

**City of Keene**  
**New Hampshire**

**CONSERVATION COMMISSION**  
**MEETING MINUTES**

**Monday, April 18, 2022**

**4:30 PM**

**Council Chambers,  
City Hall**

**Members Present:**

Alexander Von Plinsky, IV, Chair  
Eloise Clark  
Councilor Robert Williams  
Ken Bergman  
Thomas Haynes, Alternate  
Brian Reilly, Alternate  
Steven Bill, Alternate (Arrived at 4:38 PM  
via Zoom)

**Staff Present:**

Corinne Marcou, Administrative Assistant

**Members Not Present:**

Councilor Andrew Madison, Vice Chair  
Art Walker  
John Therriault, Alternate

**1) Call to Order**

Chair Von Plinsky called the meeting to order at 4:30 PM.

**2) Approval of Meeting Minutes – March 21, 2022**

A motion by Mr. Haynes to approve the March 21, 2022 minutes was duly seconded by Ms. Clark and the motion carried unanimously.

**3) Guest Speakers**

**A) Keene State Students: Josh Koehler & Cooper Cioffi Analysis on Human Impact on Monadnock Region Wetlands Ability to Maintain & Perform**

Chair Von Plinsky welcomed the guest speakers, seniors at Keene State College, Cooper Cioffi and Josh Koehler.

Mr. Cioffi began the presentation by introducing the project that began in August 2021: An Analysis of Constructed and Pristine Wetlands in the Monadnock Region. He said they are in a seminar made up of environmental studies and geography majors. Last semester they had to

develop a project and they both had the idea of wetlands conservation. They chose this topic because wetlands can store massive amounts of flood and stormwater, recycle nutrients, filter pollutants, and provide habitat for numerous plant and animal species. They decided on a scientific investigation of these habitats, mainly based on water quality sampling and analysis of plants and macroinvertebrates, with the first few months focused strictly on research and gaining knowledge about wetlands. They learned about pristine versus constructed wetlands and developed the following hypothesis: “Through a variety of metrics, pristine wetlands will show to be higher quality habitats than constructed wetlands.”

Mr. Cioffi continued describing the two research sites: (1) impacted/constructed wetland in Keene, located between RT-12 and the Target shopping plaza, and (2) pristine wetland in Surry, located a half-mile from Village Road, alongside the Ashuelot River.

Next, Mr. Koehler discussed the methods of the year-long investigation:

- Day one at each site:
  - Filled-out the University of NH (UNH) Freshwater Wetland Evaluation Forms, courtesy of the UNH Cooperative Extension, which focuses on agricultural and environmental conservation.
    - Filling out the forms provided a general “score” of the wetlands in question on ecological integrity and presence of difference species. This helped them conceptualize the two sites.
- Six randomly chosen days throughout February–March 2022 (data collected from both sites on the same day):
  - Collected water data on pH, dissolved oxygen, and conductivity using the YSI Pro30 Conductivity Meter. This allowed visualizing smaller patterns in how these variables were impacted over the two months.
- Conducted a plant species and macroinvertebrate inventory:
  - Kick net sampling for macroinvertebrates and iSeek for plant identification.

Mr. Koehler continued describing the results. He said the water quality data showed statistical significance. They found a higher quantity and diverse array of macroinvertebrates at the Surry site, but none were discovered in Keene. Additionally, they found that the number of plant species differed greatly between sites. Mr. Cioffi continued on the results, noting that zero macroinvertebrates were found at the Keene site. They found mainly native plant species in Keene, but there was less variety than the Surry site. In Keene, they found build-up of algae and foam, and noticed that the bottom of the wetland was muddy with finer sediment, compared to the larger sediment in Surry. Mr. Koehler continued discussing the pH results. He demonstrated that the pH in Surry was initially less (6.72) than they expected (7–8). There was a difference in pH, dissolved oxygen, and conductivity between the two sites. There was an extremely significant difference ( $p < 0.001$ ) between the two sites, supporting that there is something going on between the two sites; it could be human pollution or the ability for the habitats to perform their natural functions. In general, the data showed a significant difference, which they believe could warrant further investigation.

Mr. Koehler shared their conclusions from this study. Their numbers show a clear difference in water quality between the two sites, with Keene's wetland much more polluted. He said there could be several contributing factors: road salts that could correlate to the higher conductivity levels, deposits of small sediment like mud and dirt does not allow macroinvertebrates to thrive; they wonder if these factors like road salts effect soil health (nitrogen/phosphorous) and possible eutrophication in the water. Although the environmental and economic value remains in both wetland habitats, they believe it is detrimental to alter those ecosystems. They believe more studies are needed to determine the level of effect that these variables have. They concluded that it may very well be more efficient to leave wetlands as they are instead of altering landscapes and trying to mitigate the effects by creating constructed wetlands. It could be better to plan around wetlands, recognizing the importance of the habitats so they can function to the highest of their capabilities. The students thanked Professors Traviss and Burchsted, Scott Bailey of the USFS, and this Commission.

