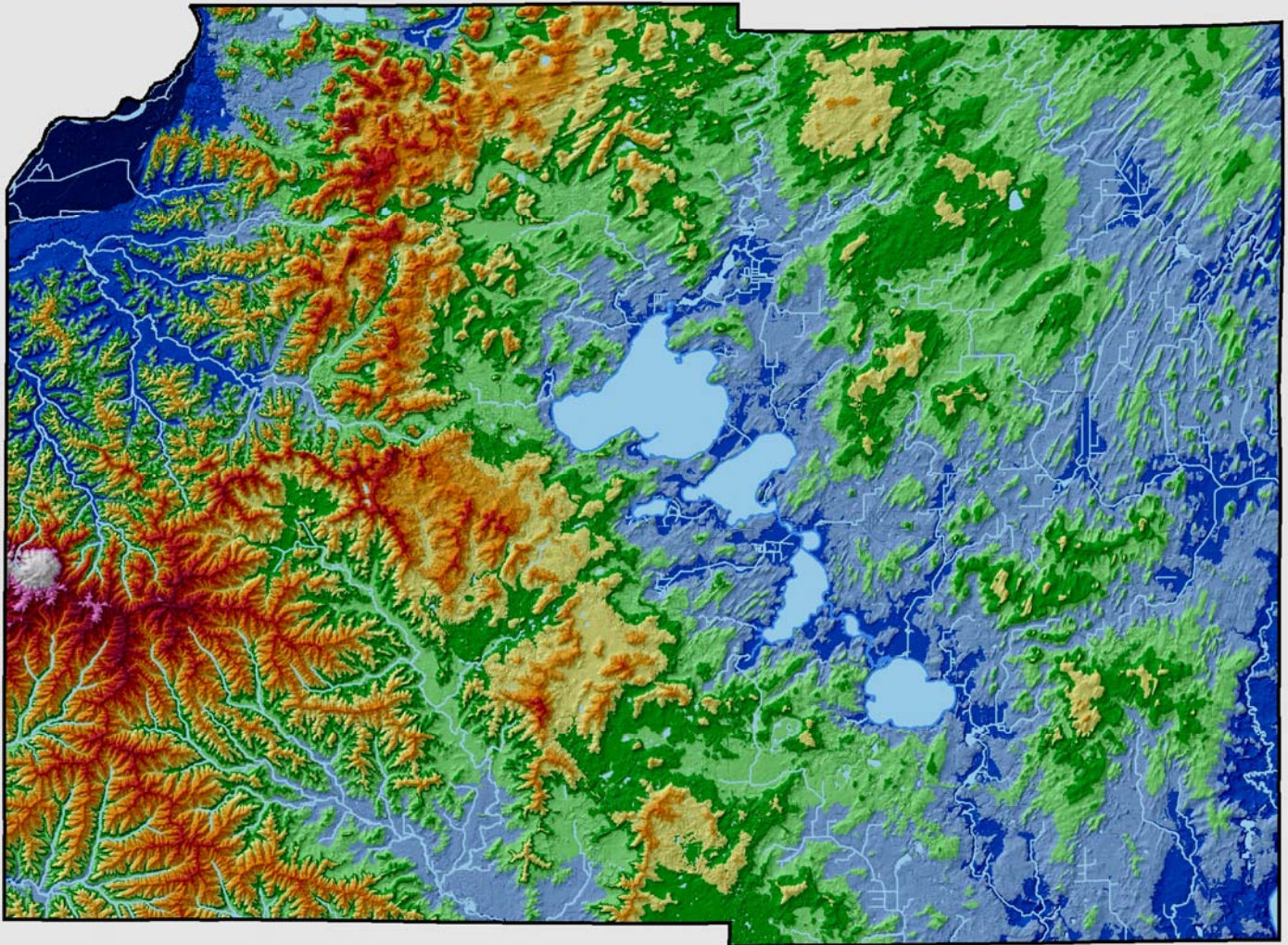


# Dane County Land & Water Resources Department



2009 Dane County Shaded Relief Map

## 2011 Annual Report

## From County Executive Joe Parisi

When I took office a year ago, I proudly took on the task of continuing the legacy established by my predecessor, Kathleen Falk, in the areas of land conservation, preservation, and improving water quality.

In 2011, I launched a new, five-year initiative called the Dane County Water Partnership. It's a historic effort partnering the county with our farm families and surrounding communities to significantly reduce the amount of algae-causing phosphorus pollution that enters our lakes from urban and rural sources.

Phosphorus is the biggest challenge we face to clean up our water. Simple solutions work best—like dredging out phosphorus-clogged ditches that link farm fields and retrofitting the stormwater outfalls that pipe pollutants directly into our lakes.

Our partnership with farmers will continue in other ways. The first manure digester in the state to be shared by neighboring farmers has been up and running for over a year north of Waunakee. A second "Cow Power" facility is planned for the Town of Springfield.

Cow Power offers multiple benefits – significant phosphorus reduction, locally grown green energy, and helping farmers manage manure, expand, and stay on the land.

We're also exploring opportunities to partner our innovative land conservation program with local agriculture. We've completed major work on the 2012-2017 Dane County Parks and Open Space Plan, including an assessment of county-owned lands that would be suitable space to offer beginning farmers looking to expand.

Many exciting efforts are underway to further enhance outdoor recreation. The next phase of the Lower Yahara Trail will eventually link south Madison to Stoughton. Plans are in the works for new dog parks and disc golf as well. And we've opened up a total of 14 miles of some of the best trout streams in the state and country for public fishing in southwest Dane County.

It's an honor to serve as your Dane County Executive during such an important and exciting time in the county's ongoing effort to preserve some of the best natural resources in the nation, and better connect people to those resources.

