PEPPERMILL LAKE MANAGEMENT PLAN

TABLE OF CONTENTS **PAGES**

INTRODUCTION

Chapter 92 of the Wisconsin State Statutes established the Adams County Land and Water Conservation Committee (LWCC) and the Adams County Land and Water Conservation Department (LWCD). The LWCC and LWCD have the responsibility of conserving long-term soil productivity, protecting the quality of related natural resources, enhancing water quality and focusing on severe soil erosion problems.

The Peppermill Lake District was formed in 2002 to monitor lake water quality and implement best management practices to maintain and improve lake water quality and quantity on Peppermill Lake.

The Wisconsin Department of Natural Resources (WDNR) is dedicated to the preservation, protection, effective management, and maintenance of Wisconsin's natural resources. It is responsible for implementing laws of the state and where applicable, laws of the federal government that protect and enhance the natural resources of our state.

To achieve the purposes of the Peppermill Lake District, Adams LWCC/LWCD, WDNR a Lake Management Plan was developed. The plan addresses natural resource issues of the lake and also in the lake's watershed. The plan is dynamic and revisions shall occur to reflect current events and priorities. The Peppermill Lake District Board has appointed a standing committee that will be responsible for implementing and updating the lake management plan. The standing committee will consist of 2 representatives of lake stakeholders and 1 Lake District board member who will chair the committee. The standing committee will attend all Peppermill Lake District Board meetings to report plan status and to gather public input on the plan. The Peppermill Lake District will publicly notify all members of the district and public of the board meetings. The standing committee will develop a method to accept written comments from the members and the public who cannot attend the board meetings.

The plan will utilize best management practices, education, and regulations to improve the natural resources. The plan will incorporate human conveniences in a manner that does not compromise the quality and quantity of the natural resources. All ordinances, policies, and activities associated with the State, County, and Town must receive approval from proper authorities.

The plan consists of goals and action items to address natural resource issues and activities for a five-year period. As one year passes, another year of the plan will be added, so the plan will always reflect a five-year period. Scientific studies, community residents, and the general public were inventoried to determine the goals of the plan. A Lake Advisory Group (LAG) was formed to identify action items and develop the format the plan, present the plan to the public to receive feedback, incorporate the feedback as deemed necessary and in the future assist Peppermill Lake District with updates and revisions. The LAG consists of WDNR specialists, Peppermill Lake District Board Representative, lake area residents, Adams County Board representative, Jackson Township representative and Adams LWCD.

Copies of the Peppermill Lake Management plan have been distributed and are available at the following locations: Peppermill Lake District; Town of Jackson; WDNR Service Center in Wisconsin Rapids; Adams Public Library; and Adams Land and Water Conservation Department.

Peppermill Lake Management Plan Advisory Group

Name	Phone number	Address	E-MAIL	Representing
AL SEBASTIANI	608-586-4380	274 STATE ROAD 82, OXFORD, WI 53952	mapres@maqs.net	ADAMS COUNTY
GEORGE BENISH	608-586-4417	348 FISH LANE, OXFORD, WI 53952	propman@maqs.net	TOWN OF JACKSON
BARB ANDERSON	608-586-6350	312 FISH CT, OXFORD, WI 53952	banderson@maqs.net	LAKE RESIDENT
JIM ABBS	608-238-5214	3216 3RD LANE, OXFORD, WI 53952	jabbs1@charter.net	LAKE RESIDENT
RUSS STEARNS	608-877-9605	1301 KINGS LYNN ROAD, STOUGHTON, WI 53589	peppermill@charter.net	LAKE RESIDENT
SCOT IRONSIDE	608-339-8087	PO BOX 100 FRIENDSHIP WI 53934-0100	scot.ironside@dnr.state.wi.us	WDNR FISHERIES BIOLOGIST
BUZZ SORGE	715-839-3794	1300 W CLAIREMONT AVE EAU CLAIRE WI 54702	patrick.sorge@dnr.state.wi.us	WDNR LAKES SPECIALIST
DEBORAH KONKEL	715-839-2782	1300 W CLAIREMONT AVE EAU CLAIRE WI 54702	deb.konkel@dnr.state.wi.us	WDNR AQUATIC PLANT SPECIALIST
REESA EVANS	608-339-4275	PO BOX 287, FRIENDSHIP, WI 53934	revans@co.adams.wi.us	ADAMS LAND & WATER CONS DEPT.
BILL PEGLER	608-586-5238	316 FISH COURT, OXFORD, WI 53952	whpclp@maqs.net	PEPPERMILL LAKE DISTRICT

PEPPERMILL LAKE CHARACTERISTICS

Lake Description

Peppermill Lake is located in southeast Adams County, approximately 4 miles west of Oxford, Wisconsin. The lake has a surface area of 100 acres, with a maximum depth of 14 feet and a mean depth of 7 feet. Peppermill Lake is the headwaters for Peppermill Creek, a tributary of Neenah Creek. Peppermill Creek has a diverse warm water fishery. The macrophyte indices and instream habitat assessments are satisfactory (The Sate of the Upper Fox River Basin, 2001). The water source for the lake is surface runoff and groundwater springs. The University of Wisconsin-Stevens Point Environmental Task Force Program evaluated the groundwater entering the lake in 2001. Groundwater generally flows northwest into the lake and flows east out of the lake. The University of Wisconsin-Stevens Point Environmental Task Force Program also determined that stratification occurs in the deep holes during the winter and summer months, while mixing occurs in the spring and the fall. The Peppermill Dam, built in 1967, impounds water to form the lake. Adams County owns, operates, maintains and repairs the dam. A public boat launch located at the east end of Peppermill Lake. Adams County Parks and Recreation Department manages the boat launch and immediate area.

Climate

The climate in the Peppermill Lake area is classified in the continental climate type. The summers have warm but not excessively hot, days and cool nights. Winters are long, cold, and snowy. Mean annual precipitation is almost 30 inches. In an average winter, snow cover on the ground and ice cover on the lakes lasts from December to April. The growing season generally extends from late May to early September, for an average frost-free growing season of 135 days. Prevailing winds come out of the northwest from late fall through spring and from the South during the remainder of the year. The wind speed generally ranges from 4 to 15 miles per hour. (Adams County Land and Water Resource Management Plan)

Demographics

Peppermill Lake is in the Town of Jackson, Adams County, Wisconsin. The 1995 town population was 953. In 2000, the population of 926 was 55.4% between 19-65 years old and 22.2% over 65. There were 951 total housing units, with 41.7% of those units being occupied year round and 58.3% seasonally/recreationally occupied. The

median household income in 1999 was $39,338 with 25.5% in the $35,000-$49,999 range, 22.9% in the $50,000-$74,999 range, and 20.2% in the $15,000-$24,999 range. The industry is varied in the Township with manufacturing 20.1%; recreation 13%, education/social services 11.3%; and retail trade 11.3% being the top four. (U.S. Census Bureau, Census 2000)

The Peppermill Lake Association/District conducted landowner surveys in 2001 and 2004 to determine lake use, perceptions, and practices that may affect the lake water quality. Fishing, boating, peace/solitude were the top recreational activities for lake users in 2001, while in 2004, fishing, boating, peace/solitude, and scenic enjoyment were the top recreational activities. The 2001 survey attempted to gather information on septic systems, but response was incomplete. The 2004 survey results stated on average, survey respondents' septic systems were inspected every 1-2 years. The 2004 survey results stated 70% of the respondents felt the lake level has not changed significantly, and 65% said there should be no adjustments to the lake level. Other results of the surveys:

	2001	2004
Surveys returned	74%	59%
Average ownership of property	11.6 years	13.6 years
Year around residents	17.7%	20%
Seasonal residents	82.3%	80%
Properties with mowed lawns	72.5%	63%
Properties that use fertilizers	14.8%	10%
Septic systems inspections	Not available	1-2 years

Lake Water Quality

The relatively shallow nature of Peppermill Lake and its impoundment status make this regionally popular water resource sensitive to nutrient inputs (Assessment of Lake and Groundwater Chemistry, Shallow Groundwater Flow, and the Aquatic Macrophyte Community, Peppermill Lake, 2002). Wisconsin Department of Natural Resources (WDNR) Self-Help data has been collected and analyzed according to DNR criteria. The lake water clarity is very good, and the lake water quality is good to very-good. The watershed to lake ratio is 9.5:1. Negative water quality impacts from the watershed are generally seen when the drainage area/lake size ratios exceeded 10:1. The Adams Land and Water Conservation Department is presently testing the water quality from 2004 to 2006 and plans to monitor water quality in the future. The University of Wisconsin-Stevens Point Environmental Task Force Program evaluated the water quality and found:

1. Total phosphorus and total nitrogen levels are at manageable levels;

2. Modeling predicted 135-kg/year total phosphorus entering the lake (75% from ground water flowing through lake sediments, 10% from watershed, 7% from groundwater, 5% from septic systems, and 3% from atmosphere);

3. Phosphorus is the limiting nutrient in Peppermill Lake;

4. water flow into the lake is estimated at 4 to 4.5 cfs;

5. The lake's Trophic Status Index is mesotrophic to eutrophic;

6. Toxic metals will not be an immediate factor in water quality due to the high pH and buffering capacity;

7. The measured amount of chloride indicates a minimal impact from septic systems, animal waste, fertilizers, regional watershed activities, and road salting chemicals;

Based on tissue phosphorus concentrations of aquatic plants in other Adams County lakes, the DNR estimates removing 40 to 90 tons of aquatic plants per year would likely counteract an estimated 135 kg/year phosphorus entering the lake via the watershed. The tonnage of aquatic plants mechanically harvested in 2003 was in this range.

The 2001 and 2004, surveys of the Peppermill Lake Community found weeds were perceived as the major water quality problem, followed by algae and water clarity. The 2004 survey results showed those who see water quality declining felt it is due to weeds (56%), development (23%), septic systems (20%), and herbicides (16%). Other results:

	2001	2004
Residents who think water quality has declined	50.9%	26%
Perception of water quality		
Good to excellent	83%	92%
Fair	15%	6%
Poor	2%	2%

Aquatic Plant Community

In 1998, Eurasian watermilfoil was identified as a potential large-scale problem, but the native plant community was effectively competing with the Eurasian watermilfoil. Chemical control was begun on 1999. Aquatic Engineering Inc. conducted an aquatic plant survey in 2003 and identified a possible hybridized form of watermilfoils as the greatest threat to aquatic plant management. Eurasian watermilfoil and hybrid watermilfoils utilize nutrients in the lake for growth, and fragments of the plant may spread to new areas and become established. Eurasian watermilfoil and hybrid watermilfoils are a problem because they can prevent navigation, reduce lake aesthetics, impair fisheries and out-compete native plant communities (Peppermill Lake District Aquatic Plant Management Technical Report, 2003).

In 2001, the University of Wisconsin-Stevens Point Environmental Task Force Program completed a plant survey that found the aquatic plant community is above average quality according to the Aquatic Macrophyte Community Index. A complete list of the plants found in the survey are listed in Appendix G. The plant survey also provided the following findings: the sediment is predominately silt; 97% of the littoral zone is vegetated (25-85% is ideal for fish habitat); many of the plants found are excellent fish habitat and are characteristic of good water clarity; there is good diverse submergent plant community, while the emergent plant community lacks diversity.

In 2003, Aquatic Engineering Inc. conducted 4 surveys, starting in June and ending in mid-October, to identify areas of Eurasian watermilfoil. The areas were treated with 2,4-D and totaled 5.4 acres. During the follow-up periods, it was determined that previous treatments controlled the Eurasian watermilfoil, but the 2,4-D had no control on the hybrid watermilfoil growth. Timing, water temperature, and slow plant metabolism may attribute to the poor treatment results on the possible hybrid watermilfoil. For details of the surveys and treatments, review "2003 Peppermill Lake District Aquatic Plant Management Technical Report.

In 2004, Aquatic Engineering Inc. developed and implemented a plan to reduce the frequency of Eurasian watermilfoil and hybrid watermilfoil by chemical means. The initial survey found Eurasian watermilfoil and hybrid watermilfoil. On June 17, 2004, granular 2,4-D was applied to small areas of Eurasian watermilfoil and hybrid watermilfoil infestations. On June 21, 2004 liquid 2,4-D was applied in areas of large infestations. The follow-up survey conducted July 19, 2004 showed the Eurasian watermilfoil and possible hybrid watermilfoil was controlled successfully.

The 2004 Peppermill Lake Survey stated 95% of the respondents supported general weed harvesting. 66% of the respondents wanted more plants to be harvested, 30% wanted the same amount as current, and 16% wanted fewer plants to be harvested.

Lake Fishery

In the summer of 2001, a survey of the Peppermill Lake Community found 72 % of the respondents rated the fishing average or better, while 23.2% rated it fair and 4.6% as poor. The survey showed approximately 55% of the respondents felt the quality of fishing had stayed the same or improved while 45% felt it had declined. Several of the comments from the survey centered on the fish being smaller in size.

In 2004, a survey of the Peppermill Lake Community found 66 % of the respondents rated the fishing average or better, while 20% rated it fair and 4% rated the fishing as poor. The survey showed approximately 56% of the respondents felt the quality of fishing had stayed the same, 45% felt it had declined and no one felt it had improved. Results of the survey showed those who felt the fishery was in decline felt it was due to over-fishing, weeds, and soil erosion.

In 2001, the University of Wisconsin-Stevens Point, Wisconsin Cooperative Fishery Research Unit evaluated the status of the fish community. Results of the survey found

high numbers of small bluegill and low numbers of largemouth bass and northern pike. It was determined that high aquatic plant growth might be hindering predation and bluegill growth. Recommendations to improve black crappie, yellow perch, northern pike, and largemouth bass were: conduct a growth study of the bluegill population to determine if stunting or angler harvest is responsible for the current size structure of the population; mechanical harvest of aquatic vegetation in channels to create edge-effect; continued stocking of northern pike and largemouth bass; and fishing regulation changes.

WDNR conducted a fish survey in 1999 and compared the results with historic records of fish populations. It was determined that Northern pike and Largemouth bass populations have fluctuated over time due to natural causes, winterkills, stocking and more restrictive size and bag limits. The 1999 survey showed the following: Northern pike and Largemouth bass numbers were high; Northern pike size structure was good with a mean length of 20.6 inches; Largemouth bass size structure was slightly down with a mean length of 10.6 inches; Bluegill numbers have increased and their size structure has decreased with a mean length of 3.9 inches. WDNR concluded predatory control of bluegill was not occurring in Peppermill Lake due to the high density of aquatic vegetation in the lake. WDNR recommended mechanical harvesting of aquatic plants to create areas of open water to improve fish predation, navigation and fishing opportunities.

