

















# 2020 Annual Report

# COUNTY EXECUTIVE'S STATEMENT

This past year, perhaps more than any other, we saw firsthand the direct benefit of Dane County's hard work conserving lands and creating outdoor spaces for people of all ages to enjoy. Since the very early days of this pandemic, Dane County parks and trails have been some of busiest places to be. Our dog parks have never been more popular. The Lower Yahara River Trail and its scenic overlook bridge was a destination for moms, dads, and kids both on foot and bike. Our natural resource areas were everything from launching points for canoes to just a place to safely catch some fresh air. The return on our investment into these lands and protecting the neighboring lakes and streams could not be clearer.

Because of what we have accomplished, thousands of acres will be protected for generations to come, offering close-to-home escapes for everyone looking to get out and reconnect with the world around them. This continued focus on land preservation has the added benefit of further reducing our carbon footprint.

The work of our Department of Land & Water Resources staff on our successful programs has continued unabated during the pandemic, and I thank them for all their perseverance and dedication to enhancing our quality of life that will be enjoyed for generations to come.

#### JOE PARISI

Dane County Executive





Click on this icon next to a story to learn more!

Cover photo credits: Elizabeth Felton (bird watching at Capital Springs Recreation Area); Kaci Waters (Pheasant Branch Creek); Kadjata Bah (Biking)

# **DIRECTOR'S STATEMENT**

2020 was hard, there's no way around it. We all suffered on any number of levels. Others have written more and better on the stress, confusion and exhaustion of the pandemic and the political and social discord that has dominated our world. Despite these challenges, the work of the Land & Water Resources Department was able to continue. I hope you'll spend a few minutes reviewing our summary of 2020 accomplishments and agree we've made progress on our goals to:

- Protect and enhance the natural, cultural and historic resources of Dane County
- Provide a broad array of accessible, high quality resource-based recreational services and facilities
- Support others in their resource management and protection activities

A clear bright spot in the year was our success in keeping our parks open and maintaining access for the public. We estimate that we saw at least a 25% increase in visitors this year – approximately 4,000,000 trips to Dane County Parks kept people sane and healthy when they needed it most. We're hopeful that this trend continues and that we all remember that time outside is always a good choice. Our parks operations staff deserve recognition for keeping our parkland available throughout the year and in incredibly taxing circumstances. I'm proud of all of our work but it's the dedicated staff that were willing and able to report to work every day to keep our parks open that are the Land & Water heroes of 2020.

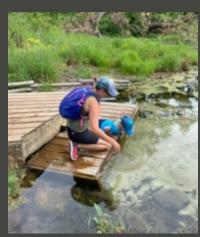
#### LAURA HICKLIN

Department Director





Sledding at McCarthy Youth and Conservation Park



Exploring the springs at Pheasant Branch Conservancy

AGRICULTURE PAGE 04

# CONTINUOUS COVER PROGRAM 0

The Continuous Cover Program provides funding to assist landowners in converting and maintaining continuous vegetative cover on agricultural lands. Maintaining continuous cover helps to increase water infiltration, reduce soil erosion, improve water quality, build soil health, enhance wildlife habitat, sequester carbon, and diversify production practices.

Since the program began in 2019, more than **700 acres** have been enrolled in the program and phosphorus runoff into local waters has been reduced by over **1,700 pounds** per year. Funding for the program was doubled to \$1.5 million in the 2020 county budget, allowing the department to work with even more landowners.

2020 • 31 landowners enrolled • 600 acres protected



"By taking part in Dane County's Continuous Cover Program, small family farms and rural property owners can preserve the character of their land and make it less vulnerable to flooding."