## From the Director

It is my pleasure to welcome you to the sixth Land & Water Resources Department (LWRD) Annual Report. In its pages you will find a wide variety of accomplishments from continued Dane County park restorations, such as Stewart Lake, and improvements, such as the nine new holes at the Token Creek County Park disc golf course, to water and soil quality projects like the Mississippi River Basin Initiative and land and water invasive species management.

These accomplishments, many of them achieved in partnership with local public, private and non-profit

organizations, are what keeps our Department vital to the quality of life we enjoy here in Dane County. Through all the diverse workings of the Department, our mission remains the same: to serve the people of Dane County with knowledge, skill, pride and dedication.

Please do not hesitate to contact me at [Connors.Kevin@countyofdane.com](mailto:Connors.Kevin@countyofdane.com) with any questions, comments, or suggestions.

*Kevin Connors, Director*

## Aquatic Plant Management Program Updates Plans, Plant Surveys & Equipment

The Parks Division and the Office of Lakes and Watersheds (OLW) continue to collaboratively strengthen all elements of their aquatic plant management program: documenting aquatic plant growth trends, scouting locations of harvesting need, maintaining open communication with the Department of Natural Resources (DNR) and the public, and maintaining equipment and efficient harvesting operations.

The purpose of the program is to cut and harvest Eurasian water milfoil and other invasives, helping provide reasonable lake recreational use while preserving the health of the lake ecosystem.

In 2011, OLW completed aquatic plant management plan updates for Lakes Monona and Waubesa. These plans, required by DNR for harvesting permit issuance, provide an inventory of existing plants and describe how native plants will be protected, nuisance non-native species controlled, and recreational access provided.

OLW also secured grants to support a consultant's surveys of aquatic plants on lakes Monona, Mendota, Waubesa, and Kegonsa. OLW staff completed aquatic plant surveys on

Warner, Vilas, and Tenney lagoons, Verona Quarry, and Jenni & Kyle ponds.

Operating from May 17 through September 2, the Parks Division cut and removed 1,184 loads of vegetation from eight waterbodies. The program focused on the lower Yahara River to improve water flow out of the Yahara lakes. Lake Monona had the highest harvesting time (30% of the total) and 18% of the total vegetation removed.

A new 10 x 26-foot stainless steel work barge added in 2011 will assist with lake projects, shoreline cleanups, and events such as "Take a State in the Lakes."



*Sorting and identifying aquatic plants*

*All photos in this report were taken by LWRD staff unless otherwise noted.*

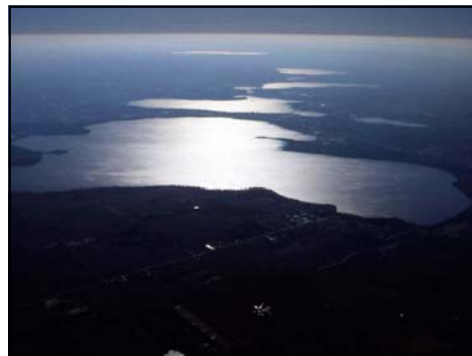
## Yahara CLEAN Implementation Advances

Early in 2011, the Dane County Lakes and Watershed Commission hosted a workshop to thank Yahara Capital Lakes Environmental Assessment and Needs (CLEAN) report ([www.yaharawatershed.org](http://www.yaharawatershed.org)) contributors, who identified the next steps in caring for and improving the watershed.

In the fall, our funding partner, Clean Lakes Alliance, hired Strand Associates to prioritize the CLEAN recommendations based on phosphorus reduction effectiveness, and to develop a detailed implementation plan. Significant funding for Strand's work came from the Madison Community Foundation, Madison Metropolitan Sewerage District, and Dane County.

Dick Lathrop and Steve Carpenter's "Phosphorus Loading and Lake Response Analyses for the Yahara Lakes" report, completed in December, was another important milestone. Lathrop and Carpenter found that the lakes would respond quickly to phosphorus reductions, and that a 50% reduction would result in more frequent mesotrophic (moderately fertile, clearer water) conditions.

Throughout the year, Dane County and other partners pressed ahead on several CLEAN recommendations while waiting for the Strand analysis to be completed, notably community manure digesters and targeted whole farm conservation planning (see Digester article below and Mississippi River Basin Initiative article on page 7).



Yahara Chain of Lakes—Photo by Dick Lathrop

## Stewart Lake County Park Improvements Continue



Student stocks trout into Stewart Lake

It was 1915 when the first reported rainbow trout was caught in Stewart Lake. With the recent renovations to the lake completed, all that was left was to restore the fishery. Game fish were stocked in 2009 and, thanks to the Mt. Horeb High School and Wisconsin Department of Natural Resources, 2,000 rainbow trout were stocked in the spring of 2011. In addition, updates to Dane County's first County Park included reconstruction of the main access parking lot, improved drainage near the beach, and installation of stormwater controls to improve water quality flowing into Stewart Lake. The dredged lake sediments were graded on

the uplands and will be seeded to native grasses and flowers in the spring of 2012. Plans are also in the works for a new shelter, restroom remodel and fishing pier.

The design of the shelter will mirror the architectural style of a Civilian Conservation Corps (CCC) timber frame structure to reflect the history of a CCC camp that was located south of the lake. Trees will be harvested from the park and milled on site for the fabrication of all wood materials necessary to construct the timber frame shelter.

Dane County Parks will add two Americans with Disabilities Act (ADA) accessible changing rooms to the existing restroom facility. A new roof will be added and exterior modifications will be made to the original 1950s building to provide a more rustic appearance, keeping in character with the CCC theme of the park.

