

Civic Engagement in Watershed Management

Nik Simonson

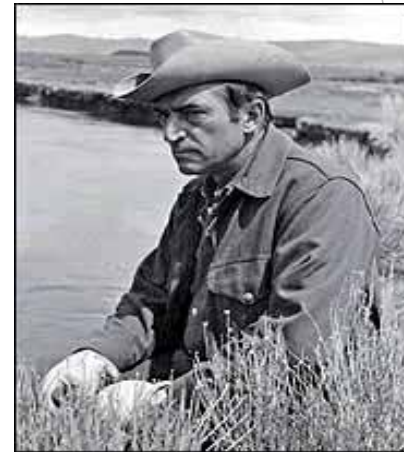
Community Engagement Specialist

Dane County Land and Water Resources Department



“Water is the most critical resource issue of our lifetime and our children’s lifetime. The health of our waters is the principal measure of how we live on the land.”

*-Luna B. Leopold
Former USGS Chief Hydrologist*





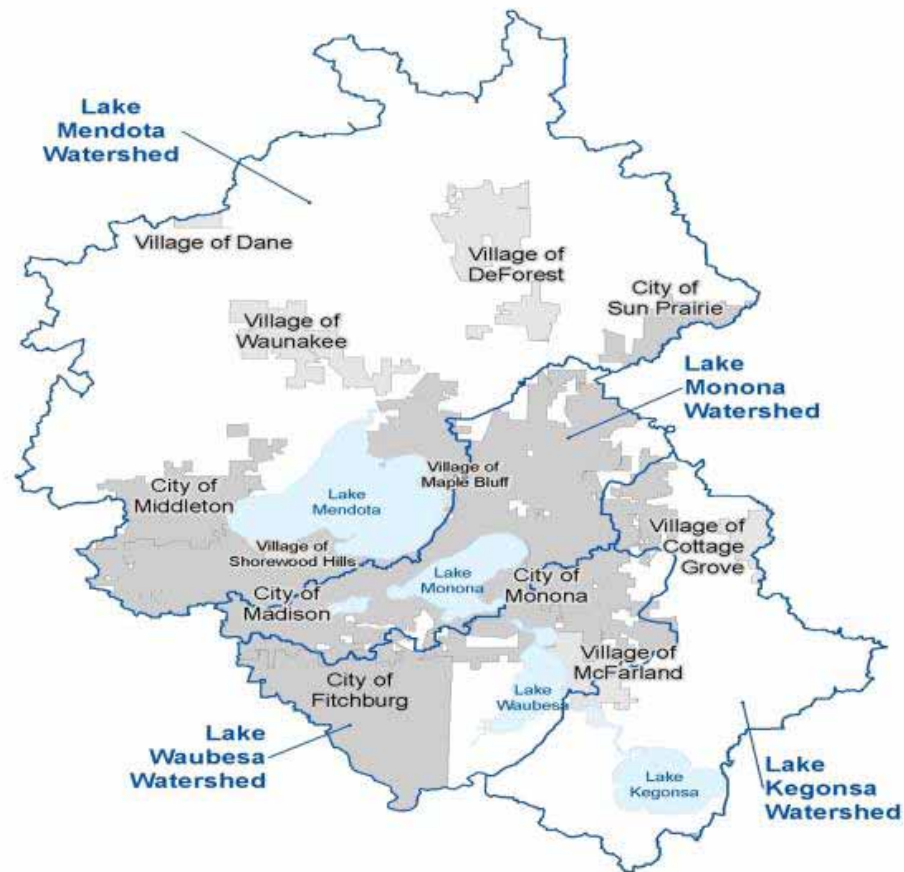
- I. Dane County Water Resources
- II. Community Engagement Program
- III. Identifying opportunities for equity in your work plan
- IV. Opportunities and "Take a Stake"
- V. Success Stories
- VI. Looking into 2016...



