

Dane County Land & Water Resources Department 2010 Annual Report



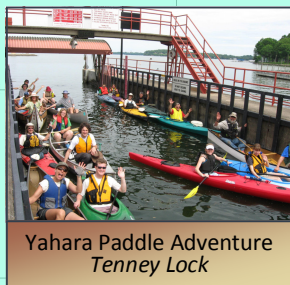
Walking Iron Wildlife Area—
wetland restoration
project—water structure



Waunakee manure digester
groundbreaking ceremony



Stewart Lake fish restocking



Yahara Paddle Adventure
Tenney Lock



Family fun at McCarthy Park
Snow Day



Streambank restoration
project on
Kittleson Valley Creek



Ice Age Bike & Pedestrian
Trail ribbon-cutting
ceremony



AIS boat inspection on
Lake Waubesa
Lake Farm County Park



Rockdale mill site
*Bridge to trail head—
CamRock County Park*

From County Executive Kathleen Falk

2010 saw some of the most challenging and far-reaching accomplishments in Dane County's conservation history. After years of negotiations, setbacks, and political contention, we completed a major acquisition for the Ice Age Trail Complex at Cross Plains. The property preserves some of the most important and loved geologic features of the entire Ice Age Trail and provides recreational and interpretive opportunities forever. Our Land & Water Resources Department staff accomplished another long standing challenge when we combined state and county dollars to offer a fair buyout to Fish Lake homeowners long besieged by inexorable high waters—and to greatly increase the public shoreland and access to Fish Lake.

Our goal of building the first manure digester in the nation to take out phosphorus and help multiple farms grow was finished! Its operation is a boon to several thriving dairy farms and its local production of sustainable energy strengthens our economy. But, from a conservation perspective, the phosphorus it keeps out of our lakes is most important. By the time this report is out, our second neighborhood digester should be underway between Middleton and Waunakee.

(continued on next page)

Because phosphorus is Enemy Number One in the obnoxious blue green algae blooms that detract from the beauty and use of our lakes, in this year's budget we commence a partnership with the Madison Metropolitan Sewerage District (MMSD) to contain this pollutant once and for all. Under EPA and DNR regulations, we have the opportunity to work with MMSD to reduce phosphorus runoff going into our lakes instead of MMSD having to install incredibly expensive equipment to take phosphorus out of its effluent. The results will be greatly reduced costs to MMSD ratepayers and dramatically improved water quality in our lakes. Again, the work of the Land & Water Resources Department management and staff was absolutely critical to this achievement.

In addition to the historic achievements, the Department continued its usual stellar work in helping farmers increase productivity and stewardship of natural resources, restoring wetlands and prairies, and designing and building new trails and park improvements.

Recently, I and the Parks Commission and Department staff, kicked off the 5-year update of our Parks & Open Space Plan. Our bicycling community is strongly showing interest in expanding regional trails. Over the last fourteen years, our robust Conservation Fund has helped local governments and conservation organizations preserve important land and natural resources identified in our Plan. But our Plan also calls for the restoration of resources and development of outdoor recreation. Again, with the good advice of Department staff and the help of the Parks Commission, the County Board and I created the Partners for Recreation and Conservation (PARC) program to help our partners fund those outdoor recreation and natural resource restoration projects with regional significance. Already staff are reviewing proposals that would greatly expand recreational facilities, connect the downtown areas of communities to state trails, and restore streams.

As you read this, I am ending fourteen years of service as your Dane County Executive. From Day One, I promised that preserving and restoring our lands and waters would rank among my highest goals. I hope I kept that promise.

Together, we:

- Passed the referendum for the Conservation Fund and protected over 11,000 acres for public use and the protection of natural resources.
- Created the Land & Water Legacy Fund to clean up our lakes and other waters. Included in this program is the restoration of key wetlands in the Yahara Lakes watershed, the rehabilitation and improvement of storm sewers (to keep sediment and trash out of the lakes), and the modernization of the locks and dams on all the lakes.
- Restored 50 miles of trout streams and created a nationally recognized program to combine the restoration of streams with permanent public access -- so far, we have covered over 12 miles of high quality streams.
- Banned phosphorus from lawn fertilizer; created some of the nation's strongest stormwater standards, including protection of cold water streams; regulated winter spreading of manure; and banned coal tar driveway sealants.
- Completed Capital City, Cam Rock, and many other bicycle trails. Constructed major park improvements at McCarthy Park, Schumacher Farm, Token Creek Park, and Scheidegger Forest, among many others.
- Created Centennial State Recreation Area (over 4,000 acres including shoreline on Lake Waubesa) in partnership with the state.

Lots of people helped me accomplish my goals—but the energy, commitment, and hard work of the Parks Commission, the Land Conservation Committee, the Lakes and Watershed Commission, a terrific department head, Kevin Connors, and the superb Land & Water Resources Department staff were vital and inspiring. Thank you all!

From the Director

Hello and welcome to our 5th Land and Water Resources Department Annual Report. Each year, our report highlights major accomplishments of the previous year, and as always when you read it, you will see all things related to "Land...Water...and PEOPLE."

