

Oneida County High Quality Waters Protection Project  
Lakes Classification Advisory Group Meeting I Notes  
November 14, 2023

*Purpose: Lakes classification considers a lake's capacity to support development, or its vulnerability to increased development, leading to more appropriate usage guidelines and management practices. Special Project Coordinator notes are in red*

ATTENDEES:

Michele Sadauskas- Oneida County Conservationist  
JoAnne Lund- OCLW Special Projects Coordinator  
Baerbel Ehrig- OCLW Lakeshore Restoration Specialist/Pollinator Coordinator  
Stephanie Boismenu- OCLW Aquatic Invasive Species Coordinator/Conservation Technician  
Chris Yamaya- Mid Lake Management District  
Joe Pilarski- Mid Lake Management District  
Dan Butkus- WI Lakes Association  
Debbie Krumpack- Hasbrook Lake Association  
Mike Engleson- WI Lakes Association  
Krystal Westphal- Let's Minocqua  
Beckie Gaskill- Freelance outdoor and environmental writer  
Tracy Beckman- Lumberjack RC&D  
Celeste Hockings- Natural Resource Director, LDF Band of Lake Superior Chippewa  
Pam Toshner- WDNR Water Quality Planner  
Scott Van Egeren- WDNR Lake Biologist  
Robb Jensen- Conservation & UW-Extension Committee/County Board  
Jim Winkler- Conservation & UW- Extension Committee/County Board

INTRODUCTION TO LAKES CLASSIFICATION

Project Goals:

- Assign lakes to management categories
- Create a list of protection activities
- Revise Oneida County 5-year Land and Water Resource Management work plan

Focus for today: Consider features of each lake (i.e. surface area, depth, shape, public access, current condition/water quality factors)

*Which features best assess vulnerability of a lake?*

The Oneida County *tentative* plan is designed after the Burnett County plan (as outlined in the Burnett County Inventory and Trends Report April 2010 –Volume 1)

Tentative features (intended as a starting point):

1. Size (surface area)
2. Depth (maximum)
3. Lake Type (seepage, spring, or drainage lake/impoundment)
4. Shoreline Development Factor *OR* Shoreline Density (describe lake shape/potential for development)
5. Watershed rank where lake is located (based on DNR assessment)
6. Number of Boat Ramps (a measure of recreational pressure)
7. Inclusion on DNR Healthy Lakes list
8. Inclusion as Outstanding Resource Water/Exceptional Resource Water (DNR water quality assessment)

## DISCUSSION

1. Lake size: Oneida County lakes range=0.03-4217 acres

Tentative ranges

<50 acres

50-249 acres

>250 acres

*Discussion points*

*How many lakes over 1500 acres? (n=3)*

*Slow no wake and unmotorized lakes <50 acres*

*Suggestion to split larger lakes into 2 categories*

*Include named lakes only in classification system*

*Tournament pressure as a subset of recreational pressure, larger lakes have more (50 acres/boat)*

*Will add another range category*

*< 50 acres (n=888)*

*50-249 acres (n=139)*

*250-1000 acres (n=55)*

*>1000 acres (n=10)*

2. Maximum depth: Oneida County lakes range=1-95 feet

Tentative ranges

<20 feet (n=788)

20-39 feet (n=212)

>40 feet (n=44)

*Discussion points*

*Mean depth data is not available, can it be calculated? How representative would it be?*

*(Stephanie is working on mean depth calculations)*

*DNR considers lake type based on size and shape, deep/shallow, whether lake stratifies,*

*Should stratification and/or lake turnover be added as a feature?*

*Does stratification affect vulnerability to outside stressors?*

*How to consider the natural variations in lake depth?*

*Should max depth AND mean depth be considered?*

### 3. Lake type/flush potential:

Seepage

Drainage/Impoundment

Spring

#### *Discussion Points*

*Suggestion to use lake stratification (see discussion above)*

*DNR separates drainage from impoundment, eliminates spring as a category.*

*Among drainage lakes, uses size of watershed (lowland/headwater):*

*Headwater has  $\geq 1$  outlet,  $\leq 4$  square miles, land draining to lake is not large*

*Lowland- can have inlet and outlet, large watershed upstream, large land area draining into lake*

