



Endothall Monitoring

Date: 8/22/2011

Contact: James Polk

Email: canstruct@comcast.net

Waterbody: Seven Hills Lake

Date treated: 6/8/2011

Herbicide: Aquathol K

| Sample Location | Date Sample Collected | Results |
|-----------------------|-----------------------|----------------|
| Site 1-below dam | 6/9/2011 | 0.145 ppm* |
| Site 2-Ninham bridge | 6/9/2011 | 0.133 ppm* |
| Site 3-below dam | 6/16/2011 | 0.014 ppm* |
| Site 4-Ninham bridge | 6/16/2011 | 0.007 ppm* |
| Site 5- below dam | 6/23/2011 | Not detectable |
| Site 6- Ninham bridge | 6/23/2011 | Not detectable |
| | | |

* Results corrected per laboratory email dated 7/22/11

580 Rockport Road, Hackettstown, NJ 07840

ph: 908-850-0303 fax: 908-850-4994

www.alliedbiological.com



Endothall Monitoring

Contact: James Polk

Email: canstruct@comcast.net

Waterbody: Seven Hills Lake

Date treated: 6/8/2011

Herbicide: Aquathol K

| Sample Location | Date Sample Collected | Results |
|-----------------|-----------------------|-----------|
| Site 1 | 6/9/2011 | 1.451 ppm |
| Site 2 | 6/9/2011 | 1.332 ppm |
| Site 3 | 6/16/2011 | 0.14 ppm |
| Site 4 | 6/16/2011 | 0.073 ppm |
| | | |
| | | |
| | | |

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Endothall Monitoring

Date: 7/25/11- Revised Results

Contact: James Polk

Email: canstruct@comcast.net

Waterbody: Seven Hills Lake

Date treated: 6/8/2011

Herbicide: Aquathol K

| Sample Location | Date Sample Collected | Results* |
|----------------------|-----------------------|-----------|
| Site 1-below dam | 6/9/2011 | 0.145 ppm |
| Site 2-Ninham bridge | 6/9/2011 | 0.133 ppm |
| Site 3-below dam | 6/16/2011 | 0.014 ppm |
| Site 4-Ninham bridge | 6/16/2011 | 0.007 ppm |
| | | |
| | | |
| | | |

* Results corrected per laboratory email dated 7/22/11

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Lake Survey Report

Seven Hills Lake Association

Contact

Contact: James Polk
 Phone: C 845-228-2611
 Fax:
 Email: canstruct@comcast.net

Survey Information

Date: 6/8/2011
 Time: 11:30:00 AM
 Biologist: Wayne Horn
 Survey Method: 18' boat

Findings

Alkalinity: 60 DO (ppm): 10 Secchi (Visibility in ft.): 3.5 pH: 8 Temperature(°F): 76.3

Aquatic Vegetation Species

| | | | |
|-----------------------|--------------------------------|--------------------|------------------------------|
| Eurasian Watermilfoil | <i>Myriophyllum spicatum</i> | Curlyleaf Pondweed | <i>Potamogeton crispus</i> |
| Spatterdock | <i>Nuphar sp.</i> | Eel Grass | <i>Vallisneria americana</i> |
| Bassweed | <i>Potamogeton amplifolius</i> | | |

Algae Species

Filamentous Algae

(To view pictures of the plants surveyed, go to www.alliedbiological.com and click on the Plant Identification link at the bottom of the page.)

Comments

Moderate amount of Eurasian watermilfoil mixed with sparse amounts of Curlyleaf Pondweed observed at or near surface along eastern shoreline. Trace to sparse milfoil, Curlyleaf Pondweed, Eel Grass and Bassweed at inlet end with moderate amount of Spatterdock. Spatterdock thins out along shoreline towards outlet. Sparse to moderate benthic and floating filamentous algae growing at shallow inlet end with trace amounts observed throughout the lake.

Eight acres of Seven Hills Lake was treated with Aquathol-K for control of milfoil and pondweeds. Treatment notices were posted.

Plant Density Key



None



Trace



Sparse



Moderate



Dense

Lake Survey Report

Seven Hills Lake Association

Contact

Contact: James Polk
 Phone: C 845-228-2611
 Fax:
 Email: canstruct@comcast.net

Survey Information

Date: 7/6/2011
 Time: 2:14:00 PM
 Biologist: Jesse Kennek
 Survey Method: 10' boat

Findings

Alkalinity: 60 DO (ppm): 11 Secchi (Visibility in ft.): 3 pH: 8 Temperature(°F): 83.4

Aquatic Vegetation Species

Eurasian Watermilfoil *Myriophyllum spicatum*
 Curlyleaf Pondweed *Potamogeton crispus*

Bassweed *Potamogeton amplifolius*

Algae Species

Filamentous Algae

(To view pictures of the plants surveyed, go to www.alliedbiological.com and click on the Plant Identification link at the bottom of the page.)

