## HARVESTING REPORT By AB Aquatics, Inc.

Location: Lunenbury, MA Hickory Hills Lake

Dates: From: Monday, September 11, 2017; - To: Friday, September 15, 2017

Exotic Plants: Fanwort

Diver(s): Charlie Leocha, Eric Howes

Crew: Andrew Greaves, Eric Howes, Charlie Leocha

Amounts: 2,665 Total Gallons 30.25 Total hours worked

Detail report included (check): Excel spreadsheet  $\boxtimes$  Map(s)  $\boxtimes$  Other  $\square$ 

Report: Work began on Hickory Hills Lake within the deep 13 foot patch in Zone 13. The area was outlined with numerous Fanwort markers. The diver entered the water towards the southwest of the patch and began harvesting around the edge of the major patch. Once peripheral plants were harvested, the diver began removing the main patch. The area generally consisted of a silt bottom and growth mostly varied between level 4, most dense plant growth, and more sparse sections where only few small plants were found. This pattern continued until most of the area had been covered by the end of the day.

On Tuesday, the team returned to their end location from the previous day and completed the area within two hours. During that time, the diver revisited all areas dove the previous day which resulted in the removal of debris and small plants which were obscured by siltation and larger plants the first day. The diver encountered one isolated dense patch which was quickly removed in its entirety. As the diver revisited each marker the crew removed the Fanwort markers and placed one yellow marker in the epicenter of the marked area. The diver continued north removing several single markers which appeared to be marking tall native growth such as tall pond weed. One isolated marker was found to mark a very small Fanwort growth area.

The team progressed into the large marked area within Zone 11 close to lots 29 and 30. As the team approached the southernmost markers the diver encountered dense, mature growth south of the marked area. The diver worked throughout the remainder of the day moving from large dense patch to large dense patch. Some of the plants within this zone reached nearly 12-14 feet tall. The team marked their end location for return the following day.

Wednesday's dive remained within Zone 11, harvesting dense mature patches. The area had no native growth which resulted in a substantial yield of 100% Fanwort. The dive began south of the majority of the markers and the harvest headed in a northern direction. The benthic barriers in the area were found to have dense growth surrounding them as well as some plants growing through the mesh of the burlap material.

On Thursday, September 14th, the team returned to the large marked area within Zone 11 and continued progress on the patches. The diver continued to find growth transitioning between isolated level 4 patches and a level 2 growth area between patches. The diver continued until all markers and patches were harvested to completion. Due to the dense nature of the patch, revisiting this area would be suggested to collect any smaller plants obscured by more mature plants and remove any potential regrowth. The team then moved to Zone 5 to a cluster of three markers to

conclude the day. Growth was relatively light amongst the markers however once the diver began to head west of the markers a larger mature patch was encountered.

Friday began by visiting two markers near a cairn across from west of the previously harvested area within Zone 11. The diver harvested most of plant growth within the area however siltation began to greatly affect visibility. The team moved from the location to keep productivity and efficiency high. The diver visited two markers within Zone 13 which marked dense isolated patches. The tall patches were quickly removed and the crew again moved into Zone 5. The diver returned to a dense patch found the previous day towards the north of the zone. The remained of the day consisted of moving between the various markers in the area focusing on locations which were in the boating lane to help reduce fragmentation caused by boat traffic. One patch towards the southwest of the zone was found to be flowering. The diver also noted plants within this area were so fragile even the bubbles from the diver's regulator were capable of fragmenting the plants. The diver continued finding isolated dense patches until the day and week on Hickory Hills Lake was concluded.

By: Charlie Leocha; Date submitted September 16, 2017

							Harvest Method & Hrs.			
	Vessel			Yield		Density	ABA	2nd DASH	Hand	
Date	Used	Harvest locat	ions	(Gal)	Bottom types	(1-4)	DASH	Diver	Pull	Survey
Monday, September 11, 2017	20D4	Zone 13 Deep site		400	Silt & native	4-1	6.00			
Tuesday, September 12, 2017	20D4	Zone 13 Deep site		30	Silt & native	2-1	2.00			
Tuesday, September 12, 2017	20D4	Zone 11 Eastern Shore		305	Silt & native	4-3	4.00			
Wednesday, September 13, 2017	20D4	Zone 11 Eastern Shore		620	Silt & native	4-2	6.00			
Thursday, September 14, 2017	20D4	Zone 11		385	Silt & native	4-2	4.75			
Thursday, September 14, 2017	20D4	Zone 5		230	Silt & native	4-2	1.25			
Friday, September 15, 2017	20D4	Zone 5		550	Silt & native	4-2	4.50			
Friday, September 15, 2017	20D4	Zone 11		145	Silt & native	4-2	1.75			
			<b>Total Gallons</b>	2665						
				Current week dive hours			30.25	0.00	0.00	0.00
				Carry forward: over/ under hours			0.00	0.00	0.00	0.00
					Unbill	ed <b>Hours</b>	30.25	0.00	0.00	
					Total D	Dive Days	5.04	0.00	0.00	0.00
	9/1617	<< Date <u>Invoice</u>	Number >>		1334	<u>Days</u>				
				Cai	 rry forward: over/und	ler <b>hours</b>	30.25	0.00	0.00	