As I reviewed the information we wanted to present in this report, I was struck by how much our work continues to be guided by our Department's strategic plan, and especially our strategy of expanding partnerships with other public, private and nonprofit agencies and local units of

government. Those partnerships make our projects stronger and taxpayer dollars go farther, as we work to protect and improve the land and water resources that county residents value so highly.

I hope that you enjoy reading our report. If you have any comments, suggestions or questions, please do not hesitate to contact me at: connors.kevin@countyofdane.com.

- Kevin Connors, Director

Stewart Lake Beach & Fishery Restored

The rebirth of Stewart Lake took another major step forward in 2010. With the dredging complete, staff took on the task of constructing the swimming beach and bringing back the fishery.



Fish cribs, built by Mt. Horeb High School students before being placed into Stewart Lake.

Beach construction began early last spring and was completed in time for the swimming season. Park use saw a substantial increase in 2010. The construction included bringing in over 3,500 cubic yards of sand and pea gravel. Beach users found this new amenity to be a great addition to Dane County's oldest park.

The lake itself also underwent a transition with the stocking of both forage and game fish. In mid-May, with the assistance of Mount Horeb High School, the lake received a stocking of fathead minnows, golden shiners and white suckers. These minnow species will help to jump-start the fishery by providing the necessary forage base for game fish. The students also constructed over 20 fish cribs which were placed in the lake as habitat. These structures will provide cover for the fish and other aquatic life. In October, the final stocking took place with 2,500 bluegills and 250 largemouth bass released into the lake.

As for 2011, the park and lake will see continued effort. The upland dredge spoil site on the eastern edge of the park will be graded and replanted. The parking lot adjacent to the beach and picnic area will be resurfaced and new stormwater controls put in place.

The lake will be treated in early spring for the aquatic invasive curly leaf pondweed. This plant is aggressive and can negatively impact important native species. While the plant densities were reduced through the dredging operations in 2009, 2010 surveys found the plant to persist in most of the lake. An aggressive approach is needed to assure the investment in improvements can be maintained well into the future.



Mt. Horeb High School students, community members, and local friends get their feet wet at the Stewart Lake Beach while stocking fish last May.

Community Manure Handling Facility Ready to Go

Construction started in August to build a Community Manure Handling Facility involving three dairy farms. The facility will provide anaerobic digestion, solids separation, electrical production and the return of digestate back to the farms in the form of fertilizer that will be applied to meet crop needs.

Dane County provided funding through a \$3.3 million State of Wisconsin DNR grant, and owner and operator Clear Horizons provided the remainder. A total project cost of \$12 million is expected. This facility, when operational in the spring of 2011, will remove 60% of the phosphorus from the digested material. About 70,000 pounds of phosphorus per year will be used for wholesale/retail markets out of the Mendota watershed or used as bedding on the participating dairy farms, only to be returned to the facility to be processed again.

By diverting the phosphorus out the watershed, phosphorus levels in the soil will decline.

Methane gas produced from the digestion process will be burned in engines to provide electricity for about 2,500

homes annually.

Planning is underway with farmers in Springfield Township and Clear Horizons for possible groundbreaking for another facility in the spring of 2011.



Solids storage building and digester tanks

ICE AGE TRAIL—Dane County Parks was awarded a Transportation Enhancement (TE) grant for \$247,280 from the Wisconsin Department of Transportation that substantially funded the 2010 construction of nearly two miles of bicycle-pedestrian trail through the Ice Age Trail Junction Area. The trail extends from the Ice Age National Scenic Trail parking area on CTH PD in the City of Madison south to Badger Prairie County Park in the Town of Verona and ends at the Military Ridge State Trail parking lot. The trail will provide great bicycle recreation and commuting opportunities for one of the largest residential areas in Dane County. The Madison Community Foundation was also a partner for the project, contributing \$165,000 toward the bicycle-pedestrian underpass at East Verona Avenue and a bicycle rest stop located along the trail. The City of Verona contributed \$50,000 and the City of Madison donated \$55,000 of funding toward trail construction. A ribbon cutting event hosted by County Executive Kathleen Falk was held in August to celebrate the grand opening of the trail. Dane County Parks is now working with the City of Madison on planning for the next segment of the trail that will extend from the McKee Road north to CTH M.

LOWER YAHARA RIVER TRAIL—After more than 15 years of being shown in the Dane County Parks and Open Space Plan as a proposed trail, Dane County Parks received a major funding breakthrough that will result in phase one of the Lower Yahara River Trail becoming a reality. Dane County received just over \$3 million dollars in Wisconsin Department of Transportation administered Transportation Enhancement funds for phase one of the trail, the largest bicycle facility grant ever given in the State through this program. The Lower Yahara River Trail is a proposed bicycle-pedestrian transportation corridor that will one day connect the Lussier Family Heritage Center with the City of Stoughton. The recently funded first phase will extend from the Capital City Trail at Lake Farm County Park to McDaniel Park in the Village of McFarland. Phase one of the trail is about 2.5 miles long and will include an extensive bridge and boardwalk system that will span the Yahara River and traverse the north shoreline of Lake Waubesa. The grant is anticipated to fund approximately 80% of project costs and construction is expected to begin during the winter of 2011-12.

