# PEMBROKE WATERSHED ASSOCIATION 2009-2010 ANNUAL MEETING REPORTS

May 20, 2010

## President Ray Holman

I'd like to thank all of our members as well as the Board of Directors and Executive Committee for their continued dedication to PWA. We will persevere in our efforts to try and eliminate some of the problems with our ponds in the months to come.

Unfortunately, it has taken longer than we expected to establish a maintenance program for Oldham Pond due to the Easternpond Mussel. Aquatic Technology, the company hired for this job, has been trying to find a chemical that Natural Heritage will approve. PWA funded this mussel study by Biodrawversity in the amount of \$4800 thanks to our member's dues, plus fundraisers.

Comprehensive Environmental, Inc. should have the Furnace Pond Hydrology study completed this summer as long as the water table recedes enough to check the water and land wells. The results of this study will determine how deep the pond can be dredged, at some point, without digging into the aquifer.

A 604(b) grant in the amount of \$47,150 will establish a long term watershed restoration plan on both Oldham and Furnace Ponds. The study will determine the pollutant source, phosphorus, and estimate how much needs to be removed as well as to develop engineering designs for the top three to five structural BMP's recommended in the plan.

A second 604(b) has been submitted to the Mass DEP which will provide a watershed management plan for Little Sandy Bottom, Stetson and Hobomock Ponds as well as for additional monitoring activities in the upper reaches of the Oldham Pond watershed.

PWA will be funding algae treatments for Furnace Pond this summer in the amount of \$8,160. We're not sure of the dates as yet, samples will have to be taken to establish a count, and when it is high enough, the first treatment will begin.

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Because the DPW is short of funds and manpower to run the harvester in Furnace Pond this spring, I have offered to be trained in its operation so that the lily pads can be eliminated as much as possible. I will then train one or two more PWA members.

PWA can do everything within its power to get our ponds cleaned up, but it will be useless if those of us who live around and near the ponds don't hold up their end of the bargain. I doubt if the Town of Pembroke will have the money each year for the maintenance of our ponds, so we all need to step up to the plate and do everything in our power to stop them from deteriorating any more than they already have.

Without a larger membership base, PWA's efforts will slow down substantially. We depend on member's dues and fundraising to continue our quest for pond preservation, our volunteers cannot do it alone.

We've come a long way in seven years, and of course would like to have accomplished everything we set out to do by now, but as we all know, it takes volunteers, time and money. So we thank you for your patience, and hopefully with your help, and believe me we need it, we'll continue to strive for clean and safe ponds in the upcoming months and years ahead.

Vice President Fred Baker

At the 2009 Annual Meeting I accepted the position of Vice President.

#### POND CLEAN UP

I have been co-captain of the annual pond cleanup which includes organizing and advertising the event, notifying pond residents by passing out flyers, scheduling the activity for each pond and helping to clean the pond as well as removal of debris.

#### WEED WATCHERS

I have coordinated the weed watcher program for the past two years. This starts with membership training by the state. We then organized a team for each pond and scheduled the weed collection event. During our last weed collection, a highly invasive weed called hydrilla was discovered in Hobomock pond. This discovery led to MA state intervention. With their help, as well as that of Aquatic Technology, the hydrilla is being killed off. Hobomock will be open in 2010 for recreational use except for boating.

#### **BOGS**

I recently met with the Pembroke Department of Public Works to discuss the Town and Federal Government's plan for the reclaiming of Edgewood Bogs on Stetson Pond to a natural environment. We will also be discussing the effect and prevention of any remaining fertilizers and pesticides in the bogs.

#### **EDUCATION**

I attended an education seminar titled Water Words that Work hosted by the North River Watershed Alliance. The key points are to make information motivational in order to create action by the listener. Tell your story with pictures, present in plain English, loose the technical jargon, and use words that inspire and present the vision of results.

# Water Quality Patti McCabe

The goal of the water quality committee is to conduct, analyze, and report the long term chemical and physical findings on our five ponds. Our methods are guided by a Quality Assurance Project Plan (QAPP) filed with the state.

- 1. Three complete water quality kits created through grants from the EPA and some purchases are available for testing. We use state of the art dissolved oxygen meters, secchi discs, sonar depth finders, pH meters, Garmin GPS, and laminated procedure manuals. These are managed by the three pond captains: Patti McCabe (Furnace), Norm Shepherd (Oldham), and Jim McLarnon (Stetson).
- 2. We are testing in deeper water, fewer locations, and we send our data to STORET, the state repository of data for all participating water bodies. Charlie Banks has been our data master and contact with the state EPA for STORET.
- 3. Our Quality Assurance Project Plan (QAPP) for water quality testing has been revised by Patti McCabe and Charlie Banks. CEI has made modifications based on a 604(B) assessment grant to our Town for further testing on Oldham. We continue to be a model organization for water quality testing procedures and quality control and were filmed by the EPA last September demonstrating testing methods. We are in a good position to continue receiving grant money for assessment of water quality issues, including chemical problems as well as weed and algae problems. We wish to thank the North South River Watershed Association, Ed Thorne (Town administrator), and CEI for their assistance with grant proposal development for the 604 (B) grant that we submitted and received.

