

**U.S. Army Corps of Engineers
Fiscal Year 2024
Handshake Program Application**

Please review instructions before completing application!

Corps Lake/River Project Name: **Patoka Lake**

District / Division: **LRD/LRL**

Handshake Proposal Title: **Reintroduction of the first stand of American Chestnut to USACE properties in Indiana**

Corps POC Name: **James R. Merkley**

Telephone: **(812) 678 - 3761 ext. 2**

E-Mail: **james.r.merkley@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 2023 or review a 2023 Handshake webinar on the Gateway? Yes No
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B. Handshake Funding Request (maximum \$25,000): \$10,000

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 financial 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 lake/river project has not received Handshake funding in the past 5 years (FY 19-23 funding years). (50 pts)

This partnership project will either result in overall O&M cost savings or no net long-term O&M gain. It reduces program liabilities, consolidates or eliminates redundant/inefficient recreation assets or facilities (Up to 200 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:

Our goal is reintroduction of the first Indiana stand of American Chestnut to USACE properties! The American Chestnut (*Castanea dentata*) once native to Southern Indiana was extremely important to the people and wildlife that historically lived in the Patoka Watershed. Trees were cut, drug, and floated to the town of Jasper (known as the "Nation's Wood Capitol") for production. Chestnuts also provided an invaluable source of food for people, farm animals, and wildlife. In the early 1900's, a blight (*Cryphonectrica parasitica*) infected these trees, and by the 1950's, the population had become functionally extinct. USACE Patoka Lake proposes to reestablish this chestnut into its former native territory by planting approximately a 3/4-acre field with a mixed variety of American Chestnut. Currently, the proposed field is intensively managed and will be converted into a less intensively managed chestnut plot. This easily accessible field will create viewing for all ages and mobility levels. USACE Patoka Lake will begin this amazing reintroduction utilizing the current partnership with the American Chestnut Foundation for a supply of American Chestnut trees, guidance, and interpretative signs. Northeast Dubois High School Forestry Class, Boy Scouts of America, and Dubois Ruritan will assist with installation, maintenance, and study of the trees for the foreseeable future. Required fence and equipment cost will be provided by USACE Patoka Lake utilizing handshake funds.

Handshake Funding Cost Break Down:

Cost Breakdown:

- * \$6,500 - Mapped perimeter 700 feet - Estimated at \$9.30 per linear foot installed.
- * \$500 - Deer Fence gate
- * \$3,000 - USACE Equipment Cost

O&M Impacts:

Currently the plot of land is intensively managed as wildlife habitat by tilling, planting, and maintaining forage with an estimated cost of approximately \$2,500 per year. Planting an American Chestnut tree plot will transform the area to less intensive management with a cost reduction of approximately \$1,500 per year. Most of the remaining costs will be offset by our partners for an indefinite length of time. USACE Patoka Lake will have a net gain in approximately four years.

Partnership Value:

In 2009, a Memorandum of Understanding between the USACE and the American Chestnut Foundation was signed to coordinate efforts and work cooperatively to restore the American Chestnut Tree. The American Chestnut Foundation will provide trees, planting and care guidance, labor, and informational signage with an estimated value of \$16,000.

The Northeast Dubois High School FFA has agreed to partner with USACE Patoka Lake. Forestry students will assist with planting, growth monitoring, and data analysis of the chestnut plot for the American Chestnut Foundation's study. Students will also assist with general labor and upkeep with a total estimated value of \$8,000.

The Boy Scouts of America will assist with planting, growth monitoring, and data analysis of the chestnut plot for the American Chestnut Foundation's study. Scouts will provide general labor and upkeep with a total estimated value of \$3,000.

Dubois Ruritan will assist with planting and growth monitoring of the chestnut plot for the American Chestnut Foundation's study. Dubois Ruritan will provide general labor and upkeep with a total estimated value of \$3,000.

USACE Patoka will provide labor, equipment, and plot preparation at a cost of only \$2,500.

Recreational Value:

There are no American Chestnut Stands under USACE management in Indiana. This unique and exciting project will become a destination that will allow easy access for classroom or personal viewing to study and participate in the reintroduction of an historically important native tree.

Environmental Stewardship Value:

The American Chestnut was one of the most important food sources for wildlife before the chestnut blight appeared. The reintroduction of the American Chestnut at USACE Patoka Lake will be invaluable for wildlife and humans. Planting both the blight-susceptible American Chestnut with the blight-resistant American Chestnut ensures native germplasm is preserved for reproduction. This will create a more diverse genome and make the USACE Patoka American Chestnut plot hardier and more likely to succeed. The blight-susceptible American Chestnut will provide successional habitat while the blight-resistant American Chestnut will provide a valuable and indefinite wildlife food source. The American Chestnut reintroduction will assist with mitigation of climate change. The chestnut grows faster and larger than other hardwood trees and will store a larger amount of carbon than neighboring trees during the same amount of time.