## Manure Digester Brings Many Benefits to the Community

A Community Manure Digester was commissioned in March of 2011, one of the first of its kind in the country designed primarily for improving water quality. It takes manure from multiple farms and stores it in three digester tanks for 30 days. During this time, methane gas is generated and burned in two power generators to produce electricity. Energy produced from this facility provides enough electricity to power up to 2,500 homes for one year.

Phosphorus rich fiber is separated from the liquid by a centrifuge as it leaves the digester tanks. This fiber removes 60% of the phosphorus originally contained in the manure. It is expected to remove over 70,000 lbs of phosphorus on an annual basis. This fiber is then made available to participating farmers to be used for bedding, nurseries, or crop fields that

are deficient in phosphorus. The liquid that remains after separation is then pumped back to the farms to be applied as a fertilizer based on each participant's crop nutrient management plan.

The digester facility is owned by Clear Horizons, and was partially funded by a grant from the Wisconsin Department of Natural Resources.



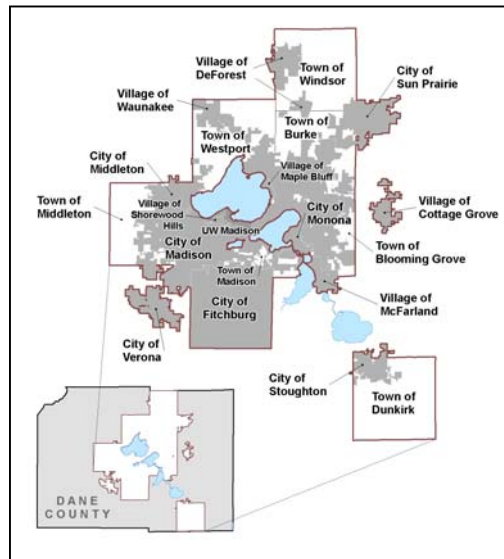
Two generators provide enough electricity for 2,500 homes. A liquid storage unit is on the right.

## Partnership Works to Improve Stormwater Quality

Since 2003, area communities have been working together to reduce the negative impacts of stormwater as part of the Madison Area Municipal Storm Water Partnership (MAMSWaP).

To meet state and federal requirements, 17 centrally-located Dane County municipalities, UW-Madison, and Dane County entered into an intergovernmental agreement that saved taxpayer money and avoided unnecessary duplication in addressing runoff pollution.

While the entities now hold individual permits rather than a joint permit, an intergovernmental agreement continues among the original 19 municipal entities and three additional communities that have since been required to obtain permits, in order to facilitate the continued required outreach. The outreach program for all 22 entities is managed by a half-time FTE housed in the Office of Lakes & Watersheds.



*Partnership communities are located in central Dane County*

Other Dane County Land & Water Resources Department staff have also been integral to the entire process, not just ensuring that county-owned properties comply with regulations, but in developing innovative means to assist all municipalities in reducing stormwater runoff pollution.

Together, the group accomplishes tasks that most municipalities could not individually, including development of an extensive outreach plan, and stormwater monitoring plan, as well as conducting important research.

At quarterly meetings in 2011, the group discussed important topics such as meeting Rock River Total Maximum Daily Load requirements for phosphorus and suspended solids, adaptive management partnerships with agricultural producers, and state and local regulatory changes.

A list of the municipalities, the permit, inter-municipal agreement, outreach efforts, research, and much more can be found at [www.myfairlakes.com/mamswap.aspx](http://www.myfairlakes.com/mamswap.aspx).

## Success Continues for Streambank Protection and Easement Program

Nine landowners participated in stream restoration and habitat improvement projects along Kittleston Valley Creek and Syfestad Creek. Technical and financial resources were used to improve and protect habitat and reduce erosion. Conservation practices include shaping and seeding streambanks for stabilization, rock riprap, stream crossings, fencing, fish habitat structures, fencing and a rock weir for fish passage. Nine landowners completed streambank protection and habitat improvement on 11,325 feet of stream. In addition, seven landowners installed fences and stream crossings to minimize cattle access to streams, thereby protecting 16,280 feet of cold water streams. Funding partners for stream restoration projects include the Department of Natural Resources (DNR) Targeted Runoff Management Grant Program, NRCS Environmental Quality Incentives Program, and U.S. Fish and Wildlife Service.

To be eligible for county cost share dollars, landowners agree to grant a 20-year public access easement along their restored stream corridor. The 20-year easements are a great way for landowners to “get their feet wet” with the concept of public access easements and help open the door for permanent protection. Most recently, 1.5 miles of stream corridors were permanently protected through the streambank easement program. Easements were secured

on Kittleston Valley Creek and Pleasant Valley Creek. A total of 22 streambank easements stretching over 15 miles have been secured since the program was established by the Land & Water Legacy Fund in 2007.

New in 2011, county LTE funds were used to hire a position to perform streambank maintenance tasks on previously restored projects. Weed management and brushwork were conducted along the easements on German



*Streambank on Kittleston property*

Valley Branch and Gordon Creek (approximately five miles). Work focused on cutting and treating stands of willow and other woody invasive species to keep the stream corridors open and accessible for anglers and to maintain a grassland habitat. The position also helped coordinate and prepare sites for three streambank work days that were held on German Valley Branch and Vermont Creek by Trout Unlimited. A huge thanks to Trout Unlimited for sponsoring the

work days! The Land & Water

Resources Department hopes to build on this success by setting up a partnership maintenance program fund with contributions from potential partners such as Trout Unlimited, DNR, Badger Fly Fishers, Dane County Conservation League, and U.S. Fish and Wildlife Service who have already expressed their interest and support for the program. Stay tuned!

