



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**




May 1, 2023

Project No.	Project Name	Status of Project
ONGOING CAPITAL IMPROVEMENTS		
60004	Habitat Restoration	The District’s Land Management Program focuses on restoration to improve habitat quality and function, the management of grant and mitigation projects, and ecologically sound management of wildlife populations and habitats. Restoration work includes the removal of invasive woody vegetation and the purchase of native seed and plants. This fiscal year (FY 2023) restoration efforts were implemented at Ethel’s Woods, Van Patten and Cahokia Flatwoods Forest Preserves. Plants and seed will be installed in fall 2023.
60010	Preserve Tree Planting	In 2021 and 2022, approximately 204 native trees, 326 native shrubs and 345 herbaceous perennials were planted with preserve tree planting funds at four forest preserves including: Fort Sheridan, Buffalo Creek, Independence Grove and Pine Dunes. Additional plantings are expected to occur at Ryerson, Lakewood, Duck Farm, Raven Glen, Ethel’s Woods and Independence Grove in 2023 and 2024.
60008	District-Wide Reforestation	In fall 2022, 831 native trees and 1,723 native shrubs were installed for habitat restoration across 106.7 acres at Cuba Marsh, Fox River, Ray Lake, Wright Woods, Old School and Grant Woods Forest Preserves. In 2023, it is anticipated that 561 trees and 1,546 shrubs will be installed at Waukegan Savanna, Cahokia Flatwoods, Ryerson, and Independence Grove Forest Preserves.
60009	Repair of Existing Roads/Parking	In 2018, the Rollins Savanna Washington Street parking lot and seed nursery area was repaved. In 2019, contractual pavement maintenance was performed at various sites, including patching and pavement markings of roads and parking lots. In 2020, the parking lot at Sun Lake was reconstructed to be compliant with the current accessibility standards. In 2021, contractual pavement maintenance was performed at various sites, including crack sealing, patching and pavement markings. In 2022, funds were allocated to repave portions of the main road at Ryerson as part of the Ryerson Education Building project. In 2023, major repaving of a section of the Millennium Trail will occur. In the near future, the roads and parking lots at Greenbelt are being evaluated for impending re-design and reconstruction to right-size the pavement infrastructure.



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

60022	Facility and Infrastructure Improvements	Based on information from the 2014 District Wide Facility Assessment of over 90 existing buildings and direction received from the District's Standing Committees, this on-going effort was established to provide funding for major repairs and improvements to District facilities. In 2021, two major projects accomplished included remodeling the Old School maintenance shop and connecting the Operations & Public Safety (OPS) Facility to the sanitary sewer system. In 2022, major repairs were performed to the south boat storage building at Fox River, the roof was replaced at the Rollins Savanna greenhouse, and a HVAC unit at the OPS Facility was replaced. In 2023, two of the roof-top HVAC units (RTUs) at the General Offices will be replaced, the Fox River bathroom building will be retro-fitted for year-round use, and major improvements to the boilers and HVAC systems in the original portions of the Greenbelt Cultural Center will occur.
60030 	District-wide Accessibility Improvements	In an effort to improve accessibility for people of all ages and abilities, a Transition Plan was prepared in 2019 that identified required modifications of the District's facilities, preserves, programs, communications, policies and procedures to comply with the Americans with Disabilities Act (ADA) and the Illinois Accessibility Code. In 2021 and 2022, staff completed accessibility improvements to the Kilbourne Road parking lot, provided accessibility improvements and updates to several restrooms throughout the District (Nippersink, Ethel's Woods, Half Day and ThunderHawk), provided code compliant parking lot striping at Nippersink and Marl Flat Forest Preserves and completed accessibility improvements to the Schaeffer Road trail crossing at Buffalo Creek Forest Preserve and the picnic area at Fort Sheridan. In 2023, accessibility improvements are planned for the Duck Farm Off-leash Dog Area, Ryerson Woods Education Center, Lakewood, Buffalo Creek picnic area, the 0.2-mile education trail at Ryerson Woods plus a new website Chat Line. Additional smaller ADA retrofits including parking areas bathrooms and access routes at various sites are also planned for 2023.
99991 	Future Grant Matching Funds	On April 6, 2020, the Board approved a plan to set aside \$275,000 from excess debt service funds collected for the retirement of debt to be used for future grant matching funds. The 2021 additional funds became available from completed approved projects and were placed in this account. These funds will be used to support the District strategic plan. In February 2023, an 18.6-acre parcel in Newport Township, known as the Brownlee property, was approved for purchase in part with grant matching funds from this account.
	Special Future Land Acquisition Funds	In 2021, funding was set aside in the CIP for key land acquisition opportunities that may arise. In March 2023, a 6.4-acre parcel adjacent to Lakewood Forest Preserve, known as the Pokorny property, was approved for purchase using funds from this special account.




