

**PEMBROKE WATERSHED ASSOCIATION**  
**Annual Report**  
**May 1, 2008 – April 30, 2009**

**Officers:**

Ray Holman, President  
Bill Isenberg, Vice President  
Chuck McCabe, Treasurer  
Beth York, Secretary

**Directors:**

Mark Ames, Arthur Boyle, Diane Holman, Dottie MacInnes, Patti McCabe

**SUMMARY**

This was year of growth and progress. We are excited about our progress in the community and look forward to continuing our mission of educating the public and moving closer to saving our ponds for future generations.

The highlight of the year was the success of the inaugural Monument Island Boat Race and Raffle. This event has increased the visibility of the ponds and PWA's efforts to preserve them.

We had two very informative speakers who proposed a number of treatment options for addressing our ponds problems. The decision was made that Aquatic Control Technologies will be treating Oldham Pond in the summer of 2009, thus ensuring safe recreational use, and the permitting process is underway.

PWA was able to secure CPA funds to go forward with the necessary hydrology study on Furnace Pond that will bring the hope of dredging a closer reality. This study is slated to begin by the summer of 2009.

Due to the invasive and dreaded hydrilla found in Hobomock Pond this year, the Commonwealth's Department of Conservation and Recreation (DCR) is taking over the responsibility of treatment, and the pond is closed for all recreational activity until further notice.

Meetings are held on the 3<sup>rd</sup> Thursday of every other month at 7:30 p.m. at the Library.

**WATER QUALITY REPORT**  
**Water Quality Chair, Patti McCabe**  
**(photos included at end of report)**

The goal of Water Quality is to conduct, analyze, and report on the long term chemical and physical findings on our five ponds. Our methods and process are guided by the Quality Assurance Project Plan (QAPP), that was accepted by the state in January 2008. Improvements in our testing process have included reduction in the numbers of tests, movement of sites to deeper water, implementation of a quality control program, and rewriting of our procedures. With the QAPP in place, we applied for and received grants for more equipment. We have also purchased equipment and now have three complete water quality testing kits for use on our ponds. The equipment upgrades will significantly improve our ability to get the testing done quickly and easily.

Results obtained this year were consistent and trended well with previous years. We met 94% of our total required testing and our Quality Control samples and tests demonstrated good accuracy. We are confident that our volunteer samplers know how to get a sample, use the equipment, and get the sample to the lab properly.

Oldham and Furnace ponds were affected by significant turbidity, clarity, phosphorus problems, as with previous years. Blue-green algae were prevalent in the shallow waters of both ponds multiple times in 2008, and green algae species were evident throughout Furnace pond at times. Oldham continues to experience increasing weed proliferation, as is Gorham mill outlet of Furnace pond. Generally the clarity and turbidity readings in the other ponds were within acceptable ranges, however, algae blooms were documented on Stetson as well. Dissolved oxygen readings were documented in both Furnace and Oldham ponds during warm months with some evidence of fish kills. Chloride readings increased on all ponds, which reflects road run-off and is of great concern.

**Water Quality recommendations:**

1. We strongly recommend the use of the street sweeper around pond abutting streets mid winter and in the spring to reduce the impact of run-off into the ponds by storm drains as well as run-off through yards without adequate buffer zones.
  
2. We strongly endorsed treatment of algae blooms as an initial short term management strategy for Oldham and Furnace Ponds. We recommend the use of Copper Sulfate treatments next summer to improve water clarity and reduce dissolved oxygen deprivation. This safe and relatively inexpensive option will permit water usage and will provide us information regarding invasive weeds given better clarity. We will submit articles to warrants in Pembroke and Hanson for funding.

3. We endorse the use of the harvester in areas where invasive weeds are NOT located!

4. Continue to pursue dredging options for Furnace pond in the future. CPA funding will complete the pre-permitting process on Furnace next summer.

