

ADOPTED

City of Keene
New Hampshire

CONSERVATION COMMISSION
MEETING MINUTES

Tuesday, February 16, 2016 4:30 PM 2nd Floor Conference Room, City Hall

Members Present:

Chair Thomas P. Haynes
Councilor George Hansel
Councilor Janis Manwaring
Denise Burchsted
Thomas Lacey
Brian Reilly
Sadie Butler, Alternate

Staff Present:

Tara Kessler, Planner

1. Call to order

Chair Haynes called the meeting to order at 4:32 PM.

2. Minutes – December 21, 2015

Councilor Hansel made the motion to accept the minutes of December 21, 2015 as presented. Councilor Manwaring seconded the motion. Mr. Lacey proposed the following amendments to the minutes: pg. 7 of the minutes, 5th paragraph change the first sentence to read “Mr. Lacey reviewed the history of the concerns and changes thought necessary back in 2014.”

The motion was approved by unanimous vote.

3. Notifications

Ms. Kessler noted that the notifications included in the meeting packet are for information only. She briefly reviewed the nature of each notification and addressed relevant questions. Mr. Riley questioned how often Eversource Energy conducts maintenance in their right of way. Ms. Kessler noted that she was unaware of Eversource’s maintenance schedule.

4. Conservation Master Plan Discussion

Chair Haynes asked the different working groups to provide an update on their work, proposed action items, and potential next steps.

a. Natural Resource Inventory Working Group

Mr. Reilly and Mr. Lacey shared an update on the work of the Natural Resource Inventory (NRI) working group. Mr. Reilly noted that he and Mr. Lacey reviewed a number of NRIs that have been completed for the City. He distributed a list outlining the different plans and documents that were reviewed. In his opinion, one of the most impressive NRIs was completed by Keene State College for Robinhood Park. He noted that this report does a good job at identifying the resources present in the park. Mr. Reilly distributed a handout that describes the important

components of a NRI. He commented that there is a vast array of information available statewide that could be used to conduct NRIs.

Mr. Lacey stated that he is focused on forest inventories. He noted that the City has done a good job at tracking what has been accomplished related to forestry and forest management. He stated that an informal timber management program had once occurred on some City-owned lands and that the City began cutting timber periodically in the 1950s. The last forestry management operation was completed in the early 1980s on lands in the Keene Watershed in Roxbury. There was an effort in the 1980s to do forest management in the Goose Pond Watershed. Although there were a few timber sales in this area, they tended to be small. Mr. Lacey noted that the area around Goose Pond is composed of a many lots, and there had been no comprehensive plan for managing resources in this area. As the City developed a greater interest in the Goose Pond area, the public began to question what activities should be occurring there. Mr. Lacey located a document from the 1990s that addressed why the City no longer pursues active forest management on public lands. In the mid-1990s, the City imposed a moratorium on timber harvesting to take time to better understand the potential impacts of forestry by conducting a biological inventory. This prompted the City began to look at the full 1,000+/- acres instead of the land as small lots. Mr. Lacey noted that there were NRIs done in 1996 for the area and student studies were completed for specific resources, but there was never a plan for general land/resource management. A plan was completed for forest management in 2006 by a graduate student; however, this student only collected information on basal area, not volume. A recommendation from this plan was that a more intense forest inventory of the Goose Pond area be completed.

Chair Haynes asked Mr. Lacey and Mr. Reilly if there they have a proposed action step(s) for moving forward. Mr. Lacey noted that he would like to see a timber inventory completed. He continued, stating that the group would need to decide what information would be gathered. He thinks it is important that the person who is hired to complete this inventory have the expertise to note both the forest systems and habitats present. Mr. Lacey noted that he suspects the NRI completed for the Goose Pond area is still current. However, he encourages the group to consider conducting an inventory of the Keene Watershed in Roxbury. Mr. Lacey stated that in order to do an inventory, a decent map is needed. He has asked that staff provide information on the surveyed boundaries of City-owned conservation easements.