I. Water Resources in Dane County

Overview

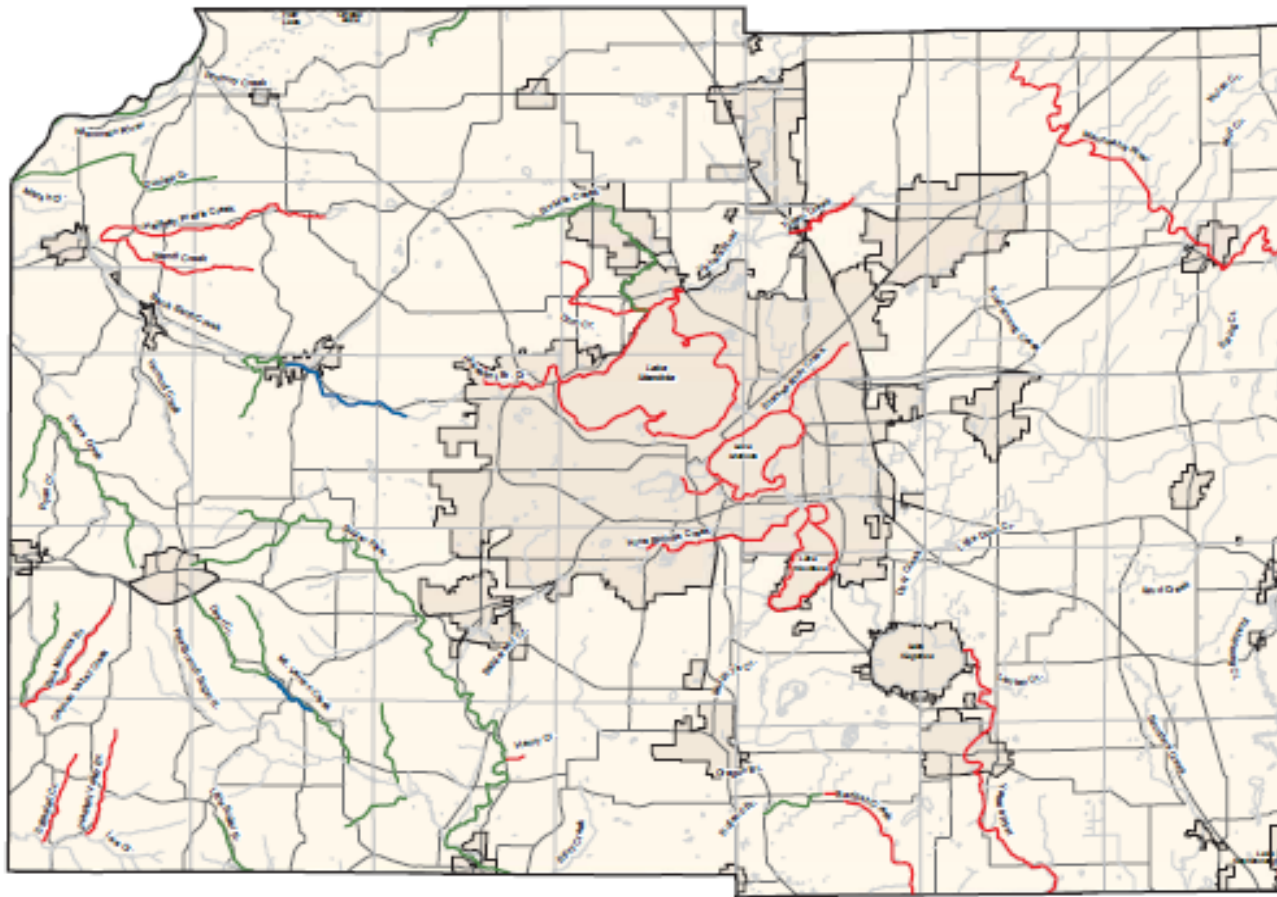
Yahara River Basin



The Yahara Watershed covers 359 square miles (> 1/4 of Dane County)

Phosphorus!!!





Outstanding, Exceptional, and Impaired Waters

Dane County, Wisconsin

Source: WDNR Dec. 2004

- | | | | |
|---|-----------------------------|---|------------------------|
| | Outstanding Resource Waters | | 303(d) Impaired Waters |
| | Exceptional Resource Waters | | Streams & Lakes |

Map 2-4

Feb., 2005

Map of Dane County
 showing Outstanding, Exceptional, and Impaired Waters
 Prepared by the Dane County
 Regional Planning Board





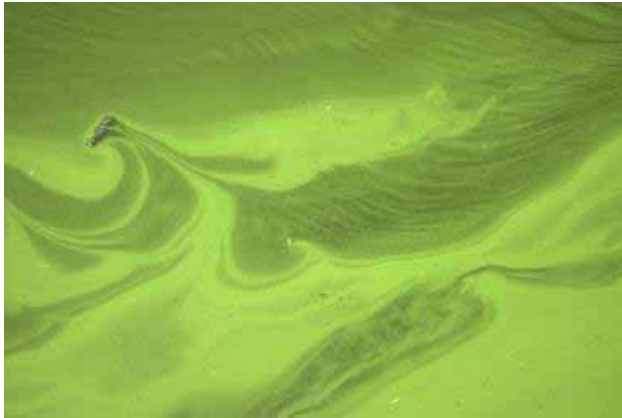
Public Trust Doctrine

Wisconsin lakes and rivers are public resources, owned in common by all Wisconsin citizens under the state's Public Trust Doctrine.

It declares that all navigable waters are "common highways and forever free," held in trust by the Department of Natural Resources.

http://dnr.wi.gov/topic/Waterways/about_us/doctrine.htm

Lake Kegonsa in June 2012. Ryan Shore, Dane County Land and Water Resources Department



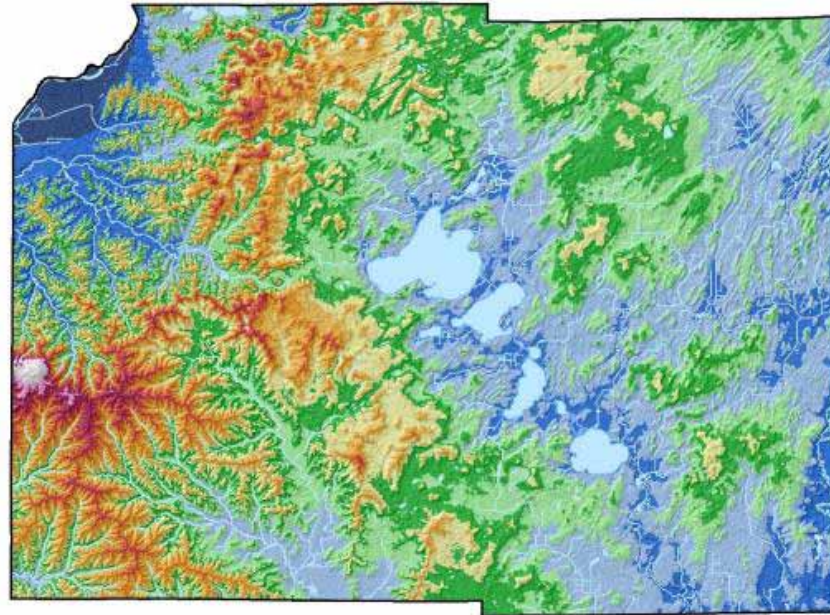
Lake Wingra algae bloom in 2004. Sue Jones, Dane County Office of Lakes and Watersheds.



Algae bloom Fish Lake in 2013. David Thompson, Friends of Lake Wingra

DANE COUNTY LAND & WATER RESOURCES DEPARTMENT

- ▶ Land Conservation
- ▶ Office of Lakes and Watersheds
- ▶ Parks
- ▶ Real Estate
- ▶ Water Resource Engineering.



Our Mission:

- ▶ LWRD ensures the protection and enhancement of Dane County's natural, cultural, and historic resources; provides the County's citizens with a broad array of accessible, high quality resource-based recreational services and facilities; and supports citizens, communities, local governments and other agencies and organizations in their resource management and protection activities.



