

York Water District has completed
Installation of the Chase's Pond Aeration/Circulation System



For the first time recorded; In February of 2010 and again in August of 2011 Chase's Pond experienced significant algae blooms requiring additional and costly treatment to be added to the Josiah Chase Water Filtration plant. Our filtration plant is not well suited for treatment of algae blooms and it is anticipated that blooms are likely to happen again sometime in the future.

The District has taken a two tiered approach to attempting to control algae blooms in Chase's Pond. In October of 2014 the District received its permit from the Maine Department of Environmental Protection under a lengthy ten month process to be able to safely add a copper based algaecide to the pond to disrupt or interrupt future blooms. This option however can only be used limitedly. The District has since been working on our primary treatment option of design and installation of an aeration/circulation system to the 15 acre area (not the entire pond) near the dam and intake. This has taken some time to select, engineer, and install. This portion of Chase's Pond is expected to be where blooms start due to the most favorable conditions.

On August 18th and 19th, representatives from Air Diffusion Systems (ADS) of Illinois helped Water District personnel install and start 8 air disks in Chase's Pond nearest the dam. Blowers installed onshore supply air through air hoses that run to eight, four foot round disks in the pond. Each disk has 100 feet of coiled and perforated pipe which releases the air just off the bottom of the pond. Each disk is capable of releasing one billion bubbles per day.

The release of air near the pond bottom keeps water oxygen levels higher throughout the area which is preferable



while creating an upward current which mixes the water. The exchange of gases and oxygen tend to inhibit problem nutrients and metals releases from the pond bottom sediments helping to prevent bloom conditions as well as creating a turbulent environment that is not favorable for the nuisance algae. It may take time and operational modifications before the system is fully effective. You may notice round areas of upwelling from currents created by the release of air on the pond bottom and consistent small surface wave action in areas of the pond. Please see our website for pictures of the installation and operation at www.yorkwaterdistrict.org

If you have questions or concerns please call us at 363-2265.