



# Grant Application

**Grant Name** - Enhanced Habitat Partnerships in Washington County

**Grant ID** - C25-0089

**Organization** - Washington Conservation District

<b>Allocation</b>	Habitat Enhancement Landscape Program 2025	<b>Grant Contact</b>	Tara Kelly
<b>Total Grant Amount Requested</b>	\$246,886.50	<b>County(s)</b>	Washington
<b>Grant Match Amount</b>	\$35,000.00	<b>12 Digit HUC(s)</b>	070102060301,070102060302,070102060303,070102060804,070102060805,070102060901,070102060902,070102060903,070300050401,070300050402,070300050903,070300050905,070300050906,070300050907,070300050908,070300051201,070300051202,070300051203,070300051205,070300051206
<b>Required Match %</b>	10%	<b>Fiscal Agent</b>	Washington Conservation District
<b>Other Amount</b>		<b>Application Submitted Date</b>	06/27/2024
<b>Project Abstract</b>	The Washington Conservation District provides assistance for projects that support soil and water resources throughout the region. This project is a collection of a dozen high-ranking habitat projects that have risen to the top for landowner willingness and ecological benefit. The selected projects cover a diverse area, ranging from agricultural lands and existing forests, to urban parks and schools. They are all holding a protected status or publicly owned and have multiple benefits including ecological, educational and partnership development. These projects have been selected primarily for their potential to enhance and restore critical core habitats and adjacent corridors in prairies, savannas, woodlands and wetlands of Washington County. The		

initial site analysis for these sites shows the potential to increase and improve the habitat quality for a host of at risk species including the Rusty Patched Bumble Bee, the Monarch Butterfly, the Great Spangled Fritillary, Blanding's Turtle, the Golden-winged Warbler, and grassland birds such as the Savanna and Grasshopper Sparrow.

The proposed projects will improve habitat quality by increasing species richness within degraded sites or sites with low forb diversity, establishing larval host plants for at-risk insects, and creating viable nesting habitat. The focus of the projects will be to ensure a range of available pollen and nectar resources from spring through fall while providing preferred and required host species such as violets, milkweeds, blazing stars, louseworts, and golden alexanders. Nesting habitat for Blanding's turtle (sandy openings in uplands), the golden-winged warbler (shrubby areas adjacent to wetlands), and grassland birds (clumps of flowers and grasses) will be added. Weedy and aggressive species will be set back using a variety of methods including prescribed burning, brush cutting, mowing, and spot-treatment. Native species will be added through seed mixes, live plants, and tree and shrub plantings.

Project partners include six local units of government (City of Birchwood Village and Stillwater, Baytown Township, Brown's Creek Watershed District, Forest Lake School District, and Washington County), two non-profit organizations (Friends of the Mississippi River and the St Croix Watershed Research Station), and three private landowners. The proposed projects of habitat restoration and enhancement projects will add habitat value by converting brome fields to mesic and dry prairie; restoring turf grass to both upland prairie and sedge meadow; retiring 25 acres of corn and soybean fields to dry-mesic prairie, enhancing low quality prairies with prescribed burning, interseeding and planting; and diversifying woodlands with additional plants, trees and shrubs. In total, the proposal will restore and enhance over 48 acres including 45 acres of prairie and savanna, 1 acre of woodland, and two acres of wetlands.

#### Proposed Measurable Outcomes

Enhance at least 48 acres of restoration and enhancement projects across 12 locations (minimum) throughout Washington County to increase both the quality and quantity of pollen and nectar resources available with an additional focus on providing larval host species to at-risk or endangered insects and nesting sites for at risk reptiles and birds.

