## Shutesbury Conservation Commission Meeting Minutes June 27, 2019 Shutesbury Town Hall

# Site Visits (Summaries attached)

June 14, 2019

Attending: Penny Jaques and Barry Field/Commissioners

1. 16 Leverett Road/Hickey: regrading and bringing in fill to level western portion of property June 20, 2019

Attending: Penny Jaques/Commissioner, Linda Avis Scott/Land Use Clerk, Janice Stone and Police Officer Tom Hudock

1. Top of the Lake Conservation Area: observe area in preparation for Notice of Intent filing June 27, 2019

Attending: Penny Jaques and Russ Mizula/Commissioners

- 1. 380 Locks Pond Road/Morse Hill Outdoor Center: BPA for installation of a yurt
- 2. 14 Old Egypt Road/Leab: BPA for metal carport with helical piers

Commissioners present: Penny Jaques and Russ Mizula

Commissioner absent: Barry Field

Staff present: Linda Avis Scott/Land Use Clerk

Guests: Jennifer Wallace, Emily Stockman/Stockman Associates, and Mark Rivers/Lake Wyola Advisory

Committee

Jaques calls the meeting to order at 6:58pm.

Jaques moves and Mizula seconds a motion to approve the 6.13.19 meeting minutes as presented; motion passes unanimously.

### Mail:

- 1. 6.18.19 courtesy email from Sharon and Zoe Weizenbaum notifying the Commission that they have installed two sheds and also plan to install a greenhouse, all with no digging; no SCC action (see file).
- 2. Planning Board notice of special permit application by LSDP 12 to install system resiliency equipment at the existing solar site.

#### Site Visit Follow-up:

- 1. 16 Leverett Road/Hickey: letter sent confirming findings from the 6.14.19 site visit; the property owner agreed to move the project three feet so the proposed work to regrade and fill the western edge is 100 feet from the wetland resource area (see attached).
- 2. 380 Locks Pond Road/Morse Hill Outdoor Center: no jurisdictional wetlands observed; BPA sign off for yurt installation will be completed.
- 3. 14 Old Egypt Road/Leab: no jurisdictional wetlands observed; BPA sign off for carport installation will be completed.

<u>Top of the Lake Conservation Area</u>: Per Jaques, Police Officer Tom Hudock attended the 6.19.19 site visit as an escort; the most reasonable location for the canoe/kayak launch was identified and measurements were done; Janice Stone will begin working on the Notice of Intent.

Lake Wyola Dam Drawdown DEP #286-0272 Wildlife Habitat Evaluation (WHE): Emily Stockman/Stockman Associates presents the June 2019 "Wildlife Habitat Evaluation Report" prepared for the Lake Wyola Advisory Committee as per the 10.17.18 Order of Conditions issued by the Shutesbury Conservation Commission. It is noted that per the Order of Conditions, there could be one partial winter

drawdown beginning in November of 2018 and one refill; future partial winter drawdowns are contingent upon the completion of the WHE.

Stockman visited Lake Wyola on 3.20.19 before refill began, ice was present and the exposed bank allowed observation of the littoral zone, the area that is normally underwater; after refill, a second visit was conducted on 5.29.19.

Stockman presented the following findings:

- Coarsening in the littoral zone is the result of drawdowns over time; fine sediments and organic matter are brought to deeper regions also causing this zone to lack macrophytes.
- The Fiske and Skerry Brook inlets had more organics and macrophytes.
- The timing of the evaluation was very beneficial; returning after refill, no mollusk activity was observed the presence of some fresh water mollusk activity would be expected in a fresh water lake; mollusks have low mobility, thus a drawdown that was not timed correctly, could have affected their presence.
- The Order of Conditions includes some best management practices; going forward, ensure that there are drawdown and monitoring standards; ensure a slow rate of drawdown and winter pool before amphibian hibernation.
- "The Practical Guide to Lake Management" by Kenneth Wagner and other cited literature are listed in the report.
- Given the conditions of a particular season, there is a need to work with the applicant on timing for the drawdown; typically, the drawdown is completed by the beginning to mid-December; refill needs to be slow and steady to help with nutrient release and turbidity as a clear pool is necessary; the lake should be at full pool by mid-April.

Mark Rivers/Lake Wyola Advisory Committee (LWAC): Howard Kinder/Gate and Dam Keeper notes that the dates, per the guidance (Division of Fisheries and Wildlife (DFW) "Drawdown and Performance Standards for the Protection of Fish and Wildlife Resources"), are reflective of what happens in eastern MA; Kinder would lower earlier and raise later.