More Streambanks Protected in 2010

The purpose of the Streambank Easement Program is to permanently protect high quality, spring-fed streams that are capable of supporting cold-water fish communities and to increase public trout fishing opportunities. Streambank erosion and loss of fish habitat is a major threat to the county's cold-water streams. Many of them have been restored thanks to the participation of landowners in the Streambank Protection Program administered by the Land Conservation Division. These streams are a priority for protection through the Streambank Easement Program. Nine easements—six on the German Valley Branch and two on Vermont Creek—were purchased in 2010. That secured a total of 21 easements since the program was established in 2007. The easements cover over 14 miles along the West Branch Sugar River, Primrose Branch, Gordon Creek, German Valley Branch, and Vermont Creek.

Maps showing the location of the streambank easements are available online at www.countyofdane.com/lwrd/parks/fishing.aspx. The early catch and release trout



Streambank restoration and easement

season opener started on Saturday, March 6th. Regular season runs from May 1 – September 30th. Try your luck at catching a big brown!

Streambank protection and enhancements were completed on Syftestad Creek, Kittleson Valley Creek and Vermont Creek in 2010.

In 2010, Land Conservation Division focused on protecting streams in the western part of Dane County. Additional technical and financial resources were used to improve and protect fish, wildlife and eroding streambanks.

Conservation practices included bank shaping and seeding for stabilization, rock riprap, stream crossings, fencing, fish habitat structures (LUNKERS), fencing and rock weir for fish passage. Three landowners completed 9,315 feet of stream protection and habitat improvement and 6,770 feet of fencing to exclude livestock. Continued programs and landowner participation will provide aesthetical and recreational opportunities for years to come!

Dane County Wild About Native Plants

Parks Division works with nearly a 1,000 3rd, 4th and 5th grade kids every autumn to collect native seeds. Many adults and middle- and high-school students also help. Two-hundred 40-gallon bags of 100 species are collected, resulting in 700-800 pounds of “clean seed,” from county-owned properties. Most of the seed is used for prairie restorations on county properties. Volunteers plant 30-40 acres annually on county and other public properties.

If purchased commercially, the collected seed would cost \$50,000-\$100,000, which means it wouldn't get purchased. A dollar figure cannot be assigned to the value of the restoration work made possible by the work of the countless volunteers. Diverse ecosystems are restored, providing critical habitat to native birds, mammals and beneficial insects. As people gather to collect and clean seed, they learn about natural history, and the importance of prairies, and then build interest inspiring friends and family to help.

Over the past nine years, hundreds of visitors have participated in the Dane County Office of Lakes & Watersheds' Better Lawns & Gutters Tour, which has featured rain gardens, native plantings, low-mow turf and



Coneflowers
(photo courtesy of Bob Queen)

rain barrels at nearly a hundred homes, churches and businesses around Dane County. “Tourists” see first-hand how beautiful native landscaping can be and can talk with homeowners one-on-one about installation costs, maintenance, observations, reactions from neighbors and more.

The Plant Dane! Cost-Share Program, possible through a gift from the Graham-Martin Foundation, makes native plants available to Dane County residents for less than half of retail prices. Coordinated through the Madison Area Municipal Storm Water Partnership and the Dane County Office of Lakes & Watersheds, an annual workshop is offered for those wanting to learn about rain gardens and native plants. Hundreds of participants have planted hundreds of acres with natives since the program's inception in 2005.

As people learn about native plants, native landscaping, prairie restoration, rain gardens and rain barrels, they learn more about stormwater and how to mitigate its negative effects. They also learn about Dane County's lakes, streams and groundwater. Gardeners and volunteers take on a new pride as they work natives into their yards or help collect seed, because they know they are helping Dane County's lakes, streams and the creatures that live there.

Our Volunteers—Priceless!

How do you put a value on a volunteer's time? According to current statistics, the national average for a volunteer's time is valued at \$20.85/hour. We at Dane County Land and Water Resources, however, consider a volunteer's time and effort priceless! Our volunteers make it possible to accomplish many more projects than we would ever be able to do without them. In Dane County, 40% of our residents volunteer in some capacity and Madison ranks #5 in volunteerism among 75 mid-sized cities.

The Dane County Parks Volunteer Program is perhaps the best known in the Department. It grew from a couple of hundred volunteers and 6,000 volunteer hours at its inception in 1992, to over 1,507 volunteers and approximately 33,027 volunteer hours in 2010. In 2010, the volunteer hours of Friends/Partner groups, working on projects in specific parks, surpassed those of individual volunteers.

Elsewhere in the Department, thousands of Take a Stake in the Lakes volunteers since 1988 have picked up hundreds of tons of trash and debris from shorelines. Other volunteers have played key roles in education and policy initiatives.

