

**2013 PROJECT CANOPY ASSISTANCE
TREE PLANTING AND MAINTENANCE**
USDA FOREST SERVICE-URBAN AND COMMUNITY FORESTRY CFDA 10:675

Applicant (Entity Name): Town of Cape Elizabeth: The Arboretum at Fort Williams Park

*Designated Representative: Michael McGovern

Title: Town Manager

Address: 320 Ocean House Road

Cape Elizabeth, ME 04107

Phone Number: 799-7665 Email Address: michael.mcGovern@capeelizabeth.org

Applicant's Federal Identification Number: 01-6000-100

Previously Received Community Forestry Assistance Funding Yes No

Does your community have a comprehensive plan, which includes forestry? Yes No

Date certified by Department of Agriculture, Conservation, and Forestry: October 19, 2007

Short Project Title: Cliff Walk Entrance

Budget: Please refer to next page

Name of State Senator

Name of State Representative

~~Angus King~~ Rebecca Mullet
Kimberly J. Monaghan-Derrig

Budget:

GRANT REQUEST					LOCAL MATCH	
Tree & Shrub Species	Size	Qty	\$/ tree or shrub	Total Cost	Matching Items	\$ Value
<i>Amelanchier canadensis</i>	4-5' B&B	5	\$110.00	\$550.00	Labor (invasives removal, bed work, planting, watering, mulching)	\$3,000.00
<i>Amelanchier laevis</i>	4-5' B&B	7	\$110.00	\$770.00	Volunteer Labor (invasives removal, bed work, planting, watering, mulching): \$18/hr x 150 hrs	\$2,700.00
<i>Amelanchier stolonifera</i>	24-30"	30	\$22.00	\$660.00	In-kind Services (invasives removal, bed work, planting, watering, mulching): \$45/hr x 48 hrs	\$2,160.00
<i>Aronia melanocarpa</i>	24-30" B&B	12	\$18.00	\$216.00		
<i>Diervilla lonicera</i>	9-12" #2	30	\$13.00	\$390.00	Compost, Loam, mulch, supplies, other materials	\$4,500.00
<i>Gaylussacia baccata</i>	Flat	30	\$20.00	\$600.00		
<i>Ilex verticillata</i>	4-5' #2	7	\$18.00	\$126.00	Irrigation system (drip)	\$4,000.00
<i>Juniperus virginiana</i>	4-5' #15	7	\$120.00	\$840.00		
<i>Myrica pensylvanica</i>	2.5-3' #3	30	\$26.00	\$780.00	Plant labels	\$300.00
<i>Prunus maritima</i>	2-2.5' #3	9	\$28.00	\$252.00	Interpretive signage	\$1,000.00
<i>Rosa virginiana</i>	18-24" #3	20	\$18.00	\$360.00		
<i>Spiraea latifolia</i>	2-2.5' #2 Heavy	30	\$17.00	\$510.00	Project Management & Administration	\$2,800.00
<i>Vaccinium corymbosum</i>	12-15" #7	15	\$36.00	\$540.00		
<i>Viburnum cassinoides</i>	2.5-3' B&B	7	\$65.00	\$455.00	1 Year Maintenance (2014)	\$5,000.00
			TOTAL	\$7,049.00		
Other Reimbursable Costs			\$ Value			
Plant deliveries			\$250.00			
TOTAL GRANT REQUEST			\$7,299.00		TOTAL MATCH (> or = grant request)	\$25,460.00
TOTAL PROJECT COST: Cliff Walk Entrance (grant request + local match) = \$32,759						

Grant applications must include:

(Refer to the Project Canopy Planting and Maintenance Grant guidelines)

- **Completed Application Form**
- **Narrative**
- **3-Year Maintenance Plan**
- **Project Map**
- **Letters of Support**

*As designated representative of said applicant, I hereby agree to implement this project according to the attached cost and technical proposals and to abide by all local ordinances and restrictions that apply.

Signature

Date

**As official representative of said applicant, I hereby authorize the project submitted for the proposed Project Canopy Grant.

