



City Forest Credits Carbon Preservation Project Application

1. Project Name

Shelter Hill Forest

2. Project Operator

Provide name of organization/entity, and contact information

Organization: Western Reserve Land Conservancy

Address: 3850 Chagrin River Road

City: Moreland Hills

State: Ohio

Zip: 44022

Contact(s): Sarah Blakely

sblakely@wrlandconservancy.org

440-528-4168

Ellen Matlock

ematlock@wrlandconservancy.org

440-528-4159

3. Project Location

Project must be in or adjacent to one of the following. Describe which one of the criteria the project meets and provide the name of the city, town, or jurisdiction where project is located. Provide the parcel numbers.

- "Urban Area" per Census Bureau maps
- An incorporated or unincorporated city or town
- A planning area for a regional metropolitan planning agency or entity
- Land owned, designated, and used by a municipal or quasi-municipal entity for source water or watershed protection
- A transportation or utility right of way through one of above

The Project is located in the Village of Hunting Valley, Cuyahoga County, Ohio, within the planning area of the Northeast Ohio Areawide Coordinating Agency, a regional metropolitan planning agency.

Address: Approximate parcels' centroid: -81.410188, 41.488155

Parcel Numbers: Partial: 88119003; 88120009

4. Project Description

Provide short narrative of the project goals, Project Area acreage, land ownership, forest characteristics, and land use/zoning. Provide details about when the property was acquired or potential timeline for acquisition. Include information about when carbon crediting was first introduced into the overall project scope.

Western Reserve Land Conservancy (the "Land Conservancy") is seeking to permanently preserve the 54.8-acre Shelter Hill Forest (the "Project") as part of a larger 88.5-acre Preserve. The Project includes old-growth forest in an area where development trends exacerbate habitat loss and suburban sprawl frequently alters the forested landscape of the Chagrin River watershed.

Preservation of the Project is critical to protect a high-quality forest in an urbanized environment. The forest stands are dominated by native Ohio tree species including large Sugar Maple (*Acer saccharum*), Red Maple (*Acer rubrum*), Red Oak (*Quercus rubra*), American Beech (*Fagus grandifolia*), and Tuliptree (*Liriodendron*), as well as rare Eastern Hemlock (*Tsuga canadensis*), Bitternut (*Carya cordiformis*), Shagbark Hickory (*Carya ovata*), White Oak (*Quercus alba*), Black Cherry (*Prunus serotina*), and Basswood (*Tilia americana*).

The Project is part of the pristine landscape of the Chagrin River Valley, which is unrivaled in Northeast Ohio. The property has cultural significance as the site of the once sprawling country estate of Myron Herrick, a Cleveland banking mogul, former Governor of Ohio, and Ambassador to France in the early 1900s. It is strategically located within a corridor of approximately 2,200 acres of contiguous conserved open space stretching for more than seven miles along the State Scenic Chagrin River. All four coldwater streams on the property, which flow into the Chagrin River less than 0.4 miles from the property area, are characterized as Class A, the highest habitat quality and biodiversity rating of all headwater streams in Ohio. The Project provides critical, high-quality habitat for wildlife, including the Federally-Endangered Indiana Bat (*Myotis sodalis*) and seven other Ohio-listed bat species. Additional notable species identified on the property are a lichen species (*Lecidea erythorphaea*) of global concern and the Two-Leaved Toothwort (*Cardamine diphylla*), a plant that serves as a host species for the West Virginia White Butterfly (*Pieris virginesis*), another species of global concern. More than 90 different bird species have also been documented on the property.

The Project Area consists of parts of a 72.3-acre property owned by the Land Conservancy and an adjacent 16.2-acre privately owned property. Both properties are zoned single family use, with a minimum lot size of 5 acres. They are also designated as a “historic settlement” which permits new construction in proximity to existing historic structures that would support the function and character of the historic settlement pattern. The 54.8-acre Project Area represents the forest habitat that will be protected through the preservation of these properties. Slopes 30% or steeper that exist on the conserved property area are subject to building restrictions per Hunting Valley zoning code. However, these zoning restrictions do not prohibit landowners to harvest timber without a permit. Steep slopes are found on 16.6 acres of the Project Area; therefore, we plan to claim only tree preservation credits on this portion of the property. The remaining 38.2 acres of the Project Area are developable forest, for which we wish to claim credits for tree preservation and soil carbon. Areas set aside for future improvements, as well as 120-foot stream and wetland buffers subject to Cuyahoga County Planning Commission riparian zoning and tree harvest restrictions, have been excluded from the Project Area.

