

## Washington Grove Meadow Restoration

### Goals:

- 1) **Reduction of Mature Trees**
- 2) **Control of NNI species**
- 3) **Reintroduction of Native Biological Diversity**
- 4) **Enhance Sound and View Barrier of Highway**
- 5) **Restoration/ Site Maintenance**

### Background

Around February of 2024, the Parks Department was contacted by representatives of Washington Grove's Meadow Committee to discuss the possibility of restoration of the meadow at Washington Grove Conservation Park. The Meadow Committee expressed their interest in restoring the open rural viewscape in the meadow, increasing native biological diversity, and reducing the coverage of non-native species. In response to this request, staff has met with committee members and residents on several occasions to discuss the process of achieving the above stated goals. Below is a written summary of the stated goals and steps to achieve those goals and includes ecological considerations when relevant.

### Reduction of Mature Trees

In discussion with the Meadow Committee, Parks stated that it tries to maintain meadow habitat with mature tree cover between 0-25%, and that reduction of trees should occur within the core of the meadow to create connected open habitat and restore historical viewsheds to the property, as identified in the Washington Grove Operation and Use Plan and Master Plan documents.

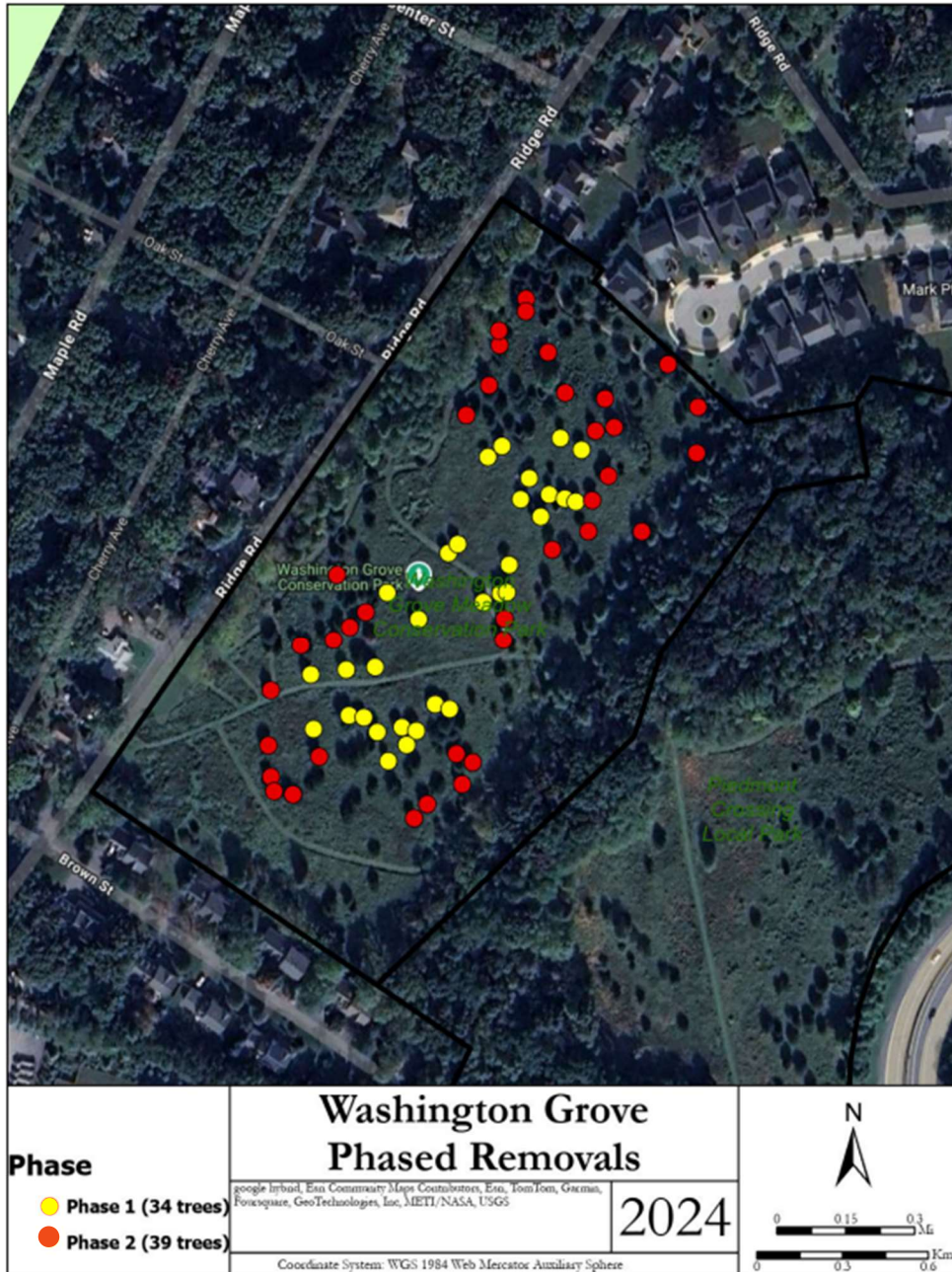
The first step was to ensure tree removal would be allowed under current Montgomery County Regulations. In coordination with Montgomery County Planning, a site review was conducted to determine if the site would qualify under Forest Conservation regulations. As there are currently less than one hundred trees per acre, it does not qualify under the Forest Conservation Act as a forest. It was also determined that Parks is exempt from county canopy regulations. Thus, proposed work can be conducted given current rules and regulations.

A two-phase removal plan (see below) was developed and shared with the Committee and residents. Phase One proposal is to remove thirty-four trees from the core of the habitat. Phase Two proposal is the removal of thirty-nine trees, including additional trees in the core of the habitat and creating a more natural edge of disperse trees to full canopy. After further discussions with Town residents and the Committee it was determined that removals should prioritize the removal of unhealthy trees (e.g., sick, split trunk).