Between 1995-2004, volunteer lake owner groups installed the following fish habitat improvement projects: deposit of pea gravel at 9 near shore sites to improve bass spawning; construction and placement of fish cribs in 3 to 5 feet of water at 9 sites to provide cover; trees dropped into water at 10 strategic points on the shoreline to provide fish habitat; and fish stocked periodically.

In the 1970's and early 1980's, there were four severe winterkills of fish due to low dissolved oxygen levels from the decomposition of vegetation and organic material (Ironside, WDNR Fisheries Biologist, 1999). Two aeration systems were installed in 1992 to improve the low oxygen conditions.

Watershed

Total lake surface watershed is approximately 952 acres. The land use in the surface watershed is woodlands 53.4%, residential 36.2%, water 6.9% and agriculture 3.5%. The upper watershed consists of moderate to steep sloping, well to somewhat poorly-drained, sands and loamy sands. The shoreline area (area within 1000 feet of lake) consists of slight to moderate-steep slopes, with well-to moderately drained, sands and loamy sands. Residential development occurs on most of the 92 riparian parcels in the shoreline area, and most parcels have native herbaceous plants. There are approximately 80 acres of zoned conservancy on the north side of the lake. (Assessment of Lake and Groundwater Chemistry, Shallow Groundwater Flow, and the Aquatic Macrophyte Community,Peppermill Lake, 2002). The shoreline area is not serviced by a public sanitary system and all dwellings have private septic systems.

The groundwater watershed is approximately 4,715 acres, with groundwater generally flowing northwest to southeast. There are no high capacity drinking wells in this watershed but there is high capacity wells used for irrigating cropland.

In 2001, the University of Wisconsin-Stevens Point Environmental Task Force Program lead efforts to determine the quality of surface water and groundwater entering the lake, the land uses in the watershed and the effects they were having on the lake's water quality. The groundwater was found to have hard water with elevated alkalinity and conductivity. Several samples had high levels of nitrate and chloride that may indicate minor impacts from watershed activities, septic systems, and shoreline area activities.

Surveys in 2001 and 2004 of the Peppermill Lake Community found:

	2001	2004
Shoreline with natural or man-made buffers	73%	70%
Average width of buffers	33 feet	16 feet
Shoreline with mowed lawns	17%	19%
Shoreline with rock riprap	8%	9%
Shoreline with retaining walls	2%	2%

Peppermill Lake District

The Peppermill Lake District was formed in 2002. The district board consists of 5 lake area residents, a Town of Jackson representative, and an Adams County representative. The district is responsible for the management of the lake.

Regulations

Adams County has a Comprehensive Zoning Ordinance that regulates land use, a Shoreland Protection Ordinance that regulates activities in areas within 300 feet of a stream and 1,000 feet of a lake, a Sanitary Ordinance that regulates on-site sanitary systems a Floodplain Ordinance that regulates activities within the flood plains, a Land Division Ordinance regulates division of properties and a Building/Construction Ordinance that regulates building and construction activities. The Town of Jackson utilizes the Adams County Planning and Zoning and their ordinances to regulate activities. Peppermill Lake has had a no-wake ordinance.

A survey of the Peppermill Lake Community showed 100% of the respondents support the no-wake ordinance. The survey also indicated that over 40% of the respondents enjoyed the quiet peacefulness of the lake, with many complaining about noises from lakeshore activities. (Peppermill Lake Survey, 2004)

ITEM	GOALS and ACTION ITEMS	WHO	WHEN
Aquatic Species Management			
	Machine harvest aquatic plants to improve water quality, to provide safe boating areas, control invasive species and to improve aquatic habitat.		
	1. No harvesting in areas between shoreline and ends of the boat docks except a 30 foot wide area may be hand harvested. Machine harvest will occur as such: a. late May to late June, E. watermilfoil harvested to a depth of one foot from bottom b. early July to late July, harvest once according to map (Appendix C). c. mid August to late August, harvest once according to map (Appendix C). d. mid Sept to late Sept, E. watermilfoil harvested to a depth of one foot from bottom	Peppermill Lake District Private Contractor	2006 to 2010
	2. Pursue funding for harvester purchase	Peppermill Lake District Adams LWCD, WDNR	2005
	Monitor the harvesting of aquatic plants		
	1. WDNR representative and a Peppermill Lake District representative will together annually inspect harvesting operations.	WDNR Peppermill Lake District	2005-2010
	2. Record the pounds of aquatic plants removed by taking an average weight of a trailer full of plants harvested and multiplying this by the number of trailer loads. This will be documented and reported to WDNR Aquatic Plant Specialist by 12/31 of each year.	Peppermill Lake District	2005-2010
	3. Wet tissues samples will be randomly taken from harvested plants and sent to a certified lab to measure the phosphorus content. This is done to determine the amount of phosphorus being removed from the lakes by harvesting plants.	Peppermill Lake District	2005-2010

ITEM	GOALS and ACTION ITEMS	WHO	WHEN
Aquatic Species Management	**Control invasive species utilizing chemical treatments**		
	1. Spot treat invasive species with chemicals specific for the species in shallow water areas where they cannot be mechanically harvested.	Peppermill Lake District private contractor	2005-2010
	Control Eurasian watermilfoil by cultural and biological methods		
	1.Research results of Eurasian watermilfoil control utilizing winter drawdown	Peppermill Lake District	2005-2008
	2. Incorporate winter drawdown into aquatic plant management strategies if research proves this to be a successful method of control.	Peppermill Lake District	2008
	3. Inventory lake to see if milfoil weevils exist.	Peppermill Lake District Adams LWCD, WDNR	2007
	Contol invasive species utilizing monitoring and identification.		
	1. Develop a group of volunteers to monitor lake for invasive species.	Peppermill Lake District	2006
	2. Educate volunteer monitor group on invasive species	Adams LWCD	2006
	3. Visually monitor lake for invasive species and plot the locations on a lake map.	Peppermill Monitor Grp	2006 - 2010
	4. Conduct aquatic plant survey using 2001 aquatic plant survey methods Survey shall include the shoreline area.	Adams LWCD	2006
	5. Maintain edcuational signs about exotic species at boat landing.	Peppermill Lake District	2006 - 2010

ITEM	GOALS and ACTION ITEMS	WHO	WHEN
Aquatic Species Management	**Protect sensitive areas within the lake from mechanical & chemical disturbances**		
	1. Identify and map sensitive areas within the lake	Adams LWCD WDNR	2006
	2. Develop a strategy to protect sensitive areas within the lake and incorporate the strategy into the lake management plan.	Peppermill Lake District Adams LWCD, WDNR	2006

ITEM	GOALS and ACTION ITEMS	WHO	WHEN
Dam			
	Maintain and operate Peppermill Dam to: insure public safety, proper dam function and a stable lake level.		
	1. Conduct annual inspections and record findings as specified in WDNR standards	engineer certified by Nat'l Assoc. of Prof. Eng. Adams LWCD	annually
	2. Operate, inspect, and repair dam to meet Wisconsin laws in Chapter 31 and NR Chapter 330.	Adams LWCD and dam lessee	daily
	3. Develop an Emergency Action Plan	Adams LWCD	2006
	4. Investigate feasibility of generating sufficient electricity at dam to operate lake aerators.	Adams LWCD	2008