Comments

Trace to sparse patches of surface Eurasian Watermilfoil observed in northern inlet. Trace to sparse amount of floating and benthic filamentous algae also observed along northern shoreline.

Supplemental herbicide (Aquathol-k) treatment conducted for control of Eurasian Watermilfoil. Treatment notices were posted.

Plant Density Key



None



Trace



Sparse



Moderate



Dense



November 14, 2011

Laurie Lawrence
 NYSDEC Region 3 Headquarters
 21 South Putt Corners Road
 New Paltz, NY 12561-1620

Brian Drumm, Wetlands Biologist
 NYSDEC Reg 3
 21 South Putt Corners Road
 New Paltz, NY 12561-1620

FINAL REPORT, WETLANDS FINAL REPORT & DOWNSTREAM MONITORING
*For submission to the Regional Pesticide Control Specialist and the Wetlands Biologist
 as per conditions of the pesticide permit referenced below.*

Site & Treatment Information

| | |
|--------------------------------|---------------------------|
| Name of Body of Water Treated: | Seven Hills Lake |
| Aquatic Permit Number: | 3-372200153/00004 & 00005 |
| Location (Town and County): | Carmel / Putnam County |
| Year Treated: | 2011 |
| Name of Applicator: | Allied Biological Inc |
| Certification I.D. Number: | 01301 |

| Chemical(s) used | EPA Reg # | Target Pest | Quantity Used | Dates of Treatment |
|------------------|-----------|------------------------------|---------------|--------------------|
| Aquathol-K | 70506-176 | <i>Myriophyllum spicatum</i> | 24 gal. | 6/8/2011 |
| | | | 3 gal. | 7/6/2011 |
| | | | | |
| | | | | |

Method of Application: Boomless Sprayer Boat Application
 Describe conditions of water level and outflow, water held, how long was it held and for how long?

Seven Hills Lake herbicide treatments are conducted when there is minimal or no outflow. The water level is not held or drawn down prior to applications and downstream notification of riparian users is conducted by the Lake Association. The treatment on 6/8/2011 targeted moderate density growth of Eurasian Watermilfoil with traces of Curlyleaf Pondweed along eight acres of eastern shoreline and northern end of the lake. Post treatment lake survey on 7/6/11 indicated excellent control of the target species achieved with only trace to sparse patches of milfoil in the northern inlet treatment area. A supplemental herbicide application to 1.5 acres was conducted. The water lilies were not affected by the Aquathol-K application.



Evaluation of Treatment

Degree of Target Species Control (100% Excellent - <50% Poor): ~95%

Duration of Control in weeks:

| May | | | | June | | | | July | | | | Aug | | | | Sept | | | |
|-----|---|---|---|------|---|---|---|------|---|---|---|-----|---|---|---|------|---|---|---|
| 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

Date and Type of reinfestation:

| Algae | Weeds | Date |
|-------|-------|------|
| | | |

Were other control options utilized or considered?

Triploid grass carp were stocked in Seven Hills Lake in 2000 and 2006. The combination of grass carp and winter drawdown reduced the overall density of aquatic macrophytes, but the carp did not remove vegetation from areas of the lake where control was highly desirable. A hydro-raking feasibility study was conducted in 2010 to determine the logistics of the project and the amount of material that could be removed from the lake basin. At this time, it is anticipated that hydro-raking will be performed within the next two years.

Has a lake management study or plan been developed and /or updated for this water body?

A water quality monitoring program was initiated in 1999 and an Aquatic Plant Management Plan was written for the Seven Hills Lake POA by Thomas C. Field, Ph.D. in February 2010.

Is there any input of nutrient discharging into the water body? If so, has any consideration/plan been discussed to address this issue?

Septic systems located within 200 feet of the lake have been monitored, with a few faulty systems identified and upgraded through Putnam County grants. Water quality monitoring identified that runoff during storm events contains high concentrations of nutrients and bacteria. The lake association has no control over surface water flows, and no formal management plan for such discharge from runoff has been prepared.

Remarks:

Signature

November 14, 2011
Date