I want to thank all of the volunteers who gave up some of their Sundays to assist with water quality testing, to learn how to test, to assist with pond clean up, and to members who provided us with pictures or called us with problems. Thank you to our pond captains for being team leaders for testing. Thank you to Howard League who was instrumental in obtaining the Shipyard Church grant and the state DEP equipment grant. Thank you to Charlie Banks who has managed our data, assisted with our annual water quality report, the development of the QAPP, and assisted with the grant writing.

**MEMBERSHIP REPORT**  
**Diane Holman, Membership Director**

Over the last year, we have been extremely fortunate to have a dedicated group of members and volunteers in our organization. Some of our members have been with us since 2004 and have never given up hope that we would someday, even though through small steps at a time, bring about a change in the condition of our ponds. I don't think many people realize how time consuming and difficult it has been to get where we are today, and will continue to be each step of the way.

Our quantity of members is one of the most important aspects of PWA, without a large member base, we would not have had the respect necessary to navigate through the many channels of state and local governments. We also depend on dues from our members to acquire small items such as stamps etc. as well as large items such as the permitting needed for algae or weed control on our ponds.

Thanks to our 143 members, we are seeing a significant difference in our accomplishments after four years, and remember, the more members we have, the faster the process of achieving our goals.

**WEED WATCHERS**  
**Fred "Skip" Baker Weed Watchers Chairman**

It was a very productive and exciting year for the Weed Watchers program. Our first meeting of the year brought in energetic volunteers from all the Pembroke

ponds ready to tackle any weed issues. I want to thank all of them for their time and efforts. We established goals to test all ponds for weeds twice a year, log weed types by pond and species, identify “exotic” weeds and notify the Town residents and the Department of Environmental Protection on our progress. The team will also research weed prevention options and work with Water Quality in the overall protection of our ponds. We hosted a weed watcher training class in June presented by Michelle Robinson from the Department of Environmental Protection. This will be an annual event held in June and open to the Town. Our biggest success story happened during our first testing cycle. The identification of hydrilla an extremely invasive “exotic” weed in Hobomock Pond. With the quick action from the PWA President and the State, Aquatic Control Technology was selected to treat Hobomock in the spring. The Weed Watchers will be active on all ponds this spring and making weed control a priority for all residents.

### **WEBSITE** **Jack Schatzel**

During 2008 the Web Pages of the Pembroke Watershed Association reported extensively on the July Boat Races, and the Annual Pond Clean Up Day. Coverage extended also to the bi monthly Association meetings.

The 2007 Annual Report was published as well as that year’s Water Quality Reports. All newsletters including those mailed were also posted.

### **OUTREACH** **Chairman, Scott MacInnes**

Kept contact with various town government officials re: PWA projects, distributing copies of the Watershed Watch, as well as delivering the “Watch” to the libraries, Town Hall, the Fire and Police departments, the DPW, and the Post Offices.

Procured materials to repair two kiosks at Town Landing and Town Hall and kept the postings in them current, including copies of the “Watch” there and on Town Hall bulletin board. Arranged for printing of the Watershed Watch and picked up when ready. Made many deliveries of paperwork between members throughout the year, and occasional delivery of water samples to lab.

- Posted various posters of events around town throughout the year.
- Worked with DPW for placement of dog waste stations, and confirmed Board of Health ordering of special dumpster for pond clean up for DPW.

- Liason with Emergency Management re: United States Army Corps of Engineers (USACE) and Furnace Pond.
- Kept Boy Scouts involved in various PWA projects, i.e. storm drain stenciling.
- Co-chaired Raffle and procured another kayak at cost for it, as well as a donation to cover the kayak.
- On faculty for area-wide Boy Scout conference; Spoke about watersheds, specifically what the PWA is all about and encouraged Scouts to get involved in their towns.

## **PUBLICITY & PUBLIC RELATIONS**

### **Director Dottie MacInnes**

Primarily continued solid working relationships with various media which included the *Pembroke Express*, *Pembroke Mariner & Reporter*, the *Patriot Ledger*, and the *Boston Globe*, as well as WATD-FM, and the local Comcast cable for postings on the Community Bulletin Board and filming for Ch 13 & 15.