**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

PUBLIC ACCESS / MISCELLANEOUS PROJECTS



62611	Adlai E. Stevenson Home Site – Master Plan	<p>The District acquired the 40-acre Adlai E. Stevenson II estate through a donation from the Edison Dick family in 1974. In 2014, the Stevenson Home was designated a National Historic Landmark and the estate was designated an Illinois Historic Site and listed on the National Register of Historic Places. Currently, the former Adlai E. Stevenson Home and service buildings are over 80 years old and have reached a point where significant exterior renovations are required to adequately preserve the home and adjacent service building.</p> <p>In June 2021, the Board approved \$100,000 within the Capital Improvement Plan to prepare a preliminary master plan that will identify a full range of ideas and opportunities for the future use of the former estate. Shortly after the Board approved the funding for the master plan, a letter was sent to the Lake County General Assembly delegation requesting funding for the improvements and renovation of the exterior of the buildings. In February 2022, staff received an invitation to submit grant application documents to the State Department of Commerce and Economic Opportunity, requesting \$1,100,000 for the improvements. In June 2022, the Board approved the incorporation of the \$1.1 million within the Capital Improvement Plan. The comprehensive master plan for the Stevenson Home and property will identify energy efficiency and accessibility improvements for the home and service building and public access improvements to the site including accessibility improvements to the existing parking lot and walkways and potential trail connection to the Des Plaines River Trail. In January 2023, District staff applied for a Historic Places Grant through the National Endowment for the Humanities to fund up to \$75,000.00 of the cost for preparing the master plan. The planning process is anticipated to begin in the fall 2023 after notification is received on the grant funding.</p>
-------	--	--

64710	 Buffalo Creek – MWRD Reservoir Expansion	<p>In February 2013, the Planning and Restoration Committee approved a concept plan and authorized staff to negotiate an IGA with the Metropolitan Water Reclamation District (MWRD) for expansion of the existing reservoir to provide an additional 184 acre/feet of flood storage and completion of the District’s planned public access improvements. The District approved the IGA in June 2016 that ultimately resulted in the District receiving approximately \$3.9 million in public access and restoration improvements in exchange for allowing the expansion of the west basin of the existing reservoir. Construction began in June 2018 and was completed and open for public use in late 2019 which triggered the beginning of a three-year monitoring and management period before final signoff by the USACE. In October 2021, the District along with MWRD and the Village of Long Grove received a Regional Excellence Award for Regional Resilience from the Chicago Metropolitan Agency for Planning for this project.</p>
-------	--	---



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**


May 1, 2023

	Countryside Net-Zero Electric Golf Car Storage Facility	In the summer of 2022, the Golf Operations staff proposed a transition of the Countryside gas-powered golf car fleet to electric-powered. To make this happen a net-zero storage building (with solar panels) is needed that can house the fleet. The solar panels will have the ability to produce and store enough energy to power the entire golf car fleet and building over the course of the year. This project is in the early stages of planning. The estimated cost of the facility is \$1.4 million. The board approved an internal loan of \$700,000.00 from the general fund that will be paid back in 10 equal installments over 10 years. As a part of the Enterprise fund, the golf courses will pay the remaining \$700,000.00.
60025 	Duck Farm Dog Exercise Area Accessibility	A Transition Plan (Plan) was completed in 2019 that identified required modifications to some of the District’s facilities in accordance with the Americans with Disabilities Act and the Illinois Accessibility Code. The Plan identified potential improvements for accessibility to existing Off-leash Dog Areas including the Duck Farm. Engineering was completed in early 2022 and the project was originally advertised for bids in June 2022 for a general contractor to complete majority of the work. Only one bid was received that was significantly over budget and it was decided to construct the entire project using labor provided by District construction crews. Construction is expected to begin in the spring 2023 with an anticipated completion in the fall 2023.
60301	Duck Farm Munn Road Access	IDOT’s planned improvements to IL Route 132 (Grand Ave.) include a shared use path along the north side of the road connecting the Duck Farm Forest Preserve to the Millennium Trail at Fourth Lake Forest Preserve. Neighborhoods along the way will be connected to the shared-use path, including a Lindenhurst Park District connection north to Hastings Lake. The project also includes the relocation of the Duck Farm Off-leash Dog Area entrance to align with the signalized intersection at Munn Road. IDOT began the Il Route 132 project in early 2019 and completed the work, including entrance drive relocation, in the summer 2020.
60420	Fort Sheridan Preserve	The final Master Plan was approved by District Board in November 2015. Construction began in June 2017 and all work with the exception of the grass birding trail was completed and opened to the public on July 3, 2018. Turf establishment for the birding trail was completed and opened for public use in the fall 2019. An ADA accessible picnic table pad was added to the turf area next to the Gilgare parking lot. This year, five picnic tables will be added to this area for the first time. Tree and shrub replacements/additions were planted at the Gilgare parking lot, Newell Post, Lake Overlook and around the pond.