## County Protects Two New Natural Resource Areas

Local hunters and outdoor enthusiasts have two new natural resource areas they can explore: the Upper Black Earth Creek Wildlife Area (295 acres, the former Sunnyside property), a partnership between Dane County and the Town of Middleton, which opened September of 2011; and Walking Iron Wildlife Area (1,200 acres, the former 7A Farm), located in the Town of Mazomanie, which opened in 2010. These large natural resource areas are distinctly different in topography and associated habitat. Upper Black Earth Creek Wildlife Area is located in the headwaters of Black Earth Creek, a premier coldwater fishery with a deep valley, steep forested hillsides and topped with open meadows. Walking Iron Wildlife Area is within the historic Wisconsin River flood plain and is characterized by its mixture of dry sandy uplands and its seasonally wet organic and sandy soils. Both properties were purchased with the assistance of a Knowles-Nelson Stewardship Grant. Recent projects for the Upper Black Earth property include a new parking area off of Highway 14 and a wetland/upland restoration in partnership with the U.S. Fish and Wildlife Service. Ongoing projects at Walking Iron include a 300-acre wetland/prairie restoration in partnership with the U.S. Fish and Wildlife Service, Pheasants Forever, Inc., and the Dane County Conservation League. Featured uses at both of the properties include hunting, trapping, and fishing, similar to DNR State Wildlife Areas. The sites are also open to cross-country skiing, hiking, snowshoeing, wildlife observation, foraging, and other foot travel.



Upper Black Earth Creek Wildlife Area –  
Wetland Scrapes



## Grant Program Funds Recreation and Conservation Projects

The Partners for Recreation and Conservation (PARC) Grant Program is a new capital matching grant program that was established in 2011. The program provides matching funds to local municipalities and non-profits for conservation or outdoor recreation projects that will have a huge impact and multiple regional benefits. A diversity of projects were selected for funding in 2011, including:

- \$250,000 for Reddan Soccer Park improvements and expansion (Madison Area Youth Soccer Association)
- \$47,750 for Pheasant Branch Conservancy pike spawning habitat restoration and recreation improvements (City of Middleton)



Fields are regraded at Reddan Soccer Park

- \$250,000 for Oregon to Badger State Trail Bicycle/Pedestrian Path (Village of Oregon)
- \$10,000 for Ice Age National Scenic Trail Property Oak Savanna Restoration (Swamplovers)
- \$30,200 for Charles Langer Park Disc Golf and Park Improvements (Village of Marshall)
- \$250,000 for Lake Marion, Black Earth Creek Wolf Run Restoration and Trails Project (Village of Mazomanie)
- \$100,000 for Dawley Park Bicycle Hub (City of Fitchburg)
- \$42,050 for Grady Tract/Greene Prairie Habitat Enhancement and Bike Rest Stop (Friends of the Arboretum)
- \$3,300 for Bike Lane Designation on CTH D and PD (City of Fitchburg)
- \$6,700 for Woodland Drive Bike Path (Town of Westport)

The 2011 Dane County Budget included \$1,000,000 for the program and it was continued in 2012 with an allocation of \$500,000. The grant application deadline is April 2, 2012. Contact Sara Kwitek with any questions or for additional information.

## Interns Educate 4,600 Boaters on Aquatic Invasives Prevention



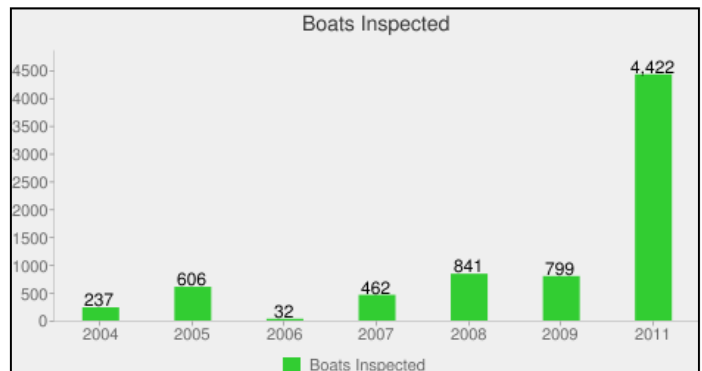
Implementation of Dane County's Aquatic Invasive Species (AIS) Prevention and Control Plan got a big boost in 2011 with the help of three interns who performed courtesy boat checks at the county's busiest boat landings from Memorial Day to Labor Day.

Invasive species (non-native plants and animals) are a threat to Dane County because they have serious impacts on our land and water resources. Invasive species in the U.S. are estimated to cost \$140 billion dollars annually as a result of ecological damage and control.

Thanks to a Department of Natural Resources grant, AIS program coordinators in the Office of Lakes and Watersheds and Administration Division were able to hire three student interns in 2011 as part of the statewide Clean Boats, Clean Waters (CBCW) program. The interns worked at boat landings in Dane County and shared information with recreational boaters about AIS such as Eurasian water milfoil, zebra mussels, spiny water fleas, and rusty crayfish and how to prevent their spread to other lakes and streams. Over 4,600 people were contacted and 4,400 watercraft were inspected. Information collected through these contacts was then entered

into a statewide database that gives resource managers important information on the effectiveness of the program and how thoroughly the boating public is adopting AIS prevention steps. In Dane County, over 90% of boaters indicated they are aware of AIS laws and just as many take prevention steps to limit spread. Public awareness will continue to grow as the LWRD has funding to implement the program for three more years! Multiple opportunities exist for volunteers to become involved with the CBCW program in Dane County. If you have an interest in becoming a certified inspector, please contact the LWRD at 608-224-3730 or visit [www.danewaters.com](http://www.danewaters.com).

