SEASONAL MONITORING AND MAINTENANCE MONTHLY REPORT SUMMARY – JUNE 2013

I. EXECUTIVE SUMMARY

AQUATIC ECOSYSTEMS MANAGEMENT

AEM staff reviewed your area on June 13 and 26. Above average rainfall amounts continued in June with a total of 6.23 inches, which is 2.88 inches above normal. Temperatures for June averaged 5.1°F lower than last year with the average high temperature being 78.5°F. While rainfall has aided in washing algae growth from area ponds in some instances, it also washed nutrients necessary for algae and aquatic plant growth into the water. We monitored this situation and treated each pond as appropriate.

The water level was normal. The water was clear to brown with sediment suspended in the water column. The average water clarity was 1.5 feet. The average water temperature was normal for this time of year at 78.2°F. The average dissolved oxygen level was very good at 8.8 mg/l. An oxygen level of 5.0 mg/l is generally considered to be the level safe for health of aquatic life. The average percent oxygen saturation was excellent at 107.8. The average conductivity and dissolved solids levels decreased. The average pH level was good. The area's appearance was excellent.

Aquatic plant growth amounted to less than 1 to 3 percent surface and subsurface coverage. Two treatments were necessary.

Bluegill, ducks and frogs were observed. Aquatic wildlife activity was good.

If you have any questions or requests, please do not hesitate to contact us. We appreciate the opportunity to care for your pond.



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II. AQUATIC COMPONENTS

MONITORING DATES: 6/12 & 6/26

1. Aquatic Plant Growth Rooted Aquatics		
Algae	Type: Pondweed	Location: None noted.
	Type: Planktonic	Location: Water column.
	Type: Chara	Location: None noted.
	Type: Filamentous	Location: Pithophora, cladophora. <1 – 3% surface & subsurface.

TREATMENT: 1 gal. Cutrine, 16 ozs. Reward, 16 ozs. Hydrothol, 9 lbs. Cutrine Granular.

III. AQUATIC COMPONENTS

2. Visual Review of Aquatic Wildlife (Fish and Others)

We observed bluegill, ducks and frogs.

Comments: Aquatic wildlife activity was good.

3. Visual Review of Pond Banks and Edges

The area's appearance was excellent. Growth of algae amounted to <1 - 3% surface and subsurface coverage. The water level was normal. The fountain was up and running on the small pond.

Comments: Treatment was necessary on 2 occasions.

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4. Water Quality

AQUATIC ECOSYSTEMS MANAGEMENT

Hydrolab measurements collected 6/12 & 6/26

6/12 6/26 Dissolved Oxygen (mg/l) 1 Foot Depth: 9.42 8.23 Comments: The D.O. levels were very good to good. 5.0 is the level required for fish health; 12.0 is the saturation level of oxygen in water, although super-saturation is attainable during cool weather conditions and/or times of heavy plant growth. **Dissolved Oxygen (% saturation)** 1 Foot Depth: 117.3% 98.3% Comments: The saturation levels were excellent. Saturation is affected by water temperature, weather conditions, state of growth or degradation of plant materials in the water, time of day and other factors. 75.1 Temperature (F) 1 Foot Depth: 81.3 Comments: The water temperatures were normal for this time of year. 7.9 1 Foot Depth: 8.2 pН Comments: The pH levels were good. Higher pH levels are due to more alkaline soils. Alkaline pH levels are typical for this region. Levels are also influenced by aquatic plant growth. Specific Conductance 1 Foot Depth: 0.336 0.362 Comments: This parameter decreased. This is a measure of the electrical current that can pass through water. Ponds with lots of dissolved materials that are charged particles (ions) will have a high conductivity. For instance, in the winter and spring water bodies that receive runoff from surfaces salted during the winter months will have high specific conductance. Total Dissolved Solids (mg/l) 1 Foot Depth: 232 215

Total Dissolved Solids (mg/l) 1 Foot Depth: 232 215 Comments: TDS measure dissolved salts and minerals present in the water. Stormwater flow affects this component. These levels paralleled the conductivity measurements above.

Secchi Disk Clarity Visibility 1.5' 1.5' Comments: A Secchi disk is a quick and simple way of measuring the transparency and color of the water. The water was clear to brown with sediment suspended in the water column.