

November 17, 2003

Mr. Joseph Finn, Commissioner
Saratoga Lake Protection and Improvement District
157 Neilson Road
Saratoga Springs, NY 12866

Re: Report on Aquatic Plant Management Program at Saratoga Lake – 2003 Season

Dear Joe:

In December 2002, Aquatic Control Technology, Inc. responded to a Request for Proposal from the Saratoga Lake Protection and Improvement District (SLPID) for Long-Term Lake Management Services at Saratoga Lake. Performance of all SLPID requested chemical treatments through the 2005 season was the principal task of the proposal, along with providing consulting services for other lake management issues. Aquatic Control was informed of their selection and entered into a contract agreement with SLPID in January 2003.

The first task completed under the contract was a 60-acre demonstration treatment on the northeast shoreline of the lake (North Plot) with Sonar PR (Precision Release) herbicide to control the problematic Eurasian watermilfoil growth. Planning for this treatment began in the fall of 2002 when SLPID purchased Sonar PR needed for the 2003 treatment from SePRO Corporation, the manufacturer of Sonar. The Sonar PR formulation was designed to release the active ingredient (fluridone) more quickly than the SRP (Slow Release Pellet) formulation that was used during the 2000 demonstration treatments. It was believed that Sonar PR's faster release rate would allow for better uptake by the targeted milfoil, resulting in better control. The new Sonar PR formulation was registered for use in New York during the 2002 season. A detailed summary of the 2003 Sonar PR treatment follows, along with updated treatment and lake management recommendations for the 2004 season.

SONAR PR TREATMENT PROGRAM – 2003

Permitting

Aquatic Control assisted SLPID in preparing and submitting a Pesticide Permit application to NYSDEC in January 2003. Towards the end of February we were notified by DEC that a portion of Freshwater Wetland (Q-31) fell within the proposed treatment plot. A Freshwater Wetland permit would be required for the treatment to proceed as proposed. It was unlikely that DEC review and the required public comment period for Freshwater Wetland permit applications could have been completed in time for the DEC Sonar herbicide application deadline of May 15th. After discussing the proposed treatment program with the DEC Bureau of Habitat, they determined that a Freshwater Wetland permit was not required if no herbicide was applied within 100 feet from the wetland boundary. We modified the proposed treatment map (Figure 1), including a 100-foot no treatment buffer from the wetland boundary. The wetland boundary was defined as the 6-foot water depth contour. This was estimated on Figure 1 using previously reported bathymetry contours and we agreed to verify the 6-foot contour using GPS prior to treatment. The DEC Pesticide Permit was issued on May 8, 2003.

Herbicide Application

Once DEC confirmed that an approved permit would be issued, final steps were taken so that Sonar PR application could occur before the May 15th deadline. We conducted our comprehensive pre-treatment

inspection of the North Plot on May 8th. Milfoil was in its most active phase of growth and the plants were still 3-4 feet below the water's surface throughout the majority of the treatment area. Conditions were optimal for treatment. The Sonar PR treatment was scheduled and performed on May 14th. Immediately prior to treatment, the shoreline of the North Plot was posted with signs warning of the treatment and the only water use restriction being imposed, which was not to use treated water for 7 days following the application.

Gerald Smith, President, and Marc Bellaud, Senior Biologist, of Aquatic Control performed the Wednesday, May 14th treatment. An Aquatic Control field technician was also present to post the shoreline. Weather conditions were cloudy with light winds that produced one-foot waves on the lake. We used our 18-foot Airboat with calibrated seeder/spreader mounted on the bow for the herbicide application. We launched the Airboat at the State boat launch near the Route 9P bridge. We then positioned a pick-up truck at the shoreline access site opposite Fitch Road to transfer the herbicide. The Airboat was equipped with a Trimble Pro XRS Differential GPS system to verify the treatment plot location and to insure an even herbicide application with its real-time, sub-meter accuracy. A geo-referenced map produced in ArcView GIS software was downloaded into the DGPS unit. Prior to treatment the treatment plot location was verified and marker buoys were placed along the boundaries of the treatment plot. We could then navigate within the plot to insure an even herbicide application utilizing the DGPS unit's real-time, sub-meter accuracy.

A total of 1530 pounds of Sonar PR pellets (fifty-one 30-pound pails) were applied to the 60-acre treatment plot. Using an average water depth of 8 feet in the treatment plot, the concentration of fluridone applied was approximately 60 parts per billion (ppb). This was a higher application rate than the 2000 Sonar SRP treatment of approximately 45 ppb. The 60 ppb application rate was recommended by Bo Burns at SePRO and Aquatic Control, because the 2000 SRP treatment was initially not effective in the North Plot. Additionally, previous field trials with the Sonar PR formulation indicated that approximately 25% of the applied amount would be released. The anticipated maximum fluridone concentration that would be in the water at any one time was 15 ppb. Normally, milfoil can be effectively killed with concentrations of 5-8 ppb, but it was expected that higher concentrations would be needed in the North Plot to help overcome the effects of dilution. The application proceeded smoothly and without incident.

FasTEST Monitoring

A comprehensive FasTEST monitoring program was recommended to fully evaluate the efficacy of Sonar PR for partial lake treatments in Saratoga Lake. Six separate sampling rounds were recommended, spaced approximately 7-14 days apart. Five sampling locations were established, two in the middle of the treatment area, one approximately 500 feet north of the treatment area, one approximately 250 south of the treatment area, and one at the deep water outside edge of the treatment area (see Figure 2). Samples were collected from the middle of the water column at all locations using a Van Dorn collection bottle. In addition, samples were collected 2 feet off of the bottom at the two stations within the plot, which should have captured the highest concentrations. The five sampling station locations were recorded with a GPS unit for consistency during each sampling round.

