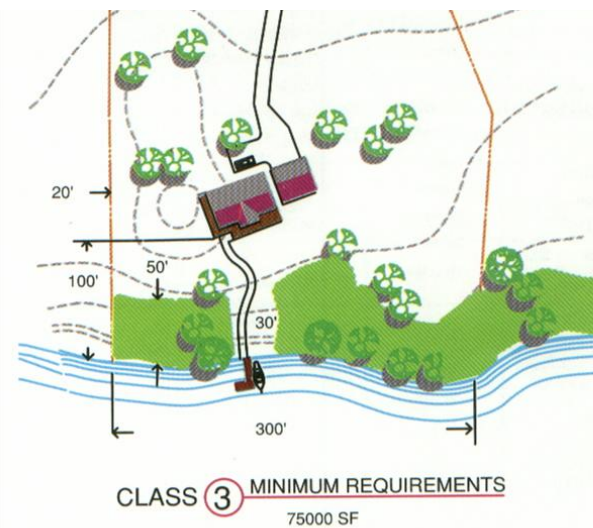
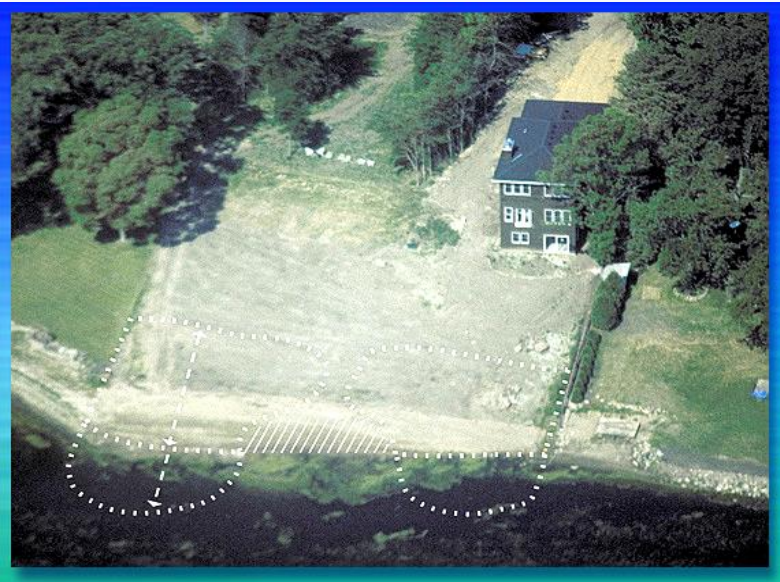
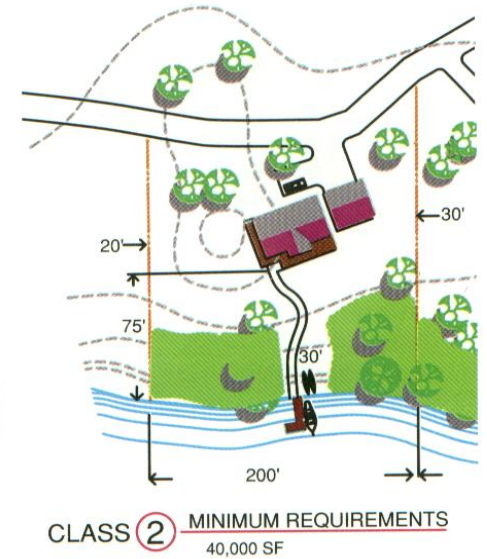
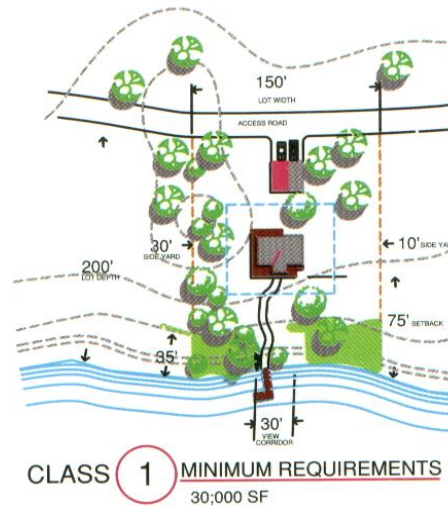


