

**U.S. Army Corps of Engineers
Fiscal Year 2023
Handshake Program Application**

Please review instructions before completing application!

Corps Lake/River Project Name: **Mansfield Hollow Lake**

District / Division: **NAD**

Handshake Proposal Title: **Pine Barren Restoration Project**

Corps POC Name: **Justin Lindsey, Park Ranger**

Telephone: **(978) 318 - 8407 ext. 407**

E-Mail: **justin.d.lindsey@usace.army.mil**

A. Checklist:

1. Will the Handshake funds be spent on Corps facilities and resources that are being fully maintained by the Corps? (not in outgranted parks) Yes No
 2. Will the Challenge Partnership agreement be with a non-federal public or private entity(ies)? Yes No
 3. Is the proposed activity within current authorities and contained in the annual or 5-year work plan in the approved lake project OMP? Yes No
 4. Have all of the NEPA requirements been considered for this project? Yes No
 5. I am aware the Challenge Partnership Agreement must be reviewed and approved by District Office of Counsel before sending to HQUSACE. Yes No
 6. If the full funding amount requested is not available, could a portion of this Handshake Project be completed with partial funding? Yes No
 7. I am aware that all government funds must be spent in accordance with FAR, DFAR and AFAR contracting laws and regulations, and that Handshake funds cannot be provided to the partner(s). Yes No
 8. Did you participate in a Handshake webinar in 2022 or review a 2021 Handshake webinar on the Gateway? Yes No
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B. Handshake Funding Request (maximum \$25,000): 25,000

C. Corps Foundation Bonus Request: (maximum \$5,000): 5,000

Separate bonus funding provided by the Corps Foundation for a selected Handshake Project. Please do not include bonus funds on your overall spreadsheet below. Provide an explanation of how the funds will be used in the Corps Foundation Bonus section.

D. Incentive Points Category: Check the appropriate box if your application qualifies to receive bonus points on the evaluation score.

- This lake/river project has never received Handshake funding. (100pts)

This project will support diversity, equity, and inclusion goals to increase access to a quality recreation experience which includes a safe and healthful environment for a diverse population. At least one of the partner organizations in this project has diversity equity, and inclusion goals as part of their mission. Please describe how your project meets this objective in the Support Diversity, Equity and Inclusion Bonus section. (100 points).

This project will address a backlog maintenance issue identified in the budget process or FEM. Please describe specifically which back log maintenance item(s) will be solved. (100 pts)

E. Describe your partnership and the proposed Handshake Partnership Project:

Project applications will be evaluated on the categories below. Please complete each section as appropriate.

Summary Statement:

The U.S. Army Corps of Engineers at West Thompson Lake and Mansfield Hollow Lake will partner with the Joshua Land Trust, and the University of Connecticut to implement restoration ecology at a protected tract of pine barren ecosystem. This project will involve the restoration of approximately four (4) acres of critical pine barren ecosystem on USACE property at Mansfield Hollow Lake within the jurisdiction of NAD, New England District. This pine barren ecosystem is more specifically a pitch pine-scrub oak barren. Details of this project include the selective thinning/removal of late successional plants and the re-seeding of three desired herbaceous early successional pollinator plants species (Baptisia, Lupin, and New Jersey Tea). This selective thinning will open up the canopy and allow for the propagation of early successional species of herbaceous plants, including three desired pollinator plants. These three desired pollinator plants includes Baptisia (Wild Indigo), Wild Lupin, and New Jersey Tea. The Wild Lupin is the foodplant of three globally rare butterflies: the Frosted Elfin Butterfly, the Karner Blue, and the Persius Duskywing. Propagation of these three desired herbaceous plants will also include the procurement of seed, site/seed bed preparation, and the seeding of the desired area. Interpretive/Educational sign(s) installation is also desired. These signs/kiosks will provide pine barren information to the public.

Handshake Funding Cost Break Down:

\$15,000 Tree Removal Contract: Labor, Travel Time, Fuel, etc.

- to be prepared, funded, and executed by the associated USACE project office via solicited contracting and awarding process to an authorized vendor/contractor.