Joe Parisi, Dane County Executive

**AGRICULTURE** PAGE 05

# **NUTRIENT CONCENTRATION SYSTEM 0**

#### Cutting-Edge Technology that Turns Cow Manure into Drinkable Water

Dane County Executive Joe Parisi joined representatives from AQUA Innovations and GL Dairy Biogas LLC to open a new community nutrient concentration system in the Town of Springfield. The system receives manure from GL Dairy Biogas LLC and cleans it through a series of ultrafiltration and reverse osmosis filters before discharging the remaining clean water into Pheasant Branch. Nutrients, including phosphorus, are removed from the manure, concentrated, and stored for later use as a fertilizer for growing crops. This new nutrient concentration system achieves nearly 100% phosphorus removal—meaning less phosphorus-filled manure and digester byproduct spread on fields sensitive to runoff in the Yahara Watershed.





Manure Samples ──> Clean Water

# TECHNICAL ASSISTANCE GRANT

This year, the department was awarded \$90,000 through a 2020 National Association of Conservation Districts (NACD) Technical Assistance grant. This grant helps fund an additional staff position to implement conservation practices. This was the third round of funding received from NACD, totaling \$260,000, to help improve agricultural productivity, soil health, and water quality throughout Dane County. Some of the projects supported by this grant include waste facility closures, streambank restoration projects, and waterway installations.

# URBAN WATER QUALITY GRANT © PROGRAM

This year, three municipalities were approved to receive funding for four different projects that once constructed, will result in the removal of an estimated 130,591 pounds of sediment and 189 pounds of phosphorus annually.

#### **Project Spotlight:**

The **Byrne Pond Retrofit** project, funded in 2020, was also substantially completed in 2020. This pond treats runoff from around 60 acres of residential land in Fitchburg's Byrnewood Neighborhood. The pond now incorporates native plants into a filter strip and infiltration area. Together these features work to trap sediment and phosphorus while providing habitat for pollinators.



# EROSION CONTROL & STORMWATER MANAGEMENT

Staff issue erosion control and stormwater management permits and perform site inspections to ensure that these permits are being followed. This year, staff performed **4,664 site inspections** and took **48 enforcement actions**.

# LAND ACQUISITIONS

#### 598 Acres Permanently Protected in 2020

#### Halfway Prairie School (74 acres)

Expand park land surrounding the historic Halfway Prairie School site. The new property will provide improved parking and new hiking trails.



Badger Mill Creek

#### Future Sugar River Wildlife Area - Riverside Rd. Unit (160 acres)

Protect Badger Mill Creek, a class II trout stream, and Sugar River streambanks from future development. Read more about this project on page 9.

#### Fish Lake County Park (1.8 acres)

Purchase flooded properties to remove buildings and protect the lake and fish habitat.

#### Black Earth Creek Natural Resource Area (79 acres)

Provide flood water storage, enhanced water quality, wildlife habitat, and future trail development and public recreation opportunities. Restoring the property to prairie will help infiltrate approximately 539 million gallons of water each year.

#### Conservation and Ice Age Trail Easement (152 acres)

Protect rural agricultural land and open space in the Town of Cross Plains and provide a new off-road corridor for the National Ice Age Scenic Trail.

#### **Upper Sugar River Streambank Easement** (2.2 acres)

Protect 1,450 feet of undeveloped streambank to provide public fishing access, water quality protection and fish and wildlife habitat preservation.

#### Wolf Run Trail and Halfway Prairie Creek Streambank Easement (10 acres)

Provide future regional trail connections and opportunities for public fishing and streambank restoration. *Partnership with Groundswell Conservancy*.

#### **Dane County Conservation Fund Grant Projects**

Grants provided to Groundswell Conservancy and the Ice Age Trail Alliance helped protect land and provide recreational opportunities on 68 acres at Lower Mud Lake and 51 acres in the Black Earth Creek Natural Resource Area.

### LAND RESTORATION EFFORTS

#### Seed Collection | 1,700 lbs. seed collected

This year, volunteers, staff and partners collected and processed over 1,700 pounds of seed from 220 native species with an estimated worth of approximately \$537,000. This seed will be used to help restore over 143 acres of land in Dane County. Volunteers contributed over 1,146 hours to this program.