County Lake Classification: a Tool to Guide Shoreland Management



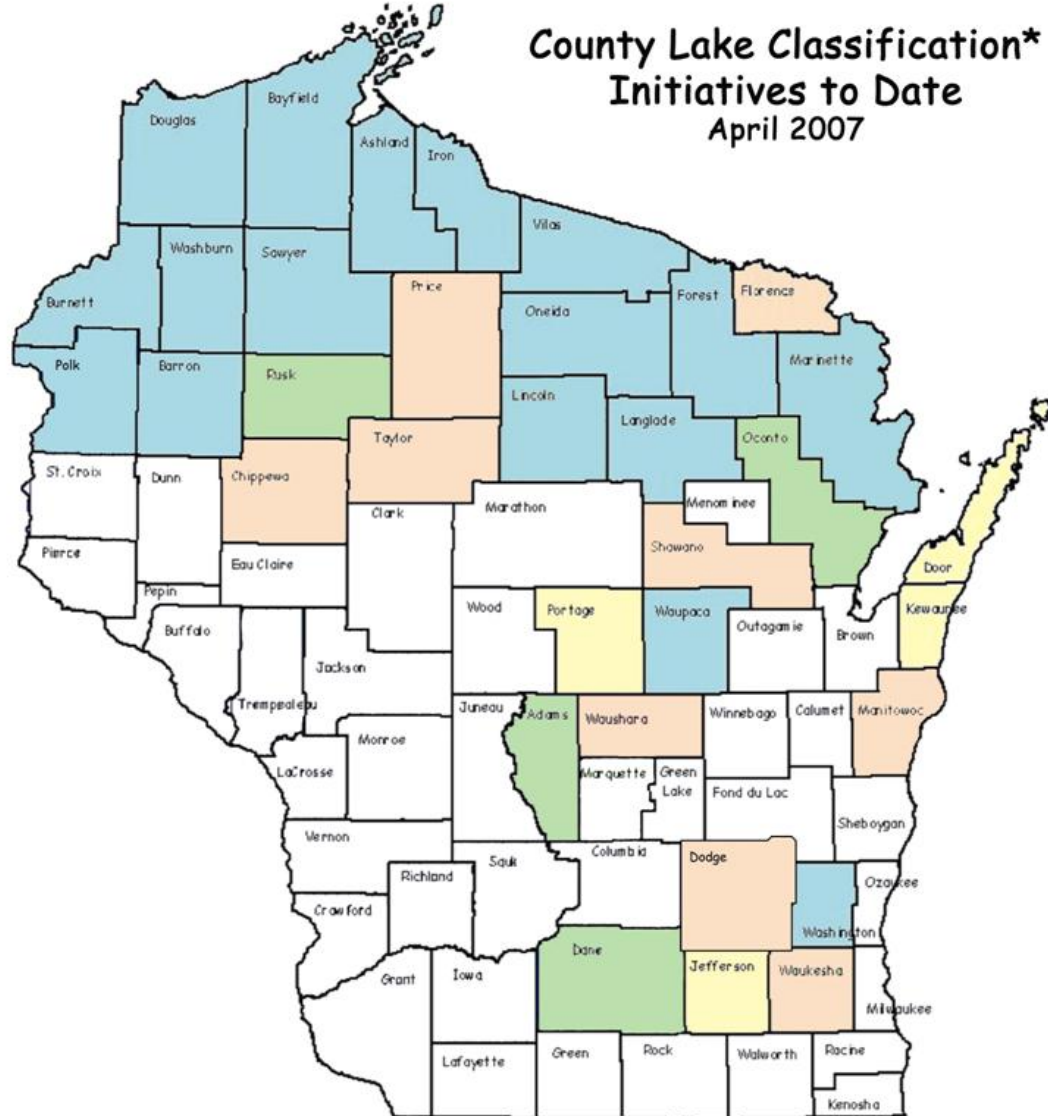
County Lake Classification

Each lake and river is unique.

Classifying waters allows development to be tailored to the needs of specific groups of waters.



County Lake Classification* Initiatives to Date April 2007



- Adopted a classification system & significant shoreland ordinance upgrades by water class
- Working on a classification project
- Gathered county lake data to guide countywide and/or local lake protection efforts
- Only generated a classification system

**The Lake Classification grant program and formal state enabling for counties to use the lake classification tool were initiated by statutory changes (in Ch. 281.69, Wis. Stats.) passed by the Legislature and Governor in 1997 and legislative changes (in Ch. ND 401, Wisconsin Code) passed by the Legislature and Governor in 1999.*

Why manage waters using a classification approach?