#### Narrative

**\*\*Required\*\* MN Statute 16B.981 Subd. 2 (6) requires that no current principals of a grantee have been convicted of a felony financial crime in the last 10 years. A principal is defined as a public official, a board member, or staff (paid or volunteer) with the authority to access funds provided by this grant opportunity. By typing YES here, I attest that no current principal of my organization with authority to access funds has been convicted of a felony financial crime in the last 10 years.**

YES

**1a. List the project(s) location and anticipated benefits to populations of beneficial insects, bees, butterflies, dragonflies, birds, other wildlife, and/or at-risk species.**

Given that all 12 projects are within the potential habitat area for the Rusty Patched Bumble Bee (RPBB), each project will also focus on habitat requirements defined by the U.S. Fish & Wildlife Service. Because the RPBB emerges early in the spring and forages into the fall, providing floral resources to gather pollen and nectar is critical. These projects are also important for Monarch Butterfly conservation. The I-35 Monarch Highway is located to the west of Washington County and within the high Monarch protection region. These projects will be designed to benefit the Monarch butterfly and other at-risk pollinators by providing diverse floral resources throughout the growing season and by establishing host plants for habitat specialists. Milkweed species, for example, will be utilized to support the larval stage of monarchs while providing a valuable nectar source to RPBB. Other nectar species preferred by both RPBB and monarchs include Blazing Star, Bee Balm, Showy Goldenrod, and New England Aster. The range of site conditions between each project location provides an opportunity to include a wide variety of prairie plant species. The projects include well-drained uplands to shorelines along ponds with a variety of soil types. Having a range of soil conditions allows for flexibility in designing species lists to incorporate larval host species or genera for particular insect species where most appropriate. Many at-risk species have specific larval plant hosts such as the Black Swallowtail, which uses Golden Alexanders and other species in the carrot family. Another example is the Great Spangled Fritillary which relies almost exclusively on violets as larval hosts. One of the projects at Big Marine Park Reserve is uniquely poised to restore dry prairie near the wetland and open water of Big Marine Lake. A 1,000 sq ft patch of open sand and gravel at the edge of the prairie restoration will offer nesting habitat for both Blanding's Turtle and ground nesting bees.

**1b. To the extent known, describe existing project(s) site conditions and processes being used to achieve project goals, including planned site preparation and seeding methods; and seed mix design(s) for projects establishing new or enhancing existing native vegetation.**

Baytown Town Hall- The project will enhance an existing wetland by removing invasives, adding seed and planting shrubs with 1.5 acre old field to native prairie. Big Marine Park Reserve- 25 acres of ag fields will be converted to dry prairie by seeding prairie and planting forbs near new turtle nesting areas. Brown's Creek Conservation Area- A 0.25 acre prairie remnant will be burned. Trees and shrubs will be planted in the woodland and grassland. Brown's Creek Park- Over 2.5 acres of prairie will be enhanced with prescribed burning, seeding, spot-treatment, and plantings. Cedar Bluffs- Over 5 acres of restored prairie will be enhanced prescribed burning, seeding with a pollinator mix, and spot-treatment. Forest Lake High School Campus- This 1.5 acre prairie restoration will restore turf grass surrounding a stormwater basin. Kingston Easement- This project includes seeding forbs into a wetland and pollinator mix into a prairie restoration, and planting forb plugs into a woodland. Nightingale Park- This 1.5 acre project will restore prairie and oak savanna. The old field and turf grass will be restored with woody species removal, site preparation, seeding and shrub and tree planting. Ponds at Heifort Hills- This 2-acre pond buffer enhancement will remove non-native woody species and replace with flowering trees & shrubs native. Riverside Park- This 1 acre prairie remnant will be enhanced with prescribed burning, spot-treatment, interseeding and mowing and added violets for the great spangled fritillary. St. Croix Watershed Research Station- This 4 acre conversion of a brome field to a prairie restoration will use a combination of techniques including burning and interseeding and conventional methods to add habitat for the savanna and grasshopper sparrow. Tighe Schmitz Park- This project will enhance a 1 acre degraded forested wetland along the edge of a park by removing invasive species, seeding a wetland forb mix and planting native shrubs and seeding a wet meadow.