\$10,000 Seed Procurement: Desired Seeding

- to be performed by volunteer groups. Work includes site preparation and the re-seeding of selected/desired pollinator plants. These plants include Baptisia, Lupin, and New Jersey Tea. Volunteer groups will provide their own tools and equipment including loppers, shovels, handsaws, etc. to perform preparation work before re-seeding. Anticipated work time will be five (5) eight-hour work days with a crew of 20 to 25 individuals.

Corps Foundation Bonus Funding Cost Break Down:

\$5,000 Interpretive Kiosks

- installation of interpretive and education kiosks or signage. These signs or kiosks will display the history, biology, and conservation efforts of the now rare pine barren ecosystem. Anticipated work time will be five (5) eight-hour work days with a crew of 20 to 25 people.

O&M Impacts:

There are numerous positive impacts that this project will provide. The first impact will be the thinning of the canopy of woody vegetation to remove late successional species. This will also allow sunlight to penetrate the forest floor and facilitate the growth of early successional herbaceous pollinators. These species of pollinator plants support numerous other species of insects and birds that facilitate successful pollination, further propagating these species of vegetation. These desired pollinator plants are perennials and will continue to reside and come back every growing season. These pollinator plants also support species of butterfly, including the Frosted Elfin, which is threatened due to habitat loss. This thinning and seeding project will promote a more desirable habitat for this species of butterfly and will also assist with conservation efforts. Overall, this project

will allow for a healthier and a more desirable pine barren ecosystem, which will aid in conservation efforts for endangered, threatened, and candidate species.

Partnership Value:

This project will include several local organizations/groups that have a long history with the U.S. Army Corps of Engineers at Mansfield Hollow Lakes. USACE has partnered with the University of Connecticut and Eastern Connecticut State University on previous pine barren projects to include insect and plant surveys, plant propagation, and canopy thinning. USACE has also worked with the Connecticut Department of Energy and Environmental Protection as well in regards to pine barren projects. This project will further bring multiple volunteer organizations and individuals together towards a common ecological goal.

Recreational Benefit:

The pine barren ecosystem at Mansfield Hollow Lake is located adjacent to a walking trail which is utilized by visitors quite frequently. The project area is also located adjacent to the dam of the lake, which has a paved walkway on its crest, which is also frequented by visitors. Visitors utilizing these facilities at the lake will have an opportunity to view the beauty of the Lupin, Baptisia, New Jersey Tea, and other pollinators in the ecosystem. Visitors will also be able to view the beauty of the wildlife that these plants will attract.

Environmental Stewardship Value:

The environmental stewardship value of this partnership is extremely high. This pine barren ecosystem supports and maintains pollinators by supplying food in the form of pollen and nectar that will ensure that these important animals stay in the area to keep pollinating our crops. These pollinators also support species of animals, including birds and insects, some which are threatened due to habitat loss.

Communication & Education Value:

One of the important missions of the Corps is stewarding the environment by managing, conserving, and preserving the natural resources on USACE property. This mission is embedded into Mansfield Hollow Lake's Master Plan which says, "The land and water resources of Mansfield Hollow Lake are valuable environmental assets to the people of the surrounding areas, providing recreational opportunities, and conservation and protection of the resources within the project." With the Handshake Partnership for UCONN and Joshua's Trust, USACE at Mansfield Hollow Lake will demonstrate the Corps' commitment to environmental stewardship, the conservation of protected plants and animals, and further protecting natural resources. Further augmenting this project will be the inclusion of educational and interpretive signs that will be installed adjacent to the project site. These signs will allow the general public to learn the history, biology, and conservation efforts of the rare pine barren ecoregion. The public will further understand how this restoration ecology project connects these elements and will further assist in the conservation of this protected ecosystem.

Innovativeness:

This is a wide reaching and unique environmental partnership for USACE at Mansfield Hollow Lake. While there have been other natural resource projects at both lakes, this project aims to restore native plants and improve wildlife habitat across this section of pine barrens, which in itself is a rare ecosystem.. This project will also utilize the efforts of numerous partners all willing to provide new pollinator habitat and biodiversity to the area.

Corps Foundation Bonus:

The Corps Foundation Bonus will be dedicated to the procurement, preparation, and installation of educational and/or interpretive signage at the pine barren ecosystem site. The location's site is adjacent to a walking trail which is utilized by the general public for recreational purposes. Providing adequate educational/interpretive sign(s) at this location after the completion of the project will allow the public to learn more about this protected four acre tract of pine barren ecosystem. The Atlantic coastal pine barrens are one of the rarest ecoregions in the Northeast United States.

