

Robert Eaton Elected President

Robert M. Eaton, Jr. was elected president of CPWL at the most recent annual meeting held last October. Prior to becoming president, he served for two years as an active member of the Dam Committee. Bob has nearly 30 years of public service to his credit and holds a Master's Degree in Public Administration. "CPWL is a maturing organization, and needs a more formalized way of doing business, including a strategic plan and day-to-day best management practices in caring for the dam." His goals for the Executive Board, which met every two weeks in the second half of 2023, are to formalize the monitoring and record keeping for the dam, and associated duties.

The Executive Committee has already formalized our mission statement and vision statement, which are often required in grant applications. The committee is also working on an Emergency Action Plan as required by the RI Department of Environmental Management (DEM), dam inspection reporting, a maintenance schedule and a capital improvement plan. Bob said, "For many years these tasks have been done by great people, but not in a formalized way. As we begin to seek grants, we need to pay attention to this."

Bob is quick to acknowledge the devotion



Robert M. Eaton, Jr.

of each of the members of the Executive Board and the Dam Committee who "...give unselfishly of themselves every day in the service of CPWL."

CPWL Vision Statement

Citizens for the Preservation of Waterman Lake (CPWL), Inc. strives to enhance the beauty of the lake so that current and future generations may enjoy recreational activities on the lake in all seasons.

CPWL Mission Statement

The mission of the Citizens for the Preservation of Waterman Lake is to provide an opportunity for the residents living on the shores of Waterman Lake and interested members of the surrounding communities to work together for the purpose of preserving Waterman Lake. This organization shall be concerned with pollution, wildlife, and any other factor, whether human or not, which effects the lake. We shall establish and maintain a proactive partnership with our membership, business owners and community leaders to work together in solving problems facing the continuous maintenance of the dam and water quality. In furthering this partnership, we pledge our dedication and diligence in protecting the earth dam, gate house, plates, and water quality. We are committed to improving all aspects of dam maintenance, water quality and extending and improving our membership involvement. We are committed to ensuring that the Citizens for the Preservation of Waterman Lake adheres to the best practices and standards. We shall continuously strive toward attaining excellence, removing barriers to communication, and providing our membership with effective leadership.

Please Register

The cyanobacteria scare (see page 2) this past summer emphasized the necessity of being able to quickly reach all parties which make use of the lake. We are asking anyone who uses the lake or anyone whose pets might drink from the lake to provide contact information.

As we attempt to streamline operations, we are encouraging everyone to register their contact information via our website. Even if you believe we already have your info, please register again.

You may register at:

www.cpwl.org/register

SAVE THE DATES

Friday, May 10, Comedy Show Fund Raiser
Doors open at 5:30, Dinner 6:45, Show 8:00

Wednesday, May 22, Spring Meeting
6:30 Light refreshments; 7:00 Meeting

The Whole 'Dam' Story—or at least part of it

by Phil Viall

My great-great-grandfather was married in 1833. The only reason that is significant is because it was about then that the planning for the Stillwater River Dam System began. At this time, Waterman Lake was only a line on a map. Rhode Island was a major manufacturer of textile products. Electricity generation and distribution to power the machines was decades away. The mills largely relied on water for their power source.

The melting snows and rain provided power in the spring and summer...but a dry summer could mean water was limited in the late fall and early winter. This had great bearing on RI's ability to be a textile leader.

Over the next few decades, several dams were built along the Stillwater River. The dams created lakes which allowed for storage of water in the winter and spring which then could be let out in a controlled manner in the drier months.

The value of the property surrounding the impoundments of water obviously increased in price, and the lakes became a draw for

people to swim, fish, row, canoe, sail, and later boat and ski (when power boats were invented). Up until the early 1960's, the main purpose for the lakes was still to provide water for the mills. During that time, it was not unusual to have the water level down six to eight feet in late August. When the textile industries left Providence in search of cheaper labor to the south, this created much uncertainty for the dam.