For the 72.3-acre property, the Land Conservancy successfully negotiated with the landowner and local community to acquire the property and preserve the old-growth forest in the face of pressures to approve development plans for the property. The Land Conservancy acquired the property on 09/06/2022 with the goal to preserve trees on this property and register the Project for carbon crediting. In order to meet the CFC Tree Preservation Protocol requirements, the Land Conservancy placed a conservation easement on the property to restrict removal of the trees. The involvement of the Land Conservancy will provide perpetual preservation of the old-growth forest. 44.35 acres of the 54.8-acre Project Area are within this 72.3-acre property.

The remaining 10.45 acres in the Project Area are part of the adjacent 16.2-acre property owned by WHL Hunting Valley, which has agreed to transfer carbon credits to the Land Conservancy. Both properties are protected with conservation easements held through Natural Areas Land Conservancy

(NALC), a supporting organization of the Land Conservancy which is experienced in holding conservation restrictions. Both easements were recorded in September 2022. The properties will be enrolled into the Land Conservancy and NALC's diverse portfolio of protected lands, monitoring the Project annually to ensure its natural resources (including mature forest) are upheld to standards identified in conservation restrictions. Layers of legal protection and stewardship monitoring granted through the easements will ensure continued provision of conservation benefits for generations to come.

In addition, the Land Conservancy will operate the property as one of its Signature Preserves, allowing access to bridle and hiking trails. The property is adjacent to the Buckeye Trail, Ohio's State Trail, and preservation will keep this section natural for hiker/cyclist enjoyment and safety.

5. Project Impacts

Provide short narrative of the environmental, social, and health impacts this project will achieve. Examples include how the project addresses increased access to green spaces for under-resourced communities, flood control or watershed protection, benefits for human health and well-being, improved recreation opportunities, or protects bird and wildlife habitat.

Open space preservation

With continued urban sprawl leading to development in the Chagrin River Valley, it is critical to conserve what is left of the mature forests that once dominated the region. The Project's 54.8 acres of mature forest will be preserved in perpetuity through conservation restrictions thus contributing to the conservation of the natural resources located on the property. Additionally, this Project will connect to a conservation corridor of nearly 2,200 contiguous acres of preserved open space.

Watershed protection

Protecting the Project's 54.8 acres of mature forest will help improve water quality and reduce flooding in the Chagrin River Valley and the Lake Erie Watershed. Forested buffers along rivers are uniquely capable of intercepting surface runoff to trap sediment and remove nutrients. Moreover, forested buffers are a major factor in determining stream health, as streams without buffers are 30 times more likely to be damaged by erosion than those streams with buffers.

The Chagrin River watershed is unique in Ohio for the number and quality of its coldwater habitat streams, more so than any other watershed in Ohio. The Chagrin itself is designated State Scenic River by Ohio Department of Natural Resources for its exceptional aquatic habitat and adjacent high-quality forests – which can only remain through conservation projects such as this one. The property's primarily groundwater-fed streams support rare and threatened species such as the Ohio brook trout (*Salvelinus fontinalis*) and other fauna that need consistent cool temperatures and clear water to survive. Groundwater-fed streams in the Chagrin such as the ones found on the property are extremely sensitive to changes in surrounding land use. This Project is crucial to avoiding development on and around these streams, which would permanently alter their hydrologic and hydraulic regime, increasing water temperature, sedimentation and pollution, and degrading habitat and biodiversity.

Human health

The Project's forest also significantly impacts air quality, as a single mature tree can absorb up to 48 pounds of carbon dioxide per year. In an area with increasing development, the additional benefit of sound absorption provided by the forest is important to reduce noise pollution. These combined air and noise quality benefits will increase over time as protection of the Project will allow for continued

maturation of the 54.8-acre forest. The Project's protection of open space will also contribute to the social and recreational quality of life for residents.

Bird and wildlife habitat

The Project is located within a migratory flyway corridor along the Chagrin River, and its forested habitat provides essential stopover habitat for neotropical migratory birds, species that rely on large, intact stands of deciduous trees in Northeast Ohio along their migration route. The Project's loose-bark trees also serve as prime roosting habitat for bats. Surveys have identified one (1) Federally-Endangered bat species, one (1) State-Endangered bat species, six (6) State Species of Concern bat species, and ten (10) State Species of Concern bird species. The mature forest provides these species with critical breeding, nesting, feeding, roosting, and stopover habitat.

6. Additional Information

Provide additional information about your project. Examples include collaboration with other partners or how this project fits into a larger effort.

