

The Hazel Lake Aeration Project

The aeration of Hazel Lake was approved at the January 15, 2011 AIA Board Meeting. Aeration will help restore Hazel Lake to the healthy condition it once was.

Why add aeration to Hazel Lake?

1. Adds oxygenation and water circulation to the lake
2. Creates a vertical current using the rising force of millions of small bubbles to entrain the water column, "turning the lake over" and allowing oxygen to be absorbed at the lake's surface
3. In winter, aeration will keep open areas in the ice to allow toxic gases to escape & sunlight to enter
4. Reduces mosquitoes and associated diseases
5. Enhances the recreational and scenic value for Arrowhead's only owned lake
6. Provides healthy habitat for fish which reduces leach problem with pets and wildlife
7. Reduces algae and muck – allows boating
8. Ensures clean water for backup water supply in case of Evergreen Lake failure
9. Provides cleaner water for firefighting equipment, if needed
10. Note: When the leak at Hazel Lake is repaired to increase water depth, aerators still will be required

Possible concerns:

1. Noise from compressors will disturb neighbors – *Sound testing has been conducted with neighbors present to ensure no issues*
2. Harsh winter environment could damage equipment – *Equipment used in similar climates with no issues*
3. Arrowhead's altitude could impact performance – *Additional compressor capacity has been designed in for our higher altitude*
4. Aeration may not work – *Aeration has been used in the past at Hazel Lake and proved to enhance the water quality and supported a thriving fish habitat*
5. Aeration may be unsightly – *Appearance will be bubbles quietly coming to the surface; there are no "fountains" or thrashing of the water*
6. Aeration may not completely bring lake back to full health – *Suppliers say adding dosing of natural bacteria will solve this problem*

The installation will take place beginning in May 2011. After actual aeration begins, the lake initially will look muddier until the sediment settles or is eliminated. It is estimated that the clearing of the water will take all summer.