The Contractor shall include in their proposal all necessary components for successful buffer establishment, including site preparation, tree planting, tree protection, and a three-year maintenance period.

At a minimum, site preparation shall involve the removal or suppression of existing fescue vegetation by clearing or chemically treating a 3-foot radius around each planned planting location. Trees shall be planted at a minimum density of 400 trees per acre (10 ft x 10 ft spacing) using suitable native species selected in coordination with project partners. Tree protection is required, with tree tubes identified as the preferred method to ensure seedling survival and reduce browse pressure. Proposals are encouraged to incorporate alternative establishment methods—such as companion planting with compatible native shrubs, grasses, or forbs—to improve plant survival, reduce weed competition, and enhance ecological function within the buffer area. The Contractor’s maintenance plan shall cover a three-year period and must include:

- Mowing between planting rows (as appropriate)
- Maintenance and repair of tree protection
- Ongoing weed control
- Follow-up invasive species treatments to ensure seedling survival and buffer function

Tree species used for planting shall be selected from the list provided below. Any substitutions must be approved by the project manager in advance.

Latin Name	Common Name
<i>Liquidambar styraciflua</i>	Sweetgum
<i>Quercus phellos</i>	Willow oak
<i>Lireodenron tulipifera</i>	Tuliptree
<i>Acer rubrum</i>	Red maple
<i>Platanus occidentalis</i>	American sycamore
<i>Celtis occidentalis</i>	Hackberry
<i>Nyssa sylvatica</i>	Blackgum
<i>Carpinus caroliniana</i>	American hornbeam
<i>Ulmus americana</i>	American elm
<i>Acer negundo</i>	Box elder
<i>Acer saccharinum</i>	Silver maple
<i>Betula nigra</i>	River birch
<i>Diospyros virginiana</i>	American persimmon
<i>Juglans nigra</i>	Black walnut
<i>Quercus bicolor</i>	Swamp white oak



## Richmond National Battlefield

Within Richmond National Battlefield Park, the North Anna unit covers approximately 650 acres along the North Anna River in Hanover County, VA. The North Anna unit contains rolling topography covered primarily by Acidic Oak – Hickory Forest, Mesic Mixed Hardwood Forest, Loblolly Pine plantations, and cultural meadows. Along the river, there are high quality examples of rare forest types identified by the Virginia Natural Heritage Program as having conservation value. This project will include the treatment of invasive plant species to preserve these high value forests for future generations.

### Park Contact

<b>Park contact name &amp; title</b>	Kristen Allen, Integrated Resources Program Manager
<b>Park contact phone</b>	(804) 640-7919
<b>Park contact email</b>	Kristen.Allen@nps.gov

### Invasive Species Management

Park staff mapped and identified approximately 50 acres of invasive plants throughout the North Anna Unit. Using the attached spatial data and treatment specifications, the Contractor shall develop a three-year invasive species treatment plan. The plan must include both initial treatments and follow-up treatments necessary to meet the treatment standards outlined in the specifications below.

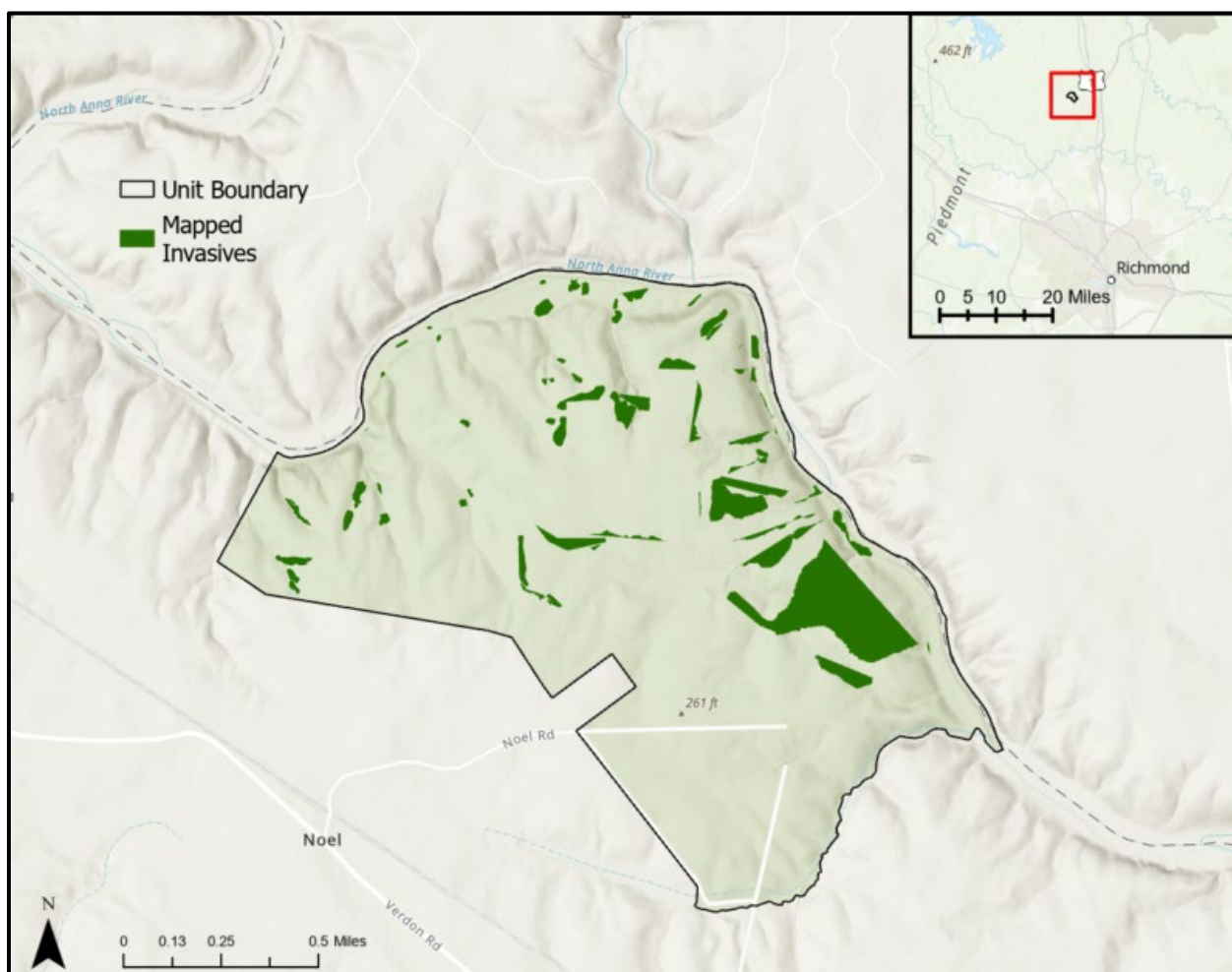
Invasive species located outside the mapped polygons shall also be documented and treated.

Japanese stiltgrass (*Microstegium vimineum*) is excluded from treatment and should not be included in the plan.

Target invasive species include but are not limited to:

<b>Latin Name</b>	<b>Common Name</b>
<i>Ailanthus altissima</i>	Tree of Heaven
<i>Albizia julibrissin</i>	Mimosa
<i>Paulownia tomentosa</i>	Princess Tree
<i>Pyrus calleryana</i>	Callery Pear
<i>Berberis thunbergii</i>	Japanese Barberry
<i>Celastrus orbiculatus</i>	Oriental Bittersweet
<i>Eleagnus spp.</i>	Autumn Olive
<i>Ligustrum spp.</i>	Chinese Privet
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>Lonicera spp.</i>	Shrub Honeysuckle
<i>Rosa multiflora</i>	Multiflora Rose
<i>Rubus phoenicolasius</i>	Wineberry

<i>Microstegium vimineum</i>	Japanese Stiltgrass
<i>Citrus trifoliata</i>	Trifoliolate orange
<i>Wisteria sinensis</i>	Chinese Wisteria
<i>Acer platanoides</i>	Norway maple
<i>Ampelopsis brevipedunculata</i>	Porcelainberry
<i>Clematis terniflora</i>	Sweet autumn virginsbower
<i>Euonymus spp.</i>	Exotic burningbushes
<i>Pueraria montana</i>	Kudzu
<i>Rhamus spp.</i>	Exotic buckthorns
<i>Rhodotypos scandens</i>	Jetbead
<i>Vincetoxicum spp.</i>	Exotic swallow-wort