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

64301	Heron Creek – IL. Route 22 Connection	<p>The District has been working with IDOT regarding their planned improvements to IL Route 22 which includes the construction of a shared-use path on the south side of IL Route 22 that will provide an important connection linking together Egret Marsh and Heron Creek. The District is required to cover the local share costs for a 350-ft. section of trail connecting the shared-use path to the existing trails at Heron Creek. An IGA between the District and IDOT was executed in July 2021 which includes the sale of 0.51-acres of District property, the granting of 2.3-acres of permanent easement and 25.3-acres of temporary easement. IDOT is currently awaiting funding for the project.</p>
	Lake County Destination	<p>A place holder has been established in the Capital Improvement Plan that allows for the opportunity to plan and evaluate a permanent location for purpose built net-zero General Offices and the Bess Bower Dunn Museum.</p>
61020	Lakewood Forest Preserve	<p> A new Master Plan for Lakewood was approved by the Board in January 2020. The Master Plan was consistent with the goals and objectives by providing a more compact efficient design with infrastructure that is right sized, offers a significant reduction in annual operating costs, is ADA compliant, is respectful of the sites sensitive natural resources and provides the appropriate balance between competing interests. The Master Plan improvements include (i) two new shelters, one of which will be a three season shelter, (ii) accessibility improvements to the existing shelter E area, (iii) net zero maintenance facility, (iv) a nature based children’s play area, (v) trail improvements including a 1.6-mile fully accessible asphalt loop trail, a 1-mile gravel trail connecting the proposed Village of Wauconda Bike Path to Lakewood and the Millennium Trail, a 1.6-mile separate dedicated biking and dog walking trail connecting Milton Road to Lakewood’s core area and improvements to the equestrian trails south of Ivanhoe Road to address flooding and erosion issues and (v) a more efficient and properly sized road and parking lot system. The Master Plan also identifies significant habitat restoration improvements including: (i) removal of the existing dam and water control structure at Beaver and Heron ponds along with the restoration of the natural hydrology feeding into Lakewood Marsh, (ii) ravine restoration in seven areas, (iii) restoration of the rare calcareous floating mat on Taylor Lake, (iv) additional invasive tree and shrub management, (v) drain tile disablement and wetland restoration, (vi) native seed installation and additional reforestation. Phase I of the public access improvements was bid in the spring 2023 and pending contract approval by the Board, work is scheduled to begin June 2023 with an expected completion in fall 2024. The hydrological study of the area south of Ivanhoe Road began in late 2022 and is continuing into 2023.</p>



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

61011	Lakewood – Grounds Maintenance Building Replacement	As part of the master planning effort for Lakewood, it was determined that a new energy efficient building be constructed for the grounds maintenance staff that is consistent with the District’s overall efforts to right size infrastructure District-wide and reduce long-term operating costs. The new maintenance building will be a Net Zero Building. The project was advertised for bid in April 2023. Assuming favorable bidding, construction will occur in 2023-24, and staff is expected to occupy the building in Summer 2024, allowing for the former maintenance shop to be removed in Winter 2024-25.
61010	Lakewood – Tree Planting	As part of LCDOT’s Fairfield Road and IL Route 176 intersection improvement project, LCDOT has provided funding to the District in the amount of \$500,000 as mitigation for the tree impacts associated with the project. A number of projects have been completed since 2015 including the removal of invasive plant species and native tree and shrub planting in the vicinity of the new intersection. In conjunction with the Lakewood Master Plan improvements additional tree planting and native seeding will occur in 2023 and 2024 that will allocate the remainder of the funding.
63010	Lyons Woods Trail Connection	In 2010, the District completed the Waukegan Savanna Master Plan that included a regional trail connecting Lyons Woods and Waukegan Savanna to the Des Plaines River Trail. Phase I engineering began in fall 2014 for a 2.4-mile section of the proposed trail from Lyons Woods to Green Bay Road. The District applied for federal funding assistance through the CMAQ program in January 2015, and was notified in November 2015 that the funding had been approved through the TAP program. Construction began on the IDOT-led project in May 2017 and was completed and open to the public in August 2018. The District received final billing from IDOT in January 2023 and the project is closed out.



