

PRIORITIZING WISCONSIN LAKES FOR CONSERVATION AND RESTORATION

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UWSP COLLEGE OF NATURAL RESOURCES

UW-EXTENSION CENTER FOR LAND USE EDUCATION

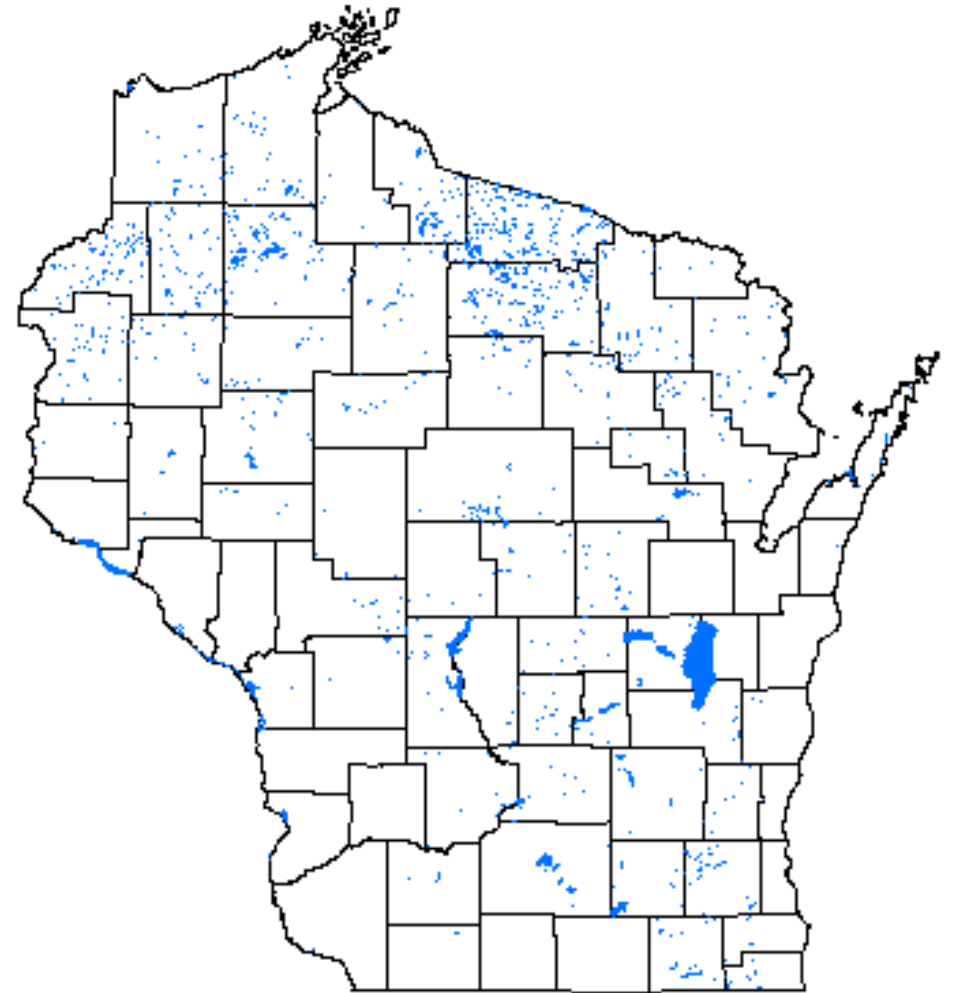
WISCONSIN LAKES & RIVERS CONVENTION

APRIL 3, 2020

WI Lakes

**> 4,000 water bodies
(lakes, ponds, flowages,
etc.) that either:**

- **Have a name, and/or**
- **Are > 20 acres**



0 15 30 60 90 120 Miles

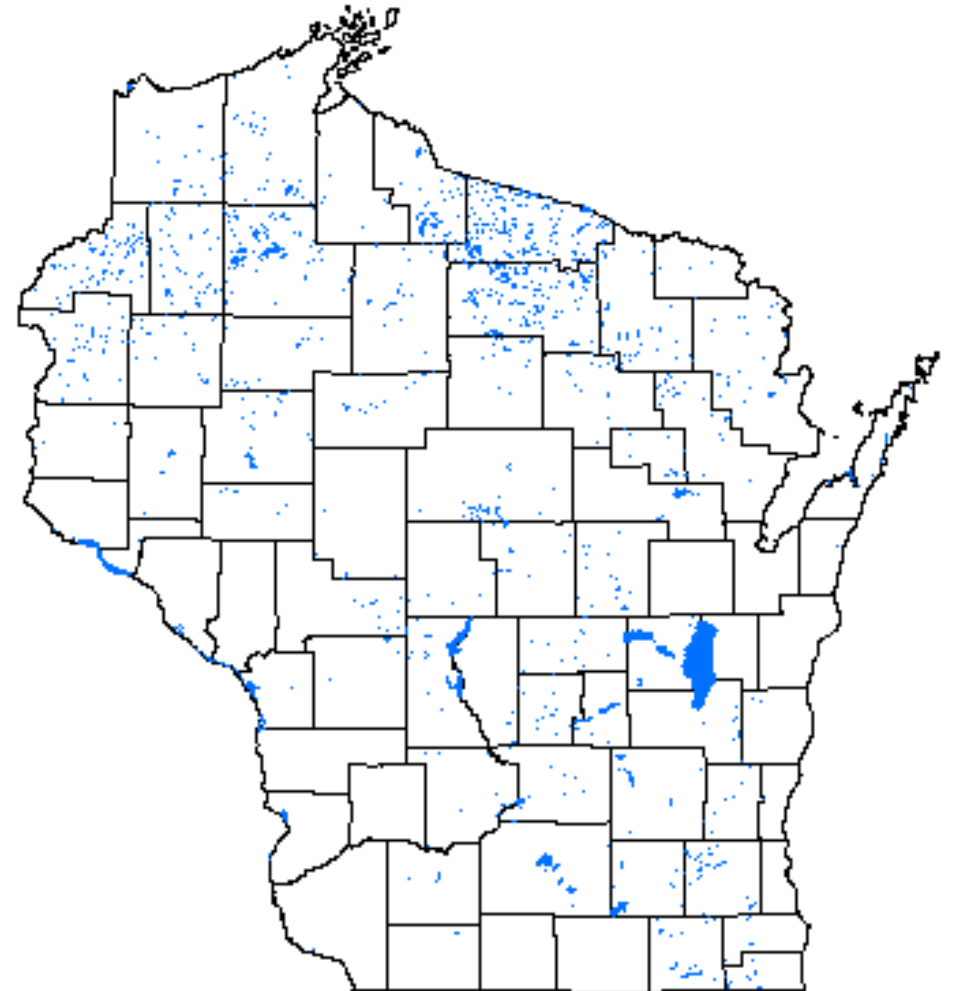
WI Lakes

State fishing industry valued over \$2 billion

Real estate market for shoreline homes valued around \$1 billion

