



SuAsCo CISMA Project Proposal Application – 2023

Organization Name: [REDACTED]

Total Funding Request: \$1,125

Total Project Cost: \$2,250

CISMA Signatory Partner: Yes

Has your organization ever received CISMA Grant Funds: Yes

If Yes, when: [REDACTED]

Project Name: [REDACTED] Buckthorn and Bittersweet Control

Contact person: [REDACTED]

Title: Stewardship and Engagement Coordinator [REDACTED]

Address: [REDACTED]

Town: [REDACTED]

Email address: [REDACTED]

Telephone: [REDACTED]

Proposal Information : Applications should be no more than 2 pages plus budget. Letters of support and additional pertinent materials may be included, though not required, in the application submittal. Please submit the application and supporting materials in either a text (e.g. Microsoft Word) or PDF file to Kristin O'Brien (kobrien@svtweb.org) with the subject "SuAsCo CISMA Grant Application".

Specific Project Goals:

To stop the spread of glossy buckthorn (*Frangula alnus*), Oriental bittersweet (*Celastrus orbiculatus*), and garlic mustard (*Alliaria petiolata*) further into the upland areas of Wright Woods conservation area in Concord. We are proposing to hand-pull the garlic mustard plants and glossy buckthorn seedlings and saplings, and use an herbicide (Triclopyr) on the larger glossy buckthorn specimens as well as the Oriental bittersweet vines. Our goal is to improve the growing conditions for the native vegetation and the natural capacity of the wetland and upland to provide wildlife habitat, as well as to preserve the recreational, historical, and scenic values of this important property.

How the Project Meets RSC Goals (described above)

Wright Woods is a 311 acre parcel bounded by Fairhaven Bay and the Sudbury River to the south and west, and Well Meadow Brook, the Andromeda Ponds, and Walden Pond (and Adams Woods conservation area) to the east, and CLCT and Walden Woods Project conservation areas to the north. Glossy buckthorn in particular is becoming more predominant in the understory in certain areas of the property and CLCT has been working to prevent its spread. We have also been working to contain smaller populations of garlic mustard and Oriental bittersweet.

Wright Woods is part of a 'Large Natural Area' in the Town's Open Space Framework; these "serve as habitats and dispersal sources for species with large home ranges." As such, the Wright Woods is a priority for CLCT in



invasive plant management. Eliminating the glossy buckthorn, Oriental bittersweet, and garlic mustard would allow the natural system to continue and would provide wildlife habitat.

Wright Woods is an extremely popular recreation destination and the project site provides beautiful vistas over Fairhaven Bay. This area is also historically significant land with its proximity to Walden Woods. This work will help CLCT to continue to protect “the resource value” that is known for its “scenery, recreation, and history.”

CLCT stewardship volunteers have been helping with invasive pulls since 2020. In 2022, Weed Warriors and students from The Fenn School helped pull glossy buckthorn in the uplands abutting Well Meadow. This spring and summer, additional Weed Warrior workdays are being organized to continue with mitigating the glossy buckthorn in this area, as well as to expand the work further upland and also help with pulling garlic mustard.

Site Description and Context:

Wright Woods has not experienced the pervasive growth of exotic invasive plants that is common to much conservation land in the region. However, where there are forest openings, as in the project area, glossy buckthorn has taken hold, set berries, and started the process of spreading. It is these scattered populations of buckthorn, mature parent plants and younger saplings, as well as concentrated Oriental bittersweet in the forest opening, that are the target of this proposal.

In 2020, CLCT received an Order of Conditions permit and hired Parterre Ecological, a licensed contractor, to begin work on treating and removing glossy buckthorn from the wetlands buffer zone within Well Meadow. Through 2022, targeted treatments continued and the worksite area spread out of the wetlands buffer zone and into the upland areas. Please see attached map.

