

## Metropolitan Parks and Open Space Commission

Meeting date: May 1, 2018

For the Community Development Committee meeting of May 7, 2018

For the Metropolitan Council meeting of May 16, 2018

**Subject:** Lake Byllesby Regional Park Master Plan, Dakota County

**District(s), Member(s):** MPOSC District H, Todd Kemery

**Policy/Legal Reference:** MN Statutes 473.313; Planning Strategy 1 *2040 Regional Parks Policy Plan*

**Staff Prepared/Presented:** Raya Esmaeili, Senior Planner (651-602-1616) / Lisa Barajas, Local Planning Assistance Manager (651-602-1895)

**Division/Department:** Community Development / Regional Planning

### Proposed Action

That the Metropolitan Council:

1. Approve the Lake Byllesby Regional Park Master Plan.
2. Approve master plan boundary adjustments to reflect the removal of three parcels and the addition of four parcels as shown in Figures 1 and 2.
3. Require that Dakota County submit estimated land acquisition costs that were not quantified in this master plan as an amendment to the master plan for Metropolitan Council review and approval prior to seeking grants for acquisition of applicable parcels.

### Background

Lake Byllesby Regional Park is located on the southern border of Dakota County, Minnesota, adjacent to Lake Byllesby, a 1,300 acre reservoir of the Cannon River. The park, established in 1970, is 620 acres and is located along the north side of Lake Byllesby and Cannon River. The park is generally divided into a western unit (West Byllesby), located on the northwest side of the lake and along the Cannon River, and an eastern unit (East Byllesby), located on the northeast side of the lake adjacent to the Lake Byllesby Dam, owned and managed by Dakota County. The current master plan was completed in 2005 and focused primarily on the eastern unit. This new master plan includes a significant natural resources section, evaluates visitor services' offerings with an eye to meeting future needs, and places a new emphasis on the development of the western unit of the park.

The Park provides public access to the largest recreational lake in the southern Twin Cities metro area, links to the Mill Towns State Trail, and is situated along the Cannon River Water Trail. Across the lake, Goodhue County's Byllesby County Park provides boat access, trails, picnic shelters, and play areas to local residents. The two parks are connected by a pedestrian and bicycle trail bridge, constructed in 2015-2016. This master plan was prepared for Dakota County's Lake Byllesby Regional Park with consideration of complementary facilities at Goodhue County's park. This master plan establishes the following vision statement for the regional park:

*Lake Byllesby Regional Park is the natural-resources based park where people can explore the Cannon River Valley. Individuals, families, and groups from around the region visit the park to enjoy the lake, river, and regional trails; to play outdoors and participate in educational activities; to gather with others; and to support the stewardship of the area's wealth of natural resources.*

## **Rationale**

The Lake Byllesby Regional Park Master Plan is consistent with the requirements of the *2040 Regional Parks Policy Plan*, including Planning Strategy 1, and other Council policies.

## **Thrive Lens Analysis**

The Lake Byllesby Regional Park master plan supports the *Thrive MSP 2040* outcomes of stewardship and prosperity by recommending the management, restoration, and enhancement of natural resources within the park. The Thrive outcome of equity is supported by a community outreach process that engaged a cross-section of the community during the development of the master plan. Additionally, the master plan advances the *Thrive* outcome of livability through increasing access to nature and outdoor recreation.

## **Funding**

The 10-year total cost estimate for East Byllesby and West Byllesby are respectively \$8,919,300 and \$2,070,250, for a total of \$10,989,550. The County estimates that the long-term plan (that is, beyond 10 years) actions will cost \$19,190,600 for East Byllesby and \$3,895,450 for West Byllesby. These totals include the cost of actions, 10% contingency, and 20% engineering and design, reflecting 2017 pricing.

The Dakota County Parks Department 2017 Operations Budget totals \$2,071,261 for the entire park system. Revenue derived from park fee-based activities is used to offset levy funds to the Parks operations budget. Revenues generated from facilities and services at Lake Byllesby Regional Park in 2017 were approximately \$150,000 for campground reservations, picnic shelter rental, and agricultural leases. When the improvements in the 10-year Plan are complete, estimated revenues from the park are estimated to increase to \$250,000 per year (in 2017 dollars) due to campground expansion.

Approval of the master plan does not commit the Council to any funding at this time. The development costs based on this master plan may be awarded through the Regional Parks Capital Improvement Program (CIP) and the Parks and Trails Legacy Fund. Council action is required to approve the CIP, the Parks and Trails Legacy Fund project list, and specific grants to Dakota County.

## **Known Support / Opposition**

The Dakota County Board of Commissioners adopted the Lake Byllesby Regional Park Master Plan on January 23, 2018. There is no known opposition.

## Analysis

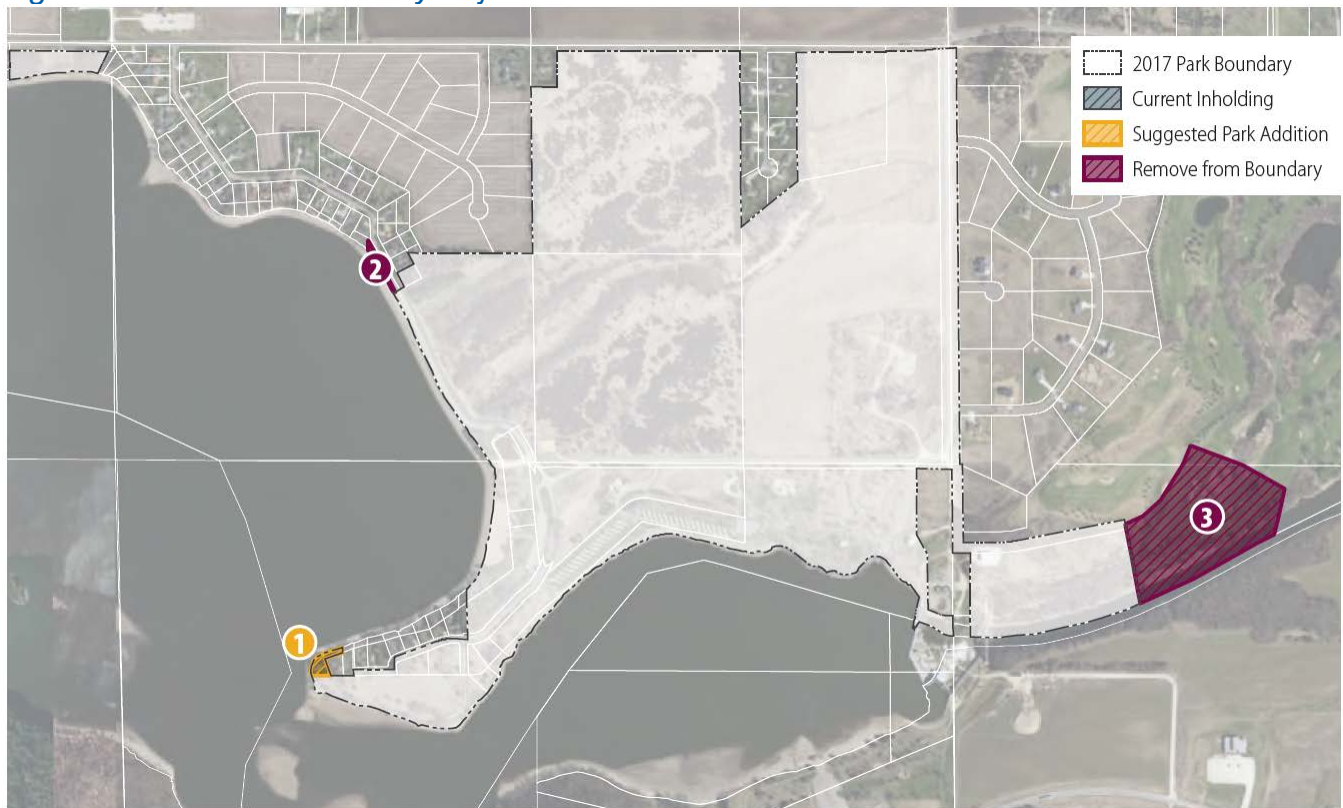
Planning Strategy 1 of the *2040 Regional Parks Policy Plan* requires that master plans for regional parks address the eleven items listed below.

