

Shutesbury Conservation Commission
Minutes – 06/08/2023
Approved – (8/10/23)
Virtual Meeting

Meeting Start: 6:00 p.m.

Commissioners Present: Miriam DeFant, Mary David, Robin Harrington, Scott Kahan, Beth Willson

Other Staff: Carey Marshall (Land Use Clerk)

Other present: Joyce Braunhut, Amanda Alix, Gail Fleischaker, Sharon Weizenbaum, Michael DeChiara, Ziporah Hildebrandt, Don Wakoluk, Janice Stone (SCC Regulations Consultant/ Peer Reviewer), Patrick Garner (SCC Regulations Consultant/ Peer Reviewer), Stanford Lewis, Mike Vinskey, Leslie Cerier, Mary Lou Conca, Joseph Salvador, and all other unidentified individuals.

Chair's Call to Order at 6:00 p.m.

Meeting is being recorded

Review draft minutes for 5/11/23

5/11/23 – SCC has reviewed the draft minutes for 5/11/2023. **Motion: David moves to approve the 5/11/2023 minutes, Harrington seconds. Vote: David- Aye, DeFant- Aye, Harrington- Aye, Kahan- Aye, and Willson- Abstain. *The motion carries.***

Chair Updates

Library Building Committee updates – DeFant attended a Library Building Committee on Tuesday night; they have asked to join SCC's next meeting with their architect consultant to discuss ways of reducing the cost. One proposed way of reducing the cost is to relocate the building closer to the road. They are looking to get preliminary feedback from SCC because moving the building in that direction brings to closer to the Buffer Zones of two wetlands but moves it further away from the BVW-3. DeFant recommends that Commissioners seeking detailed background information can watch the recording of that meeting on the Town's YouTube channel.

Lot O-32/ 66 Leverett Rd Restoration NOI updates – DeFant shares that Penny Jaques has confirmed that the restoration work on Lot O-32/66 Leverett Rd will begin on June 22; they will be placing the erosion controls next week to allow time for SCC to inspect them before work begins. Jaques had inquired about if the Town needed to record the OOC with the Franklin County Registry of Deeds because, when she [Jaques] was Chair, SCC had a practice of not requiring that for municipal projects (less likely that ownership would be transferred). SCC agrees that the Town does need to have the OOC for Lot O-32/66 Leverett Rd needs to be recorded; this is a common practice with other Towns; DeFant will share this decision with Jaques via email.

Dudley Pond Dam Updates – Lois Brown, the owner of Dudley Pond/Dam and abutter to the Montague Road Culvert, is in the process of completing an engineering study regarding how to

remove the Dudley Pond Dam on her property. There has been back-and-forth email communication with Brown and Becky Torres, Town Administrator, regarding Brown's request for the Town to acquire an engineering assessment to assess the structural integrity of the downstream culvert to ensure it can handle increased flow if the dam were to be removed; was recommended by Brown's engineer.

Highway Department Projects Updates

Bundled NOI – DeFant had some email communication with Mark Stinson, MassDEP Circuit Rider, discussing having him come to the next meeting to instruct how a Bundled NOI for the Highway Department can be structured; he has offered to help the Town develop their Bundled NOI, so the Town doesn't need to hire a consultant. Stinson has also shared samples of NOIs that other Towns have developed for SCC and the Highway Department to review. SCC will invite Stinson and the Highway Department to their next meeting for a more in-depth discussion.

Montague Rd Culvert/ Beaver Dam – SCC received a notice that the Highway Department is planning to install a flow protection device with Beaver Solutions at the upper pond culvert; DeFant will be putting together the paperwork for this activity within the next week; asks SCC if they should add a condition requiring a maintenance plan for the flow protection device because SCC received a request from the abutter for a maintenance plan if a device were to be installed. David asks if this activity includes removing the dam. DeFant explains that the work wouldn't include removing the dam but placing a flow pipe through the dam and allowing the beavers to continue their activity without affecting the culvert. SCC agrees that a maintenance plan should be required.