The first FasTEST sampling round occurred on May 28th, exactly two weeks after the Sonar PR application. The results showed low fluridone concentrations (<1.0 – 2.5 ppb). Bo Burns was not surprised with the low concentrations, because the peak fluridone release was reported to occur 2-3 weeks post-treatment. The next FasTEST sampling round was on June 9th or 26 days post-treatment. Results remained low (<1.0 – 1.7 ppb), but there did appear to be some visible chlorotic effects on the milfoil (dull colored stems and slowed growth). The third FasTEST sampling round was on June 25th or 42 days post-treatment. All of the results in the third round were reported as non-detect. Impact to the milfoil plants was still noticeable, but we were concerned about the non-detect readings and discussed them with

Bo Burns. It was decided that a comprehensive look at the milfoil plants was needed to determine if additional treatment was warranted.

Marc Bellaud surveyed the North Plot on July 8th or 55 days post-treatment. By that time, there was clear evidence of the chlorotic effects on milfoil in middle the North Plot. Good control on the milfoil was seen out 300-400 feet from shore. Within this area the majority of milfoil biomass had dropped out of the water column. Remaining milfoil plants showed the characteristic “poodling” effect of stems mostly stripped of their leaflets with a small tuft of leaflets at the end. Between 400-600 feet from shore less impact on the milfoil was noticed. Between 600-800 feet from shore dense milfoil plants were matted to the surface and no impact from the treatment was noticeable. Dense milfoil growth was seen growing 1-2 feet below the surface 800-1000 feet from shore. Impacts of the treatment appeared to stop approximately 200 feet short of the north and south boundaries of the plot. Three FasTEST samples were collected near the bottom from the portion of the plot where the milfoil was being effectively controlled. A fourth sample was collected at mid-depth on the outside (deep) edge of the plot. The three samples collected in the area of impact had the highest concentrations reported during the treatment (2.0, 2.5 and 3.0 ppb). The sample collected outside the plot was non-detect. No additional FasTEST sampling was performed.

Pre and Post-Treatment Vegetation Surveys

Comprehensive pre and post-treatment vegetation surveys were performed to provide quantitative and qualitative assessments of the 2003 Sonar PR treatment. The pre-treatment survey was performed on May 8th and the post-treatment survey was performed on October 24th. Transect and data point sampling was performed similar to what we did during the 2000 and 2001 seasons. A total of 33 data points were surveyed along 7 transects (see Figure 2). At each transect, we recorded water depth, dominant plants encountered, total plant cover, milfoil cover and plant biomass. The dominant plants encountered during the pre and post-treatment surveys are listed below:

<u>Macrophyte Species</u>	<u>Common Name</u>	<u>Abbreviation</u>	<u>Notes</u>
<i>Ceratophyllum demersum</i>	Coontail	Cd	Abundant in deeper water
<i>Elodea canadensis</i>	Waterweed/elodea	Ec	Scattered
<i>Heteranthera dubia</i>	Water stargrass	Hd	Abundant along shoreline
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	Ms	EXOTIC - dominant
<i>Potamogeton amplifolius</i>	Largeleaf pondweed	Pa	Scattered
<i>Potamogeton crispus</i>	Curlyleaf pondweed	Pc	EXOTIC – scattered
<i>Potamogeton illinoensis</i>	Illinois pondweed	Pi	Scattered
<i>Vallisneria americana</i>	Wild celery/tapegrass	V	Scattered

The actual data collected during the field inspections is presented in tables in the Appendix. There were differences in the pre and post-treatment data. The data was primarily used to create the pre and post-treatment vegetation distribution maps (Figure 3).

During the pre-treatment inspection there were six distinct plant assemblages. The shallow water assemblage that extended 50-100 feet from shore into 4-5 feet of water was dominated by water stargrass and had scattered milfoil (<10%). The largest portion of the plot, 100-800 feet from shore into 12 feet of water, was dominated by milfoil (>80%). A shallower sand bar area (around buoys) toward the northern end of the treatment plot supported more robust pondweed and water stargrass growth and reduced milfoil (50%). Deeper water areas, 800-1000 feet from shore and 12-15 feet of water, contained a mix of coontail, milfoil (<50%) and curlyleaf pondweed. The amount of milfoil continued to drop off in deeper waters.

Composition and distribution of the post-treatment plant assemblages was similar to pre-treatment, except for the change in milfoil abundance. Though the center of the plot and extending out 300-400 feet from shore, more than 80% control of milfoil was achieved. Only scattered milfoil plants were present at the end of the year and they were below the surface and did not interfere with boating. Less milfoil control was noted 400-500 feet from shore. Beyond 500 feet and at the north and south bounds of the plot, milfoil was not controlled by the treatment. Milfoil was matted to the surface 500-800 feet from shore and stayed the dominant plant to water depths of 12 feet. There did not appear to be any significant impact to the native plant community. The same native species were found during the pre and post-treatment inspections. Even within the zone of the greatest milfoil control, there was low-growing cover of water stargrass and some dense beds of wild celery and the total plant cover remained at 70%.