In 1970, a group of people from the lake decided to form an organization to promote the interests of the lake residents. At that time, Citizens for the Preservation of Waterman Lake was born. I hope to interview some of those original founders to feature in future issues of Waterman Lake Notes. Also, due to the foresight of the original founders, legislation was passed by the Smithfield and Glocester town councils exempting CPWL from property taxes. After additional years of work, CPWL was granted 501(c)(3) status by the IRS. That allowed people who gave to the organization the right to claim those do-

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Everything You Wanted to Know About Cyanobacteria

(and Lots of Stuff You Didn't)

Last September 5th, the CPWL officers received an email from Jillian Choppy of the RI Department of Health (RI DoH). They had received an inquiry of a potential harmful blue-green algae bloom on the lake.

Samples were collected and they tested positive for cyanobacteria. That led to RI DoH recommending “no swimming, boating, or fishing due to the harmful bloom.” The state then monitors the lake until it is safe again for recreational activities. The normal procedure is that the state waits until there is no visible bloom on the lake, and then re-tests. Testing was done several times, and the advisory was finally lifted in late December. Two negative tests at least one week apart are required to lift the no swimming, boating, fishing recommendation.

A question on many people's minds is, “How did this happen, and will it happen again?” While many people's activities were reduced a bit, the summer was over for the most part.

According to the RI Department of Environmental Management (DEM) website, “Cyanobacteria, also known as blue-green algae, are naturally found in many freshwater ecosystems. A combination of excess nutrients, sunlight, and high temperatures can lead to a rapid increase in cyanobacteria, called a ‘bloom.’ Blooms of cyanobacteria generally occur in late summer into the early fall when water temperatures are warmest and an abundance of sunlight and nutrients are available. Some species of cyanobacteria



can also produce toxins which are harmful to people and pets. There are no visual properties of a cyanobacteria bloom that indicate the algae are producing toxins. It is only possible to determine if toxins are present with laboratory tests.

If a cyanobacteria bloom is observed, it is best to take caution and stay out of the water to avoid any potential exposure to toxins.”

RI DEM reported that 23 lakes had first-time cyanobacteria advisories in 2023. They attributed it to the large amount of rain that we got over the summer months. “Not only was there runoff from the lake front property owners, but because of all the rain, there was runoff from property owners two blocks away,” said Jillian Choppy of the RI DoH in

a recent meeting of Save the Lakes.

Could it happen again? “Yes,” says Phil Viall, the treasurer of CPWL. “But we have taken steps to mitigate the problem if it should happen.” Viall explained that CPWL has contracted with Water and Wetland in Grafton, MA, that specializes in treatment of lakes and ponds. “They have already applied for a permit to seed the lake with copper sulfate. It takes about 45 days for the state to issue a permit, so you want to be proactive. If a bloom is seen, the company can then be on scene shortly. The seeding process takes a day, and boating, swimming, fishing, etc., should be able to resume soon after.”

The Whole ‘Dam’ Story

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nations as charitable contributions.

Twelve years later, on December 29, 1982, the Woonasquatucket Reservoir Company deeded all its rights for Waterman Lake to Citizens for the Preservation of Waterman Lake. CPWL now owned the dam, as well as the responsibility for dam upkeep.

Since 1982, much work has been done on the dam. Most of this work has been done by individuals with connections to the lake at no or very reasonable cost, and they have our thanks. We hope to highlight some of those individuals in future newsletters.

In addition since 1982, legislation and regulations affecting the dam have more stringently defined our responsibilities in maintaining the dam structure. About two decades ago, the RI General Assembly passed legislation requiring the DEM to more closely monitor dams in RI. DEM has developed several regulations in line with this requirement. Let me clearly state here that the relationship between DEM and CPWL has NEVER been adversarial. We understand they have a job to do, and as

owner and operator of the dam, CPWL has a job to do. We communicate on a regular basis, and have a great relationship.

