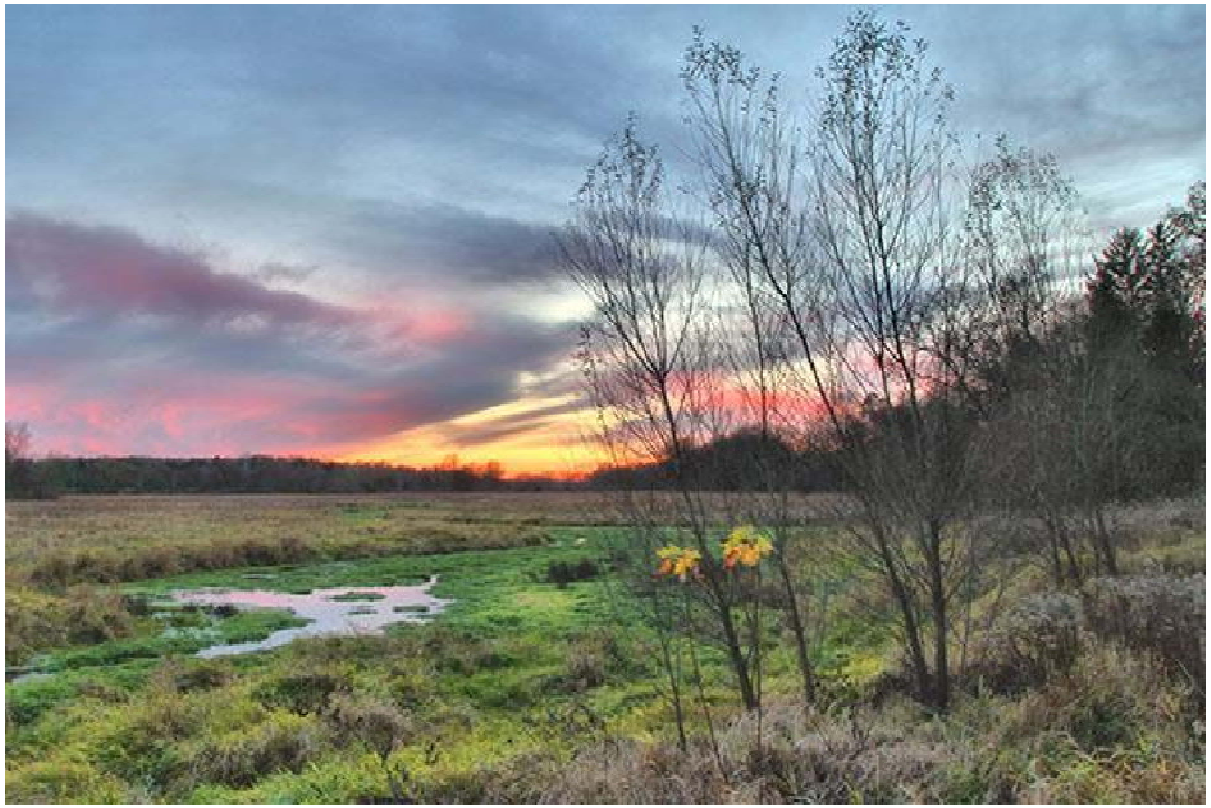
What was voted Madison's best natural attraction by Madison Magazine readers in 2005?



A) UW Arboretum B) Madison's parks C) Madison's lakes

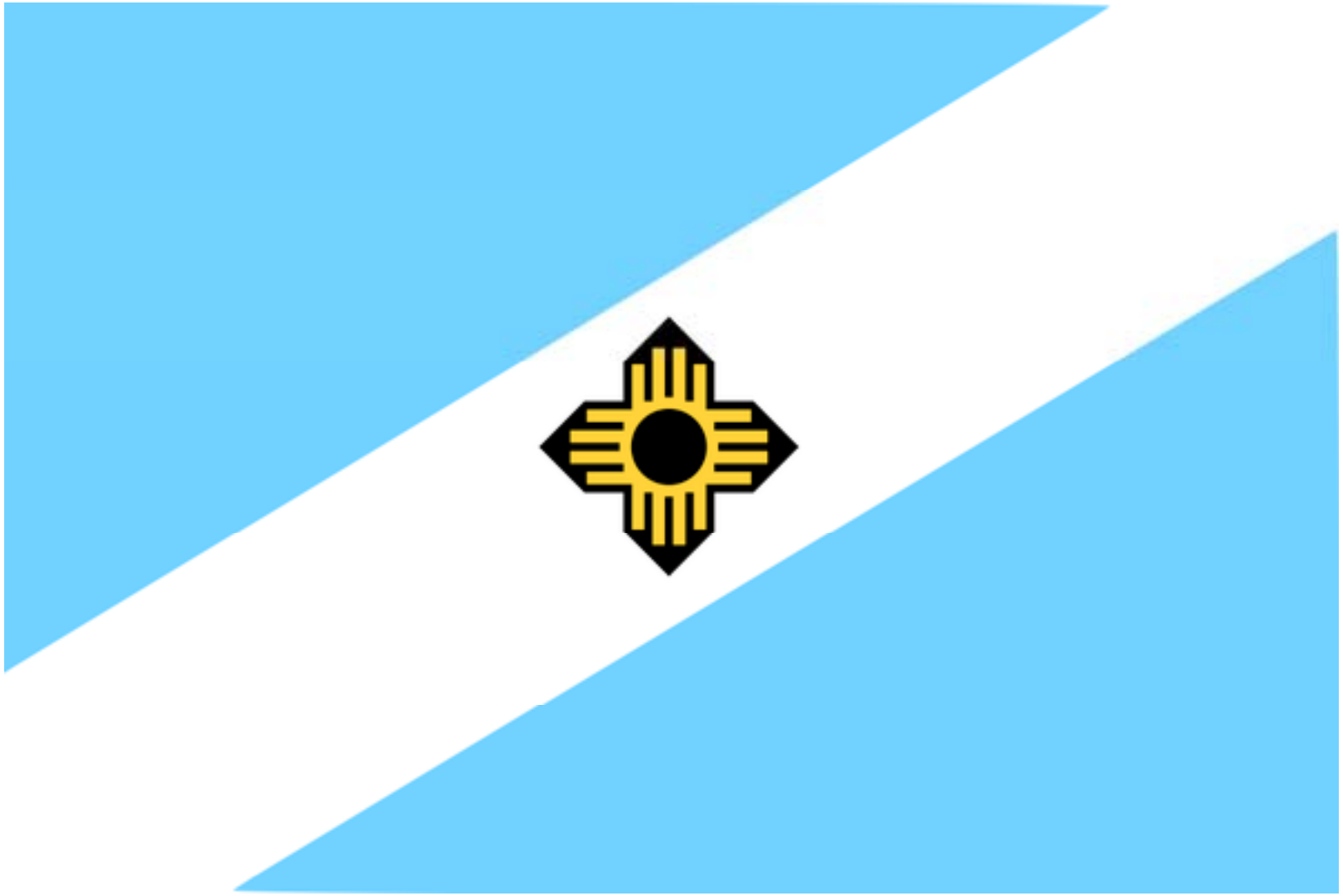
CLEAN LAKES ALLIANCE

OUR MISSION...

Clean Lakes Alliance strives to continue building a community of people, businesses, organizations, and government agencies dedicated to improving and protecting water quality in the Yahara River watershed.

OUR VISION...

We see a future in which everyone realizes that our lakes are the center of our community.