Summary of Sonar PR Treatment

Based on the results of our pre and post-treatment inspections, we estimated that milfoil was impacted throughout two-thirds of the of North Plot and was effectively controlled in a little more than half of the plot. Sonar PR had considerably better efficacy than the Sonar SRP pellets. You may recall that no milfoil control was achieved in the North Plot in 2000, until the Sonar SRP treatment was supplemented with four successive Sonar AS (liquid) applications during July and August. The Sonar PR application did kill milfoil with a single application, but it was less effective than we had hoped for. We had hoped that by treating 60 acres at 60 ppb we would see control milfoil control extend beyond the bounds of the treatment plot. In actuality, we probably saw control in 40 acres located at the center of the plot.

The most likely explanation for the limited control is that there was still too much dilution from the untreated portions of the lake. In fact, the location of the North Plot is probably the one of the most difficult portions of the lake to try and maintain Sonar concentrations over an extended period of time. There are probably several contributing factors to the excessive water exchange at the north end. Water ultimately flows from south to north in the lake. Kayderossas Creek, the primary inlet, flows into the lake directly across from the North Plot. The prevailing winds are often blowing towards the northeast end of the lake. The greatest water depths are also found in the northern third of the lake, providing a large volume of untreated water to dilute Sonar concentrations in the North Plot. At this point, we would not recommend attempting additional partial lake treatments in the northeast corner of the lake with Sonar pellet formulations.

The 2003 treatment demonstrated that Sonar PR can be used to control milfoil in large blocks on Saratoga Lake. We think that the results would be better in the southern end of the lake, where there is less water exchange and shallower water depths. The 2000 Sonar SRP treatment was effective in the South Plot, which leads us to believe that Sonar PR and the newest pellet formulation Sonar Q (Quick Release) will be even more effective.

2004 TREATMENT RECOMMENDATIONS

Despite the marginal successes of the 2000 and 2003 Sonar pellet treatments, we remain convinced that herbicide treatments can be effectively utilized as part of an integrated plant management program at Saratoga Lake. Future herbicide treatments at the lake should be performed in areas where they are likely to be most effective. This will enable the harvesters to focus on areas that cannot be effectively treated, reducing their workload and improving their efficiency.

Since the demonstration milfoil treatments started in 2000, only Sonar (fluridone) herbicide has been considered for use at Saratoga. This is largely due to its favorable toxicology profile and its potential to selectively control milfoil. Sonar PR (Precision Release) used this past year showed improved efficacy over Sonar SRP (Slow Release Pellet) that was used in 2000. Early in 2003, Sonar Q (Quick Release)

was registered for use in New York. Sonar Q is supposed to release fluridone even more quickly than Sonar PR. A combination of Sonar PR and Q may yield even better results than the 2003 PR treatment.

Other herbicides that could effectively control milfoil at Saratoga Lake include Aqua-Kleen/Navigate (2,4-D granular), Reward (diquat) and Aquathol K (endothall). 2,4-D is a selective, systemic herbicide that provides excellent control of milfoil. It may be difficult to obtain permit approval for its use in Saratoga Lake due to water use restrictions following treatment and some of DEC's conditions on its use. Both diquat and endothall are fast-acting, contact herbicides that usually provide complete milfoil control within 2-3 weeks of treatment. They have more broad-spectrum action and may impact desirable, native species. DEC regulations may also limit their use. The potential advantages of using these products are that they kill milfoil considerably faster than Sonar and carry a lower unit cost per acre. They may pose some additional regulatory hurdles and possibly may need to overcome some apprehension from lake residents and the general public. Please let us know if there is interest in considering the use of other herbicides at Saratoga Lake.

The newest herbicide registered for aquatic use by the EPA is Renovate (triclopyr). This is a fast-acting, systemic herbicide that effectively controls milfoil and can be used for partial lake treatments. SePRO, the manufacturers of Sonar, are also marketing Renovate. It is not yet approved for use in New York and a Generic Environmental Impact Report will likely be needed before it is approved. This process will undoubtedly take several years. We will keep SLPID posted on Renovate's status in New York.

For the 2004 season, we believe that it would be worthwhile to treat a portion of the south end of the lake with both Sonar PR and Q formulations. Utilizing Sonar Q will make more fluridone available immediately after treatment at the most critical period for herbicide uptake. Sonar PR will maintain fluridone concentrations over the 45+ days needed for effective milfoil control. This combined with the lower water exchange and reduced water volume in the south end of the lake should provide better results. Sonar Q is also less expensive than Sonar PR.

At SLPID's August 21, 2003 meeting, Bo Burns from SePRO and Marc Bellaud from Aquatic Control presented the results of the 2003 treatment. There was also considerable discussion about treatment options and we were asked to provide estimated costs for three treatment scenarios with Sonar herbicide 1) treatment of a 60-100 acre block at the south end, 2) treatment of the entire southern third of the lake, and 3) a whole lake treatment. As you may already know, Bo Burns left SePRO Corporation and they have not yet hired a replacement Aquatic Specialist for this region. We prepared the following cost estimates without input from SePRO. We will consult with them before performing any additional Sonar treatments at Saratoga Lake and the chemical costs may need to be adjusted. These possible treatment options are graphically depicted in Figure 4.