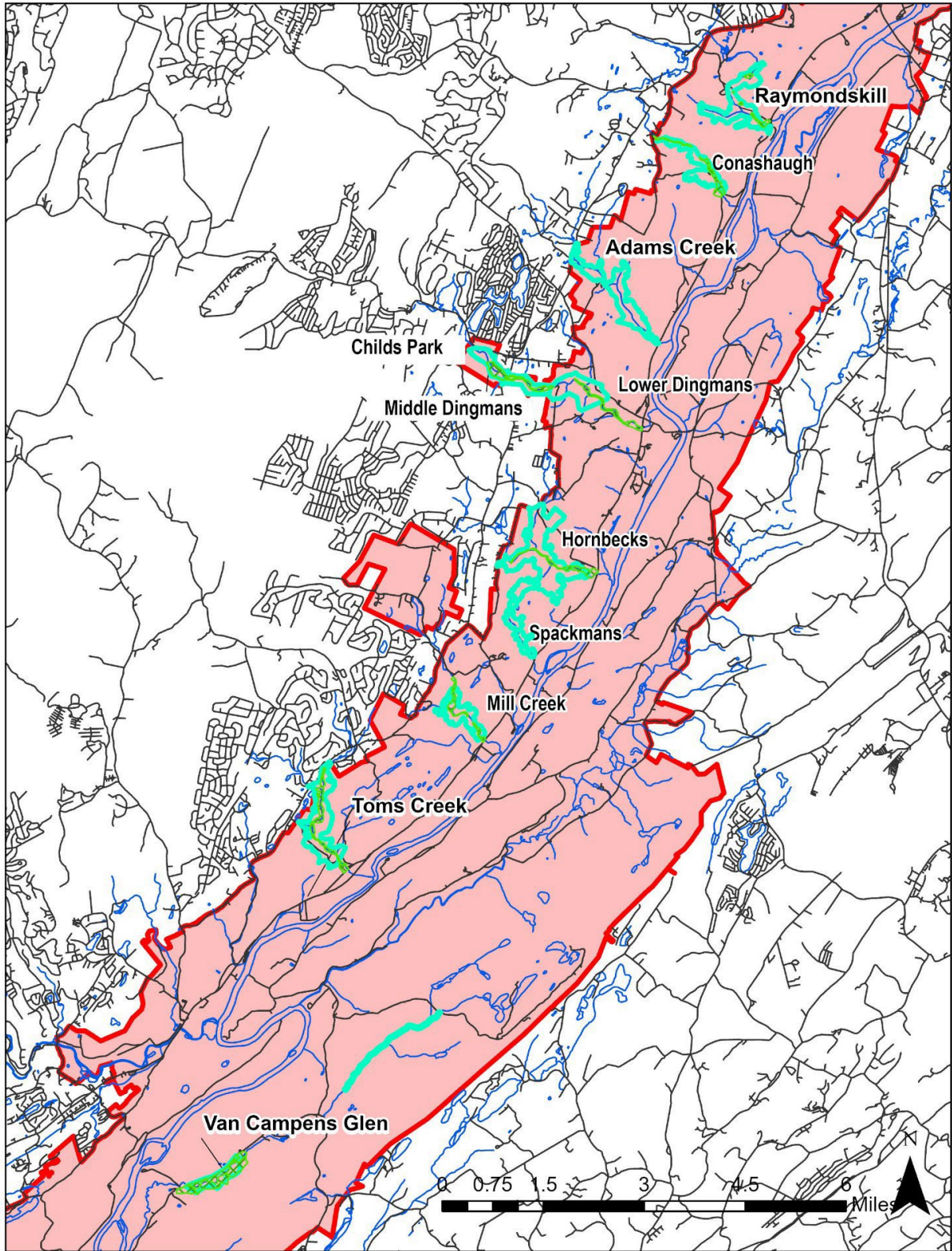
## Delaware Water Gap National Recreation Area

In the Delaware Water Gap National Recreation Area (DEWA), hemlock ravines are iconic recreation areas identified in the park’s foundation document as fundamental resources that provide “stunning scenic resources and distinct aesthetic values”. In addition to housing waterfalls that are popular visitor destinations, the heavy shade cast by hemlocks maintains cold water stream habitat critical for native brook trout and other species. However, adelgid and scale insects have caused widespread hemlock decline. This scope of work addresses the pressing threats to DEWA’s hemlock ravines- targeting areas for treatment, describing conditions on the ground, and proposing strategic management actions that will improve the resilience of these forests.

This scope of work focuses on 1) removal of targeted invasive plants and encouragement of native tree regeneration, 2) creating a detailed planting plan, and 3) implementing planting to bolster native tree regeneration in identified canopy gaps. This project will also involve collaborative site visits, project start up considerations and planning, as well as site-based reconnaissance for additional operational planning as needed in DEWA.

### Park Contact

<b>Park contact name &amp; title</b>	Kara Deutsch, Resource Management & Science Division Supervisor
<b>Park contact phone</b>	(570) 656-6084
<b>Park contact email</b>	kara_deutsch@nps.gov



## Invasive Species Management

Eleven hemlock ravines were identified as having high ecological importance within the Delaware Water Gap National Recreation Area (DEWA). This project will include the treatment of invasive plant species (2026-2028) throughout these 11 sites. The goal is to restore and enhance forest structure and diversity while preserving the ecological integrity of these priority sites.

### Park Overview

Park name	Park Location	Goals	Unit type (acres, trees, etc.)	# of units to be completed
Delaware Water Gap National Recreation Area (DEWA)	Pennsylvania & New Jersey	Control invasive species across 11 target areas in the park	Acres	256

### Invasive Plant Management Overview

Park	Area ID	Site Name	Invasive Density	Unit (acres, trees, hours, etc.)	# of Units
DEWA	Area 1	Upper Raymondskill	Low	Acres	5
DEWA	Area 2	Lower Raymondskill	Low	Acres	9
DEWA	Area 3	Conashaugh	Moderate	Acres	30
DEWA	Area 5	Middle Dingmans Creek	Low	Acres	21
DEWA	Area 6	Childs Park	Low	Acres	25
DEWA	Area 7	Hornbecks	Low	Acres	21
DEWA	Area 8	Upper Mill Creek	Moderate	Acres	19
DEWA	Area 9	Lower Mill Creek	Moderate	Acres	6
DEWA	Area 10	Toms Creek	Moderate	Acres	58
DEWA	Area 11	Van Campens Glen	Moderate	Acres	27
				Total Acres	256

## **Target Invasive Species for Control**

Unless otherwise specified, species targeted for control within this park will be invasive, non-native, and/or nuisance species that have been identified by NPS staff. The target species for this park are:

Latin Name	Common Name
<i>Ailanthus altissima</i>	Tree-of-heaven
<i>Berberis thunbergii</i>	Japanese Barberry
<i>Celastrus orbiculata</i>	Asiatic Bittersweet
<i>Clematis terniflora</i>	Sweet Autumn Clematis
<i>Elaeagnus angustifolia</i>	Russian Olive
<i>Elaeagnus umbellata</i>	Autumn Olive
<i>Euonymus alatus</i>	Burning Bush
<i>Frangula alnus</i>	Glossy Buckthorn
<i>Fallopia japonica</i>	Japanese Knotweed
<i>Forsythia viridissima</i>	Forsythia spp.
<i>Ligustrum spp.</i>	Privet
<i>Lonicera spp. Exotic</i>	Bush Honeysuckle
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>Persicaria perfoliata</i>	Mile-a-minute
<i>Rhamnus cathartica</i>	Common buckthorn
<i>Rosa multiflora</i>	Multiflora Rose
<i>Rubus phoenicolasius</i>	Wineberry
<i>Spiraea japonica</i>	Japanese spiraea
<i>Wisteria spp.</i>	Wisteria vines

## **Park Specifications for Invasive Control**

All operations must comply with the park's forestry safety protocols. All staff who are working on site and are not licensed pesticide applicators will need to undergo worker protection standard training if any herbicide application has been conducted recently enough (e.g., 30 days prior) that it would trigger the need for WPS training.

## **Tree Planting Planning, Implementation, and Maintenance**

To bolster the resilience of DEWA's hemlock forests, existing canopy gaps will be planted with climate- and pest-adapted native tree seedlings. In addition, invasive plant control will be maintained within the gaps to ensure the health and long-term viability of planted seedlings. Methods selected for planting must take into consideration the rocky soils at DEWA and make explicit plans to address planting in this type of rocky and at times steep terrain. Five areas were identified for planting including Lower Raymondskill, Childs Park, Middle Dingmans Creek, Toms Creek, and Conashaugh. The awardee will create detailed planting plan for existing canopy gaps to restore and enhance forest structure and diversity.

Deliverables for this scope of work include:

- Develop a planting plan to the specifications outlined below and submit this plan to the Forest Stewards Guild within 12 months following the execution of this contract
- Planting will begin at the earliest in 2027 (depending on the efficacy of ongoing invasive treatments) and conclude within two years of the start date (estimated 2029)
- Coordinate sourcing of planting materials
- Plant the total number of trees specified in the planting plan following the guidelines outlined below in the Delaware Water Gap National Recreation Area
- Conduct planting maintenance as described in the planting plan

**Park Overview**

<b>Park name</b>	<b>Park Location</b>	<b>Goals</b>	<b># of Sites</b>	<b>Unit type (acres, trees, etc.)</b>	<b># of units to be completed</b>
Delaware Water Gap National Recreation Area (DEWA)	Pennsylvania & New Jersey	Plant native climate-and-pest-adapted tree seedlings across 5 target areas in the park	5	Trees	TBD

**Planting Overview**

<b>Park ID</b>	<b>Area ID</b>	<b>Total Area Acres</b>	<b>Soil Type</b>	<b>Light</b>	<b>Existing Vegetation</b>	<b>Estimate # Canopy Gaps</b>
<b>DEWA</b>	Area 2	9	Mesic	Partially open	Dense invasive shrubs	1
<b>DEWA</b>	Area 3	30	Rocky, Mesic	Partially open	Moderate to dense invasive shrubs and vines	3
<b>DEWA</b>	Area 5	21	Rocky, Mesic	Full sun to part shade	Scattered to dense invasive shrubs	4

<b>DEWA</b>	Area 6	25	Rocky, Mesic	Partially open	Moderate invasive shrubs	3
<b>DEWA</b>	Area 10	58	Rocky, Mesic	Partially open	Moderate to dense invasive shrubs and vines	1

**Target Species for Planting**

*\*Unless otherwise specified and approved by the Guild and NPS*

<b>Latin name</b>	<b>Common name</b>
Acer saccharum	Sugar Maple
Betula alleghaniensis	Yellow Birch
Betula lenta	Sweet Birch
Carya cordiformis	Bitternut Hickory
Carya ovata	Shagbark Hickory
Liriodendron tulipifera	Tuliptree
Nyssa sylvatica	Blackgum
Pinus strobus	White Pine
Prunus serotina	Black Cherry
Quercus alba	White Oak
Quercus rubra	Northern Red Oak
Quercus velutina	Black Oak
Sassafras albidum	Sassafras
Tsuga hybrid	Eastern Hemlock Hybrid
Castanea hybrid	American chestnut hybrid