City Services Satisfaction Survey

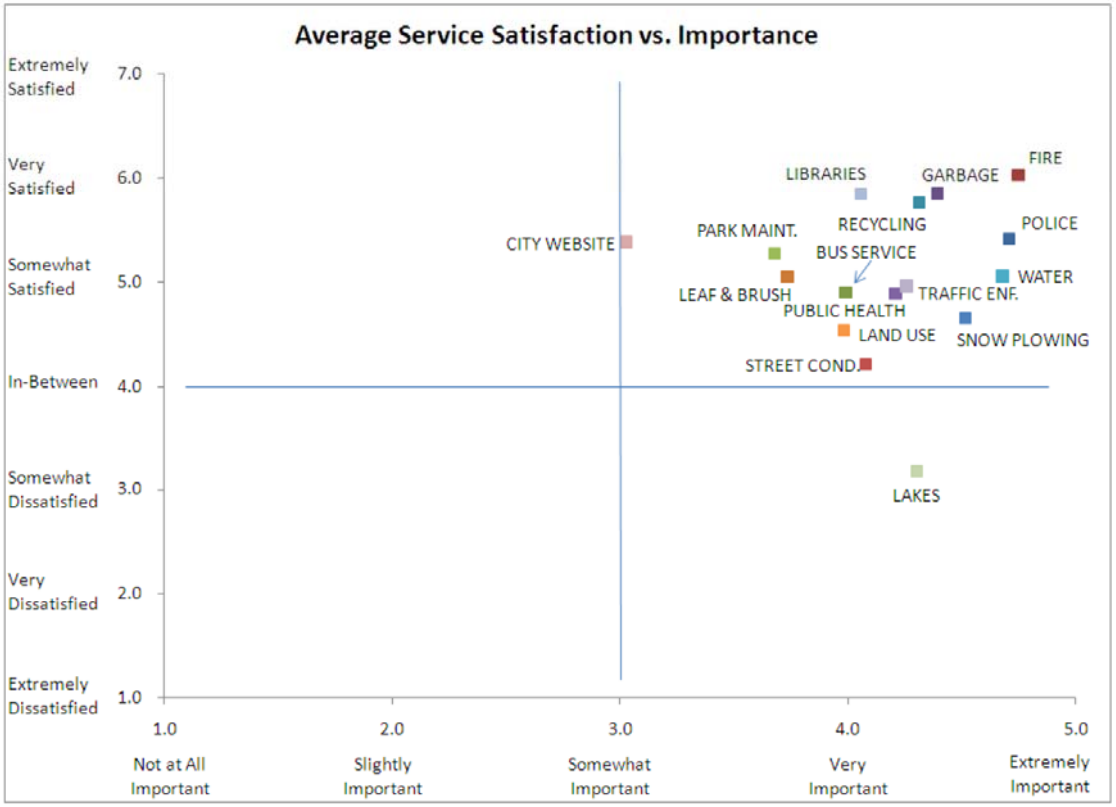
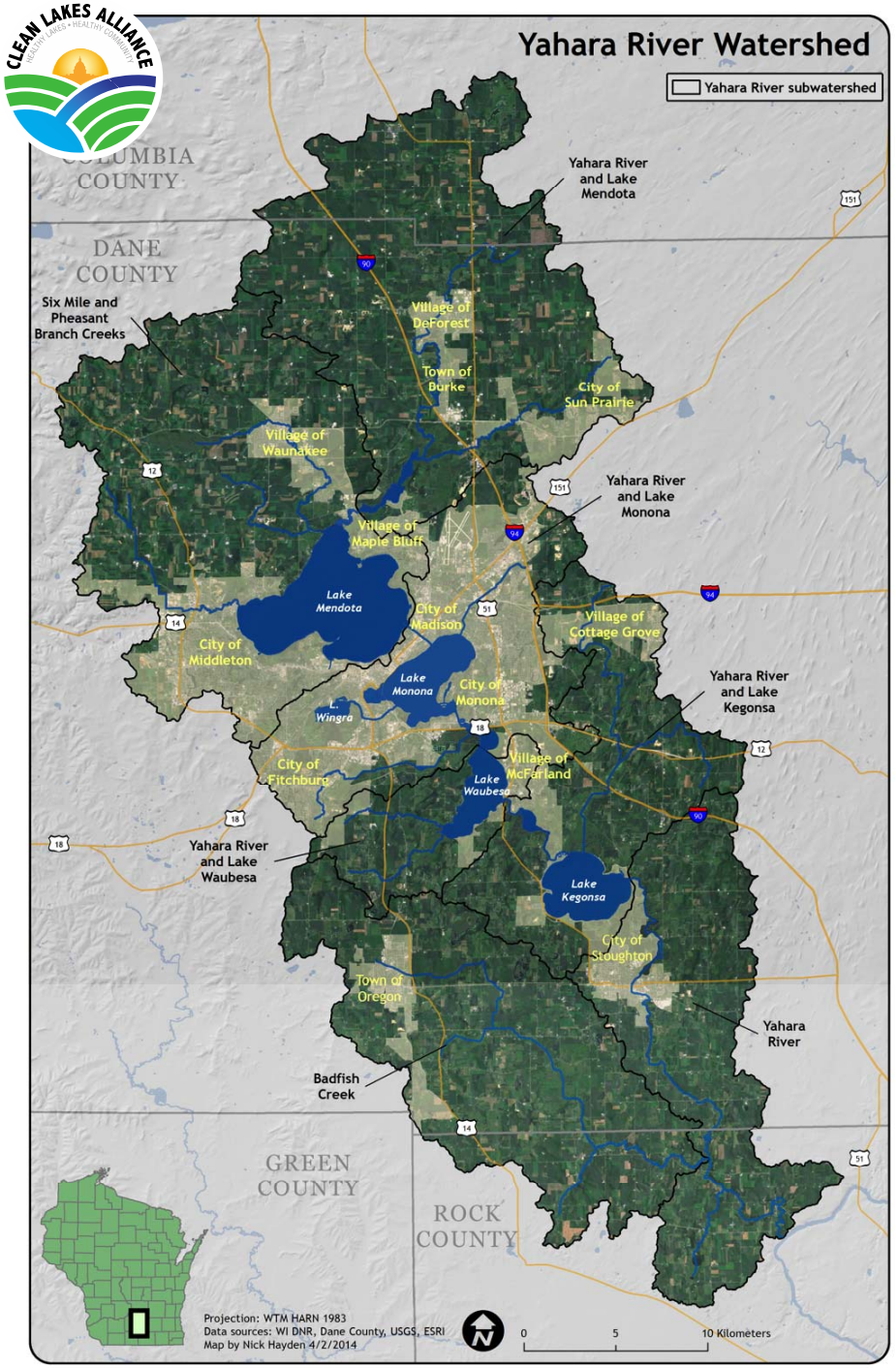


Figure 3: Quality of Services Survey, 2009 Results

Service	very/extremely satisfied
Recycling collection	71%
Garbage collection	70%
Libraries	**70%**
Fire	64%
Police	55%
Drinking water quality	47%
Park maintenance	46%
Leaf & brush collection	40%
Traffic enforcement	40%
Snowplowing	38%
City website	30%
Bus	29%
Public health	24%
Land use & planning	23%
Street condition	22%
Lake quality	8%


Yahara River Watershed
Yahara River subwatershed
COLUMBIA COUNTY
DANE COUNTY
GREEN COUNTY
ROCK COUNTY
Yahara River and Lake Mendota
Six Mile and Pheasant Branch Creeks
Village of DeForest
Town of Burke
City of Sun Prairie
Village of Waunakee
Yahara River and Lake Monona
Village of Maple Bluff
Lake Mendota
City of Madison
Village of Cottage Grove
City of Middleton
Lake Monona
City of Monona
L. Wingra
Yahara River and Lake Kegonsa
City of Fitchburg
Village of McFarland
Lake Waubesa
Yahara River and Lake Waubesa
Lake Kegonsa
City of Stoughton
Town of Oregon
Yahara River
Badfish Creek
Projection: WTM HARN 1983
Data sources: WI DNR, Dane County, USGS, ESRI
Map by Nick Hayden 4/2/2014
0
5
10 Kilometers


BUILD ALLIANCES
EDUCATION
ADVOCATE/ PROMOTE AWARENESS
FOCUS PRIORITIES
SECURE FUNDING
TAKE ACTION
REPORT PROGRESS
CLEANER WATERWAYS AND LAKES


SAVE OUR
LAKES!

CLEAN LAKES ALLIANCE

BOYS & GIRLS CLUB
OF DANE COUNTY

CLEAN LAKES ALLIANCE

wingra boats

LAKE EXPLORER CAMP

Yahara Watershed Academy

Brought to you by:

Michael Strigel

ALDO LEOPOLD NATURE CENTER

Mayor Bob Miller

Jessie Lerner

SUSTAIN DANE

James Tye

CLEAN LAKES ALLIANCE

Paul Robbins

NELSON INSTITUTE FOR Environmental Studies
UNIVERSITY OF WISCONSIN–MADISON

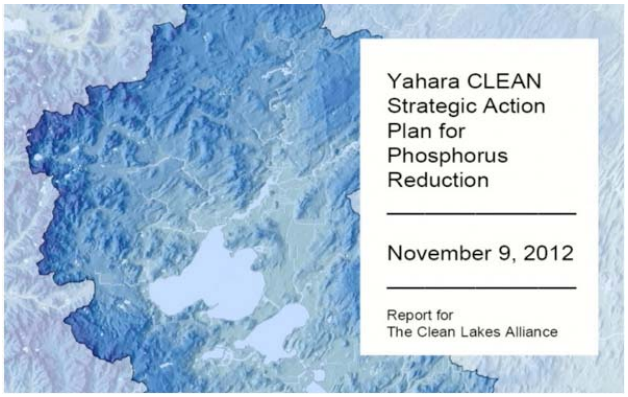
Stephen Vavrus

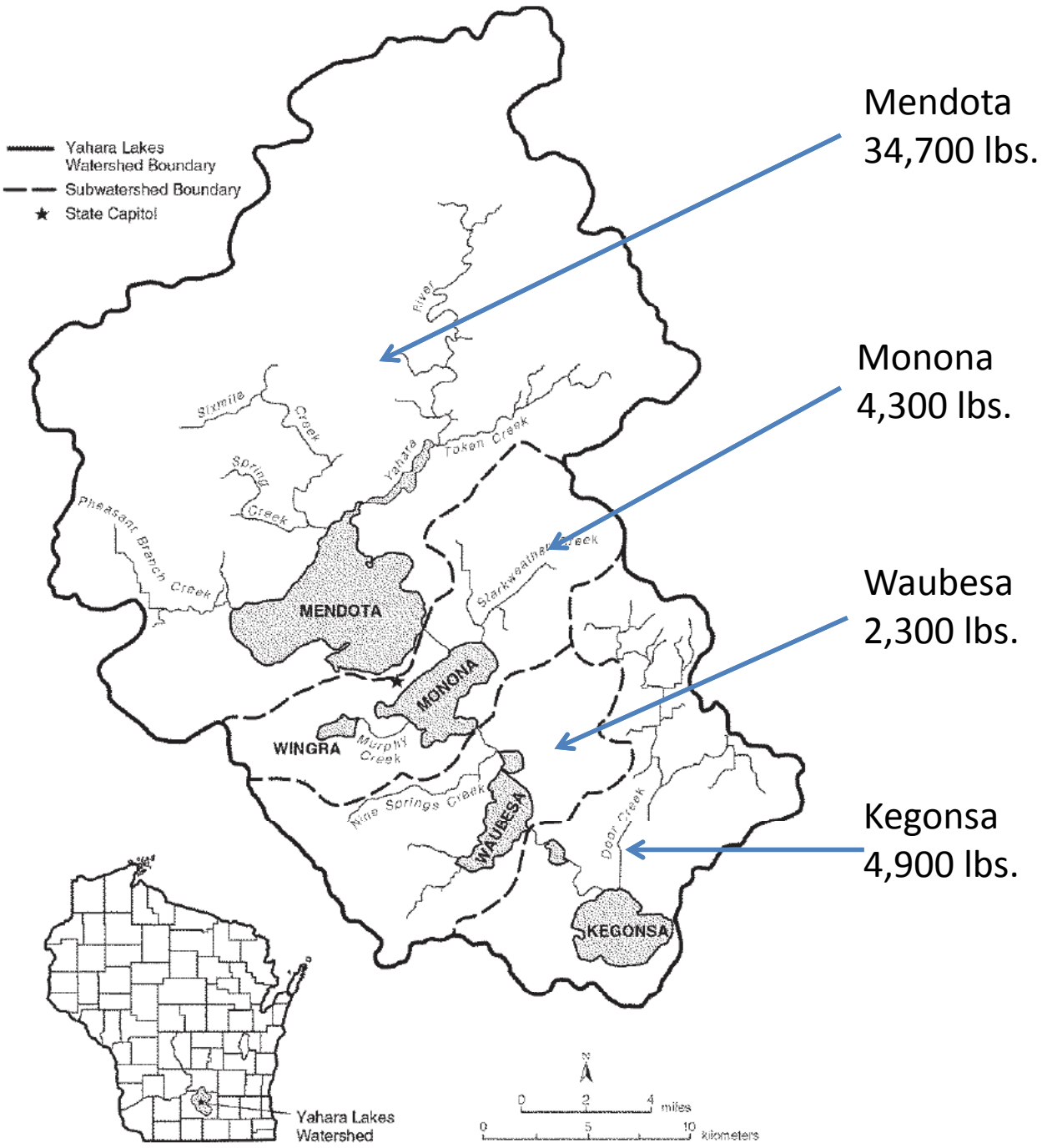
Stephen Gilchrist

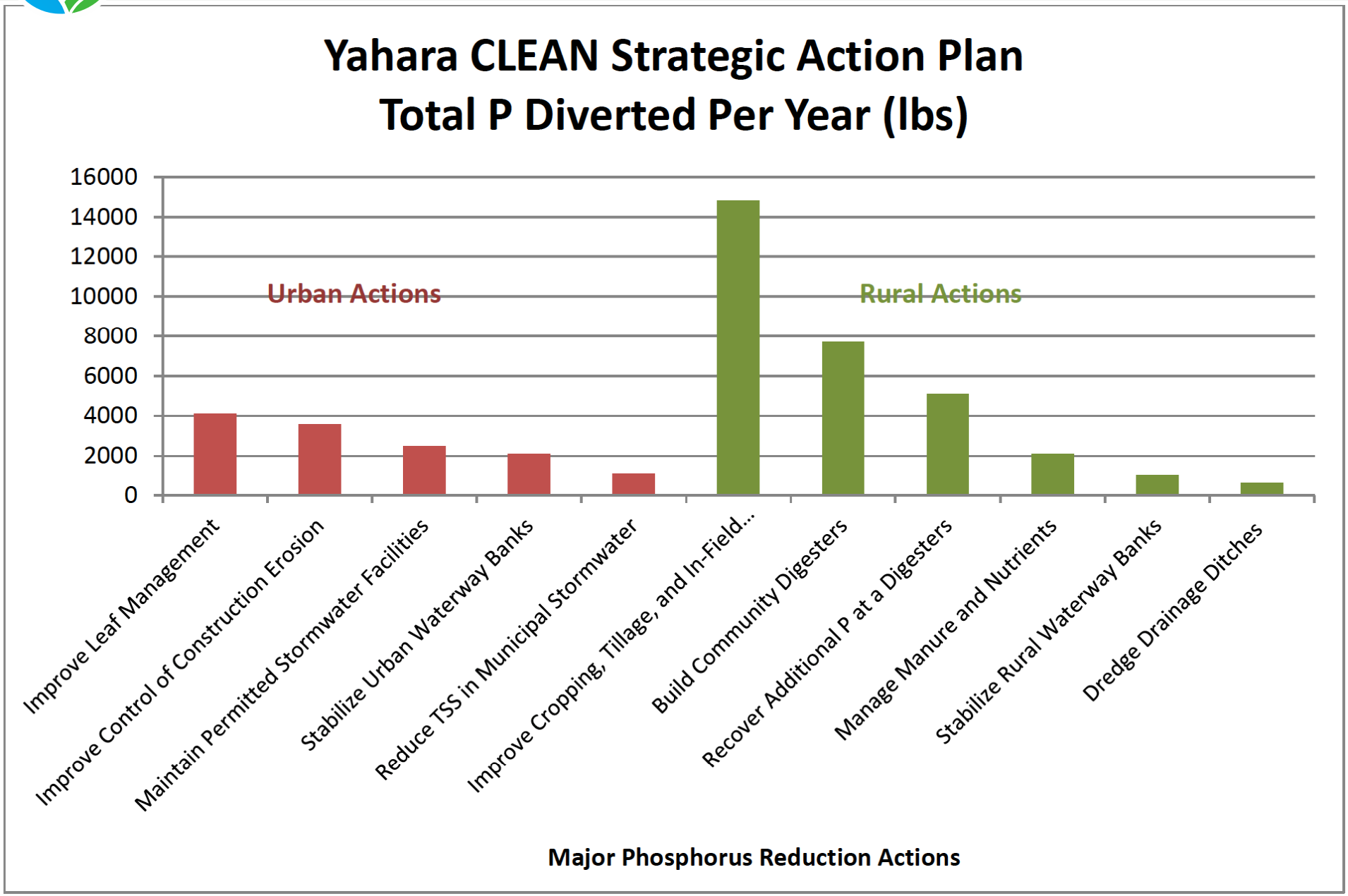
SUSTAINABILITY LEADERSHIP GRADUATE PROGRAM

D. Michael Mucha

mmsd


Yahara CLEAN
Strategic Action
Plan for
Phosphorus
Reduction
November 9, 2012
Report for
The Clean Lakes Alliance


Yahara Lakes
Watershed Boundary
Subwatershed Boundary
State Capitol
Mendota
34,700 lbs.
Monona
4,300 lbs.
Waubesa
2,300 lbs.
Kegonsa
4,900 lbs.
MENDOTA
MONONA
WINGRA
WAUBESA
KEGONSA
Sixmile Creek
Spring Creek
Pheasant Branch Creek
Yahara River
Token Creek
Starkweather Creek
Murphy Creek
Nine Springs Creek
Door Creek
Yahara Lakes
Watershed
N
0 2 4 miles
0 5 10 kilometers


Yahara CLEAN Strategic Action Plan
Total P Diverted Per Year (lbs)
16000
14000
12000
10000
8000
6000
4000
2000
0
Urban Actions
Rural Actions
Improve Leaf Management
Improve Control of Construction Erosion
Maintain Permitted Stormwater Facilities
Stabilize Urban Waterway Banks
Reduce TSS in Municipal Stormwater
Improve Cropping, Tillage, and In-Field...
Build Community Digesters
Recover Additional P at a Digesters
Manage Manure and Nutrients
Stabilize Rural Waterway Banks
Dredge Drainage Ditches
Major Phosphorus Reduction Actions

Committee on Strategic Implementation

Monthly meetings to advance the Yahara CLEAN Strategic Action Plan.

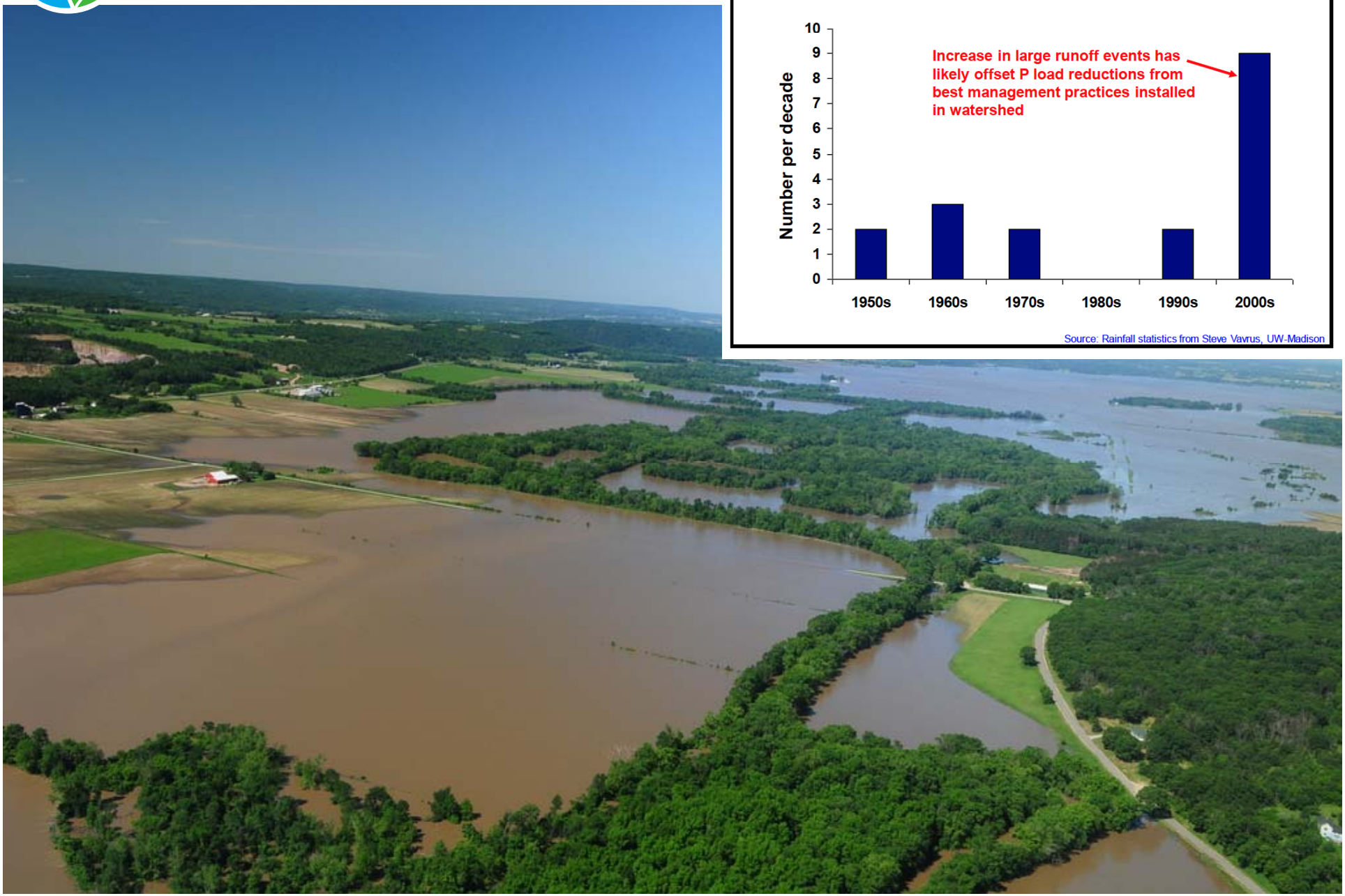
Partners: *Dane County, Wisconsin Department of Natural Resources, Madison Metropolitan Sewerage District,* ***City of Madison****, University of Wisconsin, Fund for Lake Michigan, Yahara Pride Farms*

2015-2016

- Improved tracking and reporting of progress
- Nutrient-concentrating technology approved for Middleton digester
- **Starkweather Creek treatment system moving forward**
- **Leaf-management pilots**
- County cost sharing for low-disturbance manure injection
- Removal of legacy sediment in Dorn Creek
- Funding to study manure composting
- Exploration of emerging technologies

2015 YPF Cost Sharing

Cover Crops….. 4,155 acres
Strip Tillage…….879 acres
LDMI……335 acres



Rain events >3 inches per day

Madison, Wisconsin, 1950-2009

Source: Rainfall statistics from Steve Vavrus, UW-Madison

Where do storm sewers go?

A) Storage tanks B) Treatment plants C) Lakes & streams

What percent of the Yahara watershed is urbanized?