Water Resources of Dane County

- ▶ Underground aquifers supply 48 million gallons of drinking water a day
- ▶ 37 lakes
- ▶ 489 miles of warmwater and coldwater streams
- ▶ Over 50,000 acres of wetlands





The Dane County Board established a permanent Lakes and Watershed Commission (LWC) in 1988.

The LWC is required by state statutes (ss33.445) to implement outreach programs relating to surface and groundwater in the county.

A coordinating and advisory agency within Dane County government, the Commission's charge is to protect and improve water quality, as well as the scenic, economic, recreational, and environmental value of Dane County's water resources.

10 member Commission representing...

- ▶ county board supervisors (2 from Madison and 2 from areas outside Madison)
- ▶ a representative of the Towns Association
- ▶ a representative from cities and villages outside Madison
- ▶ a member designated by the Dane County Executive
- ▶ a member designated by the Mayor of Madison
- ▶ a citizen from Madison
- ▶ a representative of the Yahara Lakes Association.





II. Community Engagement Program

Objectives & Expanded Efforts

Civic Engagement Priorities

Biological improvement in the Yahara Watershed.

Phosphorus and sediment reduction

Chloride reduction

Groundwater quality and quantity

Lake levels



Key elements that shape civic engagement initiatives with proximity to Dane County watersheds

- ▶ common agenda
- ▶ shared measurement systems
- ▶ mutually reinforcing activities
- ▶ continuous communication
- ▶ backbone support organizations*



*Role of Dane County Office of Lakes and Watersheds



LOCAL AND REGIONAL
GOVERNMENT ALLIANCE ON
RACE & EQUITY

OBJECTIVE 1

- ▶ Increase effectiveness of water leaders in Dane County, including their ability to sustain organizations, fundraise, recruit and retain volunteers, use communication and marketing plans and tools, increase membership, and set and meet strategic goals.



OBJECTIVE II

- ▶ Increase water volunteerism and the impact of water volunteer activities in Dane County



OBJECTIVE III

- ▶ Develop informed constituencies to support implementation of groups' /LWRD/LWC program priorities and desired water resources outcomes.



OBJECTIVE IV

- ▶ Develop and strengthen strategic partnerships among organizations contributing to meeting Dane County water resource goals by promoting collaborations among organizations to complete projects, hold events, develop policies, etc., benefiting Dane County waters.



Watershed Literacy Principles

A watershed-literate person:

- ▶ understands the essential principles about the function of the lakes, rivers, streams and wetlands within a watershed.
- ▶ understands what conservation resources are available and is able to make informed and responsible decisions that protect and enhance lakes and waterways.



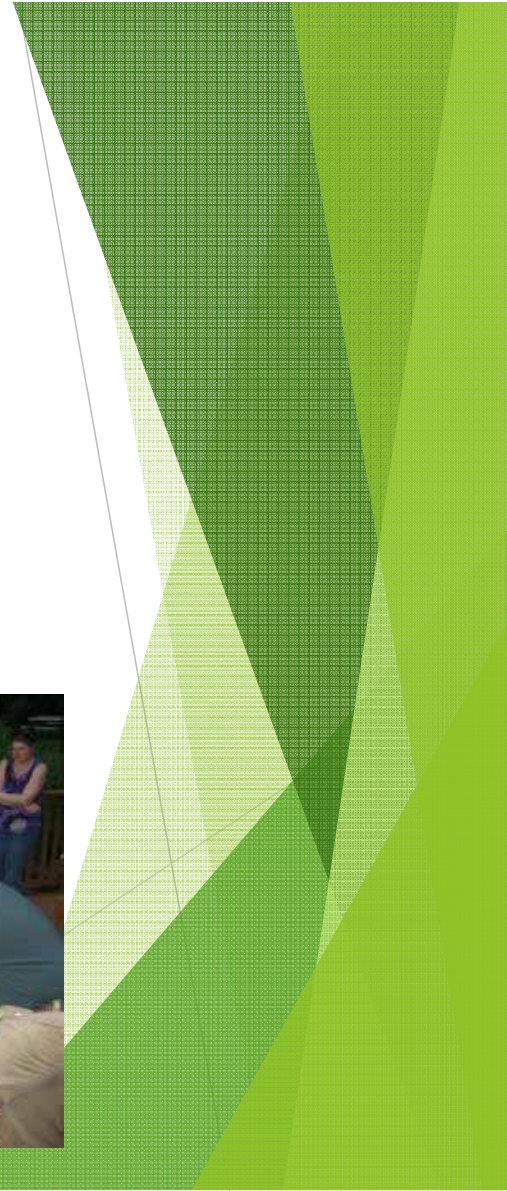
“Water Explorations”

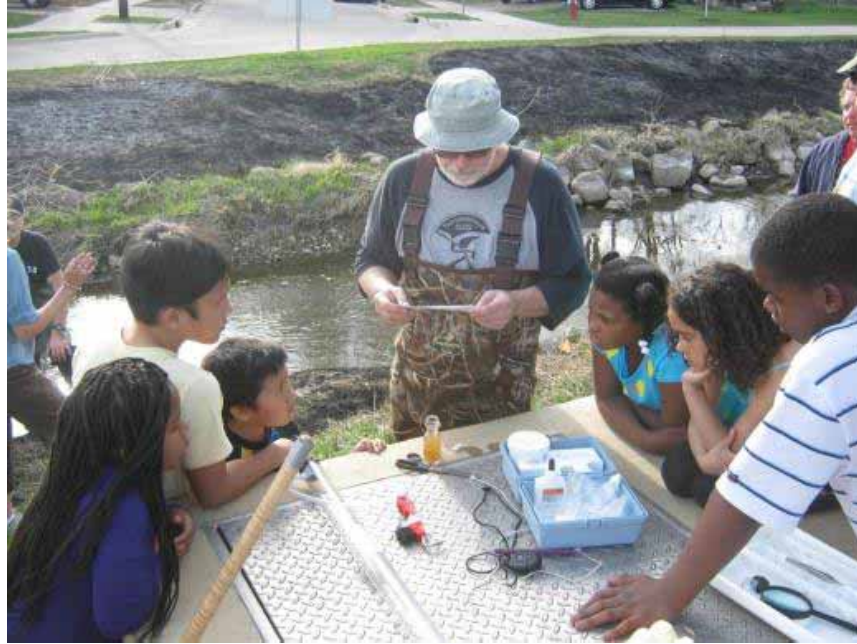
^{UW}**Extension**
Cooperative Extension



*Your county
extension office*







III. Identifying opportunities for equity in your work plan

Dane County Equity Initiative

Dane County looks to tackle racial disparities at all levels

Recommend 145

Tweet 0

+1 0

Pin it

Share 1

★

Print

Email

April 01, 2014 7:15 am • By Jessica VanEgeren | The Cap Times

(0) Comments



Shelia Stubbs, Dane County board supervisor, at the Urban League of Greater Madison on Monday.