Removal is to be funded by grant dollars and Parks would provide disposal of excess wood chips at its green waste facility. Phase one of the plan focused on the removal of trees or groups of trees within the center of the meadow. Some groupings of trees were identified to be kept, allowing for small animal cover and nesting and perching areas for birds. The goal of this phase was the creation of a more open core which could then be floristically enhanced by the reintroduction of native wildflowers and grasses supplied by the Parks nursery Pope Farm. Upon the completion of Phase One, the community could revisit the project and determine if it would like to proceed with Phase Two. Phase Two can be described

as edge maintenance. The goal of Phase Two would be to selectively remove mature trees to create a more natural boundary, with dispersed trees grading into more mature canopy around the edges.

As stated above, removal of the trees was proposed to achieve a more open meadow for a more historic viewshed and to enhance the meadow with native grasses and wildflowers. However, it is worth noting that as trees continue to grow vertically, the shade they cast over the meadow will continue to increase further limiting the availability of sunlight and subsequently the species that inhabit the area, especially open meadow plant species.



## Control of NNI Species

Residents and local volunteers have already begun to volunteer through the Parks WW program to control non-native invasive species at Washington Grove Conservation Park. This effort has included eighteen individual volunteers, contributing 83 hours of service to-date in 2024. Species controlled have included: mile-a-minute, wineberry, bittersweet, bush honeysuckle, and English ivy, among others.

Long-term the goal is to continue with non-native invasive species management through both volunteer efforts and annual work by Park Natural Resources Staff. It is anticipated that two volunteer events will be held annually if there is interest and more could be facilitated if necessary. Individual certified Weed Warrior volunteers may work whenever they choose.

Park Natural Resources Staff will also visit the site annually to address issues that cannot be addressed through volunteer action, e.g., any efforts that require herbicide treatments and to work with volunteers to identify priority species for control.

## Reintroduction of Native Biological Diversity

After the removal of trees and continued non-native control efforts the next step in the process would be to reintroduce or enhance native biological diversity. Plant materials can be supplied free of charge from the Parks' nursery – Pope Farm Nursery. Below is a list to give an idea of the species available. These species are predominantly sourced from Montgomery County, Maryland.

Latin Name	Common Name	Provenance
<i>Agastache nepetoides</i>	yellow giant hyssop	Little Bennett (Montgomery)
<i>Allium cernuum</i>	nodding onion	North Creek Nursery (PA)
<i>Allium tricoccum</i> (limited)	ramps	Silver Spring (Montgomery)
<i>Andropogon glomeratus</i>	bushy bluestem	Beltsville (Prince George's)
<i>Andropogon ternarius</i> 'Black Mountain'	Black Mountain bluestem	Black Mountain, NC
<i>Andropogon virginicus</i>	broomsedge	Little Bennett (Montgomery)
<i>Anemone virginiana</i>	thimbleweed	Little Bennett (Montgomery)
<i>Antennaria howellii</i>	Howell's pussytoes	Potomac (Montgomery)
<i>Antennaria neglecta</i>	field pussytoes	Anne Arundel
<i>Antennaria parlinii</i>	Parlin's pussytoes	Anne Arundel
<i>Antennaria plantaginifolia</i>	plantainleaf pussytoes	Northwest Branch (Montgomery)
<i>Aquilegia canadensis</i>	wild columbine	Little Bennett (Montgomery)
<i>Aralia racemosa</i>	American spikenard	Rosaryville (Prince George's)
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit	Little Bennett (Montgomery)
<i>Aronia arbutifolia</i>		
<i>Asarum canadense</i>	wild ginger	Cabin John (Montgomery)
<i>Asclepias incarnata</i> sbsp <i>pulchra</i>	swamp milkweed	Beach Drive (Montgomery)

<i>Asclepias purpurascens</i> (limited)	purple milkweed	Potomac (Montgomery)
<i>Asclepias syriaca</i>	common milkweed	Silver Spring (Montgomery)
<i>Asclepias tuberosa</i>	butterflyweed	Maydale (Montgomery)
<i>Baptisia australis</i>	blue wild indigo	Potomac (Montgomery)
<i>Baptisia tinctoria</i>	yellow wild indigo	Potomac (Montgomery)
<i>Boehmeria cylindrica</i>	false nettle	Silver Spring (Montgomery)
<i>Cardamine concantenata</i> (limited)	cutleaf toothwort	Silver Spring (Montgomery)
<i>Carex albicans</i>	white-tinged sedge	Bethesda (Montgomery)
<i>Carex cherokeensis</i>	cherokee sedge	North Creek Nursery (PA)
<i>Carex crinita</i>	fringed sedge	Gaithersburg (Montgomery)
<i>Carex grayi</i>	Gray's sedge	Potomac (Montgomery)
<i>Carex laxiculmis</i>	spreading sedge	Silver Spring (Montgomery)
<i>Carex lurida</i>	sallow sedge	Gaithersburg (Montgomery)
<i>Carex platyphylla</i>	silver sedge	Potomac (Montgomery)
<i>Carex radiata</i>	eastern star sedge	Bethesda (Montgomery)
<i>Carex rosea</i>	rosy sedge	Beach Drive (Montgomery)
<i>Carex tribuloides</i>	blunt broom sedge	
<i>Carex vulpinoidea</i>	fox sedge	Little Bennett (Montgomery)
<i>Cerastium velutinum</i>	field chickweed	Potomac (Montgomery)
<i>Chasmanthium latifolium</i>	wood oats	Carderock (Montgomery)
<i>Chasmanthium laxum</i>	slender wood oats	Beltsville (Prince George's)
<i>Chelone glabra</i>	white turtlehead	McKee-Beshers (Montgomery)
<i>Chrysopsis mariana</i>	Maryland goldenaster	Beltsville (Prince George's)
<i>Cinna arundinacea</i>	sweet woodreed	Northwest Branch (Montgomery)
<i>Clematis virginiana</i>	virgin's bower	Little Bennett (Montgomery)
<i>Clinopodium vulgare</i>	wild basil	Maydale (Montgomery)
<i>Coleataenia anceps</i>	beaked panicgrass	Northwest Branch (Montgomery)
<i>Conoclinium coelestinum</i>	blue mistflower	Northwest Branch (Montgomery)
<i>Coreopsis verticillata</i>	threadleaf tickseed	Potomac (Montgomery)
<i>Cunila origanoides</i>	common dittany	River Road Shale Barren (Montgomery)
<i>Danthonia spicata</i>	poverty oatgrass	River Road Shale Barren (Montgomery)
<i>Delphinium exaltatum</i>	tall larkspur	Prairie Moon seed (state rare)
<i>Dicentra canadensis</i>	squirrel corn	Silver Spring (Montgomery)
<i>Dichantherium clandestinum</i>	deertongue grass	Potomac (Montgomery)
<i>Dichantherium polyanthes</i>	roundseed deertongue	Rosaryville (Prince George's)
<i>Dichantherium scoparium</i>	velvet deertongue	Potomac (Montgomery)
<i>Dioscorea villosa</i>	wild yam	Wheaton Regional (Montgomery)
<i>Echinacea</i> 'Fragrant Angel'	white coneflower	purchased plant, cultivar of native
<i>Echinacea purpurea</i>	purple coneflower	purchased plant, native to mid-atlantic
<i>Echinacea</i> 'White Swan'	white coneflower	New Moon Nursery, NJ
<i>Elephantopus carolinianus</i>	elephant's foot	Beach Drive (Montgomery)