A) 27% B) 49% C) >65%


4574

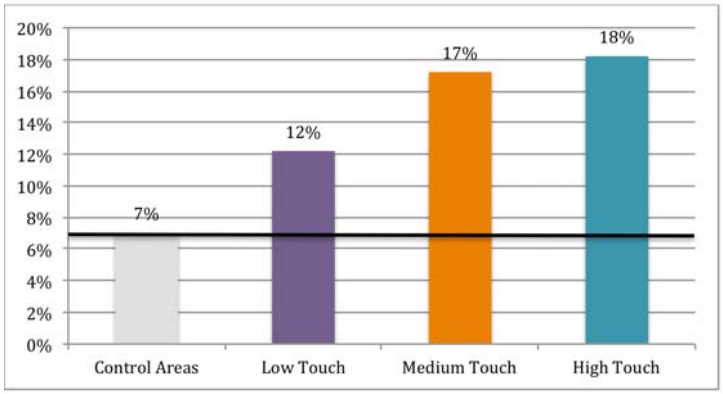
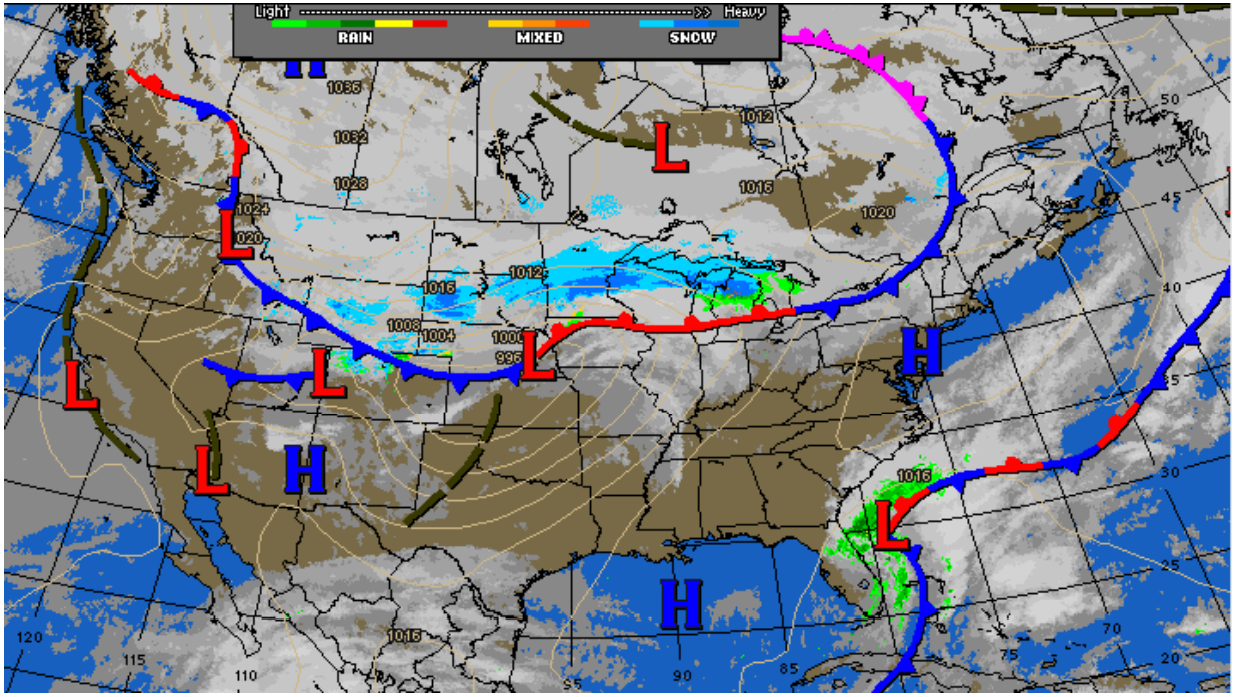


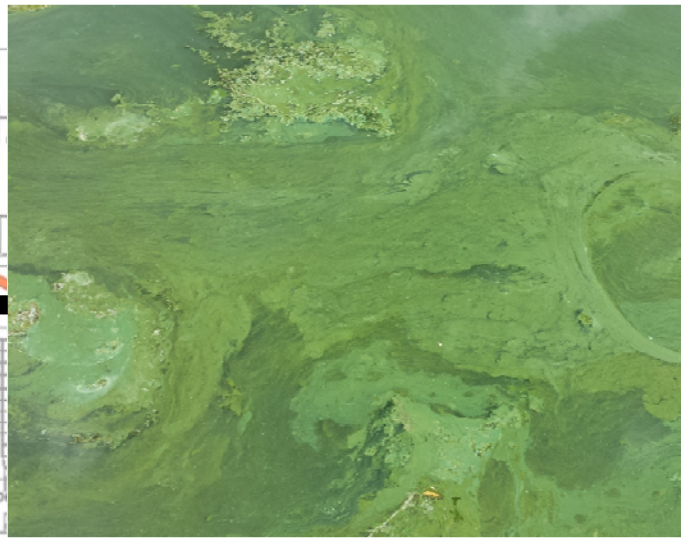
Figure 3: Average participation rates by area

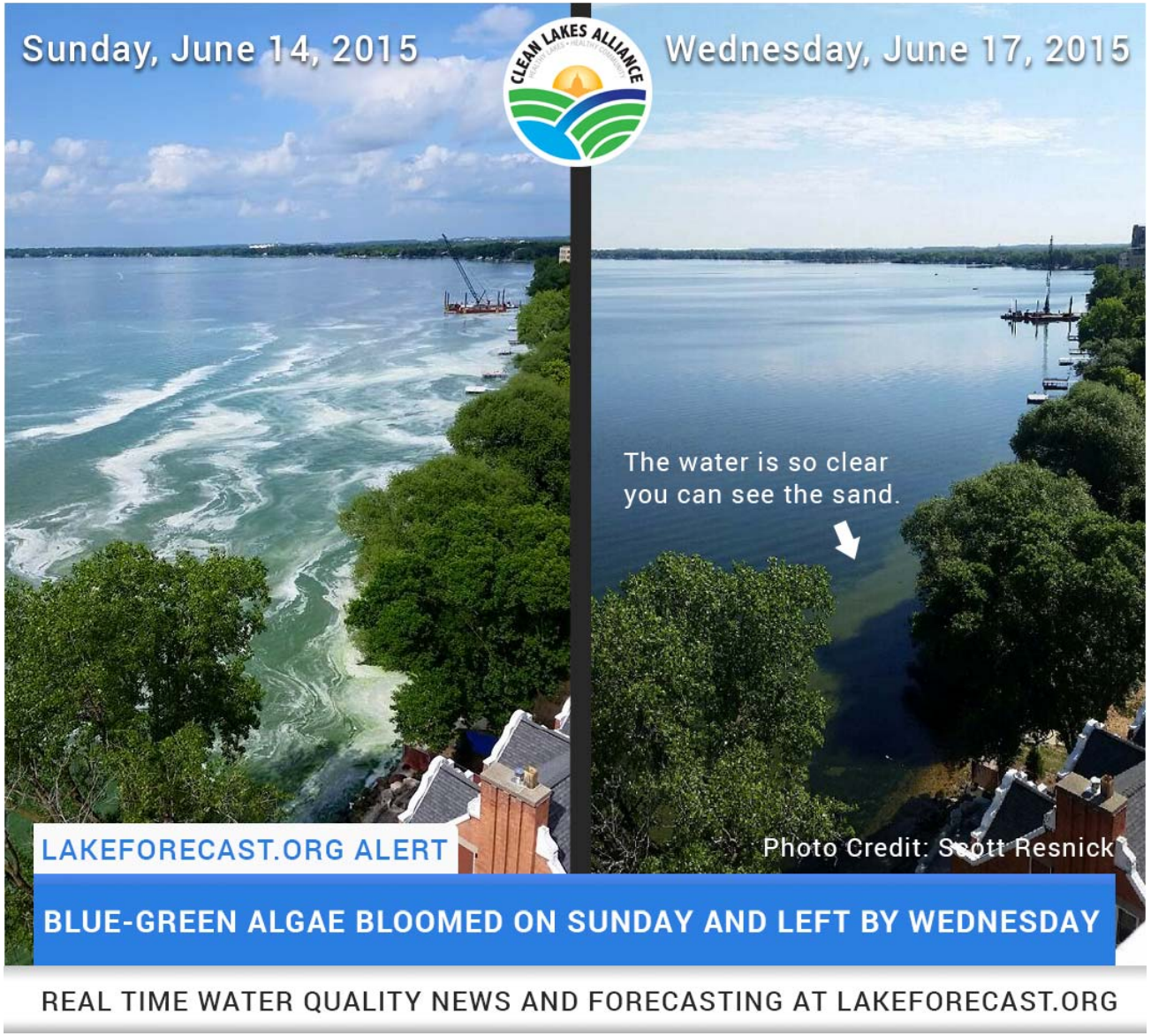
Table 7: Potential impacts and costs if results are extrapolated to other villages and cities draining to the Yahara lakes