~20% of surface water bodies impaired, driven by land use

- Sediment loading, suspended solids
- Phosphorous loading

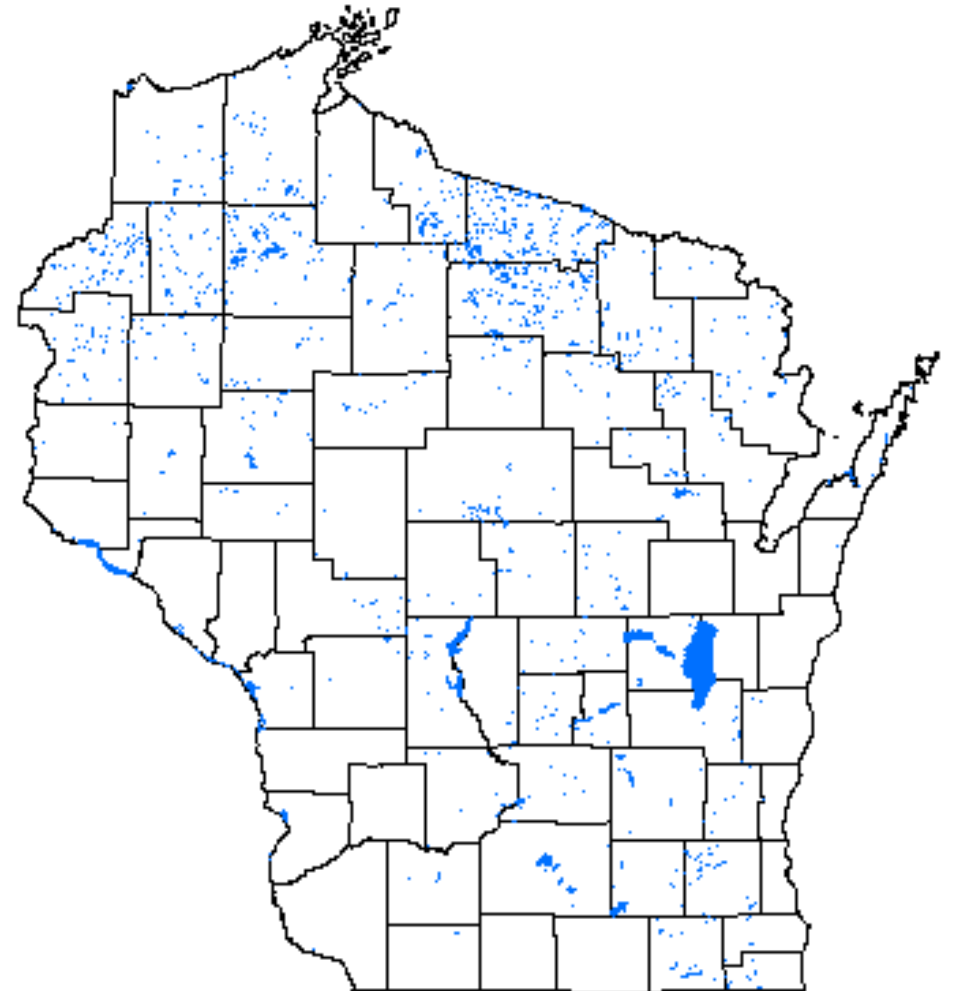


0 15 30 60 90 120 Miles

WI Lakes

How do we 'measure' or 'rank' lakes?

- **Biophysically**
 - **Water quality**
 - **Wildlife and habitat**
 - ...
- **Socioeconomically**
 - **Human use and value**
 - **Real estate, development**
 - ...



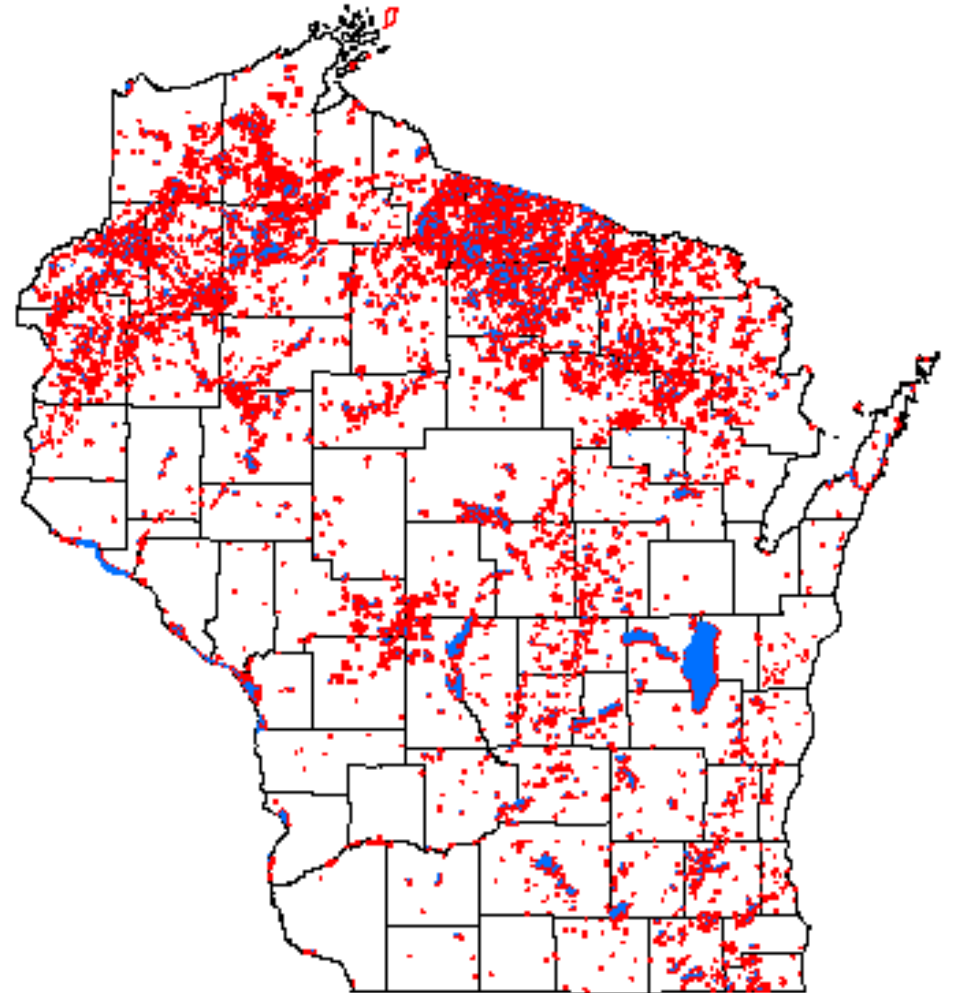
0 15 30 60 90 120 Miles

Lakeshore Parcels

> 200,000 parcels within
100 feet of a lake

~ 80 million feet of frontage
(*rough estimate*)

Valuation?