**2. Discuss your project(s) connection to statewide and local habitat corridors/pathways or areas mapped as important for target species.**

In addition to the national priority mapping for the Rusty Patched Bumble Bee (RPBB) and the Monarch Butterfly, the project locations are tied to regional, state and local mapping efforts. All of the projects are located within a 'Priority 1' area for the RPBB as defined by the Board of Water and Soil Resources (BWSR).

The Wildlife Action Network was developed by the Minnesota Department of Natural Resources to target conservation efforts. The "Conservation Focus Areas" (CFA) are prioritized locations to work with partners to increase habitat for Species of Greatest Conservation Need. The St Croix River Watershed is one of 36 CFAs in Minnesota and includes nine proposed projects. Using natural disturbances such as prescribed fire and haying is recommended for one of the target habitats the Southern Dry Prairie.

Three of these projects are within Important Bird Areas as designated by the Audobon Society, St Croix Bluffs and Mississippi River Twin Cities.

In 2016, WCD worked with the BWSR on a pilot mapping project to prioritize the locations for pollinator habitat in Washington County. Through this effort, the WCD identified "sweet spots" where marginal habitat could be improved to connect and increase the size of core habitat areas. These data supplement and support more recent prioritization efforts in Washington County, including the Washington County "Landscape Protection & Stewardship Framework" plan adopted in 2022 to identify key areas for land protection, restoration and corridor creation, and regenerative agriculture. Prioritized areas were identified based on connectivity between the highest quality natural areas and core habitats, suitable MLCCS land cover types for restoration or habitat enhancement, and proximity to protected resources. The locations of these projects are either within or adjacent to core habitat or areas that are identified as important corridors.

### 3. How will partnerships be established or strengthened and how is social equity considered for the project?

Baytown Township- This project is led by the township, local residence and volunteer groups. Signage, tours, volunteer engagement are all goals. Brown's Creek Watershed District- This LGU encourages participation by minority, women, and veteran-owned businesses as prime contractors. They also makes every attempt to engage with a full representation of those that live, work, and recreate in the watershed. City of Birchwood Village- This project is in partnership with the Rice Creek Watershed District as well as a number of neighborhood groups with wide support at a public forum and City Council meeting. City of Stillwater- The project at Nightingale Park is has a higher percentage of low-income households compared to the state average (37% versus 23%). Friends of the Mississippi River (FMR)- FMR's Environmental Stewardship Program was created to address racial inequity issues and grow the environmental sector's diversity through multiple internship and educations programs. Forest Lake School District- This project will also be in partnership with the Rice Creek Watershed District, the High School Science Club, and the Water Steward Program to use to teach the importance of using native species in design and conservation. Private landowners – Three private landowners including two homeowners associations are participating in this grant request. All have a conservation easement or equivalent over the project area. St. Croix Watershed Research Station- This organization has an experienced team of scientists committed to researching methods for water quality improvement. In their statement on Equity and Inclusion, they are "actively working to undo systems of injustice and inequity... create an inclusive, equity-based institution that empowers people to change the world through STEM." Washington County Parks – This project is in partnership with Pollinator Friendly Alliance, Pheasants Forever, and the Minnesota Herpetological Society.

### 4. Describe the technical assistance capability and availability of local natural resources professionals, contractors and/or officials. (Remember that the technical assistance provider must meet BWSR's definition in the Grants Administration manual.)

The Washington Conservation District (WCD) is a local unit of government in Washington County, MN dedicated to soil and water conservation. WCD has been providing local expertise on water quality, erosion control, and natural resource information since 1942 through partnerships with individuals, local government units, and other organizations and agencies. WCD has a total of 20 highly trained and well-credited staff that specialize in outreach, design, installation, maintenance, administration, and monitoring of conservation practices.