One of the regulations created at the behest of the General Assembly is that dams need to be inspected every two years “by a Professional Engineer (PE) with experience in earthen dams, certified in the state of RI.” This is usually done at the expense of DEM.

In 2018, seepage was found in the main section of the dam. If you are on the lake it is to the right of the gatehouse, almost to Ray Steere's (now Brad Steere's) property.

Seepage means there is a small piping of water flowing through the dam. We have about four places where water is seeping through the dam. The possibility exists that the water could begin to erode the dam from the inside if dirt from the inside of the dam is moved along with the water. The fancy name for this is ‘sediment transport’. If sediment transport becomes critical, then a sinkhole could develop in the dam resulting in potential dam failure. Our dam is classified as a high hazard dam. The “high hazard” has nothing to do with the condition of the dam, it just means that if the dam WERE to fail

there could be “significant loss of life or property.” As for the condition of the dam, at present, DEM rates us as an “UNSAFE” dam because of the seepage.

As a result of the seepage, DEM required us to conduct a “Seepage Investigation Study” at our expense. This cost \$20,000 and was done in late 2021 to early 2022. There were three recommendations in the report:

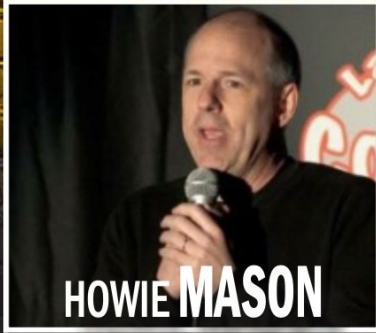
1. Remove trees and stumps on the slope where the seepage is present. This has been done at a cost of \$12,500 (some materials and labor were donated).

2. & 3. Greatly simplified, these recommendations require rebuilding the slope of the dam and installing filter cloth to prevent sediment transport. For this, plans must be drawn by a PE. The cost for *just the plans* is \$40,000. Those plans could then be put out to bid by anyone. We have searched hard for a lower cost, specifically looking for a PE that is not a part of a big firm, but have been unsuccessful. We are attempting to get a grant to partially offset this cost.

Until then, we are monitoring the flow rate of the seepage, as recommended by the seepage study. *to be continued...*

CPWL Spring Gala and Fund Raiser

HEADLINER



Put on your smiley face, and join us for an evening of fun and entertainment. While one of the goals of this event is to raise money, it is also a time for us to get together and just enjoy a relaxing evening with one another.

Tickets are also available from many of our neighbors: Jonathan Marz, Jean Eaton, Kristen Caramante, Carol Macari, Karyn Rhieu, Tony Angelone, and Sandra Sullivan. Feel free to reach out to any of them for tickets or more information.

Event Details:

- May 10, 2024 at Wright's Farm, 84 Inman Road, Burrillville, RI
- Doors open at 5:30 with cash bar, raffle signup until 6:30, dinner at 6:45
- Tickets are \$75 per person
- Comedy Show after dinner with Paul Nardizzi as the headliner, with Howie Mason, and Ish Gupta
- Note that the comedy show will contain adult content
- For tickets, contact Michael Stewart at 781-249-5700 or Stewthirteen@gmail.com (or buy online at <https://www.cpw.org/funnight>)

UMass Dartmouth Students Implementing Lake Monitoring System

In recent years, there has been an increased expectation of both municipal and granting agencies that caretakers of lakes monitor the status of the water.

Some UMass Dartmouth Electrical and Computer Engineering students were looking for a real world project for their senior capstone course. It seemed to be a natural fit. For many years water levels and other data have been monitored, but not in a formal, publicly accessible way.

A design project team of students Jarad Anderson, Melvin Livramento, Justin Martel, and Christian Taylor, led by Sarah Viall have been working on this since September.

With the system designed and developed by the students, several readings are taken and stored every 15 minutes. Water level, water temp, air temp, wind direction/velocity (including gusts), and rainfall are stored. The last part of the project will be implemented over the next month. This will be the monitoring of water flow at a tributary.