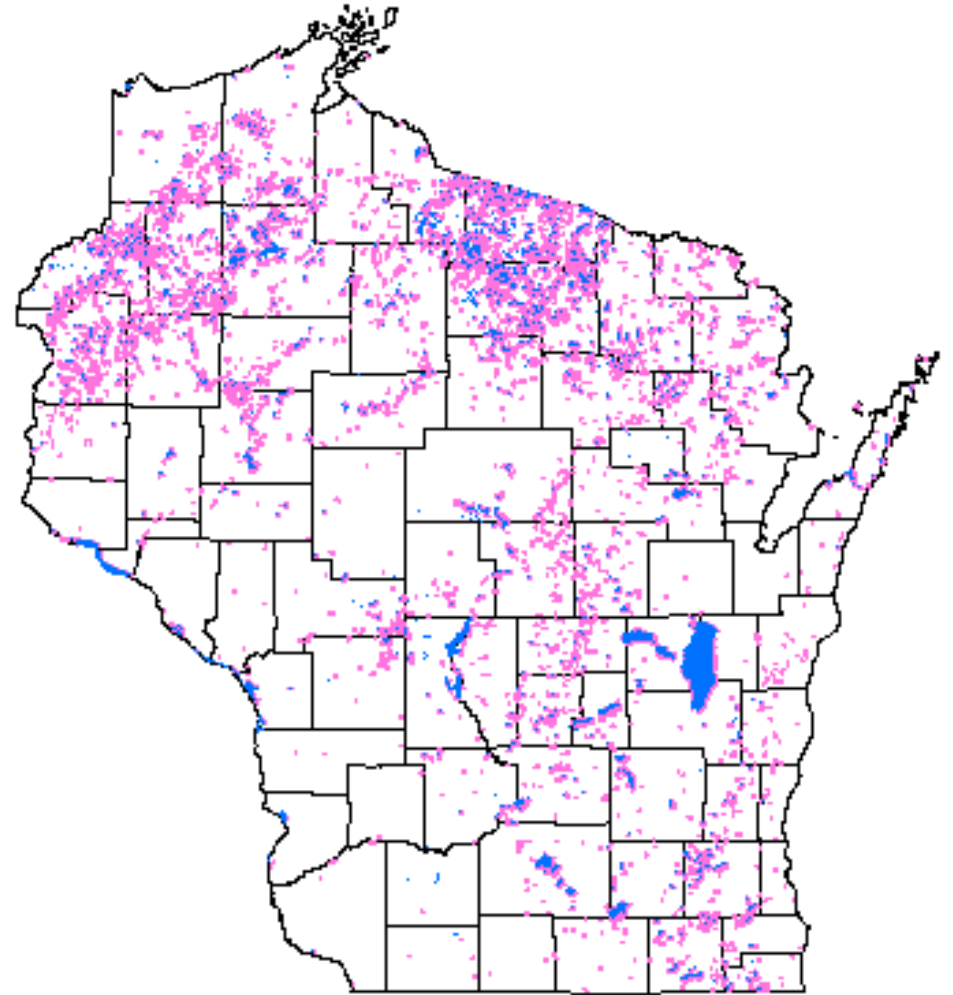
Private Parcels

~180,000 privately owned

~40 million ft. frontage

Land values

- **'Dirt' ~ \$23 billion**
- **Improvements ~ \$20 billion**
- **Total Market ~ \$44 billion**
- **Ave. per foot ~ \$1,300**



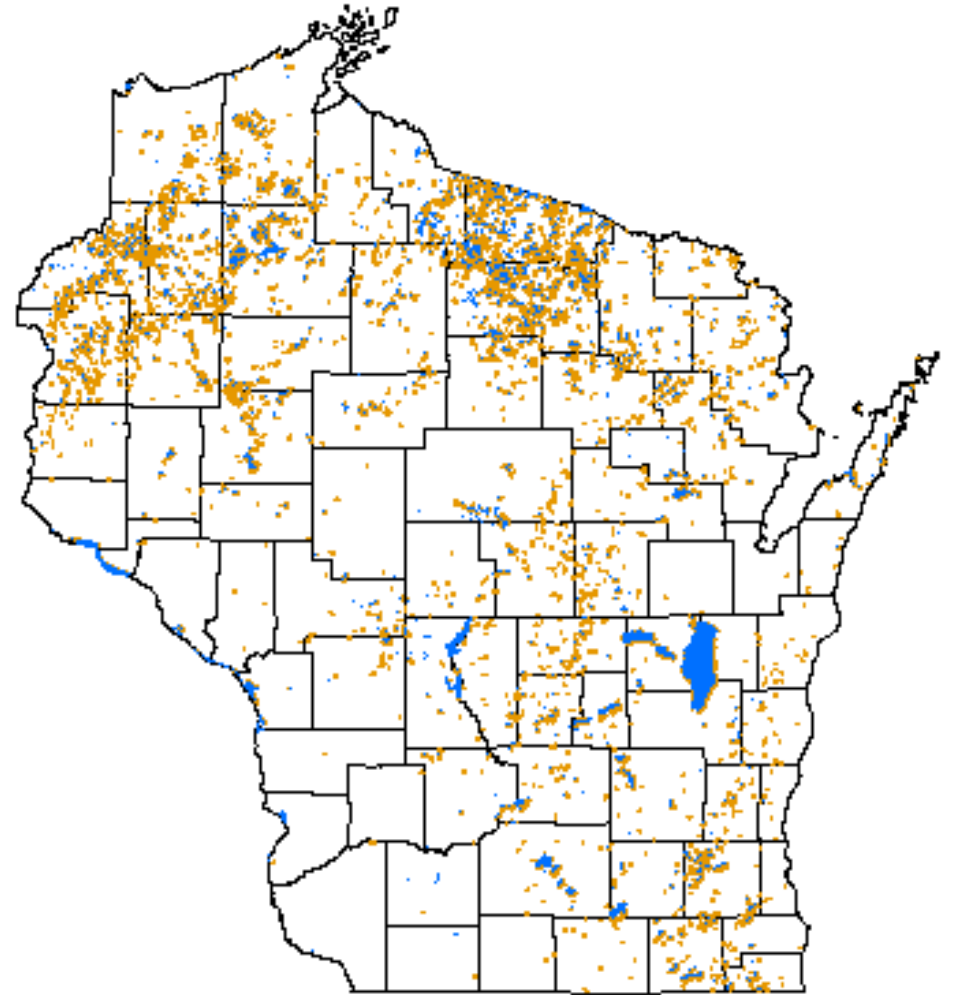
Developed Parcels

~140,000 developed

~30 million ft. frontage

Land values

- **'Dirt' ~ \$21 billion**
- **Improvements ~ \$21 billion**
- **Total Market ~ \$42 billion**
- **Ave. per foot ~ \$1,500**