Option #1) 100 acre plot at South End (Recommended)

- Plot could be relocated, but we recommend treating to the 12-foot depth contour
- Milfoil growth is found into 15 feet of water, but it is generally below the surface and doesn't interfere with boating
- Plot size can be reduced to lower treatment cost
 - Chemical – assumes ~2600 pounds of Sonar Q (60%) and PR (40%) \$55,000
 - FasTEST monitoring – assumes 4 locations and 4 rounds plus collection and shipping \$3300
 - Application services – per Lake Management Services Contract \$5600
 - Permitting, posting and miscellaneous charges \$1000
 - TOTAL*..... \$64,900

Option #2) Treatment of Southern Third of Lake

- Green shaded area on Figure 4 indicates the majority of milfoil growth in southern third of lake
- Treating to the 15-foot depth contour is recommended to target all of the milfoil and provide more than one year of effective control
- Treatment area is estimated at 300 acres
 - Chemical – assumes ~9700 pounds of Sonar Q (60%) and PR (40%) \$210,000
 - FasTEST monitoring – assumes 10 locations and 4 rounds plus collection and shipping \$5500
 - Application services \$12,500
 - Permitting, posting and miscellaneous charges \$2000
 - TOTAL*..... \$230,000

Option #3) Whole Lake Treatment

- A whole lake treatment will probably include the use of Sonar AS (liquid) and Sonar Q and/or PR around the shorelines
- A 15-foot average depth is assumed to account for all vegetated portions of the lake above the thermocline
- Treatment area is estimated at 3900 acres, stopping at Round 9P Bridge
- A target Sonar concentration of 8-10 ppb is anticipated with a total of 15 ppb to be applied
 - Chemical (estimated – need input from SePRO) \$750,000+
 - FasTEST monitoring program..... \$25,000
 - Application services, monitoring, permitting, misc..... \$75,000
 - TOTAL*..... \$850,000+

Considering the high chemical costs of Options 2 and 3 above, we recommend proceeding with Option 1 during the 2004 season. This will provide better information on how cost-effectively Sonar can be used to treat low-flow sections of the lake. The results of treating a 60-100 acre plot in the south end would then help us make more accurate predictions on the amount of chemical needed to control milfoil in larger areas, as described in Option 2.

We trust that report provides you with a detailed results of the Sonar PR treatment that was performed in the northeast corner of the lake in 2003. Please feel free to contact us to discuss your plans for the 2004 season. Permit applications for any herbicide treatments to be performed at the lake in 2004 should be filed by the end of January 2004. We look forward to working with SLPID again next year.

Sincerely,

AQUATIC CONTROL TECHNOLOGY, INC.

Marc Bellaud
Senior Biologist

Gerald N. Smith
President/Aquatic Biologist

APPENDIX

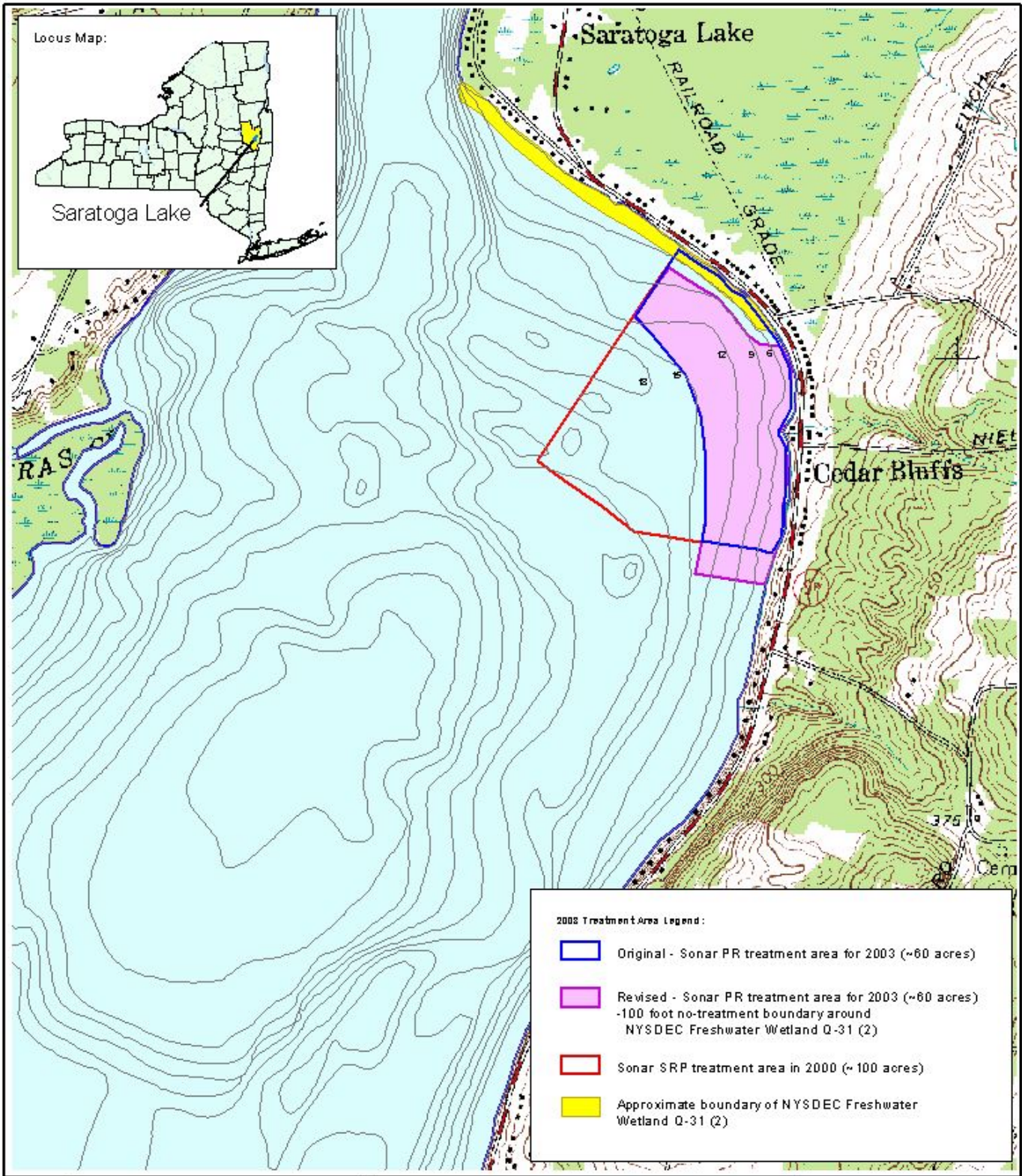
- Vegetation Survey Field Data Tables (2 pages)
- FasTEST Results (4 pages)
- Figure 1 – 2003 Herbicide Treatment Plot Location (revised 2/27/03)
- Figure 2 – Survey Data Point Locations
- Figure 3 – Dominant Aquatic Vegetation Distribution
- Figure 4 – 2004 Demonstration Herbicide Treatment Options
- Photographic Documentation