The upland area is dominated by white pines, oaks, lowbush blueberry, and huckleberry. A clearing where the former summer home of Helen Robinson Wright, the major donor of the Wright Woods property, interrupts the continuity of the forest. In 2020 and 2021, restoration projects were undertaken. Two enclosures encompassing approximately 4,000 sq ft have been established with native plants and trees adapted to the drier soils of the area and a changing climate. The reforestation effort is part of CLCT’s plan to restore the open area to a more natural condition and demonstrate what is needed for a climate-resilient woodland: diverse and heat-tolerant species, younger trees that help diversify the even-aged stands in the surrounding woods, fencing to prevent deer predation, and the absence of invasive species.

CLCT would like to continue our work to stop the spread of glossy buckthorn and Oriental bittersweet further upland. A combination of manual removal by Weed Warriors and herbicidal treatments from Parterre Ecological should enable us to arrest the progression of invasives deeper into the interior forestland.

Description of Proposed Methods for Invasive Plant Control

The primary invasive plant species to be targeted in this proposal are glossy buckthorn and Oriental bittersweet. Weed Warriors will flag specimens and hand-pull seedlings and smaller saplings. They might also assist with cutting larger specimens that licensed staff from Parterre Ecological will then dab with herbicide (Triclopyr), or Parterre staff might do this work solely on their own. Foliar applications might also be used on some seedlings by Parterre staff.



Description of how the site will be monitored and evaluated for success:

Beginning in 2020, CLCT staff mapped the glossy buckthorn and Oriental bittersweet populations' locations and estimated their densities by hand. Reports and photographs of the work performed by Parterre Ecological have been provided. CLCT continues to monitor the area and base work priorities off of past successes; we update our maps accordingly.

In 2023, we will begin using Landscape software, which will help us further organize and record our progress on this project. We also plan to enlist the support of Weed Warriors to help us monitor the work and assist with ongoing maintenance.

We will be successful when we arrest the spread of targeted invasives deeper into the forest and are able to eliminate or manage existing populations, which we believe is possible at this stage.

If Educational, describe work to be completed and how the project will help educate others:

Volunteers in the Weed Warrior program who are working on mastering techniques for identifying, removing, and disposing of glossy buckthorn and Oriental bittersweet (as well as garlic mustard) will be able to work toward their certification. We might also be able to recruit additional Weed Warrior volunteers through organized work parties.

Who is the target audience for educational materials:

Not applicable, although work will be reported on in the CLCT instagram feed, eNews, and possibly in a newsletter.

Grant recipients will be required to provide case study information for the Cisma web site (provide link to the project page of the web site <https://cisma-suasco.org/project/>).

a. Description of Program/Project: Identify and explain:

- The goal(s) and need for your project.
- How the project meets the intent of the RSC resource values for the Sudbury, Assabet, or Concord rivers, including ecology, scenery, recreation, history and literature. If your project does not directly impact one of the rivers or associated wetlands please describe how this work will benefit the watershed.
- Identify the target priority invasive species

b. Specific activities:

- Concisely list and explain all project tasks and deliverables for each task.
- Include a timeline, arranged by task, indicating start date, date of task completion and submission of deliverable(s) date.

c. Evaluation: Please provide details on the evaluation process and matrices that will be used to gauge success (how well project implementation met the anticipated outcomes/goals) and how will this be reported to the Cisma.



d. **Other:** Provide any other information you feel would be relevant and not covered above.

e. **Budget:** Complete the following budget table, (add additional tasks if needed).

Task	Funding		Explanation of Expenses (personnel, supplies, printing, equipment, other – please detail)
Task 1. Parterre Ecological	CISMA funding	\$1,125.00	Field Technicians, who maintain MA Pesticide Applicators licenses and are trained in the identification of invasive plant species, will complete prescribed management strategies, including cutting and plant-specific herbicide application techniques.
	Grants (indicate if pending)		
	In-kind		
	Other: CLCT	\$1,125.00	
Task subtotal		\$2,250.00	
Task 2.	CISMA funding		
	Grants (indicate if pending)		
	In-kind		
	Other: _____		
Task subtotal			

TOTALS: CISMA \$ 1,125.00 Grants \$ _____ In-Kind \$ _____ Other \$ 1,125.00

Budget Narrative: Provide additional clarifying information about the project budget. Applicants are encouraged to provide the CISMA with a prioritized list of project tasks. This will help inform decisions should the CISMA opt to fund only select project tasks.