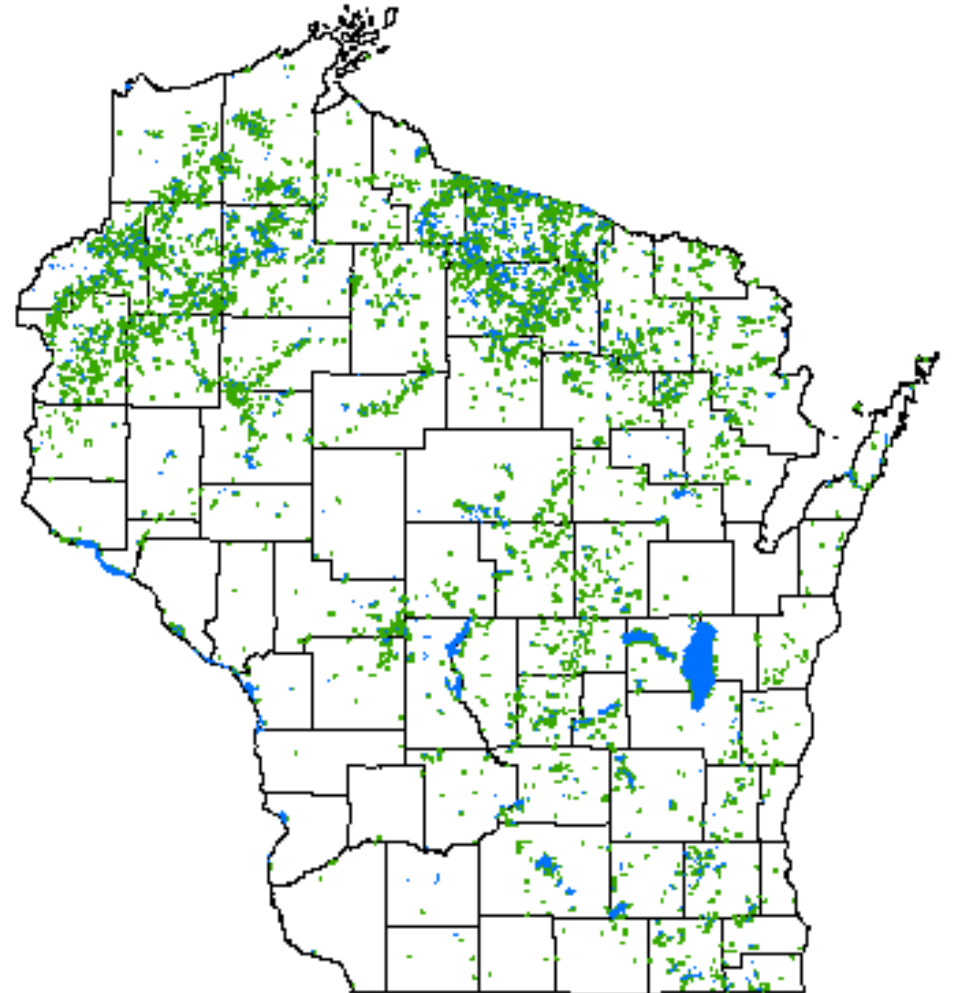
Undeveloped Parcels

~40,000 undeveloped

~10 million ft. frontage

Land values

- **'Dirt' ~ \$2 billion**
- **Improvements N/A**
- **Total Market ~ \$2 billion**
- **Ave. per foot ~ \$320**



BY COUNTY: Developed Shoreline

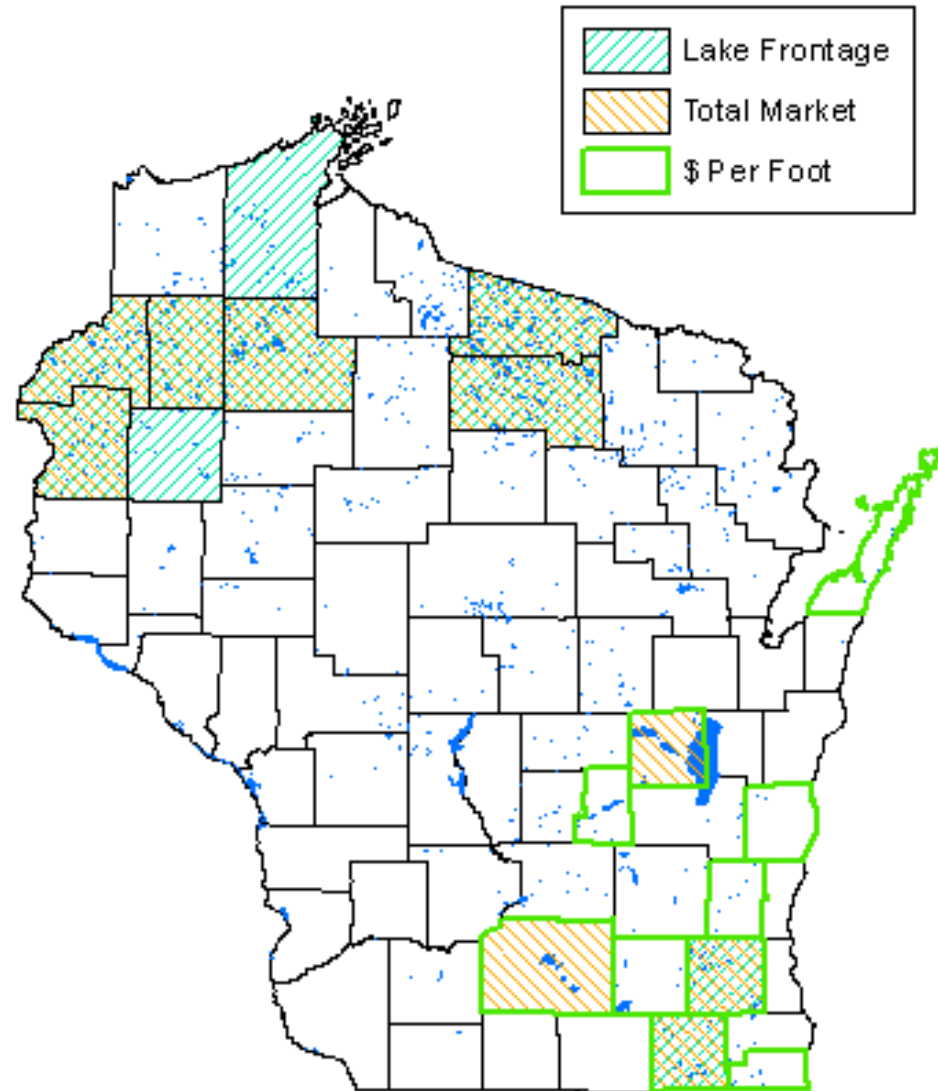
TOTAL LAKE FRONTAGE (FT.)	
ONEIDA	7,995,800
VILAS	4,413,433
SAWYER	1,319,745
BURNETT	1,266,151
WALWORTH	1,209,418
BAYFIELD	1,079,148
WASHBURN	1,060,404
POLK	1,040,155
BARRON	860,819
WAUKESHA	820,411
OCONTO	638,839
LINCOLN	602,957
DOUGLAS	591,369
IRON	539,480
PRICE	536,273
CHIPPEWA	521,492
MARINETTE	485,494
FOREST	463,423
LANGLADE	407,001
WAUPACA	393,975