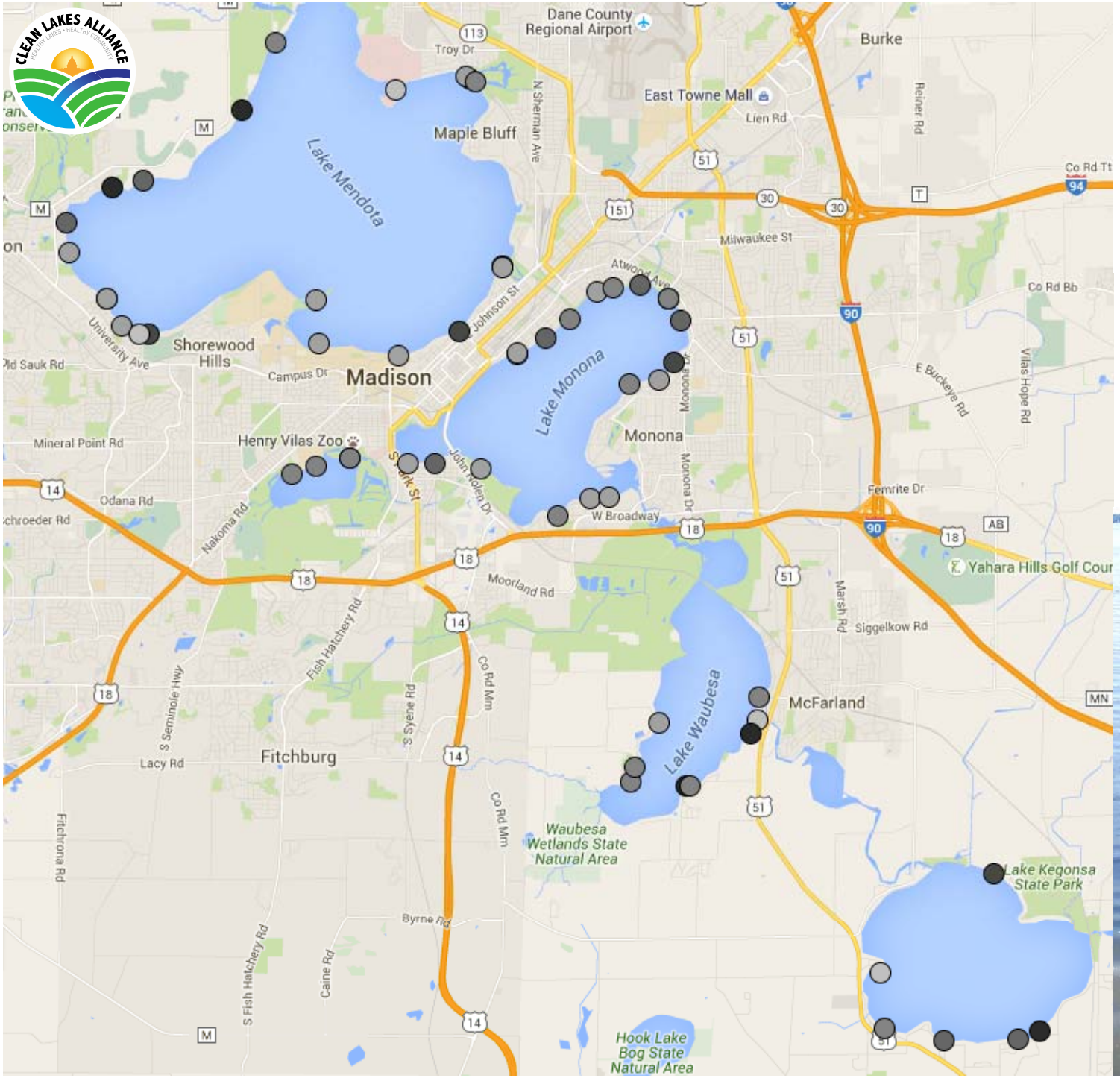
Municipality[1]	Assumed total curb lenth (ft.)[2]	Assumed weight of leaves per ft. of curb (lbs.)[3]	P diverted from 8 rakings at 100% particip. (lbs.)[4]	P diverted from 8 rakings at 20% particip. (lbs.)	Total 20-yr present worth cost based on 20% particip.[5]
Village of DeForest	340,000	0.126	72	14	$77,280
City of Madison	7,688,700	0.126	1,608	322	$1,777,440
		0.200	2,544	509	$2,809,680
		0.400	5,088	1,018	$5,619,360
City of Middleton	602,775	0.126	128	26	$143,520
		0.200	200	40	$220,800
		0.400	400	80	$441,600
City of Fitchburg (3/4)	560,400	0.126	117	23	$126,960
		0.200	186	37	$204,240
		0.400	372	74	$408,480
City of Monona	292,350	0.126	64	13	$71,760
		0.200	96	19	$104,880
		0.400	192	38	$209,760
Village of Waunakee	335,400	0.126	72	14	$77,280
		0.200	112	22	$121,440
		0.400	224	44	$242,880
City of Stoughton	400,125	0.126	80	16	$88,320
		0.200	136	27	$149,040
		0.400	272	54	$298,080
City of McFarland	238,500	0.126	48	10	$55,200
		0.200	80	16	$88,320
		0.400	160	32	$176,640
Village of Maple Bluff	44,400	0.126	8	2	$11,040
		0.200	16	3	$16,560
		0.400	32	6	$33,120
Village of Shorewood Hills	46,500	0.126	8	2	$11,040
		0.200	16	3	$16,560
		0.400	32	6	$33,120
City of Sun Prairie (1/3)	290,625	0.126	61	12	$66,240
		0.200	96	19	$104,880
		0.400	193	39	$215,280
Village of Cottage Grove (3/4)	124,350	0.126	26	5	$27,600
		0.200	41	8	$44,160
		0.400	82	16	$88,320
Above Communities Combined	10,879,125	0.126	2,270	454	$2,506,080
		0.200	3,603	721	$3,979,920
		0.400	7,206	1,441	$7,954,320


Light
Heavy
RAIN
MIXED
SNOW
L
H
1036
1032
1028
1024
1020
1016
1012
1008
1004
1000
996
120
115
110
95
90
85
75
70
50
45
40
35
30
25
20

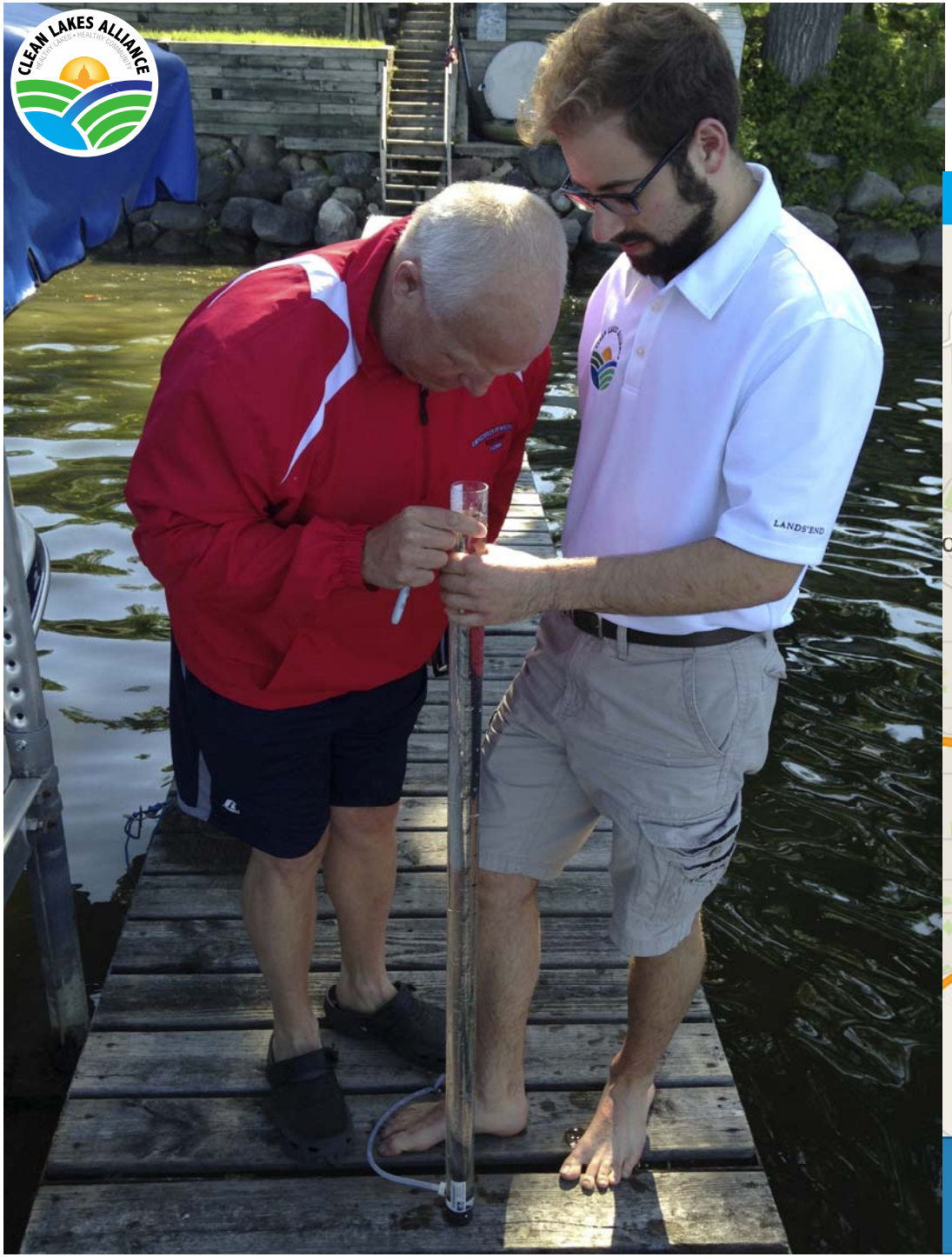

Dorn Creek
M
Q
School Rd
N Sherman Ave
Maple Bluff
M
Lake Mendota
Fordem Ave
MS
Old Middleton Rd
University Ave
Shorewood Hills
Madison
Campus Dr
University Ave
W Johnson St
E Gorham St
Johnson St
William St



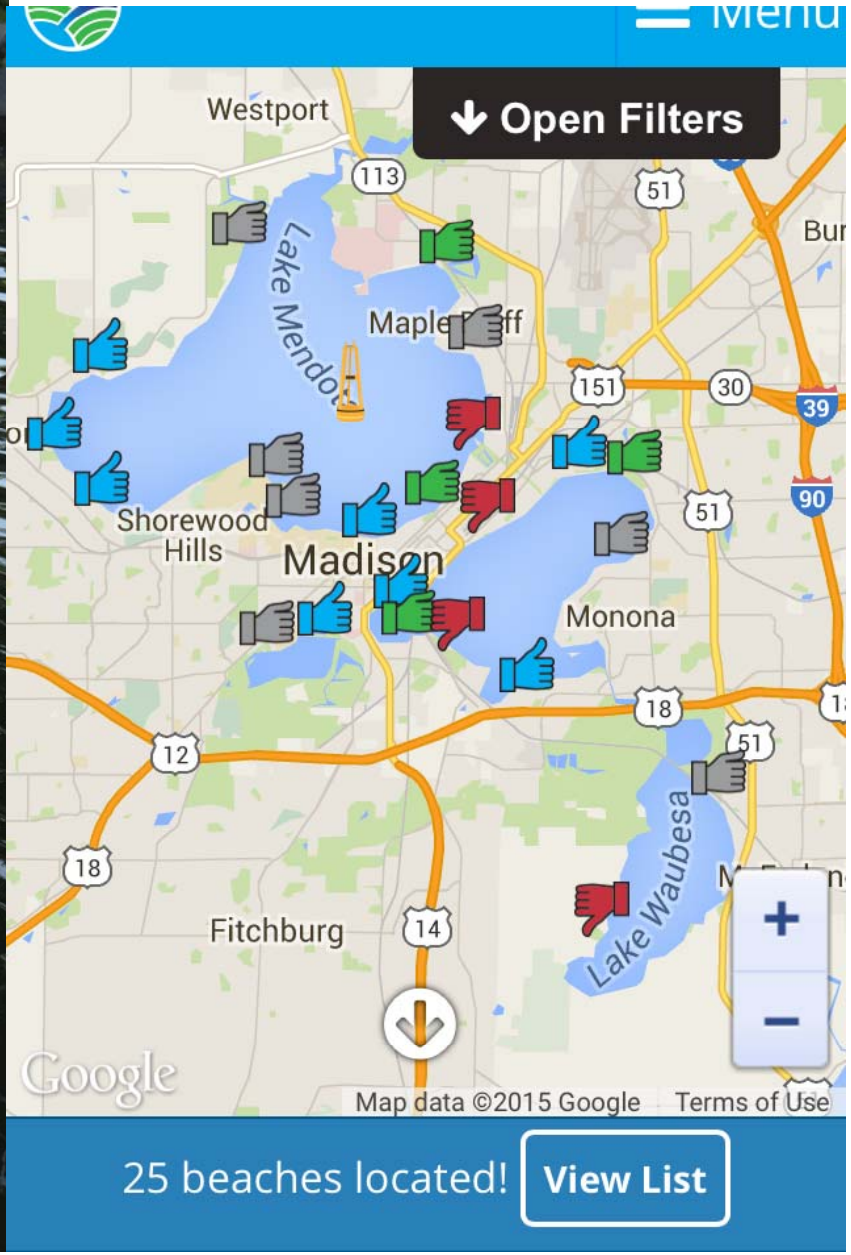

Sunday, June 14, 2015
Wednesday, June 17, 2015
The water is so clear
you can see the sand.
LAKEFORECAST.ORG ALERT
Photo Credit: Scott Resnick
BLUE-GREEN ALGAE BLOOMED ON SUNDAY AND LEFT BY WEDNESDAY
REAL TIME WATER QUALITY NEWS AND FORECASTING AT LAKEFORECAST.ORG