Support Diversity, Equity and Inclusion Bonus:

This project will support diversity, equity, and inclusion by allowing multiple organizations to collaborate towards a common Natural Resource Management objective. These organizations are bringing individuals who are experts in their respective fields and who also bring a wide array of experiences and backgrounds. By allowing these individuals and organizations to work together toward a common goal, dynamics will be established, which will further develop professional relationships.

Addresses Backlog Maintenance Issues Bonus:

Not Applicable

Conclusion:

In summary, this partnership project will provide the seeding of native pollinator plants, assist with providing desirable habitat for threatened insects, and will reestablish an improved wildlife habitat. It promotes partnering, conservation and educates the public on the importance of pollinators and our natural environment. This project will improve the pine barren ecosystem at Mansfield Hollow Lake as well as augment conservation efforts of critical wildlife.

NOTE: To show foresight, commitment, and planning, it is REQUIRED to include maps/pictures/plans/specs as part of your overall package.

Double click on spreadsheet to access data entry fields and to enter Partner names.

You MUST enter partner names into the spreadsheet:

	Local Corps Office	Handshake Funds	UCONN	Joshua's Trust	ECSU	Partner 4
Salaries	\$5,000	N/A	\$0	\$0	\$0	\$0
Travel	\$0	N/A	\$0	\$0	\$0	\$0
Materials and Supplies	\$2,500	\$10,000	\$500	\$500	\$0	\$0
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$0
Funds Contributed	N/A	N/A	\$0	\$0	\$0	\$0
Personal Property	N/A	N/A	\$0	\$0	\$0	\$0
Volunteer	N/A	N/A	\$11,980	\$11,980	\$4,792	\$0
In-Kind Services	N/A	N/A	\$0	\$0	\$0	\$0
Other (explain below)	\$0	\$15,000	\$0	\$0	\$0	\$0
Total	\$7,500	\$25,000	\$12,480	\$12,480	\$4,792	\$0
Share of Total Cost	11.1%	40.2%	18.5%	18.5%	7.1%	0.0%
	51.3%					

	Partner 5	Partner 6	Partner 7	Partner 8	Partner 9	Partner 10
Salaries	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$0
Funds Contributed	\$0	\$0	\$0	\$0	\$0	\$0
Personal Property	\$0	\$0	\$0	\$0	\$0	\$0
Volunteer	\$0	\$0	\$0	\$0	\$0	\$0
In-Kind Services	\$0	\$0	\$0	\$0	\$0	\$0
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$0	\$0	\$0
Share of Total Cost	0.0%	0.0%	0.0%	0.0%	0.0%	0