ITEM	GOALS and ACTION ITEMS	WHO	WHEN
Recreational Uses	**Improve bluegill, black crappie, yellow perch, northern pike, and largemouth bass fisheries.**		
	1. Stock fish as funding allows based on recommendations from fisheries biologists.	Peppermill Lake District	2005 - 2010
	2. Explore & make recommendations to WDNR to establish new regulation to increase bass size limit to 18 inches.	Peppermill Lake District	2007
	3. Place 8 trees in lake littoral zone each year to increase fish habitat.	Peppermill Lake District	2007 - 2010
	4. Conduct a fish survey to evaluate fishery.	WDNR	2006
	5. Operate & maintain aireators to prevent winter fish kills	Peppermill Lake District	2005 - 2010
	Maintain recreational opportunities while maintaining peace and solitude		
	1. Continue to implement slow no-wake ordinance by turning violators in to WDNR	Peppermill Lake residents	2005 to 2010
	2. Install slow no-wake ordinance signs at major penisulas of lake.	Peppermill Lake District	2006
	3. Explore ordinance that other lake districts/assoc. have for noise control	Peppermill Lake District	2006
	4. Explore ordinances that other lake districts/assoc. have for light trespass	Peppermill Lake District	2008
	Incorporate the goals of the general public into the lake mangement plan.		
	1. Conduct public users survey to identify important management issues. Surveys and dropboxes will be located at boat launches for one year.	Peppermill Lake District	2006

ITEM	GOALS and ACTION ITEMS	WHO	WHEN
Shorelands - area within 1000 feet of the lake.	**Reduce nutrients entering groundwater that then enters into the lake.**		
	1. Develop ordinance prohibiting the use of fertilizers in shoreland area and deliver it to the Town of Jackson with the recommendation of passage as a Town Ordinance.	Peppermill Lake District Adams LWCD	2006
	2. Inventory and map septic systems within the Peppermill Lake District	Peppermill Lake District Adams LWCD & P/Z	2008
	3. Explore the activities of other lake districts/assoc. who have a Sanitary Dist. regulating pre-1992 septic systems according to Wisc Admin Code COMM 83	Peppermill Lake District	2009
	Reduce nutrients entering the lake by surface water.		
	1. Contact property owners identified in shoreline inventory as having erosion, no buffers &/or no storm water runoff mgmt & educate & offer plan/design assistance.	Adams LWCD	2005
	2. Pursue DNR Lake Protection Grant to assist with costs for installing shoreline protection, riparian buffers, storm water runoff , & demonstration buffer site.	Adams LWCD Peppermill Lake Dist.	2006
	4. Develop a informational packet regarding lake laws & best management practices.	Adams LWCD	2005
	5. Distribute informational packet to area realtors, existing and new property owners	Peppermill Lake Dist.	2005-2010
	6. Continue to enforce Adams County Shoreland Ordinace	Adams P & Z	2005-2010
	7. Implement Agricultural Performance Standards - NR151.	Adams LWCD	2005-2010
	Increase wildlife populations		
	1. Target the type of wildlife lake residents want to see increase and develop a plan that describes methods of implementation	Peppermill Lake Dist.	2008

ITEM	GOALS and ACTION ITEMS	WHO	WHEN
Water Quality	**Maintain present water quality and prevent algae blooms**		
	1. Monitor water quality to measure success of meeting nutrient reduction goals. The lake will be sampled yearly and tested for clarity, chlorophyll a, & total phosphorus and compare to 2001 water quality data.	Adams LWCD DNR self-help program	2005-2010
	2. Define water quality goals and quantify a percent of annual nutrient reduction based on the defined water quality goals.	Adams LWCD, WDNR Peppermill Lake District	2006
	3. Conduct modeling of phosphorus loading - update 2001 modeling. Analyze data and determine what actions to take.	Adams LWCD	2006
	4. Harvest plants from lake to prevent plant decay & release of nutirents	Peppermill Lake District	2005-2010
	Educate community and public about ways to improve water quality.		
	1. Obtain information from WAL and other sources and publish articles . in lake district newsletters.	Adams LWCD Peppermill Lake District	quarterly each year
	2. Place informational signs regarding best management practices at public boat launch site to educate lake users	Adams LWCD, WDNR Peppermill Lake District	2005
	3. Contact local schools & ask if they want to participate in lake mgmt activities	Peppermill Lake District	2007
	Practice proper land use utilizing Comprehensive Plans and Zoning		
	1. Within the Peppermill Lake watershed, develop and implement smart growth plans that insures environmental protection in areas being developed.	Town of Jackson Adams P & Z	2005-2006

ITEM	GOALS and ACTION ITEMS	WHO	WHEN
Water Quantity			
	Maintain lake levels that enhance water quality and meet the requirements of Wisconsin Statute Chapter 31.		
	1. Operate dam to maintain lake levels and outflows as stated by WDNR.	Adams LWCD	annually
	Maintain stable stream flow out of the Peppermill Lake.		
	1. Operate dams in a proactive manner so large quantities of water are not released causing downstream flooding and streambank erosion. Lake levels will be lowered in a slow consistent manner to accommodate anticipated heavy rains and/or snowmelt runoff.	Adams LWCD	annually
	Create deeper water in the lake.		
	1. Seek funding for a bathymetric map	Peppermill Lake, WDNR	2005-06
	2. Develop a bathymetric map.	university or contractor	2006
	3. Investigate and determine the need for deepening areas of the lake. If a need exists, develop a method/plan to implement. Present plan to WDNR for approval.	Peppermill Lake, WDNR Private consultant	2009

ITEM	GOALS and ACTION ITEMS	WHO	WHEN
Watershed - land outside of shoreland area	**Reduce watershed impacts.**		
	1. Implement State Agricultural Performance Standards by inventoring watershed and documenting: runoff from livestock confinement operations entering surface waters; livestock direct access sites; uncontained livestock manure storage facilities; soil erosion sites, and producers not implementing nutrient management plans and irrigation water management plans. Offer County, State, Federal cost share assistance and plan/design assistance to landowners identified in inventory so best management practices are installed for compliance with the State Agricultural Performance Standards.	Adams LWCD, NRCS DNR, Agric. Producers private organizations	2005 to 2010

APPENDIX A

Results of Peppermill Lake Survey Autumn, 2004 - Analyzed by J. Abbs

(Number of returned surveys: 63 of 85)

1. **Where is your property?**
   Percent of those who responded: **90% on lake, 5% within ½ mile, 3% within 1 mile**

2. **What part of the lake is your property nearest to?**
   Percent of those who responded: **41% East end, 52% West End, 6% North shore**

3. **How long have you owned property on Peppermill Lake?**

   Mean = 13.6 years, Median = 10 years

4. **What best describes the time you spend on Peppermill Lake?** (% of those who responded)

Weekends-year round	Weekends-occasional	Year round resident
38%	14%	20%
Weekends - Summer	**Vacations/holidays**	**Summer time resident**
14%	6%	8%

5 **How do you use Peppermill Lake?** (check all that apply)

Fishing	Boating	Peace/solitude	Wildlife observation
84%	72%	80%	58%
Scenic enjoyment	**Swimming**	**Entertaining**	**Walking**
78%	40%	48%	46%
Ice Skating	**Hunting**	**Sailing**	**Picnicking**
16%	4%	)%	16%

6. What is the largest horsepower boat motor you operate on Peppermill Lake?
Mean = 23.9 hp, Median = 25 30% have no gas motors!

