NORTHERN WILD MONKSHOOD SECTION 6 RECOVERY LAND ACQUISITION

CHASE CREEK ALGIFIC TALUS SLOPES STATE NATURAL AREA GRANT COUNTY, WISCONSIN

The Wisconsin Department of Natural Resources (DNR) is submitting a proposal for a Recovery Land Acquisition Grant for $300,000 to help acquire 98 acres from the Ernstmeyer family near the Village of Glen Haven in Grant County that would contribute to the recovery of the federally threatened northern monkshood (*Aconitum noveboracense*). The population is within the Chase Creek Bluff complex identified in the Monkshood Recovery Plan and would be included in the proposed Chase Creek Algific Talus Slopes State Natural Area. Northern monkshood was listed as a federally-threatened species in 1978 and has a recovery priority number of 2. Populations are restricted to only 20 currently existing sites in three separate geographic regions: northeastern Iowa/southwestern Wisconsin, northeastern Ohio, and the Catskill Mountains of New York. The species' distribution is limited to specific fragile habitats with cold groundwater flowage or cold air drainage. Since few locations meet these requirements the species is vulnerable to extinction.

The primary goal of the National Recovery Plan for Northern Monkshood (1983) is to provide "security for all known northern wild monkshood locations against damage or destruction of the existing habitats." There are currently no permanently protected algific talus slopes in Wisconsin; the grant would assist in the acquisition and protection of the Ernstmeyer family's algific talus slope and the associated population of northern monkshood population.

Northern Monkshood

NEED:

This land acquisition will contribute to a high benefit of recovery of northern monkshood by helping to permanently protect both a population of monkshood and the rare and fragile ecological community that this species requires. The proposed population is one of six discretely tracked monkshood occurrences on private property within the Chase Creek Valley. Many such bluffs along the Mississippi River have experienced increasing development pressure in recent years; two condominium developments along the river bluffs have occurred already and this landowner has been interested in developing the parcel in question into condominiums.

Funds are needed to assist in acquisition of a 98-acre property (Figure 1) that contains one population of northern wild monkshood and provides a buffer to five other monkshood populations. Protection of monkshood habitat is a specific Priority 1 Task of the Northern Monkshood Recovery Plan. The Recovery Plan requires permanent protection of remaining colonies because of their fragile habitat, small number of locations and diminutive population sizes. Northern Monkshood requires cold, moist conditions on algific talus slopes or moist cliffs. This project would help meet recovery goals for northern monkshood; land acquisition would eliminate harmful logging activities around the monkshood populations and the negotiations also include purchase of an easement on 638-acres of buffer lands surrounding the monkshood population, which will prevent the establishment of a 73-lot condominium, which would greatly increase local traffic and abuse to the site. Both acquisitions are adjacent to additional private lands containing unprotected monkshood populations, and the prevention of the planned condominium will provide a significant opportunity to educate adjacent landowners to consider permanent land protection. The property acquisition will also provide valued connectivity to adjacent permanently protected lands; Chase Creek Algific Talus Slopes State Natural Area - Devil's Backbone Preserve Unit and the USFWS Upper Mississippi National Wildlife and Fish Refuge.

Acquisition would include the monkshood population that occupies one of several algific talus slopes on the property. It is entirely possible that the current monkshood population could expand to similar habitat throughout the north-facing slopes on the property. The surrounding habitat includes the globally imperiled Oak Opening Habitat, Algific Talus Slope, Talus Forest, Moist and Dry limestone and sandstone Cliffs, Southern Dry, Dry-Mesic, & Mesic Forest, Sedge Meadow, Emergent Aquatic Wetland, and Floodplain Forest. The property includes multiple springs, seeps, and over 9,000 feet of frontage along Chase Creek, a clear water stream with cobble bottom and high water quality that is an important component of the Mississippi River watershed. Protection of developable upland habitat is crucial to ensure that the monkshood population is not destroyed. Development, trampling by livestock, logging, and agricultural practices can change the drainage, cold air flows, and cold groundwater seeps. Once destroyed, this fragile ecosystem cannot be replaced.

OBJECTIVES:

The objective is to purchase a 98-acre tract by July 30, 2010. Proposed funds will be used for the acquisition of private land; the owner of the proposed purchase has been contacted and is a willing seller. The Department would provide federal and state funds to the Mississippi Valley Conservancy (MVC) who would acquire the parcel.