### **Boundaries and Acquisition**

Lake Byllesby Regional Park is a total of 620 acres. East Byllesby consists of 254 acres, while West Byllesby is 366 acres. Dakota County owns 165 acres of the total Park area. The other 455 acres are inholdings that are privately owned land within the official park boundary. The total estimated market value of all inholdings (current and new) is \$3,710,200.

The Plan identifies several boundary adjustments, including 14.9 acres of removals, and 94.27 acres of new inholdings (see Figures 1 and 2 below). The three parcels for removal from the park boundary are no longer considered valuable additions to the park. In the East Park, the larger parcel (12.79 acres) is in the eastern-most portion of the unit and had been included prior to the development of the Cannon Golf Club, which is a compatible adjacent land use. The second parcel (0.1 acre) located in the northwestern portion of the unit and is an existing road/right of way owned by the City of Randolph with little recreational value. The third parcel (2.01 acres) is located in the north central portion of the West Park as shown in Figure 2 and has little recreational value.

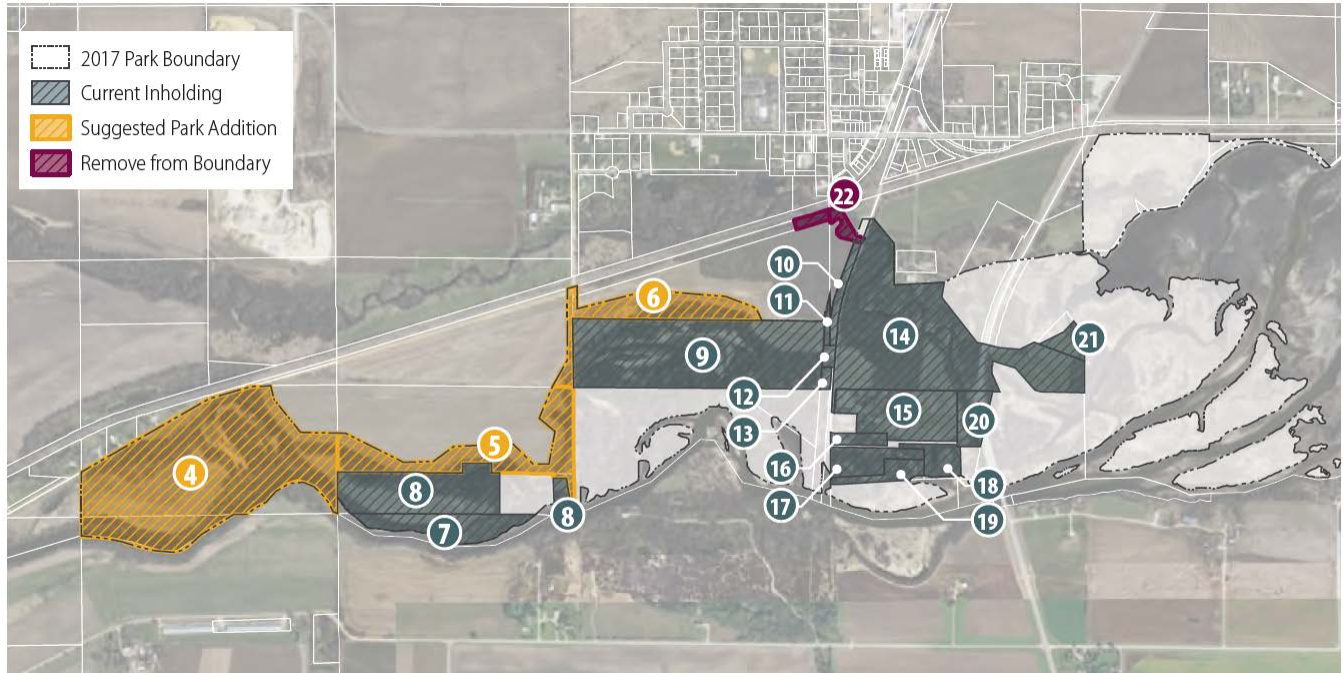
*Figure 1: East Park Boundary Adjustment*



The Plan identifies four parcels as potential future additions. One parcel is a residential lot (0.37 acres) in the East Park on the lakeshore with valuable natural resources and views of the lake and sandstone bluffs. The other three parcels (93.9 acres) extend the West Park boundary along the Cannon River. These parcels are currently agricultural lands enrolled in the Green Acres program. Acquisition of these properties provides the opportunity for natural resources protection along the Cannon River, land for an upland trail alignment, access for maintenance, connections within the West Park, and room to route the future Mill Towns State Trail. The easternmost parcel, labeled 6 in Figure 2, contains a portion of

the former Randolph dump, which was closed in 1971. Prior to acquisition, the County will need to investigate any potential contamination on the site and any required clean-up. A summary of park boundary changes is shown in Table 1 below.

**Figure 2: West Park Boundary Adjustment**



**Table 1: Summary of Park Boundary Changes**

Boundary Changes	Area
Existing Inholdings	151.59 acres
New Inholdings	94.27 acres
Removals	14.90 acres
<b>Net Gain</b>	<b>79.37 acres added to park boundary</b>

**Stewardship Plan**

The 2040 Regional Parks Policy Plan requires that a master plan describe how park property would be managed prior to developing the property for recreation purposes. The eastern portion of Lake Byllesby Regional Park is already developed for recreation, including a campground, beach, boat launch, and lakeside picnic shelter. The west side of the park is undeveloped and lacks basic signage and access, but much of this land is privately owned and includes homes and farmsteads. Park improvements will be built according to the 10-year and long-term phasing that are organized into action items according to park areas and cost estimates.

The Natural Resource Management Plan (NRMP) will utilize new funding streams and greater mix of stewardship opportunities, including contract services, partnerships, volunteerism, and public engagement. Natural resources stewardship recommendations are described in the Natural Resources section of this staff report. Dakota County Parks Department operates and manages the park system and recognizes that as Lake Byllesby Regional Park is improved, it will need to increase staffing.

**Demand Forecast**

The population of Dakota County is projected to grow over the next 25 years. Between 2016 and 2040, the Metropolitan Council forecasts that Dakota County's population will increase from nearly 415,000 to over 500,000 people.

Lake Byllesby is close to populations that are older, not as racially diverse as the rest of the region, and more affluent. Currently, people of color make up about 19 percent of the population of Dakota County. As the population of people of color is predicted to increase by 2030, the Plan recommends that for the Park to attract a more racially and ethnically diverse set of park users, it will need to market its daytime and overnight activities to residents who live in other parts of the County.

Additionally, changes in general recreation trends impact the type of improvements needed throughout the park system in the future. These trends include a growing demand for paddle sports and windsurfing, adventure racing, desire for near-home recreation opportunities, a decline in traditional outdoor recreation, and a growing desire for active living and healthy lifestyles.

Future visitors to Lake Byllesby Regional Park are likely to be older, more racially and ethnically diverse, and in need of healthy lifestyle offerings. Some adjustments in park programs are required: facilities that meet older population mobility need, low cost recreational opportunities for active living, and promoting awareness of the park system and offerings.

### **Public Engagement and Participation**

Community engagement activities involved the Dakota County Board, Planning Commission, Dakota County staff, stakeholders, and the general public. Community engagement for Goodhue County was conducted with a complementary and overlapping process to cover connections to the adjacent park to the south. A variety of methods were used for engagement and gathering public input, including an online questionnaire, open houses, stakeholder meetings, and additional outreach.

The following is a summary of engagement methods used in the master planning process.

Promotion and Outreach—Promotion and outreach included hosting a page on the County's website with information about the park master plan, flyers were posted and sent out, press releases included opportunities for public engagement, and social media and email were used to alert Dakota County residents about the planning process.

Community Open Houses—two open house meetings were held at Lake Byllesby Regional Park. These meetings included display boards of project findings. Attendees were invited to view these materials and provide input to the project team regarding park issues and opportunities, ideas for future investments, and personal experiences. 35 people attended the first open house and provided input.