The four WCD staff that will be responsible for implementing this grant have over 60 years of combined experience restoring native plant communities and have installed over 150 pollinator-beneficial projects in the last five years ranging in size from small native plant gardens to large-acre prairie restorations. WCD staff also have experience in landscape-scale planning and prioritization efforts. In the last five years, Tara Kelly, Brett Stolpestad and Elissa Thompson have completed 14 habitat management plans for project partners such as the Minnesota Land Trust, the Trust for Public Land, Washington County, and local units of government. WCD staff have also developed a Landscape Protection & Stewardship Framework in collaboration with Washington County to help guide land protection efforts within the County.

Project partners include natural resource coordinators, land managers, watershed district administrators with LGUs and non-profits in Washington County. WCD will provide project management for any LGUs that don't have a natural resource professional on staff or for private landowners.

#### **5. Describe the long-term management commitment for project(s) and management activities that are planned, including protection from pesticide exposure.**

The 12 restoration and enhancement projects are all on protected property, either publically owned or under conservation easement. All of the projects have developed management plans that are written by natural resource professionals. WCD landscape restoration and maintenance staff will coordinate with our partners throughout design, installation, and establishment phases to discuss the desired aesthetic, ecological outcomes, installation requirements, and long-term maintenance needs. WCD staff will also offer on-site consultation and technical assistance to partners in years two and year three of the establishment period. WCD has an in-house maintenance and inspection program to address the long-term needs of conservation practices. Although these projects will be maintained by the partner organizations in the long-term, staff will be available to provide technical support.

No projects will be within 200 ft. of any corn or soy plantings so as not to be exposed to pesticide drift from agricultural sources.

#### **6. Explain the anticipated measurable outcomes upon completion and how these outcomes will be obtained. Provide information showing evidence of landowner interest.**

