

City of Keene
New Hampshire

CONSERVATION COMMISSION
MEETING MINUTES

Monday, August 20, 2018

4:30 PM

**2nd Floor Conference Room,
City Hall**

Members Present:

Andrew Madison, Vice Chair
Councilor George Hansel
Denise Burchsted
Brian Reilly
Ken Bergman, Alternate
Art Walker, Alternate

Staff Present:

Michelle Chalice, Planner
Don Lussier, City Engineer
Donna Hanscom, Assistant Public Works
Director

Members Not Present:

Thomas Haynes, Chair
Alexander Von Plinsky IV
Eloise Clark

SITE VISIT: At 3:30 PM, before the meeting, Commission members visited Woodland Cemetery, Chapel Drive.

1) Call to Order

Vice Chair Madison called the meeting to order at 4:31 PM.

Councilor Hansel moved to amend the agenda to include a presentation by Ms. Hanscom, which Ms. Burchsted seconded and the Conservation Commission carried unanimously.

2) Approval of Meeting Minutes – June 18, 2018

Councilor Hansel moved to accept the minutes of June 18, 2018, which Ms. Burchsted seconded and the Conservation Commission carried unanimously.

3) Wetland Permit by Notification (PBN) – Woodland Cemetery, Chapel Drive

The City Engineer said the City wants to replace the existing stone culvert that crosses the cemetery driveway with a new plastic culvert pipe. This application is because of potential wetland impacts from riprap/stone on the upstream side (a low spot in front of the inlet to the pipe) to collect sediment, therefore extending the life of the pipe. Burial sites overlay the current culvert. Thus, instead of replacing the culvert at the same site,

they propose moving the culvert 60-65' south, which will require a longer pipe, but the elevations are acceptable. They propose an 18" HDPE (high-density polyethylene) pipe with a manhole structure in the center for maintenance access. He will investigate a trash rack upstream to safeguard beaver activity. NH Department of Environmental Services (DES) is refuting the City's claim that this is eligible for a Permit by Notification; the City believes it is eligible because it is a culvert upgrade but moving the culvert location is complicated. DES thinks it should be a Minimal Impact Permit. The City needs to submit more information but nothing is different from the application materials the Commission has seen. He believed the Chair could sign the application at the meeting and it would be valid; if not, however, the motion in the minutes should allow the Chair to sign an updated application package.

Councilor Hansel said he thinks this is straightforward and there are no significant disturbances to the area or wetlands. The City Engineer and Mr. Bergman agreed there are no obvious alternatives. Mr. Reilly asked when the project would occur. The City Engineer replied as soon as possible to mitigate water accumulating upstream so, likely this fall.

Councilor Hansel moved to allow the Chair to sign the Woodland Cemetery culvert replacement project application without any concerns from the Conservation Commission, which Mr. Reilly seconded and the Conservation Commission carried unanimously.

4) Conservation Land Purchase Request – Beauregard, Chapman Road/Beech Hill Parcel

Mr. Beauregard referred to the letter in the meeting packet he submitted to the Commission. He is the executor of his father's (Robert A. Beauregard) estate. Before passing, his father had extensive conversations with the Commission and the City about acquiring his 27.5 acres of land that fronts Chapman Road, adjacent to the Beech Hill conservation area the City already owns (2,700' common boundary). There is an old wood road on the property to an outlook on Beech Hill that the City has maintained for many years with his father's permission. He shared photos to demonstrate that the property spans the whole face of Beech Hill, making it a prominent visual feature when driving into Keene. The Community Development Director and the Director of Parks, Recreation & Facilities suggested he return to gauge the Commission's interest in acquiring the land before he explores development interest.

Mr. Reilly asked about steep slopes on the property. Mr. Beauregard replied that page 14 of the meeting packet demonstrates the slopes, particularly on the northern part of the property. Ms. Chalice noted that 25-45 degree slopes cover the whole property, meaning the City Hillside Protection Ordinance would preclude development on this site without a variance.

Councilor Hansel recalled when the Commission discussed this property previously and decided this was the most appropriate use of Land Use Change Tax funds, particularly

because it is adjacent to City-owned conservation land. Mr. Beauregard agreed at that time the Commission voted to proceed with purchase, City Council approved money for appraisal, and they were discussing terms of sale before his father passed.

Mr. Walker asked the Commission's purpose in this situation. Ms. Chalice replied the City previously determined the appraised value of the land and the Commission determined the property was consistent with criteria for City-owned lands. Now, however, the Commission criteria for acquiring land are in flux. Still, the Commission has \$148,000 in the budget from the Land Use Change Tax fund. The Commission needs to determine if they want to recommend the City Council proceed with purchasing this land.