- 4. Our data shows that our ponds remain unhealthy due to man-made problems:
- -non point source pollution such as runoff from yards and storm drains,
- -bog effluent (some from inactive bogs),
- -storm drain problems (clogged, non functional drains),
- -internal loading (muck filled with phosphorus).

On Oldham and Furnace ponds algal blooms proliferate from June through September and noxious weeds grow in shallow waters, often choking out boating and swimming. Stetson remains at risk given continued bog effluent and experiences algal blooms and increasing weeds. Hobomock is currently off our testing list while hydrilla treatment occurs. Little Sandy Bottom and Hobomock are suffering significant Road runoff impact. While long range plans for remediation are expensive and slow to happen, everyone can limit control of runoff into the ponds.

#### WHAT YOU CAN DO TO HELP SAVE OUR PONDS:

- Grow a buffer zone next to the water through a no mow zone or growing plants and trees at water's edge. This slows runoff into the pond.
- Stop runoff from down-spouts and house drains by installing rain gardens or use water barrelsthis water can be used for your garden.
- When installing walkways or plantings, consider placement horizontally or curved in relation to the water, not vertically, to stop run-off.
- Wash your car well up on the grass or in an area that won't allow soap runoff
- Don't dump leaves or grass clippings in the pond or in storm drains- this quickly accelerates the development of muck and thus algal blooms.
- Clean up after your pets, don't allow their waste to run into the pond.
- Don't feed the geese or other birds, as this encourages breeding, and all that bird poop will settle in the pond!
- Don't dump trash in the pond. We have an annual pond clean up day in the late spring- by being stewards of your own yard and water front, you help the health of the entire pond.

# Membership & Website Diane Holman

I'd like to thank our PWA members who have stood behind us through thick and thin since 2004. Whenever I've contacted you for help with a fundraiser or project, many of you are selflessly there to volunteer when we need you; I can't tell you how much that means to all of us here at PWA. Just one little gesture of help can mean a whole world of difference to our few already overworked volunteers trying to oversee the disturbing predicament some of our ponds are in and then trying to find the time and money to see that they are repaired in the best possible way.

Unfortunately, since the outcome of members attending our meetings has dwindled, we have made the decision to have only two Membership Meetings per year, one in May, our Annual Meeting, and the other in October. Many hours are spent preparing for these meetings, and some of our volunteers work full time, so it seems our time and energy would be better spent with other PWA pond problems, etc.

Our new website, <u>www.pembrokewatershed.com</u> will be updated weekly with new information about our five ponds and you will be notified of all events etc. Please email photos of your pond activities, families, pets and wildlife for our website.

I'd like to thank Jack Schatzel for generously offering his services with our old website and hope he's enjoying his new job.

Again, thank you for your dedication to PWA and our ponds, and please continue with your membership to be sure that we can continue with our efforts.

# Stetson Pond Captain Jim McClarnon

### Water Quality Testing:

From my perspective, Water Quality Testing has matured quite a bit over the past few years. With the introduction of the QAAP, we now have fully defined testing procedures that lead to more consistent and accurate testing results.

In addition, each pond now has testing equipment that allows each pond captain to act more independently with the ability to reschedule testing due to inclement weather or any other unforeseen factors without impacting test schedules for the other ponds.

### Pond Clean Up:

Pond clean up was a success on Little Sandy Bottom, Stetson and Furnace ponds this past year. Each year the process is a little bit easier due to the efforts from the prior years. With public sentiment embracing going "Green", our efforts are appreciated by the folks living around the ponds. Due to the Hydrilla issue, Hobomock Pond could not participate last year and due to lack of support from the Oldham residents, that pond was not cleaned up as well. We need to garner more support this year from the Oldham folks.

### Land Based Water Quality Andy Key, Chairman

We have changed the name of the committee to reflect the broader concerns which include storm drains, run-off and nonpoint source pollution.

The Town of Pembroke has acquired many of the bogs surrounding Stetson and Oldham. These bogs will no longer be farmed and will be allowed to return to their natural condition. We will continue to investigate ways to decrease the affect of the bogs, particularly as sources of phosphorus.