Chair Haynes asked if other Commission members had questions for Mr. Lacey or Mr. Reilly. Mr. Hansel noted that the NRIs vary in level of detail. He asked whether the Commission could develop or use an existing NRI template for use on City-owned parcels that would also include a forest/timber inventory. Mr. Reilly noted that this is a possibility and that there is information available from the state on resources present on these lands. For more granular data, field surveys/studies would need to be completed. Mr. Hansel stated that the Commission should include this template in the Conservation Plan. Chair Haynes inquired whether the NRI working group should pull together this information and present a template for conducting a timber/biological inventory. Ms. Burchsted stated that she thinks this approach makes sense and encouraged the working group to consider two levels or phases for conducting this inventory. Some areas may warrant a more detailed study or review of resources onsite than others. Mr. Lacey agreed that a template is needed that outlines what data should be collected. The NRI

working group will report back on their progress at developing an NRI template at the next monthly meeting.

b. Greenways Working Group

Ms. Butler noted that this working group has not met since late last fall. Chair Haynes noted that the group identifies the Ashuelot River corridor as an area to focus on with respect to greenways. He feels that lessons learned from a study of the Ashuelot River corridor could be applied to other potential greenway areas. The Comprehensive Master Plan identifies White Brook, Black Brook, Ash Swamp Brook, and the Minnewawa River as potential corridors for greenways in the City. The next step for the group is to identify what components or elements make a greenway viable and what areas could be designated or developed as greenways in Keene.

Councilor Manwaring asked the group to provide a definition of a greenway. Chair Haynes noted that he has identified a few varying definitions. One definition is “a strip of undeveloped land near an urban area set aside for recreational use or environmental protection.” Chair Haynes went on to note that a greenway could include a scenic road or a wildlife corridor. He noted that the group has yet to assign a definition to a greenway for the context of the Conservation Master Plan. Ms. Butler noted that it might be important for the Commission to weigh in on how a greenway should be defined.

Councilor Hansel noted that he views defining greenways as an important first step. Once a definition is developed, the Commission would be able to identify areas of Keene that meet the definition and establish recommendations for these areas. Mr. Lacey noted that he considers many of the recreation trails, including the Cheshire Rail Trail, to be greenways. Mr. Reilly stated that an area like Robinhood Park, while not specifically a pathway or corridor, could be considered a greenway. Councilor Manwaring noted that she tends to associate greenways with waterways. Chair Haynes noted that there are both cultural and ecological considerations for what could define a greenway. Ms. Butler commented that it would be important to identify the primary uses or goals of greenways. Mr. Lacey noted that the issue of wildlife corridors is less significant in the rural areas of the City; however, it becomes more of a challenge in the more densely populated areas. Mr. Lacey suggested that it would be important to identify active wildlife corridors in these densely developed areas.

Chair Haynes asked the Commission members if they agree that the Ashuelot River corridor is the most important greenway for the City. Councilor Manwaring responded that it would depend on the definition of greenway. She noted that the Active/Passive Recreation Master Plan might provide a definition of greenway. Ms. Butler commented that there is a map that the working group discovered in their research that would help explain why the group feels the Ashuelot River corridor is so important. Ms. Burchsted stated that she feels the Ashuelot River is a critical corridor for wildlife. She continued, stating that the Ashuelot River corridor is also important for recreation as well.

For next meeting the working group will share a working definition of greenway and an explanation of why the Ashuelot River corridor is an important area of focus. Ms. Burchsted suggested that the wildlife working group might help clarify the potential overlap or differences between greenways and wildlife corridors. Councilor Hansel responded that there are natural

greenways and recreational greenways and in some instances, the two types might coincide. Ms. Burchsted commented that by design, the two types are intended for different purposes. She noted that the state of Connecticut has a definition of greenway and that she worked on a project to recognize river corridors as greenways.

c. Wildlife Working Group

Councilor Manwaring noted that this group began their work by reviewing the New Hampshire Wildlife Action Plan, which was recently updated. This plan identifies the location of primary wildlife habitat in the City. She noted that she would like the Conservation Master Plan to address the importance of vernal pools. Councilor Hansel suggested that the group draw attention to relevant/important sections of the State's Wildlife Action Plan and add information where necessary. He asked Ms. Burchsted if she would be able to identify wildlife corridors by examining maps, and if there is any surveying or research that has been done on wildlife habitat in the City. Ms. Burchsted encouraged the group to look at the State's Wildlife Action Plan. Councilor Manwaring stated that there have been studies completed by Keene State College students that could be referenced. Ms. Burchsted stated that she thinks it would be prudent to do more research. She suggested that Dr. Kenneth Bergman might be able to help enhance or narrow the information that is available on wildlife habitat and corridors in the City. Mr. Lacey questioned whether public outreach might be a way to augment data on wildlife. He suggested including a questionnaire in the Keene Sentinel asking residents to report wildlife sightings.

Councilor Haynes noted that at some level all of the working group topics will connect and the Commission will need to weave these issues and data together.