- 0 - 5 (7)
- 6 - 11 (17)
- 12 - 16 (17)
- 17 - 29 (8)
- 34 - 53 (5)
- 68 - 116 (5)



LakeForecast.org



Closures by beach | Closures by year | All data | About the data

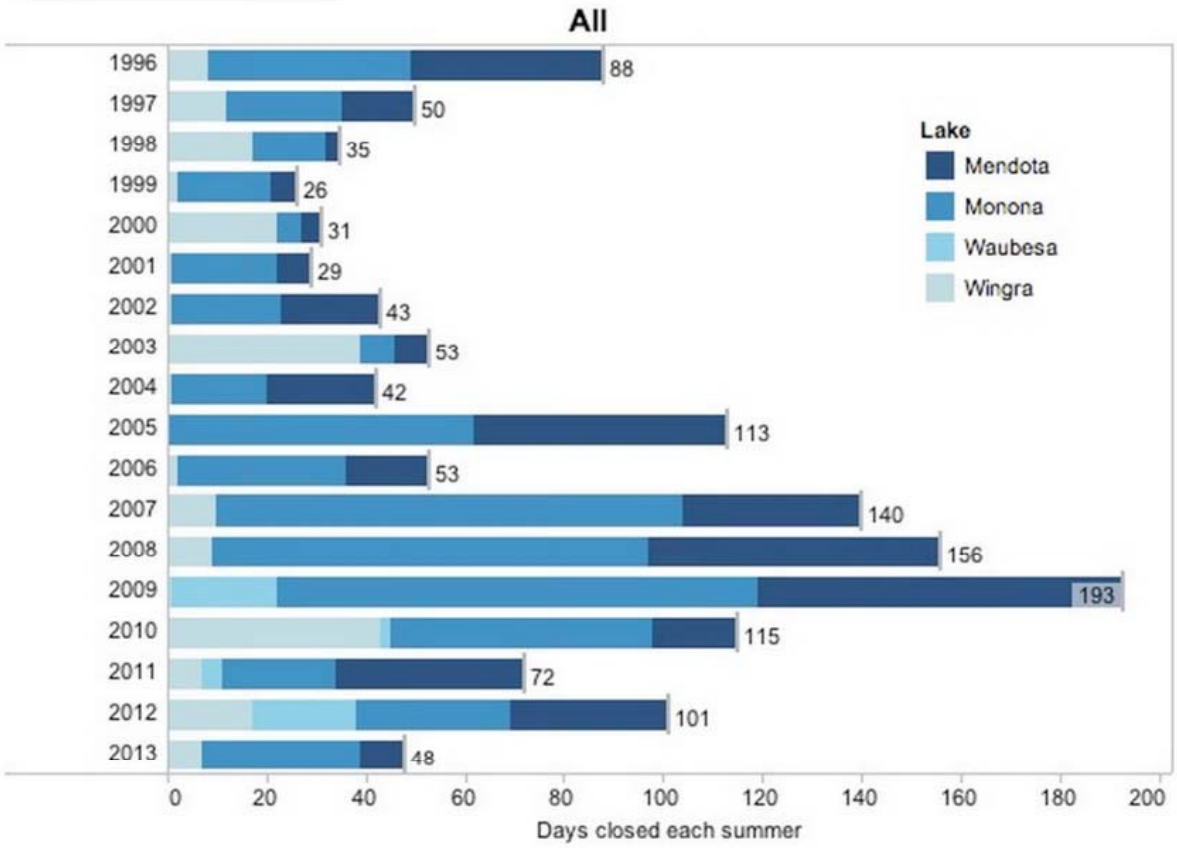
MURKY WATERS

Madison-area beaches: Good years and bad

The years 2008 and 2009 were particularly bad for blue-green algae, but the data reveal no striking overall trends.

Choose a beach

(All)



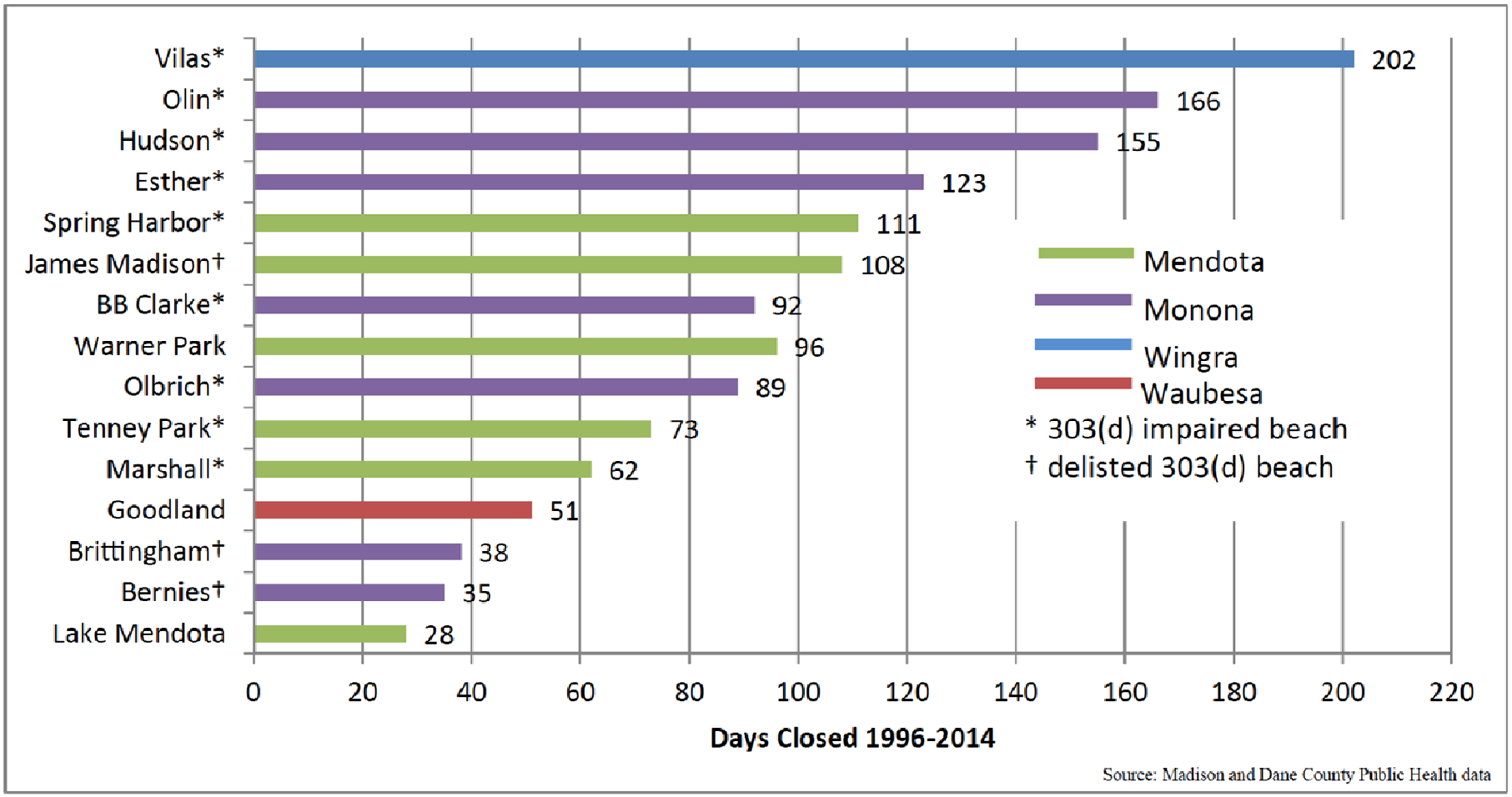
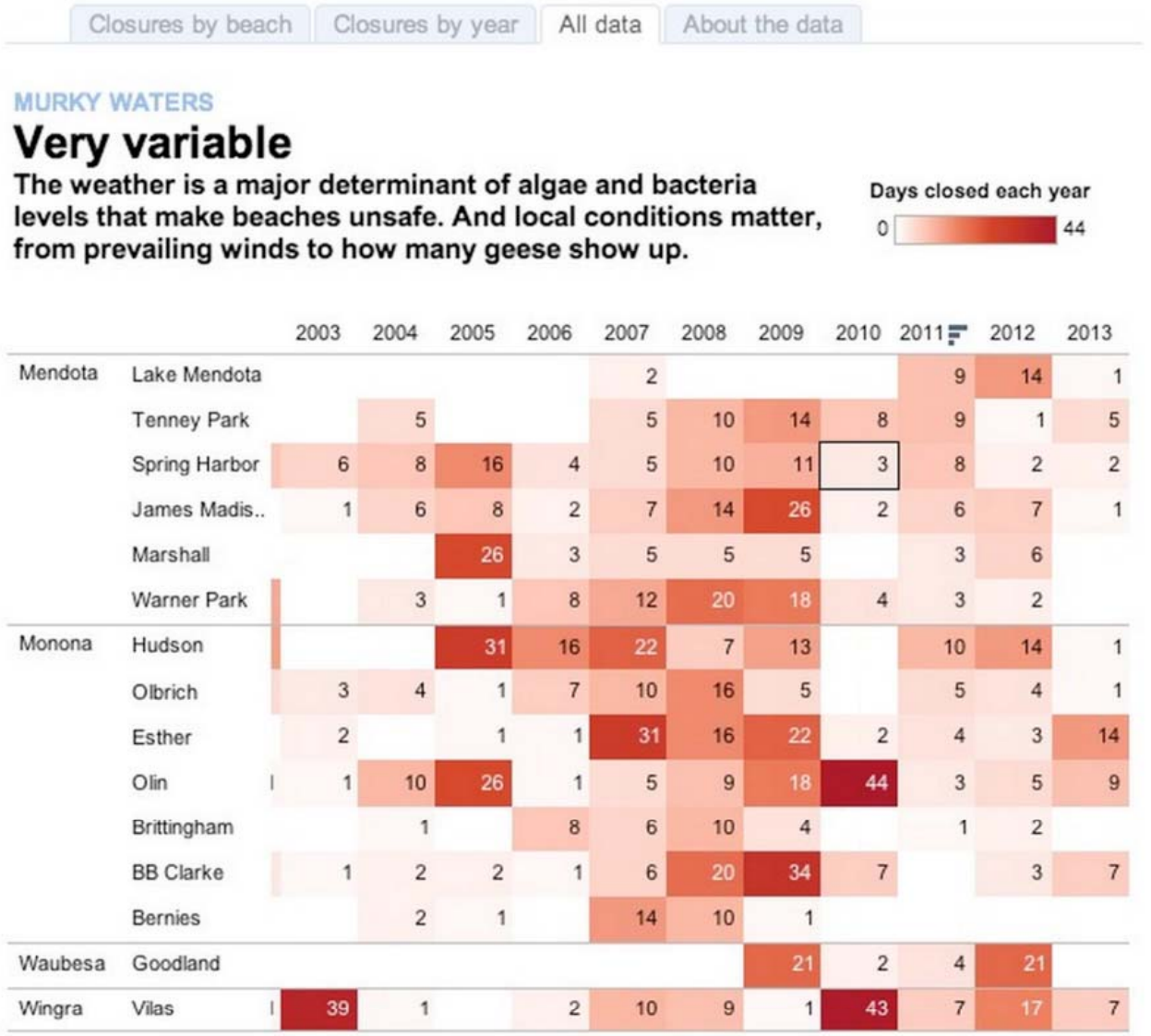