© Eugene Photo

In an effort to tackle stark disparities between its white and minority populations, Dane County is moving forward with a package of equity initiatives sponsored by its only African-American member, Supervisor Shelia Stubbs.

"I'm talking about racial disparities, but I'm done talking about racial disparities," Stubbs said at a press event to discuss her equity initiatives resolution Monday. "Policies need to change and elected officials have to be held accountable."

"We have to look at equity from every angle...Racial disparities touch every moment of our lives. The county government has to look for those disparities in everything the county government does"

Dane County Supervisor Shelia Stubbs

Getting started...

- ▶ Wisconsin Council on Children and Families' "Race to Equity Project"

<http://racetoequity.net/dev/wp-content/uploads/WCCF-R2E-Report.pdf>

- ▶ Capital Region Sustainable Communities' "Geography of Opportunity: A Fair Housing Equity Assessment for Wisconsin's Capital Region"

http://danedocs.countyofdane.com/webdocs/PDF/capd/2014_Postings/FHEA%20Final/FHEA.pdf

- ▶ 2014 Racial Justice Summit: Advancing the Equity Agenda October 2-3 2014

http://www.ywcamadison.org/site/c.cuIWLi00JqI8E/b.7968025/k.6E89/Racial_Justice_Summit.htm

Embrace the challenges!



Equity, Inclusion, and Diversity

Berkeley Home

Division of Equity & Inclusion

Campus Climate

Diversity Data and Planning

Haas Institute for a Fair and Inclusive Society

Campus Programs and Services

Reports and Resources

Give to E&I

Support Diversity

[UC Berkeley Initiative for Equity, Inclusion, and Diversity](#)

[Berkeley Diversity Snapshot](#)

[Campus Strategic Plan](#)

[Principles of Community](#)

[K-12 and Community College](#) | [Undergraduates](#) | [Graduate Students](#) | [Faculty](#) | [Staff](#)

YWCA Madison Racial Justice Summit urges 'Race to Equity'

by [Rasheed Shabazz](#) | October 7, 2014

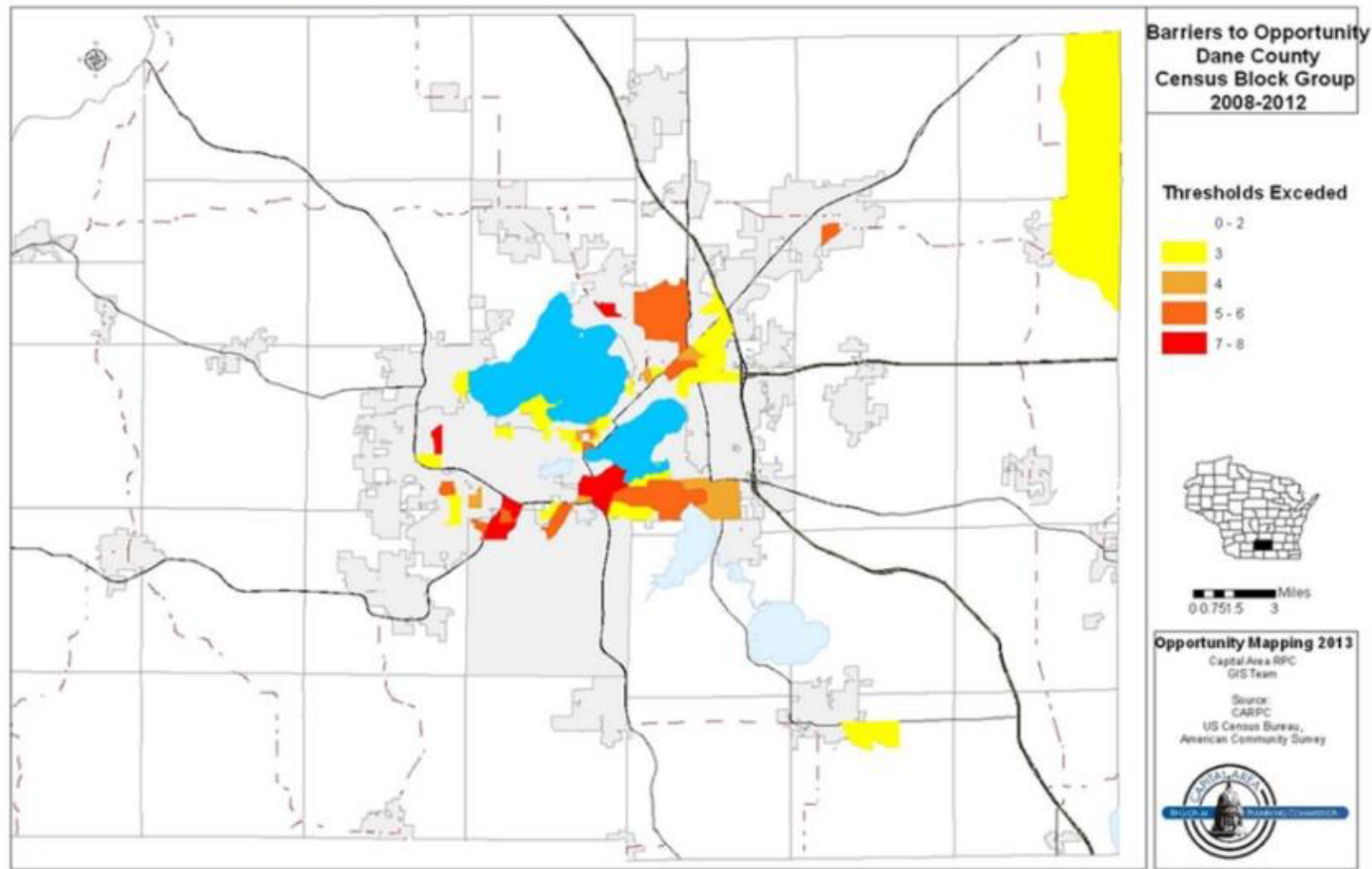
MADISON, Wis. – Over 500 people attended the 13th [YWCA Madison's Racial Justice Summit on October 2-3](#) in Wisconsin's capital city. The two-day event brought together community advocates, nonprofit and government employees, as well as national leaders, to develop and share strategies to eliminate barriers to a fair and inclusive society.

