



PONDERINGS

BY THE FRIENDS OF WHITE POND

VOL. 22 No. 1

JUNE 2014

WHO'S WHO ON WHITE POND

The Friends of White Pond (FoWP) have honored our role as stewards of the pond's water quality since 1987. We meet infrequently. We share information and concerns through our newsletter, *Ponderings*. We carry out and support water quality monitoring throughout the spring, summer and fall. We welcome others – new Friends – to participate in our activities.

This issue of *Ponderings* contains articles updating the activities of several other groups and committees connected with the White Pond area:

The **White Pond Advisory Committee (WPAC)** is a Town committee, established by the Board of Selectmen in 1973. The Selectmen appoint its members and its charge is "to review and analyze the concerns of the area and play a leadership role in programming the solutions to the recognized and accepted problems."

The **Bruce Freeman Rail Trail Advisory Committee (BFRTAC)** is a Town committee, established by the Board of Selectmen in 2007 with members appointed by the Selectmen. Its charge is "to advise the Board of Selectmen and Town Manager on matters concerning the design, development, and long-term maintenance of the BFRT.

A new **WPAC/BFRTAC sub-committee** has been set up this year to foster coordination between these two committees.

Dr. William W. Walker is the consultant who did the original water quality studies of White Pond for the Town in 1988-1990. He designed a volunteer water quality monitoring program for White Pond in 1991, which continues to this day with leadership from Judith and George Sprott working with other loyal volunteers and Bill's participation. At this time Bill has volunteered to take the leadership role in the monitoring program and we look forward to his greater input and initiatives.

WHITE POND WATER QUALITY MONITORING PLAN FOR 2014 AND BEYOND – Dr. Walker

This summer I plan to continue monthly monitoring of dissolved oxygen, temperature, and transparency with help from several volunteers.

The logistics have yet to be worked out for collecting weekly transparency data, at least during the critical months of July and August.

A new platform for monitoring the pond water levels is needed since the benchmark used by Judith & George Sprott was destroyed by ice last winter. It would be useful to have a consistent long-term record of the depth.

White Pond monitoring data is kept in an Excel database that I will update in the fall and post at www.walker.net/whitepond. That site currently contains links to my previous reports and analyses of White Pond data collected through 2006. I will post other relevant reports and updates at that site. The analyses describe seasonal variations and trends in transparency, as well as correlations with water level and precipitation. Analyses of water temperature and dissolved oxygen data will be more robust using data from 2005 forward, when the town purchased a new meter for our volunteers to use, and parallel sampling was performed using OARS equipment.

I attended the White Pond Advisory Committee meeting on June 18. Draft results of the ESS study being prepared for the Town will be appearing in pieces over the next couple of months for written review before being presented to the Selectmen. It would be very useful if the report could be presented and discussed at a WPAC meeting, where there would be more opportunity for a dialogue that would help to focus the questions and issues before the report is presented to the Selectman.

The concept of getting additional technical review of the ESS report was discussed at the WPAC meeting also. Professors from Tufts and Union College known to the WPAC members were mentioned as potential candidates. I have enlisted another longtime Concord resident, Dr. John Colman of the US Geological Survey. He was a principal

investigator in the studies of Walden Pond that were completed in 2001 and is still involved as an advisor to the state. While the USGS studies were much more detailed than those expected from ESS, they provide a frame of reference and basis for formulating questions. (<http://pubs.usgs.gov/wri/wri014153/>, <http://pubs.usgs.gov/wri/wri014137/>). According to Dr. Colman, Walden does not have a long-term monitoring program for water levels or nutrient-related water quality.

Both Walden and White Pond levels are now very low, despite the wet winter. This is in contrast to a few years ago, when the levels in both ponds were extremely high. It will be interesting to see the ESS analysis of factors controlling the water levels. The low water levels will have to be considered in interpreting the water quality data. My previous analysis of historical data through 2006 suggested that clarity was lower in years with higher water levels and /or precipitation. That would make sense if the pond were responding to nutrient and turbidity loads in runoff.

