HARVESTING REPORT By AB Aquatics, Inc.

Location: Lunenbury, MA Hickory Hills Lake

Dates: From: Monday, September 17, 2018; - To: Friday, September 21, 2018

Exotic Plants: Fanwort Diver(s): Mike Briggs

Crew: Shane Perkins, Ben Carver

Amounts: 1,580 Total Gallons 35.25 Total hours worked

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

Report: **Monday 9/17:** Diver started roughly 75 feet north of the peninsula of Walt & Proctor Cove. Diver swam north searching in an east west pattern stopping at designated markers to harvest patches. Diver encountered single plants as well as numerous patches within 100 feet of each shore line. Plants ranged from 1-10 feet in length

Tuesday 9/18: The crew began the dive near shore in the southeastern cove of zone 6. The diver initiated a search pattern in and out of the shoreline moving in a counterclockwise direction around the entire perimeter of the zone. As the search proceeded the diver noted harvesting scattered single plants and small patches evenly distributed throughout the shoreline. The plant density and distribution was consistent over the course of the entire dive with the exception of a large patch found in the deeper water about 50 feet from shore in the northeast corner of zone 6. Several factors created less than ideal dive conditions today. These factors were heavy rain which caused some siltation and decreased visibility, dense native growth throughout the entire zone which made for a more complicated pulling process, and shallow water which accelerated siltation due to harvesting. Wednesday 9/19: Dive started In the north east corner of zone 1 directly south of the peninsula. Diver started heading west through zone 1 but strong winds made searching that direction difficult. As a result we relocated to the far west side of site 1 and headed east in a north south search pattern. Diver reported very heavy siltation due to heavy rain of the previous day as well as the thick native plants being matted down making his search arduous. Diver located patches intermingled with the natives ranging from 2-7 feet through his search but with the added difficulties of strong wind and fresh silt we moved to zone 2. Dive B: Dive started 40 feet from the shore line on the east side of zone 2 along horizon island rd. Diver swam north parallel to shore line searching east to west finding multiple patches of fanwort ranging from 3-9 feet. As the search progressed north diver started to encounter the same issues of siltation we encountered in zone 1 leading us to move to zone 4. **Dive C:** Dive started in zone 4 directly south of horizon island rd approximately 30-50 feet from shore. Diver began swimming south in an east west search pattern in the direction blueberry island. Divers search saw scattered plants and but encountered two big patches the first approximately 350' from shore at n42'36'49.42 w71'42'34.03 and the second at 600 feet south of horizon island rd at n 42'36'49.42 w71'42'34.03 plants were found to be between 2 -10 feet in length. Diver continued south to blueberry island finding single scattered plants.

Thursday 9/20: Dive started in zone 4 just off the island 75 feet north from shore. Diver swam north searching in an east west pattern. Diver encountered single plants throughout search. however, diver located 4 extremely large patches in a small area of roughly 150 feet, yielding between 5-7 bags per patch. The patches were noted and pinned on map. Diver reported plant lengths ranged from 3-9 feet in length.

Friday 9/21: Dive started north of the island in zone 4, just north of the previous days end point. Diver swam south towards island rechecking the locations of the large patches discovered yesterday (9/20) satisfied the areas were thoroughly clean diver began swimming north searching in a long east to west pattern. Diver found 3 more large patches (marked in tracker) as well as scattered plants along his search. Plants diver encountered ranged from 2-8 feet in length. Heavy winds coming west to east made the search difficult. Total yield 13bags

By: Al Hoch; Date submitted September 22, 2018

						Harvest Method & Hrs.			
	Vessel		Yield		Density	ABA	2nd DASH	Hand	
Date	Used	Harvest locations	(Gal)	Bottom types	(1-4)	DASH	Diver	Pull	Survey
Monday, September 17, 2018	20D4	Site 6 N of peninsula of Walt & Proctor Cove	440	Silt & native	4-1	8.75			
Tuesday, September 18, 2018	20D4	Site 6 SE cove	170	Silt & native	2-1	6.25			
Wednesday, September 19, 2018	20D4	Site 1 NE corner, S of peninsula	20	Silt & native	2-1	2.00			
Wednesday, September 19, 2018	20D4	Site 2 E side along Horizon Rd	100	Silt & native	2-1	1.25			
Wednesday, September 19, 2018	20D4	Site 4 S of Horizon Island	110	Silt & native	1	3.75			
Thursday, September 20, 2018	20D4	Site 4 to 5 N from island	480	Silt & native	4-1	7.50			
Friday, September 21, 2018	20D4	Site 4 N of Thursday end	260	Silt & native	2-1	5.75			
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		Table Callege	4.500		<u> </u>				
		Total Gallons	1,580						
				Current week di	35.25	0.00	0.00	0.00	
			Ca	Carry forward: over/ under hours		26.00	0.00	0.00	0.00
				Unbill	ed Hours	61.25	0.00	0.00	
				Total Dive Days		10.21	0.00	0.00	0.00
	9/22/18	<< Date <u>Invoice</u> Number >>		1375	<u>Days</u>	10.00			
			Ca	rry forward: over/und	der hours	1.25	0.00	0.00	0.00