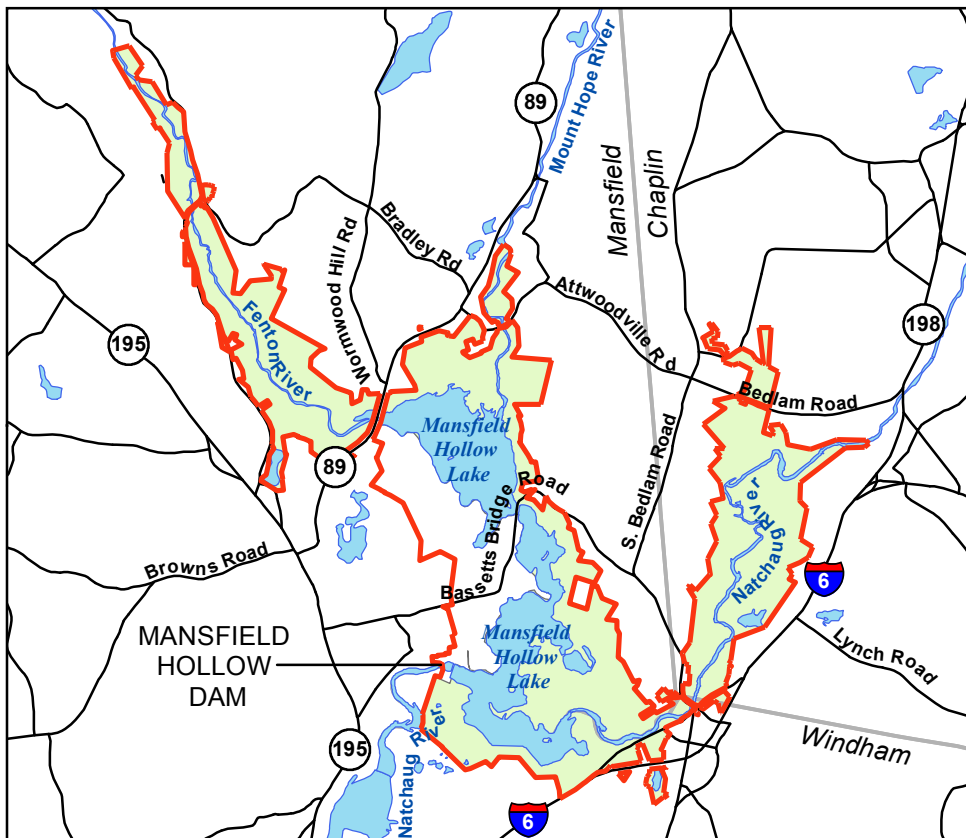
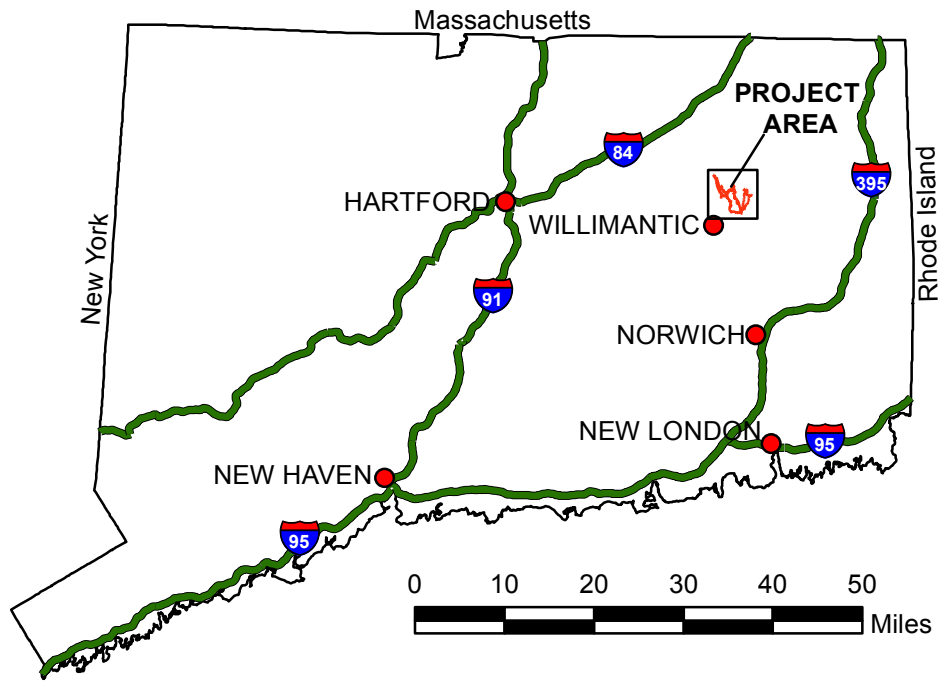
	Partner 11	Partner 12	Partner 13	Partner 14	Partner 15	Total
Salaries	\$0	\$0	\$0	\$0	\$0	\$5,000
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$13,500
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$0
Funds Contributed	\$0	\$0	\$0	\$0	\$0	\$0
Personal Property	\$0	\$0	\$0	\$0	\$0	\$0
Volunteer	\$0	\$0	\$0	\$0	\$0	\$28,752
In-Kind Services	\$0	\$0	\$0	\$0	\$0	\$0
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$20,000
Total	\$0	\$0	\$0	\$0	\$0	\$67, 252
Share of Total Cost	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Explanations:

1. Handshake Funds:

Other total amount of \$15,000 consists of:

\$15,000 for USACE funded and administered forestry management contract.