<i>Elymus hystrix</i>	bottlebrush grass	Northwest Branch (Montgomery)
<i>Elymus riparius</i>	riverbank wild rye	Northwest Branch (Montgomery)
<i>Elymus virginicus</i>	Virginia wild rye	Beach Drive (Montgomery)
<i>Eragrostis spectabilis</i>	purple love grass	Potomac (Montgomery)
<i>Eupatorium hyssopifolium</i>	hyssopleaf thoroughwort	Potomac (Montgomery)
<i>Eupatorium perfoliatum</i>	boneset	Little Bennett (Montgomery)
<i>Eupatorium rotundifolium</i>	roundleaf thoroughwort	Buck Lodge (Prince George's)
<i>Euphorbia corollata</i>	euphorbia	Little Bennett (Montgomery)
<i>Eurybia divaricata</i>	white wood aster	Northwest Branch (Montgomery)
<i>Euthamia caroliniana</i>	slender goldentop	Lewes, DE
<i>Euthamia graminifolia</i>	grassleaf goldenrod	Pope farm surrounds (Montgomery)
<i>Eutrochium dubium</i>	coastal joe pye weed	Beltsville (Prince George's)
<i>Eutrochium fistulosum</i>	hollow joe pye weed	Little Bennett (Montgomery)
<i>Fragaria virginiana</i>	wild strawberry	Montgomery County
<i>Geranium maculatum</i>	wild geranium	Cabin John (Montgomery)
<i>Helenium autumnale</i>	yellow sneezeweed	Susquehanna River (Cecil)
<i>Helenium flexuosum</i>	purple sneezeweed	Anne Arundel
<i>Helianthus divaricatus</i>	woodland sunflower	Potomac (Montgomery)
<i>Helianthus giganteus</i>	giant sunflower	Fairfax, VA
<i>Helianthus occidentalis</i>	western sunflower	Potomac (Montgomery)
<i>Heliopsis helianthoides</i>	smooth oxeye	Little Bennett (Montgomery)
<i>Heuchera americana</i>	alumroot	Lake Frank (Montgomery)
<i>Heuchera villosa</i>	hairy alumroot	purchased plant, native to mid-atlantic
<i>Hibiscus coccineus</i>	scarlet mallow	Brookside gardens, southeast native
<i>Hibiscus laevis</i>	halberdleaf mallow	Susquehanna River (Cecil)
<i>Hibiscus moscheutos</i>	rose mallow	Potomac (Montgomery)
<i>Hydrophyllum canadense</i>	canada waterleaf	Potomac (Montgomery)
<i>Ionactis linarifolia</i>	stiff aster	Potomac (Montgomery)
<i>Iris versicolor</i>	Blockhouse point	Potomac (Montgomery)
<i>Juncus effusus</i>	common rush	Pope farm surrounds (Montgomery)
<i>Juncus tenuis</i>	path rush	McKenney Hills (Montgomery)
<i>Lespedeza violaceae</i>	slender lespedeza	Little Bennett (Montgomery)
<i>Liatris pilosa</i>	shaggy blazing star	Cheverly (Prince George's)
<i>Liatris spicata</i>	gayfeather	Sterling, VA (Loudoun)
<i>Liatris squarosa</i>	scaly blazing star	New Moon Nursery, NJ
<i>Lillium superbum</i>	Turk's cap lily	Little Bennett (Montgomery)