Our volunteer programs help individuals realize their dreams and utilize their talents, whether it is on poetry

trails, art projects combined with ecological awareness, restoring prairie and natural areas, archeological or historical research projects, promotion of outdoor winter activities in various parks, inspecting motor boats to prevent transport of aquatic invasives, or surveying recreational users to help guide program and policy decisions.

Working as a team, dedicated volunteers and supportive staff have been able to have fun and be rewarded by their accomplishments that help make Dane County such a wonderful place to live.



Volunteers collecting seed at Badger Prairie County Park

Many Partners Help Keep the Yahara Watershed CLEAN

An important milestone for Yahara CLEAN was reached in September 2010, with the submittal of a report to the Yahara CLEAN Memorandum of Understanding Signatories and the Dane County Lakes and Watershed Commission. The Office of Lakes and Watersheds led Dane County's work in completion of "A CLEAN Future for the Yahara Lakes: Solutions for Tomorrow, Starting Today," with assistance from the Land Conservation Division.

The report reflects the direct contributions of almost 80 people who served on technical advisory committees and contributed information and advice in other ways. Hundreds more citizens provided input at public meetings. "A CLEAN Future for the Yahara Lakes" summarizes the findings from assessment and diagnosis completed since the CLEAN MOU was signed in February 2008 by Dane County, the City of Madison, Wisconsin DNR and DATCP. The report also acknowledges the long history of water quality improvement investments and accomplishments in the Yahara watershed.

Since 2008, several assessment tools have distilled extensive research and targeted the problems. Several state-of-the-art models (including the watershed-wide Soil and Water Assessment Tool (SWAT) and the field-level SNAP-Plus model) were used. Another model, designed to learn how phosphorus behaves in each lake, is still under development. In combination, these models are providing a sophisticated picture of the sources of the problem, concentrations, and locations. These are shaping strategies for intervention, providing insights into project costs, and have set the stage for taking action.

For example, we now know that the highest concentrations of the phosphorus in the Yahara watershed is coming from specific drainages northwest of Lakes Mendota, and from the upper Waubesa and Kegonsa watersheds. This tells us where to target the reduction efforts for biggest impacts. We also know that the benefits of reducing inputs into Lake Mendota will "cascade" throughout the full chain of lakes downstream. Thus,



improving Lake Mendota's source-water quality is one of the linchpins in cleaning up the whole system.

For beaches, analyses included water testing and site analysis, including slope, sand characteristics, proximity to storm drains, visitor facilities, presence of geese and other wildlife, and other factors. This revealed the need for a multi-pronged approach, customized to the particular beach. The CLEAN partners used the results of these assessments in developing the report's 70 specific actions that will reduce

phosphorus, sediment loadings, and beach bacteria and restore recreational and economic values to our region. The action options fall into the following broad categories:

1. In rural areas and farmlands: target the phosphorus hotspots and major sources, especially in the Mendota watershed.
2. In urban areas: expand the scope and intensity of runoff control programs
3. For beaches: control the common sources of E. coli; customize approaches by beach

Even as the report was being prepared, implementation of practices and programs to reduce sediment and phosphorus runoff, and to improve conditions at beaches, was underway. Many of these implementation activities are described elsewhere in this annual report: e.g. controlling agricultural phosphorus through the Mississippi River Basin Initiative, community manure digesters, and through phosphorus trading.

In 2011, work will focus on developing a detailed implementation workplan: selecting priorities and assigning costs, responsibilities, and expected benefits from priority actions. Plans are also actively in development to establish a permanent public-private umbrella network to coordinate strategies on the CLEAN report implementation and other watershed restoration needs, share resources, and build community involvement to clean and care for our watershed and the lakes we love.

Fish Lake Homes Purchased by Dane County

Fish Lake is a unique natural resource located in the Town of Roxbury and identified in the Dane County Parks & Open Space Plan for protection. The lake is a popular fishing spot and is unusual in that it has no natural inlet or outlet. It is also the third deepest lake in Dane County, after lakes Mendota and Monona.

A current consequence of the lake's physical characteristics is several years of high water levels, which have negatively impacted properties along Fish Lake Road in a manner that could not have been anticipated when the homes were built.

In partnership with the town of Roxbury and using a DNR Municipal Flood Control Grant, Dane County purchased five flood-damaged homes in late 2010. The Parks Division will remove the buildings and restore the properties to a natural habitat in 2011. The public will be welcome to enjoy the new shoreline for picnicking, fishing, hiking, bird watching and other passive uses.



One of five houses at Fish Lake purchased by Dane County

New Prairie Restoration Honors Mary Louise Symon

The Dane County Park Commission dedicated a 48-acre prairie in the Town of Verona in honor of Mary Louise Symon, the first woman to serve as chair of the Dane County Board.