KEY

Buckthorn removal under
Order of Conditions for
Ecol. Restoration Project

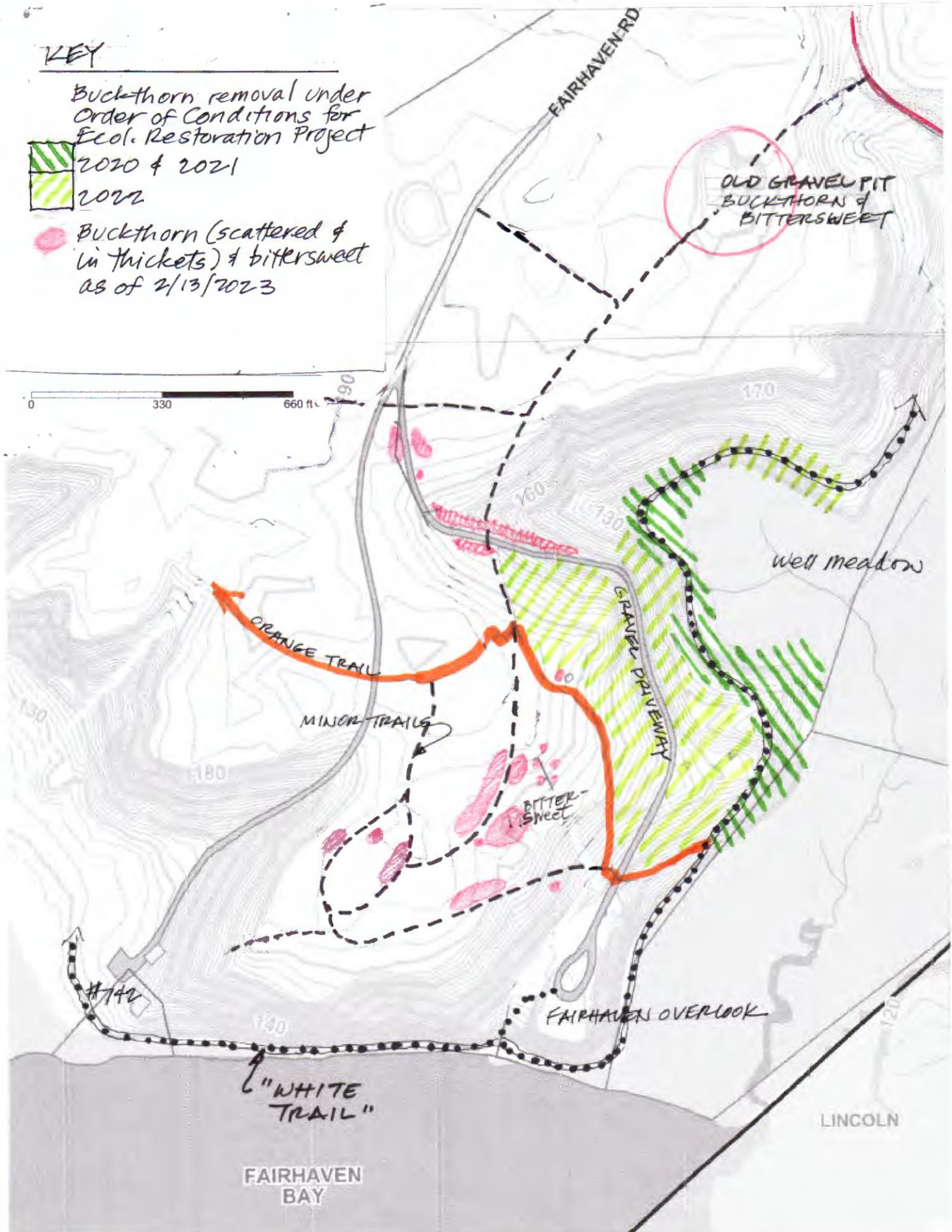


2020 & 2021

2022



Buckthorn (scattered &
in thickets) & bittersweet
as of 2/13/2023



C.L.C.T. WRIGHT WOODS
INVASIVE PLANT PROJECTS