Site Visits

678 Pratt Corner Road/Mitchell – Willson states the site overall is doing well as it has created a wet area; the hydrology of that wetland has been working well; has the potential to be a good wetland. Harrington agrees with Willson. DeFant added that the seeding hasn't taken on the side of the property where straw was placed; there was an erosion problem from the slope eroding into another BVW downhill from the area. As of now there is an erosion control in place but for a long-term solution, DeFant suggested that SCC should recommend the landowner to reseed that area. SCC agreed to those suggestions as the landowner was agreeable to that idea during the site visit; DeFant will communicate this feedback to the landowner.

Site Visit Scheduling

Camel Brook Bridge/DCR – The original site visit date was 6/21/2023 at 3:45 p.m. but has been moved to 6/14/2023 at 3:45 p.m. due to scheduling conflicts.

13 Cove Road (tree removal request) – TBA

45 Schoolhouse Road/Sweeney (BPA/studio addition) – TBA

West Quabbin Woodlands Conservation Area – TBA

South Brook Conservation Area – TBA

Draft Shutesbury Wetlands Protection Bylaw Regulations discussion with Consultant, Patrick Garner (Wetland Scientist and Hydrologist)

SCC introduces themselves to Patrick Garner. DeFant proposed that this discussion be focused between SCC, Garner, Janice Stone (SCC consultant/former SCC Chair) and Don Wakoluk

(Tree Warden); public comment may be taken at the end. The Public Hearing for the Shutesbury Wetlands Protection Bylaw Regulation Update will take place virtual on Zoom on Wednesday June 21, 2023, at 7:00 p.m.; Garner, Stone and Wakoluk will be present then as well as Donna MacNicol, Town Counsel. Public comment will be welcomed at Public Hearing.

DeFant shares the Shutesbury Wetlands Protection Bylaw Regulation draft PowerPoint presentation for SCC, Garner, Stone and Wakoluk to view via screenshare; DeFant reads the presentation (PowerPoint is posted on the SCC webpage on www.shutesbury.org or available upon request).

Garner has been working in the field of wetland environmental science in Massachusetts for over 30 years. He was president of the Massachusetts Association of Conservation Commissions, MACC, for two different terms and was once President of the Association of Massachusetts of Wetland Scientists, AMWS. He has been on 5 Mass Department of Environmental Protection, MassDEP, technical advisory committees including the Riverfront and Stormwater Regulations by invitation of Mass DEP. For current work, he predominantly works as a peer reviewer for multiple Commissions around the state but also works as an expert witness specializing in adjudicatory cases on wetland appeals. He has worked in a half dozen Towns working on creating and reviewing regulations ranging from urbanized areas to small rural areas. He was hired as a peer reviewer for SCC to craft and review the Regulations. The overall scope from the various regulations that he has worked on and reviewed, this draft he believes is a great set of regulations and will serve well as an update to the current regulations. The typical reason why Commissions update their Bylaw Regulations is because over time, science changes and Regulations themselves change; DEP actively makes changes due to case law and adjudicatory decisions which influence the relevance of existing Regulations. A good Commission may update their Bylaw Regulations every decade or so, and, for perspective, about 55 – 60% of Towns have Bylaws and Regulations. The Regulations are key to Commissions whereas Bylaws are not seen as relevant by the courts unless there is an underlying Regulation that defines how those Bylaws are to be interpreted; it is a necessity for the Regulations to be interpreted by both people in the environmental field and the public – user-friendly. DeFant had mentioned the proposed municipal project exemption which can be done under the Bylaw, but he wants to emphasize that municipal projects can't be exempted from the standard Wetland Protection Act, WPA, Regulations.