7. Do you support the NO WAKE Reguation? 100%Yes

8. Do you always oberve it? 98% Yes

9. What do you like most about Peppermill Lake (see appendix A, Item 9)

10. What do you like the least about Peppermill Lake (see appendix A, Item 10)

11. How would you rate the water quality of Peppermill Lake?

Excellent	Very Good	Good	Fair	Poor
14%	46%	32%	6%	2%

12. Over the time you have owned property near the lake do you feel the water has:

Improved	Stayed the same	Declined
7%	48%	26%

13. In what way has the water quality changed? See Appendix A, Item 13

14. What do you think are the major water quality problems facing the lake (check all that apply)

Algae/scum	Litter	Water clarity
48%	4%	6%
Smell/odors	**Weeds**	
2%	74%	

15. How would you rate the fishing on the lake?

Excellent	Very Good	Average	Fair	Poor
2%	14%	50%	20%	4%

16. How long have you fished Peppermill Lake?

Mean = 12.7 Years, Median = 13 years

17. How has the quality of fishing changed since you started?

Improved	Stayed the same	Declined
	56%	43%

18. In what ways has the fishing quality changed? See Appendix A, Item 18 for individual comments

19. If you indicated that water quality or fishing quality has declined, indicate which of the following issues, in your opinion, may have contributed to the decline. From the list below, provide the top three choices:

Water Quality Decline:

Ranking					
Air pollution	**Fertilizer use**	**Soil erosion**	**Development**	**Heavy recreation**	**Septic systems**
3%	10%	10%	23%	10%	20%
Herbicides	Agriculture	Over fishing	Weeds	Shoreline damage	
16%	6%		56%	6%	

Fishing Decline:

Ranking					
Air pollution	**Fertilizer use**	**Soil erosion**	**Development**	**Heavy recreation**	**Septic systems**
	10%	30%	9%	10%	3%
Herbicides	Agriculture	Over fishing	Weeds	Shoreline damage	
13%	6%	60%	36%	6%	

20. Has the lake level changed in the last several years?

Lower	Higher	Not changed significantly
2%	27%	70%

21. Should the lake level be adjusted?

No	Raise	Lower
65%	20%	13%

22. Do you have other comments on lake level ? See Appendix A, Item 20 for individual comments

PLANT HARVESTING

23. Do you support general weed harvesting to improve lake quality?
Yes: 95%, No: 4%

24. Are you in favor of harvesting native plants (e.g., lily pads) as well as Eurasian milfoil?
Yes: 90%, No: 10%

25. How much and what should we harvest ? (Percentage of those responding)

More plants	Fewer Plants	More lily pads	Chara	Same as now
30%	16%	30%	6%	30%

26. Do you have comments about weed harvesting? See Appendix A, Item 26 for individual comments

27. In your opinion, what other measures should be done to restore, maintain or improve the lake? See Appendix A, Item 27 for individual comments

28. Do you maintain a lawn on your property?

Yes	No
63%	36%

29. Percentage of lot in mowed lawn?
Mean = 49% Median = 40%

30. Do you use fertilizer?

Yes	No
10%	90%

31. How often? (times per year) Response – 1 time per year

32. Is it phosphorus free? Yes: 100%

33. Would you support a lake-wide ban on phosphorus in lawn fertilizer? Yes: 100%

34. What best describes the location where your property meets the lake?

Natural landscape – undevel.	Lawn	Rock Rip-rap
64%	19%	9%
Landscaped trees/srubs	**Retaining wall**	
6%		

35. If you have a undeveloped buffer strip how far from the lake into the property does it extend?
Mean = 16 ft, Median = 10 ft.

36. To your knowledge, how long since your septic system was last inspected?
Mean = 1.6 years, Median = 1 year

APPENDIX TO 2004 Peppermill Lake Survey – Individual Comments

ITEM 9: What do you like most about Peppermill Lake
Quiet, Natural beauty, Quiet, Peaceful, Peace & beauty, Solitude, No Wake, Near Dells, Beautiful & peaceful, Quiet during week, Natural condition, Wildlife & peacefulness, Clean, Solitude, Scenic beauty, Peaceful, Tranquility, Everthing, Scenic, peaceful, privacy, Clean lake, Peaceful, Beautiful, Scenic, Wildlife, Peace, Solitude, Peace & quiet, Quiet, Peaceful, Scenic, Peace & solitude, Fishing, Natural beauty, Quiet, Scenic, No wake, Clean water, No wake, Environment, Solitude, Fishing & wildlife, No wake, Quiet, Scenery, Scenery, Fishing, Lake beauty, Fishing, Quiet, Scenery, Low population density, Scenic, Quiet, Relaxing, Quiet, Friendly neighbors, Quiet, Clean water, No wake, Peaceful,

ITEM 10: What do you like the least about Peppermill Lake?
Daily open fires, Lawn mower noise, hard to fish, Weeds, Water quality, Lily pads, North shore development, Water quality, Weeds, Weeds, Weeds, Weeds, Noise pollution – motors, Weeds, Weeds, Fishing, Fishing, Weeds, Fishing, Too many boats, Public boat ramp, Mucky shore, No wake violations, Public landing, Weeds, Noise, Lawn mowers, Gun noise, Barking dogs, Cluttered south shore, Weeds, Shoreline algae, Lily pads, Human changes to shore, Scum & weeds, Lawn mower noise, Weeds, Gas motors on lawn mowers, saws, tractors, Non resident boaters, Weeds, Shallow shoreline,

ITEM 13: How has water quality changed?
Fewer weeds after treatment, More algae near shore, More algae, Too many weeds, Weeds, Algae & scum, more Algae & scum, More weeds, Less clear, Weeds, Fewer weeds, More weeds, More weeds by our pier, More EWMF, More chara, More weeds, More weeds, More lily pads, More scum, Harvesting, Weeds, Water clearer, Cleaner, Better weed control, More weeds, Less weedy,

ITEM 18: In what ways has fishing quality changed?
Fewer large bass and bluegills, Fewer crappies, Fewer fish, Fewer northerns, Overfishing, Overfishing, Fewer game fish, No stocking, Overfished, Smaller open areas to fish, Smaller, fewer fish, Smaller fish, Less fish, Small fish, hard to find, No northern, Smaller bluegills, Lack of keeper fish, Panfish don't grow, Fewer northern and crappies, Fewer and larger bass, Overfishing, Smaller and fewer fish, Overfished Smaller fish, Winter overfishing, No stocking, Lack of fish, Smaller fish,

ITEM 22: Comments on Lake Level:
Lake is too high on west end, Higher lake level means land is wet, Maybe water table has changes, Losing shoreline, Raising lake more would mean fewer weeds

ITEM 26: Comments on harvesting:
Should be done yearly, Does not appear to be helping, Has harvesting created scum problem?, Less chara would be good, Preserve shoreland plants, Nice compromise on harvesting, Harvesting of lily pads has increased filamentous algae, Can property owners sign up for harvesting near their piers?. Should be more selective, Should be done more

than twice a year, Still too soon to tell value, More harvesting in channels on north shore, Some of us are not included, Job seems to be done well, Allow lily pads to be removed, Start harvesting earlier in the year, Harvest the mimimal amount, Harvesting has been successful. Cutting EWMF tends to spread **it,**