#### Forestry | 2,000 trees and native shrubs planted

This year, Dane County planted over **2,000 trees and native shrubs** on County lands with the help of volunteers and partner groups. Staff also successfully injected roughly 50 large bur oak trees, protecting them from bur oak blight and oak wilt.

#### Oak Savanna Restorations 1

Current project sites include Indian Lake County Park, Mud Lake Wildlife Area, Scheidegger Forest, and Prairie Moraine County Park. Restoration includes timber harvests, removing invasive brush and undesirable tree species. Oak savanna was once one of the most common vegetation types in the Upper Midwest but today this ecosystem is highly endangered with only a fraction of one percent remaining.







# PHEASANT BRANCH CONSERVANCY ® SPOTLIGHT

The former Acker farm buildings and concrete were removed from the 160-acre property that was purchased in 2019. The concrete was crushed on site and repurposed for the construction of a future parking lot. The project also entailed the construction of a sediment basin and an upper and lower berm with water control structures that will create wetland pools to increase flood capacity and reduce sediment and phosphorus loading to Pheasant Branch Creek.



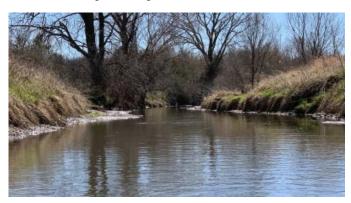




# BADGER MILL CREEK •

#### **SPOTLIGHT**

A project is currently underway to restore a 4,900-foot section of this stream. Tree clearing and invasive species removal was completed prior to beginning a stream restoration project for an almost one-mile channelized section of Badger Mill Creek that goes through the Ice Age Trail Junction Natural Resource Area in Verona. The project will be done in the summer of 2021 in conjunction with the City of Verona's sewer replacement project. In-stream habitat will be added throughout the corridor and some grading will be done to reconnect the stream to its floodplain.



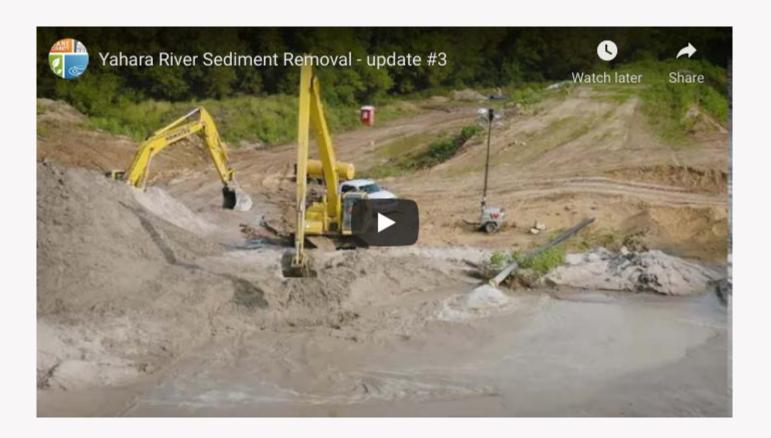


### YAHARA RIVER SEDIMENT REMOVAL ®

Dane County continued implementation of the multi-year **Yahara River Sediment Removal** project to remove accumulated sediments and improve water flow.

Sediment was removed from the Yahara River between Lakes Monona and Waubesa. Approximately **40,000 cubic yards** of sediment were removed, deepening this section of the river between two to four feet. Sediment removal will continue in the spring/summer of 2021. In 2021, Phase 1 will resume and be completed for the last section between Bridge Road and Broadway.

Dane County also purchased dredge equipment that will be used in Phase 2, which includes two river sections located downstream of lake Waubesa and lake Kegonsa. Engineering plans for Phase 2 are currently being developed and will be submitted to the Wisconsin DNR for permit approval. Phase 2 is anticipated to begin in 2021.