EXPECTED RESULTS OR BENEFITS:

The expected benefit of this project is the permanent protection and appropriate land management of a previously un-documented algific talus slope and northern monkshood population and the first permanently protected algific talus slope in Wisconsin. With the protection of this privately owned population, it becomes more likely that adjoining landowners will become more receptive to protection measures on their properties. Because of monkshood's particular growing habits, it is not expected that the species will ever become a common species, even through recovery efforts. The primary goal for recovery is to improve security for any of the monkshood locations so as to minimize actions that would damage or destroy existing habitats. The project will advance the objectives of the Northern Monkshood Recovery Plan (1983) by allowing for the permanent protection of the population and surrounding habitat, educating landowners with adjacent population aware of their long-term protection options, permanent protection from trampling, grazing, logging, damage from recreational vehicles, competition from invasives, and making the population available for research and education.

Monkshood population estimates in 2009 at this site were 100-200 plants, and they approximated a 10% cover of plants over a 0.26-acre area. The overall value of the site is greatly enhanced by the presence of additional suitable habitat; including numerous cold-air vents.

Benefits to Rare Species:

This project acquisition will contribute greatly to the recovery of at least one federally listed species, and multiple state-listed species. Additional rare species observed on the 98-acre parcel or on adjacent land (638-acre proposed future easement area or on MVC's Devil's Backbone Preserve) (Figures 1 and 2).

Scientific Name	Common Name	State Status
Plants		
Aconitum noveboracense	Northern Monkshood	State-threatened
Asclepias purpurascens	Purple Milkweed	State-endangered
Silene nivea	Snowy Campion	State-threatened
Solidago sciaphila	Shadowy Goldenrod	Special Concern
Lespedeza violacea	Violet Bush-Clover	Special Concern
Desmodium canescens	Hoary Tick-Trefoil	Special Concern
Eupatorium sessilifolium	Upland Boneset	Special Concern
Dodecatheon amethystinum	Amythest Shooting Star	Special Concern
Quercus muhlenbergii	Chinquapin Oak	Special Concern
Panax quinquefolius	American Ginseng	Special Concern
Ribes hudsonianum	Northern Black Current	Special Concern
Birds		
Empidonax virescens	Acadian Flycatcher	State-threatened
Spizella pusilla	Field Sparrow	Special Concern
Toxostoma rufum	Brown Thrasher	Special Concern
Herptiles		
Lithobates Palustris	Pickerel Frog	Special Concern
Crotalus horridus	Timber Rattlesnake	Special Concern
Invertebrates		
Hendersonia occulta	Cherrystone Drop Snail	State-threatened
Vertigo hubrichti	Midwest Pleistocene Vertigo	State-endangered

Ecosystem Description and Function

This population of northern monkshood occurs in an algific talus slope ecosystem, on a north-facing slope above Chase Creek, in a canopy opening approximately 75 feet by 100 feet in size. Estimated population size is between 100-200 plants. The algific talus slope habitat fills a critical role in the life cycle of the monkshood. Algific talus slopes require little to no management to provide benefit to the monkshood; the primary habitat requirement is protection from destruction.

Algific talus slopes are characterized by northern aspect, loose rocky substrate and cold-air vents. This rare community is known only from the Driftless Area in southwestern Wisconsin, northeastern Iowa, and southeastern Minnesota. Algific talus slopes are small and isolated and tend to occur on steep north- or east-facing slopes with a substrate of fractured limestone (dolomite) bedrock that retains ice and emits cold air throughout the growing season. The community is dependent on water entering gaps in the dolomite, freezing in winter, and then slowly melting during the summer months and producing a steady outflow of cold air. Cold microhabitats support and enable the persistence of disjunct northern plant species, and "periglacial relicts" such as northern monkshood and

globally rare terrestrial snails. As is the case at this site, the woody overstory is often sparse (only about 10-15% here) and composed of scattered, small black ash, American elm, sugar maple and white birch. Associated herbaceous species at this site include wild ginger, maidenhair fern, wild sarsaparilla, American bellflower, great blue lobelia, and abundant leaf-cup and bulblet fern, plus various diverse mosses.