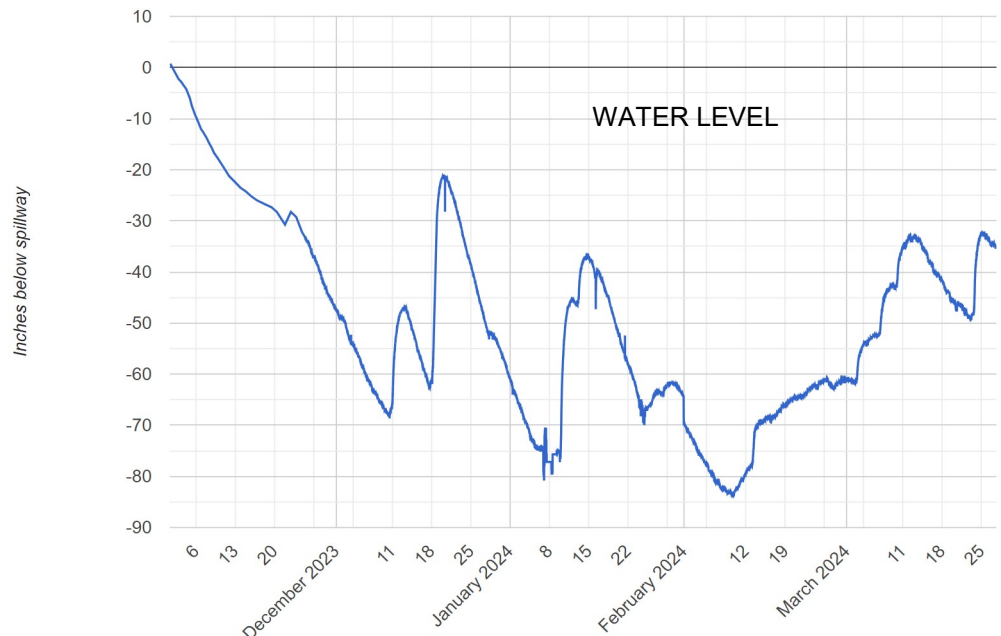
Eventually, the hope is to build a comput-

er model to predict how the lake is going to rise given the amount of rainfall.

While the website is publicly viewable, the students emphasize that this is a work in progress. The data is being stored reliably, but the website still needs work.

Eventually, this website and cpwl.org will be integrated. We thank the students for their outstanding work!

Check it out at:
<https://www.watermanlake.org>



WATERMAN LAKE *Notes*

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Credit would be appreciated.

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CPWL Officers (2023-2024)

President: Robert M. Eaton, Jr
Vice-President: Kenneth Robertson
Treasurer: Philip H. Viall
Secretary: Elizabeth Viall

Double Your Donation

Many companies will match an employee's donation to a charitable organization. Citizens for the Preservation of Waterman Lake (CPWL), Inc. is a 501(c)(3) charitable organization under IRS regulations.

If you think your company might be one that matches donations, please inquire with the Human Resources Department. If there are special forms to fill out, CPWL can assist in filling those forms out.

Contact treasurer@cpwl.org, and we'll do the heavy lifting!



Double Your Donation!

Thank You, Jeff

Special thanks go out to Jeff D'Antuano, retiring president of the organization. Jeff served CPWL as president for 13 years. During that time many improvements were made to the dam. Several fundraising events were started under Jeff, as well as improving the community spirit with boat parades. Jeff – We thank you for your many years of leadership.

Many thanks



Remember to like us on Facebook!

<https://www.facebook.com/cpwl.org>

Feedback Welcome and Encouraged

Please feel free send comments and feedback to cpwl@cpwl.org! Let us know what topics you would like to see covered in future issues of WATERMAN LAKE *Notes*. If you have interesting stories about historical events feel free to share them. Happy Summer to All!

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