Madison and Dane County might seem like an unusual place for such a summit to some. The city, county and state's population is predominantly white, although both African American and Latino populations are growing. Madison is home of the state's capital and the University of Wisconsin-Madison and is the heart of the progressive politics in the Badger State. (Not to mention the ["Wisconsin Idea."](#))



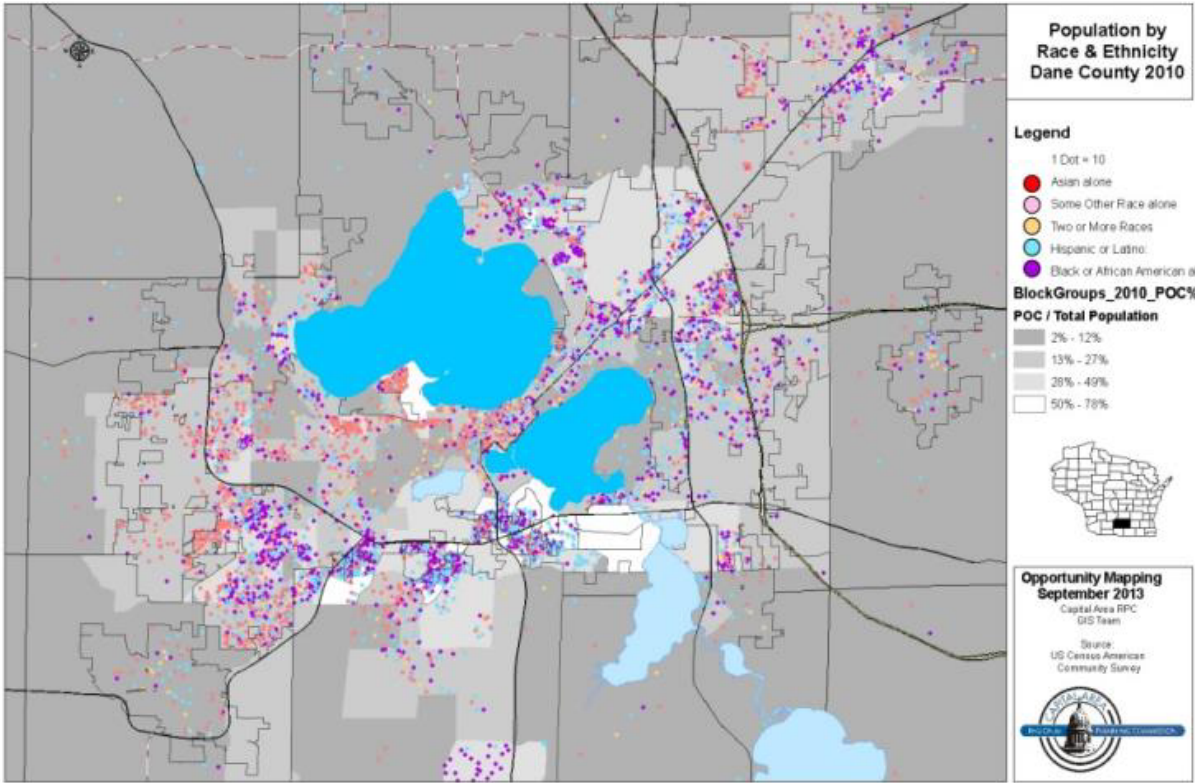
<http://diversity.berkeley.edu/ywca-madison-racial-justice-summit-urges-race-equity>

Figure 15 - Barriers to Opportunity in Dane County



An equitable and inclusive commitment to improve local water resources, expand watershed literacy and boost community capacity in underserved areas.

Figure 3 – Dot Map Distribution of Population by Race, Dane County-Central Area 2010



Please join us at the October Watershed Network Gathering...

Dane County "Watershed Literacy Fair"



**Wednesday, October 29th 6-8pm
UW Arboretum Visitor Center**

Join in the community discussion: What makes a "Watershed Literate" person in Dane County? Farmers, educators, community organizers, resource managers and engaged citizens all welcome. Snacks will be provided!

Learn about:

- *geographical story maps, webmaps & cultural atlases*
- *stream simulation & groundwater models*
- *3D Enviroscape model & Wisconsin Map*
- *Water stewardship curriculum & activities*
- *volunteer opportunities*
- *participatory photomapping & community engagement strategies*
- *watershed assessment & conservation tools*
- *water quality databases & resources*

FREE & open to the public

Exhibitors include:

Jessie Conaway
Environment and Resources Doctorate Candidate
Nelson Institute of Environmental Studies

Nancy Sheehan
Stream Monitoring Coordinator & Environmental Educator
Rock River Coalition

Sue Jones
Watershed Management Coordinator
Dane County Office of Lakes and Watersheds

Laurie Lambert
Conservation Specialist
Dane County Land Conservation Division

Nik Simonson
Community Engagement Specialist
Dane County Office of Lakes and Watersheds

Marian Farnior
Earth Partnership Field Manager
UW-Madison Arboretum

Carol McCartney
Outreach Manager
WI Geological and Natural History Survey

Phil Gaebler
Environmental Engineer
Capitol Area Regional Planning Commission

Please RSVP to
simonson.nikolas@countyofdane.com
if you plan to attend!

