



CROWN FAMILY PHILANTHROPIES



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Chi-Cal Rivers Fund Habitat Improvement Project Examples

The following 24 projects are habitat improvement projects that have been supported by the Fund over the past five funding cycles.

Friends of the Forest Preserves received \$110,400 to Friends of the Forest Preserves will implement Phase III of the Centennial Volunteers Network project to expand and mature self-sustaining communities of habitat restoration volunteers at Cook County forest preserves. Reduction of invasive species and enhanced diversity of native species will improve habitat connectivity and complexity, reduce erosion and improve water quality, and benefit native wildlife and plants. The Chicago and Little Calumet river systems have been degraded and neglected, leading to declines in habitat quality and increasing fragmentation of natural areas. Additionally, the profusion of invasive plant species have exacerbated soil erosion problems caused by urban stormwater runoff.

Friends of the Chicago River received \$248,326 to Friends of the Chicago River will reconnect Mill Creek to the Cal-Sag Channel by removing two shelf-structures which block fish passage from the Cal-Sag Channel. Project will open up 2.5 miles of high-quality stream habitat, benefiting more than 17 species of fish. Upstream fish passage on Mill Creek is blocked by two shelves that span the entire width of the creek. These shelves are not natural features. Fish species are unable to travel upstream due to these impediments. Upstream of the shelves, Mill Creek provides a meandering channel with a variety of rocky and sandy substrates that would be ideal habitat for fish.

Save the Dunes Conservation Fund, Inc. received a \$100,000 grant to restore habitat and enhance public use along the East Branch of the Little Calumet River (EBLC). Project will restore over 200 acres and enhance restoration efforts by incorporating 262 acres into landscape-level conservation planning to guide restoration projects along the EBLC. Conservation targets of this project include a mosaic of forested, savanna, prairie, and marsh habitat. Forests and savannas are important at this location for migrant and resident songbird species and many small mammals. Efforts to restore protected land along the EBLC corridor will be enhanced through vegetation surveys that will help guide long-term maintenance and management along the Little Calumet River Conservation Corridor.

The Nature Conservancy received a \$157,375 grant to develop and implement a cooperative and comprehensive approach for controlling invasive species, managing restoration activities, and

monitoring habitat on 388 acres in the Grand Calumet Area of Concern in Lake County, Indiana. With a focus on four geographic areas, The Nature Conservancy and partners removed invasive trees and shrubs, grew and planted thousands of native plants, and conducted regular monitoring and habitat management to prevent new invasive species from becoming established. By coordinating the efforts of landowners to accomplish this work, this project will contribute to the delisting of habitat-related beneficial use impairments within the Grand Calumet River Area of Concern.

Friends of the Chicago River received a \$175,000 grant to install 33 in-stream habitat structures and substrates that will enhance populations of fish and other aquatic life along a half-mile reach of the Chicago River main stem. The project involves the fabrications and installation of several innovative structural designs on seawalls and other edifices in the river to accommodate the needs of fish at various life-cycle stages. The substrates and structures will provide a foundation for the establishment of desirable plants, algae and macroinvertebrates as well as resting and foraging habitat for largemouth bass, yellow bullhead, bluegill, green sunfish and other fish. By adding structural complexity, spawning habitat, food resources, and refuge, this project will make the river system in downtown Chicago more hospitable to many fish species and lead to improved angling opportunities for local communities.

Friends of the Chicago River, in partnership with the Illinois Department of Natural Resources (IDNR) will use a \$105,003 grant to install native emergent vegetation in the North Shore Channel and the North Branch of the Chicago River as habitat for fish and other aquatic species. The project involves the planting of 2,500 water willow and 2,000 lizard's tail at river locations between Wilmette Harbor and Goose Island. This work will create stands of high-quality habitat for aquatic organisms, protect the shoreline from bank erosion, create shelter for aquatic life during floods, and improve the aesthetics of the channel for recreational users. The selected plant species are particularly appropriate for the unique conditions of the Chicago River and will complement other recent efforts by IDNR and Friends to install 400 channel catfish nesting cavities in the Chicago River system.

Lake County Forest Preserve District is using \$171,442 in grant funding to restore 178 acres along the north branch of the Chicago River at Middlefork Savanna, one of the most important sites for biodiversity in northeast Illinois. Project activities will include regrading and replanting 1,980 feet of riverbank, disabling drain tiles to restore the hydrology in 15 acres of wetlands and adjacent prairies, clearing invasive trees across 64 acres, and seeding and planting 105 acres of prairies and wetlands. Project partners will collaborate across ownership boundaries to coordinate land management activities, including prescribed burning and other invasive species removal. This work will help reduce erosion and flooding, create more-natural hydrology that will aid the long-term control of invasive species, and improve the condition of a large contiguous grassland zone that supports many prairie and wetland birds.