Stakeholder Meetings—nine different groups were engaged in stakeholder meeting. These meetings were held jointly with Goodhue County in September 2016. The County engaged with Soil and Water Conservation Districts, Watershed Districts, Army Corps of Engineers, the City of Cannon Falls, Dakota County and Goodhue County Park Operations staff, Dakota County Lake Byllesby Campground Hosts, Department of Natural Resources, History and Interpretation Organizations, Lake Byllesby Improvement Association, Park User Groups, and Regional Recreation Providers.

Online Questionnaire—this engagement effort included two opportunities to provide input through online access to complement the stakeholder and public meetings, in September and October of 2016. The questionnaire covered both Dakota County and Goodhue County Byllesby parks. The questionnaire asked respondents how often they visited the parks, which summer and winter activities they used, why they liked or did not like the park, and their suggestions for improvements. A total of 207

people responded to the questionnaire. The second opportunity used Social Pinpoint, a website where concepts could be posted and users could make comments about park specific locations.

Dakota County Fair—A booth and display boards were posted at the Dakota County Fair in August 2016. Visitors provided their input and suggestions on a map.

Lake Byllesby Regional Park Advisory Group—A joint Dakota County and Goodhue County advisory group was assembled for this master plan. Members included representatives from the Dakota Planning Commission, the Goodhue County Park Board, and key stakeholders. The Advisory Group met five times throughout the planning process in order to guide staff and consultants on important decisions, offer input on park recommendations, and represent constituents.

## **Development Concept**

The development concept for Lake Byllesby Regional Park focuses on improvements prioritized for the next 10 years within the framework of the long-term vision for the park. The long-term concept plan shows the park at full recreation development. The 10-year priorities graphic shows improvements that are reasonably expected to be accomplished during the life of this master plan document, based on historic funding levels.

The development concept for the park has been organized into separate plan graphics for the east side and the west side of the park. The east side includes the Goodhue County Byllesby Park concept to show the vision for the combined park.

East Park Plan - The long-term concept for the east side of Byllesby Park includes approximately 140 acres of developed park land (including the campground, picnic areas, biking skills course, beach, and Cannon River area) and nearly 95 acres of natural, passive park land with trails and restoration.

Major improvements include the addition of camping and overnight options, indoor recreation space and basic visitor services, expanded water play opportunities, formal picnic spaces and shelters, and access to the Cannon River. There are several key concept plan proposals that facilitate the overall design and consistency of park circulation and character.

Goodhue County Coordination—Dakota County's East Byllesby Park is joined to Goodhue County's Byllesby County Park by the pedestrian bridge across the Cannon River. A master plan for Goodhue County's park has been developed in collaboration with Dakota County's East Park plan. The program elements within each park have been designed to complement each other and provide recreation for park users at both parks as if they were managed as one combined park. Each County will develop its park separately.

Figures 3 and 4 show the long-term and 10-year concept plans for East Lake Byllesby Regional Park.

Figure 3: East Lake Byllesby Regional Park Long-term Plan



Figure 4: East Lake Byllesby Regional Park 10-year Plan

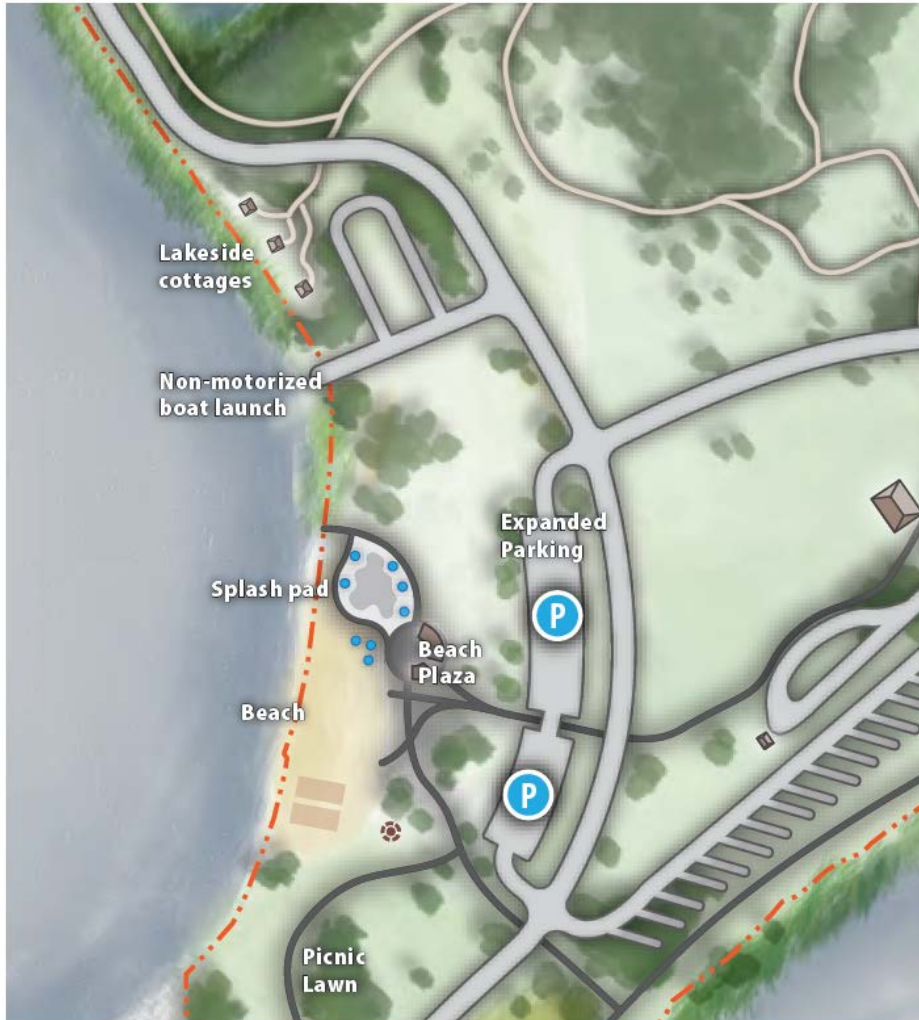




A summary of each use area in East Park Plan is listed below.

**Sunset Beach**—10-year development plan for this area will include splash pad, sand play equipment additions, beach improvements, volleyball courts, fire pit, picnic lawn, expanded parking lot, lakeside cottages, and beach plaza revitalization (Figure 5). The long-term vision will include a sandy bottom swimming pond built adjacent to the splash pad.

*Figure 5: Sunset Beach: 10-year Plan*



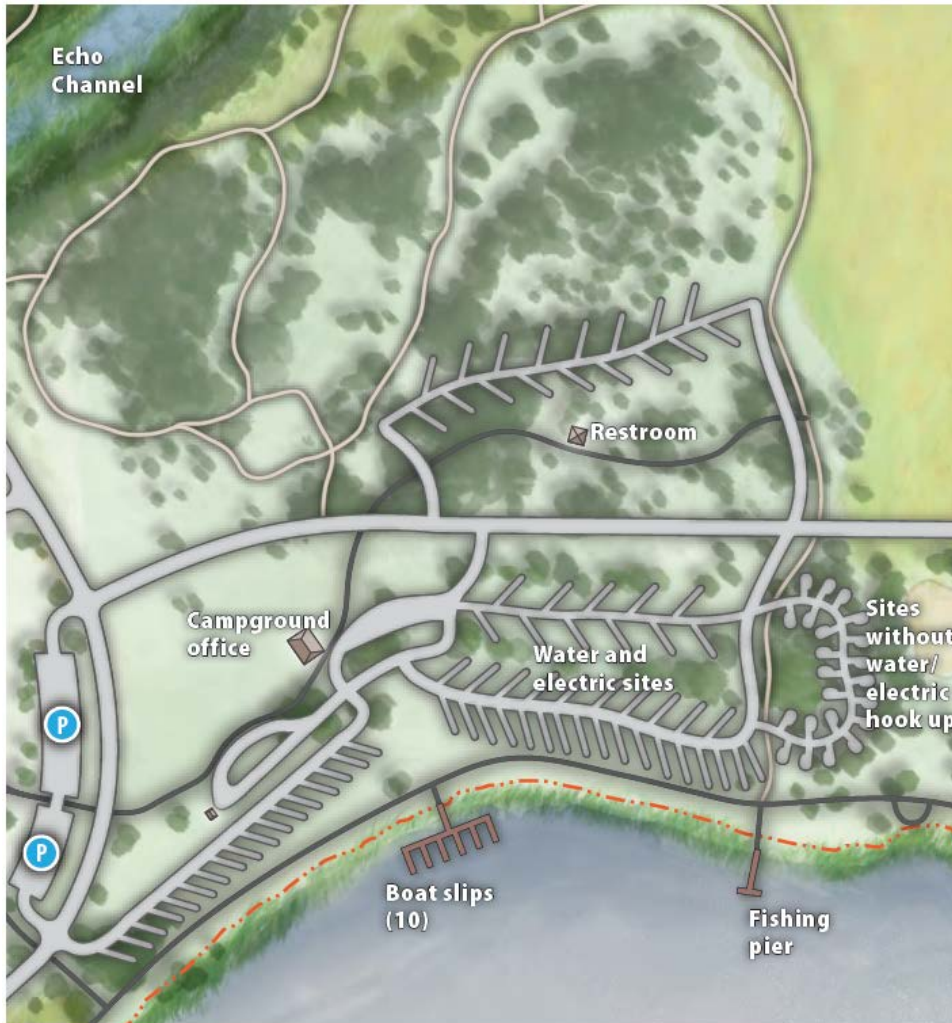
**Echo Point**—10-year development plan for this area will include paved trail loop, shore fishing area, fishing pier, fishing dock, two sun shelters with picnic tables and fire pits, and a potential boundary addition, as identified on Figure 1 (Figure 6). In the long-term vision, a park boundary addition is identified on the western point of the peninsula. If acquired, this will be the location of a large group fire pit and gathering area.