ITEM 26. In your opinion what other measures should be done to restore, maintain or improve the lake?:

Limit shoreline building and development, Aim for more natural environment, Dig lake deeper, Allow sandy shorelines, Stock more fish, Dig out a few more deep holes, Educate new owners on good shoreline protection practices. Increase shoreland buffers sizes, Prohibit gas motors, Agressively report violations, Do some more dredging, Dredge it deeper, Lower the lake to create buffer, Establish slot limits for fishing, Get shoreline grants to improve buffers, More fish stocking, Better weed harvesting plan, Enforce the no wake rule, : Be conservative in plant treatment, More chemical control of weeds, Educate owners on shoreline protection, Be more proactive in educating everyone on good lake practices, Better enforce no wake rules, Set up special fishing regs for bass, Educate land owners on buffers, Regulate boat launches, Dredge to make lake deeper, Remove all muskrats,

APPENDIX B

Results of Peppermill Lake Survey Summer, 2001 - Analyzed by J. Abbs

(Number of returned surveys: 63 of 85)

Section One: Lake Use

1. **Where is your property?**

   Percent of those who responded: **85.7% on lake, 14.3% within ½ mile**

2. **What part of the lake is your property nearest to?**

   Percent of those who responded: **43% west end, 57% east end***

   [*East and west end owners differed in opinions of water and fishing, see page 3]

3. **How long have you owned property on Peppermill Lake? Of those who responded: Mean = 11.6 years, SD = 9.51, Median = 8****

   [Length of ownership did not influence opinions on water and fishing quality]**

4. **What best describes the time you spend on Peppermill Lake?** (% of those who responded)

Weekends-year round	Weekends-occasional	Year round resident
25.8%:	24.1%:	17.7%
Weekends - Summer	**Vacations/holidays**	**Summer time resident**
16.1%	9.7%	6.4%

5. **Do you use the lake for recreation?: 98%: Yes, 2%: No**

6. **What types of recreation do you participate in on the lake?** (check all that apply)

Fishing	Boating	Peace/solitude	Wildlife observation
76.1%	71.4%	69.8%	53.9%
Scenic enjoyment	**Swimming**	**Entertaining**	**Walking**
53.3%	44.4%	44.4%	33.3%
Ice Skating	**Hunting**	**Sailing**	**Picnicking**
6.2%	4.7%	3.1%	3.1%

7. **Which of the following do you own and operate?** (Check all that apply)

Fishing boat	Canoe/Kyak	Paddle boat	Pontoon
63.4%	41.2%	36.5%	28.5%
Sail boat or board	**Ski boat**	**Jet Ski**	
4.7%	0	0	

8. **Please estimate gallons of marine gas used per year: Mean = 10.3 gallons, SD = 8.8**

9. **Largest horsepower motor operated on Peppermill Lake?: Mean = 20.2 HP, SD = 16.3**

10. **Do you support the NO WAKE regulation? Yes: 98.1, No: 1.9**

Section Two : Water Quality & Fishing

11. Over the time you have owned property near the lake do you feel the water has:

Improved	Stayed the same	Declined
3.9%	45.0%	50.9%

12. In what way has the water quality changed? See Appendix A for individual comments

13. How would you rate the water quality on Peppermill Lake?

Excellent	Very Good	Good	Fair	Poor
16.6%	33.3%	33.3%	14.8%	1.5%

14. Which of the following do you think are major water quality problems facing the lake (check all that apply):

Weeds	Algae/scum	Water clarity
71.4%	26.9%	9.5%
Motor boats	**Litter**	
4.7	4.7%	

15. How would you rate the fishing on the lake?

Excellent	Very Good	Average	Fair	Poor
	13.9%	58.1%	23.2%	4.6%

16. How long have you fished Peppermill Lake? Mean = 12.5 years, SD = 9.0 years

17. How has the quality of fishing changed since you started?

Improved	Stayed the same	Declined
4.7%	50.0%	45.2%

18. In what ways has the fishing quality changed? See Appendix B for individual comments

19. If you indicated that water quality or fishing quality has declined, indicate which of the following issues, in your opinion, may have contributed to the decline. From the list below, provide the top three choices:

Water Quality Decline:

Ranking					
Development	**Heavy recreation**	**Fertilizer use**	**Soil erosion**	**Septic systems**	**Herbicide use**
1	2	3	3	4	4

Fishing Decline:

Ranking					
Recreation	**Development**	**Soil erosion**	**Herbicide use**	**Fertilizer use**	**Septic systems**
1	2	3	4	5	6

Sub-Analysis: Water Quality and Fishing Opinion variations with Location of Property

QUESTION 11 - EAST END

Over the time you have owned property near the lake do you feel the water has:

Improved	Stayed the same	Declined
7.4%	33.3%	59.2%

QUESTION 11 - WEST END

Over the time you have owned property near the lake do you feel the water has:

Improved	Stayed the same	Declined
4.7%	55.0%	40.0%

QUESTION 13 - EAST END

How would you rate the water quality on Peppermill Lake?

Excellent	Very Good	Good	Fair	Poor
10.7%	32.1%	35.7%	14.2%	7.1%

QUESTION 13 - WEST END

How would you rate the water quality on Peppermill Lake?

Excellent	Very Good	Good	Fair	Poor
21.7%	39.1%	26.0%	13.0%	0%

QUESTION 14: What do you think are the major water quality problems facing the lake

EAST END **Percent checking WEEDS: 93%** WEST END **Percent checking WEEDS: 60..8%**

QUESTION 15 – EAST END

How would you rate the fishing on the lake?

Excellent	Very Good	Average	Fair	Poor
	26.0%	52.1%	17.3%	4.3%

QUESTION 15 – WEST END

How would you rate the fishing on the lake?

Excellent	Very Good	Average	Fair	Poor
	4.7.0%	66.6%	23.8%	4.7%

QUESTION 16 - EAST END

How has the quality of the fishing changed since you started (fishing Peppermill Lake)?

Improved	Stayed the same	Declined
4.1%	45.8%	50.0%

QUESTION 15 - WEST END

How has the quality of the fishing changed since you started (fishing Peppermill Lake)?

Improved	Stayed the same	Declined
0%	64.7%	35.2%

Section Three: Lake Management/Land use

20. In your opinion, what should be done to restore, maintain or improve the lake?

See Appendix C

21. Who should be involved in making management decisions for Peppermill Lake? (check all that apply)

Lake shore residents	Lake group members	Watershed residents
68.2%	57.1%	28.5%
University personnel	**State government**	**County government**
25%	19.0%	17.4%
Local government		
15.8%		

22. Are you a member of a Peppermill Lake Group?

One Group	Neither group	Both Groups
52.7%	9.0%	38.1%

23. Are you comfortable with the work of the Joint Committee?

YES	NO
94.2%	5.7%

24. Comments on the Peppermill Lake Joint Committee. See Appendix D.

25. Do you maintain a lawn on your property?

Yes	No
72.5%	27.4%

26. Percentage of lot in mowed lawn? Mean = 39.7%, SD = 26.1, Range: 10% to 95%

27. Do you use fertilizer?

Yes	No
14.8%	85.1%

QUESTION 28. What do you fertilize? - Erratic responses

QUESTION 29. Closest distance from fertilized area to lake . Erratic responses

QUESTION 30. What best describes the location where your property meets the lake?