**Park Specifications for Planting**

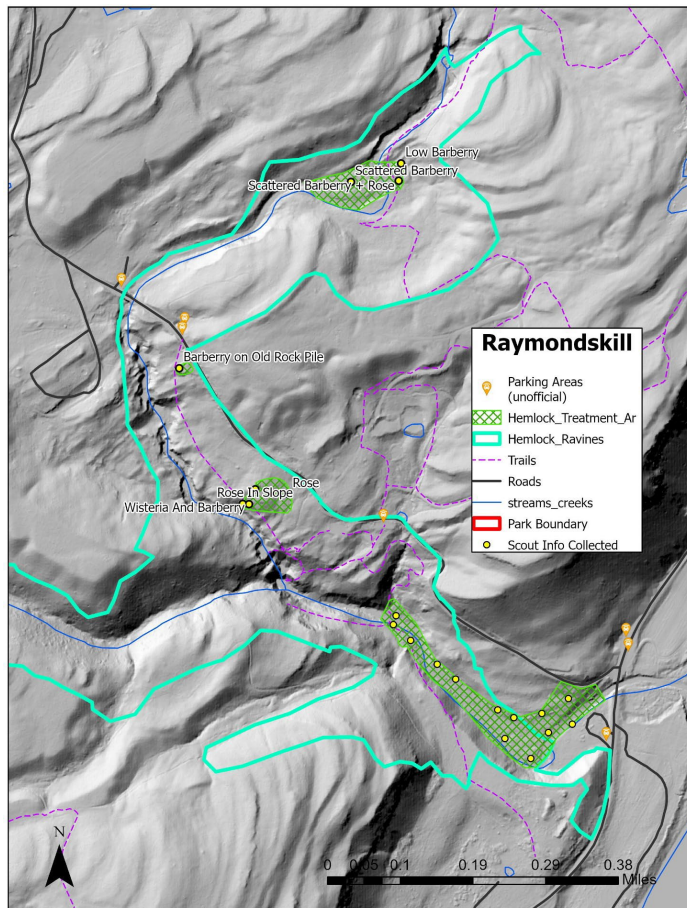
Contact park staff at least one day prior to commencement of work to discuss access. Print outs of permits or other documents may be required to identify workers while they are in the park.

If any archeological resources are encountered during planting, cease work in that area and contact park staff.

## Treatment Specifications

**Area 1, Upper Raymondskill (5 acres), INVASIVE TREATMENT ONLY:** The majority of the Raymondskill ravine contains intact closed canopy forest or dense regeneration of birch and white pine in areas of open canopy. There were three small areas totaling nearly 5 acres where invasive plant removal would improve resiliency of the forest. No areas suitable for planting were observed.

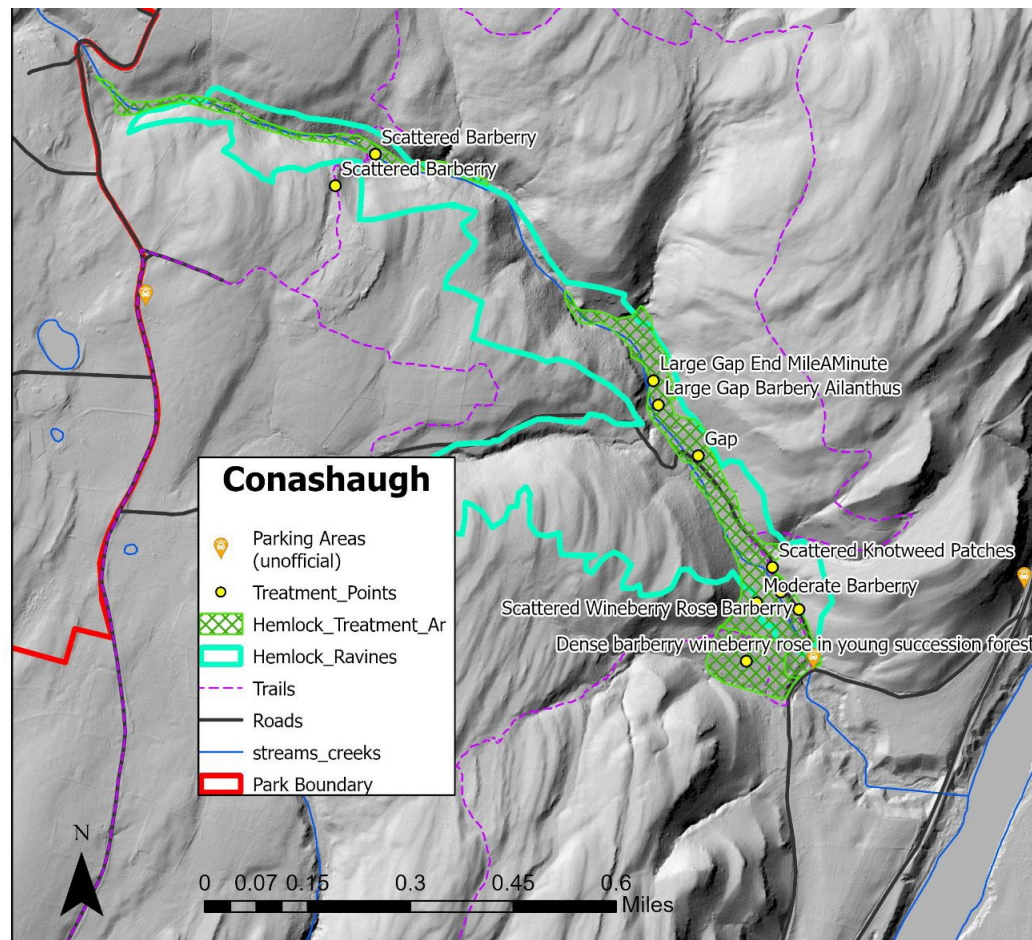
**Area 2, Lower Raymondskill (9 acres), INVASIVE TREATMENT AND PLANTING:** The lower portion of the Raymondskill ravine contains scattered low density Japanese barberry, multiflora rose, and bittersweet vine along the creek. A large clump of forsythia along with moderately dense barberry and rose occur adjacent to the parking lot and road. One large canopy gap near the forsythia was observed- this could be targeted for future planting efforts.



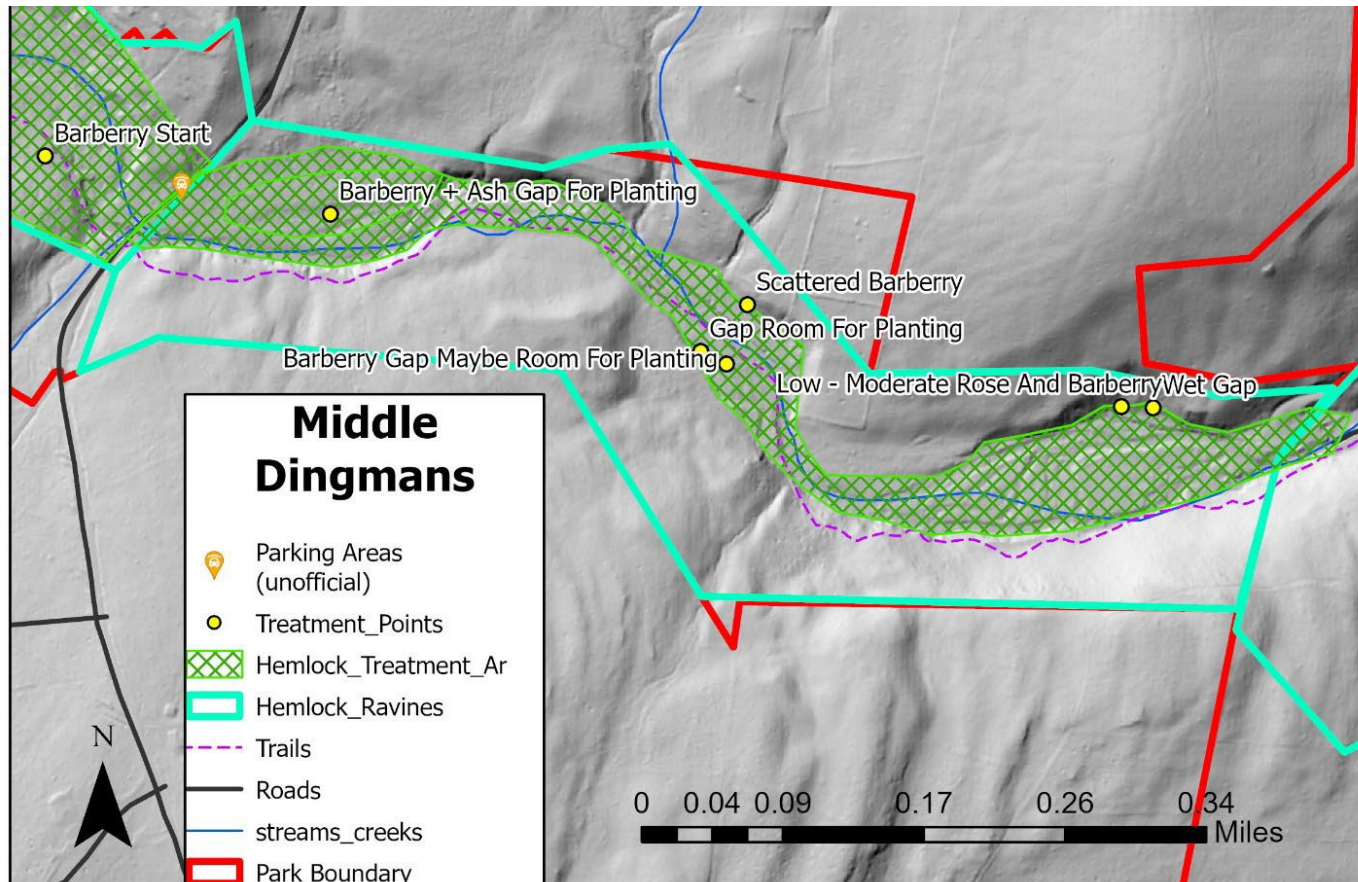
Lower Raymondskill

**Area 3, Conashaugh (30 acres), INVASIVE TREATMENT AND PLANTING:** The floodplain surrounding Conashaugh Creek contains scattered invasive shrubs, including Japanese barberry, multiflora rose, wineberry and isolated tree of heaven across 19 acres. Japanese knotweed and mile-a-minute vine are also present in patches. The upper portion of the creek is very narrow and has scattered Japanese barberry across nearly 5 acres. There is a young successional forest of 6 acres adjacent to the mouth of the creek that contains moderate to dense invasive shrubs, including barberry, multiflora rose, wineberry, and others.