#### Stockman continues:

- Ensure refill happens by 4.15.19. Rivers notes that the Lake Wyola refill can be completed in about 2 weeks. Stockman: rain events are outside of the keeper's control; outflow, based on watershed size, needs to be maintained (calculations are noted on page 61 of Stockman's report); encourages use of the DFW dates as a guide especially if there is any uncertainty; local knowledge can be used to tweak the dates; some monitoring is recommended. Jaques notes that Kinder keeps meticulous records. Stockman wonders how Kinder is gauging the drawdown.
- Because Lake Wyola is an ecosystem and aquatic species need to acclimate, both raising and lowering are important. Stockman is willing to work with LWAC and Kinder.
- There is no control over inflow into the lake; an appropriate amount of outflow into the Sawmill River needs to be maintained. Jennifer Wallace notes that a significant winter weather event required Kinder to alter the drawdown lake's level.
- Photo #2 (page 33) demonstrates the need for a base level of exposure and the importance of not lower the lake more than two feet. The Conservation Commission needs to ensure there is a procedure to check that the lowering is not more than two feet; in certain areas a two foot drawdown equals more than fifty feet of exposure.
- Stockman Associates did not do a full lake survey.
- The lake has substantial seeps on the western and eastern shores that help mitigate reductions in dissolved oxygen levels; sizable healthy striped bass were observed.
- Lake Wyola seems to have reached an equilibrium with long-term drawdowns; there does not seem to be a significant adverse impact from this point moving forward.
- A two foot drawdown is reasonable; it could even be eighteen inches and should not exceed three feet; the intent of the annual drawdown of Lake Wyola is to reduce ice damage to the lake's banks, resident's docks and the dam/spillway.

- To River's question, Stockman appreciates the current valve control system; an automatic control valve is not needed.
- The time for measurements is from ice-off to ice-on; a study site for controls (measurements) is needed. Rivers reports that he is taking measurements for dissolved oxygen and turbidity at 1 meter intervals in the center of the lake. Stockman recommends going deeper and also taking measurements in the littoral zones.
- There are some small bank undercuts that could be naturally occurring or could be caused by wind/wave action; there is no significant erosion.
- The mocked-up maps depicting impact areas and habitat features (pages 30-32) are referred to.
- To Wallace's question about goals for the lake: it is usually a problem that brings a lake community together, i.e. nutrient loading.

Rivers: the lake management plan developed by Bill Elliott recommended the development of a septic system plan. Jaques notes the increase in the number of year-round lake residents resulting in septic system improvements as well as an increase in the amount of non-permeable surfaces.

- Stockman appreciates the amount of woody vegetation interspersed around the lake. The value of education is noted by Jaques.
- The benthic barrier over land under water is present in places and torn in others (see map #3 Southern Portion).
- The Commission needs to clearly communicate to the LWAC and Kinder about the refill dates (April first) and necessary monitoring; the refill rate can be no more than three inches/day. Stockman restates her willingness to work on calculations with Rivers and Kinder.

Rivers: due to the presence of a stream monitor, real time data statistics for Fiske Brook's input into the lake are available.

• Stockman recommends a staff "stick" gauge to easily observe the lake's depth; the stick can be installed at a reference point, i.e. full pool, to determine how deep the lake is at full pool at the dam.

Rivers to Mizula's question: there is a standard operating procedure for the dam that was developed by Kinder and Walter Tibbetts/Fire Chief and Emergency Management Director.

- Areas of concern: point sources from culverts and no fresh water mussels were present in the lake the mussels tend to be sensitive to shifts in water quality, they are a food source for other species and are common in fresh water lakes.
- The back coves are providing a tremendous amount of food source.
- Take the monitoring suggestions in the report and establish a protocol to be repeated by volunteer scientists; include anthropogenic and climate impacts.
- A "drop rake" can be used to monitor plant composition and density. Observation of aquatic plants during July and August is recommended.

Jaques will ask her UMass contact about protocols being used for drawdown research at Lake Wyola.

• The southern portion of Lake Wyola and the adjunct wetlands are mapped as Potential Regional and Statewide importance.

The Commission and Rivers appreciate Stockman's comprehensive report. Rivers notes the need for a coordinated plan going forward.

### <u>Updates</u>:

- 1. South Brook Conservation Area: UMass intern, Melory Brandeo, became over-committed and was unable to work on the South Brook mapping project; Jaques will follow-up with Darci Maresca/UMass and let her know the Commission is interested in an intern who will do the project for credit.
  - Jaques will follow-up with Janice Stone regarding her 6.20.19 email noting concern about the bridges and debris left behind.

- 2. <u>Highway Department</u>: annual project list remains pending; Scott will follow-up.
- 3. <u>575 Montague Road/Brown</u>: Draft letter is reviewed; Jaques recommends a thorough site visit before sending a letter to Brown as it is important to determine who is working on the access road. Tentative site visit: 7.11.19.
- 4. Eversource flagging report and erosion control: Draft letter is reviewed and revised; Scott will finalize and send the letter.
- 5. <u>Sumner Mountain CR</u>: Per his 6.13.19 email, Charley Eiseman will conduct the annual monitoring visit in early-mid July.
- 6. Open Space and Recreation Plan (OSRP): Wallace suggests a discussion about how the OSRP can be a dynamic planning guide and tool. Jaques recommends a review of the document to determine if there have been any significant changes since completion of the present OSRP. Jaques and Wallace will consider next steps. Wallace: the SCC can decide which recommendations to prioritize and make a basis for action. Jaques will ask Janice Stone, former OSRP Committee member, to explain the process and next steps.
- 7. <u>Posting Meeting Minutes</u>: Carry over this topic to the next meeting to allow time for Mizula to consult with Town Clerk Susie Mosher.

Current Financials: Planned purchases: new keyboard/mouse, \$34.61, and printer ink, \$158.51.

Commissioners acknowledge that Jennifer Wallace's appointment to the Commission becomes effective 7.1.19. Due to an expected lack of quorum, there will be no meeting on 7.11.19.

There being no further business, the meeting is adjourned at 9:30pm.

Respectfully submitted, Linda Avis Scott Land Use Clerk