*Figure 6: Echo Point: 10-year Plan*



**Byllesby Bay Campground & Lodge**— The 10-year campground plan will include 22 sites without water/electric hook up and 72 water and electric sites. A restroom building with toilets and showers will be located in the center of the campground, accessible by a paved trail. This will also serve as an emergency shelter in case of inclement weather in the near term (Figure 7). The long-term vision for East Byllesby includes a lodge area, which contains a 6,500-square-foot building and will also serve as a storm shelter. The western lakefront water and electric sites will be replaced by 12 new water and electric sites and 20 new electric sites. An additional 18 sites without water/electric hookup will be constructed to the northwest.

*Figure 7: Byllesby Bay Campground & Lodge: 10-year Plan*



**North Byllesby Bay Picnic Area**— The existing playground will be renovated to add elements that interpret the unique natural and historical elements of the park (Figure 8). Long-term, the existing picnic shelter near the motorized boat launch will be removed and replaced with an improved and expanded picnic shelter to accommodate 150 people. A second picnic shelter will also be added near the playground. This will be an open-air shelter that will accommodate 75 people. The parking lot will be expanded to accommodate the increased capacity of the picnic shelters. The plan for the area north of the boat launch and parking areas is to grade and compact the soils to create a mountain biking skills course with small hills and jumps.

*Figure 8: North Byllesby Bay Picnic Area: 10-year Plan*



**Cannon River**— Providing access to the Cannon River is one of the key goals of the master plan. Access will be improved with a trailhead parking lot for 12 cars. A paved trail will lead from the Mill Towns State Trail down the slope to the edge of the Cannon River. A formalized, paved kayak and canoe launch will be at the water's edge to facilitate safe entry into the river. Space will be provided near the kayak and canoe launch for shoreline fishing and water viewing, and two yurts will be constructed along the slope, accessible by paved trails (Figure 9). In the long-term, the existing maintenance building, located near the recently constructed trail bridge, will be moved to a new location to create space for additional parking, accommodations, and river access. An open-air picnic shelter for 30 to 40 people and with permanent restrooms will be constructed.

*Figure 9: Cannon River: 10-year Plan*



**Oak Savanna & Echo Channel**— The Echo Channel is a naturally wet area that funnels water from Lake Byllesby into natural underground drainage ways. The plan for this area is to restore the wetlands on the surface of the Echo Channel to make it a high functioning drainage way and habitat area. Other improvements include a Nature Play Loop and a parking lot to accommodate 20 cars. The Oak Savanna area will be a primary site for natural resources improvements, native landscape plantings, and wetland restorations (Figure 10). In the long-term park vision, the new park entry road will be sited to take advantage of viewsheds of the lake, along Echo Channel, and of natural features for an aesthetically pleasing drive into the park. Also, a new maintenance building will be constructed and buffered from view of the park’s recreation areas.

*Figure 10: Oak Savanna & Echo Channel: 10-year Plan*



**Lilac Landing**— Lilac Landing will continue to serve as a non-motorized boat launch in the summer and a lake access point during portions of the winter (Figure 11). In the long-term, Lilac Landing will be improved to be a more inviting part of the park through landscaping, signage, and maintenance.

*Figure 11: Lilac Landing: 10-year Plan*



West Park Plan—The west side of Lake Byllesby Regional Park is an undeveloped, floodplain landscape surrounded by agricultural fields and rural residential properties. It is physically connected to the east side of the park only by water. Because the west park lacks basic signage and parking, many are unaware that it is public park land.

It is intended that West Byllesby retain its natural resource focus. New entry signage, trailheads, and soft surface trails will be constructed to facilitate visitors' access to the park. In addition to the physical improvements, it will be necessary to build awareness of this park land through online marketing and communication methods in the east park.

One big idea in the West Park concept plan is a water trail, which would designate a route for non-motorized watercraft to paddle a loop through the Delta, Cannon River, and Chub Creek. When complete, the loop trail would be approximately two miles long and have access points at the Delta Trailhead and the Future Chub Creek Trailhead. Long-term, an underpass at Hwy 56 would need to be established to restore the creek to its original channel and allow for non-motorized boats and a paved trail. This water trail would provide park users with a new way to explore the area and facilitate access to a variety of ecosystem types.

Figures 12 and 13 show the long-term and 10-year concept plans for West Lake Byllesby Regional Park.