There's good news regarding a terrestrial invasive forest pest, the gypsy moth. Recent aerial sprayings in Dane County for this invasive tree defoliator have been effective in reducing gypsy moth populations. Treatment acreage dropped to nearly 1,000 acres in 2011. Gypsy moth surveys indicated that the over-winter population was lower than levels from previous years. The sprayings and a cool wet spring likely contributed to this decline. As a result, there will be no Cooperative Aerial Gypsy Moth Suppression Program treatment in Dane County in 2012.



County interns gave the AIS program a big boost in 2011

## Dane County Updates Parks & Open Space Plan

The Dane County Parks & Open Space Plan 2012-2017 identified significant cultural, historical, and natural resources that should be considered for possible protection, preservation or restoration over the next five years. The plan also identifies countywide recreation needs and Dane County's role in providing facilities to meet anticipated demands. The Parks & Open Space Plan is updated and adopted by the County Board every five years in order to be eligible to participate in a variety of state and federal grant funding programs for park land acquisition and development, including trails. Lands purchased through the Dane County Conservation Fund must be identified within the plan.

The planning process for the Parks & Open Space Plan began in December of 2010 and included a comprehensive public input process consisting of seven public informational meetings and nearly 50 individual meetings with local units of government, non-profit conservation organizations, and other state and federal agencies. Staff investigated a variety of

planning criteria when formulating recommended updates with an end goal of balancing user needs while maintaining proper land stewardship. A recreation needs analysis suggested the following primary recreation needs: trails (mainly mountain biking, snowshoeing and multi-use regional), lake access facilities, camping, picnicking and shelters, disc golf, dog exercise areas, hunting, fishing, and wildlife observation.

The plan includes several new initiatives including agriculture, gardening and foraging, and art in parks. There are also recommendations for two new recreation parks, four new natural resource areas and several new dog parks. Implementation of most plan recommendations will be contingent on the ability to secure outside grant dollars or approved budget dollars. The entire plan can be viewed on the Parks website at: [www.countyofdane.com/lwrp/parks/open\\_space\\_plan.aspx](http://www.countyofdane.com/lwrp/parks/open_space_plan.aspx).

## Program Targets Nutrient Reduction to Yahara Chain of Lakes

The Mississippi River Basin Initiative (MRBI) is a four-year project (2010-2013) that focuses on two watersheds (Waunakee Marsh and Pheasant Branch) in northern Dane County and was a direct result of the Yahara Capital Lakes Environmental Assessment and Needs (CLEAN) effort. The goal of the initiative is to provide financial and technical assistance to farmers to implement conservation practices that will reduce the amount of nutrients and sediments flowing into Lake Mendota. In 2011, nine contracts were signed totaling \$368,870. Individual contracts covered a range of conservation practices including, but not limited to: grassed waterways, nutrient management plans, manure storage structures, cover crops, and filter strips. A grade stabilization structure and a roof runoff system were also installed. Total proposed funding for the four-year project is \$2,049,613.

One of the major project highlights this year was the inventorying of over 8,000 acres (80% of goal) of 2010 – 2012 nutrient management plans. This inventory quantified and monitored both soil test phosphorus levels and phosphorus index values within the watersheds. The phosphorus index measures the amount of phosphorus (lbs/acre/year) leaving the edge of an agricultural field and transported to nearby surface water. In addition, a stream monitoring station was installed to aid in the assessment and evaluation of the conservation practices on improving water quality within the watersheds.

Examples of conservation practices and field edge monitoring systems installed as a result of the project are shown at the right. The Natural Resources Conservation Service, U.S. Geological Survey (USGS), Sand County Foundation, Madison Community Foundation, Walton Family Foundation, and Dane County funds were used to implement project goals.



**Stream Monitoring Site:** This USGS monitoring site records stream flows and collects water quality samples to determine suspended sediment, phosphorus, and nitrogen concentrations during storm runoff events.



**Grade Stabilization Structure:** This structure effectively traps suspended sediments and corresponding particulate phosphorus, preventing it from reaching nearby surface waters.

## Farmers Test Wisconsin Buffer Initiative Recommendations

The Pleasant Valley Watershed, located in southwest Dane County and northwest Green County, is home to a five-year pilot project testing the Wisconsin Buffer Initiative recommendations. These recommendations focus on using targeted strategies in small agricultural watersheds (5,000–25,000 acres) to achieve water quality improvement goals by reducing phosphorus and sediment delivery to streams. High risk fields, those with a Phosphorus Index (PI) value above 6.0, were identified through a farm inventory and soil testing process. The PI is measured in pounds of phosphorus per acre per year leaving the field and transported to nearby surface water.

The Smith-Conley Watershed is the paired watershed for this project, located south of Ridgeway in eastern Iowa County. Farmers in this watershed are not being asked to make any special management changes on their operations. The PI modeling was completed on 80% of the watershed and will be used by the U.S. Geological Survey (USGS) to determine statistically significant changes in water quality between the two study areas.

In 2010, Dane County farmers made changes to crop rotations, tillage practices, and nutrient management plans on fields with PI values greater than 6.0. In 2011, cooperating farmers made the same changes to fields with PI values between 3.0 and 6.0. Some of these farmers also installed conservation practices that reduce cropland erosion, limit livestock access to streams, and reduce barnyard runoff.

To date, Pleasant Valley farmers have made changes to 1,520 acres of cropland. Eight farms have installed barnyard runoff systems. Cattle have been excluded from more than four miles of stream. Streambank protection, with fish habitat improvement, has been completed on one mile of stream.