Signature

Date

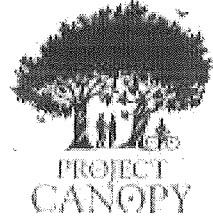
Please submit proposals in PDF format to the following e-mail: jan.santerre@maine.gov, **no later than 5 PM, December 2, 2013**. Required information for the proposal should not exceed five (5) pages (excluding budget tables), with a print font size of 12 preferred. Note: the proposal submission inbox can accept message up to 10 MB in size. Multiple messages per proposal may be submitted if necessary. Additional information such as maps, tables, and letter of support may be included in addition to the proposal.

* Designated representative refers to the person authorized by the applicant to submit a grant application, sign documents and take necessary actions to undertake, direct and complete the approved project.

**Official representative refers to the Mayor or Town Board Official for a municipality; a Superintendent or Principal for a school; and the Board Director or President in the case of a non-profit organization.

Note: Amount Eligible for Reimbursement is Limited to \$8,000.

Project Canopy Community Capacity Checklist



Please rate your community's capacity for urban and community forestry management. Put a check mark next to each capacity component that applies to your community.

1. Inventories and management plans: X

Community has a tree and forest management plan developed from professionally-based resource assessments and inventories.

2. Professional staff: X

Community employs or has written agreement with professional forestry staff who possess at least one of the following credentials: degree in forestry or related field, and ISA certified arborist or equivalent professional certification.

3. Tree care ordinance: X

Community has local ordinances or policies that focus on planting, protecting, and maintaining urban and community trees and forests.

4. Local advisory /advocacy organization: X

Community has local advocacy/advisory organizations such as active tree boards, commissions, or non-profit organizations that are formalized or chartered to advise and/or advocate for the planting, protection, and maintenance of urban and community trees and forests.

Project Narrative:

Fort Williams Park is a 90-acre, town-owned park on Casco Bay in Cape Elizabeth, Maine. The Park has a significant marine and military history and is the site of Portland Head Light. Fort Williams Park has over 800,000 visitors annually and is used by local residents as well as regional, national and international tourists making it the second most visited tourism site in Maine next to Acadia National Park. It is one of the few free coastal access areas in the greater Portland region and used by families of all demographics.

Maintaining this open space has rested primarily on the generosity of Cape Elizabeth citizens. Tax dollars have covered only the most basic care, and while the community is committed to keeping the Park free, limited funding is creating challenges. Over time, invasive plants have taken a toll on the Park's ecology by outcompeting native species. The Park is in jeopardy of losing what makes it most precious—its natural and historical resources. A 2005 Arboricultural Study recognized that without significant intervention, a horticultural crisis was pending as the Park is losing its rich biodiversity, magnificent views are being swallowed up, and historical sites are no longer accessible through tangled overgrowth. As the Park nears its 50th anniversary in 2014, Fort Williams is at a tipping point.

The Fort Williams Foundation and the Arboretum at Fort Williams Park project

The Fort Williams Foundation was chartered in 2001 by the Cape Elizabeth Town Council and the Fort Williams Advisory Commission to preserve and enhance the natural and historic resources of Fort Williams Park. The Park's prominence as a signature landmark of rugged landscape and beauty leverages opportunities for environmental education and outreach by reaching a broad and diverse audience. The Arboretum project, the Foundation's first major restoration effort at the Park, is creating sustainable landscapes which will inspire, educate, and be a continual reminder of the importance of the natural world. Fourteen landscapes have been chosen to showcase the Park's unique environmental and historic features.

Specific goals of the Arboretum project are to:

- reverse damage done by invasive species
- restore sustainable landscapes and native wildlife habitat
- create open space and views
- enhance the outdoor experience
- foster educational resources and opportunities

Planned as a multi-phase restoration project, the Arboretum landscapes will be designed and installed over several years. The first site, Cliffside, was completed during the summer of 2012 after successfully raising \$324,000 - including a grant from Project Canopy - and an additional \$113,000 in in-kind donations. Dozens of native trees were preserved as a thick jungle of invasive exotic plants was removed and replaced by the planting of native species, significantly increasing the biodiversity and beauty of the site. Accessibility was provided via new walkways and a garden amphitheater invites gatherings into the heart of the landscape. Planning for the next four priority sites of the Arboretum project has begun, including the Cliff Walk Entrance, Lighthouse View, the Cliff Walk Landscape and the Children's Garden.