North Plot - Pre-Treatment Survey Data (5/8/03)

Transect & Data Point	Water Depth (ft.)	Dominant Vegetation	% Total Plant Cover	Biomass Index	% Milfoil Cover
A1	4.5	Hd, Pa, M	80	3	5
A2	8.5	M	90	3	100
A3	10	Cd, M	100	2	50
B1	5.5	Hd, M, Pa	85	3	10
B2	6.5	Hd, M	90	3	20
B3	6	M, Hd	60	2	80
B4	8.5	M, Hd	60	2	50
B5	9	M, Hd	50	2	70
B6	10.5	M, Cd	50	2	50
C1	6	Cd, M, Ec, Hd	90	3	10
C2	8.5	M	100	3	100
C3	10.5	M	100	3	100
C4	12	M	100	3	100
C5	12.5	M, Cd	60	2	50
C6	13	Cd, Pc, M	80	2	10
D1	5	M, Cd, Pc	80	3	80
D2	7.5	M, Cd	100	3	80
D3	9.5	M, Cd, Pc	100	3	80
D4	12	M, Pc	70	2	90
D5	13	Cd, Pc	70	2	0
E1	5	Hd	50	2	0
E2	7.5	Cd, M, Pc	70	3	40
E3	9.5	M	70	3	100
E4	12	Cd, M, Pc	90	3	30
E5	13	M, Pc	40	1	50
F1	5	Hd, M	60	2	10
F2	7.5	M, Hd	90	3	60
F3	9	M	80	3	100
F4	12.5	Cd, Pc	100	2	0
F5	14	Pc	20	1	0
G1	6.5	Hd, Pc	80	2	0
G2	8	Hd, M	80	2	20
G3	9	M	80	2	100

North Plot - Post-Treatment Survey Data (10/24/03)

Transect & Data Point	Water Depth (ft.)	Dominant Vegetation	% Total Plant Cover	Biomass Index	% Milfoil Cover
A1	4.5	Hd, V, Pa, M	80	3	10
A2	8.5	M	90	4	100
A3	10	M, Cd	90	3	90
B1	5.5	Hd, V, M, Cd, Pi	80	3	15
B2	6.5	M, Hd, V, Cd, Pc	90	3	50
B3	6	M, Hd, Pi	40	2	50
B4	8.5	M, Cd, Hd	90	3	70
B5	9	Ms, Cd, Hd	90	3	70
B6	10.5	M	100	3	100
C1	6	M, Hd	90	3	70
C2	8.5	M, Hd	70	2	60
C3	10.5	M, Cd	70	2	80
C4	12	M, Cd	50	2	60
C5	12.5	M, Cd	60	2	60
C6	13	M, Cd	70	2	60
D1	5	Hd, V, M, Pc	60	2	20
D2	7.5	Hd, M, Pc	70	2	30
D3	9.5	M	50	2	100
D4	12	M	75	3	100
D5	13	Cd, M	80	3	40
E1	5	Hd, V	90	2	0
E2	7.5	Hd, M, Pc, Cd	70	2	20
E3	9.5	Cd, M	80	2	30
E4	12	Cd, M	70	2	80
E5	13	M, Cd	70	3	60
F1	5	Hd, M	90	2	5
F2	7.5	Hd, V, Cd, M	70	2	10
F3	9	M, Cd	80	3	70
F4	12.5	M, Cd	90	3	80
F5	14	Cd	70	2	0
G1	6.5	Hd, Ms	80	2	10
G2	8	Hd, M	100	3	30
G3	9	M	100	4	100




2003 Treatment Area Legend:


- Original - Sonar PR treatment area for 2003 (~60 acres)
- Revised - Sonar PR treatment area for 2003 (~60 acres)
-100 foot no-treatment boundary around
NYSDEC Freshwater Wetland Q-31 (2)
- Sonar SRP treatment area in 2000 (~100 acres)
- Approximate boundary of NYSDEC Freshwater
Wetland Q-31 (2)

FIGURE NUMBER:
1

Saratoga Lake
2003 Herbicide
Treatment Plot Location
(revised 2/27/03)