One thing Garner would also like to emphasize is that what is being called the AURA, Adjacent Upland Resource Area (typically called the Buffer Zone), is an important part of the Regulations. When the WPA was established it was a ground-breaking environmental document and when the Regulations were first issued, Massachusetts was envied by many states, but that has changed because it's become very stagnant – hasn't changed much besides the addition of the Stormwater Regulations, whereas the science has evolved rapidly. The driving purpose of Towns having Bylaws and Regulations is that they are an enhanced protection. In his experience, most of the appeals are in regards to work within the Buffer Zone; cases where the applicant isn't impacting Resource Areas directly (no loss of BVW) but there will be significant work within feet of the BVW itself. Unfortunately, DEP will almost always approve those, even if a Commission denies them. DEP doesn't want to deal with these instances because they are expensive, and over time, DEP has had budget cuts and their legal staff reduced; therefore, they try to move things along as

easily as they can, resulting in DEP no longer acting a reliable enforcer as they only adhere to WPA regulations that say 100-foot Buffer Zone triggers a wetland permit requirement – what the development t does within that Zone is allowed as long as it doesn't directly or instantly impact the Resource Area. On a scientific level, the impacts to Buffer Zone do alter/change the Resource Area itself; for example, shade/sun exposure changes, which result in change of temperature and impacts in Resource Areas, although not abrupt, will occur gradually over time, as he has seen in monitoring projects that he has been a part of. Some alterations that occur over time to wetlands with are altered in close proximity to Buffer Zones, that have been well documented by MACC, EPA, and Army Corps of Engineers, include wildlife habitat and hydrology. Due to this, he believes having the AURA in the Regulations is excellent, but SCC needs to decide which requirements are flexible enough for it to be a workable concept.

DeFant asks if Garner can speak to wildlife habitat and wildlife needs within the AURA; previously discussed that the 100-foot AURA is standard, but some species require more. Garner agrees but knows SCC understands that it is a site-by-site thing; every site is unique. It is similar to Vernal Pools which are protected within 100 feet, but their protection stops at the edge of the BVW; it is a bit confused but Vernal Pool species will typically use the upland area adjoining areas at distances of 800-1,200 feet, which is well documented, but only 100 feet are protected. He has seen Towns, more so in Central Mass, that have a 400-foot protection around them.

David asks Garner if there are any areas within the draft that SCC should pay more attention to or have a more detailed conversation about. Garner states that in his experience streams and riparian areas are more sensitive and should more regulated than a BVW. Kahan thanks Garner for his introduction and comments about the AURA. Kahan asks Garner's thoughts about Buffer Zone distances and their relation to how they protect wetland functions; what is his thought process regarding minor exempt actives that are outlined in the WPA? Garner believes that, unfortunately, there isn't a simple answer to this question; the Resource Area being protected varies in its protection based on its value; thus he is a proponent of a site-by-site assessment – in support of some flexibility that allows the Commission a method of evaluation how important a particular area is. Many Towns have adopted a 25-foot “No Build Zone” and a 50-foot “Minimal Disturbance Zone”, which sets it back far enough to allow for a wildlife corridor; reduces impacts of shading, and hydrology issues. These minimum threshold protection zones create an easily-used instrument for the Commission to use.

DeFant shares she had a discussion with Stone and Willson whether the “No Build Zone” should be set to 25' or 50'. Since most properties in Shutesbury, except for the residential area(s) of Lake Wyola, are built on larger parcels of land (roughly an acre or more), there is more room for landowners to move away from Resource Area boundaries; thus, they believed having a 50' No Build Zone was appropriate with the understanding that if an Applicant presented an Alternative Analysis to SCC explaining there is no practical alternative for them to complete their proposed project except for in that 50', there would be opportunities for mitigation and waivers. Garner agrees with this decision. DeFant adds that having a 25'/50' tiered protections might contribute to the 50' limit being overlooked and 25' becoming the default.

Kahan asks Garner to elaborate about the minor exempt activities and how they vary in terms of their potential impact on wetlands. Garner explains that WPA lists many exemptions which can