### LEGACY SEDIMENT REMOVAL 0

The first two phases of the "Suck the Muck" project, completed in 2018 and 2019, removed a total of **31,000 tons** of sediment (about 2,300 dump truck loads) from streambeds within the Yahara Watershed.

This year, sediment removal was completed in Token Creek, a class II trout stream that runs through Token Creek County Park. The project included many habitat enhancements, such as boulders and root wads. Rock deflectors were also added to prevent future erosion. Token Creek is the only cold water stream in northeast Dane County so these enhancements will also have huge benefits for the trout fishery.

Engineering plans were developed for sediment removal in Six Mile Creek, in the area known as "Mary Lake." This phase of the sediment removal is planned for the summer of 2021.



### **PARK UPGRADES**

Below are highlights of some of the park development and trail expansion projects that happened this year.



#### Solar Panels 1

Solar panels were installed on the Lussier Family Heritage Center and W.G. Lunney Lake Farm Park campground building. Two open air shelters with solar panel roofs were also added. This will be the first campground in the County and second park in the state to be fully solar-powered.



#### **Accessible Overlook**

Steve Morton, who donated the Morton Forest property in 2017, gave additional funding to create an accessible overlook platform on the North Ridge Trail. The overlook provides visitors with another option to take in the amazing views.



#### Electronic Pay Stations 🕕

Several electronic pay stations were added this year to some of our highest use locations. These new solar-powered pay stations allow park visitors to purchase daily or annual activity permits and are an upgrade from the old cash-inenvelope style money-tubes that have been removed from the parks.



#### Wisniewski Accessible Fishing Pier

An accessible floating fishing pier and picnic table were added at Salmo Pond County Park in memory of Dan Wisniewski, former Parks Commission Member. This new facility was funded through the Accessible Pier Program.

# PARK UPGRADES CONTINUED



#### **Metal Roof Upgrades**

Three facilities at W.G. Lunney Lake Farm County Park received new metal roofs including the Lussier Heritage Center, the campground shower house, and shelter #1. The two remaining shelters are scheduled for metal roofs in 2021.



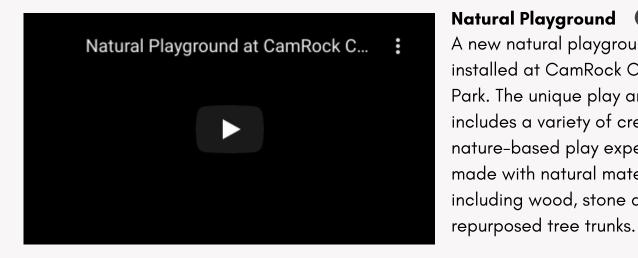
#### **New Property Access Development**

Parking lots were constructed for two new properties that were recently added to the Dane County Park System. One lot was constructed for the 162-acre Vienna Pothole Wildlife Area and a second for the 140-acre Joyce M. Baer and George J. Socha Conservancy.



#### Jenni & Kyle Trail Restoration

The western portion of the walking path around the ponds at the Jenni & Kyle Preserve was resurfaced to improve accessibility to the ponds.



#### Natural Playground

A new natural playground was installed at CamRock County Park. The unique play area includes a variety of creative and nature-based play experiences made with natural materials including wood, stone and

### **BIKE TRAIL EXPANSIONS**

Dane County is working hard to meet the constant demands to expand and improve connectivity of bike trails throughout the County. Below are a few progress highlights:

**Anderson Farm County Park:** a ¾-mile shared-use trail at Anderson Farm County Park that connects the Village of Oregon to the park, will be paved in 2021.

(1) Capital City Trail Pavement Restoration: a mile of pavement from Seminole Highway west to the bicycle roundabout was restored.

**North Mendota Trail:** a new trail segment was added in partnership with the Town of Westport and Wisconsin DNR, along County Hwy M. This segment includes a 1,600 foot elevated boardwalk and bridge over Six Mile Creek.