We are currently working with the Pembroke DPW to try to minimize the effects of the former bogs on Stetson. The project is controlled by the Federal EPA and there are well-defined procedures that must be followed so that the former bogs return to natural wet-lands. Fred Baker and Jim McLarnon are the most active in this area.

I am trying to compile as much information on storm drains as possible. I have contacted Gene Fulmine of the DPW regarding the following information on the storm drains in Pembroke:

- Locations
- Design
- Maintenance

Mr. Daggett of the water department has asked us to notify him of any malfunctioning storm drains that are allowing excessive discharge into the ponds.

# Publicity and P/R Dottie MacInnes

- 1. I contacted media with news releases, emails, articles and columns for publication in various local and area newspapers and local cable bulletin board postings.
- 2. I co-chaired 2009 Raffle, including publicizing, selling, procuring prizes, and record keeping.
- 3. I worked with elementary school youngsters on anti-litter campaign.
- 4. I wrote PWA's report for Town's annual report book.
- 5. I wrote miscellaneous letters on a variety of subjects relating to PWA as well as emails promoting our mission and the status of pond treatment.

# Outreach Scott MacInnes

- 1. I was the co-chairman of Raffle 2009, including procuring donations of money and prizes, promoting raffle, and distributing and selling tickets.
- 2. I made repairs to kiosk/bulletin board at Town Landing and posted new information there and Town Hall kiosk.
- 3. I've done on-going watershed education with local and area Boy Scouts.
- 4. I've kept in touch with local official with connections to US Army Corp of Engineers regarding possible future dredging of pond.

# Weed Watchers Report

Annual Meeting
Bill Glover
Pembroke Weed Watchers Association • May 20, 2010



### ANNUAL REPORT



This year has been a year of getting information together and working on educational outreach.

I have created flyers to generate more interest in the weed watching program. This will be the first year that I will be running a program through the Pembroke Public Library Called Wading into Wetlands. This will be open to students from 3rd to 6th grade. Included in this program will be a basic lesson on what is a wetland, Weed identification on at least two ponds, use of a flowmeter at the Herring Park, macro invertebrate collection in the herring run. The program will run from July 12 through July 16.

I have also been contacted by Renee Spring, a cub scout leader, who is interested in having her scouts trained in weed watching. The training will be taking place in early June.

I will be compiling lists of those past weed watchers and setting up an initial meeting for June 17th at 7:00 pm to establish this years data collection.

I will try to have at least 2 people at each pond this year with an additional meeting to discuss results and any new developments.

### Treasurer Chuck McCabe

### Treasurer's Report, May 1. 2009-April 30, 2010:

#### Income:

Membership: Membership Donations: Memorial: Raffle:	\$2,155.00 \$ 805.00 \$ 350.00 \$2,622.00
Water Testing Fee Miscellaneous:	\$1,050.00 \$ 72.00
Total Income:	\$7,054.00

### Expenses:

Scholarship: Oldham/Furnace Study/Permit	\$ \$4	500.00 4,800.00
Donation to American Red Cross: Kayak purchase for raffle: Postmaster Commonwealth of Mass Bond Printing Miscellaneous:	\$ \$ \$ \$ \$ \$ \$	100.00 300.00 216.00 15.00 198.79 72.00
Total Expenses:	\$6	3,201.79
Net Income	\$	852.21
Ending Balance as of 4/30/2010:	\$1	2,774,38

<sup>\*</sup>Water testing expenses were reimbursed fully by the Town of Pembroke. Aquatic Control Technologies permitting and fees for Algaecide treatment of Oldham and Furnace were reimbursed by the Town of Hanson and Town of Pembroke.

### **Officers:**

Ray Holman, President Fred Baker, Vice President Beth York, Executive Secretary Chuck McCabe, Treasurer

### **Directors:**

Mark Ames Arthur Boyle Patti McCabe Diane Holman Dottie MacInnes

### **Executive Committee:**

Patti McCabe, Water Quality Co-Chair & Furnace Pond Captain
Charlie Banks, QAPP Development, Data Management & WQ Testing
Diane Holman, Membership & Website
Jim McLarnon, Stetson Pond Captain & Pond Clean Up Coordinator
Norman Shepherd, Oldham Pond Captain
Bill Glover, Weed Watchers & Education
Andy Key, Hobomock Pond Captain & Land Based Water Quality
Arthur Boyle, Little Sandy Bottom Pond Captain
Dottie MacInnes, Publicity & P/R
Willard Boulter, Jr., Safety Officer
Scott MacInnes, Outreach

Pond Clean Up
June 12, 2010 – rain date, June 13

2<sup>nd</sup> PWA Meeting October 21, 2010 7:30 PM Pembroke Public Library