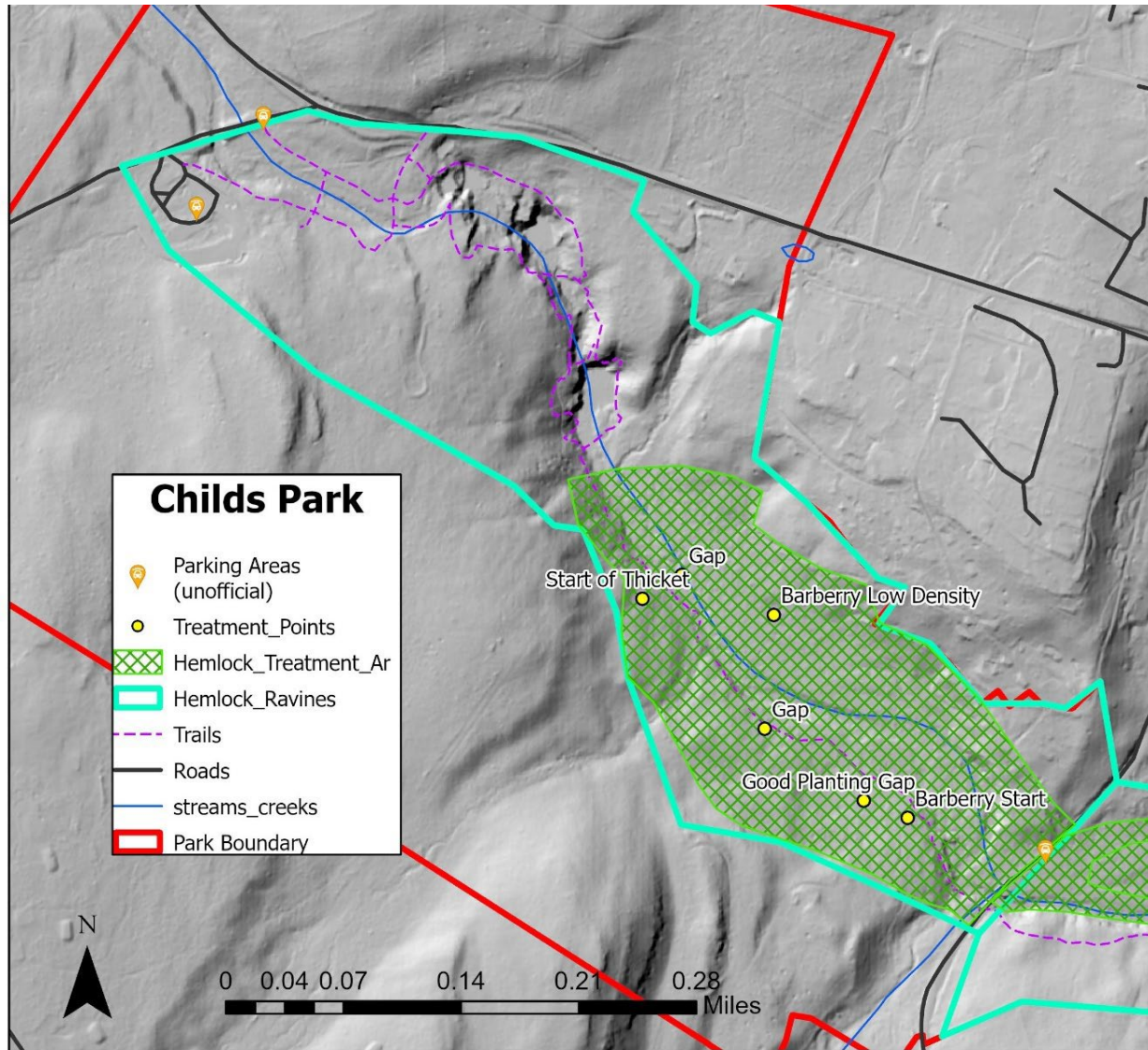
Most of the canopy gaps created by fallen ash and hemlock trees have been filled with sugar maple and birch saplings, however some gaps could use supplemental plantings. The planting plan should consider the possibility of disturbance to planted seedlings from high water events. Planting may not be feasible in some gaps due to frequent flooding.



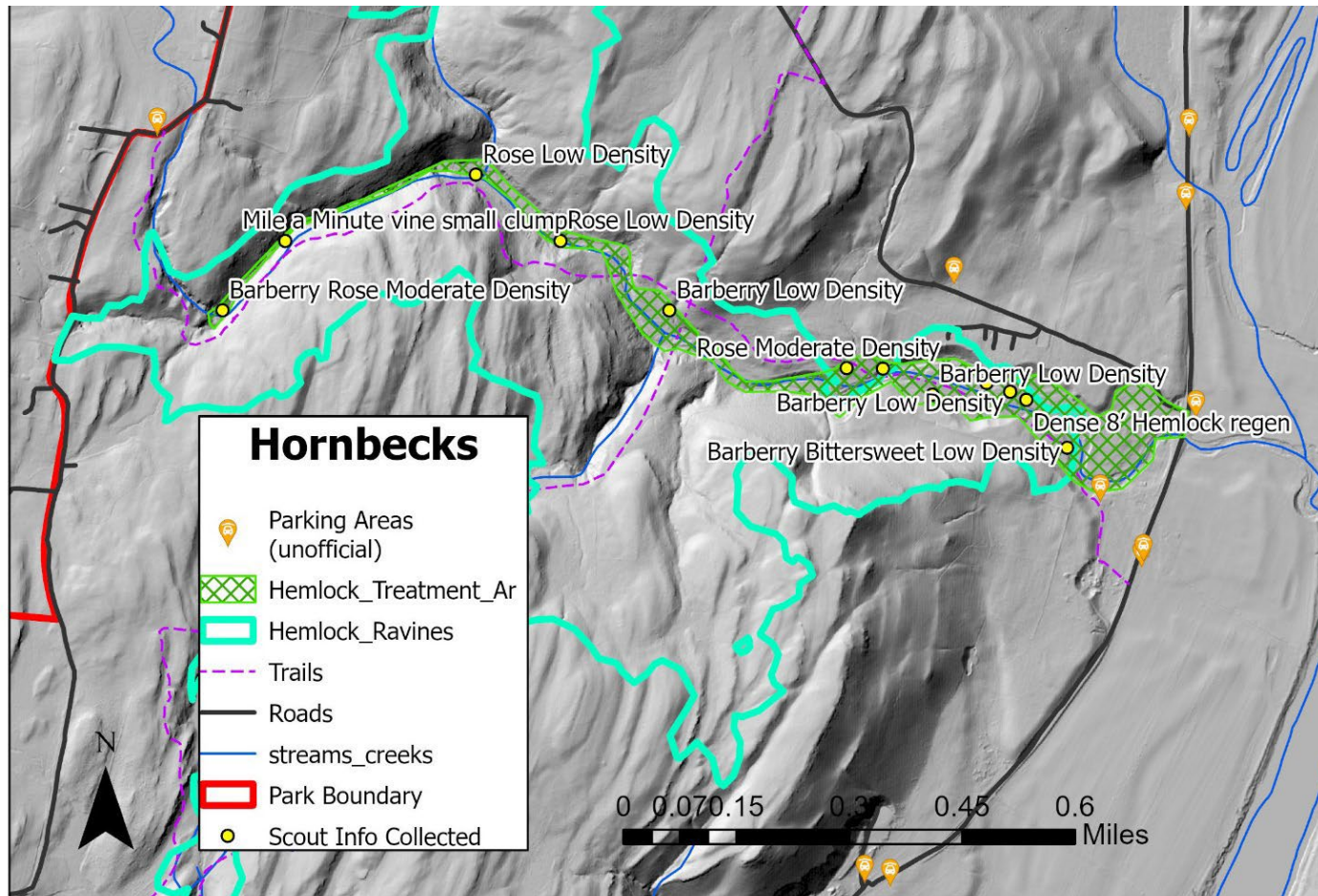
**Area 5, Middle Dingmans Creek (21 acres), INVASIVE TREATMENT AND PLANTING:** This section between Milford Road and the steep terrain above Dingmans Falls (19 acres) contains scattered Japanese barberry along the creek, with at least three small canopy gaps suitable for planting. There is one large 2-acre gap created by dead hemlocks and ash on the north-western corner that contains dense Japanese barberry and is likely a good site for replanting and restoration, possibly with hybrid hemlock seedlings.



**Area 6, Childs Park (25 acres), INVASIVE TREATMENT AND PLANTING:** The forest between the southern most bridge and Milford Road (25 acres) contains scattered Japanese barberry and three canopy gaps that are suitable for planting native tree seedlings.