- **1 Lower Yahara River Trail:** planning is underway for Phase 2 of the trail segment that will run between Fish Camp County Park and Lake Kegonsa State Park. Construction is anticipated late in 2021.
- **(i)** Glacial Drumlin to Capital City Connector Trail: planning and design continues for a trail between I-39 and Buckeye Road. The trail will eventually extend to Cottage Grove.

**Great Sauk-Walking Iron Trail:** a study was completed in partnership with Sauk County to explore the feasibility of constructing a multi-use trail bridge over the Wisconsin River. The next step is to explore potential funding sources.



Future corridor of the Lower Yahara River Trail through Fish Camp County Park



Artistic rendering of the future Wisconsin Recreation Bridge connecting the Great Sauk and Walking Iron trails

# **NEW RESERVATION SYSTEM 0**

Dane County Parks launched a new online reservation and permit sales system this year. The new site is more **mobile friendly** and allows users to reserve campsites, group campsites and shelters, as well as purchase park permits and make donations.



# **SUPPORTING VOLUNTEERS**

#### **Dane County Parks Volunteers and Events**

This year over 1,200 volunteers donated more than 43,030 hours, even though many volunteer events were canceled or size-restricted due to the pandemic. These numbers reflect the community's strong commitment to our parks. Twenty Friends Groups and partners helped staff keep trails and park lands open and accessible through 2020.



The Foundation supports the park system and fundraises for the Dane County Parks Endowment Fund held by the Madison Community Foundation. The Endowment is now over \$650,000 and has awarded over \$32,000 in grants to 13 local nonprofit conservation organizations to help them provide educational programming, interpretation and enhanced volunteerism in parks. They have also led initiatives like the Accessible Piers Program.

This year the foundation also launched a new website and hired a Foundation Coordinator and a Fundraising Coordinator to support and grow their work.







# **INDIAN LAKE COUNTY PARK**

#### **SPOTLIGHT**

Indian Lake County Park is one of Dane County's largest parks and it has a number of projects and upgrades to highlight this year:

#### Park Expansion 🕦

Dane County purchased an additional 295 acres of property that will increase the size of the park to just under 800 acres. This will provide expanded recreation opportunities and help create a critical off-road link for the Ice Age National Scenic Trail.

#### Oak Savanna Restoration 🕦

Staff and volunteers began restoration of a 17-acre section of rare oak savanna habitat that once dominated the area. The county contracted with Valton Log and Lumber to begin removing black locust trees and other trees that are not part of the oak savanna ecosystem. Staff and volunteers also worked to remove invasive plant species and scattered native plants seeds to help stabilize the soil.

#### **Carp Removal**

In cooperation with the Wisconsin DNR and the Friends of Indian Lake, staff used nets to trap and remove over 5,000 common carp, building on previous efforts. Netting will commence again in the spring. Carp are an introduced, invasive species and removing them helps improve water quality and restore native fish populations. The lake was stocked with perch, bluegill, largemouth bass and channel catfish.

#### **Historic Chapel Updates**

The historic chapel was built in 1857 by John Endres and is a site of great importance to his descendants. This year, the Endres Family replaced the aging fence and added a plaque to memorialize Larry Endres and Urban J. Endres (two of John's great grandsons).









Photo: Jennifer Zetzman Photography

# **YOUTH INITIATIVES 0**

Our Lussier Family Heritage Center Facility offers a growing number of educational programs and events for both youth and adults. Some of these are described below.



#### **StoryWalk®**

In partnership with the Monona Public Library and Friends of Capital Springs, the Heritage Center added a StoryWalk® to the Prairie Learning Center trails. Each month, the pages of a new book are set out along the trails so that kids can explore nature and read a story as they go.