- Some lakes and rivers are better suited for some uses than others.
- Some waters are more vulnerable than others to the impacts of overuse.
- Classification makes uses more compatible with lake and river types.
- Predictability: provides a diversity of recreational use and property ownership experiences.
- Helps remedy frustration and disappointment over conflicting water uses.

Classification

- **A local process to group waters by comparing physical features:**
 - Lake size, depth, flushing rate, water sources, etc.
 - Watershed size, soil types, land cover types
 - Development density, suitability for development
- **Ultimate uses:**
 - To gauge sensitivity to development, other impacts
 - To guide application of various management tools



County Lake Classification Process

- Steps involved
- A few examples



Lake Classification Steps

1. Select objective for classification system.

Examples:

- Manage shoreland development
- Guide countywide lake planning initiatives
- Address watershed management issues
- Manage recreational uses
- Coordinate county level management strategies.

2. Select management tools suited to objective


- Comprehensive land use planning
- Educational initiatives
- Financial incentives
 - Tax credits
 - PDRs
 - Cost-share programs
- Ordinances:
 - Shoreland zoning regulations
 - Land division
 - Stormwater & erosion control
 - Boating regulations

3. Select Classification Criteria


- Select criteria appropriate for the chosen objective and management tools.
- Consider:
 - Number & variety of water resources
 - Data availability
 - Intended use
 - User friendly methods

Sensitivity criteria for lakes

Predict the extent to which future pollutant additions will impact a lake's water quality



- Surface area
- Average depth
- Shoreline irregularity
- Flushing rate
- Stratification factor
- Lake type
- Watershed size
- ORW \ ERW designation



Sensitivity criteria for rivers:


Sinuosity

Stream order

Channel cross sectional area

Trout stream class designation (indicator species)

ORW \ ERW designations



Existing development \ use criteria:

Shoreland development

Number of structures within the shoreland zone

Recreational use

Watercraft
moorings at
private & public
facilities

Boat counts
during summer
holiday weekends





Lake Classification Steps:

4. Designate management classes.
5. Determine vision for each class of waters
6. Apply management strategies.

Natural Waters Vision

Protection Strategy

Vision: Protect water quality, habitat, aesthetics and tranquility of the natural waters class by maintaining low-density development. New shoreland development standards: large lot sizes, structure setbacks, and shoreland buffers; no keyhole development.



Buildings set back & visually screened

Shoreland & shallows habitat protected



Semi-Developed Waters Vision Protection & Restoration Strategy

Vision: Protect the remaining natural shoreline area and restore the developed shoreline by establishing: zoning standards for moderate density, single family and residential development, run-off controls & incentives for lake-friendly development.

Vegetation protection area better defined in development standards.



Educational initiatives promote shoreland buffer protection\restoration

Developed Waters Vision

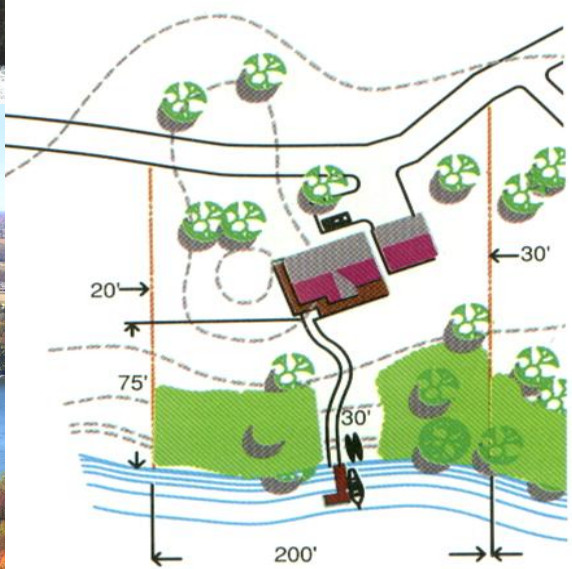
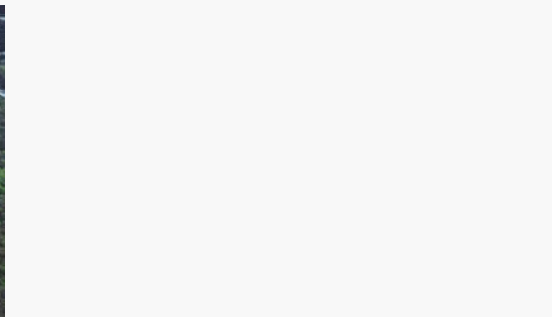
Restoration Strategy

Vision: Restore the functional aspects of shoreline buffers to provide habitat, aesthetics, and water quality protection via education, incentives, and ordinances. Designate sensitive areas throughout the watershed for protection from deteriorating factors.

