

Sherwood Forest Lake District – FY2015 Annual Report

Dam Management

Dam Management - On July 1, 2015 the district began its fifth year. Planning for the third dam restoration project continued to make progress, but property acquisitions and easement agreement issues continued and have caused the project to be delayed.

Hill Engineers, Architects and Planners a professional land survey firm finalized a boundary survey to establish the actual limits of the work area around Lancelot Dam, Arrow Beach, both the primary spillway area, that crosses under Sir Galahad Drive and the emergency overflow that crosses over Maid Marian Lane and the Route 20 brook diversion inlet pipe and ditch. Like topographic surveys done on the previous projects, Hill's work precisely revealed properties that actually encroached onto the structure of the dam including two parcels owned by the Town of Becket.



As a result Cain Hibbard and Meyers PC, the district's attorney was called in to either negotiate easements with the affect proprietors or secure selected parcels through the procurement process. Convincing the Town of Becket administration to draft, present and back an Annual Town Meeting warrant article was critical to get two key properties in the center of the dam's toe area. It took some time but the town voters eventually approved and authorized the selectmen to formally dispose of the property.

During this period, the prudential hired a new engineering firm, Tighe & Bond Inc. for the Lancelot Dam project as the result of a competitive bidding process. The district would like to especially thank Morris Root P.E. of Root Engineering for the work he did in bringing the two previous dam restoration projects on Big Robin and Little Robin Lakes into compliance with the standard set forth by the Office of Dam Safety.

With the new engineering firm on board, assessment work began in the fall of 2015 for the earthen embankment (dam) on Lancelot Lake. Tighe & Bond prepared a detailed Phase II Assessment Report Dam, which was presented to the prudential committee in February 2016. This report specifically keyed in on the observed deficiencies, the subsurface exploration methods utilized (test borings to ascertain the material composition of the embankment), a hydrologic and hydraulic analysis, modeling results, four spillway and low level outlet alternatives/options, along with necessary general dam improvements to include upstream rip rap slope protection, toe drain alternatives options and inlet Route 20 diversion pipe replacement. The prudential committee next reviewed the various options with a focus on the cost associated with each component. The committee also carefully considered the engineers recommendations as forwarded the plan to the Office of Dam Safety for its concurrence.



Since dam work can begin no earlier than July first and must be completed before October first of the same year, and because estimated projected costs are much higher than the 2013 Annual District Meeting authorized appropriation, work on the Lancelot Dam will have to be postponed until after the proprietors vote to authorize additional borrowing at this years Annual District Meeting. This means in essence that the project will not commence until on or about July 1, 2017 at the earliest.

Once the proprietors agree to increase the additional funding authorization all of the pre-construction work will commence in earnest. Unlike the past projects involvement with the US Department of Agriculture Rural Development (USDA RA) would be up front and critical, as they will eventually bond the project and provide the long term low interest loan. It also means that agency would be involved in a review of the design process. Department of Environmental Protection (DEP) and Conservation Commission permitting also takes time.

In late spring the prudential committee discussions centered on formulating the best plan for the project reviewing the engineer's recommended course of action. It was a difficult decision as the committee members carefully

weighed and various options, the impact construction would have on those in the immediate neighborhood and the associated long-term financial burden on the community as a whole. There was a great deal of give and take but in the end the committee reached consensus having realizing that it was the district's responsibly to mitigate as much as possible any catastrophic failure this high hazard dam might have.

Lake Management

Vegetative Management - Aquatic Control Technology (ACT) Inc., in 2015 continued to provide the water quality monitoring, survey and treatment program for the District. All lakes were surveyed and treated on an as needed basis. Both Nottingham and Little Robin Lakes were found to be relatively weed free and therefore not treated. Big Robin and Lancelot lakes were treated on a contingency basis for invasive and nuisance vegetation. Mechanical weed cutting harvesting for non-invasive plants was permitted by the town's Conservation Commission. This treatment method commenced in late summer on Big Robin Lake for the first time in more than two decades. Excalibur Lake had an unusual massive influx of Algae, which was successfully treated, and a bladder wart issue. Dealing with the latter problem will require 2 to 3 applications of Sonar this spring. Overall the water quality in the lakes remained very good throughout the entire season.

The district reported issued in August of 2015 a report to Becket Conservation Commission on its Weed Cutting/Harvesting Program on Lakes in Sherwood Forest. This report stated that the district had measured success in the removal of pondweed from big Robin Lake and learned a great deal from this experiment. Moving forward the district will make some adjustment to its procedures as it gained insight from the 2015 experience.



First year experience, lesson learned & shortcomings:

- 1) Unusual weather conditions initially delayed pondweed growth. This impacted ACT ability to conduct its survey, map and mark the treatment areas until late July. This delayed harvesting until just 3 weeks prior to Labor Day.
- 2) Unpredictable wind conditions moved cuttings west to east (not as planned) and altered the teams ability to collect and place weeds on designated land where drying could be undertaken.
- 3) Cutter rake, in the condition described in 2 above, didn't serve as a useful attachment with cut weeds moving in too many directions by the changing winds.
- 4) Designated areas marked for cutting remained hard to locate because of wind and sun reflection. A second boat, with pole markers, most likely would have useful to keep the pattern of cutting in a straight-line pattern.
- 5) Lancelot Lake does not have a suitable ramp area to launch the cutter.
- 6) Excalibur bladderwort is not suitable for cutting given the extremely large mass of matter. Chemical treatment is recommended until it is reduced to a point where mechanical cutting and harvesting can easily keep it under control.
- 7) Little Robin and Nottingham had very little growth and didn't call for cutting.
- 8) Glare/reflections and water clarity prevented suitable photos of the event.