<i>Lobelia cardinalis</i>	cardinal flower	Meadowside, Little Bennett (Montgomery)
<i>Lobelia siphilitica</i>	great blue lobelia	Potomac (Montgomery)
<i>Ludwigia alternifolia</i>	seedbox	Beltsville (Prince George's)
<i>Luzula echinata</i>	hedgehog woodrush	McKenney Hills (Montgomery)
<i>Lysimachia lanceolata</i> var. <i>purpurea</i>	lanceleaf loostrike	New Moon Nursery, NJ
<i>Maianthemum racemosum</i>	false Solomon's Seal	Silver Spring (Montgomery)
<i>Melica mutica</i>	two flower melic grass	Potomac (Montgomery)
<i>Mimulus alatus</i>	winged monkeyflower	Rosaryville (Prince George's)
<i>Mimulus ringens</i>	monkeyflower	Maydale (Montgomery)
<i>Monarda clinopodia</i>	white bergamot	Potomac (Montgomery)
<i>Monarda didyma</i>	beebalm	Frostburg (Allegheny)
<i>Monarda fistulosa</i>	wild bergamot	Rachel Carson (Montgomery)
<i>Monarda punctata</i>	spotted mint	Sellman Road (Prince George's)
<i>Oenothera fruticosa</i>	narrowleaf sundrops	Little Bennett (Montgomery)
<i>Packera anonyma</i>	Small's ragwort	
<i>Packera aurea</i>	golden ragwort	Northwest Branch (Montgomery)
<i>Packera obovata</i>	roundleaf ragwort	River Road Shale Barren (Montgomery)
<i>Parthenocissus quinquefolia</i>	Virginia creeper	Rosaryville (Prince George's)
<i>Penstemon calycosus</i>	long sepal beardtongue	Donated seed stock, east coast native
<i>Penstemon digitalis</i>	beardtongue	Little Bennett (Montgomery)
<i>Penstemon hirsutus</i>	hairy beardtongue	River Road Shale Barren (Montgomery)
<i>Phlox divaricata</i>	wild phlox	Potomac (Montgomery)
<i>Phlox paniculata</i>	tall phlox	Meadowbrook (Montgomery)
<i>Phlox paniculata</i> 'Jeana'	garden phlox 'Jeane'	New Moon Nursery, NJ
<i>Phlox stolonifera</i>	creeping phlox	Donated seed stock, east coast native
<i>Phlox subulata</i>	moss phlox	Allegheny county
<i>Podophyllum peltatum</i>	may apple	Silver Spring (Montgomery)
<i>Pycnanthemum incanum</i>	hoary mountain mint	Dan's Mountain (Allegheny)
<i>Pycnanthemum muticum</i>	mountain mint	Little Bennett (Montgomery)
<i>Pycnanthemum tenuifolium</i>	narrowleaf mtn. mint	Little Bennett (Montgomery)
<i>Pycnanthemum torreyi</i>	Torrey's mint	Huntingdon PA
<i>Pycnanthemum virginianum</i>	Virginia mountain mint	Little Bennett (Montgomery)
<i>Rudbeckia fulgida</i>	orange coneflower	Potomac (Montgomery)
<i>Rudbeckia laciniata</i>	cutleaf coneflower	Little Bennett (Montgomery)
<i>Rudbeckia triloba</i>	brown-eyed susan	Little Bennett (Montgomery)
<i>Ruellia caroliniensis</i>	wild petunia	Pope farm surrounds (Montgomery)

<i>Ruellia humilis</i>	fringeleaf wild petunia	North Creek nursery (PA)
<i>Ruellia strepens</i>	limestone wild petunia	Potomac (Montgomery)
<i>Salvia lyrata</i>	lyreleaf sage	Northwest Branch (Montgomery)
<i>Sanguinaria canadensis</i>	bloodroot	Bethesda (Montgomery)
<i>Schizachyrium scoparium</i>	little bluestem grass	Little Bennett (Montgomery)
<i>Scirpus cyperinus</i>	woolgrass	Beach Drive (Montgomery)
<i>Scirpus georgianus</i>	Georgia bulrush	Pope farm surrounds (Montgomery)
<i>Scutellaria incana</i>	hoary skullcap	New Moon Nursery, NJ
<i>Scutellaria integrifolia</i>	skullcap	Little Bennett (Montgomery)
<i>Sedum ternatum</i>	wild stonecrop	Potomac (Montgomery)
<i>Senna hebecarpa</i>	wild senna	Potomac (Montgomery)
<i>Senna marilandica</i>	Maryland senna	Little Bennett (Montgomery)
<i>Sericocarpus linifolius</i>	narrowleaf whitetop aster	Potomac (Montgomery)
<i>Sisyrinchium angustifolium</i>	blue-eyed grass	Lake Frank (Montgomery)
<i>Sium suave</i>	water parsnip	Little Bennett (Montgomery)
<i>Solidago bicolor</i>	silverrod	Potomac (Montgomery)
<i>Solidago caesia</i>	wreath goldenrod	Northwest Branch (Montgomery)
<i>Solidago erecta</i>	slender goldenrod	Riverdale (Prince George's)
<i>Solidago flexicaulis</i>	zigzag goldenrod	Potomac (Montgomery)
<i>Solidago juncea</i>	early goldenrod	Little Bennett (Montgomery)
<i>Solidago nemoralis</i>	grey goldenrod	Little Bennett (Montgomery)
<i>Solidago odora</i>	sweet goldenrod	Furnacetown (Worchester)
<i>Solidago rugosa</i>	wrinkleleaf goldenrod	Pope farm surrounds (Montgomery)
<i>Sorghastrum nutans</i>	indiangrass	Potomac (Montgomery)
<i>Spigelia marilandica</i>	indian pink	Brookside gardens, southeast native
<i>Symphotrichum cordifolium</i>	blue wood aster	Potomac (Montgomery)
<i>Symphotrichum laeve</i>	smooth aster	Potomac (Montgomery)
<i>Symphotrichum lateriflorum</i>	calico aster	Silver Spring (Montgomery)
<i>Symphotrichum novae-angliae</i>	New England aster	Maydale (Montgomery)
<i>Symphotrichum oblongifolium</i>	aromatic aster	Potomac (Montgomery)
<i>Symphotrichum pilosum</i>	frost aster	Little Bennett (Montgomery)
<i>Symphotrichum puniceum</i>	purplestem aster	Pope farm surrounds (Montgomery)
<i>Symphotrichum undulatum</i>	wavyleaf aster	Little Bennett (Montgomery)
<i>Thalictrum pubescens</i>	tall meadow rue	Little Bennett (Montgomery)
<i>Thalictrum revolutum</i>		
<i>Thalictrum thalictroides</i>	rue anemone	Meadowside, (Montgomery)