The Mary Louise Symon Prairie is part of the Ice Age Junction Natural Resource Area on land owned by the county, and is in the process of being restored. The Ice Age Trail runs along the northern end of the prairie and there are plans to one day build a



Sowing seed at the Mary Louise Symon Prairie

bicycle/pedestrian trail through the area. A parking lot and kiosk will also be built at the prairie in the future and will include a memorial to Symon. The county worked with the Symon Family to choose a county parcel the family thought was most appropriate. The prairie is accessible from Raymond Road and is near the intersection of Raymond Road and Cty M.

Symon passed away in October of 2009 at the age of eighty-seven.

Land & Water Resources Continues Fight Against Alien Invaders

The LWRD effort to combat invasives species took on more significance this past year. The Department's **Gypsy Moth** Suppression Program saw its highest acreage treated since the program started in 2007. The 3,000 acres represented 45 spray blocks within six municipalities. The good news is that the efforts of aerial spraying seem to have been somewhat effective with recent egg mass surveys showing decline. The egg mass surveys are used to gauge the relative abundance of caterpillars. 2011 applications are down to three municipalities and roughly 900 acres slated for treatment in spring. With oak trees being a favored food source, the moths can be very destructive within our urban and rural forests.

The good news is there are still no confirmed cases of the **Emerald Ash Borer** (EAB) in Dane County. However, eleven counties in Wisconsin now have confirmed cases of EAB infestation. In 2010, LWRD planned for two additional EAB efforts to begin in 2011: "underplanting" (planting smaller trees to replace existing ash trees) at three urban Dane County properties, and developing marshalling yard criteria for responding to the EAB infestation or catastrophic storm events. Marshalling yards will allow for municipalities to stockpile trees and other wood debris where it can be efficiently processed.

Implementation of the *Dane County Aquatic Invasive Species (AIS) Prevention & Control Plan*, available at www.danewaters.com, began in earnest. Information

exchange at county bait and tackle shops and fishing tournaments; placing new signage at lake boat landings and trout stream access points, monitoring, and web development were some of the many tasks undertaken.

Two items to highlight:

- Dane County, the River Alliance of Wisconsin, and other partners hosted a Project RED (Riverine Early Detectors) training for paddlers and anglers in April, that prepared participants to monitor for 15 invasive species of concern. OLW also partnered with the River Alliance in distributing kayak/canoe sponges with AIS prevention messages.
- OLW coordinated AIS sampling efforts with the UW Center for Limnology and the WDNR. Sampling for zebra mussels and spiny and fish hook water fleas on Indian Lake and for spiny and fish hook water fleas on Lake Wisconsin yielded negative results.

LWRD's AIS staff team also planned for an intensive 2011 watercraft inspection program, aligned with the statewide Clean Boats Clean Waters Program, at many of the county's most popular boat landings. Engaging boaters and other watercraft users on the new AIS transport laws will serve as another tool to limit the spread and introduction of the greatest threat to our water resources.



Gypsy Moth Caterpillar



Adult Emerald Ash Borer



Zebra Mussels



Boat Inspections

Dane County Land & Water Resources Department Mission Statement

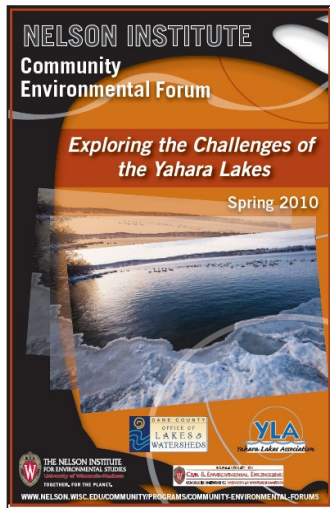
Dane County citizens value the quality of the county's natural, historic, and cultural resources, recognize the connection between these resources and their own quality of life, and expect these resources to be improved and sustained for present and future generations.

The Dane County Land and Water Resources Department exists to ensure the protection and enhancement of Dane County's natural, cultural, and historic resources; to provide the county's citizens with a broad array of accessible, high quality resource-based recreational services and facilities; and to support citizens, communities, local governments and other agencies and organizations in their resource management and protection activities.

The Department pursues its mission, alone and in collaboration with other agencies and organizations, through a mix of strategies that includes and combines resource management, program delivery, education and outreach, policy development, oversight, data management, technical assistance, responsiveness, and excellent customer service.

In 2010, the Office of Lakes and Watersheds was immersed in program implementation, grant implementation, planning, research, and education.

Three program implementation areas that were major OLW time commitments and accomplishments are described elsewhere in this annual report: completion of the Yahara CLEAN report, implementation of our aquatic invasive species prevention and control plan, and establishment of native plantings for their water quality and habitat benefits.



OLW also collaborated with external partners on many projects, for example making extensive contributions through committee work on the natural systems components of the City of Madison Sustainability Plan.

We completed the third year of the Turville Bay Eurasian water milfoil research project, working with DNR and the Corps of Engineers, including a public informational meeting and strategy meetings with our partners.

We continue our work with the UW-River Falls Survey Research Center on our water recreation study of the Yahara lakes. The general population survey was completed in 2010, and we also planned for 2011 in-person surveys of winter and summer recreationists.

