

November 29, 2006

Mr. Stephen E. Cotton, President
 Foster's Pond Corporation
 19 Pomeroy Road
 Andover, MA 01810

Re: 2006 Year-End Report for Herbicide Treatment of Dredged Basin off of Glenwood Road – Foster's Pond – Andover, MA

Dear Steve:

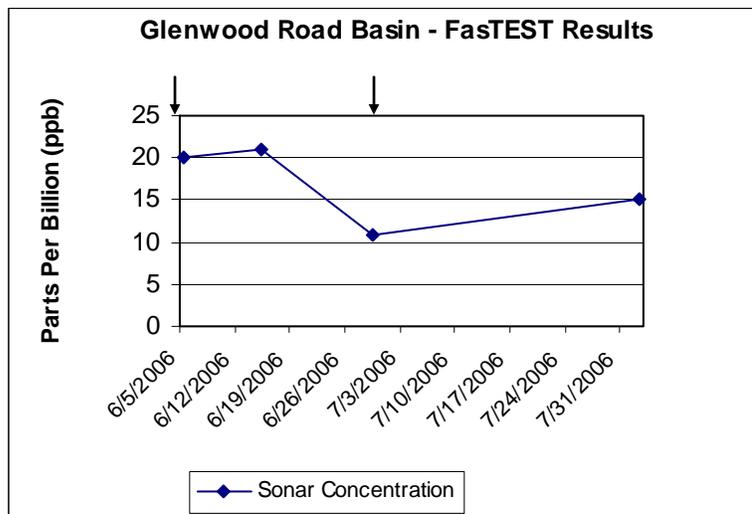
Our written Year-End Report for the 2006 Herbicide Treatment of the dredged basin located off of Glenwood Road follows. This basin was not included in the 2005 Sonar herbicide of Foster's Pond. Inspections of the basin performed in the late summer of 2005 revealed small populations of two non-native and invasive aquatic plants, fanwort (*Cabomba caroliniana*) and Brazilian elodea (*Egeria densa*). Since both species can spread through fragmentation and could reinfest the main body of Foster's Pond if left unmanaged, treatment of the Glenwood Road Basin was conducted in 2006.

Chronological Summary of 2006 Management Activities

- Secured approval from Andover Conservation Commission (FPC) February
- Prepared and submitted License to Apply Chemicals with MA DEP April 14th
- Received approved LTAC from MA DEP April 21st
- Pre-treatment inspection May 5th
- Initial Sonar herbicide treatment June 5th
- FasTEST sample collection June 15th
- FasTEST sample collection June 29th
- Follow-up Sonar herbicide treatment June 29th
- FasTEST sample collection and cursory inspection of Foster's Pond August 2nd
- Final post-treatment inspection of Glenwood Road Basin and Foster's Pond September 13th

Summary of 2006 Program

Due to heavy rainfall between mid and late May, the initial treatment was delayed until June 5th, when outflow from the Glenwood Road Basin into Foster's Pond had subsided. Since both fanwort and Brazilian elodea were found scattered around the entire shoreline of the Basin it was determined that a whole-Basin treatment with Sonar AS (liquid formulation) targeting an in-pond concentration of 20 ppb was the preferred treatment approach. The June 5th treatment was performed from



a small jon boat and the concentrated herbicide was diluted with pond water and evenly sprayed throughout the Basin.

Ten days later on June 15th, we surveyed the Glenwood Road basin and collected a water sample for FasTEST analysis of Sonar residues. The in-pond concentration was holding at 21 ppb. The follow-up treatment was scheduled and performed two weeks later on June 29th. A FasTEST sample collected and analyzed immediately prior to the follow-up treatment revealed an in-pond concentration of 10.9 ppb. Approximately one month after the follow-up treatment on August 2nd, a third FasTEST sample was collected and analyzed, revealing an in-pond concentration of 15 ppb. Based on the condition of the targeted plants observed on August 2nd and the remaining Sonar concentration it was determined that no further treatment was required.

The targeted plants responded very favorably to the Sonar treatment. By the time the second Sonar application was performed on June 29th, both the fanwort and Brazilian elodea were showing strong evidence of chlorosis (whitening symptomatic of Sonar exposure). On August 2nd, both plants were nearly completely chlorotic. When the final inspection was performed on September 13th, no viable fanwort or Brazilian elodea were found in the Basin and the majority of these plants (<95%) were decomposing on the pond bottom.

Some impacts to native species were observed during the treatment program. White waterlilies (*Nymphaea odorata*) growing along the shoreline had been thinned out and remaining plants were fairly chlorotic. Based on the 2005 treatment experience at Foster's Pond and observations on other similar treatment programs, we expect to see significant rebound of white waterlily growth in 2007. Other healthy plant species observed post-treatment included submersed bladderwort (*Utricularia sp.*) and shoreline growth of emergent pickerelweed (*Pontederia cordata*) and emergent rushes (*Scirpus sp.*). No adverse impact to fish or wildlife were observed following treatment. There was some loss of water clarity following treatment, with Secchi Disk clarity dropping from 12.5 feet to 8.75 feet. This was likely caused by the decomposing plant material and possibly some slight increases in algal densities. We expect water clarity to improve to pre-treatment levels in 2007.

Overall, we were pleased with the nuisance plant control achieved in the Glenwood Road Basin and we expect to see at least 2-3 years of effective control of fanwort and Brazilian elodea. It was a pleasure working with you and the Corporation this year. The Corporation's organization, communication and efforts to notify the lake abutters and the community of the treatment dates, made our job much easier and helped make this program a success.