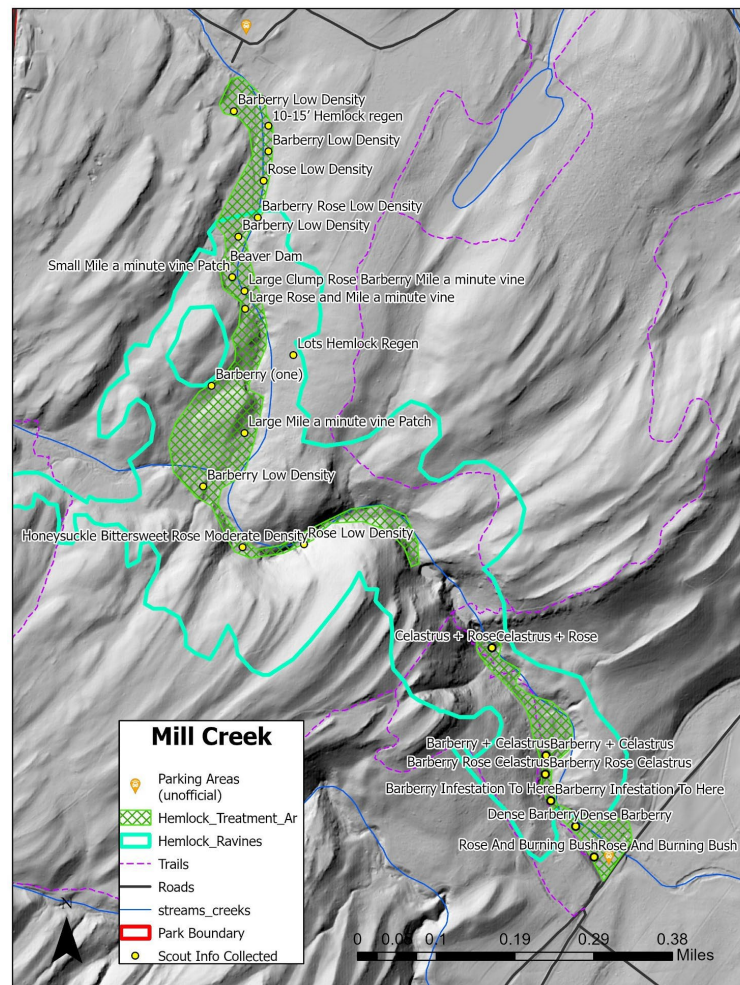


**Area 7, Hornbecks (21 acres), INVASIVE TREATMENT ONLY:** The lower section of the Hornbecks drainage contains scattered clumps of low to moderate density invasive shrubs such as Japanese barberry, multiflora rose, and wineberry, with occasional small patches of bittersweet and mile a minute vines. One large patch of sapling hemlocks also occurs in the creek floodplain. Invasive shrubs and vines are low density and widely scattered in the steeper upper section of the drainage.

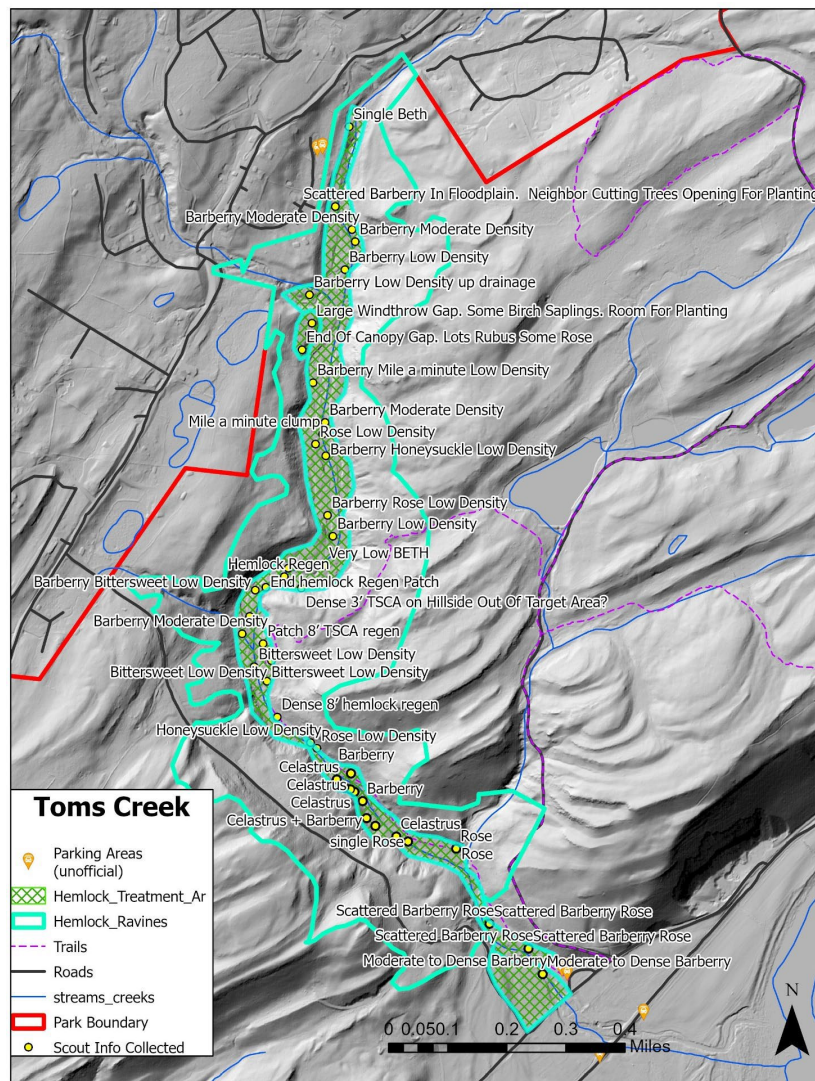


**Area 8, Upper Mill Creek (19 acres), INVASIVE TREATMENT ONLY:** The upper section of this drainage contains low to moderate density invasive shrubs (Japanese barberry, multiflora rose, and honeysuckle), along with patches of mile a minute vine. Beavers are using the broader floodplain in the upper reaches. Access through the steep terrain in the middle section is challenging due to abundant downed hemlock trunks.

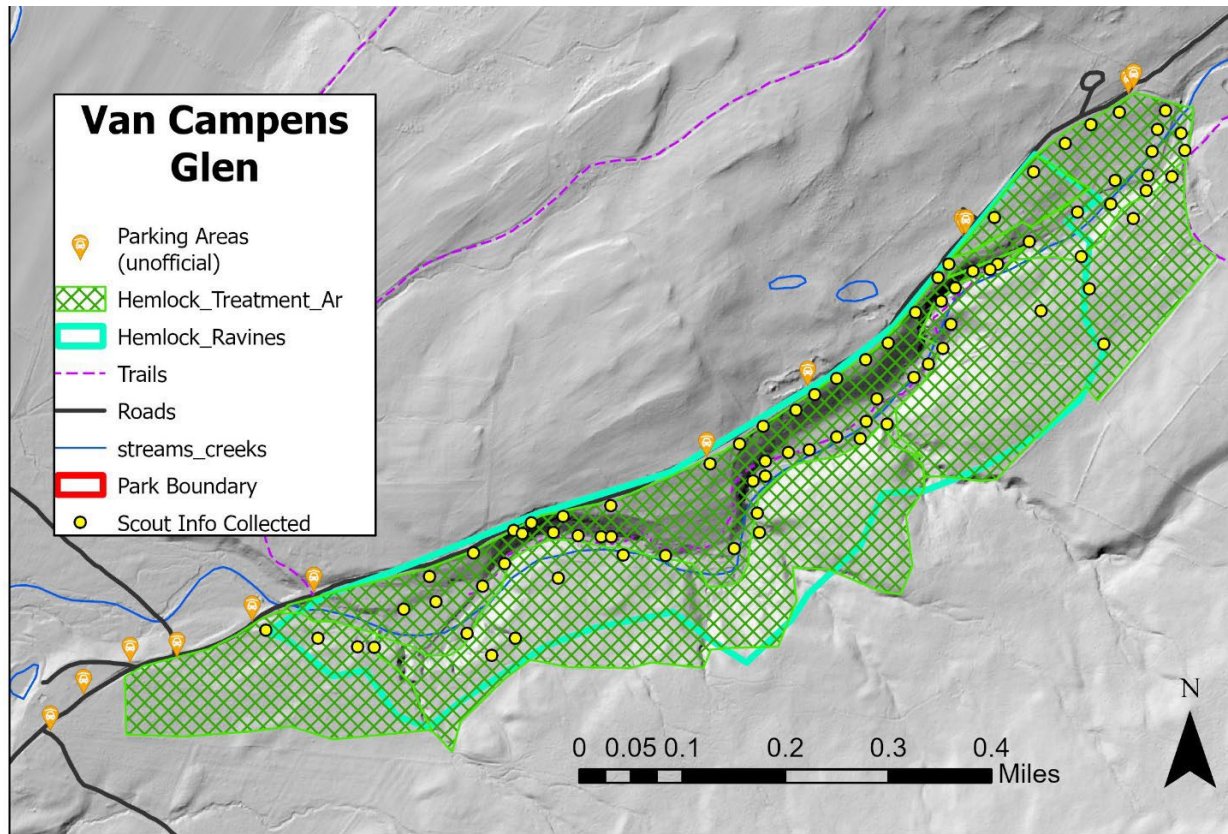
**Area 9, Lower Mill Creek (6 acres), INVASIVE TREATMENT ONLY:** The lower section of this creek (6 acres) are seriously threatened by Oriental bittersweet vine and invasive shrubs. Bittersweet vines are smothering the native tree saplings that are attempting to regenerate following hemlock mortality. Bittersweet density varies from scattered to dense throughout this area. The southern portion of this polygon is infested with dense burning bush and Japanese barberry.



**Area 10, Toms Creek (58 acres), INVASIVE TREATMENT AND PLANTING:** The creek floodplain contains scattered low to moderate density Japanese barberry, multiflora rose, honeysuckle and Oriental bittersweet across 50 acres. Access is generally decent along the length of the creek, with a well-established trail running along the lower section. To the west of the parking area near Route 209, a 6-acre section contains dense barberry and possibly other invasive shrubs. Near the houses at the upper end of the drainage, there is a 1.5 acre canopy gap with dense raspberry and scattered rose, barberry, and mile a minute vine where a neighbor may have cut declining trees.



**Area 11, Van Campens Glen (27 acres), INVASIVE TREATMENT ONLY:** The floodplain surrounding Van Campens Creek and the forested slope between the creek and Old Mine Road contains scattered moderate-density invasive shrubs, including Japanese barberry, multiflora rose, wineberry, autumn olive, and bush honeysuckles. In addition, there are scattered clumps of Japanese knotweed and bittersweet vines throughout.



# Contract Specifications

## **Invasive Species Control Specifications**

### **1. Non-target species**

The contractor is not to target any native, non-target species including any trees, shrubs, forbs, grasses, or wildflowers. The Contractor is not to conduct treatments outside of approved units without prior authorization by the Guild.

It is understood that a certain amount of unintended damage may occur to non-target species due to overspray, but proper application technique and chemical selection will minimize this damage.