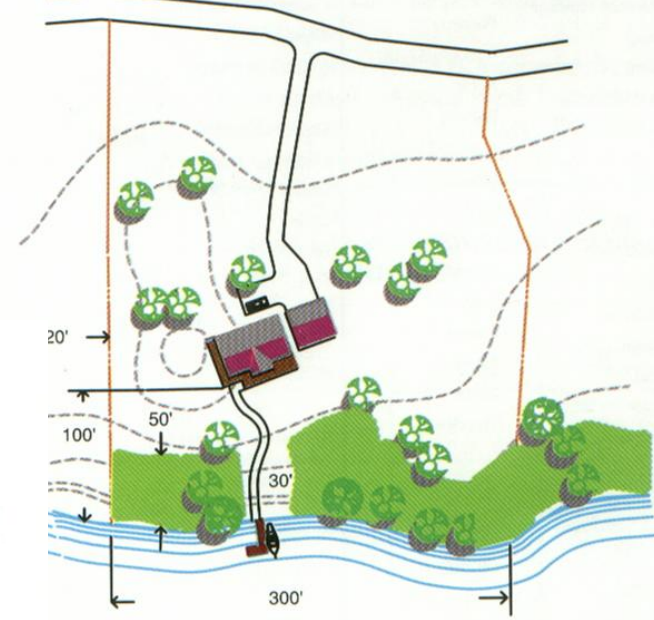




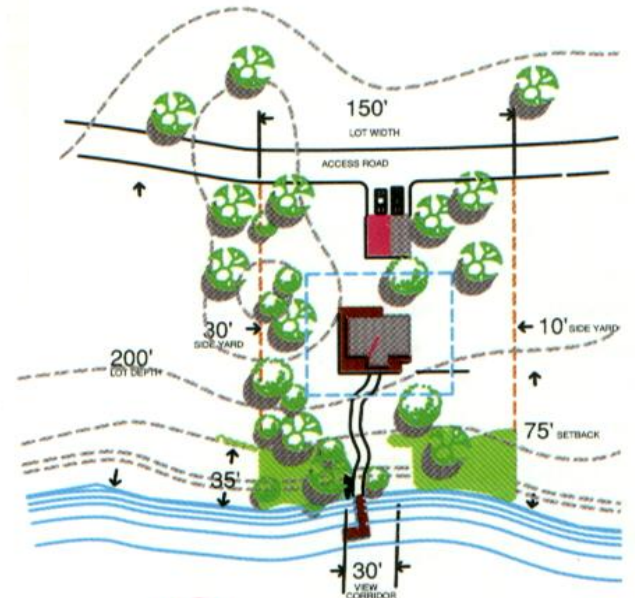
UW-Extension Lakes



CLASS 2 MINIMUM REQUIREMENTS
40,000 SF



CLASS 3 MINIMUM REQUIREMENTS
75,000 SF



CLASS 1 MINIMUM REQUIREMENTS
30,000 SF

Lake Classification Grants

- Just for counties!
- Program to classify lakes and implement management activities best suited to each category.
 - Rivers can be classified too.
 - Data collection leading to countywide lake management approaches also eligible.
- Up to \$50,000 per grant
 - Can apply for sequential grants to stage out projects.

Lake Classification Grants

Eligible Activities

- Classification of waters
 - Collecting data, applying criteria, ranking, and mapping lakes
- Management tools
 - Develop management strategies (eg: ordinance development)
- Implementation
 - Education and training
 - Enforcement, monitoring, technical support, refinements

Lake Classification project stages

Phase I. Classification of Waters:

1. Objective setting for the classification system.
 - Manage shoreland development
 - Guide countywide lake planning
 - Manage watershed land uses
 - Coordinate AIS prevention and control efforts.
2. Preliminary investigation of appropriate management tools.

Lake Classification Grants project stages

Phase I. Classification of Waters:

3. Investigation and selection of appropriate classification criteria.
4. Data collection and analysis to place waters in classes.
 - Project partners:
 - County Zoning Dept.
 - LWCD
 - Regional Planning Commission
 - RC&D

Lake Classification Grants project stages

Phase II. Management tools:

1. Public information & educational programs about the classification project.
 - Citizens advisory committee: stakeholders to help guide project.
2. Objective setting for each lake class.
 - Vision for each class
 - CAC helps ground-truth proposals.