A collaborative effort of individuals with Dane, Green and Iowa Counties, U.S. Department of Agriculture—Natural Resources Conservation Service, UW—Madison, Wisconsin Department of Natural Resources, and Department of Agriculture, Trade and Consumer Protection, USGS, and The Nature Conservancy are providing in-stream monitoring and documentation of changes on the agricultural landscape in both watersheds to determine the effects of the applied practices.

## Parks Construction Projects Enhance Public Enjoyment

### Fish Lake Flood Mitigation and Reclamation Project

In the winter of 2011, Parks removed five houses on the west end of Fish Lake, stabilized shorelines and seeded the area. The parkland will provide for undeveloped shoreline habitat and public access.

### Rockdale Mill Site Restoration

The Rockdale Mill Site at CamRock County Park was officially opened for public access in August of 2011. Site restoration work included landscape plantings, retaining wall construction, kiosk and historical marker installation, as well as completion of the CamRock Multi-Use Trail.

### Baxter Park Bicycle and Pedestrian Trail

Nearly one mile of paved trail, boardwalk and a bridge now connects a large residential area in the Indian Springs neighborhood to the Capital City Trail. The trail is part of the 2010 Capital Springs Recreation Area master plan.

### Stewart Lake County Park Restoration

A new beach area was completed on the south end of the lake and the parking lot was resurfaced.

### McCarthy County Park Group Camp

A new group camp, including vault toilet, roads, and parking lot, was developed.

### Lussier Family Heritage Center

The wood siding on the Center was replaced with a concrete board that looks similar to the cedar boards used during the original construction.

### Jenni and Kyle Preserve

A picturesque tile mural, constructed by VSA-Wisconsin, was installed at the shelter through a grant from the Dane County Cultural Affairs Commission.

### Lake Farm Campground Updates

Campsites were redesigned to provide more efficiency and utilization. New site pads, electrical pedestals and landscaping were added.

### Scheidegger County Forest

Paving of interior access road and parking lots was completed in the spring.

### Token Creek County Park Disc Golf Expansion

Grading and seeding was completed on the 9-hole expansion of the existing 18-hole Vallarta-Ast Disc Golf Course. The project was included within the recently adopted Token Creek County Park and Natural Resource Area master plan.

### Capital Springs Disc Golf and Dog Exercise Area

Landscaping, grading, native seed planting, tree clearing, and installing a stone base for roads and parking lots was completed for the new 18-hole disc golf course and 40-acre dog exercise area in the Capital Springs Recreation Area.



*Completed Rockdale Mill Site*

## Real Estate Division

In 2011, the Land Acquisition Division began referring to itself as the "Real Estate Division" to better reflect its responsibility to acquire, sell, and manage real estate for Dane County.

Three wonderful additions were made to the County Parks System in 2011. The first was a 25-acre addition to McCarthy County Park in the Town of Sun Prairie. The parcel provides new access opportunities into the Park from CTH N. The second addition of the year was 160 acres at Donald County Park. These lands were sold by Vernon Valley Farms, Inc, (the Woodburn Family) at a price substantially below market value. Finally, the Real Estate Division purchased a small, flood-prone lot that is adjacent to the Fish Lake County Park Boat Launch. The purchase of the lot is the last flood-damaged property purchase made through a Municipal Flood Control Grant that the County worked on in partnership with the Town of Roxbury.

The division also sold a surplus property of 10 acres in the Town of Berry, which is now owned by the same farmer who owns the surrounding land. The land is subject to a conservation easement that prevents future development.

Partnerships with other divisions in 2011 include the following projects:

- Development of the 2012-2017 Dane County Parks & Open Space Plan
- Master planning for Anderson County Park
- Historic landscape evaluation at Lake View Hill County Park
- Sustainable agriculture planning for county parkland
- Installation of a mosaic tile mural at the Jenni & Kyle Preserve
- Database development of all lands protected by Dane County for inclusion in reports by the Trust for Public Lands

Real Estate Division staff continues to manage the acquisition of streambank easements, leases of county land, real estate support services for other county departments and administration of grant programs, including the PARC program (see page 5).



## Land Conservation Division

### Erosion Control and Stormwater Management Program

The Land Conservation Division (LCD) administers the County Erosion Control (EC) and Stormwater Management (SM) ordinance. In 2011, LCD staff completed an audit of a representative sample (30) of SM sites permitted since 2002 for compliance with maintenance provisions of their permits, and have made plans to audit the remaining 480 sites in 2012. Staff provided six professional trainings opportunities to county officials, developers, and construction industry. In addition, 640 spring newsletters were mailed to update these groups on Dane County's ECSM program changes.

2011 marked the seventh year of the Urban Water Quality Grant (UWQG) Program. The goals of the program are to improve the quality of urban stormwater runoff entering Dane

County lakes, rivers, and streams, increase public awareness of urban water quality issues, and provide public education for urban stormwater quality improvement practices. This program provides incentives to municipalities to install best management practices that will provide efficient, cost-effective treatment of urban runoff. Financial assistance is available in the form of cost sharing up to 50% percent of the total project cost, not to exceed \$100,000. In 2011, the County awarded five UWQG projects, for a total of \$193,530 in cost-shared dollars.

In 2011, LCD staff issued 389 permits and conducted 2,459 inspections on 522 active sites. Reference the tables below for additional statistics.

Approval Authority	Submittals Reviewed	Active Sites	Inspections Performed	Contacts Initiated	Noncompliance Notices Issued	Stop Work Orders Issued
Dane County LWRD	681	465	1566	1362	23	26
Local-Intergovernmental Cooperative Agreement <sup>1</sup>	113	57	893	174	2	-
<b>TOTAL</b>	<b>794</b>	<b>522</b>	<b>2459</b>	<b>1536</b>	<b>25</b>	<b>26</b>

<sup>1</sup> Municipalities with intergovernmental cooperative agreements with Dane County to provide plan review and site inspection services include: the villages of Cambridge, Deerfield, DeForest, and Waunakee, and the cities of Middleton, Stoughton and Sun Prairie.