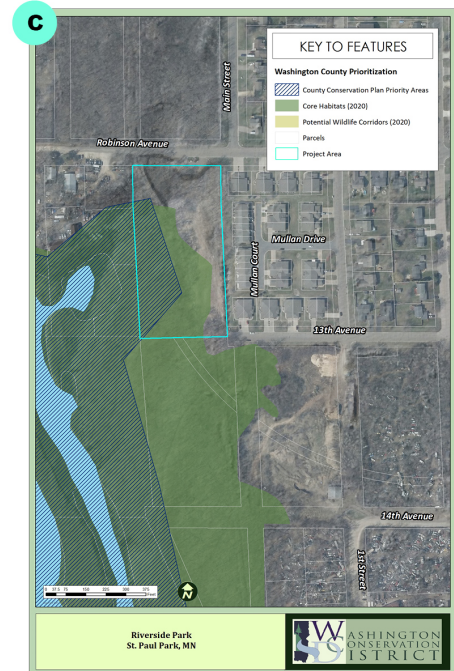
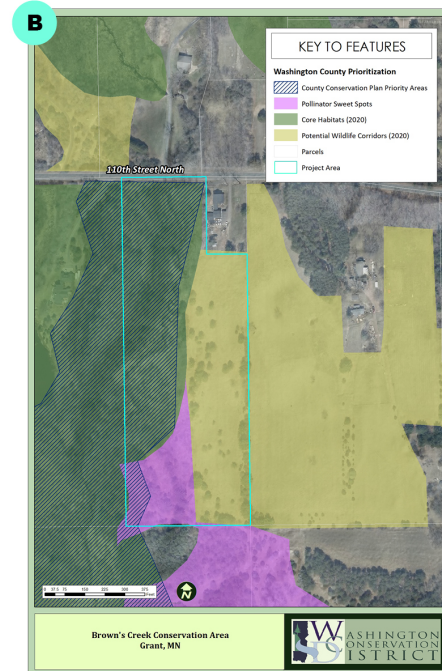
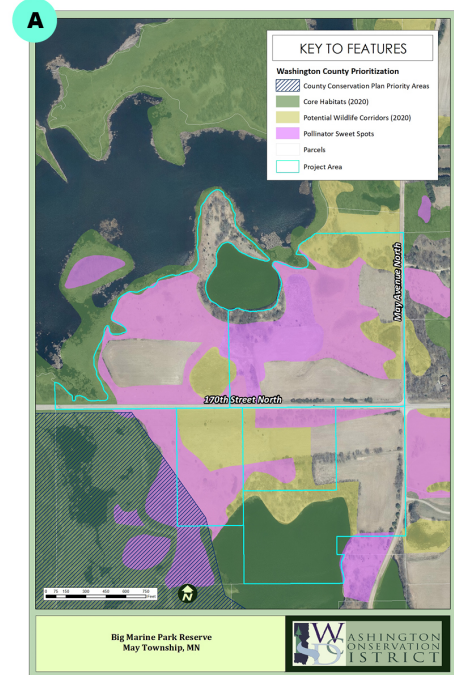
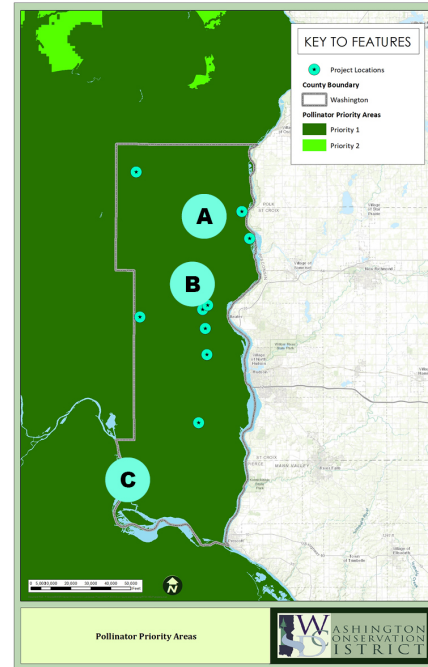
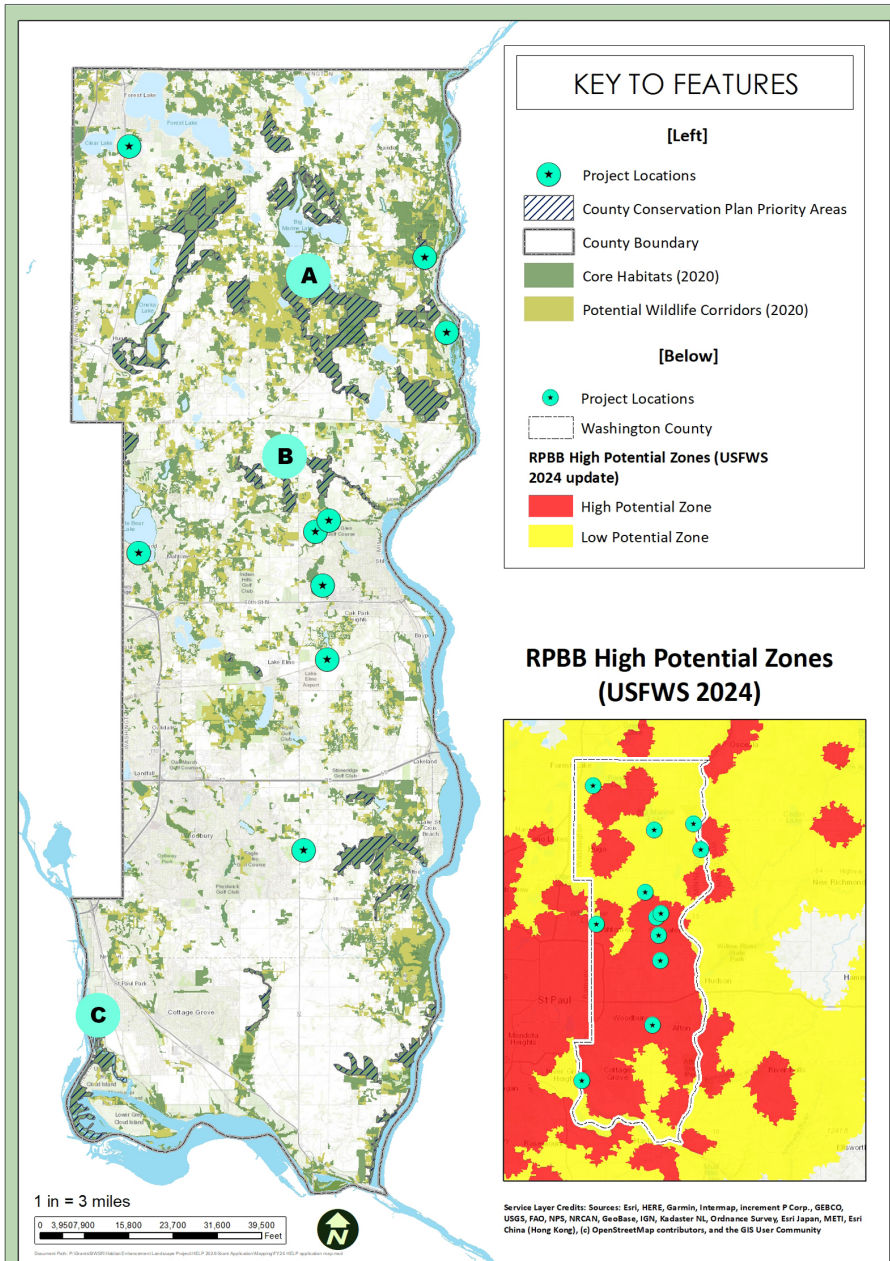
The proposed projects will provide at least 48 acres of high quality pollinator habitat for a wide variety of pollinators and at risk in prioritized core habitats and associated corridors in Washington County. Each seeding project will be designed to include at least 10 flowering plant species in each bloom period to provide resources through spring/early summer, summer, and fall. Among the forbs species selected will be plants known to support immune systems as well as "superfoods" which have nectar with abundant amino acids as a protein for the RPBB. Live plant enhancements and tree and shrub plantings will be developed to maximize potential benefit pollinators, incorporating larval host species or genera for specialist insect species where appropriate. The Great Spangled Fritillary, for example, relies almost exclusively on violets as larval hosts. Black Swallowtail butterflies similarly rely on species in the carrot family for egg laying and larval stages. These species, among others, will be incorporated into each project to ensure specialist pollinator species are supported as well as generalists.