Ideas for other types of monitoring that could be considered in the future that take advantage of evolving technology:

- Install one or more webcams at select locations around the pond to record legal and illegal recreational use intensity. That seems to be a major concern about the Bruce Freeman Rail Trail. The technology and software are readily available and inexpensive. The "surveillance" could help the Town Police to target their patrols. The cameras might also pick up some of the interesting wildlife. Shoreline residents may have concerns about their privacy.
- Establish a bulletin board where users could record their subjective observations on water quality conditions with respect to aesthetic qualities and suitability for swimming and boating. While the data would not be used to set a standard for White Pond, it would help to document trends or episodes in water quality as perceived by the user community.
- Install automated sensors to track water quality (e.g. temperature, oxygen, light intensity, conductivity, pH at 15 minute intervals). There is an evolving grass-roots effort to develop automated and affordable technology that can be implemented on a

wide scale and posted on the web (<http://publiclab.org/wiki/open-water>). This is more of a long-term idea since affordable sensors are under development. It could be an interesting high school science project that would stimulate interest in the Pond and environmental field.

- Continue use of whitepond.org or move to another platform for sharing news and ideas about the Pond that can be more easily maintained by a local resident.

Hopefully, a practical and affordable long-term monitoring plan can be developed by the Town and White Pond community based upon recommendations from the ESS study, the existing program, and other ideas such as those listed above.

Looking forward to more special moments on the Pond this summer.

Bill Walker

WHITE POND ADVISORY COMMITTEE UPDATE

Development of a Management Plan: A new swimming season is here, and many of us will frequent White Pond to enjoy its serenity and clear waters. And to ensure that its beauty and natural environment will continue long into the future, the Natural Resources Commission (NRC) and the White Pond Advisory Committee (WPAC) have engaged an environmental consulting firm to develop a White Pond Management Plan to guide the Town's preservation efforts. Between proposal preparation, Community Preservation Committee (CPC) fund approval and allocation, and vendor selection, it has been several years in coming. But our patience has been rewarded as the studies kicked off late last summer and are due to be completed by the end of this summer.

Many different parameters and perspectives are being studied such as usage patterns, surface and sub-surface water flow, flora and fauna including any invasive species, and of course water quality. The studies have occurred throughout the year at various points around the pond and in a variety of weather conditions. The resulting report will include detailed management options and cost estimates enabling us to make sound and technically founded recommendations for future efforts. And we hope that the report will serve as a tool to convince the town to allocate the proper resources to care for the pond, whether for erosion control or people management.

We welcome the involvement of the White Pond community in this and all our projects, and we encourage you to get involved. If you have any questions or comments about this study, or on any other efforts of the WPAC, please come to our meetings. The WPAC meets every third Wednesday at 7:30 PM. Our meeting place has been changed temporarily to the Harvey Wheeler Community Center at 1276 Main Street In West Concord. Please check the Town website to confirm when our meetings move back to our usual meeting place at 141 Keyes Road.

Jerry Frenkil; Chair of the WPAC

BRUCE FREEMAN RAIL TRAIL UPDATE.

The White Pond Advisory Committee and Bruce Freeman Rail Trail Advisory Committee (BFRTAC) made great strides in 2014. Both committees have been working much more closely with positive attitudes and results. The White Pond Advisory Committee is planning on another productive year under the leadership of chair Jerry Frenkil and new members Stephen Goodman, Norman Willard and Deborah Ellwood. A round of thanks to Arra Avakian who is leaving after serving nine productive years on the WPAC as well. Previous chair, Jim Lyon has been selected to serve on the Bruce Freeman Rail Trail Advisory Committee in the abutter position, replacing Jim Coutre.

A new WPAC/BFRTAC sub-committee has been set up further fostering this relationship. Chris Leary and Alan Whitney have been on site walks along the trail where it borders White Pond. Currently they are working on signage to direct traffic and educate users of the trail about the sensitive environment around the pond.