Tiarella cordifolia	foamflower	North Creek nursery (PA)
Tradescantia virginiana	Virginia spiderwort	Potomac (Montgomery)
Tridens flavus	purpletop	Little Bennett (Montgomery)
Trillium cuneatum (limited)	Sweet Betsy	Bethesda (Montgomery)
Uvularia perfoliata	perfoliate bellwort	
Valeriana pauciflora	large-flowered valerian	Potomac (Montgomery)
Verbena hastata	blue vervain	Anne Arundel
Verbesina alternifolia	wingstem	Little Bennett (Montgomery)
Vernonia noveboracensis	ironweed	Beach Drive (Montgomery)
Veronicastrum virginicum	Culver's root	Potomac (Montgomery)
Viola primulifolia	primroseleaf violet	
Viola pubescens	downy yellow violet	Wheaton Regional (Montgomery)
Viola striata	striped cream violet	Silver Spring (Montgomery)
Zizia aurea	golden alexanders	Potomac (Montgomery)
FERNS: (SUBJECT TO AVAILABILITY) Limit 2 ferns		
Athyrium filix-femina	lady fern	Casa Flora or rescue
Dryopteris marginalis*	marginal fern	Casa Flora or rescue
Onoclea sensibilis*	sensitive fern	Casa Flora or rescue
Osmunda cinnamomea*	cinnamon fern	Casa Flora or rescue
Osmunda regalis*	regal fern	Casa Flora or rescue
Polystichum acrostichoides*	Christmas fern	Casa Flora or rescue

Parks will work with the Town of Washington Grove to determine the type of pollinators/ invertebrates they would like to attract and select species for plantings based on those criteria. While it cannot be guaranteed that we can provide species to meet all requests, any significant increase in native biological diversity is likely to be paralleled by an increase in pollinator diversity. Plantings can take place as a volunteer event. In general, Pope Farm nursery offers plant pick-ups in the spring and another in the fall.

#### **Enhance Sound and View Barrier of Highway**

Parks will also work with the Town of Washington Grove to determine woody species that can be planted within the tree lines to obstruct the view and possibly reduce the sound of highway traffic. This effort will require the planting of shade tolerant understory species such as winterberry. A list of tree and shrub species available from Pope Farm is provided below.

shrub	Coronus sericea	Red Osier
shrub	Aronia arbutifolia (Photinia pyrifera)	Red Chokeberry
shrub	Abelia	Rose Creek Abelia



shrub	Abelia x Rose Creek	Rose Creek Abelia
shrub	Abelia x Sunshine Daydream	Sunshine Daydream Abelia
shrub	Aesculus glabra	Ohio Buckeye
shrub	Aesculus parviflora	Bottlebrush Buckeye
shrub	Aesculus parviflora	Bottlebrush Buckeye
shrub	Aesculus pavia	Red Buckeye
shrub	Aesculus pavia	Red Buckeye
shrub	Alnus serrulata	Smooth Alder
shrub	Alnus serrulata	Smooth Alder
shrub	Amelanchier canadensis	Serviceberry
shrub	Aronia melanocarpa	Aronia 'Lowscape Snowfire'
shrub	Boxwood 'Bab Gem'	Baby Gem' Boxwood
shrub	Buddleia 'Miss Ruby'	Miss Ruby Butterfly Bush
shrub	Calacarpa americana	Beautyberry
shrub	Callicarpa 'Pearl Glam'	Pearl Glam Beautyberry
shrub	Cephalanthus occidentalis	Buttonbush
shrub	Cephalanthus occidentalis	Buttonbush
shrub	Cephalanthus occidentalis 'Sugar Shack'	Sugar Shack Buttonbush
shrub	Cephalotaxus harringtonia 'Dukes Garden'	Dukes Garden Jap. Plum Yew
shrub	Cephalotaxus harringtonia 'Fastigiata'	Fastigate Plum Yew
shrub	Cephalotaxus harringtonia 'Fastigiata'	Fastigate Plum Yew
shrub	Chaemaecyparis 'Haywire'	Haywire False Cypress
shrub	Chamaecyparis pisifera 'Gold Mop'	Gold Mop False Cypress
shrub	Chamaecyparis lawsoniana	False Cypress 'Haywire'
shrub	Chamaecyparis pisifera	False Cypress 'Cedar Rapids'
shrub	Chionanthus virginicus	Fringetree
shrub	Clethra alnifolia 'Ruby Spice'	Summer Sweet 'Ruby Spice'
shrub	Clethra alnifolia 'Sugartina Crystalina'	Summer Sweet 'Sugartina Crystalina'
shrub	Cornus alternifolia	Pagoda Dogwood
shrub	Cornus amomum	Silky Dogwood
shrub	Cornus amomum	Silky Dogwood
shrub	Cornus sericea	Red Osier Dogwood