Councilor Hansel stated that the next steps for this working group will involve bringing forth relevant sections of the state's Wildlife Action Plan and identifying the information or data that needs to be collected and/or mapped. In addition, the group will develop a description of a wildlife corridor.

d. Surface Water Working Group

Ms. Burchsted noted that Matthew Walton has an interest in continuing to contribute to the Conservation Master Plan and the Surface Water Working Group. She has not met with him recently, but was able to provide an update on their previous meetings. She stated that in addition to protecting water resources, the group feels it is important to protect aquatic wildlife. They began their work by brainstorming the reasons/purpose for conducting a Conservation Plan and for protecting water resources. They feel a potential action item would be to conduct an NRI or some level of assessment of aquatic resources/habitat. Ms. Burchsted noted that the aquatic resources in Keene are highly managed and it would be useful to develop an understanding of what areas/resources are most in need of protection and what are the threats to aquatic wildlife and water quality.

For next steps, the group will be reviewing the recommendations produced by the Ashuelot River Local Advisory Committee (ARLAC) as well as objectives included in other regional plans and studies and NRIs that have been conducted. They are also interested in consulting experts to better understand the impact of management on aquatic wildlife. Ms. Burchsted stated that she likes the idea of focusing on the Ashuelot River corridor. She noted that the

working group might also produce recommendations for what should be included in the NRI template with respect to surface waters and aquatic wildlife.

The Commission decided that they will continue discussion on the topic of the Conservation Master Plan and the work of the working group at the next meeting.

5. West Street Dam – Discussion on VHB Report and next steps

Chair Haynes reminded the Commission that VHB, who presented at the last meeting on the West Street Dam study, is seeking comments, questions and feedback on their draft report. He also reminded the group that the Commission, at some point in the future, will need to provide a recommendation to City Council on the next steps for the Dam with respect to potential environmental impacts. Chair Haynes questioned whether more information is needed on the potential impacts of the scenarios proposed to date or if the group is ready to produce a recommendation to City Council.

Mr. Lacey stated that he has questions about some of the tables included in the draft report. He noted that the West Street Dam has been portrayed as a run of the river dam and is not a flood control dam. He has heard that the reason Keene floods in this area is because the water backs up at this location as there is not enough channel to hold the water without inundating the surrounding area. Because there is a reservoir of storage, it occurs to him that it is actually flood storage. He compared this to the Woodland Cemetery project, which is described as a flood storage project. Ms. Burchsted noted that it is true that, generally, it would not be sizeable enough to impact flood storage in this spot, but agrees that there is a wide wetland expanse available. She noted that there is no question that with dam removal the river near the current dam location would not be able to access the adjacent wetland except in the highest of floods.

Chair Haynes asked the Commission members if they feel further studies are needed. He questioned whether more information should be collected to assess the impact of the river on the area of Tenant Swamp. Ms. Butler asked if the City has a timeframe for which a recommendation is due. Chair Haynes responded that he does not believe there is a deadline. Ms. Butler noted that she thinks it would be useful to conduct further studies. Councilor Manwaring noted that she is in favor of additional studies as long as they do not cost the City additional money. Ms. Burchsted noted that, in her opinion, regardless of whether the dam is removed or remains, the project has the potential for harming aquatic resources. She continued, stating that regardless of the path chosen, there are numerous sensitive issues at hand and these issues need to be handled appropriately. Ms. Kessler mentioned that West Street Hydro might be conducting additional studies as part of their application for FERC licensing.

Ms. Lacey stated that he thinks the river will become very shallow if the dam were removed and questioned the impact that this will have on water temperature. He noted that the drop in elevation could have an impact on recreational uses as well as on the wetlands. Ms. Burchsted noted that she does not think dam removal will cause the temperature of the river to elevate. She stated that the river will be shallow and will resemble the area downstream of the dam. She suggested that dam removal without special design considerations would not be a good decision. She explained that the dam removal project near the Homestead Woolen Mill in Swanzy is a

good model to follow. In this project, rock veins were installed that keep the water levels higher. She noted that the drop in surface water elevation could be done in steps so that the water level is maintained further upstream.

Mr. Lacey noted that Table 7 of the VHB report indicates a change in Channel Top Width of -1405 feet under the scenario of dam removal. He questioned whether this number should be -140.5 feet instead. Mr. Lacey also asked if the water surface profiles charts could show a different line color from blue. He also requested that the report's inundation maps depict bankfull (2-year flow) conditions and not average flow. Ms. Burchsted noted that she is not in favor of using average flow and feels that bankfull conditions would be more useful information. Ms. Kessler responded that she will share these edits with VHB and will check to see if it would be possible to produce new inundation maps.