TOTAL MARKET VALUE	
VILAS	\$ 4,420,797,500
WAUKESHA	\$ 4,262,254,900
WALWORTH	\$ 3,724,157,700
ONEIDA	\$ 3,659,601,500
DANE	\$ 1,858,200,900
SAWYER	\$ 1,812,443,700
POLK	\$ 1,462,109,400
BURNETT	\$ 1,272,186,600
WINNEBAGO	\$ 1,150,875,100
WASHBURN	\$ 1,093,957,900
BARRON	\$ 1,022,135,400
BAYFIELD	\$ 859,441,200
KENOSHA	\$ 810,903,580
WASHINGTON	\$ 804,482,700
OCONTO	\$ 802,494,900
GREEN LAKE	\$ 770,910,300
CHIPPEWA	\$ 752,164,200
WAUSHARA	\$ 703,733,200
WAUPACA	\$ 584,628,800
RACINE	\$ 565,217,600

SHORELINE % OF COUNTY MARKET	
IRON	93.6%
MENOMINEE	81.9%
VILAS	65.2%
BURNETT	57.2%
ONEIDA	56.8%
SAWYER	56.1%
FOREST	52.2%
WASHBURN	52.0%
FLORENCE	42.9%
GREEN LAKE	39.7%
POLK	38.9%
BAYFIELD	38.6%
WAUSHARA	35.0%
BARRON	31.2%
PRICE	30.7%
RUSK	28.8%
WALWORTH	27.2%
LINCOLN	26.2%
LANGLADE	26.1%
OCONTO	25.3%

MARKET \$ PER FT.	
WAUKESHA	\$ 5,195
DANE	\$ 5,148
KENOSHA	\$ 3,845
WASHINGTON	\$ 3,621
SHEBOYGAN	\$ 3,463
GREEN LAKE	\$ 3,107
WALWORTH	\$ 3,079
JEFFERSON	\$ 3,061
WINNEBAGO	\$ 3,008
DOOR	\$ 2,859
LA CROSSE	\$ 2,784
MILWAUKEE	\$ 2,558
RACINE	\$ 2,392
COLUMBIA	\$ 2,287
CALUMET	\$ 2,287
FOND DU LAC	\$ 2,141
MENOMINEE	\$ 2,107
WAUSHARA	\$ 1,802
JUNEAU	\$ 1,743
ADAMS	\$ 1,733

BY COUNTY



BY COUNTY: Undeveloped Shoreline

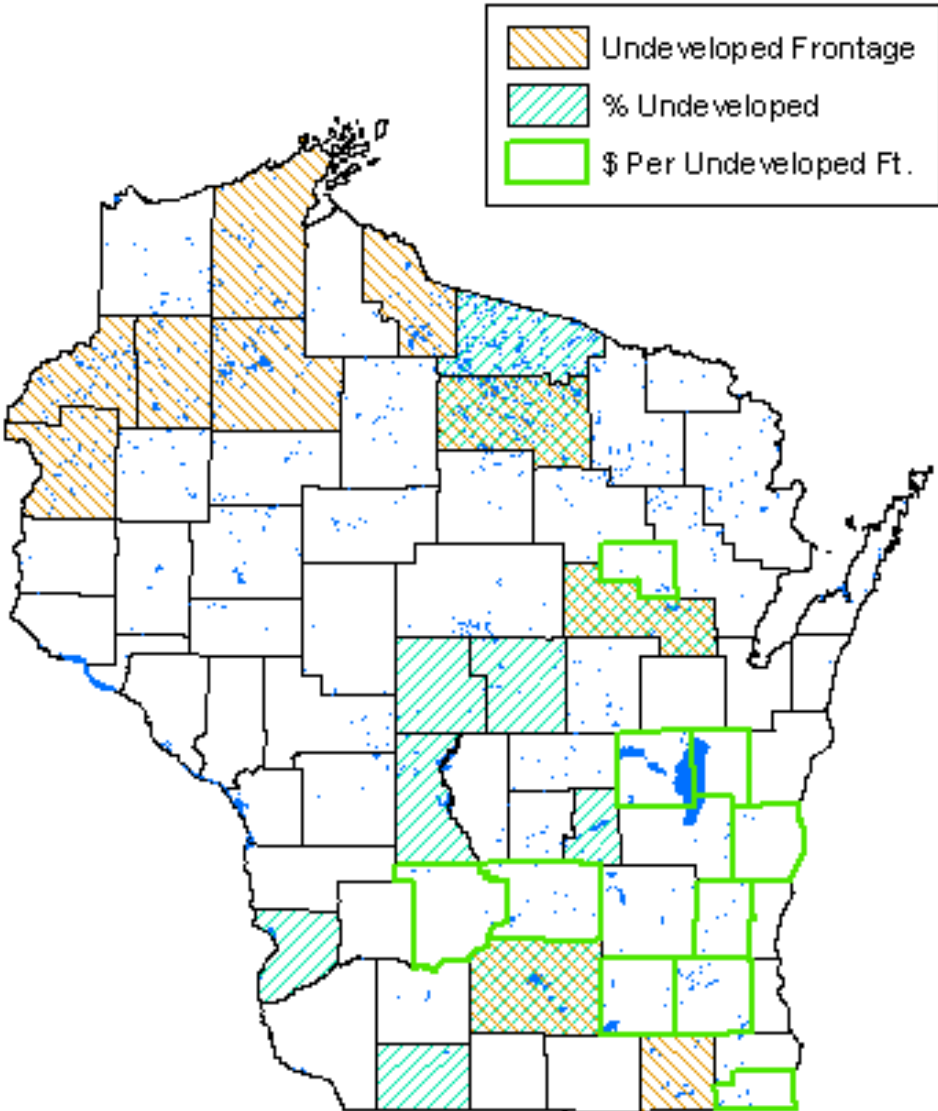
TOTAL LAKE FRONTAGE	
ONEIDA	5,635,288
VILAS	1,950,316
SAWYER	333,077
WASHBURN	271,385
BURNETT	265,697
DANE	247,012
WALWORTH	245,815
IRON	219,122
BAYFIELD	200,977
SHAWANO	188,070
POLK	183,095
PORTAGE	158,719
BARRON	152,122
PRICE	138,064
LINCOLN	130,798
DOUGLAS	129,781
FOREST	124,428
MARINETTE	118,786
OCONTO	105,765
GREEN LAKE	98,461