Much has been accomplished this past year with the hard work of the BFRTAC. After many meetings, site walks and discussions, the BFRTAC is hoping to complete the 75% design for section 2C this fall. A highlight for those around the pond is the fencing that is suggested in the 75% design. On the pond side it will be 6 feet high, wrought iron style with vertical bars running the length of the pond. This is a much more aggressive and protective fence than originally suggested and shows the willingness of the BFRTAC to make changes based on citizen and committee feedback. Also, the entrance to the Town Trails from the BFRT has been moved 84 feet further south of its current location.

The Town of Concord has made no concrete plans as of 2014 regarding maintenance and enforcement. A maintenance line item will show in the Town budget for 2016. The Town is waiting for

the final results of the White Pond Watershed Management Plan before making any decisions regarding enforcement issues. It is our hope that concrete suggestions are weighed and implemented accordingly by the Town. Besides that outcome, it has been stated by the Town Manager that there will be regular police patrols that will have much better access to the cove and problem areas. It is a wait-and-see approach and hopefully the Town will act accordingly. There is also hope that a stewardship committee will be set up by the Friends of the BFRT to help educate its users.

Sudbury has recently voted to proceed with their section of the rail trail as well. Approximately \$150,000.00 in funding has already been allotted towards the 25% design of the four miles of trail leading to Route 20. It is imperative that Sudbury proceed as quickly as possible, since any fencing and work from the Powder Mill culvert south will only be completed when Sudbury has finalized plans for their section of the trail.

Moving forward, please attend meetings of the WPAC and BFRTAC. It is the best way to stay current with news and provide direct feedback to those that need to hear it. Please continue to pick up any trash around the pond and report any illegal activity to the Concord Police Department non-emergency number. Thank you and have a great summer!

Jim Lyon, member of the BFRTAC

FRIENDS OF WHITE POND UPDATE

The Friends of White Pond co-presidents, Joan Turner and Wendy Slattebo, are stepping down from their posts after more than eight years of service. As long-time abutters of the pond, they are passionate about maintaining its water quality. Under their leadership, the Friends have successfully continued the water quality testing program and raised money for surface-runoff projects. Both Joan and Wendy have written educational and inspirational articles for *Ponderings*, including pieces about the Bruce Freeman Rail Trail, septic betterments, the ranger program in the cove, vernal pools, erosion, the pond in winter, the sewer program, permit parking, and the wetlands bylaws. Wendy has documented the pond in all seasons with her camera. Joan has paddled around the pond in her canoe monitoring wild life and erosion. Each has been a stalwart steward of White Pond, and we thank them both for their energy, drive, and commitment. Although they will no longer be serving as co-presidents, they have agreed to act as advisors as well as members-at-large. Kate Blair will serve as President pro tem, with Judith Sprott as Treasurer.

Kate Blair



Adieu, kind friends. Adieu. To: Judith and George Sprott, informal keepers of White Pond for 36 years, who will soon be moving to the Carleton-Willard community in Bedford. You will be especially missed by the Friends of White Pond and this our Ponderings newsletter. We will miss the sight of the two of you in your red canoe anchored atop the deepest point of the Pond, measuring and recording data pertaining to water transparency, algae and phosphorus content.

Adieu, kind friends. Adieu.

Joan Turner, Kate Blair, Wendy Slattebo

FRIENDS OF WHITE POND

President pro-tem: Kate Blair

(978) 369-9194 - kdblair46@comcast.net

Treasurer: Judith Sprott - jksprott@comcast.net

Read about white pond water quality at bill@wwwalker.net/whitepond. Find FoWP information at www.whitepond.org. Click on the Friends of White Pond section of the whitepond.org website and read the current Ponderings and water quality data as well as back issues of Ponderings and past water quality data.

Membership dues (\$10) and contributions are gratefully received by the Treasurer, Judith Sprott, c/o 20 Darton St., Concord

FOR THE FRIENDS OF WHITE POND