Foster's Pond 2006 Survey Findings and Future Management Recommendations

Based on reports of fanwort regrowth in portions of Foster's Pond, we performed a cursory survey of the entire pond on August 2nd. Unfortunately, scattered fanwort plants were found in the channel leading to the Mill Reservoir section, in the main channel and in the Outlet Cove. We agreed to re-survey the entire pond during our final post-treatment inspection.

On September 13th we toured the entire pond by boat. Robust fanwort growth was found in the channel leading to Mill Reservoir and in the channel leading to the Outlet Cove. Plants were approaching the surface in these locations. Most of the fanwort growth was found where water depths were between 3-4 feet deep and there were extensive (>2 feet) soft sediment deposits on the pond bottom. Widely scattered fanwort plants were found in the Outlet Cove, mostly along around the island and along the western shoreline. No fanwort was found in the Main Pond or in the shallow coves found in the southern half of the pond.

Based on the complete control of fanwort that was achieved in 2005, it was quite surprising and disappointing to see such extensive fanwort regrowth this year. Again most of the regrowth occurred in areas where water depths were shallow (3-4 feet) and soft sediment accumulations on the bottom were significant (>2 feet). The most logical explanation for the regrowth in these areas is they harbored the most mature fanwort plants prior to treatment and the herbicide treatment could not completely exhaust the starch reserves in their extensive root structures. We have observed similar patterns of regrowth on other waterbodies following treatment with Sonar and other systemic-acting herbicides, but never within one-year following a Sonar treatment when concentrations of 10-20 ppb were maintained for well over 60 days.

Management options for partial lake fanwort control remain fairly limited. Sonar is still the only herbicide currently registered for aquatic applications that has demonstrated effective control of fanwort. Several new compounds are currently seeking aquatic labels from the EPA, but their efficacy on fanwort is still being evaluated. Even if a new product is discovered and registered by the EPA, it will probably take at least 1-2 additional years to become registered for use in Massachusetts. This leaves Sonar as the only herbicide option. Mechanical controls such as hydro-raking or harvesting are usually not recommended because fanwort primarily propagates by vegetative fragmentation and these mechanical controls only provide temporary control and can often hasten the spread of the infestation. There already appears to be too much plant biomass to effectively remove/control by diver hand-pulling or through the use of bottom weed barriers.

Re-treatment with Sonar herbicide remains the most cost-effective fanwort management strategy for Foster's Pond. The limitations of Sonar for partial lake treatments are its high solubility and requirement for an extended contact time with the target species. We contacted Shaun Hyde, the Northeast Aquatic Specialist for SePRO Corporation to discuss the situation at Foster's Pond and obtain his input on management alternatives. He is fairly confident that we could effectively spot-treat the areas of fanwort regrowth by utilizing the time-release pellet formulations of Sonar (Q and/or PR). These pellets sink to the bottom and release Sonar over a period of several weeks. This helps to overcome the effects of dilution and maintains higher concentrations of Sonar near the water-sediment interface to facilitate uptake by the foliage and root structures. Significantly higher chemical concentrations must be applied when using the pellets since only 20-30% of the active ingredient is available during their peak release periods. To effectively control the dense fanwort growth in the channel to Mill Reservoir and the channel to the Outlet Cove, we would need to apply a total dose of approximately 60 ppb calculated over the entire volume of the northern "half" of the lake. This would translate to concentrations of 120-150 ppb in the targeted treatment areas. Treatment would need to be initiated in May when the plants are beginning their most active phase of growth. Three applications of the pellets and possibly some liquid Sonar would be needed to maintain sufficient concentrations. In addition, we would recommend installing impermeable limno-barrier at the mouth of the Mill Reservoir cove and at the other end of the channel where it opens to the Main Pond (see attached map). This would help limit dilution and movement of the Sonar away from the treatment areas.

The other option would be to retreat the entire pond with Sonar. This approach would certainly carry a higher cost than the partial-lake treatment, but it would insure that all scattered fanwort regrowth is controlled. Where we did not find any significant fanwort growth in the Main Pond during our September 13th survey, we do not believe that a whole-pond Sonar treatment is warranted in 2007. On the other hand, if a partial-pond treatment is not performed in 2007, then a whole-pond treatment may be necessary in 2008. One drawback to the whole-pond treatment approach is the unavoidable impact to non-target species. The native plants appeared to rebound well in 2006 and additional recolonization is anticipated in 2007. A healthy native plant community is probably the best natural barrier to invasive species. Preserving a healthy native plant community should continue to be a primary goal of invasive species management programs at Foster's Pond in the future.

Again, the results of the 2006 treatment of the Glenwood Road Basin were favorable and we expect to see excellent carryover control for at least another 1-2 years or longer. The fanwort regrowth seen in Foster's Pond was disappointing and highlights the lake-to-lake variability in plant response to treatment. A partial-pond treatment in 2007 would be beneficial to prevent further spread of fanwort and reduce impacts to the non-target plant community. However, if funding is not available for treatment in 2007, we would recommend surveying the pond in the late spring (May or early June) to document the extent of fanwort regrowth and to determine if any non-chemical controls (i.e. hand-pulling) can be utilized. A second inspection should then be performed later in the summer to evaluate treatment alternatives for 2008.

We appreciate your business and look forward to assisting with your on-going invasive plant management efforts at Foster's Pond. Please feel free to contact our office if you have questions or require additional information.

Sincerely,

AQUATIC CONTROL TECHNOLOGY, INC.

A handwritten signature in black ink that reads "Marc D Bellaud". The signature is written in a cursive, flowing style.

Marc Bellaud
Senior Biologist