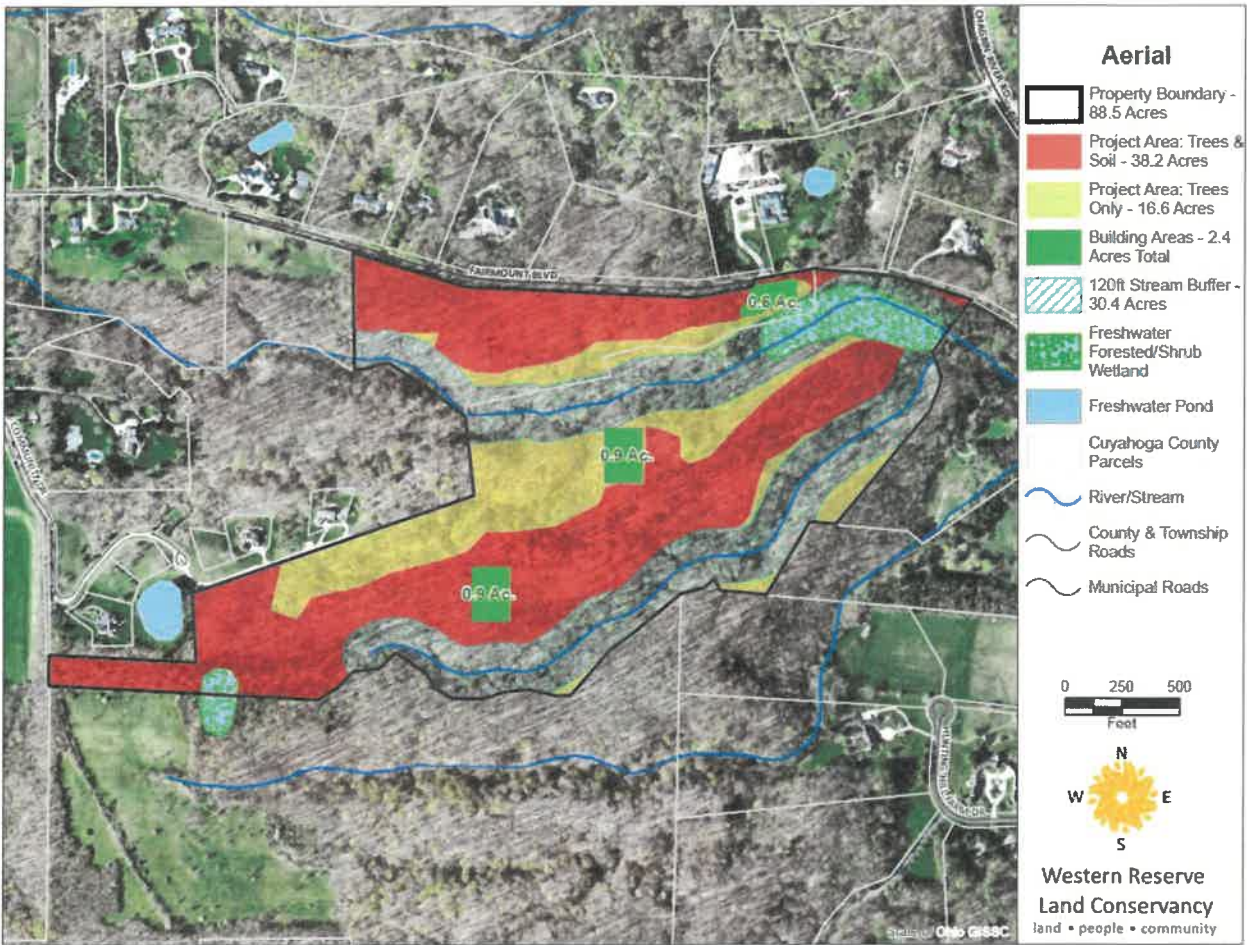
The Project is located in a highly developed area; its protection will prevent additional residential development in an area that is losing green space and the associated benefits. Forest preservation is consistent with the Chagrin River Watershed Balanced Growth Plan. The Land Conservancy's efforts in partnership with the Village of Hunting Valley to make protection of this property a conservation priority speaks to the importance of habitat preservation in this corridor. Funders of the property acquisition included the Clean Ohio Conservation Fund, the federal Great Lakes Restoration Initiative, and Ohio Governor Mike DeWine's H2Ohio program, as well as generous private donations from neighboring landowners, members of the community, and other supporters of the project.

Western Reserve Land Conservancy, nationally-accredited by the Land Trust Alliance, is Ohio's largest land trust with more than 70,000 acres conserved across nearly 900 unique properties. The Land Conservancy preserves natural resources which provide multiple environmental benefits and improve the quality of life for residents throughout 29 counties in northern and eastern Ohio. Carbon credits are an excellent extension of the Land Conservancy's mission, furthering conservation goals that will benefit communities, increase valuable open space acreage, and preserve critical wildlife habitat.

7. Map

Provide a map of the Project Area.

Please see the map on the following page.



PROJECT OPERATOR SIGNATURE

Signed on May 24 in 2023, by Alex Czayka, Chief Conservation Officer for Western Reserve Land Conservancy.



Signature

Alex Czayka

Printed Name

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