According to the Monkshood Recovery Plan, it is unlikely that northern wild monkshood will be established outside of the sites it currently inhabits. Therefore it is critical that these ecosystems be protected.

Protection of this property will not only prevent direct harm to the population of northern monkshood from development, grazing, trampling, or logging activities, but will also prevent disturbance of the cold air vents which may be susceptible to collapsing if disturbed.

Connectivity

Purchase of 98-acre parcel will link multiple protected areas together; the 98-acre parcel borders the USFWS Upper Mississippi Wildlife and Fish Refuge to the west and MVC's Devil's Backbone preserve on the southwest corner. The USFWS Upper Mississippi National Wildlife and Fish Refuge is considered a wetland of international significance under the Ramsar Convention, and MVC's Devil's Backbone preserve is a unit within the Chase Creek Algific Talus Slopes State Natural Area; it is permanently protected and will be legally dedicated as a State Natural Area. The subsequent purchase of the 638-acre easement will expand the protected area to the north and east to further reduce habitat fragmentation, as the land is planned to become a residential subdivision if grant funding is not obtained. The land also provides a critical buffer to adjacent privately owned algific talus slopes.

Benefits for Wildlife:

Preservation of a tract of land of this size, ecological quality, and location adjacent to the Mississippi River provides crucial habitat for numerous wildlife species, including those listed above as well as other rare forest interior birds, such as the Cerulean and Hooded Warbler. Complete bird surveys have not yet been done for the property, but it is expected that a number of additional rare forest birds will be round breeding here. The project area is adjacent to the Upper Mississippi River National Fish & Wildlife Refuge Important Bird Area. This IBA describes the area as "the forests, wetlands, and grasslands provide critical breeding habitat for many species, including bitterns, herons, bald eagle, red-shouldered hawk, yellow-billed cuckoo, Acadian flyçatcher, prothonotary warbler, cerulean warbler, Louisiana waterthrush, lark sparrow, and eastern meadowlark."

Wetlands on the property are home to an abundance of amphibians, a testimony to the water quality on the site. Aquatic invertebrate sampling of Chase Creek in the 1980s indicated high water quality, and with its cobble bottom, clear water, relatively fast gradient and associated moist cliff habitat, the stream and associated riparian cliffs and wet meadows provide additional conservation and potential recreational value. Updated fish, frog and aquatic invertebrate surveys are needed and will be pursued. A number of state-listed species that may benefit from the protection and management of the habitat on the project including those listed above, plus the wood thrush, whip-poor-will, Blanding's turtle, cricket frog, prairie ringneck snake, and many others.

Benefits to the Public:

The acquired site would be open to the public (with the exception of the algific talus slopes). The property would provide an excellent area for the public to hike, bird-watch, hunt, and fish. The conservation easement area would be open to the public along Chase Creek for trout fishing. The site will also provide excellent opportunities for research and education.

APPROACH:

Mississippi Valley Conservancy began negotiating with the Ernstmeyer family in January 2009. The property is currently being appraised, and the value ($600,000 or $6,122/acre) is a rough estimate made by the appraiser. The 638-acre easement is not part of this grant request.

The State of Wisconsin's cost share will be from the Knowles-Nelson Stewardship Fund, a State of Wisconsin ten-year bonding program that provides land acquisition funds for the Department, local units of government, and conservation organizations. MVC will submit grant applications through this program to cover 50% of the cost of the acquisition. Upon approval of funding and signing an offer to purchase, MVC will secure the Department and Governor's approval for the cost share grant money.

Management responsibilities will be retained by MVC, and efforts will begin immediately to remove existing threats, such as invasive species such as garlic mustard, which occurs in scattered small pockets in the larger forested area. The property will be permanently protected and it will be noted on the deed that there is a federal interest in the acquired property.

LOCATION

The project is located in Grant County, Wisconsin, Bloomington Township (4-5N, R6 W, Section 2, 3, 34, 35), directly adjacent to Mississippi Valley Conservancy's Devils Backbone Preserve. The acquisition area is located on Figure 1 and 2. The land to be acquired is situated in rolling Driftless Area topography with a variety of slopes, including bluffs overlooking the Mississippi River.