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023




63923	Millennium Trail – Ethel’s Woods to Pine Dunes	<p>The District is partnering with IDOT to complete one of the last remaining sections of the Millennium Trail between Ethel’s Woods and Pine Dunes Forest Preserves. Stretching nearly 4.6 miles, this planned trail extension includes a 1.5-mile section to be completed by IDOT as part of their proposed IL Route 173 improvement project and the remaining 3.1 miles to be completed by the District-on-District Property. This project has been identified as a strong candidate for federal funding assistance. The District applied for funding assistance through the 2021 Congestion, Mitigation and Air Quality Program (CMAQ/TAP) funding cycle. The District was notified in the fall 2021 that this project was not selected for funding during the 2021 CMAQ/TAP funding cycle. The District applied for federal funding assistance through the 2022 Illinois Transportation Enhancement Program (ITEP) and was notified in Spring 2023 that the project was not selected for funding. The District applied for funding under the 2023 CMAQ/TAP program and is currently awaiting notification on project selection. Phase I engineering is expected to be complete in the fall 2023 and Phase II engineering will begin in early 2024. If awarded CMAQ/TAP funding, construction could begin in early 2026.</p>
65503	Millennium Trail – McDonalds Woods to Route 45	<p>As part of the planned Millennium Trail extension connecting McDonald Woods, Raven Glen and Ethel’s Woods, the District partnered with IDOT to incorporate a shared-use path within the planned Millburn bypass and U.S. Route 45 improvement project. The District is responsible for the construction of a 0.2-mile trail connection from the existing trails at McDonald Woods east to U.S. Route 45. IDOT began construction on the bypass in June 2018. Construction of the District’s connection was completed in the fall 2020.</p>
63903	Millennium Trail – Rte 45 Tunnel and Trail	<p>As part of the planned Millennium Trail extension connecting McDonald Woods, Raven Glen and Ethel’s Wood Forest Preserves, the District partnered with IDOT to incorporate a shared use path within the planned Milburn bypass and Illinois Route 45 improvements. This project includes a .75-mile section of trail and a tunnel under Route 45 (just north of Miller Road) connecting Raven Glen to Ethel’s Woods. In November 2019, the District was awarded federal funding assistance in the amount of \$3.8 million through the 2019 CMAQ/TAP funding cycle. Phase I engineering was completed in the fall 2018, Phase II engineering was completed in the fall 2020 and construction was completed in December 2021. District staff continues to participate in the planning of IDOT’s Route 45 improvements between the Milburn bypass and Miller Road which will include a 1.2-mile section of the Millennium Trail.</p>





**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

	North-Central Preserve Connections	<p>The District continues to look for opportunities to restore and provide a continuous multi-use loop trail connecting five forest preserves (Raven Glen, Prairie Stream, Dutch Gap, Pine Dunes and Ethel’s Woods) referred to as the North Central Preserves. Given the flooding event in July of 2017, staff is continuing to monitor funding opportunities with the U.S. Army Corp of Engineers (ACOE) for restoration work on the North-Central Preserves. In October 2022, the District signed a Project Partnership Agreement with the ACOE to provide aquatic ecosystem restoration at Dutch Gap Forest Preserve. Also in October 2022, the District approved a license agreement with HGS, LLC to restore a portion of Prairie Stream Forest Preserve as part of their development of a wetland mitigation bank. In April 2023, a Project Design Agreement was executed with the ACOE to provide preconstruction, engineering and design for the restoration of Pollack Lake and Hastings Creek riparian wetlands at Raven Glen Forest Preserve. The Raven Glen restoration is part of the ACOE’s 2013 Upper Des Plaines River Phase II Feasibility Plan.</p>
62001 	Ray Lake Trail Connection	<p>In 2019, the District received grant funding assistance through the Federal Land and Water Conservation Fund (LWCF) to purchase a 99-acre parcel at Ray Lake Forest Preserve. The LWCF grant requires public access improvements on the parcel, including a trail connection to the Fort Hill Trail and a scenic overlook. Staff estimates the engineering, permitting and construction at a cost of \$275,000. Engineering began in late 2022 with construction to be completed by spring 2025.</p>
61410 	Ryerson Education Improvements	<p>In July 2021, the Board approved a contract for architectural and engineering services to prepare construction and permit documents for Phase I of a new education facility. The new education facility will replace and expand the education programming previously offered at two since removed log cabins which had reached the end of their useable life and did not comply with current accessibility codes. The education facility is being built as a net-zero energy building and the District received funding assistance from the Net Zero Energy Building Program offered by the Illinois Clean Energy Community Foundation (ICECF) and several other private donations in support of the project. Phase I of the education facility includes a 3,400-SF building with two classrooms, restrooms, virtual teaching space, net zero interpretive exhibit area and a 1,000-SF screened porch that will provide additional teaching space when the weather is accommodating. Construction began in June 2022 and the new facility is expected to be fully complete and open to the public in late summer 2023.</p>