Communication & Education Value:

The story of the American Chestnut 20 years ago focused on the loss of this magnificent tree. Today, a new story is being written about how modern science is bringing this tree back from the brink of extinction! USACE Patoka will educate the general public and students particularly in the middle and high school age about disease, blight, near-extinction, recovery, history, habitat, current usage and more. Forestry students, teachers, Boy Scouts, inner-city youth and the general public will learn interactively by monitoring and maintaining this historically important tree stand. Additionally, the participating Boy Scouts will be offered the opportunity to work towards earning their Forestry Badge.

Supporting Diversity, Equity, Inclusion, and Access Goals:

This project will be positioned in a fee-free area for all to see, study, and enjoy this culturally important tree. The location of this stand near the roadside and within driving distance from several large cities will allow underrepresented communities, persons with mobility issues, inner-city students, or anyone else who would not be able to view and study the American Chestnut easily. Wildlife viewing opportunities will increase substantially for all individuals as the Chestnut stand develops. The Ruritan pledges to support urban and rural communities, this partnership will help foster their mission. The Piankashaw tribe, who were members of the Miami tribe, historically used the Patoka Watershed for migratory hunting grounds. The culturally important American Chestnut provided food, medicine and cordage to help survive and by reintroducing it we can help restore its traditional heritage.

Corps Foundation Bonus Cost Break Down:

- * Professionally printed educational materials \$1,000
- * Interpretive Panels
 - * Panel Design \$1,000
 - * Panel Construction and delivery \$3,000

Conclusion:

The scientific, environmental, educational, and historical importance of reintroducing the American Chestnut for future generations is incalculable. By planting, studying, and maintaining this stand of American Chestnut, the future of this once functionally extinct tree will be secured. The partnership of USACE Patoka, The American Chestnut Foundation, Northeast Dubois High School, the Boy Scouts of America and Dubois Ruritan, will ensure this project succeeds indefinitely.

NOTE: To show foresight, commitment, and planning, it is **REQUIRED** to include maps/pictures/plans/specs as part of your overall package. Failure to include supporting attachments will result in points deductions.

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	American Chestnut Foundation	Northeast Dubois High School	Boy Scouts of America	Dubois Ruritan
Salaries	\$2,500	\$0	\$8,000	\$5,000	\$0	\$0
Travel	\$0	N/A	\$1,000	\$0	\$0	\$0
Materials and Supplies		\$7,000	\$7,000	\$0	\$0	\$0
Equipment Use	\$0	\$3,000	\$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	\$0	\$3,000	\$3,000	\$3,000
In-Kind Services	N/A	N/A	\$0	\$0	\$0	\$0
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$2,500	\$10,000	\$16,000	\$8,000	\$3,000	\$3,000
Share of Total Cost	5.9%	23.5%	37.6%	18.8%	7.1%	7.1%
	29.4%					

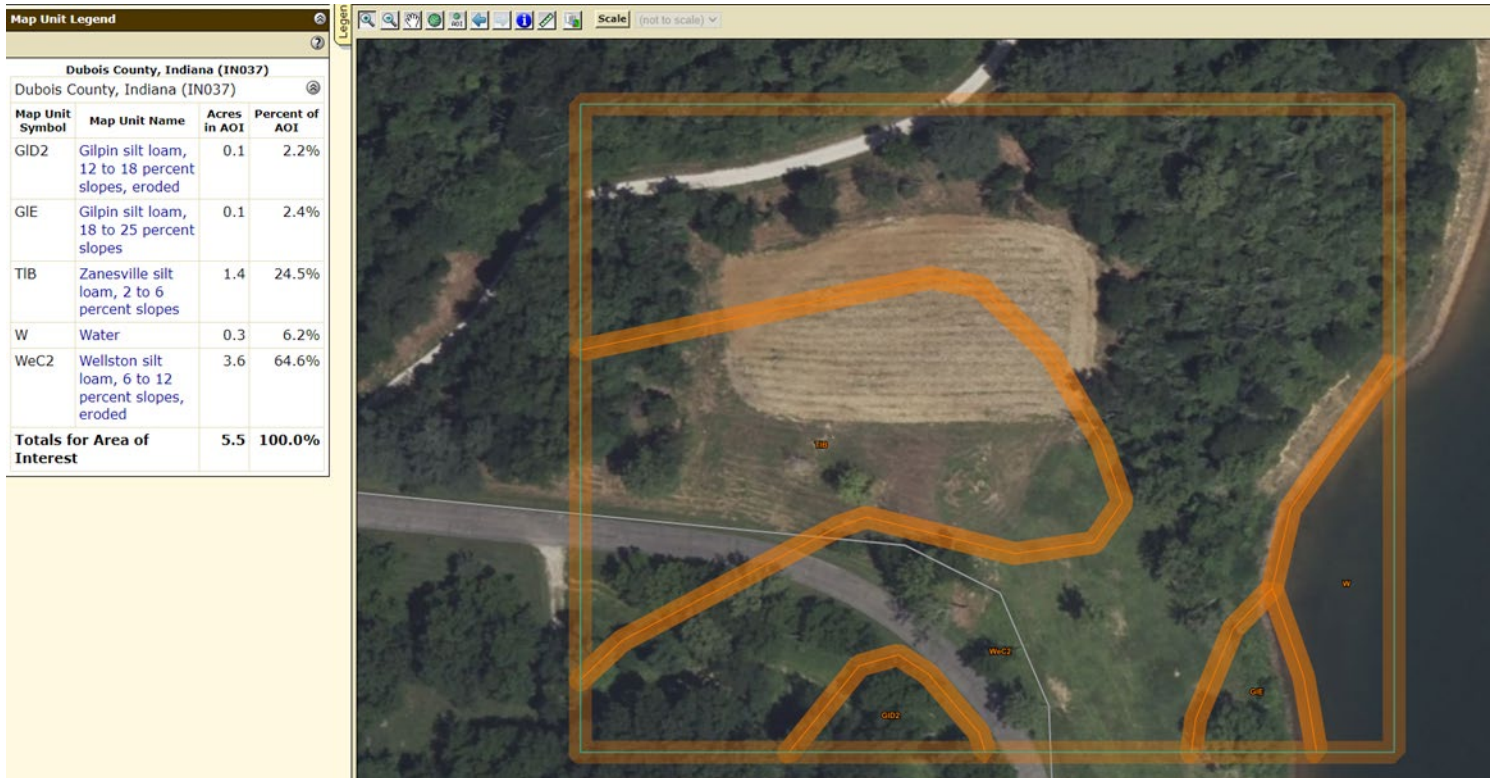
	Partner 5	Partner 6	Partner 7	Partner 8	Partner 9	Partner 10
Salaries	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$0
Funds Contributed	\$0	\$0	\$0	\$0	\$0	\$0
Personal Property	\$0	\$0	\$0	\$0	\$0	\$0
Volunteer	\$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	\$15,500
Travel	\$0	\$0	\$0	\$0	\$0	\$1,000
Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$14,000
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$3,000
Funds Contributed	\$0	\$0	\$0	\$0	\$0	\$0
Personal Property	\$0	\$0	\$0	\$0	\$0	\$0
Volunteer	\$0	\$0	\$0	\$0	\$0	\$9,000
In-Kind Services	\$0	\$0	\$0	\$0	\$0	\$0
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$0