Legend:
See Above

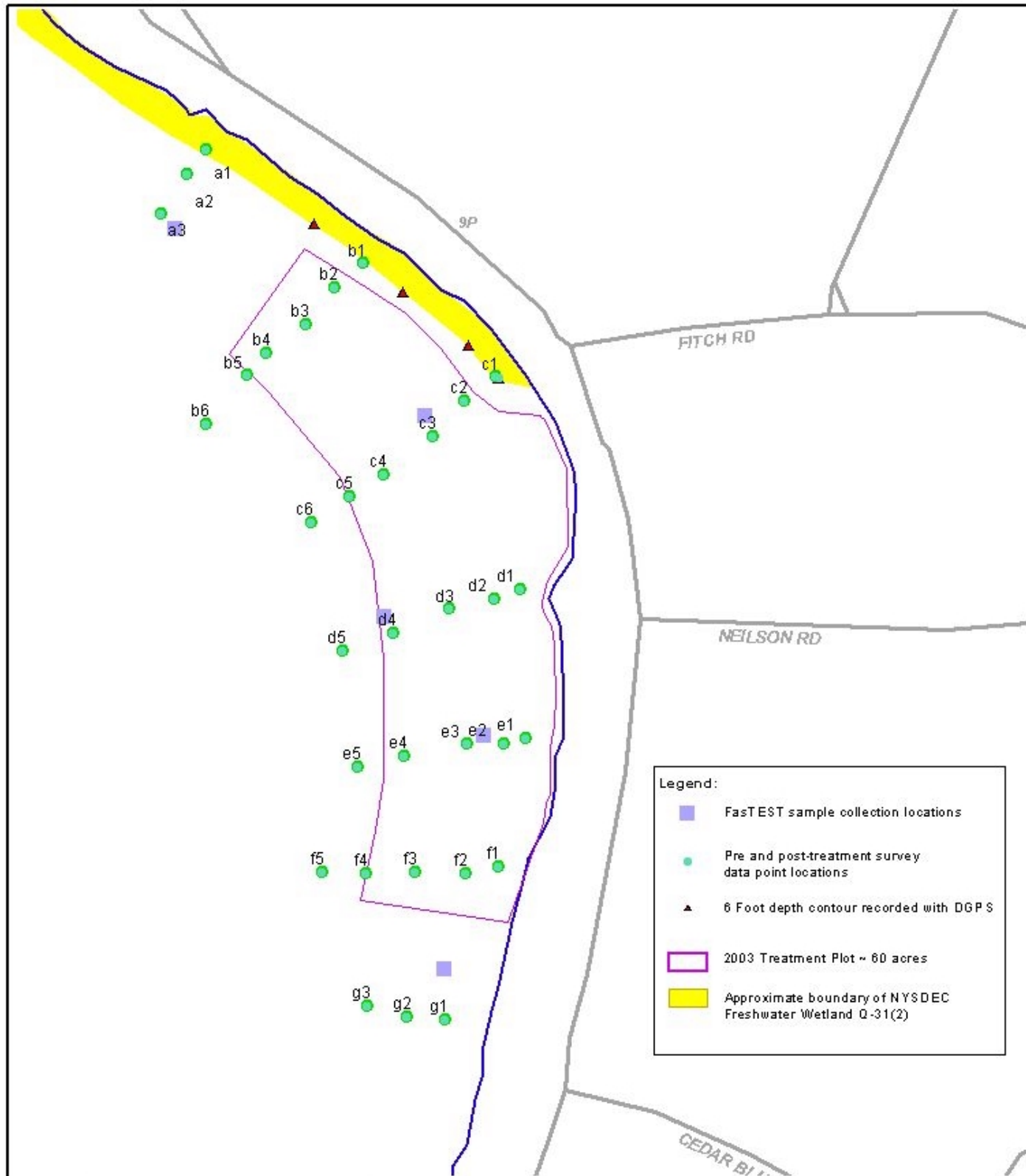




1000 0 1000 2000 Feet

AQUATIC CONTROL TECHNOLOGY, INC.

11 JOHN ROAD
SUTTON, MASSACHUSETTS 01550
PHONE: (508) 866-1666
FAX: (508) 866-226
WEB: WWW.AQCTECHCONTROLTECH.COM



Legend:

- FasTEST sample collection locations
- Pre and post-treatment survey data point locations
- ▲ 6 Foot depth contour recorded with DGPS
- 2003 Treatment Plot ~ 60 acres
- Approximate boundary of NYSDEC Freshwater Wetland Q-31(2)

2
FIGURE NUMBER:

Saratoga Lake
2003 Herbicide Treatment
Survey Data Point Locations

Legend:
See Above

400 0 400 800 Feet







AQUATIC CONTROL TECHNOLOGY, INC.