Mr. Lacey asked whether there is an advantage to having the flashboards present in certain conditions. Mr. Reilly stated that the report notes that the flashboards would be designed to fail at certain flow conditions.

Chair Haynes suggested that the Commission conduct an exercise to outline and compare the positive and negative impacts of the proposed scenarios.

Councilor Hansel stated that he would like to hear from West Street Hydro on what environmental studies they might be conducting before issuing a recommendation to City Council. Ms. Burchsted responded that it might make sense to invite the Nature Conservancy to attend a Commission meeting to discuss their work on dam removal. Ms. Burchsted noted that if West Street Hydro is proposing to include fish passage as part of their project design it would make for a very different project. Ms. Kessler will reach out to representatives from both West Street Hydro and the Nature Conservancy to inquire about availability for attending future meetings.

6. Surface Water Protection Ordinance

Councilor Manwaring distributed a handout outlining proposed amendments to the Surface Water Protection Ordinance. She noted that one proposed amendment is to eliminate "in an undisturbed and natural condition" from the definition of the term buffer in Section 102-1482. The definition would read, "Buffer for the purposes of this article means an area that is designed to remain vegetated to protect adjacent surface water functions and values from adverse impacts and provide habitat for wildlife." Mr. Lacey noted that this change to the definition would not impact the Planning Board's ability to influence the extent to which the buffer area would be preserved through the review for approving a conditional use permit.

A second proposed amendment is to eliminate subsection 7 of Section 102-1485, which references tax ditches.

The third proposed amendment is to revise section 102-1485 subsection 1 to read, "Man-made ditches and swales that have been constructed to manage drainage and/or flooding. These are not considered surface waters of the State pursuant to RSA 485-A: 2.XIV." Mr. Lacey noted that this change refers back to what the Ordinance considers to be surface waters.

Ms. Burchsted questioned how the proposed revision addresses the initial problem. Mr. Lacey noted that subsection 7 would no longer be present. Councilor Hansel questioned whether the City could argue that Beaver Brook is manmade. Mr. Lacey noted that the state would argue it is a stream. However, Mr. Lacey noted that he is not certain the Zoning Administrator would interpret it this way. Councilor Manwaring asked if there is a better way to distinguish tax ditches from streams, rivers, and other surface waters. Ms. Lacey stated that he welcomes suggestions. Ms. Burchsted suggested matching the City's definition with the state definition of surface waters. Ms. Burchsted asked if manmade ditches are considered streams by the state. Mr. Lacey responded that the City relied on model ordinances when they initially developed the Ordinance. Chair Haynes suggested subcommittee come back to the Commission with revisions to their proposed amendments.

Mr. Lacey noted that another amendment that the subcommittee had considered early on was the difference in buffer width by zoning district. He noted that in more densely developed areas where surface runoff is more concentrated, the buffer width is narrow, compared with the buffer width required in more rural areas of the City. He feels the buffer width should be the same throughout the City. Chair Haynes suggested that the Commission keep working to address the amendments previously discussed before shifting focus to the question of buffer widths.

7. New or Other Business

a. Keene State College Flood Management Video

Ms. Burchsted is working with three Keene State College students interested in researching flood management practices in Keene. One student is creating a video to promote possible alternative management options and would be interested in speaking with others in the community about this topic.

8. Staff Updates

a. Commission Budget

Ms. Kessler provided an update on the Commission's remaining budget for fiscal year 2016 and the available funds in the Land Use Change Tax (LUCT) fund. She noted that the Commission has a remaining budget of \$518 and there is approximately \$101,132 remaining in the LUCT fund.

Mr. Lacey noted that he has made previous proposals that the timber tax should also be applied to this fund. Chair Haynes noted that this could be addressed as a discussion item another time.

b. Membership to Society for the Protection of NH Forests (SPNHF)

Ms. Kessler noted that the Commission's membership to the SPNHF is up for renewal. The amount for membership renewal is \$40.00. The Commission approved renewing membership.

c. Woodland Cemetery Wetland Restoration Project

Ms. Kessler noted that staff are preparing to issue the bid package for this project. She hopes that it will be release before the end of March.

d. Conservation Lands Update

Ms. Kessler noted that a site assessment has been completed by Bracket Geosciences for the Stacey Cole Trust. A Commission member asked if there are there stipulations or restrictions for how the City can use the property. Ms. Kessler will follow up on this question.

9. Adjournment

Chair Haynes adjourned the meeting at 6:36 PM.

The next meeting date Monday, April 18, 2016

Respectfully submitted by:
Tara Kessler, Planner
March 15, 2016