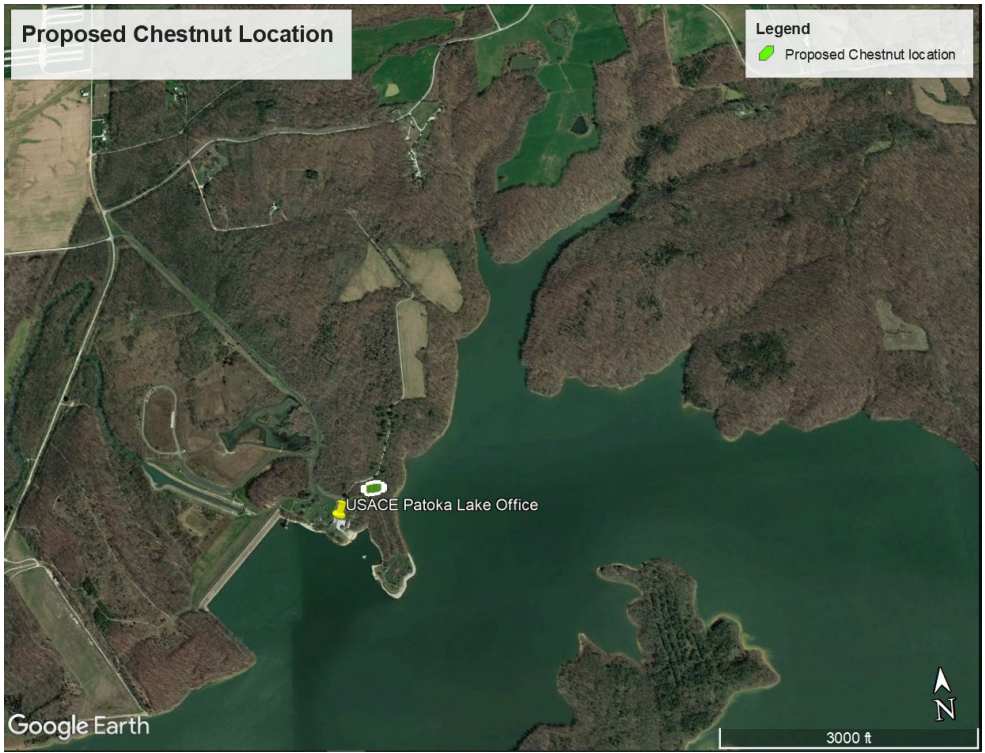
Explanations:



- Map of Patoka Lake showing inclusion of the American Chestnut native area.



- Soil map of well drained loam soil on the proposed planting site, this indicates an ideal location that is preferred by the American Chestnut.



- General area near Patoka Lake Corps of Engineers office
- 4512 N Cuzco Road South Dubois, Indiana 47527



- Localized map of proposed area of American Chestnut.



- Picture of proposed area of American Chestnut.