Councilor Hansel and other members agreed that although the criteria are not yet established, this purchase is consistent with themes the Commission has prioritized in recent years, particularly: wildlife corridors, watershed protection, continuity of conservation land, and greenways/recreation.

Mr. Bergman asked the physical condition of the land. Mr. Beauregard replied it is wooded and forested heavily; there are ledges and a significant utilized trail network (unmaintained) that connects to the formal Beech Hill trails. Mr. Beauregard confirmed the physical condition of the land has not changed since the Commission voted in 2010 (e.g., no logging, etc.). Mr. Bergman asked if there is competing land acquisitions the Commission should consider. Ms. Chalice replied no. Additionally, she shared the April 5, 2010 Commission motion to negotiate purchase of the land via email.

Vice Chair Madison said his primary concern is steep slopes; if logged or cut there would be significant impacts on the Beaver Brook watershed.

Mr. Bergman asked about maintenance if the City buys the land. Ms. Chalice replied the Commission could add it to a list of parcels for conservation plans. Councilor Hansel replied the City has maintained the watershed historically but does no other maintenance on the property currently. He continued that these opportunities are rare and align well with City conservation initiatives. This opportunity makes sense to him based on the funding source, a tax to mitigate development impacts. Mr. Reilly agreed because if the next owner decided to log it, there would be a significant visual impact in the City. Ms. Burchsted noted it is important to remind Council that the Commission arrived at this same conclusion once before.

Ms. Burchsted moved to recommend that City Council authorize the City Manager to do all things necessary to negotiate the purchase of 27.5 acres of land belonging to the Beauregard family, which Councilor Hansel seconded and the Conservation Commission carried unanimously.

5) Donation Requests

a. Ashuelot River Local Advisory Committee (ARLAC)

Vice Chair Madison noted a memo from ARLAC (in the meeting packet, from April 2018) requesting \$125 for watershed data monitoring, which they request from every town in the watershed annually.

Mr. Reilly moved to donate \$125 to ARLAC, which Mr. Bergman seconded and the Conservation Commission carried unanimously.

b. Monadnock Conservancy – Conservation Easement Fees for 105 Daniels Hill Road Property

There were changes to the parcel so the Conservancy needs more time and will return in September.

6) Watershed Management Plan – Donna Hanscom, Assistant Public Works Director

Ms. Hanscom, the Assistant Public Works Director, said she was at the meeting because the Commission expressed interest in learning about watershed management. For the last eight months, the Public Works Department worked on a watershed management plan and they just received the draft (City Council has not heard a presentation of the plan yet). Keene established a water supply in the mid-1800s, when water volume was a significant problem. The City used various water supplies for a long time, like the Goose Pond and the Robin Hood dams, but fire protection predicated establishing a sufficient formal water supply in 1860. The City bought parcels in Roxbury and the Water Commissioner identified Woodward Pond, with a sawmill powering dam, as an ideal location for a large reservoir; the State agreed. The City bought Woodward Pond in 1881 and continued acquiring adjacent parcels of land through the 1940s (today, the City owns 2,600 acres in Roxbury). The City last improved Woodward dam in 1910, raising it to hold more water. Water from Woodward continues down Roaring Brook to Babbidge dam, where a water outlet pipe goes to the water treatment facility and into two storage tanks that drain by gravity to the rest of the community; elevation turns hydroelectric turbines for electricity. NH DES has rules written for the watershed that says Keene's water supplies are only for that purpose; the City can access the land for maintenance but citizens cannot use it for recreation. There are many tributaries throughout the watershed and logging prohibited because of a logging-related typhoid incident in 1959, which is when the City began chlorinating their water.

Ms. Hanscom continued explaining features of the water treatment facility established in 1993 to treat water beyond chlorination. Before the facility, City water had an unpleasant odor and noticeable color. Today, the facility processes 1.8 million gallons from Babbidge dam (maximum capacity: 120 million gallons) daily. Staff can shut the gate of at the base of Woodward dam to maintain water supply there (maximum capacity: 450 million gallons). If the City uses the average 2 million gallons daily, Woodward dam can store water for a long time, meaning the City rarely has to restrict water use during droughts. When the plant opened, there were basic water quality regulations that have changed twice since to include disinfection byproducts that form based on chemicals

added to the water. The cost efficient way to assess water quality daily is to test organic carbon, which indicates the capacity to produce byproducts. The facility can treat 6 million gallons of water daily but can only take 2.2 million gallons out of the reservoir safely. The City also has two well fields that help compensate for water use, but that requires pumping water out of aquifers, which do not recover from drought as quickly.