shrub	<i>Cornus stolonifera</i> Artic Fire	Artic Fire Red Twig Dogwood
shrub	<i>Cornus stolonifera</i> Artic Fire	Artic Fire Red Twig Dogwood
shrub	<i>Corylus americana</i>	American Filbert
shrub	<i>Cotinus coggygia</i> 'Winecraft Black'	Winecraft Black Smokebush
shrub	<i>Diervilla</i> 'Kodiak Black'	Kodiak Black Diervilla
shrub	<i>Diervilla</i> 'Kodiak Fresh'	Kodiak Fresh Diervilla
shrub	<i>Diervilla</i> 'Kodiak Red'	Kodiak Red Diervilla
shrub	<i>Distillium</i> 'Blue Cascade'	Blue Cascade' Distillium
shrub	<i>Distillium</i> 'Coppertone'	Coppertone' Distillium
shrub	<i>Distillium</i> 'Linebacker'	Linebacker' Distillium
shrub	<i>Distylium</i> 'Emerald Heights'	Emerald Heights Distylium
shrub	<i>Duetzia</i> 'Yuki Snowflake'	Yuki Snowflake Duetzia
shrub	<i>Duetzia</i> 'Yuki Snowflake'	Yuki Snowflake Duetzia
shrub	<i>Euonymus americanus</i>	Strawberry Bush
shrub	<i>Euonymus americana</i> (cuttings)	Strawberry Bush
shrub	<i>Forsythia</i> Gold Tide	Forsythia
shrub	<i>Fothergilla gardenii</i>	Dwarf Fothergilla
shrub	<i>Fothergilla gardenii</i>	Dwarf Fothergilla
shrub	<i>Fothergilla x intermedia</i> 'Legends of the Fall'	Legends of the Fall Bottlebrush
shrub	<i>Hibiscus syriacus</i> 'Azurri Blue Satin'	Azurri Blue Satin Rose of Sharon
shrub	<i>Hydrangea quercifolia</i> 'Gatsby'	Hydrangea
shrub	<i>Hydrangea quercifolia</i> 'Gatsby'	Hydrangea
shrub	<i>Hydrangea quercifolia</i> 'Snow Queen'	Snow Queen Oakleaf Hydrangea
shrub	<i>Hydrangea paniculata</i>	Hydrange 'Limelight Prime'
shrub	<i>Hypericum</i> 'Blues Festival'	St John Wort
shrub	<i>Hypericum prolificum</i>	Shrubby St John's Wort
shrub	<i>Hypericum</i> 'Sunny Boulevard'	St John Wort
shrub	<i>Ilex glabra</i> 'Compacta'	Compact Inkberry
shrub	<i>Ilex</i> 'Nigra'	Ink Berry 'Nigra'
shrub	<i>Ilex verticillata</i>	Winterberry
shrub	<i>Ilex verticillata</i>	Winterberry
shrub	<i>Ilex verticillata</i> ' Mr. Poppins'	Mr. Poppins Winterbrry
shrub	<i>Ilex verticillata</i> 'Berry Gold'	Berry Gold Winterberry

shrub	<i>Ilex verticillata</i> 'Berry Poppins'	Berry Poppins Winterberry
shrub	<i>Ilex verticillata</i> 'Winter Red'	Winter Red Winterberry
shrub	<i>Ilex</i> x 'Castle Spire'	Castle Spire Blue Holly
shrub	<i>Ilex</i> x 'Castle Wall'	Castle Wall Blue Holly
shrub	<i>Itea virginica</i>	<i>Itea</i> 'Henerys Garnet'
shrub	<i>Juniperus chinensis</i> 'Montana Moss'	Montana Moss Juniper
shrub	<i>Juniperus chinensis</i> 'Montana Moss'	Montana Moss Juniper
shrub	<i>Juniperus communis</i> 'Tortuga'	Tortuga Juniper
shrub	<i>Lagerstroemia</i>	Crape Myrtle
shrub	<i>Lagerstroemia indica</i> 'Rikki Tikki Rouge'	Dwarf Crape Myrtle Rikki Tikki Rouge
shrub	<i>Leptodermis oblonga</i>	Leptodermis
shrub	<i>Leucothoe axillaris</i> 'Rejoyce''	Coast <i>Leucothoe</i> 'Rejoyce'
shrub	<i>Lindera benzoin</i>	Spicebush
shrub	<i>Lindera benzoin</i>	Spicebush
shrub	<i>Lindera benzoin</i>	Spicebush
shrub	<i>Lindera benzoin</i>	Spicebush
shrub	<i>Lindera benzoin</i>	Spicebush
shrub	<i>Lindera benzoin</i>	Spicebush
shrub	<i>Magnolia virginiana</i>	Sweet Bay Magnolia
shrub	<i>Myrica pennsylvanica</i>	Northern Bayberry
shrub	<i>Myrica pennsylvanica</i>	Northern Bayberry
shrub	<i>Myrica pennsylvanica</i>	Northern Bayberry
shrub	<i>Myrica pensylvanica</i>	Northern Bayberry
shrub	Ninebark	Ninebark 'Ginger Wine'
shrub	<i>Osmanthus</i> x 'Fortunei'	Fortune's <i>Osmanthus</i>
shrub	<i>Osmanthus</i> x 'Goshiki'	<i>Osmanthus</i>
shrub	<i>Potentilla</i> Happy Face White	Happy Face Bush Cinquefoil
shrub	<i>Rhamnus</i> 'Fine Line'?	Buckthorn
shrub	<i>Rhus aromatica</i> 'Gro Low'	Gro Low Sumac
shrub	<i>Rhus aromatica</i> 'Gro Low'	Gro Low Sumac
shrub	<i>Rhus</i> 'Tiger Eyes'	Tiger Eyes Sumac
shrub	<i>Sambucus canadensis</i>	Elderberry
shrub	<i>Sambucus canadensis</i>	Elderberry