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**



May 1, 2023

61411	Ryerson – Welcome Center Solar Photovoltaic	<p>In winter 2021-22, a 41.8-kW solar photovoltaic system was installed on the roof of the Ryerson Welcome Center. The system was sized to produce on an annual basis approximately 100% of the electricity needed each year by the building.</p> <p>The cost of the project was substantially subsidized by a \$62,240 grant from the Illinois Clean Energy Community Foundation and a \$50,000 anonymous donation to the Preservation Foundation.</p> <p>The system was first used in March 2022, and staff has since been monitoring the system to assess if the building is achieving the desired goal of “net-zero”.</p>
64811	Spring Bluff Wildlife Observation Area	<p>The project include the enhancement of an existing asphalt road at Spring Bluff as a trail, and the placement of a wildlife observation platform. A grant application was filed with the IDNR in 2014 for a potential \$263,750 Open Space Lands Acquisition and Development (OSLAD) Grant. The District received a delayed notice from IDNR in fall 2016 stating that the funding has been approved for the project. During the FY 2016/17 budget discussions, the project had been removed from the CIP and placed on the unfunded list of potential projects for future consideration. In September 2016 the Board directed staff to accept the grant funding and restore the original funding in the CIP for FY 2017/18. Construction on the road conversion was completed in the summer 2018 and construction of the observation platform was completed in the fall 2018.</p>
HABITAT RESTORATION PROJECTS		
67012	Amphibian and Smooth Green Snake Reintroduction	<p>In April 2014, following reintroduction efforts by the District, wood frogs were found breeding at MacArthur Woods for the first time since the mid 1980’s. In 2017, wood frogs were also reintroduced at Edward L. Ryerson Conservation Area and Grainger Woods. This project will continue the augmentation of these reintroduced populations and provide an additional two years of monitoring beginning in 2023.</p>
62404	Buffalo Creek Mitigation - Wright Woods	<p>As part of the approved IGA with the Metropolitan Water Reclamation District (MWRD), the District has received compensation in the amount of \$400,000 for wetland restoration and enhancement at Captain Daniel Wright Woods as offsite wetland mitigation compensation due to wetland impacts associated with MWRD’s reservoir expansion project at Buffalo Creek. This project involved clearing of woody invasive trees and shrubs over a 67-acre area and the restoration of northern flatwoods during the winter of FY2018/19, followed by native seeding and planting in the fall of 2019. Follow up monitoring and invasive species control occurred starting in 2020 until the completion of the project in 2022.</p>



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

66004 	Cahokia Flatwoods – Preserving Oak Ecosystems	<p>This project is a continuation of the Southern Des Plaines River Woodland Habitat Restoration Project. With funding from the U.S. Forest Service via The Morton Arboretum the Forest Preserves will restore 70 acres of degraded oak woodlands along the Des Plaines River Trail and Lake Cook Road.</p> <p>Chicago Wilderness (CW) has identified Oak Ecosystems to be a keystone community in the CW region. This community supports a wide array of plant and animal species. As a result of a GIS mapping effort, it was determined that over 85% of the remnant Oak Ecosystems have been extirpated in Lake County and the natural community has become globally critical habitat for protection. This project will greatly enhance the quality of oak woodlands at Cahokia Flatwoods Forest Preserve. This project was completed in 2022; however subsequent restoration efforts have occurred at this site, funded using Habitat Restoration funds.</p>
64104	Cuba Marsh Habitat Restoration	<p>Planning began in FY 2013/14 to restore wetland, prairie, and savanna habitats to enhance wildlife populations and expand remnant high-quality vegetation, with implementation starting in FY 2014/15. From 2014-2016, 188 acres of woodland, prairie and wetland were cleared of woody invasive brush and sown with native seed. In addition, 650 trees and shrubs were planted on the western side of the preserve. Drain tiles were disabled and water control structures were installed in 2020 to improve wildlife habitat, reduce stormwater runoff and improve water quality. The District is leveraging partnerships with including, Citizens for Conservation, the Bobolink Foundation, Great Lakes Audubon, and Friends of the Forest Preserve to work cooperatively to meet regional habitat restoration goals in the southwest portion of the county.</p>
65206	Dutch Gap ACOE 206 Restoration	<p>The District has entered into a Project Partnership Agreement with the Army Corps of Engineers for the restoration of Dutch Gap Forest Preserve. Final plans have not yet been determined, but it is anticipated that upon completion, the channelized Dutch Gap Canal will be partially remaindered, other hydrologic restoration efforts will occur, and the site will be converted to native vegetation through seeding and planting efforts. The start date for on-the-ground actions has not yet been determined.</p>
63910 	Ethel's Woods – N. Mill Creek Restoration	<p>A contract for design, engineering and permitting for Phase II construction was executed in summer 2016. Final design was complete in early 2017 with all necessary permits secured in spring 2017. Competitive bids were accepted and a contract for construction awarded in September. Phase II construction started in fall 2017, with preliminary work completed over the winter. The bulk of new channel construction occurred in 2018. The final channel construction took place in 2019 including final seeding and planting. Ongoing invasive species management is required to ensure the proper trajectory to full restoration is maintained.</p>