TOTAL LAND VALUE	
VILAS	\$ 349,931,200
ONEIDA	\$ 245,867,600
SAWYER	\$ 148,295,300
WALWORTH	\$ 100,166,000
WASHBURN	\$ 91,821,800
BURNETT	\$ 81,254,800
WAUKESHA	\$ 72,631,800
BAYFIELD	\$ 70,497,300
POLK	\$ 59,685,700
BARRON	\$ 53,328,600
FOREST	\$ 45,422,670
GREEN LAKE	\$ 45,220,000
IRON	\$ 43,725,800
WINNEBAGO	\$ 39,437,800
OCONTO	\$ 37,156,700
SAUK	\$ 35,406,100
DOUGLAS	\$ 30,572,600
CHIPPEWA	\$ 30,365,700
LINCOLN	\$ 28,172,800
KENOSHA	\$ 27,039,500

% UNDEVELOPED	
ONEIDA	65.6%
DANE	50.1%
CRAWFORD	46.4%
SHAWANO	46.3%
PORTAGE	45.0%
GREEN LAKE	36.7%
VILAS	36.4%
LAFAYETTE	31.9%
WOOD	30.8%
JUNEAU	30.7%
IRON	28.9%
KEWAUNEE	28.0%
JACKSON	23.1%
MONROE	21.6%
CLARK	21.2%
FOREST	21.2%
ADAMS	20.7%
DOOR	20.7%
PRICE	20.5%
WASHBURN	20.4%

LAND \$ PER FT.	
WAUKESHA	\$1,195
KENOSHA	\$1,005
WASHINGTON	\$965
SHEBOYGAN	\$889
MENOMINEE	\$728
COLUMBIA	\$610
CALUMET	\$597
JEFFERSON	\$586
SAUK	\$576
WINNEBAGO	\$576
DOOR	\$568
WOOD	\$566
PEPIN	\$531
JUNEAU	\$524
FOND DU LAC	\$463
GREEN LAKE	\$459
SAWYER	\$445
CLARK	\$420
WAUSHARA	\$418
WALWORTH	\$407

BY COUNTY



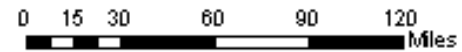
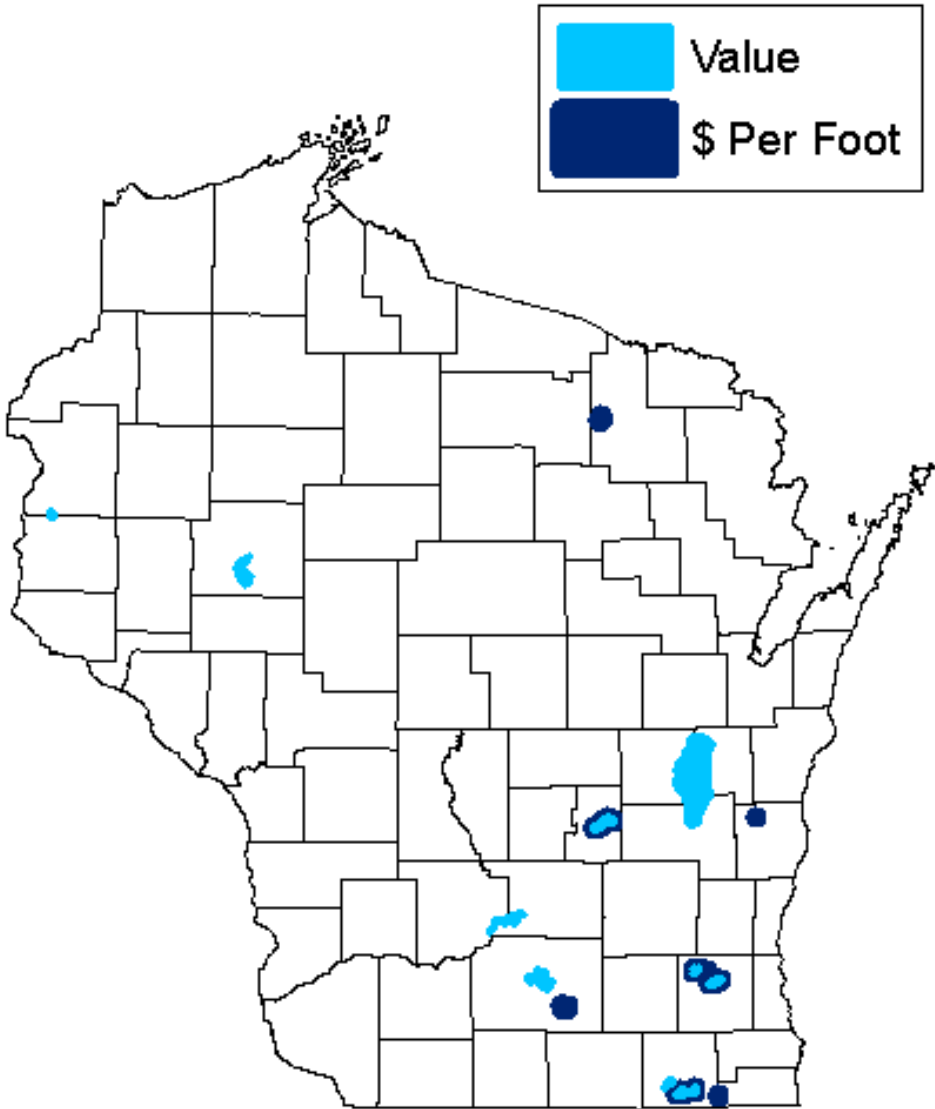
BY LAKE