shrub	<i>Sambucus nigra</i> 'Black Beauty'	Black Beauty Elderberry
shrub	<i>Sambucus racemosa</i> 'Lemony Lace'	Lemony Lace Sambucus
shrub	<i>Sarcococca hookeriana</i>	Sweetbox 'Sweet & Low'
shrub	<i>Spiraea alba</i>	Meadowsweet Spirea
shrub	<i>Spiraea</i> 'Double Play Blue Kazoo'	Blue Kazoo Spirea
shrub	<i>Spiraea</i> 'Double Play Doozie'	Double Play Doozie Spirea
shrub	<i>Spiraea</i> 'Double Play Red'	Double Play Red Spirea
shrub	<i>Spiraea tomentosa</i>	Steeplebush
shrub	<i>Spirea latifolia</i>	White Meadowsweet
shrub	<i>Spirea tomentosa</i>	Spirea
shrub	<i>Spirea tomentosa</i>	meadowsweet
shrub	<i>Thuja occidentalis</i>	Arborvitae
shrub	<i>Thuja occidentalis</i> 'North Pole'	North Pole Arborvitae
shrub	<i>Thuja occidentalis</i> 'North Pole'	North Pole Arborvitae
shrub	<i>Thuja occidentalis</i> 'Spring Grove'	Spring Grove Arborvitae
shrub	<i>Thuja occidentalis</i> 'Woodward Globe'	Woodward Globe Arborvitae
shrub	<i>Vaccinium corymbosum</i>	Highbush Blueberry
shrub	<i>Viburnum</i> 'Sweet Talker'	Fragrant Viburnum
shrub	<i>Viburnum acerfolium</i>	Maple Leaf Viburnum
shrub	<i>Viburnum dentatum</i>	Arrowood
shrub	<i>Viburnum dentatum</i>	Arrowood
shrub	<i>Viburnum dentatum</i>	Arrowood
shrub	<i>Viburnum lentago</i>	Nannyberry
shrub	<i>Viburnum nudum</i> 'Bulk' Brandywine'	BrandywineSouthern witherod Viburnum
shrub	<i>Viburnum nudum</i> 'Bulk' Brandywine'	BrandywineSouthern witherod Viburnum
shrub	<i>Viburnum odoratissimum</i>	Viburnum 'Coppertop'
shrub	<i>Viburnum prunifolium</i>	Blackhaw Viburnum
shrub	<i>Viburnum prunifolium</i>	Blackhaw Viburnum
shrub	<i>Viburnum prunifolium</i>	Blackhaw Viburnum
shrub	<i>Viburnum prunifolium</i>	Blackhaw Viburnum
shrub	<i>Viburnum trilobum</i> 'Red Wing'	Redwing American Cranberry Bush
shrub	<i>Viburnum x burkwoodii</i> 'Conoy'	Conoy Viburnum

shrub	Viburnum x burkwoodii 'Conoy'	Conoy Viburnum
shrub	Vitex 'Summer blues'	
shrub	Weigela florida 'Czezmark Two Pink	Czezmark Two Pink Weigela
shrub	Weigela Sonic Bloom Red	Sonic Bloom Red Weigela
shrub	Weigela 'Wine & Spirits'	Weigela 'Wine & Spirits'
shrub	Xanthorhiza simplicissima	Yellowroot
tree	Abies nordmanniana	Nordman Fir
tree	Acer rubrum	Red Maple
tree	Acer rubrum	Red Maple
tree	Acer rubrum	Red Maple
tree	Asimina triloba	Paw Paw
tree	Asimina triloba	PawPaw
tree	Asimina triloba	PawPaw
tree	Asimina triloba	PawPaw
tree	Asimina triloba 'Alleghany'	Alleghany PawPaw
tree	Asimina triloba 'Atwood'	Atwood Paw Paw
tree	Asimina triloba 'KSU Atwood''	KSU Atwood Paw Paw
tree	Asimina triloba 'KSU Chappell'	PawPaw
tree	Asimina triloba 'Mango Graft'	Mango Paw Paw
tree	Asimina triloba 'Mango Graft'	Mango Grafted Paw Paw
tree	Asimina triloba 'NS1'	NS 1 PawPaw
tree	Asimina triloba 'Pennsylvania Gold'	Pennsylvania Gold Grafted Paw Paw
tree	Asimina triloba 'Potomac'	Potomac Grafted Paw Paw
tree	Asimina triloba 'Prolific'	Prolific PawPAW
tree	Asimina triloba 'Rappahannock'	Rappahannock PawPaw
tree	Asimina triloba 'Sunflower'	Sunflower Paw Paw
tree	Asimina triloba 'Sunflower'	Sunflower Paw Paw
tree	Asimina triloba 'Tallahachee'	Tallahachee PawPAW
tree	Asimina triloba 'Tallahae'	PawPaw
tree	Asimina triloba 'Wabash'	Wabash Grafted Paw Paw
tree	Asimina triloba 'Wells'	Wells PawPAW
tree	Betula nigra	River Birch- single

tree	<i>Betula nigra</i>	River Birch- single
tree	<i>Betula nigra</i>	River Birch- single
tree	<i>Betula nigra</i>	River Birch- single
tree	<i>Carpinus caroliniana</i>	American Hornbeam
tree	<i>Carpinus caroliniana</i>	American Hornbeam
tree	<i>Carpinus caroliniana</i>	American Hornbeam
tree	<i>Carpinus caroliniana</i>	American Hornbeam
tree	<i>Carpinus caroliniana</i>	American Hornbeam
tree	<i>Carya glabra</i>	Pignut Hickory
tree	<i>Carya ovata</i>	Shagbark Hickory
tree	<i>Carya ovata</i>	Shagbark Hickory
tree	<i>Celtis occidentalis</i>	Hackberry
tree	<i>Celtis occidentalis</i>	Hackberry
tree	<i>Celtis occidentalis</i> (seed grown)	Hackberry
tree	<i>Cercis canadensis</i>	Redbud
tree	<i>Cercis canadensis</i>	Redbud
tree	<i>Cercis canadensis</i>	Redbud
tree	<i>Cercis canadensis</i>	Redbud
tree	<i>Cercis canadensis</i>	Redbud
tree	<i>Cornus florida</i>	Dogwood
tree	<i>Cornus florida</i>	Flowering Dogwood
tree	<i>Cornus florida</i>	Flowering Dogwood
tree	<i>Cornus florida</i>	Flowering Dogwood
tree	<i>Cornus florida</i>	Flowering Dogwood
tree	<i>Diospyros virginiana</i>	Persimmon
tree	<i>Diospyros virginiana</i>	Persimmon
tree	<i>Fagus grandifolia</i>	American Beech
tree	<i>Fagus grandifolia</i>	American Beech
tree	<i>Fagus grandifolia</i>	American Beech
tree	<i>Fagus grandifolia</i>	American Beech
tree	<i>Hamamelis virginiana</i>	Witchhazel
tree	<i>Ilex opaca</i>	American Holly
tree	<i>Ilex opaca</i>	American Holly