Cliff Walk Entrance:

Between the recently developed Cliffside Landscape and Ship Cove to its north, is a stretch of heavily invaded land that descends to the rocky coastal cliff. Much of this site is dominated by a near monoculture of invasive Asiatic shrubby honeysuckle, and interspersed with Asiatic bittersweet, multiflora rose, black swallowwort and Norway maple; all of which pose a continued threat to other areas within the park, but especially across the path to Cliffside.

Although the site's geography provides highly favorable conditions for migratory and overwintering land-birds, the landscape in its currently degraded condition does not function as suitable habitat due to its low native biodiversity. The exotic invasive plants host very few insects and their stem density is inadequate for protective nesting, while their berries offer minimal nutritional value (Derek Lovitch, 2013).

Partial hand-clearing of invasives by volunteers in late 2013 has opened dramatic views of Casco Bay, the islands, Battery Keyes and Portland to the north. It has also revealed several ventilation shafts atop the buried late-19th century mine casemate that was built into the side of the cliff, further enhancing the historical intrigue of this area.

As recently observed in the easternmost section of the site, and along the top of the coastal cliff, there persists remnants of a Rose-Bayberry Maritime Shrubland (Maine Natural Areas Program), along with early successional to intermediate coastal woodland tree species. In keeping with the Fort Williams Forestry and Arboriculture Assessment and Maintenance Program (prepared by OEST Associates in 2004), our objective for the Cliff Walk Entrance is to preserve and build upon this existing remnant community of endemic and beneficial adapted species. Reestablishing the native coastal shrub layer and planting small fruiting trees will prevent soil erosion and stormwater runoff into Ship Cove, while also providing much needed habitat for migratory and overwintering birds.

Park visitors have expressed their gratitude and excitement for what the arboretum project has in mind for this impoverished landscape, by which so many people walk past each summer day as they head along the Cliff Walk towards the lighthouse. With successful funding, we will begin work by late spring of 2014; clearing more invasive plants, applying erosion-control measures, installing drip irrigation, planting native trees and shrubs, and mulching. Work will continue through the summer and be completed in early fall 2014, with continued maintenance beyond that to prevent the reinfestation by nearby invasives and to allow for healthy ecological succession. As with any restoration project, this will require ongoing monitoring and assessment, and adjustments will most likely occur over time to ensure a truly sustainable landscape that meets the needs of people and wildlife alike.

Outcomes:

The Arboretum project shares the mission of Project Canopy and the USFS National goals. Funds will be used to eradicate invasive plants and replant with native trees and shrubs to restore biodiversity and wildlife habitat. The plantings will also serve to reduce erosion and storm water runoff to protect the ecology of Casco Bay. This ecological approach to managing

the landscape above Ship Cove offers incredible opportunities for public engagement and education. Outreach is a critical component for informing the general public about the effects of invasive plants, and the benefits of native vegetation and a low-impact approach to managing landscapes. This project offers an exciting opportunity to showcase native flora for their adaptability, beauty, sustainability, and wildlife enhancement. There will be expanded opportunities for learning, volunteering and community engagement and advancing understanding of the Park's distinctive coastal landscape and history. Plants are being identified with species labels and interpretive displays will inform the public on how to incorporate natural wildlife planting and invasive species mitigation in their own landscapes. The Arboretum will become a model site and living classroom that engages the community in establishing and caring for healthy, sustainable landscapes.

Community Support:

The Arboretum project has galvanized the community with more than 400 volunteers and donors clearing invasive plants, planting native species and providing leadership, administrative and financial assistance. The Arboretum has the full support of the Fort Williams Advisory Commission and the Cape Elizabeth Town Council, and it complements the Park's recently updated Master Plan. Community partnerships being explored include the horticulture programs at Southern Maine Community College and the University of Maine in Orono, as well as the environmental science and botany programs at Connecticut College. As a living laboratory for the interface between horticulture and restoration ecology, the Arboretum offers students opportunities to learn about best practices through class field trips, hands-on training, case studies and summer internships. The Arboretum is expanding its "adopt-a-plot" program and is developing a docent program for native plant and habitat walks that will also incorporate the site's natural and cultural history. Additional partnerships are being developed with local environmental organizations and gardening groups to support these programs. The 25 members serving on the Foundation board and Arboretum project committees include horticulturalists, landscape architects, environmental educators, professionals, business owners and civic leaders. Momentum and support is building with increased visibility and engagement, particularly in conjunction with the Park's 50th anniversary.