**Figure 12: West Lake Byllesby Regional Park Long-term Plan**

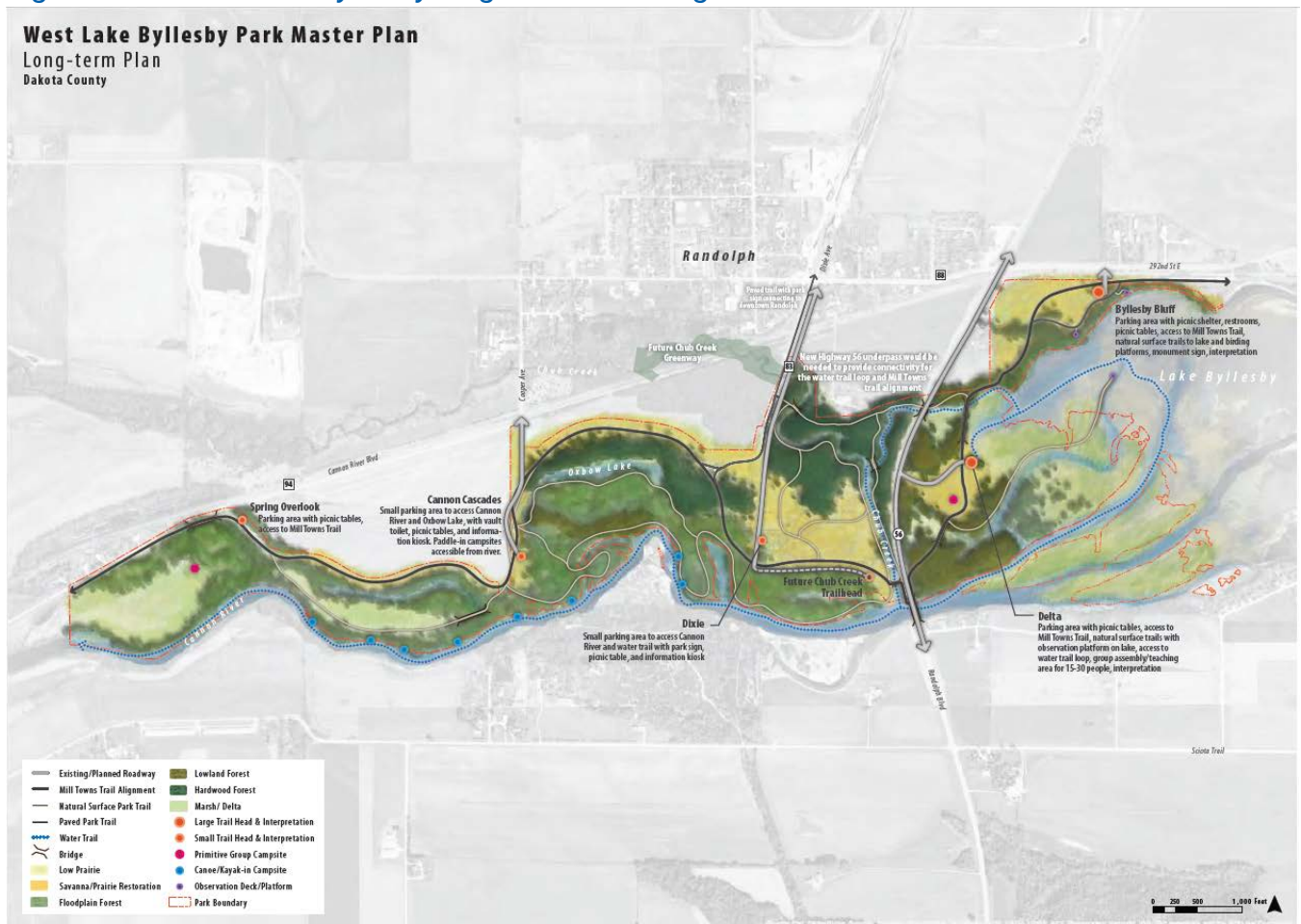
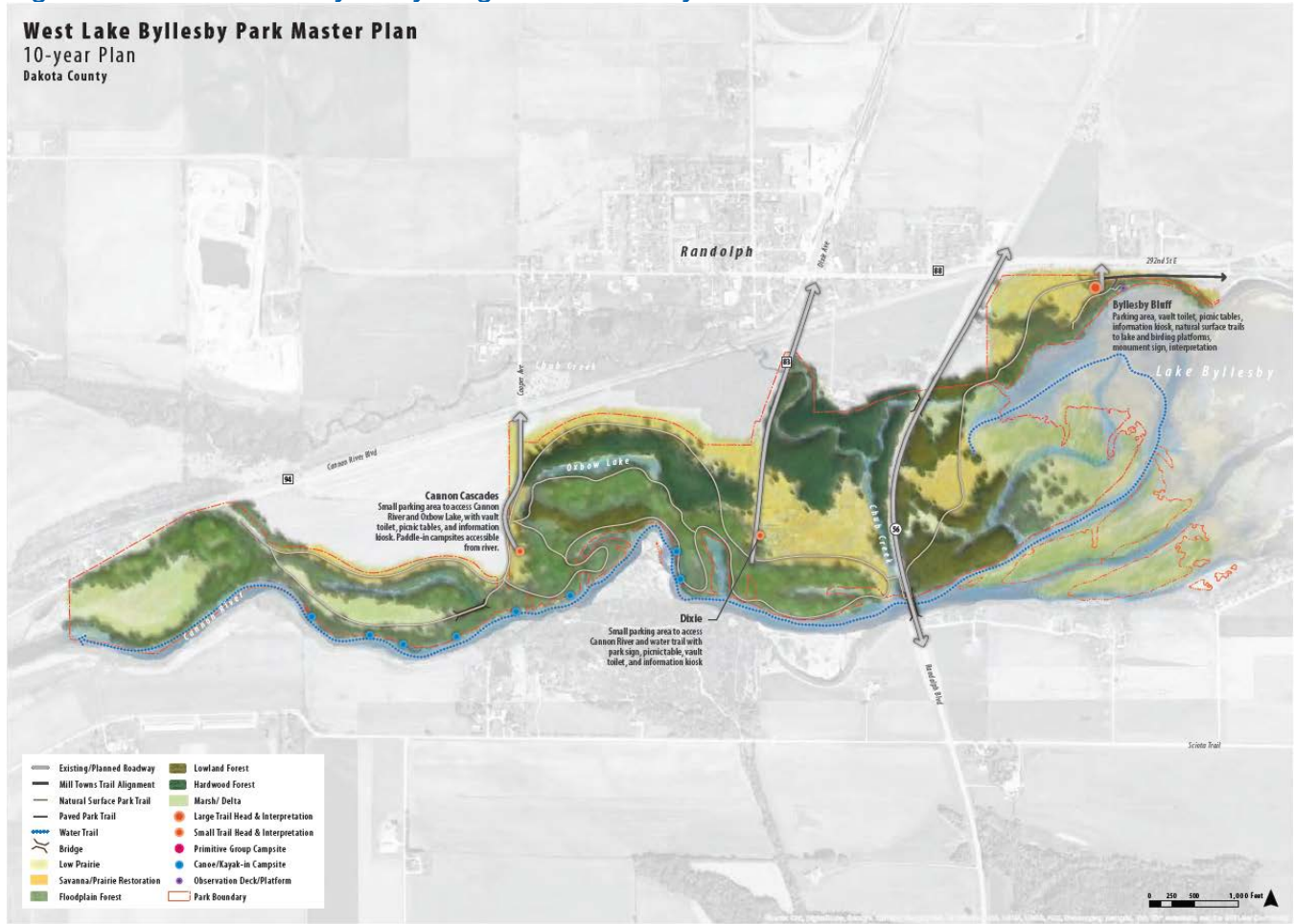




Figure 13: West Lake Byllesby Regional Park 10-year Plan

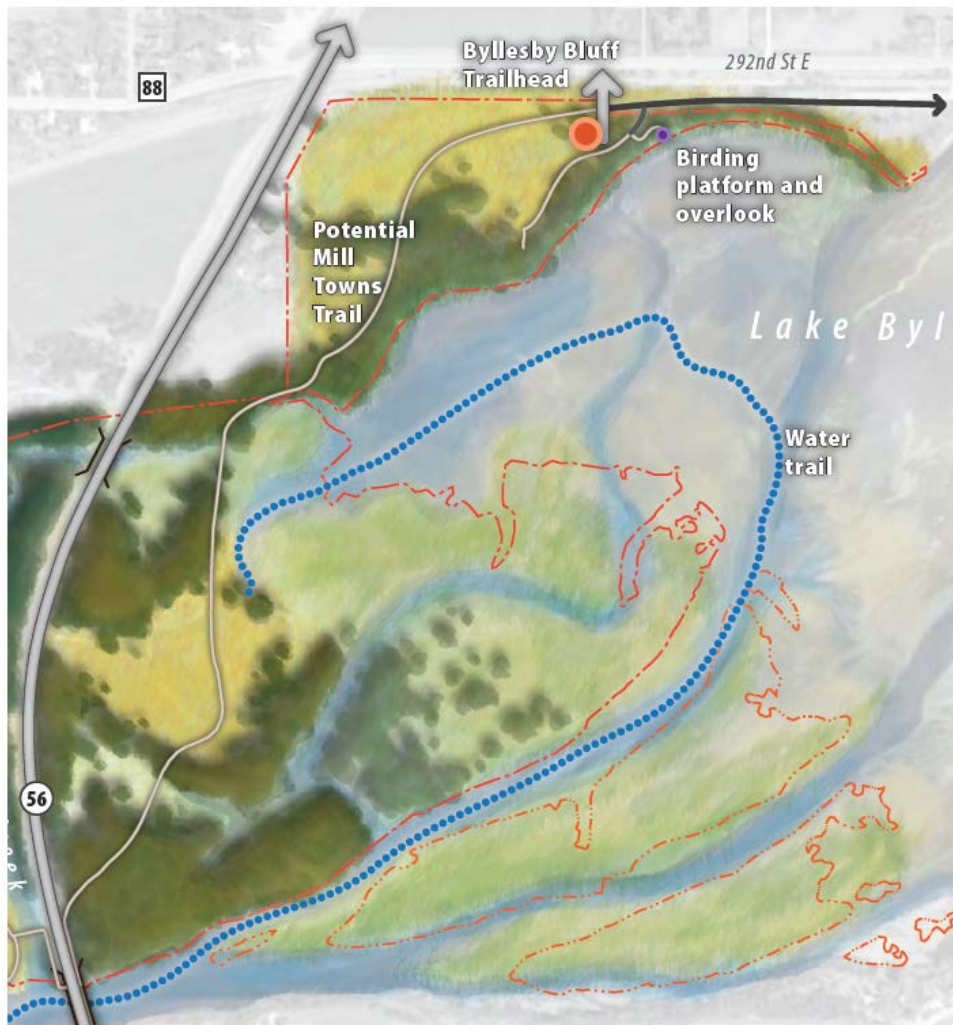


A summary of each use area in West Park Plan is listed below.