become confusing, but he liked how the exemptions were listed in this draft of the Bylaw Regulations. He reread the draft before the meeting and suggests that SCC further define the exempt activity listed as “improvements to agriculture” because the WPA has a better set of criteria for agriculture. DeFant asks Kahan if that answered his question. Kahan said that this is an area he believes the Bylaw administration, in the past, has struggled with and in this draft it adopts some exemptions listed within the WPA; trying to balance flexibility against providing the wetland protections SCC is concerned with. SCC needs to look at what is truly minor and what is not so minor to weigh it out. What he understands Garner to have said is that for the ones SCC is proposing to allow, that those are less concern of potential impact to wetland habitats than the ones SCC is proposing to not allow. For example, the conversion from lawn to a building is an activity that is being proposed to be not allowed because it may have greater impacts on wetland habitats. Garner admits he is hesitant to deeply elaborate because he believes every project is different but he agrees that usually when a lawn is being converted into a building/building expansion, that would create impervious surface that is a trigger for a wetland permit because it changes the direction of stormwater and how it interacts with the property. Garner notes that having a provision for small projects within the Regulations is great in addressing the needs of the public – creates an easy path for those small, minor projects.

Don Wakoluk introduces himself as the Town of Shutebury’s Tree Warden; he has been asked several times by the public about the large scale projects in town that involves clear cutting since the Town is subject to the Forest Cutting Act (FCA) which allows private land owners to log their property. When people convert their properties by clear-cutting and wetlands are affected as a result of this, how confident are you [Garner] that data could be collected to quantify repeatable results measuring the impact on groundwater sources discharge rates, and drinking water supplies? He is concerned that they as a Town has no say in controlling the drinking water supplies. Garner agrees it is a concerning and complicated matter, but he is not confident that could be done; typically to assess this type of impact through using the Stormwater Regulations within the WPA requires assessing the pre- and post-development runoff. The state Regulations are weak because they do measure peak runoff for a series of storm events but they don’t measure the change in volume, so in this instance of addressing trees where 150, 250 or 600 trees were removed, those trees have tremendous uptake through evapotranspiration and play a key role in groundwater recharge and runoff from the site. The state Stormwater Regulations only look at surface runoff and the impacts which are typically litigated through infiltration; trees are a whole new aspect to these Regulations. He is not as well-versed with trees as Wakoluk is but trees serve multiple purposes such as shading and habitat; they are harder to mitigate because in most cases, trees that are removed are ancient or several decades old. He was once hired for a 40b project in the Town of Weston where the project was proposing to remove over 600 mature trees; the Commission brought in many experts to review the project with those same questions. The result of that was placing groundwater monitoring with the goals being to establish a baseline to then compare to existing and future conditions – in some cases the Commission can have a hand in controlling this type of case with a robust OOC that specifies certain Performance Standards. He acknowledges Wakoluk question as a great one but he doesn’t have a reassuring answer.

DeFant informs Wakoluk that there is language in the current draft Regulations for a process in removing trees. Garner agrees that process that developed is good, but Wakoluk’s question was

more focused on groundwater and water quality, which is complex and difficult; different than what is written in the draft. These types of questions are appropriate for the large-scale solar projects and large-scale industrial/commercial projects, but not for homeowner analysis; but the large-scale developer has the funding, the resources, and the civil engineering expertise to be able to measure some of the baseline criteria he has mentioned – the Town and the Commission have the ability to hold them to those pre-existing standards. This process would consist of the Commission asking the developer to assess a list of standard interests and the assessment would need to be done during normal conditions to create an accurate set of existing standards.

DeFant shares with Garner that SCC has had discussion about having the tools needed to evaluate cumulative impacts for large projects or multiple large projects; specifically, watershed impacts. She asks Garner if he believes this draft as it is written currently gives SCC those tools and if SCC needs these Regulations in order to assess cumulative impacts. Garner confirms he believes this draft of the Regulations gives SCC the tools to do so; the key is for the Commission to be able to assess what SCC is demanding analysis of. That is the weakness of the Small Project Permit provision, as SCC is not requiring a professional delineation or to-scale plans, which shifts the burden to the Commission members to have in-house expertise; so when on a site visit a Commissioner or Commissioners can identify a wetland edge. If the Commission changes over and none of the members have that expertise, then that can become a danger to the Commission. DeFant adds that when she had spoken with Town Counsel, Donna MacNicol, MacNicol advised SCC needs to have definitions and Regulations so that Applicants know in advance before the application process; its challenging for SCC to introduce standards after a permit has been produced and SCC would do that at their peril. Garner agrees.

