

Chi-Cal Rivers Fund Green Stormwater Infrastructure Project Examples

The following 13 projects are green stormwater infrastructure projects that have been supported by the Fund over the past five funding cycles.

Student Conseravtion Association, Inc received a \$161,466 grant to reduce stormwater and sediment runoff and restore degraded riparian habitat in the Grand Calumet and Little Calumet Rivers. Project will add 72,275 gallons of stormwater storage capacity by strategically planting 1,225 native trees in riparian zones, including portions of the EPA-designated Grand Calumet Area of Concern, and offer training in basic arboriculture to residents across the region to build capacity and sustain project impact through long-term maintenance.

South Suburban Mayors and Managers Association is using \$235,295 in grant funding to construct 6 acres of wetlands that will add 1.5 million gallons of stormwater retention in the city of Blue Island. Part of the larger Calumet River Corridor Green Infrastructure Flood Mitigation Program, the project will remove contaminated soils, eliminate dominant invasive plant species, and plant native vegetation. The project will employ students who have graduated from technical environmental training programs, such as Greencorps Chicago, and it will engage local residents to help them learn about the value of green infrastructure. By providing a regional wetland detention system, this project will enable greater on-site stormwater infiltration, increase native habitat, reduce flooding, and illustrate how green infrastructure solutions can promote economic development.

Faith in Place received a \$250,689 grant to improve stormwater management systems at five houses of worship located on Chicago's South Side. The project will perform a stormwater audit, develop a stormwater management plan, and implement at least one green infrastructure feature at each site. The project will also develop outreach and education plans to encourage more effective water management on properties surrounding the faith communities. The implementation of these activities will improve stormwater management, create demonstrations of green stormwater infrastructure elements throughout the communities, and prevent 43,000 gallons of stormwater from entering area waterways each year. It will also lead to a better understanding of stormwater management among local communities.

University of Illinois at Chicago received a \$251,848 grant to renovate the Arthington Mall Plaza. Work will include removing 19,000 square feet of impervious paving and concrete, planting over 14,500

square feet of green space with native plants, and installing 11,300 square feet of rain gardens. Additionally, a monitoring and modeling development program will be implemented. The monitoring data and hydrologic model will be used to assess stormwater reductions and changes to the water balance generated by the green infrastructure implementations. As a result of this project, 55,069 gallons of stormwater will be prevented from entering Chicago's waterways.

Village of Midlothian received a \$150,440 grant to develop a community-led initiative to resolve the recurring flooding and other problems resulting from inadequate grey infrastructure. Through this project, Midlothian Village will construct a new porous asphalt parking lot, create a rain garden, and plant the site's remaining open space with native plant species to promote stormwater infiltration. As a result of this project, the site will add 120,000 gallons of stormwater storage, remove 7,000 square feet of impervious surface, and prevent 375 pounds of sediment from entering the system annually.

Chicago Public Schools received a grant of \$271,313 to install green infrastructure and new community space at four schools (Virgil Grissom, Theophilus Schmid, Donald Morrill, and George Leland Elementary Schools). Along with turf fields, play structures, and other improvements, plans to renovate outdoor spaces at these schools include the installation of 241,000 square feet of vegetated swales, rain gardens, and pervious surfacing. This work added 900,000 gallons of on-site stormwater storage capacity and improved recreational opportunities for local communities by providing 12.7 acres of new park space. This project is helping reconnect communities with their local public schools, provide green space in otherwise heavily urbanized neighborhoods, and significantly reduce stormwater runoff across the city.

Chicago Public Schools will receive a \$300,000 grant for continuing efforts under the Space to Grow program to transform Chicago schoolyards into vibrant outdoor spaces that benefit students, community members and the environment. Schoolyard renovations supported by the grant will incorporate green infrastructure features, such as vegetated swales, rain gardens, permeable surfacing and underground water storage. Altogether, these features will capture significant rainfall, helping to keep the City's water resources clean and resulting in less neighborhood flooding. The schoolyards will capture and store stormwater for a combined storage capacity of approximately 500,000 gallons and prevent approximately 320,000 gallons of stormwater from entering Chicago's combined sewer system each year. The renovated schoolyards will also expand recreational opportunities by providing five acres of new park space for underserved communities.

The Student Conservation Association, Inc. received a \$127,418 grant to will, in accordance with the Northwest Indiana Regional Planning commission's draft Urban Forestry Regional Plan, plant native trees to optimize green infrastructure benefits to prevent 59,000 gallons of stormwater from entering the region's waterways. Specific long-term planting goals include maximizing stormwater capture, preventing soil erosion, improving riparian health, and replacing trees lost to the emerald ash borer. Trees will be targeted to riparian areas of the Grand Calumet River, the Little Calumet River, and tributaries of these major waterways. This project will complement ongoing remediation efforts within the Grand Calumet Area of Concern (AOC). In addition to planting and maintaining trees, the project will

work with the AOC citizen committee, and offer training in basic arboriculture to residents across the region.

The Student Conservation Association, Inc. received a \$152,747.41 grant to plant 1,000 trees to mitigate stormwater and sediment run-off into the Grand Calumet and Little Calumet Rivers in the communities of East Chicago, Gary, and Hammond. The project area includes portions of an EPA-designated Area of Concern. A crew of local young adults will be recruited, trained, and employed to do the work, supervised by an SCA crew leader. The three municipalities are active participants in the current project, as are local citizens and student volunteers. The outcomes will include reduced stormwater and sediment run-off (Green Stormwater Infrastructure), restoration of degraded riparian habitats with 1" native hardwood trees (Habitat Enhancement), and education of community members educated and engaged in tree canopy maintenance.

OAI, Inc. received a \$300,000.45 grant to create a new diversion channel, access point and kayak launch to the Cal-Sag Channel, establish about 10 acres of native wetland and prairie plantings and provide public access via trails. Partnering with local and regional organizations to provide training for the long term stewardship of the site.

Delta Institute received a \$100,000 grant to improve water quality by reducing runoff, enhance instream and riparian habitat quality, and reduce local flooding by increasing infiltration capacity in Duck Creek. Due to its location among existing agricultural fields, much of the stormwater runoff entering the creek contains e-coli, nitrogen, and phosphorus. These contaminants pose negative consequences for water and habitat quality in the Tributary, as well as the downstream watershed. By improving permeability and infiltration along the corridor, the grantee will reduce nonpoint source pollution from entering the creek, prevent erosion and damage to surrounding infrastructure, and improve the instream and riparian habitat. Overall, the project will restore a 0.2 mile section of Duck Creek as part of the initial phase in a large-scale project.

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.

Center for Neighborhood Technology received a \$121,030.59 grant to increase stormwater infiltration and reduce runoff in Ivanhoe Park in Riverdale, Illinois by installing green infrastructure including rain gardens and bioswales. Riverdale faces chronic flooding issues, creating significant financial hardship for residents and undermining community vitality. To address this issue, the green infrastructure installed will add 294,000 gallons of stormwater storage annually, and reduce 16.55 pounds of nitrogen and 4.22 pounds of phosphorous nutrient release via runoff annually. The project will improve downstream water quality through stormwater capture and engage residents throughout the planning process to ensure the final designs provide a direct community benefit.