**Byllesby Bluff & Delta**— One of the primary public access points for the west part of Lake Byllesby Regional Park will be the Byllesby Bluff Trailhead. The trailhead will be constructed at the location of what is today a small gravel vehicle turnaround. Near-term (10-year) improvements are geared to basic access: park signage, a small gravel parking area, picnic table, vault toilet, kiosk, and a bird blind/lake observation platform with interpretation (Figure 14). The long-term vision for the trailhead includes a small picnic shelter building with permanent restrooms to accommodate approximately 30-40 people, a paved parking lot for about 20 cars, and new soft surface trails leading to accessible bird blinds.

Development of the Delta Trailhead is part of the long-term vision for the park. The Delta Trailhead will be constructed on the site of a former farmstead and will include a paved parking lot, a boardwalk, observation deck, and interpretation signage. The Delta site will be a central programming space for the west park.

*Figure 14: Byllesby Bluff & Delta: 10-year Plan*



**Dixie & Chub Creek**— The Dixie and Chub Creek trailheads will facilitate access to the river hiking and paddling trails. The Dixie Trailhead will be a rustic site with a 10-car gravel parking lot, park sign, and access to the river along a natural surface trail and will be constructed in the near term with picnic tables (Figure 15), with the Chub Creek Trailhead as a long-term extension getting people to the popular fishing area at the confluence of Chub Creek and the Cannon River.

*Figure 15: Dixie & Chub Creek: 10-year Plan*



**Cannon Cascades & Spring Overlook**— The Cannon Cascades Trailhead will include a small gravel parking lot to provide access to Oxbow Lake and the Cannon River, a picnic table, and a vault toilet. The Spring Overlook will be a similar rustic trailhead with access to the Mill Towns Trail and a primitive group campsite. Canoe and kayak campsites can be accessed from the river or from trails (Figure 16).

*Figure 16: Cannon Cascades & Spring Overlook: 10-year Plan*



## **Conflicts**

The master plan discussed minor conflicts in relation to the park as well as planned mitigation measures, which include:

- The park is bordered by single family homes, agricultural land and roadways that are generally compatible with the park. In addition, the master plan recommends landscape buffers at the park edge to provide separation between uses, support the natural setting, and minimize potential conflicts.
- The park is accessed by Randolph Township roads, and there are concerns about roadway maintenance needs and safety resulting from park traffic. Park wayfinding and direction signage are recommended to help address this issue, as well as continued partnership and cooperation with Randolph Township.
- There is a community concern that increased lake recreation could lead to safety concerns on the lake. Dakota County will work with other lakeshore homeowners and the Department of Natural Resources to explore lake use restrictions in case of any conflicts in the future.

## **Public Services**

As an existing park since 1970, public services already exist in the park, but may be expanded during future development to serve park users and facilities. These services include: roadways, an active freight rail line operated by Progressive Rail, pipeline, power lines, sanitary sewer, water service, stormwater runoff management, and utility services.

Depending on the type of pipeline and safety requirements, there may be limitations on the types of park facilities. Also, additional sanitary sewer capacity will be needed with the campground expansion and addition of picnic shelters and restrooms.

## Operations

Within Dakota County's Physical Development Division, the Parks Department operates and manages the park system with the following business units: Administration, Visitor Services, Maintenance, Facilities and Grounds Management, and Natural Resources. Administration oversees park operations, budgeting, staff, and capital facility development. Visitor Services includes rentals and reservations, outdoor education, recreation programming, events, volunteers, and outreach, awareness, and marketing.

As part of the joint master planning process Dakota County has conducted with Goodhue County, there may be some areas of joint operations. Where there are opportunities for operational partnerships, particularly where the park provides complementary services to Goodhue County's Lake Byllesby Park, Dakota County will enter a mutually acceptable contractual agreement with partner agencies. Potential areas of exploration include camping operations, security, park maintenance, and programming. In the future, Dakota County and Goodhue County may also explore the potential for Dakota County staff to assist with security through a mutually acceptable contractual agreement.

Maintenance of the Park is conducted from the maintenance building on the east side of the park, near the dam. Staff are responsible for mowing, snow removal and trail grooming, building services, trash and recyclable materials removal, natural resource management, infrastructure repair and replacement, and other duties as assigned.

The estimated cost of 2017 annual park operations is approximately \$360,000. As park improvements are made, operating costs will increase. Estimated costs for park operations including park patrol, campground management, regular maintenance, and natural resource stewardship, are \$660,000.

The Parks Capital Improvement Budget for 2017 totals \$26,126,262 providing for acquisition, greenway and park improvements, and planning for the entire County Parks and Open Space system. Approximately half is derived from the County, and half comes from outside sources, including grants from the Metropolitan Council and other agencies. Further prioritization of projects for implementation will be considered annually through the County Capital Improvement Program budgeting process.

Many of the issues and opportunities for Lake Byllesby Regional Park are influenced by decisions and activities beyond the park and within the greater Cannon Valley River Valley and Cannon River Watershed. Dakota County will continue to work with current and new partners on water quality, natural resource management, provision of recreation opportunities, outdoor education, marketing, and other issues to achieve high quality services. The County may explore opportunities for cooperative and joint power agreements or development of an advisory committee or an innovative governance model to more effectively address these issues. Potential partners include:

- Cannon Falls Chamber of Commerce
- Cannon River Valley recreation providers
- Cannon River Watershed Partners
- City of Cannon Falls
- Goodhue County
- City of Randolph
- Lake Byllesby Improvement Association
- Minnesota Department of Natural Resources
- Randolph Schools
- Randolph Township

- Sciota Township
- Dakota County Historical Society
- Randolph Historical Society
- Cannon Falls Historical Society

## **Public Awareness**

Dakota County publicizes its park system through a semi-annual County newsletter that is mailed to every household in the county, the County's website, a listserv with more than 3,500 subscribers, a Facebook page with over 4,000 likes, limited advertising for fee-based rentals, and news releases. Research conducted for the 2008 Park System Plan found that many County residents were unaware of the park system and its services. In response, Dakota County Communications developed a marketing strategy and brand for parks to raise awareness and recognition of the system. The "Forever Wild" brand distinguishes Dakota County's parks as a unique system. Dakota County prepares an internal parks communication plan each year to ensure that the public has access to timely updates on parks- related topics and major events.

## **Accessibility**

Dakota County believes that everyone should have the opportunity to benefit from participation in parks programs and services. Dakota County provides access to park facilities, programs, and services regardless of economic situation. Financial needs-based assistance is available to qualifying organizations, families, and individuals.

The gentle topography in most areas at Lake Byllesby Regional Park enables the development of accessible facilities. Future facilities will be designed to be compliant with the Americans with Disabilities Act (ADA) and to consider new federal rules regarding accessibility.

## **Natural Resources**

Although much of the surrounding area is developed or utilized for agriculture, the park provides important ecological functions. It provides habitat for wildlife and is a connector between surrounding regionally significant ecological areas in a highly fragmented landscape. In addition, parkland along the Cannon River provides an important buffer to help mitigate water and habitat quality along the river and reservoir.

After reviewing the Minnesota Land Cover Classification System (MLCCS) data around Lake Byllesby, multiple onsite surveys of the natural resources present within the Park were conducted in the summer of 2016. This effort was completed in order to verify existing plant communities, assess their quality, and develop an understanding of how existing park best management practices (e.g. prairie restorations), natural succession, and the arrival of new invasive species have changed the Park's plant communities since they were last surveyed in 2005.

