Using Aerators and Aeration Systems



Knowing the rules can help keep people safe and help protect structures from ice damage

Knowing your options

Heaving ice and ice buildup can dislocate pilings, footings and other waterway structures during the winter months. When boating season is over, many landowners avoid such potential impacts by choosing to remove piers, docks and other structures from the water prior to ice up.

Aerators can be a helpful tool to lengthen the structural life of permanent waterway structures. Proper installation, size of waterbody, ice force, and other factors can influence the overall success of this practice. Many landowners choose to attach an aerator or circulator to a pier to maintain open water in the vicinity. As a general rule of thumb, installing these devices to existing authorized structures such as piers does not require permitting; however, additional DNR permitting may be required if you are placing a free-standing structure on the lake bed or actions result in lake bed or river bottom disturbance. Visit https://dnr.wisconsin.gov, keyword "avoid ice damage" for more information.

State Regulations:

DNR permitting is not required provided:

1. The aeration system is attached to a legal structure (pier, retaining wall, etc.). This can be a previously permitted structure or a structure that is exempt from permitting.
2. The mixing action from the aerator does not disturb the lake bottom. Pointing the aerator flow perpendicular to the lakbed or towards the water surface will help ensure that the lake bottom is not significantly disturbed.

If these standards cannot be met, please visit dnr.wi.gov, keyword, “water permit”

Other Regulations:

In order to protect public safety, ice holes formed from an aerator must be marked with one of the following methods. Please contact the local sheriff’s department to report a violation of this requirement (s. 167.26, Wis. Stats.):

- Erect and maintain a barricade around the holes consisting of uprights that are spaced at adequate intervals to maintain the barricade and that are connected by a continuous rope, cord, or similar material placed at least 2.5 feet and not more than 4.5 feet off the surface. The connecting rope, cord, or similar material shall have reflectorized, fluorescent, or lighted ribbon or tape or other reflectorized devices attached to it, so as to be highly visible, and shall be of sufficient strength to allow for the retrieval of the barricade following melting of the ice.
- Erect and maintain a visual warning mechanism that is highly visible and that is reflectorized, fluorescent, or lighted.

Other Best Practices:

Please be aware you may be liable for any accidents that occur due to improperly marked ice holes. Disputes between neighboring landowners may be handled through a civil action. To avoid accidents or injuries, here are some additional best practices that should be followed:

- Limit the open water in the pier vicinity by orienting the circulator to create an upflow of water;
- Operate the aerator or circulator on a timer to limit run time to the duration necessary to keep the pier ice free;
- Install the aerator in a manner that avoids impacting the ice on your neighbor’s property or creates unsafe ice conditions in recreational areas known to be used by for ice skaters, fishermen, snowmobilers, etc.