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

60406	Fort Sheridan – USACE GLFER Restoration	<p>The USACE (Corps) Great Lakes Fish and Ecosystem Restoration project began November 2015 with habitat restoration and removal of marine debris along the Lakeshore Ravine, Lake Bluff, and Lakeshore stabilization work began in spring 2016, and is part of the USACE’s effort to restore ecosystems and fish habitats across the Great Lakes watershed. Ravine and stream bank stabilization measures were installed in 2017. Additional restoration activities included planting 250,000 sedge and forb plant plugs throughout the ravines and newly created sand dune habitat. 300 trees and shrubs were installed, and 30 acres of prairie were also planted in 2017. Phase I of this project was completed in 2020 and now the District is required to maintain the As-Built conditions until year 2025, when regulatory sign-off occurs. In November of 2018 the US Army Corps of Engineers informed the Forest Preserve that they had secured \$1.8 million in funding for in-water habitat structures (natural stone reefs). These reefs were constructed in 2020 and serve to provide habitat for marine fish and aquatic invertebrates, dissipate wave energy and trap littoral sediment. Regulatory sign-off for this aspect of the project is anticipated to occur in 2025. The District is required to maintain boating-traffic buoys to mark the reef locations.</p>
63709	Fourth Lake – Hepatica Restoration	<p>With the financial support of a private donor through the Preservation Foundation, this woodland restoration protects and expands the diverse, high-quality native plant community near the eastern shore of Fourth Lake. Initial restoration steps were completed in 2019, and now this project is in the management phase of restoration; where perpetual invasive plant control and prescribed burning will remain priorities in order to maintain the high-quality native plant community.</p>



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

65104	Grainger Woods Wetland Restoration	<p>This project is part of the Southern Des Plaines River Preserve habitat restoration initiative. This project will restore the Flatwoods Forest community at Grainger Woods which includes numerous endangered and threatened species. With Wetland Mitigation Fund support from the Lake County Stormwater Management Commission, the Forest Preserve will implement a project that will restore the natural hydrology of a portion of Grainger Woods Conservation Preserve. The proposed project area is currently impacted by altered hydrology created by the presence of nearly 7,000 linear feet of drain tiles. Most of the site consists of poorly drained soils that, if not for the existing drain tiles, would be seasonally saturated with the water table at or near the soil surface. The site possesses several depressions that are characteristic of northern flatwoods communities.</p> <p>Lake County Stormwater Management Commission created the Wetland Restoration Fund as an alternative for mitigating wetland impacts in watersheds where wetland mitigation bank credits are not available. Funding was made available in a request for proposals. The Forest Preserve submitted a proposal and was selected for funding, pending an Intergovernmental Agreement. An agreement with Lake County Stormwater Management Commission is expected in spring of 2023 and project commencement is anticipated in fall of 2023.</p>
65199	Grainger Woods Restoration	 <p>The Grainger Foundation donated \$500,000 to the Preservation Foundation to complete the restoration of Grainger Woods Forest Preserve. This includes 44 acres at the corner of Route 60 and Saint Mary's Road, which is currently under an equestrian facility license agreement, set to conclude in March 2027. By mutual agreement with the licensee, this agreement will not be extended. District staff recommends that the property not be made available to a new licensee. Funds will support a drain tile investigation, soil survey, and hydrologic study of the entire preserve. When the license agreement is concluded, remaining funds will support restoration, such as clearing any remaining invasive trees and shrubs, possible site work such as berm building, and replanting with native seeds, shrubs, and trees.</p>
60620	Grant Woods – Long Lake Shore Stabilization	<p>Engineering and design need to be completed for the stabilization of 90 feet of highly eroded lakeshore. With engineering complete an IEPA Section 319 Grant will be applied for and upon successful award of the grant, construction will occur in 2023. Need for the stabilization and enhancement of the Long Lake Shoreline at the southern border of Grant Woods.</p>