The majority of existing natural areas are low quality and affected by invasive species but have the potential to be restored. The list of terrestrial invasive species includes buckthorn that has troubled the region for many years, along with newer invasives such as wild parsnip. With the exception of the floodplain forests on the west end of the park, buckthorn is the most prevalent threat to the forested communities. Threats to the grassland and prairie communities in the park include Siberian elm, amur maple, and wild parsnip to name a few. With proper management and continued maintenance and restoration efforts, the Park has great potential to develop diverse native plant communities.

Figures 17 and 18 depict the existing condition of natural resources in Lake Byllesby Regional Park.

Figure 17: MLCCS Map: Lake Byllesby Regional Park East Existing Natural Resources Conditions

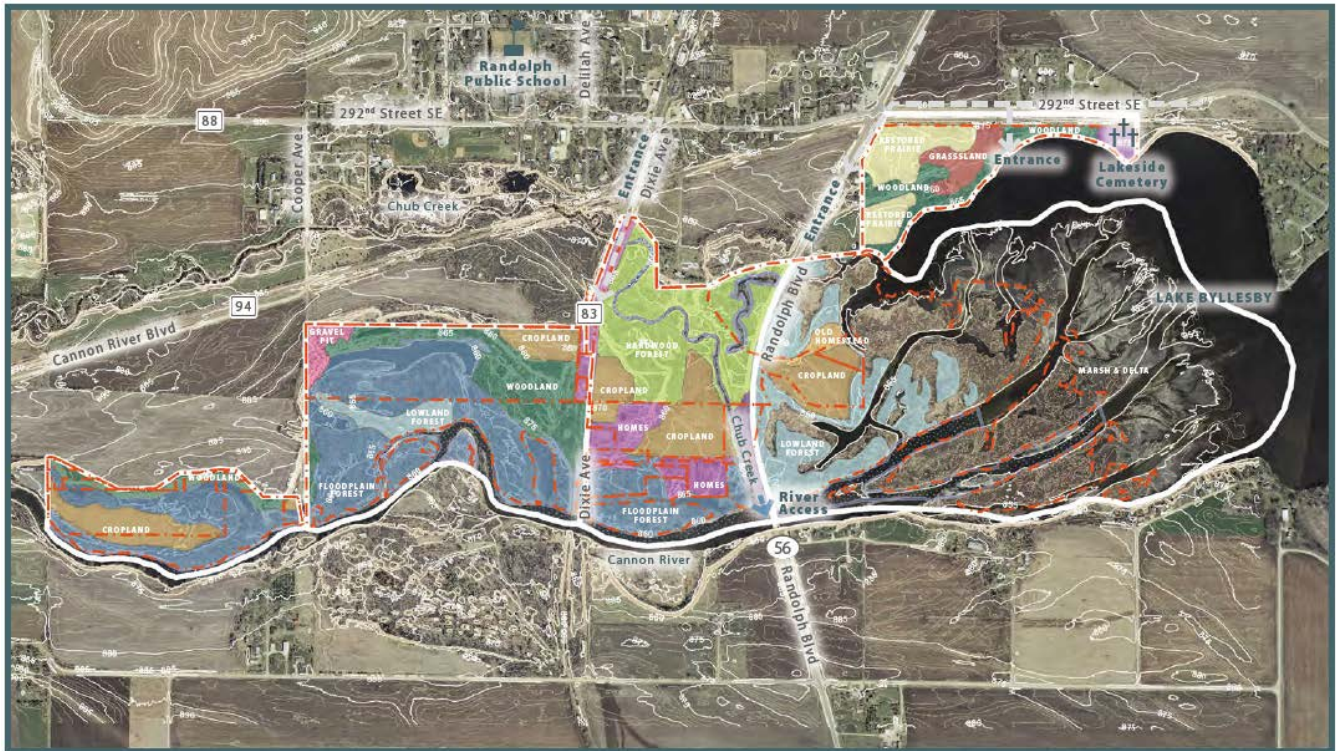


Land Cover Legend (based on MLCCS mapping and additional Field Surveys)

- Lake Byllesby Regional Park Boundary
- Park Trails
- Restored Prairie
- River
- Wetland
- Savanna
- Gravel Pit
- Utility Area
- Cropland
- Developed Parkland
- Planted Trees
- Juniper Savanna
- Woodland



Figure 18: MLCCS Map: Lake Byllesby Regional Park West Existing Natural Resources Conditions



Land Cover Legend (based on MLCCS mapping and additional Field Surveys)

Lake Byllesby Regional Park Boundary	Floodplain Forest	River	Homes	Old Homestead
Restored Prairie	Lowland Forest	Cemetery	River Access	Hardwood Forest
Grassland	Marsh & Delta	Gravel Pit	Cropland	Woodland

The Lake Byllesby Regional Park Natural Resources Master Plan (NRMP) was developed in tandem with this master plan and includes detailed descriptions of natural resources existing conditions, desired improvements, and action items. The Plan identifies significant areas for restoration in both the East and West Park.

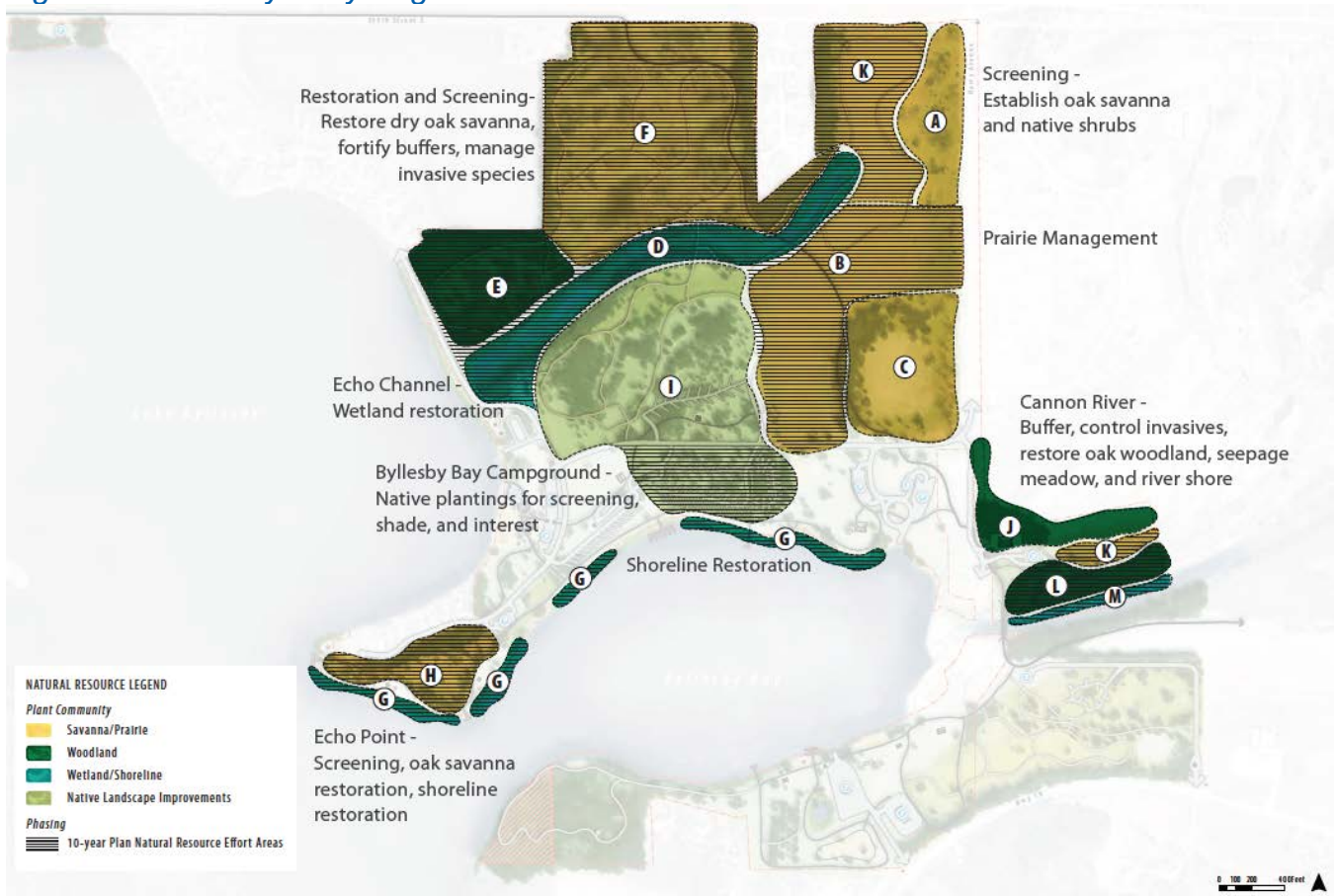
Planned natural resource improvements at the East Park include (Figure 19):