Each project will use a combination of site preparation and management techniques to minimize impact to existing pollinator communities while ensuring the best project outcomes. These techniques include: prescribed burning, integrated plant management, mowing, interseeding and planting. Depending on the site preparation timeline, pollinator plots will be seeded within two weeks following a spring burn or in the fall to maximize forb germination. Live plants, trees and shrubs will be planted in spring or fall to further enhance diversity and increase overall chance of successful establishment.

WCD staff has developed and/or reviewed a concept and cost estimate for each of the projects with project partners. The project partners have submitted letters of support (available upon request) that outline the project goal, size, cost, match contribution and timeline.

### Application Budget

<i>Activity Name</i>	<i>Activity Description</i>	<i>Category</i>	<i>State Grant \$ Requested</i>	<i>Activity Lifespan (yrs)</i>
Administration	Staff time for administrative tasks such as contracts, board memos, development of requests for quotes, inspections, requests for payment, vouchers and reporting.	Administration/Coordination	\$10,000.00	10
Implementation	Contractor and materials cost to restore and enhance at least 48 acres of prairie, savanna, woodland and wetland.	Non-Structural Management Practices	\$191,886.50	10
Technical Assistance	Staff time for technical assistance to assist partners with project design, site assessment, contractor bids, seed mix design and ordering, tree shrub and plant ordering, coordination of volunteer events, and assessing project outcomes.	Technical/Engineering Assistance	\$45,000.00	10



Map Image