Time allotted to cutting Big Robin was 9 hours with 4 hours required to locate/dewater weeds and move it to the compost site.

ACT, now Solitude Lake Management, will resurvey the lakes this spring and evaluate the previously treated areas in particular.

The committee recommends and encourages weed hand-pulling and removal from the water as an effective protocol so long as it is done properly. Remember as with many plant species cuttings can develop, re-root and spread quickly if left in the water.

Beach Water Monitoring - During the 2015 swim season Housatonic Basin Sampling and Testing independently tested all common beaches areas on a weekly basis. Testing commenced just prior to Memorial Day and ended just after Labor Day. This is a state mandated requirement to insure that bathing beach water is safe for swimming and other water related recreational activities. Samples are analyzed for Total Coliforms and E. coli bacteria by Colilert SM-9223B QT Method in accordance with MA DPH regulations for bathing waters. This testing protocol along with its associated notification alert procedure will continue this year.

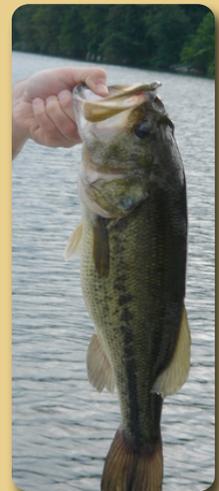
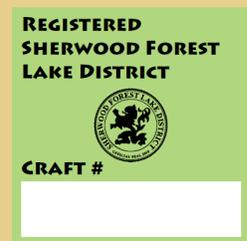
Although Sherwood Forest lakes historically have had some of the lowest bacterial counts in all of the Berkshires, testing this past summer revealed that several beaches within the community had to be closed for short periods of time until acceptable water quality levels reverted to below unacceptable thresholds. In all cases affected beaches were posted immediately with signage on site and an alert notification warning was publicized on the website.

Beach and Boat Management

Beach Sand Rejuvenation: New sand was spread over the sandy beaches last summer. The first step in this process required contractor to rototill, scrape and remove grass and weeds that had crept into the sandy portion of the beach and reestablish a defined edge. Once the prep work was finished quantities of new sand were added. Beaches with steep gradients still suffered from runoff and erosion damage required the most maintenance.

Last year the district started to have the contractor pay close attention to and utilize erosion mitigation methods for each beach to reduce the migration of sand into the lakes. The sand rejuvenation program implemented last spring will continue this summer.

- **Beach Landscaping and Turf Management Program:** Last summer, the district again solicited requests for proposals for mowing around the beaches and dams. Three contractors responded and submitted bid packages and this resulted in a contract being awarded. This was apparently well received by the community as many folks verbally responded kudos to the superintendent. He in turn passed this on prudential committee. As a result of the good work the committee has decided to exercise its option to extend the contact for a second year.
- Beach signage was ordered but not erected due to the lack of suitable posts. This will be corrected this spring prior to Memorial Day.
- **Picnicking:** There was very active use of the new picnic tables last summer. People have been very good about carrying out their trash, which keeps our beaches looking great. Since they were so well received additional tables are planed for this summer.
- Due to the motorized boat traffic, the location of the boat launch and for swimmer safety, swim area markers again were placed at the two main beaches on Big Robin.
- The Boat Registration Program is still free and it is infrequent to find a boat without a watercraft sticker. You can even register your dock.
- Most boaters observe and respect our “no wake on the lake” policy. The district will continue to promote proper boat etiquette this summer.
- The fish population in the lakes appears to be healthy and abundant. The district again encouraged everyone to support our catch-and-release policy in order to prevent overfishing. Even though the lakes in Sherwood Forest are private, proprietors who are over the age of 15 are required to have a valid Massachusetts fishing license. In the past some folks have received warnings from the Environmental Police about fishing without a license. Education



will continue.

- Lake front owners have been very good about keeping their docks properly secured to shore. No incidents were reported this past summer of docks floating aimlessly creating a hazard to navigation.
- Since the district adopted a rule/regulation consistent with the Massachusetts Department of Health policy that bars all domestic animals except registered service animals (guide dogs etc.) from community beaches and adjacent lake or waterway almost no incidents have been reported.
- Several proprietors expressed a concern about unregistered boats being left near the beaches. Boaters need to be aware that there is a new abandoned vessel law in the commonwealth. Owners, if they can be located, of unattended, unregistered, dilapidated boats left within the common beach areas will be notified of their responsibility under the statute. If nothing is done at that time the district will legally follow the law and ultimately take possession of this property.



Thank you to all for respecting the beaches and our lakes.

Website

Online: Website postings this year have focused on keeping our proprietors informed on the important issues facing our community. We have posted updates on topics such as the upcoming repair of the dam on Lancelot Lake, Prudential Committee meeting agendas and minutes, fiscal year budget reporting, lake water testing results, plans for control of invasive lake species, beach maintenance, property acquisitions, and other topics of general interest.

Connecting: We continue to explore ways to connect with residents online and to promote active community participation. We have provided links to lake-related internal use forms such as boat registration and opt-out forms as well as links to helpful outside resources for the Town of Becket and the State of Massachusetts.

Inquiries: We have received and responded to email and contact inquiries on a variety of subjects from both inside and outside the Sherwood Forest community. Public input is most welcome and appreciated.

Tidbits: Have something to share with the community? Email it to webeditor@gmail.com

Please visit us at our new Website www.sfldbecket.org

In closing this has been an extremely active year with great progress made towards the goal of preserving and protecting the beautiful lakes and beaches that make up the Sherwood Forest Lake District.

Your Prudential Committee