Japanese stiltgrass will not be treated as part of in this contract unless indicated in a park's scope of work above.

The Contractor is responsible for the restoration or replacement of all excessively damaged native vegetation, at no cost to the project. Repair, replace, or restore to original condition all property damaged because of any unauthorized or negligent activity by the Contractor and/or Subcontractor(s). The use of subcontractors must receive prior approval by the Guild. This includes, but is not limited to, soil grade disturbance resulting from heavy equipment/stump removal, pavement surface, turf areas, mixing zones, man-made structures, and equipment.

### **2. Licensing and chemical use**

- The Contractor must possess and maintain current applicable state pesticide applicators' license, valid state Department of Agriculture and Consumer Services or similar state agency-based state certification in the Aquatics and/or Natural Areas categories appropriate for the work and state requirements before work begins.
- The contractor must possess and maintain valid pesticide business registration in the state(s) where work will be performed.
- Use of chemicals shall strictly adhere to United States Environmental Protection Agency (EPA) regulations, manufacturers label directions, state pesticide laws, and National Park Service requirements. No pesticide shall be used until approved by the Guild and NPS.
- The applicator(s) will use caution to limit off-target damage to desirable vegetation or sensitive sites, avoid spraying during periods of high winds or temperature inversions, and shall follow all label requirements and mix rates.

### **3. Safety**

- All work shall conform to OSHA Regulations, ANSI Z133, and Arborist Industry Safe Work Practices.
- Contractor shall ensure the security and safety of the worksite, including the safety of Park visitors, pedestrians, and bystanders by placing appropriate signage and coordinating with park staff.
- The Contractor shall be familiar with and adhere to any and all federal, state, or local safety regulations pertaining to aquatic and terrestrial plant control operations, pesticide use and storage, transportation and trailering operations including but not limited to the use of vehicles, airboats, motorboats, all-terrain vehicles (ATVs), or utility terrain vehicles (UTVs).
- The Contractor shall provide Crew Members with all supplies and equipment for invasive, non-native, and nuisance plant control projects- including appropriate vehicles or vessels for transportation to worksites, GPS equipment for collecting site positions and tracking logs, pesticides and adjuvants, sprayers, machetes, hand tools, chainsaws, brush cutters, PPE, potable water, and suitable communications capability and any other equipment needed to facilitate operational coordination and safety of Crew Members.

### **4. Equipment**

- The Contractor shall furnish all equipment and supplies including personal protective equipment (PPE), pesticides, dyes, vehicles, GPS equipment, radios, hand tools, chainsaws, brush cutters, and adjuvants needed to complete the specified service requested. All equipment must meet all federal OSHA, state and local safety requirements and must be properly licensed.
- The Contractor shall provide for the safety and security of all equipment and materials.
- The Contractor may leave equipment at the work site at a pre-determined location in consultation with Guild and Park staff. The Contractor shall be solely responsible for the equipment if it is lost, stolen or damaged.
- Mechanical equipment, such as chainsaws, masticators, and UTVs must be in good condition and well maintained. Chainsaws must use spark arrestors when operating during times of high fire danger.
- When using mechanical equipment that may spark a fire, the Contractor must have a fire extinguisher in all vehicles (trucks, masticators, UTVs etc.).

### **5. Sanitation and travel management**

- The Contractor shall sanitize all equipment and vehicles (including personal protective gear) to avoid unnecessary spreading of invasive, non-native, and/or nuisance plant species within and from each treatment site. All equipment, clothing, boots, and vehicles entering into Park

units shall be inspected by the Contractor before entering Park units and shall be free of mud, soil, weeds, seeds, eggs, other living organisms, and other such debris that could contain or hold seeds, other propagules, eggs, or larva. The Contractor shall power-wash all equipment before initial entry to the Park and between mobilizing to different work sites.

- The Contractor shall ensure protection of the worksite from Contractor-caused human trampling and off-target damage to other resources in the area. Contractor materials such as but not limited to human waste, food, food wrappers, containers, bottles, and other trash shall be removed from the site daily to ensure site restoration.
- The Contractor shall follow all local, state, and federal guidelines regarding the cleaning of equipment used to dispense herbicide and the disposal of herbicide and associated containers. The disposal and cleaning of herbicide and associated equipment will be done off-site.
- Ruts, divots, and any and all other damage to turf, vehicles, utilities or surrounding structures shall be repaired at Contractor's expense.
- Contractor will not take heavy equipment off road after heavy rains (greater than 0.25" per 24 hours)
- Treatment operations will not interfere with active agricultural operations. Travel must be limited to field edges and gates must be left as they are found.

## **6. Site Access, Timing, and Conditions**

- Work may occur during any season during the year, except as prescribed for specific growing seasons or treatment windows depending on the target species or in the event of Park specific closures (e.g., avoidance of nesting seasons for wildlife, special events, etc.).
- The contractor is responsible for communicating with the Guild and Park staff if there is a need to close or limit visitor access to adjacent or overlapping trails/points of public access near the work site due to the ongoing site conditions, herbicide application, or public visibility of the work site.
- All woody material resulting from these treatments will be left on site.

### **Treatment standards and inspections**

- All control efforts for each treatment area shall be at least 90% effective in preventing re-sprouts of all invasive, non-native, and/or nuisance target vegetation by the conclusion of this agreement.
- The Guild will coordinate with the Contractor to conduct interim inspections. A final inspection will be conducted within 30 days of the issuance of the final invoice. This will be conducted before the final invoice is paid.

### **Documentation, reporting, and invoicing**

The contractor will provide Guild staff with the following reports, licenses, and invoices:

- Pesticide applicator license(s) across relevant states;
- Pesticide Use Proposal System (PUPS): Contractor reports proposed type(s) of herbicide used and method(s) of application, using the PUPS Proposal Sheet, to the Guild prior to beginning work. This sheet must include the estimated area (acres) to be treated and EPA registration # for the product(s). If multiple pesticides are used for one treatment method, that should be described in the proposal. Implementation cannot begin prior to approval by Guild staff. By December 31<sup>st</sup> of each project year the Contractor must also report the name of pesticide(s), pesticide EPA registration number, annual volume of each herbicide used (with units), its concentration (with units of percent solution or grams/gallon), treatment method, and acres treated to the Guild;
- Monthly Invoices: Invoices will be submitted monthly using the invoice template provided by the Guild.
- Data collection for invasive control will be required in a format compatible with ArcGIS for use in the National Invasive Species Information Management System (NISIMS).
- Quarterly report: Contractor will submit quarterly reports within 30 days of the end of the quarter. The Guild will provide a quarterly report template. Quarterly reports must include available spatial data and maps indicating progress.
- Annual Performance Report: Contractor will submit an annual report by October 31<sup>st</sup> of each project year. The Guild will provide an annual report template. Annual reports must include pre and post treatment photos at a minimum of five points within each treatment area.

Standards for photo points are:

- One point per 10 acres, a minimum of three points for treatment areas less than 10 acres.
- Geographically disbursed within the unit
- Select sites that will demonstrate a visual contrast before and after treatment and if possible, choose sites that will overlap with future planting efforts.
- The frequency of photo point collection will occur once pretreatment (year 1), post treatment (year 1), and annually for the following years remaining in the contract (years 2 and 3).
- Files must be in .jpg format
- GPS coordinates will be collected and provided with an associated shapefile
- No humans in the image
- Repeat photos must be taken within the same season
- Contain a photo board in the foreground with the following information:
  - Date
  - Location
  - Unit ID
  - Azimuth
  - GPS coordinates
  - PRE or POST

- Final report: Contractor will submit a final report within 60 days of the end of the performance period. The Guild will provide a final report template.

### **Tree Planting Specifications**

#### **Compliance**

- The contractor must submit a planting plan to the Guild no later than six months prior to planting for NPS review and approval. No tree planting should commence prior to invasive plant treatments, however, the planting plan can be developed in conjunction with invasive species treatment.
- The plan shall include proposed planting locations, shapefiles of the planting areas, and the quantity and species of trees to be planted in each area. A planting plan template will be provided by the Guild.
- Planting cannot deviate from the pre-approved planting plan without prior approval through the NPS compliance process and appropriate staff. If the planting plan changes then additional post-planting data will be provided by the contractor for approval.

#### **Mapping and monumentation**

- The contractor will provide spatial data (shapefiles) of the canopy gaps where planting will occur at least six months prior to planting. Each spatial data layer will contain the following fields:
  - Park
  - Site Name
  - Date
  - Name of Contractor (company)
  - Name of Observer mapping the canopy gap or Crew Lead for Planting (person)
  - Model of GPS unit (NPS names the field MAPSOURCE)
  - XYACCURACY - just an estimate/average of GPS precision in the field
  - Canopy Gap ID – a unique identifier within the park for that canopy gap (ParkID\_AreaID\_CG#)
  - Area of Canopy Gap
  - Planting Stock – number and species of trees planted, can use abbreviations for tree names (5 NYSSYL, 10 QUEALB, etc).
  - Notes – anything that someone planting trees in the gap would need to know (e.g., large rocks, seeps, lots of downed trees, etc).
- The contractor shall collect and submit all mapping and data files in formats that work with ArcGIS, such as shapefiles (.shp), GPS exchange format (.gpx), file geodatabases (.gdb), or KMZ/KML files.

#### **Canopy Gap Conditions (DELAWARE WATER GAP ONLY)**

The Contractor shall adhere to the following requirements when assessing and mapping canopy gap conditions:

- **Soil Condition Assessment**

For each identified canopy gap, the Contractor shall document soil conditions, including but not limited to:

- Presence of saturated soils (e.g., seeps or natural depressions with standing water).
- Evidence of shallow soils, underlying bedrock, or large surface rocks that may impede planting.