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

60604 	Grant Woods Restoration	Restoration planning began for Grant Woods FY 2014/15 and continues to present. Over 600 acres of habitat improvements that enhance woodlands, prairie, bogs, marshes and shrublands throughout this preserve have occurred to control invasive woody species. Extensive on-going invasive weed management continues in all restored areas. Enhancement seeding is occurring throughout as well. Initial buckthorn clearing is occurring north of Grand Avenue within the last remaining block of unrestored habitat at Grant Woods. Funding for this work is being provided by a private donor through the Preservation Foundation.
60607	Grant Woods – Creating Ecological and Climate Resiliency	A grant from the Wildlife Conservation Society (WCS) funded this project to determine the adaptations of native seed to changing climatic conditions. This grant was combined with funds from a donation and converted existing agricultural lands into natural communities. Thirty acres of former-agriculture field was sown with seed sourced from 500 miles south (Missouri) and planted next to Midwest (local) sourced seed for comparison over time as our climate changes. In addition to the seeding experiment, drain tile disabling, water-control structure, stream bank stabilization was implemented on 200 acres. These measures will slow the rate of runoff by allowing percolation to replace groundwater levels and improve water quality. Documentation and published reports are part of the deliverables for this project.
60701	Grassy Lake Improvements	This project included the construction of approximately 1.5-miles of gravel trail, 1-mile of mowed grass trail, a 24-car parking lot and restroom. Construction began in August 2014, and the public access improvements were completed and open to the public in October 2015.
60804	Greenbelt Restoration Grant I	This is very important restoration of natural habitats within a highly urbanized area. Past restoration efforts have reduced invasive woody species to increase habitat for pollinators and shrub land bird species. The Forest Preserve has been working with Audubon Great Lakes to encourage local volunteer efforts. In 2022, the District was awarded a US Fish and Wildlife Coastal grant to restore critical prairie and shrubland habitat west of Green Bay Road. The work of this grant project included the removal of 43 acres of buckthorn thickets from the preserve. District volunteers, as well as volunteers from Audubon Great Lakes, continue to be engaged at this site and support the project with monthly-scheduled workdays and plug planting events. Since initiating the project, many notably rare prairie plants have been observed in this newly restored unit as well as rare shrubland bird species and the Federally endangered Rusty Patch Bumble Bee.



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

60806	Greenbelt Restoration Grant II	This grant funds the on-going effort to control invasive species at our restoration sites. All 185-acres of previously restored areas will be revisited by controlling new and expanding populations of invasive species. This work is critical to maintain the investment and quality of past work and to maintain healthy habitat for the many rare species of plants and animals that flourish at Greenbelt Forest Preserve, including the recently discovered Rusty Patch Bumblebee there.
61005	Lakewood Habitat Restoration – Schreiber Bog	Planning began for restoration of important wetland and woodland communities in FY 2013/14. Clearing of woody invasive species and native seeding has been completed across 114 acres of oak woodlands and wetland since beginning the project in FY 2014/15 and 2015/16, and a total of 1,815 native trees and shrubs have also been installed during that time. Additional clearing of 34 acres of woodland and wetland followed by native seeding was completed in FY 2017/18, with full project completion in FY 2019/20.
61104\61110	Middlefork – Buckthorn Pilot Project	In 2015, the District began leading a partnership of multiple agencies to explore potential strategies for eradicating buckthorn, an invasive species. During summer 2017, a public survey was sent to all residences surrounding Middlefork Savanna to inquire about buckthorn on their property, as well as to investigate the public’s views on buckthorn, their home landscapes, and the value of natural areas. Analysis of the survey results was presented to the partnership in 2018 and helped determine future steps of this project as well as guide a recent buckthorn eradication public relations campaign, consisting of media events, electronic and published resources, and a “Buckthorn Free” garden flag available to project collaborators. Additionally, in 2016 and again in 2019, the District was successful in receiving grant funds from the National Fish and Wildlife Foundation’s Chi-Cal Rivers Fund grant program to address approximately 62 acres of lands impacted by buckthorn within Middlefork Savanna as well as private lands surrounding the preserve. The 2016 grant funded project was completed in 2018; the 2019 grant will be completed in 2023. District staff and partners are exploring opportunities to continue and expand this effort in future years.