Three-Year Maintenance Plan:

Maintenance will be coordinated by the Arboretum Project Manager, James McCain, and conducted with college interns and Cumberland County Master Gardener volunteers, as well as in-kind tree care and landscaping services. Maintenance will be in conjunction with Public Works Supervisor, Jim Greene, and Parks Manager, Forest King. The agreement between the town of Cape Elizabeth and the Fort Williams Foundation/Arboretum requires that before any plantings are done there must be a plan and funds available for perpetual care.

Year 1

Hand-clear invasive plants to protect existing native trees and shrubs, and to allow for the establishment of newly planted trees and shrubs. Mulch new plantings and mulch wherever additional invasive plant suppression or erosion-control is needed. Weed and prune as needed. Check for insect, disease and predator damage and treat where necessary. Monitor and adjust programming of drip irrigation system, repair lines and winterize system.

Year 2

Monitor and continue to hand-clear invasive plants. Replenish mulch and plants where necessary. Startup and program drip irrigation system. Weed and prune as needed. Check for insect, disease and predator damage and treat where necessary. Monitor and adjust programming of drip irrigation system, repair lines and winterize system.

Year 3

Monitor and continue to hand-clear invasive plants. Replenish mulch and plants where necessary. Startup and program drip irrigation system. Weed and prune as needed. Check for insect, disease and predator damage and treat where necessary. Monitor and adjust programming of drip irrigation system, repair lines and winterize system.

Project Map / Planting Locations:



Fort Williams Park (Google Earth)



Cliff Walk Entrance (Google Earth)

PIERSON NURSERIES INC.		QUOTE		ORDER		PO #	PK UP DATE
24 BUZZELL ROAD		#		#			
BIDDEFORD, ME 04005		DATE		DATE		TERMS	DEL DATE
PH (207)4992994 FX(207)499-2912		11/26/2013					
sales@piersonnurseries.com		INT		INT			Late Sp/Summer 2014
CUSTOMER		JOB NAME		Arboretum at Fort Williams Park: Cliff Walk Entrance			
TOWN OF CAPE ELIZABETH		LOC	Fort Williams Park, 1000 Shore Road, Cape Elizabeth				
PH	332-7508	FAX		CONTACT	James McCain		
CELL		EMAIL					DEL CHRG
ADD						SEE BELOW	
COM	A= HERE B=WILL BE HERE SOON C=CAN GET WITH NOTICE D= GUESSING OR UNLIKELY						
LATIN NAME	QTY	SIZE	TRT	STAT	NOTES	PRICE	EXT PR
1 AMELANCHIER CANADENSIS	5	4-5'	BB			110.00	550.00
2 AMELANCHIER LAEVIS	7	4-5'	BB			110.00	770.00
3 AMELANCHIER STOLONIFERA	30	24-30"				22.00	660.00
4 ARONIA MELANOCARPA	12	24-30"	BB			18.00	216.00
5 DIERVILLA LONICERA	30	9-12"	#2			13.00	390.00
6 GAYLUSCCIA BACCATA	30		FLAT			20.00	600.00
7 ILEX VERTICILLATA	7	4-5'	#2			18.00	126.00
8 JUNIPERUS VIRGINANA	7	4-5'	#15			120.00	840.00
9 MYRICA PENNSYLVANICA	30	2.5-3'	#3			26.00	780.00
10 PRUNUS MARTIMA	9	2-2.5'	#3			28.00	252.00
11 ROSA VIRGINANA	20	18-24"	#3			18.00	360.00
12 SPIREA LATIFOLIA	30	2-2.5'	#2			17.00	510.00
13 VACCINIUM CORYBOSUM	15		#7			36.00	540.00
14 VIBURNUM CASSINOIDES	7	2.5-3'	BB			65.00	455.00
15 DELIVERY	1					250.00	250.00
QUOTE TOTAL				7299.00	PAGE TOTAL	7299.00	
Pricing valid for 15 days and FOB Dayton, ME unless otherwise specified. Not all plants quoted are always in stock and we may need time to meet particular specs. Prices based on significant portion of qty being purchased. If small portion purchased it may affect pricing. We reserve the right to change pricing if quantities, timing or sizes differ from quote. Thank you and we look forward to working with you.							