- **Vegetation and Competition Assessment**

The Contractor shall assess and document the presence of competing vegetation within each canopy gap. This includes:

- Invasive shrub species.
- Dense native shrub (e.g., raspberry, spicebush) and tree (e.g., black birch) species that may hinder or prevent successful tree planting

- **Slope and Erosion Assessment**

The contractor shall assess and document the slope and status of erosion within each canopy gap. This includes:

- Documenting percent measurements of slope, which can be gleaned from existing topographical maps for this assessment.
- The status of erosion should be ranked based on a visual assessment for the following scale:
  - No erosion
  - Very slight erosion
  - Moderate erosion
  - High erosion
  - Severe erosion

## **Planting stock type and quality**

- The seedling type (i.e. tubling, bareroot etc.), source, and species must be approved by the Guild and NPS for each treatment unit prior to the purchase and/or sourcing of material.
  - Bareroot hardwood seedlings must have a root collar diameter of at least 1/4" or greater and a height of at least 18".
  - Tublings with soil dimensions between 2" x 2" x 6" and 3" x 3" x 9" are the preferred stock for most projects.
  - Hickories must be D60 cell or similar to prevent tap root disturbance.
  - Containerized trees (up to 15 gallon pots) may be appropriate for some treatment areas if park compliance process approves larger holes being dug.
- Choose seedlings produced from seed sources at or near the same level III Ecoregion or seed lot as the planting site.
- Inspect seedlings for any injury, and for general condition. Musty smelling or moldy seedlings should be avoided.

- Inspect fill materials and top-soil sources on site to confirm that they are weed and jumping worm free before transporting to the site. Use only weed-free material that has been treated and maintained in weed-free stockpiles.
- All nursery stock transacted within the terms of the Standard shall, at time of shipment, be substantially free of damaging insects and diseases, in good living condition, and typical in habit for the species in the region of the country in which it is grown.
- When requested the contractor must identify and share the plant source and propagation method
- Hardening- Any seedlings grown in a greenhouse shall have undergone a sufficient hardening process before being out planted
- All plant material complies with American Standard for Nursery Stock ANZI Z60.1. All plant material has been selected based on site conditions and constraints.

### Tublings

- Hardening- Any seedlings grown in a greenhouse shall have undergone a sufficient hardening process before being out planted
- General requirement for container grown root systems
  - *“All plant material complies with Container grown nursery stock shall have a well-established root system reaching the sides of the container to maintain a firm ball, but shall not have excessive root growth encircling the inside of the container.”* - American Standard for Nursery Stock ANZI Z60.1
- Nursery stock does not contain signs of jumping worms

### **Seedling care**

#### Bareroot & Tublings

- All plant material shall be protected from desiccation from sun/wind during transport. If transporting in an uncovered truck bed, plant material shall be covered with a plant tarp or similar material. If transporting in uncovered truck bed during hot weather, plants shall be watered prior to travel.
- All plant material shall be stored in a location protected from local herbivore pressure (e.g. deer, rabbits)

#### Bareroot

- Keep in a cool, protected place with air circulation between the bundles. Handle and store seedlings carefully by planting them promptly, storing them in a cool dark place, out of the sun, wind, and high temperatures. Protect bundles/bags from rain, wind and freezing.
- Stock must be kept cool and protected from “heating”. Heating is a condition where seedlings break dormancy thereby using up stored water and energy resources. Stock

must be well watered, protected from direct sunlight, and properly aerated. Seedlings that have been subjected to heating should not be planted.

- Bare root seedlings shall be planted as soon after being lifted from nursery beds as possible. Loose seedlings, those not balled or bagged, should be “heeled in” immediately upon arrival.
- Seedlings that are not being planted should be rewrapped and put in a shady or cool area out of direct sunlight.

#### Containerized trees

- All plant material shall be protected from desiccation from sun/wind during transport. If transporting in an uncovered truck bed, plant material shall be covered with a plant tarp or similar material. If transporting in uncovered truck bed during hot weather, plants shall be watered prior to travel
- During transportation of plant material, the Contractor shall exercise care to prevent injury and drying out of the trees. Should the roots be dried out, large branches broken, balls of earth broken or loosened, or areas of bark torn, the Guild may reject the injured tree(s) and order them replaced at no additional cost to the Guild.
- Plants must be protected at all times from sun or drying winds.
- Those that cannot be planted immediately upon delivery shall be kept in the partial shade(Light availability varies depending on species and where the seedlings are coming from. We probably can't specific this. If we have to, partial shade is probably more appropriate and will do the least harm in most situations) , well protected with soil covered with wood chips or other acceptable material and kept well-watered.
- Plants shall not remain unplanted any longer than 3 days after delivery without permission from the Guild.
- Plants shall not be bound with wire or rope at any time so as to damage the bark or break branches.
- Plants shall be lifted and handled with suitable support of the soil ball to avoid damaging it.
- Tree shall be watered regularly while stored in containers (at least 1x/day when not raining)
- All plant material shall be stored in a location protected from local herbivore pressure (e.g. deer, rabbits)

#### Tubling

- During storage, all plant material shall be watered regularly, considering the increased need for watering plants while being stored in containers
- While in storage, all plant material shall be maintained to ensure it continues to mee the following standards (American Standard for Nursery Stock ANZI Z60.1):
  - Correct identification requirement
  - Minimum quality requirement
  - General requirement for container grown root systems

## **Planting Period**

### Bareroot & Tublings

- Coordinate planting periods with maintenance periods of site treatments to support overall project implementation when possible.
- Weather limitations: Proceed with planting only when existing and forecasted weather conditions permit planting and when beneficial and optimum results may be achieved.

### Bareroot

- Seedlings shall be planted during the dormant season. Avoid planting when the ground is frozen or dry or excessively wet and sticky.

### Tublings

- Planting shall take place within the time window recommended on the planting plan

## **Planting methods**

### Sanitation and travel

- Clean all planting equipment and boots at an off-site location before entering the park and when moving between geographically disjunct treatment units within a park.
- Remove mud, dirt, and plant parts. Seed and plant parts need to be collected and removed.

### Bareroot seedlings and tublings

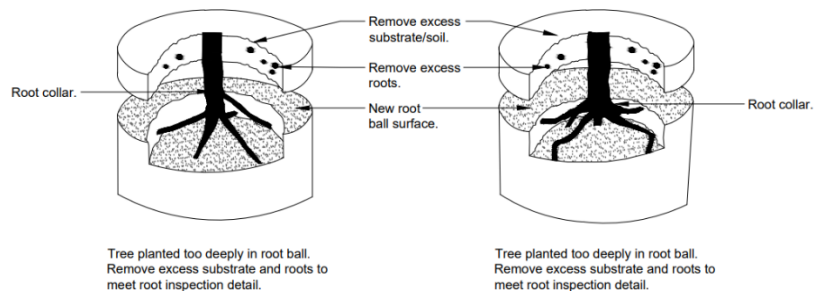
- Seedlings may be planted by hand using a spade shovel, or other hand digging tool , planting bar, mattock, modified dibble bar, or sharpshooter shovel. Soil may be removed only with the approval from park resource specialists.
- The hole or furrow shall be large enough for the entire root system.
- Seedlings should be planted with their roots straight down not “L” or “J” rooted, plant holes should be free of debris and have only one seedling per hole.
- The seedling should be set in the ground with no air pockets or voids.
- When planting bareroot seedlings or tublings, **the root collar will be at the soil line.**
- All digging tools must be reviewed and approved through the NPS compliance process before use is authorized.
- Trees must be watered when no rain is expected.
- Roots shall be adequately protected from the sun and/or drying winds during planting
- Any tags that could become constricting shall be removed from the tree
- Roots shall be adequately protected from the sun and/or drying winds during planting

### Tublings

- Any roots wrapped around the sides of the containers shall be loosened from the root balls to avoid circular root growth. Plants shall be planted with the roots untangled and laid out in the planting holes to promote good root growth and prevent the plants from becoming root bound.

### Containerized trees

- Installation of plant material shall be in accordance with the current industry standards of the International Society of Arboriculture and the American Association of Nurserymen.
- Locate the root collar. Remove all excess soil to expose the root collar.
- Dig the planting hole at least three times wider than the root ball with sloping sides. Dig the hole to a depth so the located root collar, at the first order lateral root, is at or within 2 inches above the surrounding, undisturbed finished grade.
- Planting holes shall be backfilled with excavated soil.



- When holes are approximately two-thirds full, they shall be thoroughly watered to eliminate air pockets. After this initial watering, excavated soil shall be installed to the top of the hole and watered. Prevent puddled soil conditions by avoiding compaction once the soil is wet.
- All twine, rope, transit guards or wrappings, and plant labels secured around the trunk or branches shall be removed after planting is completed.
- Mulch the entire planting surface (ideally at least an 8 ft diameter around the tree) with composted bark or woodchips applied no less than two inches (2”) deep and no more than three inches (3”) deep, leaving three inches (3”) adjacent to the tree trunk free of mulch.
- Tree shall be immediately watered after planting with a slow, saturating watering.
- Staking shall only be utilized for trees exposed to excessive winds or if the tree is unable to stay upright without temporary support. Install a staking system in a way that will not damage the bark on the tree. Wire, rubber hose, or similar materials shall not be permitted.
- Any roots wrapped around the sides of the containers shall be pulled loose from the root balls. Plants shall be planted with the roots untangled and laid out in the planting holes to promote good root growth and prevent the plants from becoming root bound.
- Seedlings shall not be pruned during planting except in the following situations:
  - Damaged branches may be pruned
  - If impossible to dig a hole to accommodate the roots, root pruning may be used

### **Site Conditions**

- Avoid and/or remove sources of weed seed and propagules (i.e., invasive, non-native, nuisance species) to prevent new infestations and spread of existing infestations. Before

planting activities begin, assess site conditions and treat weeds with high risk of establishment and spread into the disturbed planting site.