In addition to the media folks, I kept in touch with various government officials department heads, and individuals in the interests of PWA, including Rep. Dan Webster's office at the State House. Some contacts were in person, but most through letters and emails.

Most of my communications and contributions to PWA are through writing, which included the PWA report for the *Pembroke Annual Report*, the PWA Newsletter on the PWA website, news releases, newspaper articles, much of the writing for the CPA application for funding for Furnace Pond, Watershed Watch writing and co-producing, meeting minutes, and reports for membership meetings, and regular columns in both the *Pembroke Mariner & Reporter* and *Pembroke Express* covering PWA concerns.

I continued to serve as Executive Secretary pro tem for a portion of this year and handled miscellaneous organizational needs, and served as Co-chair of the Raffle.

I want to thank everyone for being patient and tolerant with my voice issues, and to especially thank Scott for reading my reports and making so many phone calls for me.

Working with Diane to create The Watershed Watch was a challenge, but her good humor, determination, and creative computer skills have made it fun. Lastly, I think with Beth on board, with her media skills, we're in for some added pizzazz in PR and Publicity.

**TREASURERS REPORT**  
**Chuck McCabe**

As a first Full year treasurer, I became very familiar with the use of Quick Books non-profit! Our primary income is dependent upon membership, donations, and fundraising. Additionally this year we received a grant for equipment and educational kits from Shipyard Church in Hingham. Expenses revolve around water testing and PWA approved the purchase of equipment to complete water quality testing kits. Other expenses related to operation of the association and fundraising.

Income:

Membership:	\$1,875.00
Donations:	\$390.00
Corporation Donations:	\$350.00
Fundraising:	\$2,820.00
Grants	\$933.00
Testing reimbursement from town:	\$4,460.00

Expenses:

Water quality testing:	\$7,317.00
Operating:	\$2,872.00
Donations	\$100.00

Current Balance: \$10,727.17

**SAFETY**

**Chairman, Bill Boulter**

**BOG STUDY**

**Chairman Andy Key**

The Town of Pembroke, will be purchasing the cranberry bog that has negatively impacted Furnace Pond for so many years, with the help of CPA funds and a grant. This area will become passive, open space.

**SAFETY OFFICERS REPORT**  
**Chairman, Williard J. Boulter, Jr.**

Last year the Pembroke Watershed Association Members became involved in a number of events. The annual pond cleanup was very successful and completed without incident in each of the ponds. The trash was stored in several locations around the ponds and picked up by the Pembroke Highway Department.

The Pembroke Watershed Association, along with the Pembroke Police, and Auxiliary Coast Guard held a Boating Safety Class in May. We had 56 adults and children sign up to the class which was held at the Pembroke Community Middle School. This education will help people with safety on our ponds and when they venture out to other locations both in state and out of state. We give this class each year at no cost to the residents.

We were involved in the first Monument Island Rowing Race which turned out to be a success. We didn't make a lot of money but had a lot of fun and the town became more aware of our goal to make the ponds of Pembroke better and safer. With the help of the Pembroke Police, Pembroke Fire, Hanson Fire, Halifax Police and local boaters we were able to complete this event without incident. A lot of credit goes to the members of the Pembroke Watershed Race Committee. The planning and preparing for the first event not knowing how many people would enter came out just fine. I may have seemed like we had more help than we needed but we were prepared if we did have any problems. The Race Committee should get a "Well done" for all their hard work.

Local testing and swift action by members of the Watershed Association identified a very invasive weed in Hobomock Pond. The pond was closed to the public and the state responded with more testing and agreed to take immediate action to reduce and eliminate this weed. Area residents are keeping a watchful eye on the public use.

The safety of our ponds and residents is paramount and as your Safety Officer, I will continue to look for better ways to improve our ponds and their use.

**Photos of our Ponds, submitted by Water Quality Chair, Patti McCabe**