Lake Classification Grants project stages

Phase II. Management tools:

3. Developing ordinances or other management strategies.
 - Cannot be lower than existing state minimum standards designed to protect lakes.
4. Adoption of policies to manage each class.

Lake Classification Grants project stages

Phase III. Implementation:

A county must have adopted a lake classification system to be eligible for an implementation grant.

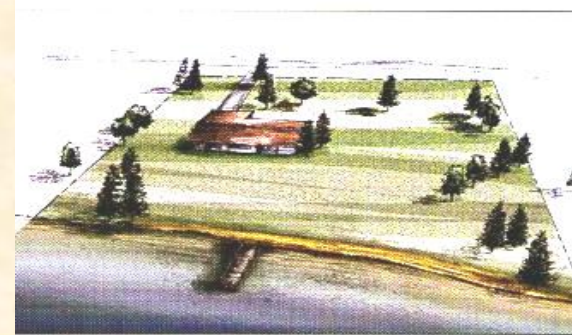
1. Tracking & evaluating enforcement & compliance with ordinances.
2. Developing procedures to streamline activities
 - Eg: GIS, parcel mapping, web sites, etc.

Lake Classification Grants project stages

Phase III. Implementation:

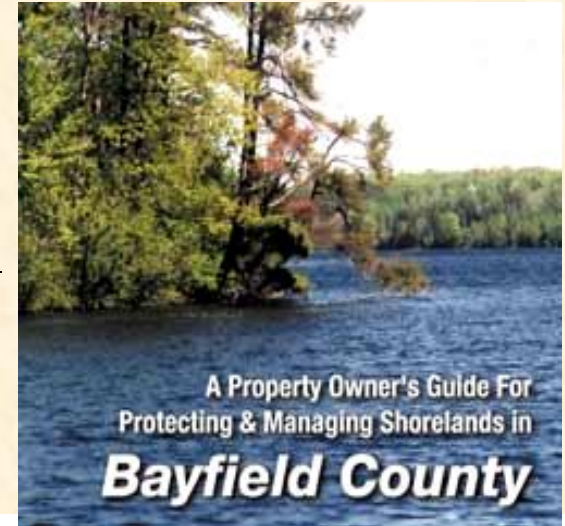
3. Training sessions and educational materials.

- Workshops for contractors, developers, property owners.
- Printed materials: guidebooks, brochures, fact sheets.
- Web sites.



Shoreland Development Guides

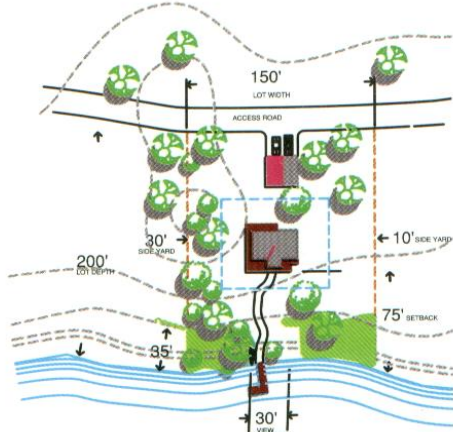
- Summarize shoreland zoning rules and their benefits in a clear, user-friendly way.
- Development standards described for each lake class
 - Illustrated with graphics, diagrams, photos.
- Who to call for permits and technical assistance.
 - Shoreland restoration
 - Mitigation
 - Erosion control



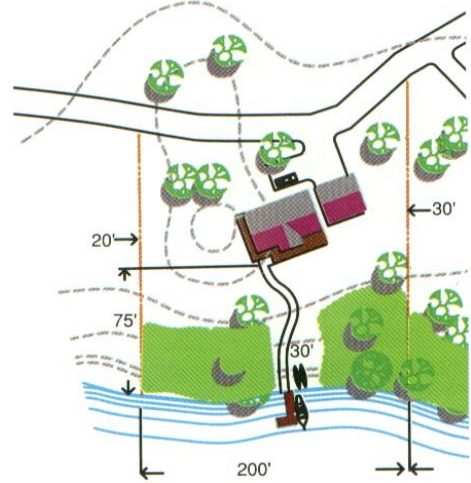
Washington County, Wisconsin Shoreland Property Owner Handbook