### State Funds Used to Correct Serious Manure Runoff Issues

Dane County LCD staff assisted four farms in applying for state grants to eliminate manure runoff in 2011. These farms were determined to have a significant amount of discharge to nearby streams resulting in a violation of local and state water quality standards. The Wisconsin departments of Natural Resources (DNR) and Agriculture, Trade and Consumer Protection (DATCP) make state funds available through the Targeted Runoff Management (TRM) and Notice of Discharge (NOD) programs. The total cost share for the four projects was \$302,358, 70% of the total cost.

### Productive Year for Nutrient Management Planning

Dane County continues to promote safe and accurate applications of fertilizer, including manure, through DATCP and Natural Resources Conservation Service (NRCS) cost share programs. In addition, educational workshops and

one-on-one assistance are offered to farmers who are interested in writing their own plans. LCD staff trained 16 farmers (covering 2,926 acres) during a 2-day workshop early last year. An additional 102 producers developed nutrient management plans on 45,812 acres within the county, many of which were developed by private crop consultants.

### Helping Farmers Comply with Chapter 14

As part of the Dane County budget, the Land & Legacy Cost Share Fund is available to assist farmers with the installation of conservation practices that mitigate animal waste runoff to surface water. In 2011, \$223,240 was used to assist three farming operations with the installation of conservation practices related to animal waste runoff, enabling them to come into compliance with Dane County Ordinance-Chapter 14.

### Of Note:

Landowners assisted	989
Acreage under winter spreading plans	66,801 acres (111 permits)
Acreage under a nutrient management plan	45,812 acres
Streambank protections & restoration	25,471 feet
NRCS Programs	
• Wildlife Habitat Incentives Program (WHIP)	4 contracts for \$59,370
• Environmental Quality Incentives Program (EQIP)	33 contracts for \$569,639
• Conservation Reserve Program (CRP)/Conservation Reserve Enhancement Program (CREP)/State Acres for Wildlife Enhancement (SAFE)	90 contracts for 1,304 acres



*In compliance with Chapter 14, a roof installation covers the feedlot and prevents manure runoff into local surface waters*

## Office of Lakes & Watersheds

The Office of Lakes and Watersheds (OLW) staff consist of a watershed management coordinator and a half-time public information officer with occasional limited term employment (LTE) support. Thanks to extensive collaborations with other Land & Water Resource Department (LWRD) divisions and external partners (Department of Natural Resources, Department of Agriculture, Trade and Consumer Protection, U.S. Geological Survey, Madison Municipal Sewerage District, UW Extension, other agencies, municipalities, friends groups, watershed associations, and private nonprofits), OLW multiplies its reach and accomplishments.



*Water activities abound on Dane County lakes*

Madison Area Municipal Storm Water Partnership (MAMSWaP) outreach activities are coordinated by a half-time stormwater education coordinator housed in the OLW. Projects include the annual Plant Dane! Cost-Share Program; Retain the Rain Workshop; Love Your Lakes, Don't Leaf Them; Love Your Lakes, Don't Salt Them; DVDs; CDs; displays; presentations; and much more. Further information and materials are available at [www.myfairlakes.com](http://www.myfairlakes.com). MAMSWaP stormwater quality improvement accomplishments are highlighted on page 4 of this report.

OLW's water recreation survey of the lakes and streams in Dane County continued in 2011 with hundreds of short interviews with those recreating on the water. This information will help refine further surveys planned for 2012, which will ultimately give a snapshot of the economic impact of the surface waters of Dane County and help guide management decisions.

OLW continued its watershed education initiative, working with a consultant to inventory existing education and outreach programs and gaps within the Yahara watershed and Dane County, and to identify groups interested in collaborating with OLW to build an informed constituency that can shape watershed improvement policies, practices, and behaviors. This work prompted some changes to the annual Take a Stake in the Lakes Days and spawned another effort: Dane County Water Quality Campaign Planning. Led by members of the Lakes and Watershed Commission, this project is using a tool for planning, implementation,

evaluation, and communication for complex community-based collaboratives and processes. This work has just begun and will continue in 2012.

The OLW also contributed to many other projects, including: Yahara Lakes Advisory Group's development of lake level recommendations, shoreland zoning ordinance revisions, and watershed adaptive management for phosphorus reduction. Information on 2011 OLW contributions to aquatic plant management, Yahara Capital Lakes Environmental Assessment and Needs (CLEAN) implementation, and aquatic invasive species prevention and control can be found on pages 2, 3 and 6.

### *Of Note:*

2011	2010	Office of Lakes & Watersheds Accomplishments
10	11	Grant-funded projects managed
11	3	Contracts managed
~300	~200	Water quality protection informational CDs distributed
16,846	22,641	<a href="http://www.danewaters.com">www.danewaters.com</a> website hits
9,521	3,990	<a href="http://www.myfairlakes.com">www.myfairlakes.com</a> web hits
270	237	DaneWaters fans on Facebook
53	27	myfairlakes.com fans on Facebook
249	182	DaneWaters Followers on Twitter
904	783	Take a Stake in the Lakes (TAS) clean-up volunteers
35	49	TAS Days events
10	13	Tons of garbage collected from piers during TAS
20	18	Groups borrowing equipment from OLW-supported Water Education Resource Center
472	227	Storm drains stenciled/marked
34	30	Plant Dane! workshop participants
69	59	Plant Dane! Cost-Share participants
4,472	4,032	Plant Dane! Cost-Share plants sold/delivered
60	38	Legally noticed LWC meetings
4,600	n/a	Boaters contacts by three CBCW summer interns
587	n/a	Water recreation surveys completed
274	n/a	Locations (points) sampled for plants by OLW staff
6		water bodies
4,108	n/a	Locations (points) sampled for plants by consultant
4		water bodies