OLW coordinates Madison Area Municipal Storm Water Partnership education and outreach activities, under the guidance of the MAMSWaP I&E Committee. Some highlights for 2010 include: posting five-year survey results and five-year workplan on myfairlakes.com, developing and distributing CDs of nearly 60 publications to reduce the amount of paper distributed at events, hosting the Plant Dane! workshop attended by 30 people (nearly 60 people planted native species through this cost-share program), and planning and hosting a salt reduction workshop for municipal staff within Dane County. The myfairlakes.com website was given a new look and is now more user friendly.

Other education accomplishments include updates to the danewaters.com website, and sharing water quality protection and improvement information at displays at Garden Expo, Canoecopia, Isthmus' Green Day Expo, Retain the Rain! Workshop, and the Clean Lakes Festival.

OLW continues to work collaboratively with private nonprofits such as the Clean Lakes Alliance and pursues funding through them as well as traditional grant sources, to aid our work in protecting and improving water quality.

Of Note:

25	Number of Yahara CLEAN presentations and public meetings
2	Number of new special events during TAS Days to promote Yahara CLEAN
700-1000	Estimated total attendance for the 7 forums in "Exploring the Challenges of the Yahara Lakes" series that OLW co-sponsored with UW's Nelson Institute for Environmental Studies.
11	Number of grant-funded projects managed
3	Number of contracts managed
~200	Number of CDs of water quality protection information for homeowners distributed
22,641 -5%	www.danewaters.com website hits Difference from 2009
3,990 31%	www.myfairlakes.com web hits Growth from 2009
783 18%	Take a Stake in the Lakes (TAS) clean-up volunteers Increase over 2009
237	DaneWaters fans on Facebook
27	myfairlakes.com fans on Facebook
49	TAS Days events
182	Followers on Twitter
227	Storm drains stenciled/marked during TAS Days
13 -46%	Tons of garbage collected from piers during TAS Change from 2009
18	Groups that borrowed equipment from OLW-supported Water Education Resource Center
5	Presentations to service clubs and other organizations
~30	Plant Dane! workshop participants
59	Plant Dane! Cost-Share participants
4,032 7%	Plant Dane! Cost-Share plants Growth from 2009
30	Approximate number of Better Lawns & Gutters Tourists
10	Number of sites on Better Lawns & Gutters Tour

In 2010, Land & Water Resources Department staff completed the *Dane County Lake Level Management Guide for the Yahara Chain of Lakes*.

The guide provides an overview of strategies that are employed to manage lake levels within regulatory limits.

The guide may be found online here:

www.countyofdane.com/lwr/landconservation/lakelevelpg.aspx

Land Conservation Division

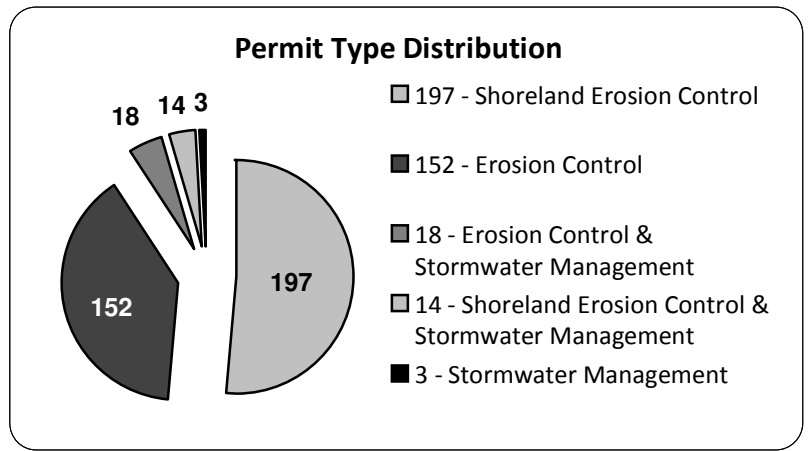
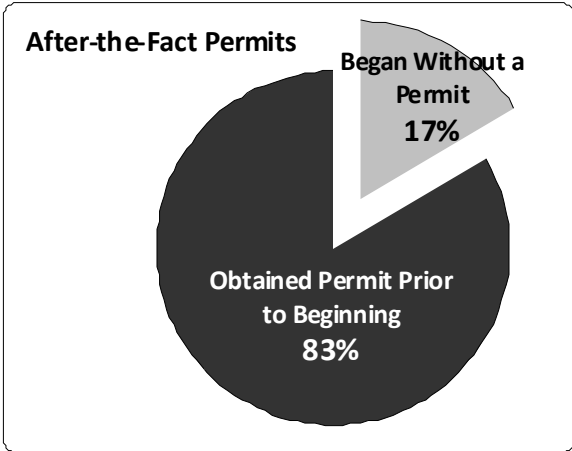
The Land Conservation Division (LCD) administers the county Erosion Control and Stormwater Management (ECSM) ordinance. In 2010, the LCD signed cooperative agreements with the Villages of Deerfield and Cambridge to provide review and inspection services. Staff also mailed out a spring newsletter to over 300 contacts in the construction industry, and performed an audit of a representative sample

of stormwater management sites permitted since 2002 for compliance with maintenance provisions of their permits.

