

Milfoil Committee

Briefing to Board of Selectmen

October 17, 2012



Milfoil Committee Experience

- Committee now has four years of experience; 7 active members;
- Continual interaction/interface with DES and experienced Contractors, both Herbicide and DASH (Diver Assisted Suction Harvesting)
- Town wide effort- all of Alton's waters are being addressed, with focus on Winnepesaukee



MANY LESSONS LEARNED

- Growth Patterns, Type of Bottom, etc.;
 - 3' to 16' depth, muddy bottom
- Treatment Methods (Herbicide, DASH, Cut);
- Each Region has unique issues/problems:
 - Moultonborough
 - Wolfeboro
 - Alton



ALTON'S MILFOIL PROBLEM Is In Winnepesaukee

- Alton has 26+miles of mainland shoreline and 12+miles of island shoreline.
- Surveys revealed approximately 20 acres with milfoil.
 - Small's Cove
 - Minge Cove
 - Woodman's Cove
 - Rand Cove/ Back Bay
 - Roberts Cove Marina
 - Between the Water Bandstand and Rte. 11 Bridge in numerous places (Town Docks, Town Beach, Gillan Marine, Downings Landing)
 - Merrymeeting River (approximately 16 acres from Parker Marine to Fish & Game Dam)
- SCOPE: 36+/- acres within several square miles of area



No Other Alton Water Body Has Milfoil

- Hall's Pond
- Sunset Lake
- Gilman Pond
- Half Moon Lake



What have we done to mitigate/ control and what has it cost?

2009

- Trained by DES.
- Surveyed Alton's Waters.
- Applied for DES Grant.
- Developed RFP's for Herbicide Treatment.
- Selected Contractor.
- Explored Participation in Lake Host Program.
- Recommended a Warrant Article for the 2010 Budget.



2010

- DES Grant Funding Awarded (30% Match)
- Donations from several waterfront businesses and private sources (\$4,500)
- Warrant Article Funding Authorized (\$7,500)
- Herbicide Applied by Contractor using DES supplied GPS Coordinates. Approximately 12 acres in Lake and 4 acres in River. Parker Marine to Griffins Bridge (\$13,364)
- Applied in September not June (Why?)
- Only a portion of the Merrymeeting River (MMR)
- Quality Problems
- Results will be determined in 2011
- Participated in Lake Host Program- \$750 Grant from NH Lakes (Inspections and Education).



2011

- DES Grant Awarded (30% Match)
- Warrant Article Funding Authorized (\$7,500)
- Surveyed 2010 Treated Zones
 - Effective reduction in milfoil
 - Meetings with DES regarding next steps
- Determined that Diver Assisted Suction Harvesting (DASH) was also needed
- Issued RFP and selected DASH Contractor
- DASH work performed (Lake and MMR) 16 days; \$13,000. Hurricane Irene
- Selected new Herbicide Contractor for 2012
- Participated in Lake Host Program- \$750 Grant from NH Lakes



2012

- DES Grant Awarded (50% Match-up to \$17,000)
- Warrant Article Funding Authorized (\$20,000)
- Surveyed all Winnepesaukee and MMR zones. GPS coordinates supplied by DES
- Herbicide applied by Contractor in July (peak growing season)
- Treated all zones north of Rte. 11 Bridge- \$8,942
- Issue of what to do in the MMR discussed at length (Town Wells and Water Commissioners)
- DASH Contractor currently working.
- Will work 30 days:
 - Cleared all zones North of Rte. 11 Bridge
 - Cutting channel in MMR from Rte. 11 Bridge to Fish & Game Dam
- Participated in Lake Host Program- \$750 Grant from NH Lakes
- Out Year Plan Being Developed
 - Survey/treatment required every year (similar to snow removal)
 - Funding required annually



LESSONS LEARNED

Summary and Status of Milfoil in Alton's Winnepesaukee Waters

- We have milfoil. We know how to control it. We know it will be an ongoing issue to address and it will require treatment and funding to control- **milfoil will not go away.**
- Herbicide Treatment reduces growth by 90%-95%, it is cost effective (\$1,000/acre)
- DASH is effective, particularly post herbicide. However, it is labor/time intensive thus costly.



We Have Divided Our Waters into Two Zones:

- ZONE 1 - The Lake North of the Rte. 11 Bridge
- Status- has been treated with Herbicide and DASH follow up.
- As of this date, milfoil is mitigated and under control. The Herbicide and DASH combination have been successful.

*Note: New growth discovered late 2012 in Roberts Cove Marina Boat Basin.
Will treat in 2013.



ZONE 2

MMR South of the Rte. 11 Bridge

Status-

- Considerable reduction of milfoil and channel cut from Rte. 11 Bridge to Fish and Game Dam.
- Milfoil remains. Parker Marine is loaded.

The Issue-

- Town Wells (Levey Park and Jones Field) adjacent to River.
- Concern that Herbicide could enter drinking water currently is precluding the Herbicide Treatment in this Zone.
- Since the River flows into the Lake this results in new milfoil deposits continually flowing into the clean Lake



Today's Major Issue is the MMR

- DES, Contractors and the Committee have concluded that the MMR needs Herbicide Treatment to effectively reduce milfoil.
- DASH follow-up removes remaining live plants.
- The Herbicide/DASH Combination is effective. Substantial results are achieved.



RECOMMENDATIONS

- Lake: North of Rte. 11 Bridge: Survey annually and Treat/DASH as required. This will effectively control.
- MMR: DES Drinking Water & Ground Water Bureau recommends Alton Water Works and Town of Alton develop a plan to address milfoil mitigation while protecting drinking water.
 - A recommended approach is to sequentially shut down the Town Wells and perform the Herbicide Treatment in segments: example- Levey Park (Rte. 11 Bridge to Griffins Bridge); Jones Field (Griffins Bridge to Dam). Follow up with DASH.
 - The alternative is to:
 - Continue the Herbicide Treatment in the Lake
 - DASH in the MMR
 - Combined cost is estimated at a minimum of \$25,000/year.



ACTION IS REQUIRED

- The Milfoil Committee needs a decision so we can develop a budget and plan the 2013 Contractor activity.
- We must annually survey and treat milfoil. If we do not, it will again take over portions of Alton Bay and threaten the greatest financial resource/asset in our Town.



MILFOIL BUDGET AND COST SUMMARY

Year	FUNDING					COST	
	P&R	Donations	Warrant	DES	NH LAKES	HERBICIDE	DASH
2009	2500						
2010	2500	4500	7500	4000	750	13,364	
2011	0	0	7500	3900	750		13,000
2012	0	0	20,000	16,500	750	8,942	24,000
2013	0		To Be Determined for 2013				
TOTAL	5000	4,500	35,000	24,400	2,250	22,306	37,000
SUM				68,900		59,306	

NOTE: \$26K has cleaned Lake
\$33K spent in MMR- remains a major problem