tree	<i>Ilex opaca</i>	American Holly
tree	<i>Juniper virginiana</i>	Eastern Red Cedar
tree	<i>lagerstoemia</i>	Crape Myrtle 'Scarlett'
tree	<i>Liquidambar styraciflua</i>	Sweet Gum
tree	<i>Liquidambar styraciflua</i>	Sweet Gum
tree	<i>Liquidambar styraciflua</i>	Sweet Gum
tree	<i>Liquidambar styraciflua</i>	Sweet Gum
tree	<i>Liquidambar styraciflua</i>	Sweet Gum
tree	<i>Liriodendron tulipifera</i>	Tulip Poplar
tree	<i>Liriodendron tulipifera</i>	Tulip Poplar
tree	<i>Liriodendron tulipifera</i>	Tulip Poplar
tree	<i>Liriodendron tulipifera</i>	Tulip Poplar
tree	<i>Magnolia virginiana</i>	Sweet Bay Magnolia
tree	<i>Magnolia virginiana</i>	Sweet Bay Magnolia
tree	<i>Nyssa sylvatica</i>	Black Gum
tree	<i>Nyssa sylvatica</i>	Black Gum
tree	<i>Nyssa sylvatica</i>	Black Gum
tree	<i>Nyssa sylvatica</i>	Black Gum
tree	<i>Nyssa sylvatica</i>	Black Gum
tree	<i>Oxydendrum arboreum</i>	Sourwood
tree	<i>Pinus virginiana</i>	Virginia Pine
tree	<i>Pinus virginiana</i>	Virginia Pine
tree	<i>Platanus occidentalis</i>	Sycamore
tree	<i>Platanus occidentalis</i>	Sycamore
tree	<i>Platanus occidentalis</i>	Sycamore
tree	<i>Platanus occidentalis</i>	Sycamore
tree	<i>Prunus serotina</i>	Black Cherry
tree	<i>Quercus alba</i>	White Oak
tree	<i>Quercus alba</i>	White Oak
tree	<i>Quercus alba</i>	White Oak
tree	<i>Quercus bicolor</i>	Swamp White Oak
tree	<i>Quercus bicolor</i>	Swamp White Oak
tree	<i>Quercus bicolor</i>	Swamp White Oak

Tree	<i>Quercus bicolor</i>	Swamp White Oak
tree	<i>Quercus coccinea</i>	Scarlet Oak
tree	<i>Quercus coccinea</i>	Scarlet Oak
tree	<i>Quercus coccinea</i>	Scarlet Oak
tree	<i>Quercus coccinea</i>	Scarlett Oak
tree	<i>Quercus falcata</i>	Southern Red Oak
tree	<i>Quercus imbricaria</i>	Shingle Oak
tree	<i>Quercus macrocarpa</i>	Bur Oak
tree	<i>Quercus muehlenbergia</i>	Chinkapin Oak
tree	<i>Quercus pagoda</i>	Swamp White Oak
tree	<i>Quercus palustris</i>	Pin Oak
tree	<i>Quercus palustris</i>	Pin Oak
tree	<i>Quercus palustris</i>	Pin Oak
tree	<i>Quercus palustris</i>	Pin Oak
tree	<i>Quercus phellos</i>	Willow Oak
tree	<i>Quercus phellos</i>	Willow Oak
tree	<i>Quercus phellos</i>	Willow Oak
tree	<i>Quercus prinus</i>	Chestnut Oak
tree	<i>Quercus prinus</i>	Chestnut Oak
tree	<i>Quercus rubra</i>	Northern Red Oak
tree	<i>Quercus rubra</i>	Northern Red Oak
tree	<i>Quercus rubra</i>	Northern Red Oak
tree	<i>Quercus rubra</i>	Northern Red Oak
tree	<i>Quercus rubra</i>	Northern Red Oak
tree	<i>Quercus shumardii</i>	Shumard Oak
tree	<i>Quercus velutina</i>	Black Oak
tree	<i>Quercus velutina</i>	Black Oak
tree	<i>Sassafras albidum</i>	Sassafras
tree	<i>Sassafras albidum</i>	Sassafras
tree	<i>Sassafras albidum</i>	Sassafras
tree	<i>Ulmus rubra</i>	Slippery Elm
tree	<i>Juniperus virginiana</i>	Eastern Red Cedar
tree	<i>Cercis canadensis</i> (seed)	Redbud



### **Restoration/ Site Maintenance**

The most important aspect of this project is the maintenance of the meadow to maintain restoration efforts. As mentioned above this would be achieved through two mechanisms: the Weed Warriors and Park staff. Park staff will work in coordination with volunteers to identify strategic targets and coordinate work with staff to ensure noticeable progress. As invasive species are controlled and replaced with native wildflowers and grasses, the system will become more resilient to re-invasion. While upfront efforts are significant, over time, effort should reduce as non-native invasive species are removed and native species begin to dominate.