

These guidelines are for the installation of aeration equipment on private stormwater ponds that have a public storm sewer connection.

## Aeration Equipment

Dissolved oxygen is a critical component in the ecology of a pond. Fish populations and organic wastes such as decaying vegetation and fertilizer runoff all consume dissolved oxygen. While most Bloomington ponds are shallow enough for sufficient aeration by wind, installing an aerator is a way property owners can supplement the amount of dissolved oxygen in their pond.

There are basically two types of aeration systems to choose from: surface aeration and bottom based aeration. Surface aerators are generally used in ponds six feet deep or less and take in water from the surface of the pond and splash it into the air. When the water crashes back onto the surface of the pond, dissolved oxygen is transferred into the pond. Bottom based aeration systems force air to the bottom of the pond and as it bubbles to the surface dissolved oxygen is transferred into the pond.

## Permit process to install aeration equipment

1. Residents owning property abutting a private stormwater pond will need to choose a person who will represent the pond group collectively.
2. Once the Pond Representative is chosen, this person will need to inform the City of the intent to install aeration equipment by contacting the City of Bloomington Engineering Division at 952-563-4870
3. Upon notice the City will work with the Pond Representative to determine if the pond is eligible for aeration, and assist the Representative with the permit application process.
4. Representative shall work with other abutting property owners to complete the application and submit the following to the Engineering Division:
  - a) Completed application form, including signatures from 100% of the abutting property owners and a signed agreement included with the application form.
  - b) Aeration system specifications, including sizing criteria, type and details of the equipment and power supply details provided by a qualified professional.
  - c) Documentation indicating the installer is a qualified professional and will properly install all equipment.
  - d) Removal and maintenance documentation.

## Other permits may be required

The Representative must obtain all necessary permits prior to the installation of any aeration equipment. Necessary permits may include but are not limited to:

- City of Bloomington Stormwater Pond Aeration Permit; Engineering Division 952-563-4870
- City of Bloomington Electrical Permit; Building and Inspections 952-563-8930
- Minnesota Department of Natural Resources 651-259-5087
- Hennepin County Conservation District 612-348-1397
- Watershed Districts or Management Organizations:
  - a) Nine Mile Creek \_\_\_\_\_ 952-835-2078
  - b) Lower Minnesota River \_\_\_\_\_ 952-856-5875
  - c) Riley Purgatory Bluff Creek \_\_\_\_ 651-365-8542
  - d) Richfield Bloomington WMO \_\_\_ 952-563-4867

## Other considerations

1. Aeration equipment must be installed no earlier than April 1 and removed from the pond by October 15, or at anytime therein at the City's request. Winter aeration is prohibited for safety reasons.
2. Fountain type aeration systems shall be placed in a manner where they are not causing a nuisance condition. The City reserves the right to limit any lighting and the height and width of the spray.
3. Only one permit shall be issued for a stormwater pond.
4. The Representative and Property Owners are responsible for the installation, operation, maintenance, removal, and any other incidental costs associated with providing aeration. The City will not be responsible for any costs associated with the aeration equipment.

## Aeration Permit Renewal

In subsequent years after receiving a stormwater pond aeration permit, the Representative must only notify the City on a yearly basis of their intent to operate the aeration equipment and update any contact information or aeration equipment alterations as necessary.

If the City becomes aware the aeration equipment has less than 100% support from abutting property owners, the Representative will be notified and required to submit signatures from 100% of the abutting property owners prior to operating the aeration equipment the following year.