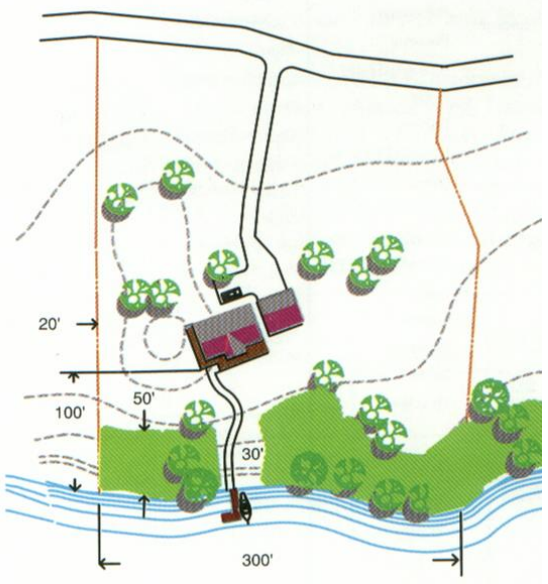
Preserving the quality of our lakes and waterways
A companion guide for Chapter 23
Washington County Shoreland, Wetland, and Floodplain Ordinance



CLASS 1 MINIMUM REQUIREMENTS
30,000 SF



CLASS 2 MINIMUM REQUIREMENTS
40,000 SF

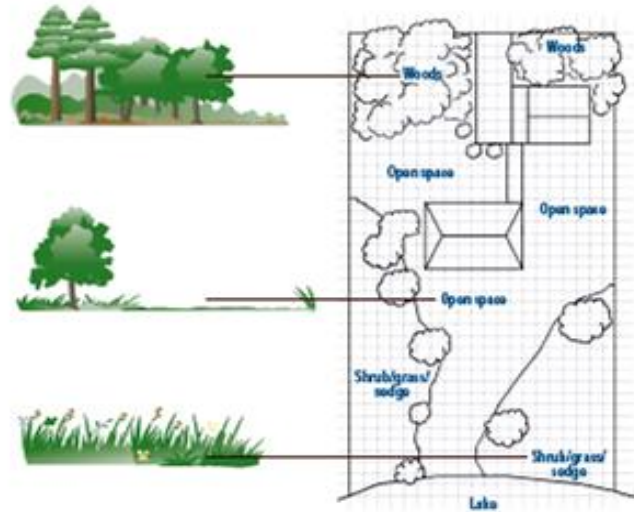


CLASS 3 MINIMUM REQUIREMENTS
75,000 SF

Land Use Index

This index is to be used in conjunction with the Land Use Runoff Rating (LURR). The LURR is a mitigation procedure for proposed development on parcels that do not conform to the Polk County Shoreland Protection Zoning Ordinance. The key to the LURR is to identify all land uses on a given property.

The pictures and descriptions that follow will help landowners, contractors, and county zoning officials complete this task for any shoreland property in Polk County. See pages 32-33 for photos that identify land use cover types in good, fair, and poor condition.



LAND USE



Woods

Unmowed stands that consist of one or more tree species with an understory of shrubs and immature trees. Ground cover consists primarily of native perennials and/or forest litter. The ratio of shrubs to mature trees is 1.5:1 or greater. Typical species composition and structure are those described by Curtis in *The Vegetation of Wisconsin* for both northern and southern forests.



Open space

Lawns, parks, golf courses, cemeteries, etc. Ground cover composed primarily of legumes and other typical, shallow-rooting lawn grasses and forbs. May include shrubs and/or trees.



Shrub/grass/sedge community

Dominated by a mixture of deep-rooting, native shrubs, grasses, sedges, and perennial forbs. Trees may be present but are not dominant.

Lake Classification Grants project stages

Phase III. Implementation:

4. Shoreland restoration technical assistance or other supporting programs stemming from county classification project.
5. Revisions, amendments to the classification system or associated ordinances.
 - Mapping, GIS applications, databases, ordinance refinements, etc.

Classification in Summary:

- Locally led process
 - citizen & stakeholder involvement is vital
 - directed by science and agreed-upon goals.
- Looks at issues common to all county water resources
 - Results in tailored management approaches to meet the vision for each class
 - Coordinated lake planning and county-level management strategies.

Grant Application Resources

- DNR Regional Lakes Coordinators, Grants Specialists
 - Talk with them early on about project ideas.
 - Help you select the best grant category to match project goals.
 - Assist you with scoping and staging out projects.
- Talk with other counties who've done lake projects.
- Guidelines & Applications on the Web:

www.dnr.state.wi.us/org/caer/cfa/grants/

<http://dnr.wi.gov/lakes>