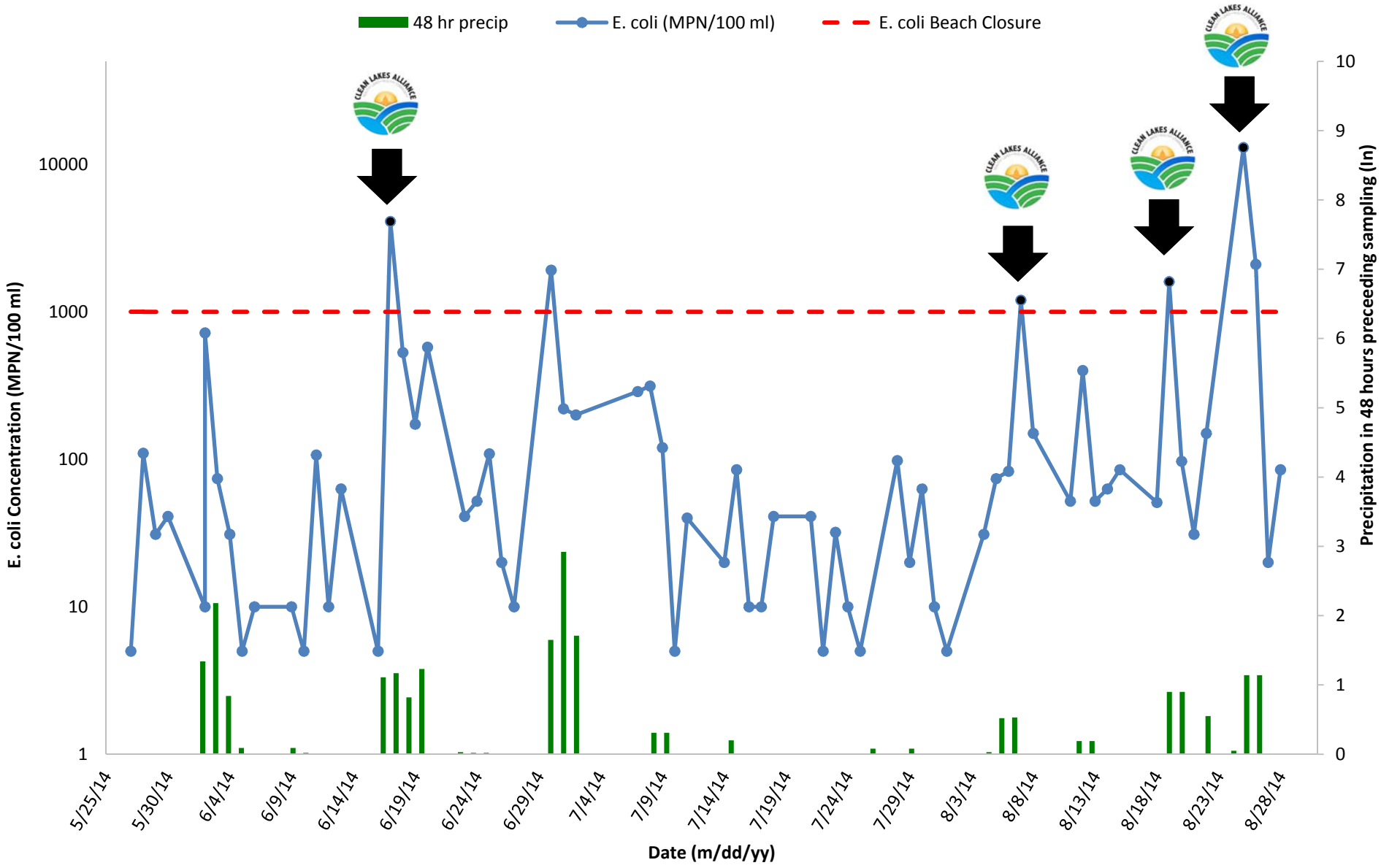
Figure 15: Closures by Beach 1996—2014

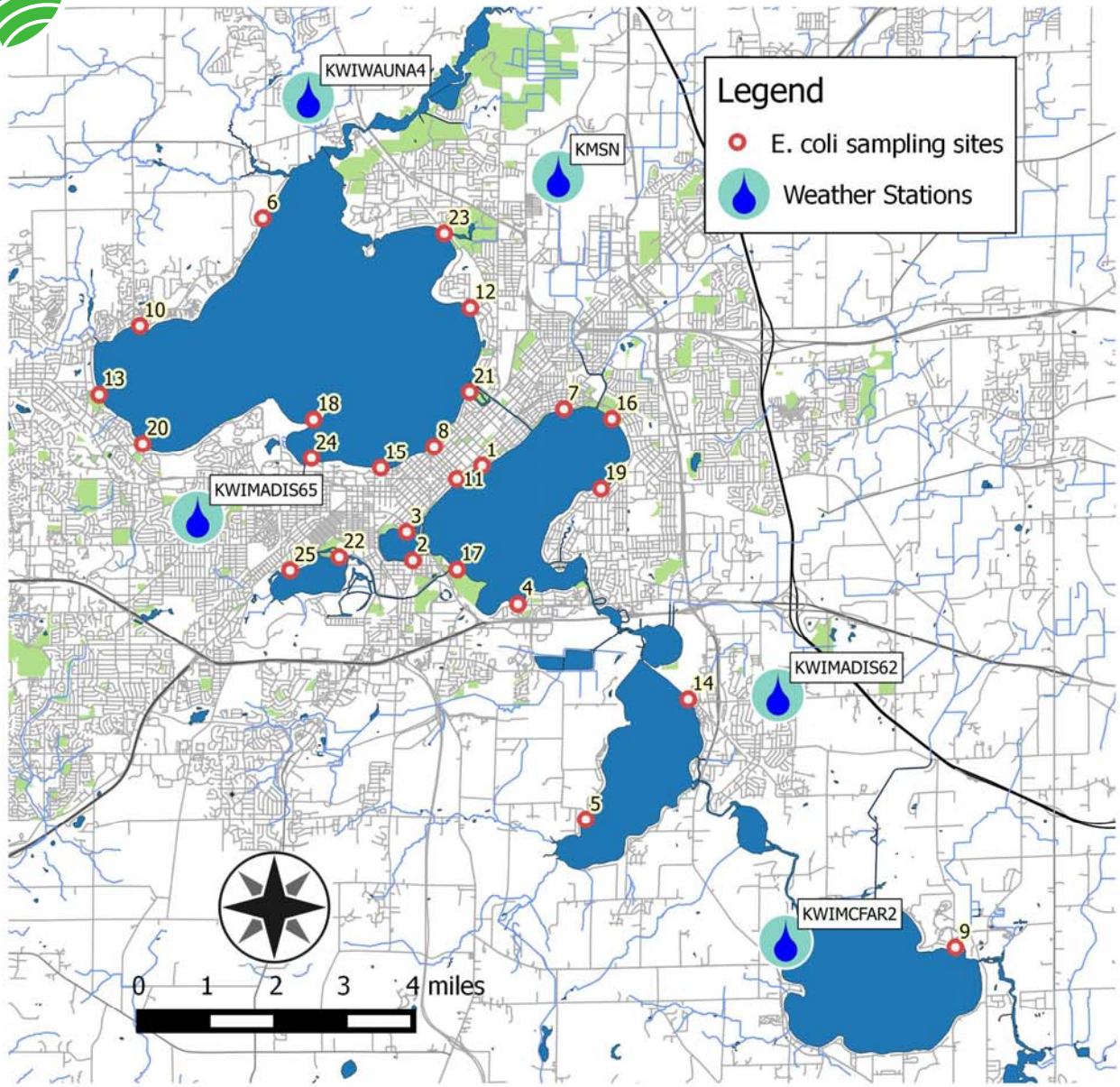
Source: Madison and Dane County Public Health data.