Natural landscape – undevel.	Lawn	Rock Rip-rap
67.4%	16.2%	6.9%
Landscaped trees/srubs	**Retaining wall**	
4.6%	2.3%	

31. If you have a undeveloped buffer strip how far from the lake into the property does it extend? Mean = 33 feet, SD = 61 feet, Median = 10 feet

QUESTIONS 38-44 concerned septic systems and wells. Many respondees failed to answer these questions at and many who did only provided incomplete information. Data do not seem meaningful.

APPENDIX A: Comments in response to Question 12: In what ways has the water quality changed? (32/63 folks provided comments):

EAST END: Appendix A

*More weeds/lily pads
*Denser plant population
*More weeds, especially lily pads
*Too many weeds near shore
*Introduction of ewmf and need to spray, increase in lake weeds/plants
*More weeds
*Weeds, weeds, weeds
*Weeds, weeds, weeds
*More clogged with weeds making navigation more difficult, more silt as a result of decaying weed die off in winter
*Too many weeds
*Lake quality has improved because more properties have tried to naturalize or at least keep a buffer.
*More weeds and lily pads
*Weeds increased substantially
*Weeds, more traffic, more people
*Bottom of lake has risen due to decay of weeds
*It is still clear, more weeds along east end (milfoil?)

WEST END: Appendix A

*A few more weeds
*More weeds, more algae, water clarity is poorer, weeds are denser and closer to surface, more chara on surface
*Less fish, more weeds
*Seems to be a lot more weeds, etc.
*The weeds and lily pads
*No change
*Severe weeds, water does not seem as clear
*Water has changed every year, determined by climate mostly. Quality is a very subjective term
*Too many weeds
*More lily pads along north shore
*Weed growth
*Water quality has stayed the same, but weeds are more dense now
*Abundance of weeds
*It appears to be stable
*More weeds, water not as clear

APPENDIX B: Responses to Question 18: In what ways has the fishing quality changed? (23 of 63 folks offered comments).

EAST END: Appendix B

*No northerns
*Fewer fish, not stocked enough
*Smaller fish
*Bigger fish
*More bluegills, but in much smaller sizes, fewer largemouth bass; smaller northerns, much fewer crappie
*Larger bass, panfish about the same
*Bluegills are smaller and more plentiful
*All small fish
*Panfish not as big or as numerous
12 years ago – bass fishing excellent – panfish good – no northerns. After last winter kill – big panfish good – few bass Now bass appear to be coming back slowly.
*Less fish, too much pressure from fisherman
*Less fish caught, unable to fish some areas due to weed growth
*Hard to find the fish you like to catch, not as many, more weeds

WEST END - Appendix B
*Too little fish
*Smaller panfish, harder to fish due to weed growth
*Smaller northern, perch and bass – less also caught of all species. Have not caught a crappie in three years
*No change or small change
*More small fish
*We have larger northern pike, fewer bass and larger panfish
*Fewer "keepers" Fewer large panfish, too many northern pike, no rock bass
*Panfish are a better size than 10 years ago, good size bass are being caught
*Smaller fish, fewer big fish
*Not enough catch and release
*Over fished

APPENDIX C: Answers to the question, In your opinion, what should be done to restore, maintain or improve the lake? (47 of 63 responses)
EAST END – Appendix C
*People should maintain a natural or wild barrier between their lawns and the lake; boat motors should be resticted in size
*Weed harvesting, Eurasian milfoil treatments, Close public landing, Remove overabundant bluegills
*Weeds need to be reduced, Lilypads taking over, Remove tree limbs to prevent boat damage, need to dredge
*Some level of plant management
*A planned yearly program of either cutting or spraying weeds and lily pads
*Start harvesting weeds
*Allow weed removal to allow acces to our pier and dredging
*Cut or eliminate some weeds chemically
*Insist on buffer zone between lawn and lake. Limit boat motor size, cautious control of emwf
*Reduce the weeds; conduct a thorough study by non-interested (3rd party) aquatic biologists and chemists to profile the current aquatic system through sampling harvest methods then develop a protocol for the project based on these results. Somehow get help from the state.
*Don't know
*Weed control, cut paths through lily pads
*Clean out algae/vegetation
*Establish a lake district so that one unified voice will represent the lake
*Form lake district, enforce weed cutting laws for those who cut weeds in lake
*Weed control program, limit further development, limit public access, enforce no-wake, promote catch and release
*Enforce no-wake, stabilize shorelines
*Two organizations work together
*Reduce the weed biomass for better navigation, use of much more of the lake, better fish environment
*Raise lake if it will help to rid lake of unwanted weeds with weed treatment
*On weekends some way to have boats coming in clecked/sprayed for milfoil
*Form a lake district so everyone pays their fair share

WEST END– Appendix C
*Too soon to have an opinion
*Eliminate gas engines and allow only electric motors or sail
*Harvest weeds, dredge channels, aerate
*Stop the SOBs from dumping bottles and cans at the boat ramp
*Clear out the weeds
*Reduce lily pads in few areas using chemicals, harvest weeds, treat chara, form a lake district
*Seriously consider re-dredging the lake
*Get rid of the milfoil and weeds
*Form a lake district
*Monitor and study lake characteristics using proven scientific methods

*Weed control
*Stock more fish
*Limit motor size, limit boat size, harvest weeds, enforce no-wake
*Discipline the no-wake rule, signal offenders, emphasize what no-wake means
*Monitor the lake on a regular basis for water quality and non-native weeds
*Control weeds
*Remove some of the weeds
*A more concentrated weed eradication program
*Dredge key areas
*Encourage everyone to remove weeds, not weed killers, Check septic systems, consider some ways to increase water depth
*More shoreline protection and septic maintenance, no motor or electric only, stock fish
*Control weeds on north side; set up public swimming area
*Weed control, fish stocking, DNR involvement

APPENDIX D: Responses to the question... Comments on the Peppermill Lake Joint Committee (27 or 63 commented).