#### **Get Outside**

In the second year of this program, kids from four community centers were able to visit the Heritage Center one to two times a month for outdoor and environmental education programming. Activities included fishing, biking, snowshoeing, and other outdoor recreation and exploration.



#### Youth Environmental Leadership Experience

In the second year of this program, 15 high school students participated in a five-week virtual summer program that encouraged peer support and a minimum of 120 minutes per week spent outside. Two interns from the Boys & Girls Club assisted staff with this program.



#### **Natural Areas Art Contest**

This is a competition, fundraiser and scholarship for youth in grades six through twelve. The top three winners received a \$500 scholarship and their artwork was turned into stickers, window clings, and magnets that are being used to raise money for Dane County Parks natural areas.

In addition to the expanded educational opportunities at the Heritage Center, our department also hosted five interns from the Simpson Street Free Press and two interns at the Lussier Family Heritage Center.

### RIPPLE EFFECTS

There are many practices that reduce and improve stormwater runoff into Dane County lakes, rivers and streams. Ripple Effects, a joint program between our department and the Madison Area Municipal Stormwater Partnership, educates residents about easy actions they can take to protect Dane County Waters.

#### Leaf-free Streets



In the fall, removing leaves from the street before it rains can help keep phosphorus from entering our waterbodies. This year, rain alerts went out to 394 text subscribers and 344 email subscribers before rain events reminding them to remove leaves from the street. Four hundred people also displayed yard signs to help educate neighbors.

#### Plant Dane 1



The annual plant sale sold 10,469 discounted native plants to Dane County residents. Additionally, 4,922 free native plants were distributed through the free plants program. These plants are donated to school and community organizations through the plant sale or grown by volunteer native plant growers.





# **CONSERVATION CORNER**

With coronavirus precautions, staff had to get creative this year to provide public educational opportunities and encourage people to get outside. Dane County staff and partner agencies created 17 videos highlighting wildlife, land management, volunteerism, lake management, park history and more.

**Watch Videos** 

# DRONE TECHNOLOGY HELPS WITH CONSERVATION PROJECTS

This year we added a drone to our list of conservation tools. Staff have already put the drone to use in a wide variety of projects:

**Video footage** captured solar panel installation at the Lussier Family Heritage Center and was used to quantify the coverage of an invasive species at Indian Lake.

**Topographic data** was used for planning farm field conservation projects, such as grassed waterways, as well as park design projects. At Fish Camp County Park, a topographic survey collected ground elevation data of the existing parking lots, walkways, and shoreline to help design a new kayak launch. The drone survey was done within a few hours, whereas a field survey would have taken a day or two. Topographic data was also used at the new Pheasant Branch Conservancy property to confirm that contractor work was done to plan.

**Aerial photography** helped staff track managed grazing impacts at a Wisconsin DNR wildlife area. The aerial images allowed staff to adjust grazing throughout the season to have the most impact on vegetation and improve the site for hunters and hikers.

In 2020, staff conducted 46 flights with nearly 15 hours of flight time. The department will purchase a second drone and train additional staff as pilots in 2021 so that more projects can utilize this time and money-saving technology.



# WE WELCOMED FOUR NEW FULL-TIME STAFF IN 2020



Patricia Alexandre
Data Analyst



Bert Schwab\*
Operations
Manager



Joleen Stinson
Deputy Parks
Director



**Lacie Roberts**Park Ranger

\*Bert worked for us previously as a Crew Leader.

# **AWARDS & RECOGNITION**

**Dane County Parks** won the Operation Fresh Start "Community Collaboration" award.

**Darren Marsh** (Parks Director) received the Wisconsin Park & Recreation Association's "Professional Award of Merit."

**Joleen Stinson** (Deputy Parks Director) received the Wisconsin Park & Recreation Association's "Outstanding Park Professional of the Year" award.

**Seth Ebel** (Agricultural Engineer) received the Wisconsin Land + Water Conservation Association's "Outstanding Conservation Employee" award.