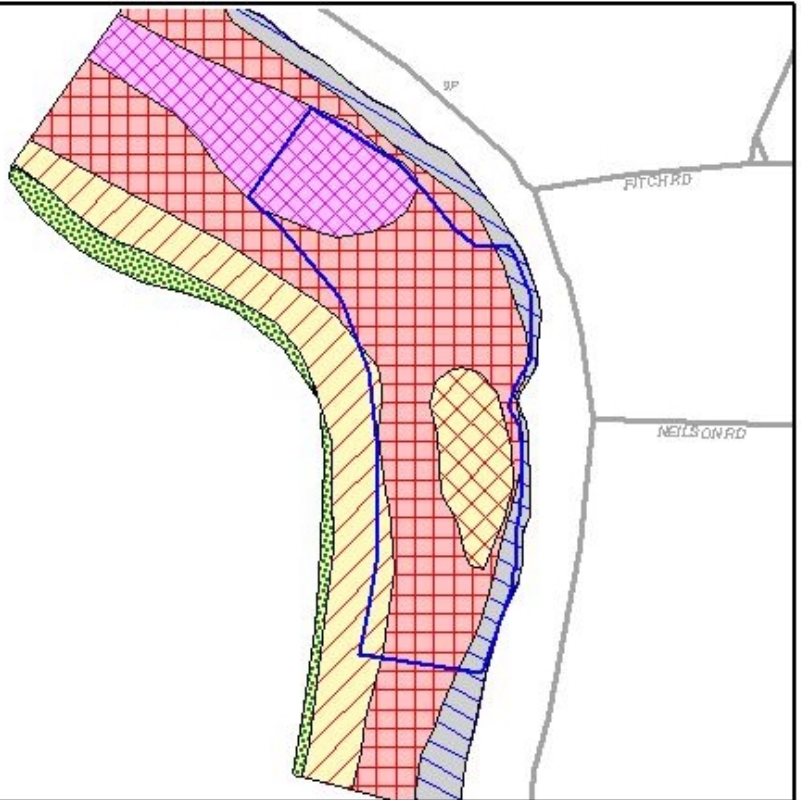
11 JOHN ROAD
SUCTION, MASSACHUSETTS 01506
PHONE: (508) 866-1866
FAX: (508) 866-4235
WEB: WWW.ACT-TECH.COM

NORTH PLOT

Pre-Treatment Vegetation Coverages

Survey Date 5/8/03







-  Coontail, curlyleaf pondweed, Eurasian watermilfoil (<5%)
Total Plant Cover 50%; Biomass 1
-  Coontail, Eurasian watermilfoil (<50%), curlyleaf pondweed
Total Plant Cover 70%; Biomass 2
-  Eurasian watermilfoil (>80%), scattered coontail, curlyleaf pondweed
Total Plant Cover 90%; Biomass 3
-  Eurasian watermilfoil (50%), water stargrass, pondweeds
Total Plant Cover 90%; Biomass 3
-  Eurasian watermilfoil (<80%), coontail
Total Plant Cover 90%; Biomass 3
-  Water stargrass, Eurasian watermilfoil (<10%), curlyleaf pondweed, elodea
Total Plant Cover 80%; Biomass 3

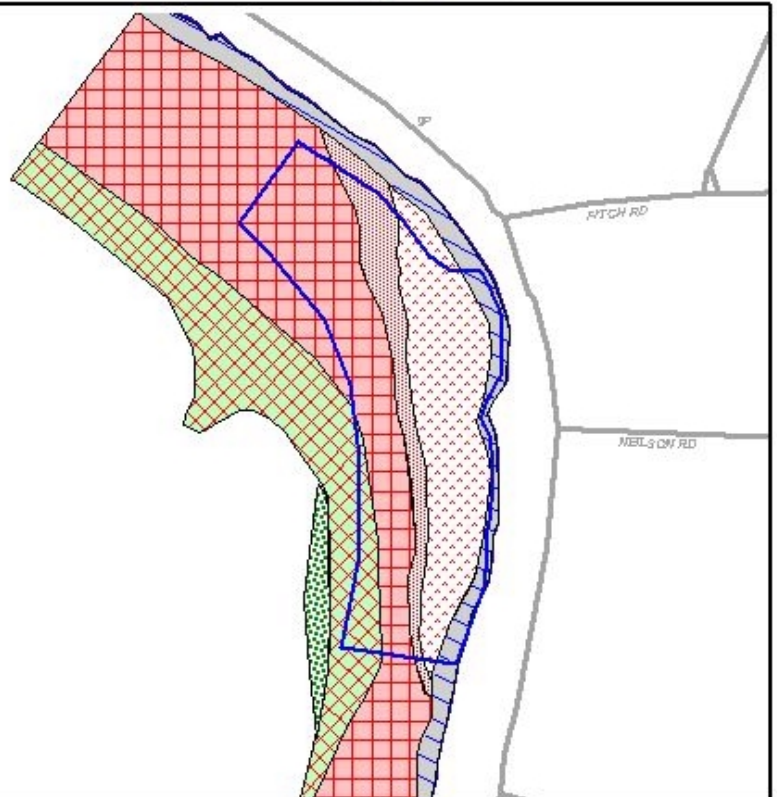


NORTH PLOT

Pre-Treatment Vegetation Coverages

Survey Dates 7/8/03 & 10/24/03

-  Coontail
Total Plant Cover 70%; Biomass 2
-  Eurasian watermilfoil (<70%), coontail
Total Plant Cover >80%; Biomass 2-3
-  Eurasian watermilfoil (>80% cover - no control), coontail, pondweeds
Total Plant Cover >70%; Biomass 3
-  Eurasian watermilfoil (<50% controlled), coontail, pondweeds
Total Plant Cover >70%; Biomass 2
-  Eurasian watermilfoil (>80% controlled), Water stargrass, wild celery, pondweeds
Total Plant Cover 70%; Biomass 2
-  Water stargrass, Eurasian watermilfoil (<10%), curlyleaf pondweed, elodea
Total Plant Cover 80%; Biomass 3