		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Mendota	Lake Mendota					2				9	14	1
	Tenney Park		5			5	10	14	8	9	1	5
	Spring Harbor	6	8	16	4	5	10	11	3	8	2	2
	James Madis..	1	6	8	2	7	14	26	2	6	7	1
	Marshall			26	3	5	5	5		3	6	
	Warner Park		3	1	8	12	20	18	4	3	2	
Monona	Hudson			31	16	22	7	13		10	14	1
	Olbrich	3	4	1	7	10	16	5		5	4	1
	Esther	2		1	1	31	16	22	2	4	3	14
	Olin	1	10	26	1	5	9	18	44	3	5	9
	Brittingham		1		8	6	10	4		1	2	
	BB Clarke	1	2	2	1	6	20	34	7		3	7
	Bernies		2	1		14	10	1				
Waubesa	Goodland							21	2	4	21	
Wingra	Vilas	39	1		2	10	9	1	43	7	17	7

James Madison Beach 2014 *E. coli* Data

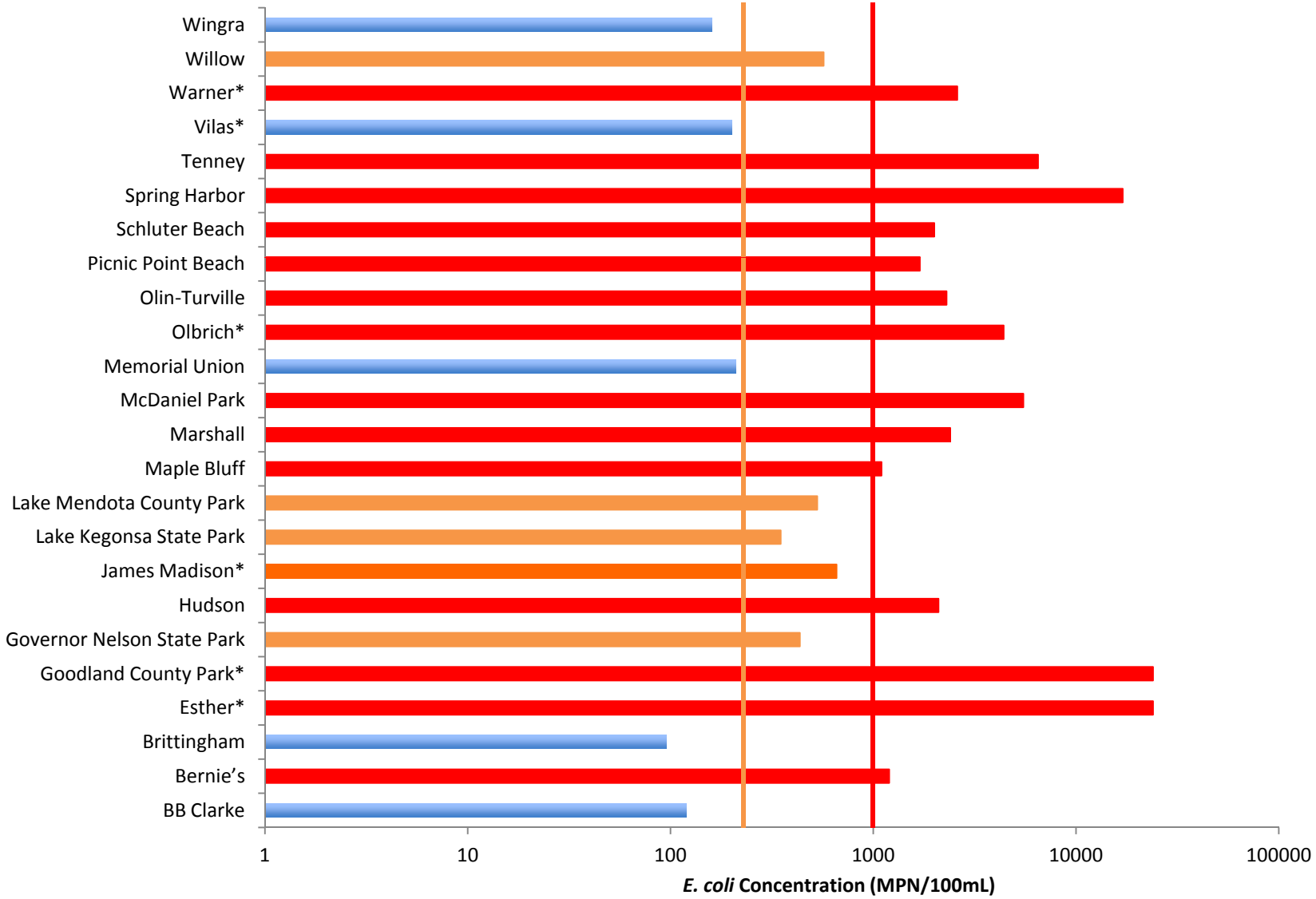




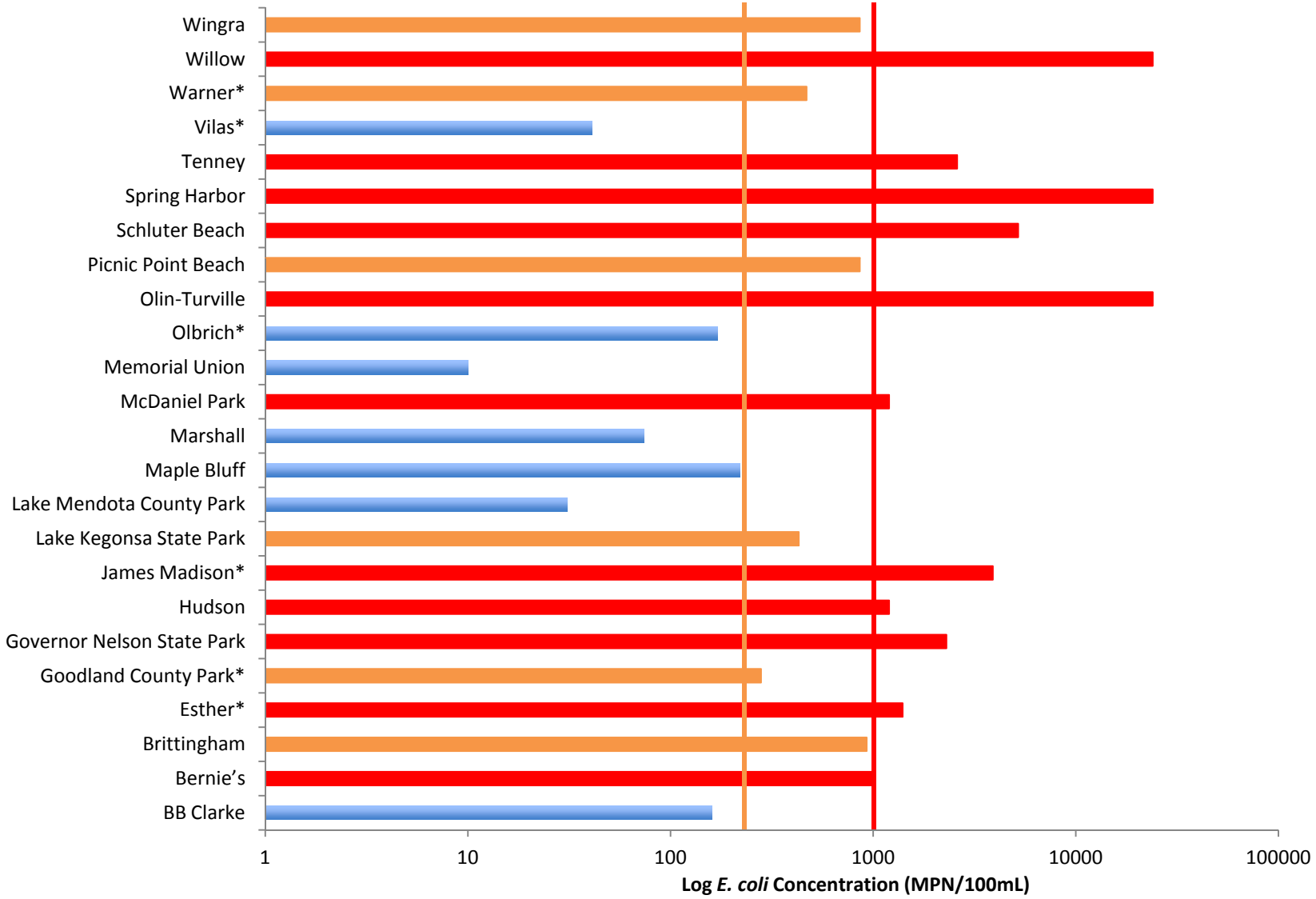
Measured Precipitation on Sampling Dates		
Station	Rainfall 7/13	Rainfall 7/29
KWIWAUNA4	0.67	0.4
KWIMADIS65	0.57	0.78
KWIMADIS62	0.24	0.71
KWIMCFAR2	1	0.93
KMSN (airport)	0.88	1.42
Average -->	0.67	0.85

Station ID	Sampling Location
1	BB Clark Beach
2	Bernie's Beach
3	Brittingham Park Beach
4	Esther Beach
5	Goodland County Beach
6	Governor Nelson State Park
7	Hudson Beach
8	James Madison Beach
9	Lake Kegonsa State Park
10	Lake Mendota County Park
11	Law Park
12	Maple Bluff Beach
13	Marshall Beach
14	McDaniel Beach
15	Memorial Union Pier
16	Olbrich Beach
17	Olin Park Beach
18	Picnic Point Beach
19	Schluter beach
20	Spring Harbor Boat Launch
21	Tenney Beach
22	Vilas Beach
23	Warner Beach
24	Willow Beach
25	Wingra Boat Launch

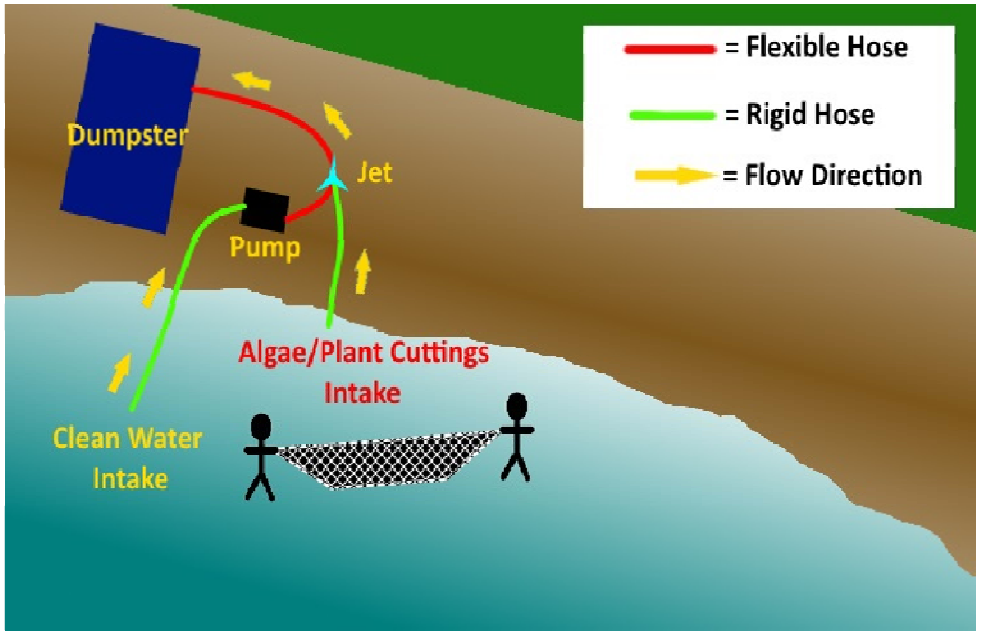
Post-Rain Monitoring Blitz: July 13, 2015



Post-Rain Monitoring Blitz: July 29, 2015




LAKE
WEED
ONLY


= Flexible Hose
= Rigid Hose
= Flow Direction
Dumpster
Jet
Pump
Algae/Plant Cuttings
Intake
Clean Water
Intake