LAND VALUE	
Lake Geneva	\$ 1,201,990,900
Green Lake	\$ 515,943,700
Lake Winnebago	\$ 471,467,300
Lake Mendota	\$ 423,228,700
Pewaukee Lake	\$ 365,561,200
Lake Wisconsin	\$ 326,977,900
Okauchee Lake	\$ 317,249,600
Delavan Lake	\$ 230,666,500
Cedar Lake	\$ 222,605,900
Lake Monona	\$ 203,602,400
Lake Beulah	\$ 202,093,600
Nagawicka Lake	\$ 193,023,400
Lac La Belle	\$ 185,384,400
Round Lake	\$ 185,302,100
Lac Courte Oreilles	\$ 182,683,800
Lake Wisconsin	\$ 169,732,400
Pine Lake	\$ 161,324,900
Lake Kegonsa	\$ 159,755,500
Long Lake	\$ 158,420,100
Powers Lake	\$ 144,112,500

MARKET VALUE	
Lake Geneva	\$ 2,045,168,300
Lake Winnebago	\$ 1,097,386,300
Lake Mendota	\$ 802,580,300
Green Lake	\$ 792,936,000
Pewaukee Lake	\$ 645,922,600
Lake Wisconsin	\$ 606,211,200
Okauchee Lake	\$ 588,367,100
Delavan Lake	\$ 469,549,100
Lake Monona	\$ 456,042,300
Lake Wisconsin	\$ 406,034,700
Cedar Lake	\$ 363,608,000
Nagawicka Lake	\$ 360,244,600
Lake Beulah	\$ 348,627,100
Lac La Belle	\$ 338,073,900
Minocqua Lake	\$ 301,299,600
Pine Lake	\$ 300,725,500
Lake Kegonsa	\$ 297,781,600
Round Lake	\$ 284,883,400
Lac Courte Oreilles	\$ 281,366,700
Long Lake	\$ 276,764,900

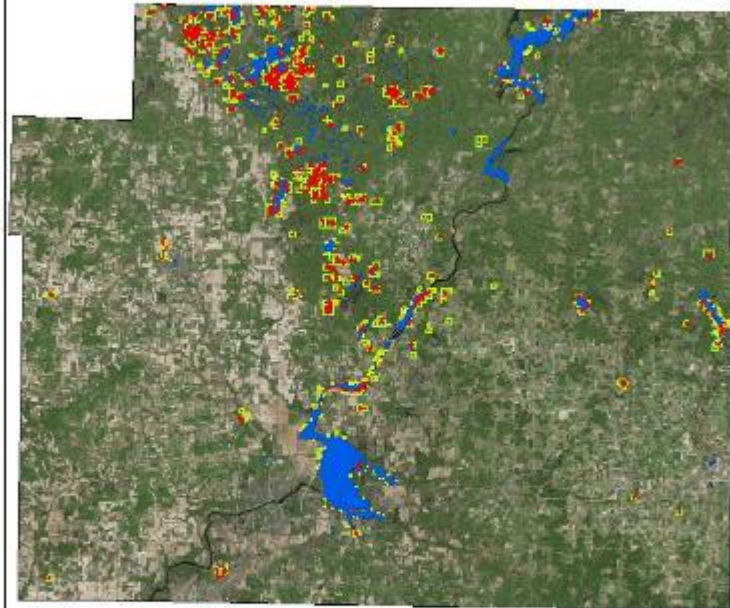
MARKET \$ PER FOOT	
Beaver Lake	\$ 12,180
Lake Geneva	\$ 10,933
Powers Lake	\$ 8,736
Pine Lake	\$ 8,416
Tierney Lake	\$ 8,191
Elkhart Lake	\$ 8,086
Green Lake	\$ 7,944
Lake Kegonsa	\$ 7,883
Okauchee Lake	\$ 7,786
Pewaukee Lake	\$ 7,785
Lower Nashotah Lake	\$ 7,751
Cedar Lake	\$ 7,532
Round Lake	\$ 7,407
Nessling Lake	\$ 7,115
Dake Lake	\$ 6,938
Silver Lake	\$ 6,879
Upper Oconomowoc Lake	\$ 6,683
Middle Lake	\$ 6,556
Crystal Lake	\$ 6,549
Rock Lake	\$ 6,465

BY LAKE



WHAT'S NEXT?