In 2010, staff issued 384 permits and conducted 2,627 inspections on 554 active sites. Please reference the tables on the next page for additional statistics.

ECSM newsletters can be found online here:

<http://www.countyofdane.com/lwr/newsletters.aspx>



County Permit Activity Summary

Site	Submittals Reviewed	Permits Issued	Active Sites	Inspections Performed	Contacts Initiated	Noncompliance Notices Issued	Stop Work Orders Issued	Citations Issued
Permitted	657	384	509	1,383	891	15	1	1
Unpermitted	-	-	-	52	83	-	15	7
TOTAL	657	384	509	1,435	974	15	16	8

Unincorporated areas of Dane County where the ordinance is administered by LCD

Intergovernmental Agreement Activity Summary

Municipality	Plans Reviewed	Active Sites	Inspections Performed	Contacts Initiated	Noncompliance Notices Issued	Enforcement Actions Recommended
Cambridge	0	1	1	0	0	0
Deerfield	2	2	53	0	0	0
DeForest	18	14	213	10	0	0
Middleton	57	30	302	13	0	3
Stoughton	17	12	167	67	4	2
Sun Prairie	17	21	247	20	0	0
Waunakee	12	12	209	5	1	0
TOTAL	123	45	1,192	115	5	5

Municipalities with intergovernmental cooperative agreements for plan review & inspection

Land & Water Resource Management Cost Share Program 2010

Each year, the Department of Agriculture, Trade & Consumer Protection allocates funds to assist counties in the protection of their land and water resources. In 2010, the LCD received a grant of \$62,926 to plan, design, and implement conservation practices. Landowners received up to 70% of the installation costs, up to a maximum \$6,000 per agreement. Sixteen landowners had cost-share agreements amounting to \$61,286.

Mississippi River Basin Initiative (MRBI):

The MRBI is a four-year project (2010-2013) that focuses on two watersheds in northern Dane County: Pheasant Branch and Waunakee Marsh/Six-Mile Creek. The goal of this initiative is to provide financial and technical assistance to farmers to begin using conservation practices that result in the reduction of nutrients and sediment flowing into Lake Mendota. In 2010, 20 contracts were signed totaling

\$437,206. The overall funding of the project is \$2,049,613 over the four years.

Cooperative Conservation Partnership Initiative (CCPI): Pecatonica Pilot Project

The five-year pilot project is testing the idea that water quality will be measurably improved by targeting just the farms contributing the very highest amounts of phosphorus to the stream; and that implementing the “soft” low-cost management type practices first will be more effective than the high-cost structural practices. After inventorying the 62 farms in the Pleasant Valley watershed, it was clear that majority of the phosphorus flowing into the stream came from only eight farms. The CCPI money, (~\$600,000), was critical to target these high-phosphorus farms to see if management changes would have significant impact. USGS will monitor water quality changes in the pilot watershed as well as a control watershed.

Of Note...

Landowners assisted	760
Acreage under winter spreading plans	63,653 acres (107 permits)
Nutrient management plans developed in 2010	12,138 acres
Streambank protection & restoration	9,315 ft
USDA—NRCS Programs	
• WHIP	5 contracts for \$17,252
• EQIP	50 contracts for \$825,307
• WRP	1 contract for 42 acres
• CRP/CREP/SAFE	77 contracts for 920 acres

Land Acquisition Division

The Land Acquisition Division played a role in a diverse range of projects in 2010, including:

- Oversight of leases, primarily agricultural, on county parkland. We are currently managing about 50 leases for a variety of reasons. In many cases, lands are leased for agriculture as a management tool to prepare the area for prairie restoration. In other cases, a local unit of government or nonprofit organization has a long-term lease for recreational use of an area.
- Worked closely with the Parks Division on development of Scheidegger County Forest in the Town of Verona.
- Initiated a habitat restoration project in the Walking Iron Wildlife Area. This project, which will take several years to implement, is a partnership with the U.S. Fish & Wildlife Service, the WI DNR and Pheasants Forever. In late 2010, staff began working on 125 acres that will be restored to a wetland and prairie mix. The restored area will provide excellent wildlife habitat as well as passive recreational use for the public. Staff from all divisions in the Land & Water Resources Department have been involved in making the project a success.
- Transferred a small parcel of land in Dunn’s Marsh within the Nine Springs E-Way to the City of Fitchburg so that the city could make stormwater improvements for the benefit of the marsh.
- Transferred about five acres to the Madison Country Day School in the Cherokee Marsh Natural Resource Area.
- Gave Conservation Fund Grant Awards to the Natural Heritage Land Trust for protection of lands within the Empire Prairie State Natural Area and the Black Earth Creek Natural Resource Area.
- Purchased land for the Lower Yahara River Trail that is also located within the Door Creek Wildlife Area.
- Purchased land to improve access and circulation at Prairie Moraine County Park.
- Purchased flood-damaged homes within the Fish Lake Natural Resource Area (see article on page 6).
- Purchased 131 acres within the Ice Age National Scientific Reserve.
- Sold surplus property in the Town of Springfield.
- Continued to purchase streambank easements in southwestern Dane County (see article on page 4).
- Purchased land within the Sugar River Natural Resource Area that will be used for a canoe-access point.