→ An opportunity: to make these events are more racially diverse while inspiring a genuine interest among residents to improve local water resources

“Water Explorations”

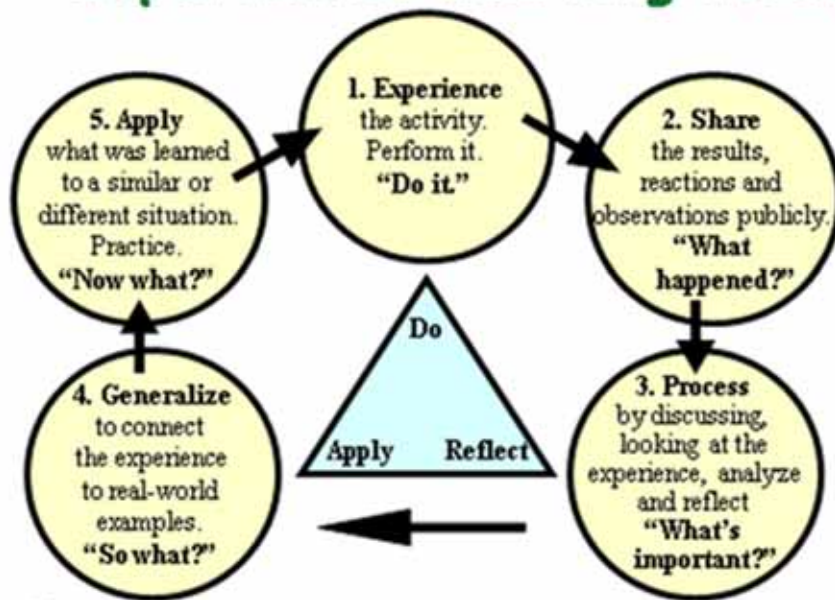
Students share paintings of diversity in their local watershed...



Positive Youth Development Model (PYD)

- ▶ PYD is an empirically supported strengths based approach to working with youth that values experiential learning
- ▶ Centered around the 5 C's-Competence, confidence, connection, caring, and character.
- ▶ Asking for youth's input, allowing them to learn and to teach, modeling positive communication relationships → all help nurture the 5 C's in young people.
- ▶ Experiential learning → a great reminder of the non-linear process of learning and developing as individuals
- ▶ Guide for important questions to be asking youth participants

Experiential Learning Model



©2002 UW Board of Regents

Wisconsin 4-H Volunteer Orientation



Developed by Joe Hankey, Associate Professor, Department of Youth Development, University of Wisconsin-Extension, August 2014



Frederick Springs has a flow of approximately 1,100 gallons per minute!!!

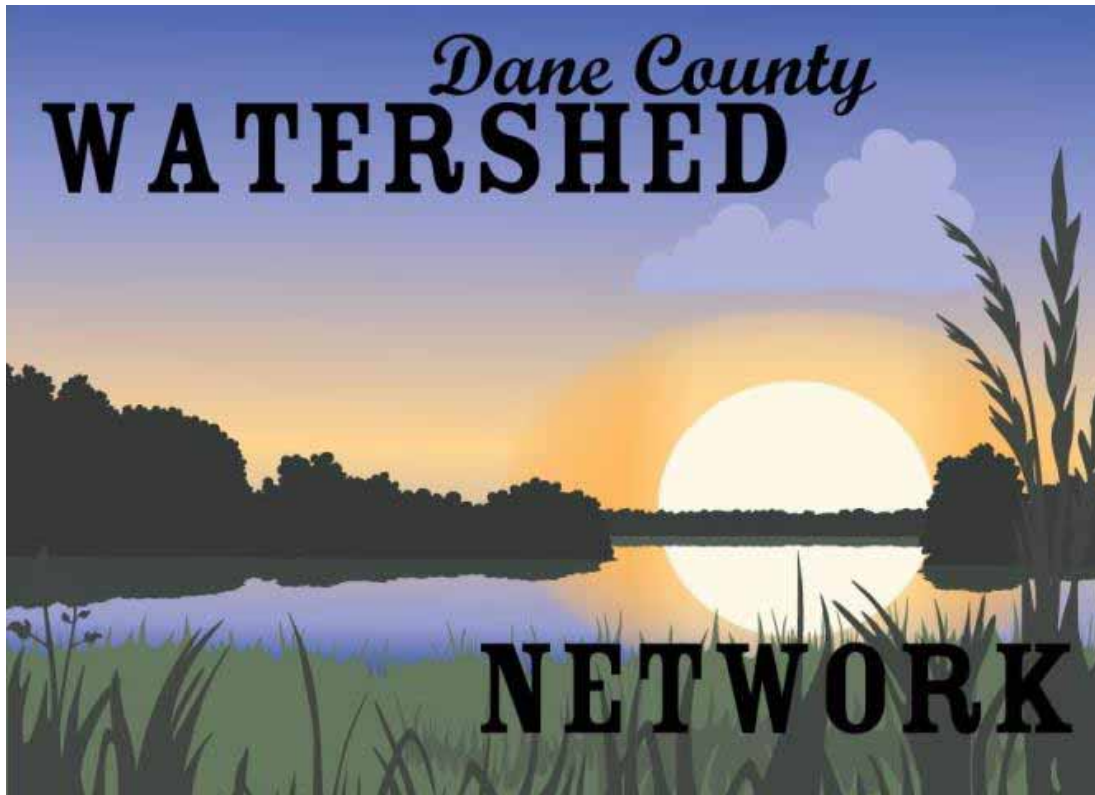
Youth are developing an understanding for their relationship to local lakes, rivers, streams and wetlands. The curriculum and associated activities have helped inform how individual actions impact local waterways.





IV. Opportunities and "Take a Stake"

Dane County Watershed Network



→ An opportunity: make a difference by joining a local water advocacy organization

Through the Dane County Watershed Network, organizations with a connection to lakes, rivers, streams and wetlands **communicate** shared problems, **collaborate** on solutions, **celebrate** and learn from each other.