- Identify treatment, prevention, and maintenance needs of weed vegetation management.
- Establish weed-free project staging area and avoid travel through infested areas during planting period.
- Clean planting equipment before entering the park at an off-site location. Remove mud, dirt, and plant parts. Seed and plant parts need to be collected and removed.
- Do not plant shade intolerant species under the canopy or within 20 feet of a larger over-story tree
- Trees will be planted at least 20 feet from a powerline
- Trees will not be planted on game trails
- Trees will not be planted in seeps

## **Tree Protection**

### Tree tubes

If contract includes the sourcing and/or purchasing of herbivore protection:

- Tubes must be four feet tall
- Contractor will use white oak or other rot resistant stakes
- The contractor will install each tree tube stake in a straight and upright manner and to a minimum depth in the soil of 10 inches to 12 inches.
- The top of each installed stake will be no greater than 3 inches above the top fastening tie of the tube when tightened.
- All stakes will be oriented in the same direction and installed on the north side of each tube.
- Each tree tube must be labeled with the species of the seedling.
- Ensure tree limbs are not caught under zip ties.
- The contractor will properly install all tree tubes with stakes and bird netting on each tree seedling on the same day that each seedling is planted.

### Cages

- Cages must be of sturdy material such as steel welded wire fencing
- Cages must be five feet tall. For tree seedlings over one foot in height, cages may consist of four feet of wire fencing elevated one foot off the ground using T-stakes.
- Contractor must secure the cage with metal stakes such as electrical conduit (EMT) or T stakes
- Cages must be at least 12” in diameter
- All fastening ties will be pulled tightly against each stake.
- Each cage must be labeled with the species of seedling it protects in UV Resistant Marker that will not fade or wash off with rain.

## **Natural regeneration**

- Where advanced native regeneration occurs, caging is optional to supplement planting with approval from NPS.

## **Planting Maintenance**

### General

- All planted seedlings will be protected from any and all damage resulting from herbicide application.
- If surrounding vegetation is likely to severely compete with the planted seedling, the Contractor will remove or kill vegetation within 6 inches of the tree tube through hand weeding and/or mowing.
- Watering (except during the initial planting), mulching, and fertilizing will not be required but will be at the discretion of the contractor to maintain plant health.
- If surrounding vegetation is competing with or overtopping the planted seedling, the contractor will remove all plants except the seedling from inside all tree tubes and wire cages. The contractor will guarantee 80% survival after three years.
- At the end of the first growing season, the contractor shall inspect all planted trees in September. Trees deemed unacceptable shall be replaced and replanted at the contractor's expense by April 30 of the following calendar year. Unacceptable trees are defined as those that are dead, exhibit more than 25% leaf die-back, have leader die-back exceeding 10% of the tree's height, or branch die-back greater than 6 inches on at least 75% of branches. Replacement trees must be of the same species as those that failed. After the first year, ongoing maintenance requirements shall follow the specified maintenance guidelines.

### Tree Tube Maintenance

- Inspect annually
- Straighten tipped shelters and replace broken stakes and lost bird netting
- Remove bird netting when trees are at the top of the tube

### Cage maintenance

- Inspect annually
- Straighten tipped or loose cages and replace any broken stakes
- Prune as necessary to prevent tree branches from growing into cage
- If dense vegetation becomes established within the cage and is competing with the tree seedling, the contractor shall remove the vegetation by hand from around the seedling.

## **Treatment standards and inspections**

- The contractor will guarantee 80% survival of planted trees after three years.
- The Guild will coordinate with the Contractor to conduct a post-planting inspection. A final inspection will be conducted within 30 days of the issuance of the final invoice

- Trees not planted according to contract shall be replaced by the contractor

### **General requirements**

- Contractor shall ensure the security and safety of the worksite, including the safety of Park visitors, pedestrians, and bystanders by placing appropriate signage and coordinating with park staff.
- The Contractor shall furnish all equipment and supplies including personal protective equipment (PPE), vehicles, GPS equipment, radios, and hand tools needed to complete the specified service requested. All equipment must meet all federal OSHA, state and local safety requirements and must be properly licensed.
- The Contractor shall provide for the safety and security of all equipment and materials.
- The Contractor may leave equipment at the work site at a pre-determined location in consultation with Guild and Park staff. The Contractor shall be solely responsible for the equipment if it is lost, stolen or damaged.
- The Contractor shall sanitize all equipment and vehicles (including personal protective gear) to avoid unnecessary spreading of invasive, non-native, and/or nuisance plant species within and from each treatment site. All equipment, clothing, boots, and vehicles entering into Park units shall be inspected by the Contractor before entering Park units and shall be free of mud, soil, weeds, seeds, eggs, other living organisms, and other such debris that could contain or hold seeds, other propagules, eggs, or larva. The Contractor shall power-wash all equipment before initial entry to the Park and between mobilizing to different work sites.
- The Contractor shall ensure protection of the worksite from Contractor-caused human trampling and off-target damage to other resources in the area. Contractor materials such as but not limited to human waste, food, food wrappers, containers, bottles, and other trash shall be removed from the site to ensure site restoration.
- Ruts, divots, and any and all other damage to turf, vehicles, utilities or surrounding structures shall be repaired at Contractor's expense.

### **Documentation, reporting, and invoicing**

- Planting Plan (when applicable): The contractor must submit a planting plan to the Guild for NPS review and approval using a planting plan template provided, no later than twelve months following the execution of the awarded contract.
- Monthly Invoices: Invoices will be submitted monthly using the invoice template provided by the Guild.
- Quarterly report: Contractor will submit quarterly reports within 30 days of the end of the quarter. The Guild will provide a quarterly report template. Quarterly reports must include available spatial data and maps indicating progress. (having individual tree level data and what would want to include here)

- Annual Performance Report: Contractor will submit an annual report by October 31<sup>st</sup> of each project year. The Guild will provide an annual report template.
- Final report: Contractor will submit a final report within 60 days of the end of the performance period. The Guild will provide a final report template.

<b>Reporting and invoice summary</b>	
<b>Due date</b>	<b>Type of report(s)</b>
Prior to implementation	<ul style="list-style-type: none"> <li>• Pesticide Use Proposal System (PUPS)</li> <li>• Planting Plan (min 6 months prior)</li> <li>• Archeological compliance</li> </ul>
Monthly	<ul style="list-style-type: none"> <li>• Invoices</li> </ul>
Quarterly (within 30 days of the end of the quarter)	<ul style="list-style-type: none"> <li>• Quarterly report summarizing prior quarter</li> </ul>
Annually (October 31 <sup>st</sup> )	<ul style="list-style-type: none"> <li>• Annual report</li> <li>• Pesticide Use Proposal System Reports</li> </ul>
Project completion (within 60 days of performance period end date)	<ul style="list-style-type: none"> <li>• Final report</li> </ul>

# Response to Specifications

<b>Company name</b>			
<b>Mailing address</b>			
<b>Physical address(s) (if different) Include satellite offices.</b>			
<b>Primary contact name and title</b>			
<b>Email</b>			
<b>Phone</b>			
<b>Has your organization been debarred or suspended from any government systems or from entering into federal contracts? If yes, please explain.</b>			
<b>Federal tax ID #</b>			
<b>Which parks and scopes of work are you replying to? Select all that apply</b>	<b>Park</b>	<b>Invasive plant removal</b>	<b>Tree planting</b>

**1. Company background (10 points)**

*Please describe your company's history and guiding philosophy.*

**2. Key personnel (15 points)**

*Names and qualifications of key personnel who will perform work under this contract, including any subcontractors. NOTE: any subcontract must be approved in advance by the Guild. Please include all professional certifications and licenses, and in what states they are active, your staff and subcontractors possess. Resumes of key personnel may also be included as an appendix to this response.*

**3. Relevant experience (30 points)**

*List examples of projects completed that were within a similar scope to this RFP. Include the name and contact information for each project listed. The Guild may reach out to the contacts identified here as a reference.*

**4. Proposed timeline (10 points)**

*Please provide a timeline for how/when you will accomplish the objectives of the projects outlined in this RFP.*

<b>Year</b>	<b>Month(s)</b>	<b>Activity</b>

**5. Leveraged accomplishments (15 points)**

*Please describe how you will leverage this project with other projects your company is engaged in. For example, are you working on any similar projects on nearby or adjacent lands*

**6. For planting projects, please describe how you will source plant materials and from where. (10 points)**

**7. Please describe the treatment methods that will be used to accomplish the scope(s) of work. (20 points)**

*Include the types of tools/equipment that will be used, types of herbicide, and any special considerations for accomplishing the work. For planting projects, describe how you will ensure an 80% survival rate.*



# Contractor Assurances

By submitting this proposal, I, the undersigned, understand contractors are assuring that:

- The Contractor(s) will provide proof of vehicle insurance (that will be on a project site), liability insurance, and worker's compensation insurance, if required by law. The successful offeror(s) shall provide the Guild with a Certificate of insurance with liability, naming the Forest Stewards Guild as an additional insured prior to signing of a contract. After providing initial proof of insurance, Contractor(s) is required to keep all insurances current. During the contract, if any insurance has changed or renewed it is the responsibility of the contractor to give this information to the Guild. All Contractors proposals will be reviewed for compliance with the mandatory requirements stated within the RFP. Proposals deemed non-responsive will be eliminated from further consideration.
- Have required that all of their employees have completed the I-9 form to certify that they are eligible for lawful employment under the Immigration and Nationality Act (8USC 1324a), as well as a W-4.
- Contractors must provide a W-9 if an agreement is signed and certify that their organization is not excluded or debarred from participating in any government databases such as on SAM or from entering into government contracts throughout the completion of the agreement
- The request does not commit the Guild to pay any costs incurred in the submittal of this proposal, or costs incurred in making necessary studies and designs for the preparation thereof, or to procure or contract for the services or supplies. It is further understood that the proposal response will become a part of the official file on this matter without obligation to the Guild. Issuance of this solicitation does not constitute an award commitment on the part of the Guild.
- The Contractor has the staff, facilities, and competence to furnish the services required under this agreement; the Guild will determine the adequacy of the staff, facilities, and competence of any Contractor considered for the award. For this purpose, an inspection of the Contractor's facilities, equipment, etc., may be made by representatives of the Guild.
- To receive consideration, representation submitted in response to this request must be signed by an officer or an official who has authority pursuant to this award.

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Printed name

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Signature

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Date