**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

*	Oak Woodland and Ecological Complexes	The Forest Preserve has been working with several partners through the Morton Arboretum’s Chicago Regional Tree Initiative to implement the Oak Ecosystem Recovery Plan. Goals in the plan include identifying restoration opportunities for 1,000-acre woodlands, increasing regeneration of oak species, reducing buckthorn densities, and encouraging restoration of urban woodland canopies in and around forest preserves, natural areas and adjacent residential areas. The Chicago Regional Trees Initiative is developing buckthorn reduction and canopy increase strategies. The Forest Preserve in collaboration with the Morton Arboretum has identified a focus area surrounding Ryerson Woods and Cahokia Flatwoods and is working to engage neighbors in the protection, restoration, and management of the Natural and Urban Canopy in this area.
64404	Old School – Phase II Restoration	This project has restored oak woodland habitat in a 45-acre area located north of the existing loop road and included clearing of woody invasive brush and successional tree species followed by seeding in an effort to establish a native herbaceous ground cover. Additional clearing occurred in winter of 2023 and restored wet woodland depressions supporting populations of amphibians at this preserve.
67510	Prairie stream Habitat Restoration	This project will restore the southern half of the preserve (the northern half is being restored as part of a Wetlands Mitigation Bank project) and will include hydrologic restoration; farmland restoration; cultural landscape (pastures, building sites) restoration; woody invasive plant clearing, wetland plant installation; and four years of follow up maintenance (invasive species control and prescribed burning). This is a grant-funded project undertaken in partnership with the Illinois Department of Natural Resources (IDNR) submitted to the American the Beautiful Challenge. The America the Beautiful Initiative is a locally led and voluntary nationwide conservation goal to conserve 30 percent of U.S. land and waters by 2030.
62504	Prairie Wolf – Mitigation Project	With funding from a private developer for off-site wetland mitigation, the District began habitat restoration here in FY 2018/19. In 2021 Army Corps regulatory compliance documentation was submitted indicating successful completion permit mitigation.
62506	Prairie Wolf NFWF Hydrological Restoration	In 2020, the District was awarded a grant from the National Fish and Wildlife Foundation’s Chi Cal Rivers Fund Grant to restore a portion of Prairie Wolf Forest Preserve. The project began in 2022 and is anticipated to be completed in 2023. The hydrologic restoration efforts will result in be increased stormwater storage. This project will also result in increased management of invasive species, primarily teasel, Callery pear, and buckthorn.



**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

56055	Ray Lake – Cuneo Phase 1 Restoration	The District has received approximately \$83,000 in grant funding from the Illinois Clean Energy Community Foundation and approximately \$70,000 of farm license revenue (over 2 years) to support site investigations and initial habitat restoration. A drain tile investigation and fish survey were completed in 2016, and detailed soil mapping was completed in fall 2017. Clearing of invasive woody vegetation has begun and subsequent seeding took place in 2018/2019. A restoration plan is being developed to restore a large uninterrupted grassland/wetland ecological complex.
61504	Singing Hills/Kettle Grove Restoration	Restoration planning began for Kettle Grove in FY 2014/15. The goal of this project was to restore and enhance important wetland/grassland bird habitat and the surrounding woodlands. Clearing of woody invasive brush and native seeding have occurred across more than 71 acres. Additionally, 95 acres of agricultural fields have been permanently retired. Approximately 5,750 linear feet of drain tile have been disabled, and all former agricultural fields have been seeded with native vegetation. 225 native trees and 909 native shrubs, as well as 18,000+ native wetland plants have been installed to meet restoration goals. At Singing Hills, an additional 23 acres of agricultural fields have been retired, seeded to native grassland, and had 2,950 linear feet of drain tile disabled. This project was funded by a private donation through the Preservation Foundation; all funding has been utilized.
65004	Southern DPR Preserve Habitat Restoration	Since 2012, canopy thinning, and removal of invasive woody brush has occurred across 1,195 acres of MacArthur Woods, Captain Daniel Wright Woods, Grainger Woods and Ryerson Conservation Area. In FY 2017/18, the final phase of canopy thinning was completed in the dry mesic woodlands of MacArthur Woods, Captain Daniel Wright Woods and Ryerson Conservation Area. In summer 2017, the District hosted a day-long seminar on oak ecosystem restoration with researchers from around the Midwest region. Assessment of the project is being conducted by researchers at the Morton Arboretum to look at the response of environmental conditions after the canopy thinning, by researchers at the Illinois Natural History Survey documenting avian response and by researchers at Southern Illinois University to document the occurrence of semi-aquatic mammals.





**Lake County Forest Preserve District
Capital Improvement Plan
Projects Status Report**

May 1, 2023

56050\64804 Spring Bluff – Connecting
Wetlands



Funded in the fall of 2017, in the amount of \$1,000,000.00, this project will restore 683 acres of wetland and upland in the Chiwaukee Prairie Illinois Beach Lake Plain, begin restoration on 66 acres of wetland and savanna within the decommissioned the Zion Nuclear Power Plant (owned by Exelon Corporation), and, in partnership with UW Parkside, will collect baseline data on the invertebrate taxa across a range of conditions (remnant, restored and degraded habitat) to understand how insect species respond to restoration. The work of this project began in the spring of 2018 continuing through fall 2020 and will work across nine properties in Illinois and Wisconsin, eight of which are a part of the RAMSAR Wetland of International Importance. Partners include: the District, IDNR, WDNR, Village of Pleasant Prairie, Village of Winthrop Harbor, Zion Park District, Zion Solutions, Exelon Corporation, UW-Parkside, NIU, The Nature Conservancy, Chiwaukee Prairie Preservation Fund, the Friends of Illinois Beach, and Volunteer Stewards at Fossiland Park and Hosah Prairie. The Lakeplain Partnership sought and received funding assistance from a private donor in the amount of \$750,000 for the next three years.