Dane County Watershed Network Members

- ▶ Black Earth Creek Conservation Organization
- ▶ Black Earth Creek Watershed Association
- ▶ Capitol Water Trails
- ▶ Clean Lakes Alliance
- ▶ Friends of Badfish Creek Watershed
- ▶ Friends of Cherokee Marsh
- ▶ Friends of Lake Kegonsa Society
- ▶ Friends of Lake Wingra
- ▶ Friends of Lakeshore Nature Preserve
- ▶ Friends of Monona Bay
- ▶ Friends of Pheasant Branch Conservancy
- ▶ Friends of Starkweather Creek Watershed
- ▶ Friends of Stricker's Pond
- ▶ Friends of the Yahara River Parkway
- ▶ Friends of Yahara River Headwaters, Inc.
- ▶ Lake Waubesa Conservation Association
- ▶ Lower Sugar River Watershed Association
- ▶ Mad-City Paddlers
- ▶ Madison Scuba
- ▶ Mauneshia River Alliance
- ▶ River Alliance of Wisconsin
- ▶ Rock River Coalition
- ▶ Token Creek Conservancy Committee
- ▶ Token Creek Watershed Association
- ▶ Trout Unlimited Southern Wisconsin Chapter
- ▶ Upper Sugar River Watershed Association
- ▶ West Waubesa Preservation Coalition
- ▶ Yahara Fishing Club
- ▶ Yahara Lakes Association

Watershed Network Gatherings



Over 70 different groups/organizations have attended these gatherings!

Watershed Network Gatherings

- ▶ Leadership for these gatherings is collaborative and dynamic, drawing on the strengths from the broader community (non-profits, agencies, institutions, etc.)
- ▶ A new “design team” is developed for each gathering to avoid burn out and reliance on only one group.
- ▶ Ideas, innovations and best practices are shared at each session in order for participants to be inspired about on-going work
- ▶ Attendees network, share resources and highlight their upcoming events
- ▶ All Watershed Network Gatherings (WNGs) are free and open to the public with topics of interest to all watersheds in Dane County.

“Take a Stake” Volunteer Service Projects

- ▶ For more than 25 years, Take a Stake volunteers have been working to protect and improve the lakes, rivers, streams and wetlands of Dane County.
- ▶ Join the celebration! You can participate in activities and events happening all year long.



<http://www.takeastake.org/>

→ An opportunity: Do your part to protect and maintain the health of Dane County waters

Trash Pick-Ups



→An opportunity:
to clean-up our
lakes, rivers
streams and
wetlands



Wetland Restoration



→ An opportunity: together we can prevent the spread of invasive species and preserve aquatic resources

Stream and River Restoration



An opportunity: volunteers clear local waterways to enhance navigability and recreational use

Shoreland Management



→ An opportunity: restore native vegetation for the enjoyment of wildlife and visitors.



Storm Drain Marking



→ An opportunity: promote stormwater awareness and educate community residents on actions that reduce stormwater pollution



Citizen Based Monitoring



Water Action Volunteers

Water Action Volunteers (WAV) is a statewide program for Wisconsin citizens who want to learn about and improve the quality of Wisconsin's streams and rivers. The program is coordinated through a partnership between the Wisconsin Department of Natural Resources and the University of Wisconsin – Cooperative Extension.

Citizens, civic groups, 4-H clubs, students and other volunteer groups are participating in WAV programs across the state.

There are three parts of Water Action Volunteers: (In addition, the program offers a variety of [water-related educational materials](#) for educators.)

Quick links

- Awards
- Biologist and County Contacts Database (Level 1)
- Exploring Streams Curriculum Get Involved!
- Level 2 Stream Monitoring
- Level 3 Stream Monitoring
- Monitoring Data Sheets (Level 1)
- Monitoring Methods (Level 1)
- Newsletters and Reports
- Order Form
- Site Tours
- Symposium
- Trainings and Events

→ An opportunity: volunteer stream monitors gather valuable data used in land conservation and water resources planning

Love Your Lakes Campaign



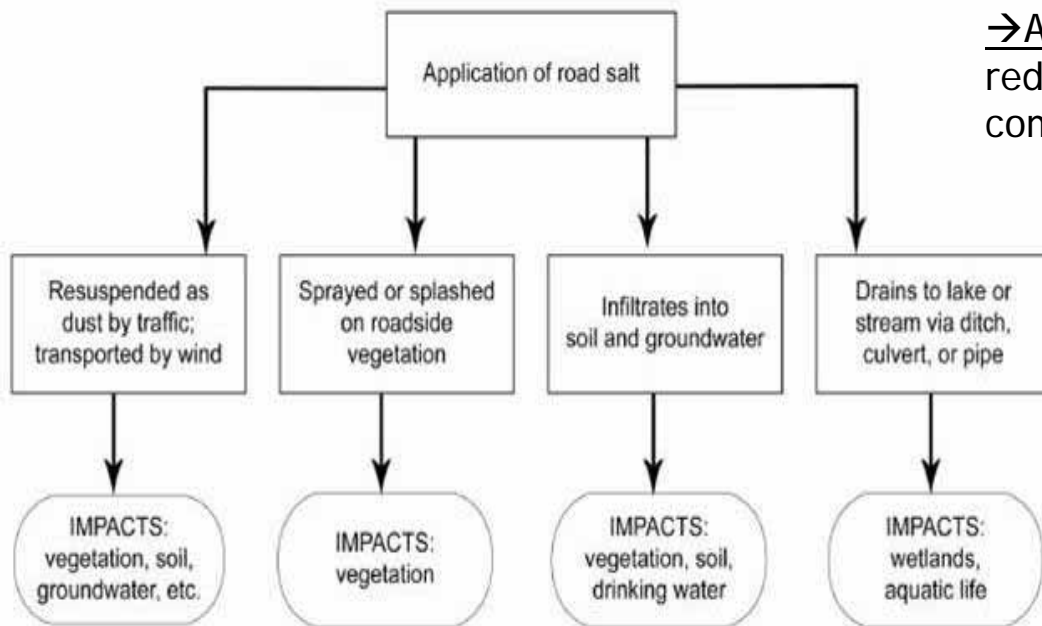
→ An Opportunity: inform your community on proper lawn/garden maintenance and yard waste disposal

Clean Boats Clean Waters



→ An opportunity: volunteers inspect watercraft at area boat launches and stop the spread of aquatic invasive species

Road Salt and Water Softeners



→An opportunity: start a chloride reduction campaign in your community





V. Local Success Stories

Some Encouraging Examples...