Friends of the Chicago River received a \$300,000 grant to install in-stream habitat structures that will help enhance fish populations within the Chicago Area Waterway System. A total of 400 habitat structures were placed in channel bottoms and streambeds at four locations where suitable fish habitat is currently limited or nonexistent. The structures will provide spawning cavities for channel catfish and

cover for largemouth bass, sunfish and other fish species. By adding structural complexity, spawning habitat and refuge, this project will make the river system more hospitable to many fish species and lead to improved angling opportunities for local communities.

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City of Evanston received a \$100,000 grant to create and enhance migratory bird habitat areas along the North Shore Channel in Evanston's Ladd Arboretum and add bird-friendly plantings in four nearby public parks. The project will restore 3.75 acres that will provide crucial support for the tens of thousands of birds that pass through the region annually, such as the Canada Warbler and the Olive-sided Flycatcher. The project will not only restore bird habitat, but will also broaden and strengthen community engagement in natural habitat stewardship by engaging community volunteers.

Friends of the Forest Preserves received a \$271,313 grant to fund coordination of the Centennial Network – a network of more than 6,000 volunteers dedicated to restoring habitat in the Chicago and Calumet region. The network is restoring a minimum of 112 acres at five sites along the North Branch of the Chicago River and the Little Calumet River. Volunteers removed invasive species, dispersed native seeds, and installed more than 150 square feet of bioswales at each location. By reducing invasive vegetation, increasing native plant cover, and improving streambank stability, this work is improving habitat, reducing erosion, and improving water quality. In addition, the Centennial Network is broadening local support for habitat restoration and increase the number of conservation stewards in the region.

Friends of the Forest Preserves will use a \$270,000 grant to continue and expand the Centennial Volunteers Network, an organized system of volunteers that restore and monitor habitat along the North Branch of the Chicago River and the Little Calumet River. Grant funding will be used to organize volunteer days throughout the year to conduct habitat restoration activities on 267 acres at nine sites managed by the Forest Preserve District of Cook County. The project will reduce invasive vegetation and increase native plant cover throughout riparian areas and adjacent habitat. Reduction of invasive species and improved diversity of native species will improve habitat connectivity and complexity, reduce erosion and improve water quality, which will benefit native wildlife and plant species. Grant funding will also help ensure the long-term care and enhancement of these sites by building an invested and trained constituency that will continue restoration efforts into the future.

Save the Dunes Conservation Fund, Inc. received a \$281,918 grant to restore 18 acres of agricultural farmland to oak savanna, control over 100 acres of invasive species, and plant 28 acres of trees. To increase and enhance the public use of the river habitats, the project will create and enhance trails, improve signage, install two pervious surface parking lots, and allow better access on the rivers for paddlers. Altogether this project will restore and enhance 128 acres of habitat, open up 3 miles of river for paddlers, and develop 2.4 miles of trails benefiting both the native species and people of the region.

National Audubon Society received a \$273,347 grant to enhance habitat for wetland-dependent species and improve public-use for surrounding communities at Indian Ridge Marsh and Big Marsh in the Calumet region. Project outcomes include the establishment of native marsh vegetation on 110 acres and improved and increased public access to two large public areas on Chicago's South Side. The removal of invasive plant species and the revegetation of a complex mosaic of wet meadow, marsh and submerged vegetation will improve conditions for dozens of imperiled and declining species in the region and provide flood protection, sediment control and nutrient trapping. Additionally, informational and educational signage will promote access and provide information on the river and marsh systems in the Calumet region.

National Audubon Society, Inc. received a \$294,696.94 grant to restore the most critical riparian marshes from Hammond to Gary, Indiana as a first step in establishing the Little Calumet Marsh Bird Conservation Area. The restoration of 350 acres of marsh and wet meadow habitat will support the return of breeding marsh birds, a suite of species representative of quality marsh habitat and rapidly declining across the Midwest. The project will also directly improve water quality of the Little Calumet River while increasing eco-recreation visitation from traditionally under-served communities.

Friends of the Chicago River received a \$242,668.96 grant to clear invasive species from 207 total acres of headwaters area of Crooked Creek (including 81 acres cleared with grant funding). The project goal is to restore the natural infiltration provided by deep-rooted native perennial forbs and grasses, and improve the habitat for wildlife both within the creek and its larger watershed.

Shirley Heinze Land Trust, Inc. received a \$141,956.38 grant to restore 25 acres of wetlands and riparian habitat within the Little Calumet Conservation Corridor. Access and amenities improvements will also be made along the corridor through the addition of 0.25 miles of hiking trail, the clearing of a minimum of 5 miles of water trail, a universally accessible kayak launch, and informational signage with partners Shirley Heinze Land Trust, Town of Porter Parks Department, the Indiana Dunes National Lakeshore, Save the Dunes Conservation Fund, and Northwest Indiana Paddling Association.