## Parks Division

The Dane County Parks were popular sites for year-round events with an estimated two million visitors in 2011. The county maintained approximately 21 miles of groomed cross-country ski trails along with several designated snowshoe trails, and supported the Snowmobile Alliance, which provided over 500 miles of maintained snowmobile trails. County lake access sites were also popular throughout the winter providing public access for ice boating, fishing, snowshoeing, skiing, and snowmobiling. County Parks supported nearly 80 special events including: the National North American Unicycling Championship at CamRock County Park; the Family Motor Coach Association Tour with over 5,000 campers at Alliant Energy Center and Lake Farm County Park; the Wisconsin State Bass Fishing Championship at Lake Farm County Park; and the Regional and National Cyclocross bike races at Badger Prairie County Park. These larger events help Dane County achieve the second highest ranking in statewide tourism.



*Lake Farm County Park played host for over one thousand RVs during the 2011 Family Motor Coach Association rally.*

Through our nationally-recognized volunteer program, many park friends groups have developed unique activities that have become popular annual events including: “Youth Service Day” and “Snow Day at the Park” by the Friends of McCarthy Park; “Take Your Pop to Pop’s Knoll” and “Park Palooza” by the Friends of Donald Park; “Hymn Sings and Ice Cream Social,” “Heritage Fest” and “Halloween on the Farm” by the Friends of Schumacher Farm; “Fun Run” by the Friends of Indian Lake; “National Trails Day Event” and “Harvest Moon Festival” Friends of Capital Springs Recreation Area; “School House Open House” by Friends of Halfway School; and “Halloween in the Park” by Friends of Lake View Hill.

Volunteer land management included collecting over 900 pounds of prairie seeds with the help of area school kids. Prairies were planted at Indian Lake, Capital Springs Recreation Area, Ice Age Trail, and Yahara Heights. Volunteers conducted six prairie burns, contributing more than 850 hours on organized projects removing invasive species.

The Lunney–Pfeifer Parks Recognitions Wall at the Lussier Family Heritage Center was updated to meet its original goal to recognize major donors to Dane County Parks in the way of cash contributions, land, time and resources. The Recognition Wall also honors county park friends groups and partners along with past and present Park Commission members.

**2011 Park Planning Projects:**

- 2012-2017 Park and Open Space Plan
- Phase One Lower Yahara River Trail
- Token Creek County Park & Natural Resource Area Master Plan
- Donald Park Interpretive Planning
- Sunnyside Property Master Plan
- 2011 Lake Management—see Aquatic Plant Management article on page 2.



*Volunteers work on clearing invasive plants at a county park*

**Of Note:**

Park Users	2,131,000
Trail Users	116,000
Volunteers	1,478
Volunteer Hours	34,000
Lussier Family Heritage Center Visitors	22,140
Camping Reservations	1,281
Shelter Reservations	517
Calls to Parks 24/7 Information Line	11,118
Visits to Parks Website	101,342
Park and Community Planning Projects	17
Number of boats that locked through Tenney Lock	3,708

# Administration Division

## New Parks Online Store

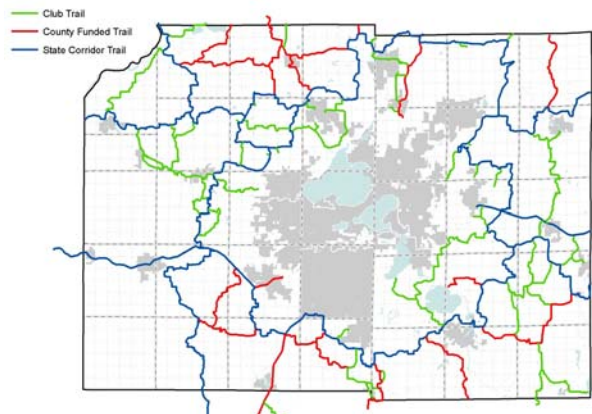
In 2011, a new online system went live on November 1st for parks facility reservations and on December 1st for the sale of parks permits. It contained a number of enhancements and new options, such as recording a history of each transaction, offering the public a means to make reservations by site, by park or by date, and making online donations easier.

Administration staff spent many hours reviewing and testing the system and suggested a number of improvements to enhance both the public and administrative online experience.

Information Management will implement many of these improvements and put them into production in 2012.

## Dane County Snowmobile Trails Now Mapped

Dane County LWRD worked with the Dane County Council of Snowmobile Clubs to acquire GPS locations of existing snowmobile trails. The information can be used by snowmobilers as well as emergency support services.



### Of Note:

Management of bi-weekly payroll for:	49 FTEs 72 LTEs (yearly average)
Park permits issued:	14,565 TOTAL 9,508 via phone/park envelopes 5,057 via website
Number of camping reservations	1,346

## Awards

- **Angie Mayr**, Land Conservation—Land & Water Resources Department’s *Making a Difference Award*
- **Pat Sutter**, Land Conservation—Wisconsin Land Information Association’s *2011 Local Government Achievement Award*

## Staff Changes

Welcome to

- **Adam Alves**, Arborist for Parks Division
- **Kyle Minks**, Nutrient Management Specialist for Land Conservation Division

## Contact Us

### Dane County Land & Water Resources Department

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### 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 & 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.