DeFant asks if Garner could discuss/walk through the Subsurface Streams Regulations section; Garner explains that the draft creates a 200-foot limitation around a Subsurface Stream. A Subsurface Stream is when a stream appears to end or disappear into the ground, but then starts or reappears somewhere downgradient; it is assumed that the Stream continues its flow under the surface and comes back up to the surface downgradient or where it enters the earth; the question was whether the area where the stream is underground (subsurface) should be protected – he believes it should be protected. He explains that scientifically and environmentally, Subsurface Streams need to be protected, because, for example, if someone was to place a driveway in-between where the Stream is subsurface, then they would be disrupting the flow when removing the soil and replacing it with an impervious material such as asphalt; the downgradient portion may then dry out or be altered and re-routed – any wetland Resources/habitats that interact with the downgradient portion would be impacted. Subsurface Streams are an unusual phenomenon, but he believes it may be more common in Shutesbury due to the landscape consisting of many hills and slopes. The last time Garner and SCC had discussed this topic, they decided if a stream disappears and then reappears within 200 feet, it would be protectable; would be verified as being same stream downgradient by using something like dye testing. Garner describes how he has completed dye testing over many times and there is published EPA protocol for doing dye testing; it can be done by using colored dyes (red, yellow) or use tracers – this protocol is not expensive and can be done by anyone who has observed and previously participated in using this method and is quick as these streams typically have a fairly high velocity. Overall, he believes Subsurface Streams need to be protected, is justifiable, and they have created a simple, inexpensive way of completing the protocol to verify the Resource.

DeFant asks Garner if they included a specific time period of year that the assessment for Subsurface Streams could be verified during as it may be important for accurate assessment. Garner understands that a specific time period of year for the assessment to be completed during wasn't written into the Regulation. He acknowledges that during spring conditions, water flow is typically higher than during the fall and winter conditions, which could impact the results of the assessment; he agrees with DeFant's suggests that this matter should be discussed and included within the Regulations. Garner and SCC will discuss this in more detail later on.

Kahan, David and Harrington have looked over the draft regulations but need more time to focus on the details of the document. Garner states that the sensitive areas are the small projects and what they cover and the exemptions which were reviewed during Kahan's discussion and questions. DeFant has discussed with other Conservation Agents how they work with Regulations that have provision for small projects; when process first introduced in a community, there is a tendency for many applicants to look to get all projects approved under the Small Projects Permit process; it is important to have clear guidelines regarding what qualifies for this permit; hopes that this provision will be positive improvement that allows more Applicants to seek out permits. Garner agrees and recalls there is language in the draft that always working sessions that allow landowner to approach the Commission with questions about a project they have in mind and received advise from the commission which permit to apply for and what the process would look like; helpful to applicants and makes the process more approachable.

DeFant asks Garner if he could comment how these draft regulations help the Commission address climate change issues. Garner states that he always looks at climate change from the point of view of what impact is it going to have on Protected Resources. The AURA and its varying components are critical; as climate changes, those areas act as a true buffer in a scientific and physical sense. The more buffering that can be placed in these Resource Areas, the greater the resiliency is built in. One part of climate change that has been predicted and has been seen recently is more abrupt, stronger storms events; these added Buffer Aones will protect these areas' by allowing for a natural, undeveloped Buffer Zone to handle stormwater runoff.

DeFant: SCC has discussed Lake Wyola; there are about 100+ properties right along the lakeshore of Lake Wyola as it is a residential and recreational lake; thus, it is densely populated. The area surrounding the area can be described as a bowl which the homes sit within and are accompanied by dirt roads; steep slopes paired with the dirt roads have created complicated issues with erosion and runoff. The properties themselves are small and don't allow much room for the Applicant to complete their projects. There has been a slow development trend of people converting cottages into year-round residences, with an expansion of impervious surfaces, meaning there is less space for infiltration. SCC has been encouraging vegetated buffer strips along the shore of lake as mitigation for some development. Garner agrees and reminds him an Army Corps of Engineering Program that has a mitigation fund which allows for restoration off-site. Most Towns have areas, more so with areas owned by the Town, that are in need of restoration, so having a mitigation find of \$50-\$100 thousand dollars is great to have in order to restore those impacted areas. These small sites are usually a burden for the Commission as they have to look at each site and assess what can be done as each site is unique; if there is an increase

in impervious surface, the space on the site is limited for mitigation such as infiltration basins, etc.