EAST – Appendix D

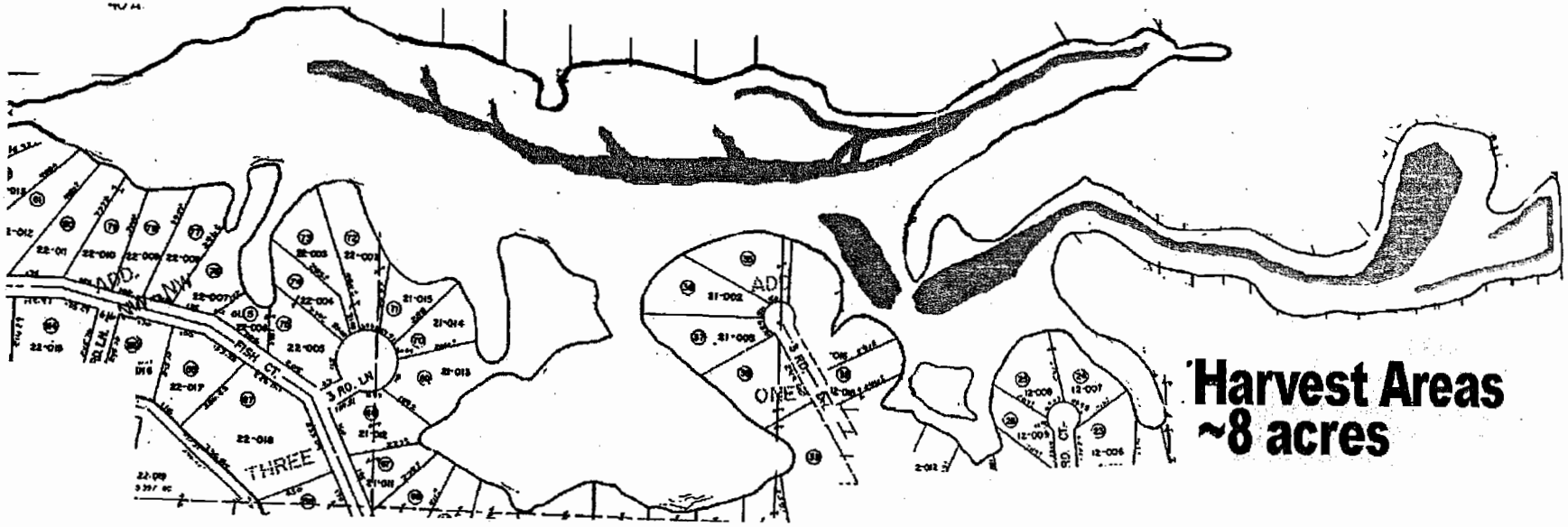
*Those people are the best
*Social atmosphere has improved, see no changes as far as the lake is concerned
*Finally- fantastic
*It holds the promise of uniting rather than dividing the residents of the lake
*There has been so much bickering between groups that we choose not to be a part of it
*For the first time I see there is a common desire to improve the lake rather than constant political bickering, leading to nothing getting done
*In the right direction
*Not enough communication
*Appreciate the spirit of communication
*Doing a fine job – bringing people together for the good of the lake
*Too early to tell
*Well-meaning, have bridged some political differences .. need to take some specific action before next year
*They're doing a great job

WEST – Appendix D

*Don't know who to believe. Lots of back and forth between the groups
*Doing a good job to bring consensus and people together
*Good start for good communication and cooperation.
*Badly needed, Hope a single group can work
*Keep up the good work
*We need a lake district
*Glad you have showed the initiative to work together
*Good to have people working together, keep it up
*A very good change from the We-They infighting
*Hope it lasts
*Great
*It should be recognized for its efforts
*It is good to have us working together rather than as adversaries
*Doing a fine job,

APPENDIX C

MECHANICAL HARVESTING MAP



APPENDIX G

AQUATIC PLANTS FOUND DURING 2001 SURVEY

SPECIES	COMMON NAME
Ceratophyllum demersum	coontail
Chara sp.	muskgrass
Elodea Canadensis	common waterweed
Lemna minor	small duckweed
Myriophyllum sibricum	northern milfoil
Myriophyllum spicatum	Eurasian watermilfoil
Najas flexlis	slender naiad/bushy pondweed
Nuphar advensa	yellow pond lily
Nymphaea odorata	white water lily
Potamogeton amphifolius	large-leaved pondweed
Potamogeton pectinatus	sago pondweed
Potamogeton richardsonii	clasping-leaf pondweed
Potamogeton zosteriformis	flat-leaved pondweed
Scirpus validus	softstem bulrush
Spirodela polyrhiza	greater duckweed
Typha angustifolia	narrow-leaved cattail
Typha latifolia	broad-leaved cattail
Utricularia vulgaris	common bladderwort

APPENDIX H

PUBLIC COMMENTS ON PEPPERMILL LAKE MGMT PLAN

2/5/05

1. LAKE MGMT PLAN WAS A SELLING POINT WHEN I WAS CONSIDERING BUYING PROPERTY ON THE LAKE.
LAKE ADVISORY GROUP RESPONSE: ACKNOWLEDGED LAKE MGMT PLAN IS NEEDED TO MAINTAIN LAKE AND PROPERTY VALUES.

2. NEED TO IMPROVE AWARENESS OF COMMUNICATION METHODS TO SEASONAL RESIDENTS.
LAKE ADVISORY GROUP RESPONSE: WILL FORWARD TO LAKE DISTRICT BOARD SUGGESTIONS FOR IMPROVING COMMUNICATIONS WITH SEASONAL RESIDENTS.

3. VOLUNTEER GROUP WHO IS MONITORING INVASIVE SPECIES SHOULD ALSO MONITOR BEAVERS, MUSKRATS, OTTERS ETC…
LAKE ADVISORY GROUP RESPONSE: WANT VOLUNTEER GROUP TO FOCUS ON INVASIVE PLANT SPECIES. RECOMMEND LANDOWNERS TO MONITOR AND IF PROBLEMS OCCUR, THEY SHOULD CONTACT LAKE DISTRICT BOARD.

4. IS THERE A NEED TO INCREASE NATIVE PLANTS IN SHORELINE BUFFER AREAS.
LAKE ADVISORY GROUP RESPONSE: SHOULD HAVE AS MUCH NATIVE BUFFER SHORELINE AS POSSIBLE BECAUSE OF AESTHETICS, ABSORBS WATER RUN-OFF, PROVIDES WILDLIFE HABITAT, AND CRITICAL OVERWINTERING HABITAT FOR MILFOIL WEEVIL. PAGE 14, GOAL: REDUCE NUTRIENTS ENTERING THE LAKE BY SURFACE WATER - PROVIDES ACTION ITEMS TO INCREASE BUFFERS.

5. NEED TO IDENTIFY REED CANARYGRASS AREAS ON SHORELINE.
LAKE ADVISORY GROUP RESPONSE: PAGE 10, GOAL: CONTROL INVASIVE SPECIES UTILIZING MONITORING AND IDENTIFICATION – PROVIDES ACTION ITEM FOR FORMAL SURVEY – PART OF THIS SURVEY WILL INCLUDE SHORELINE.

6. GET LOCAL SCHOOL PROGRAMS INVOLVED WITH LAKE PROJECTS. ADOPT A LAKE PROGRAM.
LAKE ADVISORY GROUP RESPONSE: ADD ACTION ITEM TO CONTACT LOCAL SCHOOLS ABOUT PARTICIPATING IN ACTIVITIES OF LAKE MGMT PLAN.

7. IS THERE PLANS TO DO ANNUAL FISH SURVEY? GET SCHOOLS TO CONDUCT CREEL SURVEY?
LAKE ADVISORY GROUP RESPONSE: WDNR WILL SURVEY IN 2006 AND EVEERY 5 YEARS AFTER. PAST EXPERIENCE SHOWS CREEL SURVEYS BY NONPROFESSIONALS DOES NOT PROVIDE SOLID DATA.

8. WATER REGULATORY PERMITS, INDIVIDUAL AQUATIC PLANT HARVEST PERMITS, AND PLANNING/ZONING PERMITS NEED TO BE FORWARDED TO LAKE DISTRICT BOARD.
LAKE ADVISORY GROUP RESPONSE: GROUP WILL FORWARD RECOMMENDATION TO LAKE DISTRICT BOARD.

9. WHO OWNS THE DAM? ON PAGE 16 IT STATES THERE IS A LESSEE.
LAKE ADVISORY GROUP RESPONSE: ADAMS COUNTY OWNS DAM AND ADAMS LAND AND WATER CONSERVATION DEPT. OPERATES IT. THIS IS A TYPO AND WILL BE CORRECTED.