**US Army Corps
of Engineers®**
New England District

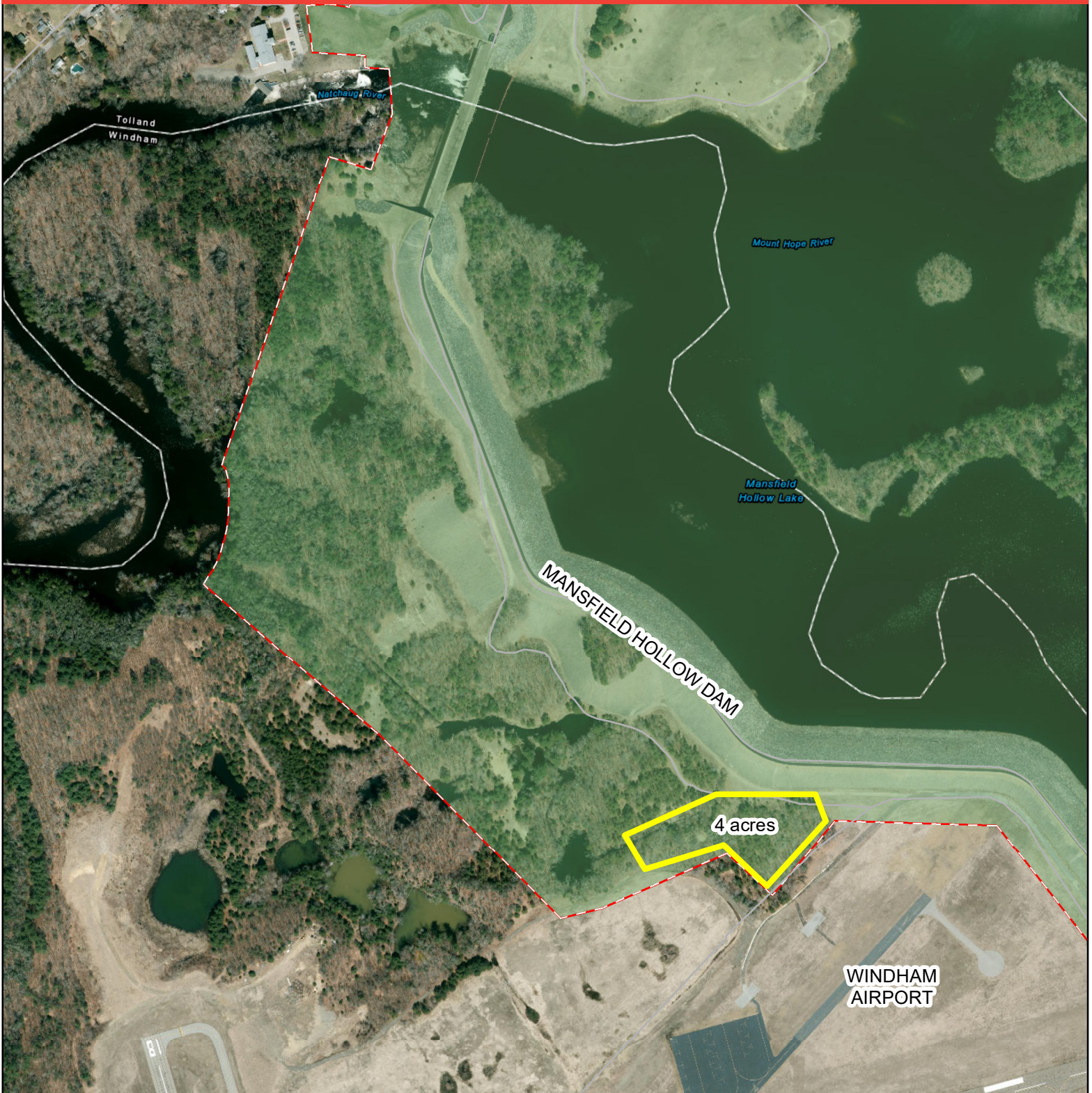


DATA Sources: Project Boundary: USACE.
Roads, Town Boundary, State Boundary:
CT DEEP. September 2022


FIGURE 1
LOCUS PLAN
MANSFIELD HOLLOW LAKE
U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
MANSFIELD, CT

SEP 2022





 USACE Property

 Pitch Pine - Scrub Oak Project Site
Approximately 4 acres




 Miles
0 0.0375 0.075 0.15

FIGURE 2

PITCH PINE - SCRUB OAK
PROJECT LOCATION

MANSFIELD HOLLOW DAM

US ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT

SEP 2022