Friends of the Forest Preserves received a \$270,000.00 grant to restore healthy habitat in forest preserves along waterways positively impacts water quality by reducing the volume and increasing the quality of water runoff. The project contributes to the Forest Preserves of Cook County's ambitious goal of restoring 30,000-acres by 2040 and creates communities of individuals who will work and advocate for healthy land and water. Phase IV will bring upwards of five new forest preserves into the program and expand to include forest preserve along the Sanitary and Ship Canal and Cal Sag Channel in addition

to the North Branch of the Chicago and Little Calumet rivers. The addition of new sites results from successfully graduating six of the eight current project sites as they will be self-sustaining volunteer communities by the end of 2018.

Friends of the Chicago River received a \$243,978.57 grant to improve habitat quality in the Crooked Creek watershed through invasive species control to improve water quality and benefit the endangered Hine's emerald dragonfly and other species. The Hine's emerald dragonfly has been state-endangered in Illinois since 1991 and on the Federal Endangered Species list since 1995. Project will restore 85 upstream areas through the removal of invasive species at strategic locations in the watershed. The control of invasive species will encourage the return of native plants which will absorb more waters, reducing the frequency and duration of downstream flood events and erosion. Project builds on work across Pioneer Woods and Country Lane Woods that will result in comprehensive, landscape scale restoration.

The Student Conservation Association, Inc. received a \$165,652.94 grant to reduce stormwater runoff and create urban habitat by planting 500 new trees in northwest Indiana. Dangerous levels of contaminated sediments, runoff from industrial and hazardous waste sites, a contaminated water table, leaking underground storage tanks, urban runoff, and coliform bacteria have all degraded this river. To address this, the restoration will reduce 65 pounds of sediment and nutrients from entering the Calumet river and add 29,500 gallons of stormwater storage capacity annually. Additionally, 500 community volunteers will be engaged in tree planting and maintenance activities, and volunteer events will educate citizens about the importance of maintaining a tree canopy. The project will build upon previous investments to continue to improve water quality at a regional scale.

Friends of the Forest Preserves received a \$186,609 grant to fortify and expand the Centennial Volunteers program at seven forest preserves to increase invasive species control work and improve restoration management. The Centennial Volunteers will engage volunteers in 11,000 hours of habitat restoration projects which include: the reduction of invasive species, improved diversity of native species, increased habitat connectivity and complexity, reduced erosion, and improved water quality. A guide will be developed for local organizations so that they are equipped with educational activities to support their service learning activities. The project will restore 80 acres along the North Branch of the Chicago River and the Little Calumet Rive through outreach to 750 people.

Shedd Aquarium Society received a \$128,150 grant to design and install floating, in-stream habitat to advance the ecological development of a stretch of the Chicago River, designated as the "Wild Mile". Native plants form the foundation of the river ecosystem, providing habitat for aquatic wildlife both above and below water to provide a more naturalized shoreline within an urban river system. The Wild Mile is home to a diverse number of local wildlife but has the potential to support much greater biodiversity through this habitat installation. Additionally, public access is a significant component of this project and the grantee will increase participation in kayak-based stewardship at the restoration site as

well as building infrastructure that will allow people to experience the in-stream floating habitat on foot. The project will enhance habitat quality, creating a more naturalized shoreline and support public engagement through stewardship activities at the installed habitat site.

Lake County Forest Preserve District received a \$171,145.66 grant to improve ecosystem function and habitat complexity near the North Branch of the Chicago River by clearing invasive woody species and planting a native cover crop mixture. Past conservation efforts within the Middlefork Savanna Forest Preserve have been successful but significant degradation remains within the private lands surrounding the preserve. Birds and other wildlife eat the fruits of invasive species, such as buckthorn, and continue to re-introduce this pernicious weed into previously restored areas, threatening their long-term sustainability. This project will create a cost-share framework for collaborating with neighboring landowners to address large populations of invasive species adjacent to the preserve, thereby decreasing potential threats and increasing the amount of land that supports native species, providing additional buffer to the preserve. Improving areas currently impacted by buckthorn will increase total vegetation cover which will help to increase infiltration and reduce wetland erosion. The project will restore and enhance 140 acres of natural areas buffering the Middlefork Savanna Forest Preserve and expand invasive species management to the landscape scale.

The Wetlands Initiative received a \$134,280.51 grant to restore habitat quality and biodiversity in the Indian Ridge Marsh, a priority remnant wetland in the Calumet region, to benefit wetland-dependent birds and wildlife while engaging the surrounding low-income communities with the site as a local natural area open for public access. The marsh was fragmented and degraded by decades of industrial development in the mid-20th century and has been more recently threatened by altered hydrology and encroachment of invasive plant species. To address this, the grantee will reestablish a diverse, functional mosaic of native hemi-marsh, sedge meadow, wet prairie and upland plant communities through native plantings, invasive management and shoreline modification. The restoration will serve as a model for transforming similar sites across the region. The project will restore 76 acres of marsh, wet meadow and upland prairie habitats.