- A. Establish oak savanna and shrub species within existing restored prairie to provide screening from roadway, homes, and power lines.
- B. Manage existing prairie. Convert the 24-acre agricultural area that is currently farmed to native dry prairie (provides \$2,500 annual revenue in the meantime). Plant specimen bur oaks at key focal locations. Consider subtle landform changes to improve habitat diversity and some screening.
- C. Conduct invasive species management. Establish patches of native dry prairie mixed with savanna tree species. Establish dense buffer along main roadways.
- D. Restore wetlands with diverse wet meadow and emergent plant communities. Control invasive species such as reed canary grass.
- E. Restore woodland habitat. Remove and manage invasive species such as buckthorn and Amur maple.



- F. Restore dry savanna oak savanna. Manage invasive species and reestablish native vegetation. Create and fortify buffers along private homes and roadway.
- G. Conduct shoreline restoration. Reshape bank, install habitat logs along the lake edge, and manage vegetation.
- H. Restore prairies, including specimen oak trees. Manage invasive species. Fortify buffers adjacent to homes as needed.
- I. Incorporate natural plantings throughout campground to provide screening and create focal points as well as approachable/permeable buffers to draw people into the buffer.
- J. Remove Siberian elm and reestablish a natural dense buffer.
- K. Manage tall grass prairie. Control invasive Siberian elm.
- L. Restore oak woodland and seepage meadow areas.
- M. Restore river shoreline.

Figure 19: Lake Byllesby Regional Park East: Natural Resources

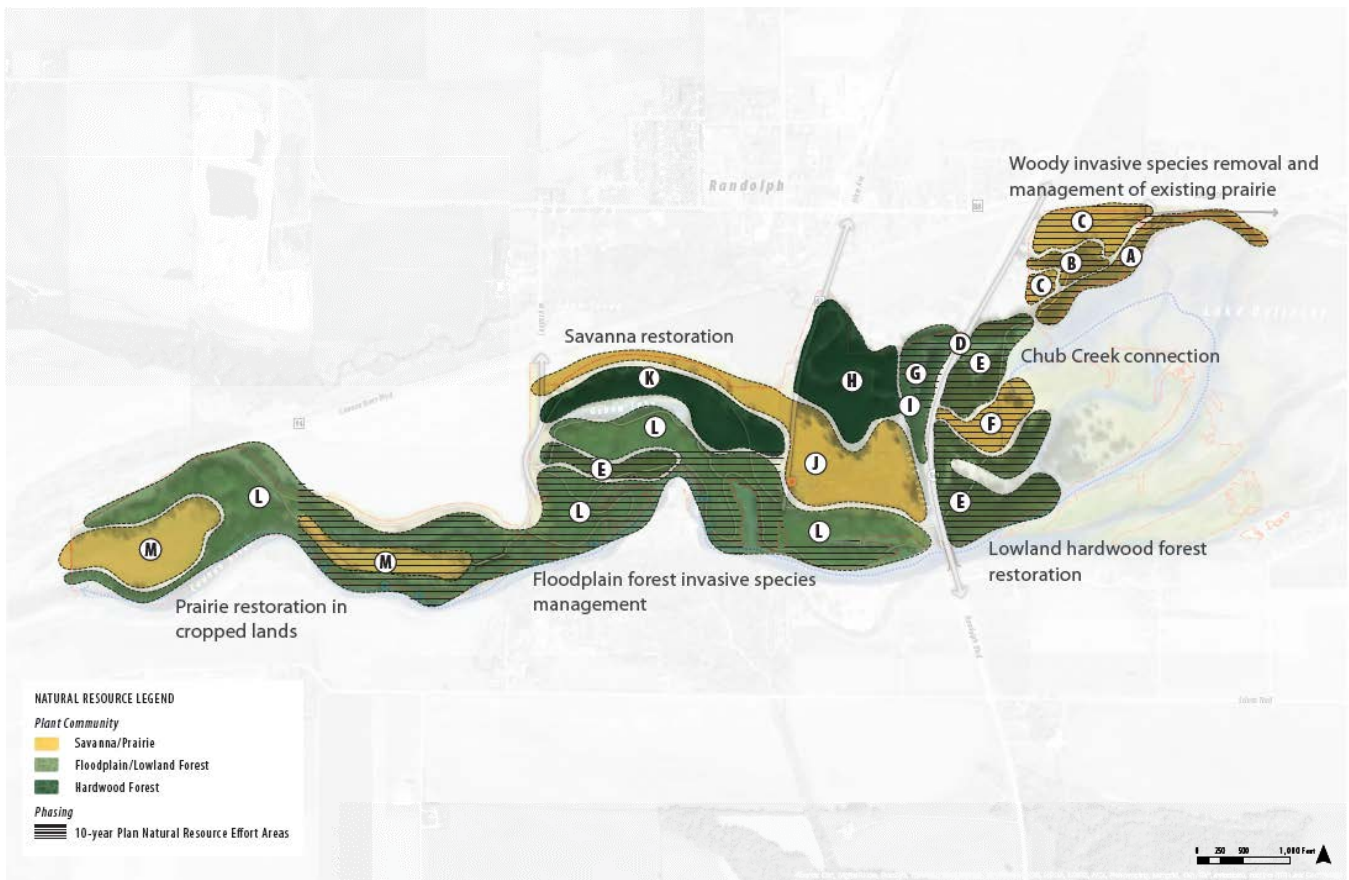


Planned natural resource improvements at the West Park include (Figure 20):

- A. Remove and restore woody invasive species within bluff savanna along lakeshore
- B. Remove invasive woody species and restore former wooded areas to mesic prairie
- C. Manage existing short grass and tall grass planted prairies
- D. Construct highway underpass for safe recreation and wildlife passage
- E. Manage lowland forest restoration and remove invasive species
- F. Restore mesic and wet prairie in former homestead and agricultural field
- G. Manage hardwood forest invasive species
- H. Restore Chub Creek Channel

- I. Restore savanna/prairie areas
- J. Manage woodland invasive species
- K. Manage floodplain/low forest invasive species
- L. Restore low prairie in currently cropped lands

Figure 20: Lake Byllesby Regional Park West: Natural Resources



*Review by Other Council Divisions*

**Community Development – Environment and Surface Water Management** (Jim Larsen 651-602-1159) – Text on page 104 indicates that existing shower and restroom facilities in the East Park area are currently served by septic systems which will need to be enlarged or replaced when addition facility demand is constructed. A motor home wastewater dump station is also planned for future construction in the East Park area. The plan does not address how the waste that will be collected in that proposed facility will be managed. Motor home owners are known to utilize a variety of stabilizers in their holding tanks, ranging from mild commercially-recommended odor-suppression additives to ‘home-made’ concoctions which can be toxic to the natural bacterial population in septic tanks and drainfields. Council staff recommends that the dump station wastewater storage tank be planned and constructed as a holding tank which will be periodically pumped and taken to a wastewater treatment facility for adequate treatment and proper disposal, and not connected to any on-site subsurface sewage treatment system (SSTS) sited within the Park. While this may already be the current strategy, a simple text clarification on this issue would be a good addition to the Plan.

**Environmental Services – Sewers** (Roger Janzig, 651-602-1119) – No comments.

**Transportation/Transit Planning** (Russ Owen, 651-602-1724) – No comments

**Local Planning Assistance** (Patrick Boylan, 651-602-1438) – No land use issues.