Ms. Hanscom stated watershed maintenance and quality of water entering the reservoir impact the quality of water delivered to customers. Historically, watershed maintenance polices were informal; now, the City has developed this draft watershed management plan to formalize policies. Water quality is the priority of the plan. VHB Consultants should present the final document to Council this fall. She discussed contents of the plan:

- Characteristics of the watershed from a full natural resource inventory
- Options, benefits, and impacts of timber management
- Potential for a water quality sampling plan to identify potential changes to water quality based on human or other events
- A critical threshold guideline for all nutrients that could increase Cyanobacteria (algae) growth; algae is limited by phosphorous in the water and can produce harmful byproducts like odor, illness, and liver damage
- The potential impacts of storms intensified by climate change
- Areas of the watershed most likely to impact water quality
- Additional areas of the watershed the City should own
- Options to control access in certain areas if appropriate
- Prioritized recommendations for future Capital Improvement Projects (CIPs) or grant opportunities
- Potential solutions for access problems; there are old, unmaintained roads and issues with abutting landowners
- Watershed security

[The City Engineer noted Babbidge dam improvements to meet DES standards will conclude in October and he would be happy to show it to the Commission; Woodward dam is scheduled for improvements in FY2020]

The plan concludes that the reservoir property is in good condition because it is remote. Ms. Hanscom noted there is abundant ecological habitat rated highly by DES; a pair of nesting loons has reproduced on the pond for many years. The report does not delineate species to protect in the watershed but indicates the area should remain protected. Foresters did not encounter any invasive species on the property. She discussed other conclusions from the plan:

- This land works well for water storage because of steep slopes, so the reservoir recharges quickly
- The biggest risk to water quality is human activity and thus phosphorus/cyanobacteria
 - ATV activity and other activities (e.g, hunting) continue to increase despite no trespassing signs
 - The water treatment facility is not equipped to remove oil or gas
 - There is no fencing around the watershed

- Keene pays Roxbury police to patrol the property 10-12 hours monthly

Staff might recommend that Council adopt a long-term stewardship and monitoring plan, which would include the Conservation Commissions of all surrounding towns to share maintenance of the watershed in the future. She added that there is adjacent conservation land and it would be in the City's best interest to protect this land as well. Ms. Hanscom will notify the Commission before the presentation to Council (likely October) and will share a final copy of the report.

7) Updates/Status:

a. Dillant-Hopkins Airport Wetland – Construction Water Pumping

The City Engineer said the last construction meeting was two weeks ago and the pump is already discontinued. The amount of water taken was below the state reporting threshold so there was no obligation to report use of that water. Mr. Bergman said it was in service of an excellent project. The only wetland impacts were from cleaning manmade drainage ditches and the construction access road is temporary.

b. Public Visitation of City Reservoir Properties

There is no update at this time.

c. Aquatic Resource Management Subcommittee Priority Projects

Ms. Burchsted stated the subcommittee met with the City Engineer. They want to identify up to four projects in the CIP that are good opportunities for ARM funding and opportunities to continue discussing tools for improving conservation priorities with the City Engineer. At the next subcommittee meeting, they will identify priorities and official projects to collaborate with the City on.

Councilor Hansel moved to table the rest of the agenda until the September meeting, which Ms. Burchsted seconded and the Conservation Commission carried unanimously.

d. Land Prioritization Criteria Subcommittee – CSI Project

e. Commission Functions/Roles – Councilor Hansel

f. West Street Hydro, Inc. – Cancellation of Hydropower Project on West Street Dam – acceptance by City Council

g. Keene Scenic Roads Policy to NH Association of Conservation Commissions

8) Informational Communications

a. ARLAC – 7/30 Public Utilities Commission/ Liberty Utilities Request Letter

b. Goose Pond Dam Improvements – Shoreland Permit Notice – Vernal Pool, ARLAC Comments

9) New or Other Business

10) Adjournment – Next Meeting Date: Monday, September 17, 2018

CONS Meeting Minutes
August 20, 2018

Hearing no further business, Vice Chair Madison adjourned the meeting at 5:49 PM.

Respectfully submitted by,
Katryna Kibler, Minute Taker

Reviewed and edited by,
Tara Kessler, Senior Planner