Chippewa County:
Lakeshore Conservation Potential

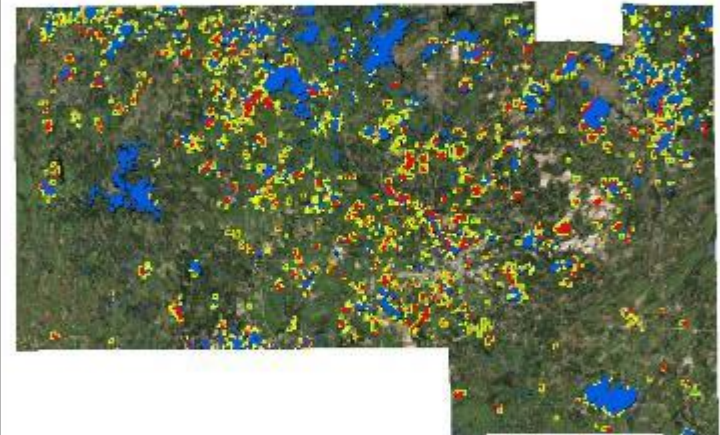


Lakeshore Frontage

- < 300 ft.
- 300 - 1,000 ft.
- > 1,000 ft.
- Parcels



Oneida County:
Lakeshore Conservation Potential

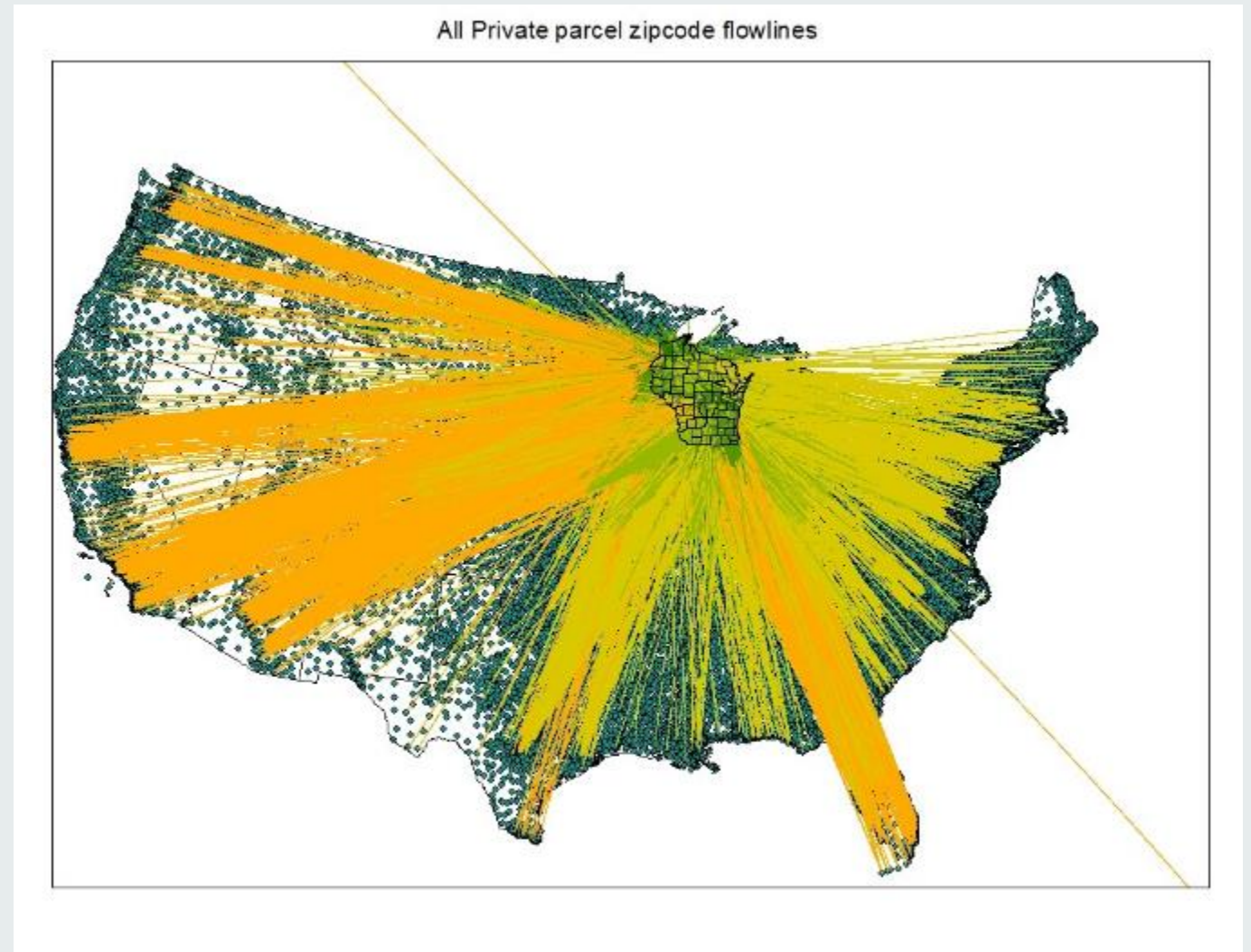
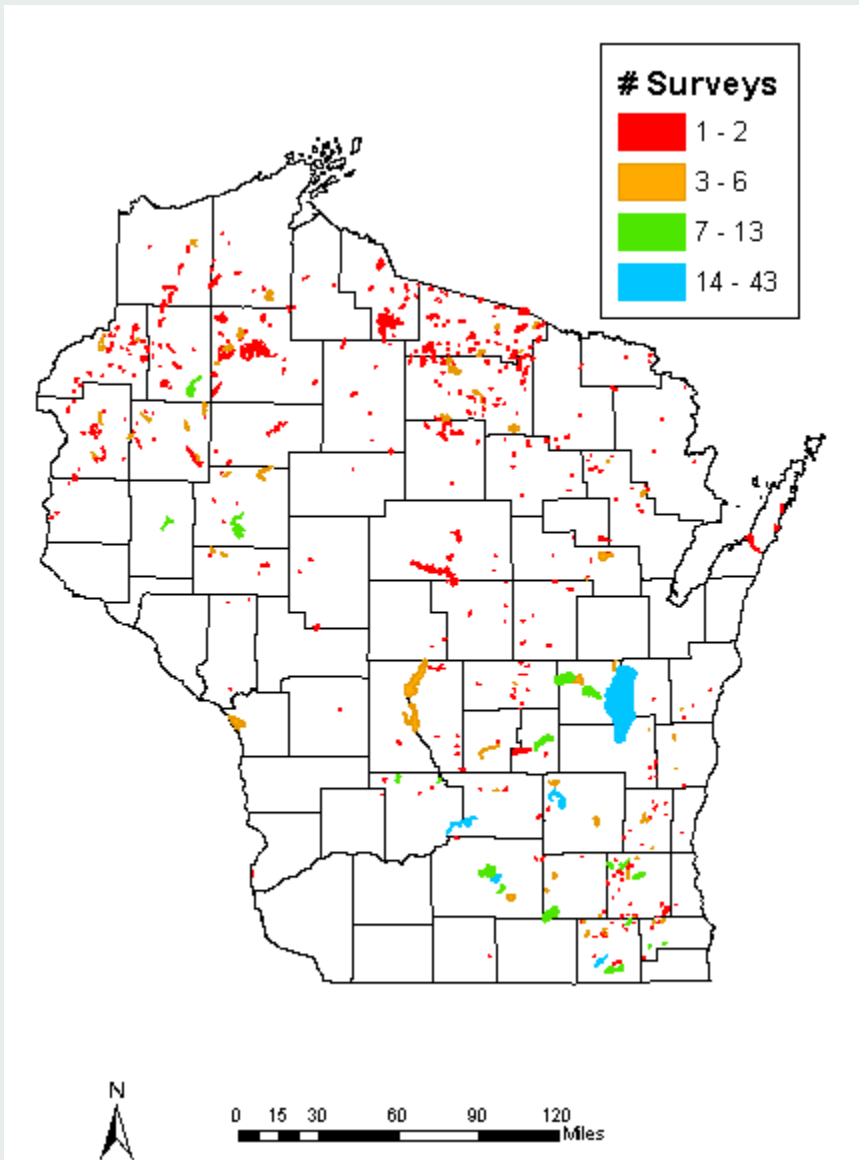


Lakeshore Frontage

- < 300 ft.
- 300 - 1,000 ft.
- > 1,000 ft.
- Parcels



WHAT'S NEXT?



WHAT'S NEXT?

Lake / Environmental Quality

CONCLUSIONS

Many ways to assess our lakes

Interesting, important, and sometimes divergent patterns

Data can help us strategize, plan, and make our case

Lots more work to do!



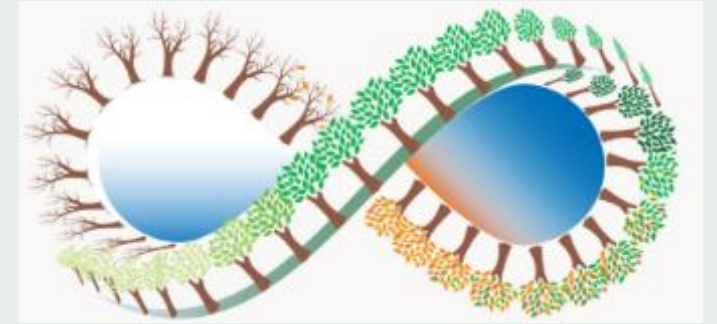
QUESTIONS?

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