ESTIMATED ACQUISITION COSTS

Estimated fee acquisition cost (98 acres @ $6,122/acre)	$600,000
Federal Share (50%)	***$300,000***
State Share (50%)	$300,000
Total Cost:	$600,000

If full funding is not available the Department would accept partial funding. If full funding is not available for the purchase of the entire 98 acres a small tract might be acquired that would meet the guidelines of the grant.

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Mississippi Valley CONSERVANCY

August 14, 2009

Pete Fasbender
U.S. Fish and Wildlife Service
Bishop Henry Whipple Federal Building
One Federal Drive
Fort Snelling, MN 55111-4056

Dear Mr. Fasbender:

I am writing this letter to show Mississippi Valley Conservancy's strong support of the proposal for the Northern Monkshood Section 6 Recovery Land Acquisition of the Ernstmeyer Property. I am personally very familiar with the property, having explored the site multiple times, along with state biologists and university professors. All who have explored the property have come away with an enthusiasm for the quality of the site, the springs, seeps, creek and overall water resources, the geological features; cliffs and talus, and the abundance of wildlife.

Mississippi Valley Conservancy (MVC) is a non-profit land trust located in La Crosse, WI. Our mission is to conserve the diverse landscapes and natural areas of the Coulee Region. This project is an exemplarily diverse and significant part of our "Mississippi River Bluffs Priority Area", a priority area targeted for the prevalence of rare and endangered species and habitats. The project area's location adjacent to MVC's Devil's Backbone Preserve, the FWS Upper Mississippi National Wildlife and Fish Refuge, and WI-DNR's Chase Creek Algific Talus Slopes State Natural Area Project Boundary provide a unique opportunity to expand existing protected land, and meet the goals of multiple organizations. The purchase of this 98-acre property would not only provide MVC with our very first nature preserve featuring the algific talus slope natural community, but also provided the first permanently protected algific talus slope ***in the state***! In addition to providing an exceptional opportunity for public education on this rare natural community, it will also provide the public an example of conservation of private land preservation, so landowners can see that there are other options available to them than subdividing and developing their natural areas. The timing of this project is opportune; without our ability to secure grant funding the landowner is planning to subdivide and develop the property into condominiums, advertising the availability of ATV off-roading, hiking, etc.

I hope you receive this proposal with as much enthusiasm and excitement for the project as we have. If I can be of further service, please feel free to contact me at any time at 608-784-3606 extension 5 or by email at achurch@mississippivalleyconservancy.org.

Thank you,

Abbie Meyer-Church

Abbie Meyer-Church
Conservation Specialist

COMPLIANCE

On an annual basis, the Department signs an U.S. Fish and Wildlife Service, Division of Wildlife and Sport Fish Restoration "Assurances" Form certifying that the agency complies with a number of federal laws, i.e. the Intergovernmental Personnel Act of 1970, Wild and Scenic Rivers Act of 1968, etc.

Attachment 6 to the Sport Fish and Wildlife Restoration Program Funding Option Grants in Wisconsin (F-95-P and W-160-P) describe the Wisconsin statutes, rules, and procedures to insure compliance with federal requirements associated with the Sport Fish and Wildlife Restoration Acts. In addition, Part 523 of the Federal Aid Handbook provides further guidance on those requirements generally applicable to grant programs. *NEPA Guidance to States Participating in The Federal Aid Program* and Wisconsin guidance document titled *How to Complete the National Environmental Policy Act (NEPA) Compliance Checklist* (Attachment 16) serves as the guidance for insuring compliance with the National Environmental Policy Act. The following narrative supplements Attachment 6 and Part 523 by providing additional procedural information on several compliance subject areas.

Section 106 of the National Historic Preservation Act and 36 CFR Part 800: Protection of Historic Properties: Under Section 106 of the National Historic Preservation Act, any project receiving federal funds must be reviewed to determine if the action may impact significant cultural resources. The U. S. Fish and Wildlife Service, Division of Federal Aid, has authorized the WDNR to act as an agent for the FWS to initiate the Section 106 process with the State Historic Preservation Officer. The Wisconsin Historical Society's Museum Archaeology Program has agreed to assist the WDNR with Section 106 compliance for federally assisted activities that have the potential to impact cultural resources and lands acquired with federal funds.