- ▶ Yahara Pride Farms - Certified Farm Program
- ▶ Village of Deforest - Stormwater Grant Program
- ▶ Friends of Lake Wingra - Chlorides Campaign
- ▶ Yahara Watershed Stewardship Summit - Brings Together Key Stakeholders
- ▶ Door Creek Watershed Plan - Civic Engagement Priorities



Door Creek Watershed Plan

- ▶ EPA 9 Key Element Plan for adaptive management implementation
- ▶ 29.5 square miles
- ▶ Predominantly land in agricultural production
- ▶ 1,700 acres of wetlands



Other Characteristics

- ▶ Channelized
- ▶ Low stream flow, & gradient
- ▶ Drainage ditches prevalent
- ▶ Highly unnatural stream network
- ▶ Susceptible nutrient laden runoff
- ▶ Metrogro fertilizer applications
- ▶ Substantial silt & sediment deposition

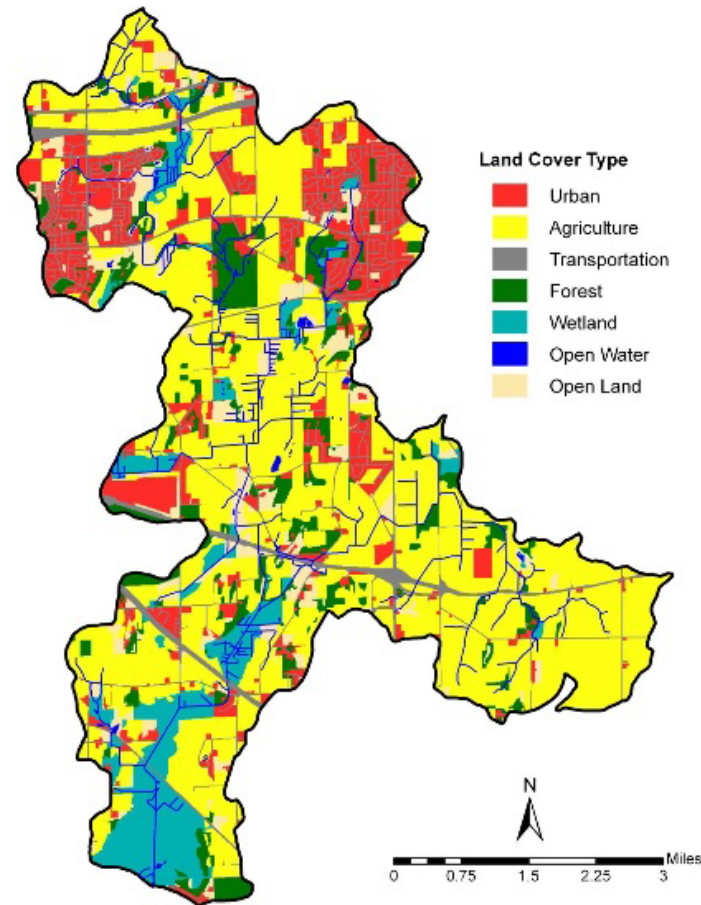


Figure 2.2: Door Creek Landcover, 2007. The major categories of land use within the Door Creek watershed. Source: CARPC, 2007; Dane County, 2005. Created Fall 2009 by 2009 WRM Practicum.

2015 civic engagement goals:

- ▶ Expanding opportunities within underserved communities
- ▶ Strengthening connections between local watershed groups and the agricultural community.
- ▶ Supporting farmer-led councils committed to continuous water quality improvement and improved nutrient management





VI. Looking into 2016...

Identifying missed opportunities & developing new programs/partnerships

Collaborative Conservation

Advisory Role: LWRD and UWEX

- ▶ Help gather farmers into local networks where they can organize and learn from each other
- ▶ Bring the technical support and funding for specific projects that farmers want to take on
- ▶ Emphasize the social dimension of conservation
- ▶ Provide expertise on water quality issues and conservation practices

Leadership Role: Agricultural Producers

- ▶ Share ideas and expand operations in other areas
- ▶ Experiment with new crops and practices that control erosion and improve soil health
- ▶ Implement best practices specific to their local watershed
- ▶ Offer financial incentives to offset the costs for a more sustainable farming operation

Farmer-led councils are a long-term strategy!!!

- ▶ Non-traditional strategy for improving water quality impacts from agricultural land. → Lets make it the social norm!
- ▶ Every farm and farmer is going to be different
- ▶ The effort can be fun but it requires commitment and a flexible timeline
- ▶ Be patient and have reasonable expectations
- ▶ Federal farm policy, falling agricultural commodity prices and environmental regulations are all real constraints

Emerging Opportunities...



- ▶ Boost organizational capacity & engage more diverse audiences
- ▶ Develop a water-related community engagement program focusing on community water stewardship and public health
- ▶ Bring watershed groups and the agricultural community together on projects targeting P reduction
- ▶ The “Farmer-Led Watershed Project” in northwestern Wisconsin as a model for partnership with Yahara Pride in Dane County
- ▶ Improve recreational access and attract more ethnically and racially diverse individuals to our parks and open spaces



Questions & Discussion



What is the stewardship role of the community? How can local government support their efforts?

How should LWRD manage and implement priority projects in partnership with local residents, watershed groups and the agricultural community?

How do we evaluate the success of equity related work in water resources management?

How can we effectively communicate with neighborhoods and community leaders in proximity to Dane County watersheds?

Supporting aligned activities, promoting partnerships and developing a shared vision has been successful. Where can we improve?