DeFant asks if members of the public has any comments, questions or concerns. ***There is no public comment.***

DeFant asks Garner if he has any comments or information about provisions for Vernal Pools. He attended a seminar several years ago sponsored by the Association of Massachusetts Wetland Scientists and the keynote speaker was the head of Natural Heritage Endangered Species Program (NHESP) who was giving an address on Vernal Pools; using a map of known and potential vernal pools in Massachusetts, the speaker discussed that there around 10,000-15,000 Vernal Pools within Massachusetts and made a comment that since there was so many, they're not that important. Garner isn't stating that he agrees with the speaker but is summarizing that was the NHESP perspective on Vernal Pools. They're difficult to get certified because the creatures that use them move seasonally from the Vernal Pool upland on an average of 1,000 feet or more; there have been cases where wood frogs are found a quarter mile away from the Vernal Pool from where they conduct their seasonal spring activities – that range of distance is impossible to protect. Unless there is a corridor with some sort of wide connectivity to an otherwise unaltered area of upland area, if we surround the 100-foot Buffer Zone with development, then it becomes a dead zone. The provision currently written in the draft not much different than the current conventional limit.

DeFant: regarding the draft Regulations, understand that length is an issue, but the document contains Preambles that discusses the importance of each Resource Areas; each Resource Area is described, defined and the Preambles contain the reasoning for why these particular Resource Areas are scientifically important. A Commission may use those Preambles in their Findings. Garner agrees; suggests reviewing the draft to look for any duplications or repetitions of the WPA Regulation; can incorporate the WPA Regulation; recommends adding language about what makes each Resource Area unique and important for Shutesbury based upon geography and topography.

DeFant agrees and states that the Regulations can be shortened by simply referencing the WPA language that is being incorporated. Preambles have the additional benefit of educating the public who might not read the WPA Regulations.

Garner suggestions that SCC review the section that defines agricultural improvements because from the perspective of a farmer who might conclude that any agriculture activity could be considered an improvement. DeFant agrees.

The Public Hearing for the Draft Bylaw Wetland Protections Regulations with Patrick Garner, and Town Counsel Donna MacNicol will be on June 21, 2023 at 6:00 p.m., virtual on Zoom.

FRCOG Lake Wyola Watershed Plan Discussion

Tuesday, June 20 is the day of the FRCOG meeting with the Select Board for the Lake Wyola Watershed Plan Presentation; the Plan is now being released to the public and will be on the

Town website for public comment. FRCOG plans to do another site visit this summer and DeFant requested that SCC be notified of the site visit so Commissioners may attend. David shares it was a great presentation. FRCOG offered to help the Town in developing grants once they determine what is needed. DeFant adds that they help with DEP Stormwater Grants; in addition, there was discussion of additional studies that could be done that could be funded under MassDEP 604b planning grants. There are also action grant funds that require a certain level of engineering within a design already completed (about 30%). FRCOG shared they are developing a toolkit for municipalities for dirt road management.

Motion to Adjourn: David moves to adjourn, Willson seconds. Vote: David- Aye, DeFant- Aye, Harrington- Aye, Kahan- Aye, and Willson- Aye. So moved.

Meeting Close: 7:56 p.m.

Next Meeting: June 22, 2023, at 6 p.m.

Documents Used

- Agenda
- 678 Pratt Corner Rd Site Visit Form
- Shutesbury Wetlands Protection Bylaw Regulation PowerPoint
- Shutesbury Wetlands Protection Bylaw Regulation Draft
- FRCOG Lake Wyola Watershed Plan

Respectfully submitted by Carey Marshall, Land Use Clerk, 8/8/23