3

FIGURE NUMBER:

Saratoga Lake
NORTH PLOT
Dominant Aquatic
Vegetation Distribution
2003 Sonar PR Herbicide Treatment

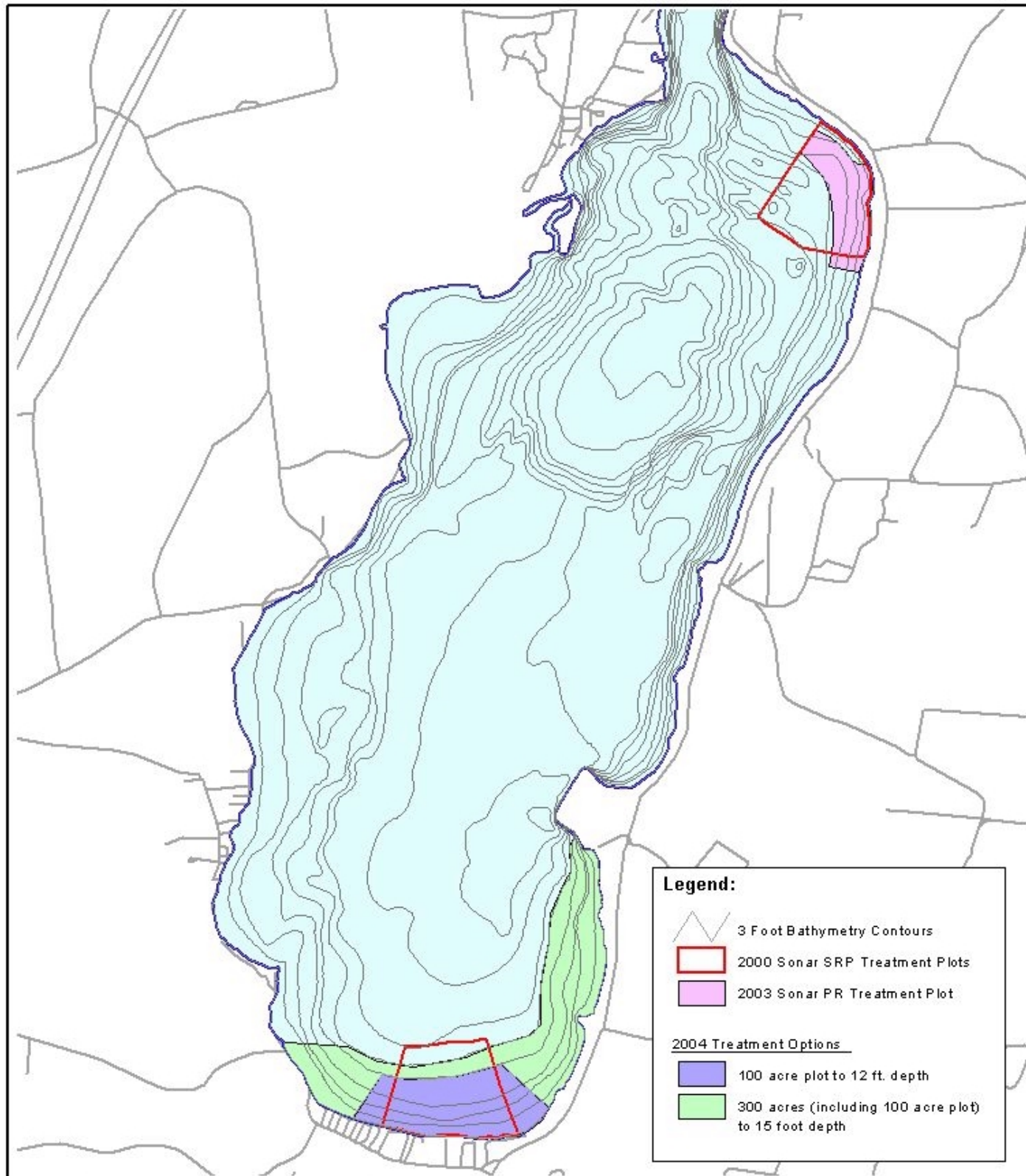
Legend:






400 0 400 800 1200 Feet

 **AQUATIC CONTROL TECHNOLOGY, INC.**

11 JOHN ROAD
SUTTON, MASSACHUSETTS 01550
PHONE: (508) 866-1866
FAX: (508) 866-4235
WEB: WWW.AQUATICCONTROLTECH.COM



Legend:

-  3 Foot Bathymetry Contours
-  2000 Sonar SRP Treatment Plots
-  2003 Sonar PR Treatment Plot

2004 Treatment Options





-  100 acre plot to 12 ft. depth
-  300 acres (including 100 acre plot) to 15 foot depth

FIGURE NUMBER:
4

Saratoga Lake
2004 Demonstration Herbicide
Treatment Options

Legend:
See Above





 **AQUATIC CONTROL TECHNOLOGY, INC.**

11 JOHN ROAD
SUTTON, MASSACHUSETTS 01550
PHONE: (508) 866-1866
FAX: (508) 866-2235
WEB: WWW.AQUATICCONTROLTECH.COM

SARATOGA LAKE

2003 Sonar PR Herbicide Treatment



5/14/03 – Warning signs posted along shoreline of treatment area



5/14/03 – Application of Sonar PR herbicide to north plot



5/14/03 – Empty Sonar PR contains



8/21/03 – Dense milfoil growth south of treatment plot