*Hydrology combined with shallow/deep*

*Will need this data from the DNR*

*How do these reflect vulnerability?*

*How to treat impoundments and seepage lakes?*

### 4. Lake shape: discussed using Shoreline Development Factor (SDF) or Shoreline Density

SDF=shoreline length/circumference of a circle with same surface area as lake

Shoreline density=shoreline length/lake surface area

#### *Discussion Points*

*Leaning toward shoreline density as it is simpler and less subject to bias*

*Do we need to add development density?*

### 5. Watershed Eco-rank based on DNR Healthy Watersheds High Quality Waters (HWHQW)

Program assessment

Suggested ranges: as plotted by Excel

1-191

192-381

382-571

572-761

#### *Discussion Points*

*How many lakes fall into each category?*

*This data will be compiled*

6. Number of boat ramps (recreational pressure). In Oneida County there are 207 ramps  
Count number of “developed” boat ramps on each lake, not to include carry-in launches

*Discussion Points*

*How to define “developed”? Does this include sand, gravel, cement? Type and size of watercraft able to launch will vary depending on the ramp itself*

*Data is available on number of boats launched and from whence they came. Should this be included?*

*Is this data available for all lakes with a boat launch?*

*Boat ramps do not consider boats of residents*

*Traffic on each ramp is pertinent*

*Consider chain of lakes with no boat launch on one lake but present on a connected lake*

*Agreement that lakes without a ramp in this case are vulnerable*

*Suggestion that CBCW program is not the focus here, details unnecessarily complicated, perhaps can cover this topic during protection activity phase of the project*

*Need to compile ramp data and chain of lakes data*

7. Inclusion on DNR Healthy Lakes list

Waterbody must satisfy  $\geq 2$  of 3 criteria:

1. Unique/rural resource
2. Meet prescribed water quality standards
3. Good biotic integrity

*Discussion Points*

*Drawback: lack of monitoring data may lead to exclusion from list*

*Inclusion of Tribal Water Quality Assessments (ie Crescent Lake), also on DNR High Quality Waters list*

*Discussion on lakes not assessed led to suggestion to place lakes in 3 groups:*

*Assessed- on list*

*Assessed- not on list*

*Not Assessed*

*Send Healthy Lakes List to group*

8. Inclusion as an Outstanding Resource Water (ORW) or Exceptional Resource Water (ERW)

*Discussion Points*

*ORW are included on the Healthy Lakes list*

*Three lakes in Oneida County are ORW but not on the Healthy Lakes list: Big Carr Lake, Upper Post Lake, and Willow Flowage*

*ERW includes mainly streams*

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#### Other Discussion:

- A. Water level fluctuations as a feature- impacts recreation, AIS, native plants  
Data is only available for a few lakes  
Lake Type feature captures changing water levels
- B. Plant community assessment- A lake could have plant species of concern, rare or endangered  
Information is not available for most lakes  
Sensitive species are considered in the High Quality Waters assessment
- C. Aquatic Invasive Species (AIS) have a major impact on waterbodies  
Dynamic, changing, can't be predicted  
Have been captured in other features especially Healthy Lakes list  
Should lakes without AIS be considered more vulnerable?  
Suggestion to score lakes having AIS as containment lakes (less vulnerable) vs lakes without AIS as shielding lakes (more vulnerable)  
Does number of boat ramps cover this? More ramps>>more shielding needed?  
Consider using Oneida County lakes in WI Top 300 AIS Prevention Lakes list as a feature (see link below)  
AIS can be covered in the Protection Activities phase of this project  
Keep in mind the intended users of the classification system: the public, lakes groups, other counties

CALL FOR PUBLIC COMMENT: no response

#### CONCLUSION

Next meeting: we will send a Doodle poll to schedule the next meeting

Meeting will be early in 2024

The Advisory Group will receive minutes from this meeting and the DNR Healthy Lakes list for Oneida County

Notes from Chat, Meeting 1:

-Pamela Toshner, Wisconsin DNR: <https://www3.uwsp.edu/cnr-ap/weal/Documents/G3582.pdf>  
Recollected the 20 feet cutoff and here is the source.

-Celeste Hockings \_LDF Tribe NR: <https://www.epa.gov/sites/default/files/2015-05/documents/lacduflambeau-2015.pdf>

-Pamela Toshner, Wisconsin DNR: Page 128 (top 300 ais prevention lakes)  
<https://dnr.wisconsin.gov/sites/default/files/topic/Aid/grants/surfacewater/CF0002.pdf>

-Scott Van Egeren, Wisconsin DNR: Here are the lakes that are ORW, but not on the Healthy Waters list: Big Carr Lake, Upper Post Lake, Willow Flowage