All tracts of land proposed for acquisition as part of this grant proposal will be reviewed by a qualified professional (archeologists and/or architectural historians). The qualified professional documents the results of his/her research and makes a determination that the potential project impact will constitute one of three possible findings: "no effect", "effect, no adverse effect", or "adverse effect". The finding determination (including all the essential information needed to support the finding) is sent to the State Historic Preservation Officer for concurrence. A copy of the documentation and SHPO concurrence is retained in the individual land file maintained in the Bureau of Facilities and Land. If a cultural resource survey is required and the survey is conducted with Federal Aid in Sport Fish or Wildlife Restoration funds, a copy of the survey will be sent to the FWS Regional Office.

National Environmental Policy Act:

In Wisconsin, all land acquired with federal funds are acquired from willing sellers. The Governor has the authority to utilize eminent domain, but only with approval of the legislature. If any land is proposed for purchase with federal funds using eminent domain, an Environmental Assessment will be prepared and approved by the Fish and

Wildlife Service prior to signing an option. The Department's property managers contact private landowners within a project boundary on a periodic basis to inform them that the Department is interested in purchasing their land. The Natural Resources Board reviews each tract of land proposed for acquisition and the public is invited to comment on all proposed acquisitions. Finally, the Governor approves each tract of land acquired.

Any land acquired through funds received as part of this grant proposal would be utilized only for the specific purpose for which they were purchased. The Department does not generally allow changes in land use on properties that have been purchased with Fish and Wildlife Service funding.

The department has an extensive public involvement process related to land acquisition. Public involvement is invited in the Feasibility Study process for the establishment of new department properties, and in the Master Planning process

Activities funded in this grant comply with the Department of Interior and Fish and Wildlife Service categories of actions, which are excluded from NEPA documentation. Section 1.4, Categorical Exclusions, states that categorical exclusions are classes of actions which do not individually or cumulatively have a significant effect on the human environment. Subsection 1.4A lists 4 types of actions that are categorical exclusions under NEPA. The acquisition of land under this project is considered a categorical exclusion under FR Volume 62, Number 11, Section 1.4A(4). Number 4 under 1.4A is "The acquisition of real property obtained either through discretionary acts or when acquired by law, whether by way of condemnation, donation, escheat, right-of-entry, escrow, exchange, lapses, purchase, or transfer and that will be under the jurisdiction or control of the United States." We believe land acquired as part of this proposal qualifies as a categorical exclusion under Section 1.4A(4). We believe the potential for adverse impacts is minimal.

Other compliance issues, (i.e., cultural resources or endangered species) may also trigger the need for environmental assessment documentation.

Endangered Species Review: The responsibility for reviewing proposed projects for possible impacts to state and federally listed endangered and threatened species is assigned to the Department's Regional Offices. The concept behind this decentralized review is that the people that know the project and the local project site are the most knowledgeable to assess impacts. Trained staff in the central office and field staff throughout the Department use the *Endangered Resources Screening Guidance For the Wisconsin Department of Natural Resources* (Attachment 14) to screen actions for impacts to federally listed species, species proposed for listing, candidate species, and proposed or designated critical habitat and document results.

Implementation of this grant will not jeopardize the continued existence of any state or federally listed threatened and/or endangered species or result in the destruction or adverse modification of critical habitat of the species. In fact, any land acquisition should have a positive impact on endangered species, if, for example acquisition and protection

by DNR prevents damaging private sector development on the land. Thus, for this grant, we recommend a "no effect" or "may affect but is not likely to adversely affect" determination.

Performance Reporting:

A narrative style interim performance reports will be submitted to the FWS on an annual basis. A final report, including a Land Summary Statement (LSS) and supporting documents, will be submitted within 90 days of the grant period end date. The final performance report will include 1) the LSS; 2) appraisal review certifications; 3) Statement of Just Compensation; 4) documents showing date Governor signed the option (this establishes Department commitment); 5) recorded deeds/easements with covenant language; 6) transaction summary (Form 2200-12); and 7) tract map. In addition, the following will be submitted under the noted conditions: 8) justification statement when the land acquired is outside the current property boundaries; and 9) documentation of vendor donation. When an individual tract of land is valued in excess of $1M, prior to purchasing the land the Department will consult with the Fish & Wildlife Service to determine appraisal procedures, documentation, and reporting requirements.