Dane County Parks had two million visitors in 2010. Based on park traffic counters, park use was up about 38% percent from 2009. Major projects included the completion of the Stewart Lake Beach, Scheidegger Forest facilities (restroom, shelter, parking lot, group camp and trails), Ice Age Bike and Pedestrian Trail and the CamRock Mill Site. New water access piers were installed at Viking and Yahara Heights dog exercise areas. Master plans were initiated for Capital Spring Recreation Area, Token Creek County Park and Natural Resource Area, and Black Earth Wildlife Area. Project planning began for the Capital Springs Recreation Area, Lake Farm Unit dog exercise area and disc golf course and a 9-hole expansion of the Vallarta-Ast Disc Golf Course at Token Creek Park.

The Lussier Family Heritage Center supported over 306 events with an estimated attendance of over 20,000 visitors. The Center is very popular for weddings, environmental organizations and county functions. The utilization rate for 2010 was over 78%.

The Park Volunteer program continues to grow. In 2010, more than 1,600 volunteer participants and over 33,000 donated hours supported a wide range of activities and events within the Parks. A new Friends Group formed for Indian Lake County Park and they held their first successful event in October, the Indian Lake Trail Run. The group's goals include habitat restoration, improvement of trail surfaces, and fundraising for future facilities. All the Friends Groups continue to expand the recreational, cultural and historical amenities at their parks. The Friends have also been providing for more public events.

It was a very successful year for land restoration projects with over 200 acres burned in the spring. Thirty-eight acres of prairie and 12 acres of oak savannah were newly planted. Fall seed collection by area school children collected over ninety species of flowers totaling 776 pounds, and another 52 pounds of grass seed were harvested from county prairies.

Mitigating high water issues was once again the priority for Lake Management Operation in 2010. Fifty percent of the aquatic vegetation harvesting operation was associated with maintaining water flow in the Lower Yahara River. There was one contracted harvesting project that occurred in August on Lake Mendota.



Frame of new shelter at Scheidegger Forest. Wood used for construction of the shelter was harvested from Scheidegger Forest

Of Note...

Customer Tracking	2009 Patrons	2010 Patrons
Estimated Park Users	1,240,000	2,000,000
Users of the Capital City Trail—Lake Farm Park	101,090	115,384
Volunteers (Individuals)	1,478	1,550
Volunteer hours	24,123	33,026
Lussier Family Heritage Center visitors	21,000	20,000
Camping reservations—campgrounds and group camps	924	942
Shelter reservations	286	283
Number of calls to the 24/7 Information Line	No data	59,715
Number of hits to the website	62,000	77,000
Park & Community Planning projects	16	15
Tenney Lock – Boats locking through	6,895	6,601

Website Update—Staff worked collectively with all Land and Water Resources Department divisions to design a more visually appealing and user-friendly LWRD home page. Our goal is to maintain timely information and connect inter-divisional topics by making it easier to find related material that resides on more than one divisional website. This will be an ongoing project and we welcome your feedback. The new web page can be seen here:

www.countyofdane.com/lwrld/.

Of Note...

Management of Bi-weekly payroll for:	47 FTEs 77 LTEs (yearly average)
# of Park Permits Issued	12,402 Total 8,617 via phone/park envelopes

Historical Imagery—Staff continued to scan historical crop compliance slides from the USDA Farm Service Agency to improve the resolution of specific years. These slides will be used by a number of Dane County departments as well as other cooperating agencies, such as WI Department of Natural Resources and the USDA Natural Resources Conservation Service.



Sample of scanned slide—1993, Town of Blooming Grove, Sec. 22

Awards

Pat Sutter, Land Conservation, and Tom Pulvermacher, Parks Operations, were honored by County Executive Kathleen Falk for 25 years of service to the county.

Dane County and other conservation partners were recognized by Gathering Waters Conservancy for acquisition efforts to protect farmland and important natural resource features along the US Hwy 12 corridor. Thank you to **Gaylord Plummer, Land Acquisition**, for his efforts on this project.

Dane County was awarded the status of *Gold Water Star Community* by the Wisconsin Water Star Program. Thank you to **Jeremy Balousek, Land Conservation, and Pete Jopke, Administration**, for their efforts on this project.

Sue Jones, Office of Lakes & Watersheds, was named a **Nelson Institute Community Environmental Fellow** by the UW-Madison Nelson Institute for Environmental Studies.

Janet Crary, Deb Flanders & Tina Kilgore, Administration
Land & Water Resources Department—*Making a Difference Award*

Staff Changes

Welcome—
Al Jensen, Park Operations & Joe Taylor, Lake Management

Contact Us

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