The Chairman thanked the presenters, stating that he hopes they stay in the field of conservation. He asked whether the students considered solutions to improving manufactured wetlands, such as the one near Target. Mr. Koehler said it is important to recognize that no matter how impacted wetlands have been, they have the capability to provide environmental and economic benefits. During their analysis and trying to determine possible impacts like road salts and sediment deposits, they realized the limitation that what they recommend may not be complete, as they are students. However, they did realize that in these constructed habitats like the one in Keene, that where they can limit human impact, it is important to. He thought a lot comes in the pre-planning stage when it is possible to protect the integrity of these environments.

Mr. Bill asked whether the students measured turbidity at the two sites and if they knew the age of the artificial wetland. The students said they did not test turbidity and were unsure on the age. Mr. Cioffi thought that over time the wetlands help to filter what goes in and out of them, so if people become aware of the impacts over time and begin treating them appropriately, they could be more productive ecosystems. Mr. Koehler said turbidity would have been a good metric to consider as an indicator of sediment suspension and the ability for plants and creatures to live. He said the site photos do show the presence of algae, muck, and foam that could indicate the negative effects of eutrophication. Mr. Bill wondered partly because if the wetland is not very old then perhaps the creatures had not found their way there yet and could in future years. Mr. Bergman and Ms. Clark agreed that the manufactured wetland was approximately 20 years old. Mr. Bergman recalled it begin built to great controversy when the entire site was developed, which consisted of wet agricultural fields. The area had changed considerably since, with plants growing in.

Mr. Bergman commended the students, knowing it is challenging to focus on a single project with a competing full course load. He asked whether the students measured water depth and temperature; he added that water in the drainage ditches throughout the mall area are full of trash and therefore not pristine water. Mr. Cioffi said they did not have the tools to measure depth from the bank but said temperature would likely have shown some interesting differences, given

that they could notice differences by hand. Mr. Cioffi mentioned that even just around the shore of the manufactured wetland you can see trash build-up along. Mr. Bergman noted that a few years ago, someone clear cut a strip of trees (full of insects and animals) on the border between the wetland and the highway. Now, he said there was no shade cast over the manufactured wetland.

Mr. Reilly asked whether the students conducted a literature search on similar research. Mr. Koehler said that the first semester of this year was dedicated to searching literature for sources on wetland comparisons, particularly in New England, with comparable climates and soils. There was one source specifically on NH wetlands, but it was focused more on soils.

With no further questions, the Commission thanked Mr. Koehler and Mr. Cioffi for their presentation.

### **B) Dane D’Arcangelo, Arborist, Eversource, Tree Trimming**

The Chairman recalled that several Commissioners attended the City Council meeting on this topic and heard the representatives from Eversource and Asphlund Tree Expert. Mr. D’Arcangelo, the Eversource Arborist, reiterated what he stated at the City Council meeting. He explained the request to perform maintenance trimming of trees along scenic roads: Concord Road, Concord Hill Drive, Moore Farm Road, and Nims Road. He said that this consists of trimming around the primary power wire, which is the wire located on the top of poles. The trimming will be 15 feet above that pole, eight feet to the left and right of that wire, and 10 feet below that wire. In addition to this trimming, he said there was a short list of 12 trees along the scenic roads in Keene that are either diseased, dying, or otherwise defective, which Eversource also wants to remove. Eversource not only required permission from the City to do this work, but also from the property owners.

The Chairman said he traveled to visit all the trees and the Eversource’s notes were very accurate about the poor condition of these trees. He recalled a question at City Council about what is done with the tree after it comes down. The Chair understood that the limbs would be shredded and removed. Mr. D’Arcangelo said the limbs would be chipped; in a wooded lot they would be distributed evenly, but if in front a house they chip into the truck and remove it. The logs would typically be cut up and left on site. Mr. D’Arcangelo recalled the question about leaving staves for wildlife habitat, which Eversource is willing to do, depending on the abutting landowner’s permission and proximity to roadways; they have no issue leaving the tall stave that will not hit any wires. The Chair asked whether Eversource had issue with taking the dead tree and leaving it there to decay, if the landowner agreed. Mr. D’Arcangelo said that was not a problem; only tree cuttings and logs are left on site because Eversource does not haul them away.

Ms. Clark reiterated the value of the dead snags and her suggestion that City Council reconsider cutting them down to that one-foot-tall. She said the trees on Moore Farm Road seem quite set back from the driveways and roads. They are soft woods like aspen and black locust, which

already have good excavations for woodpecker holes; the variety of wildlife working on those dead snags and cavities are very important. This was her encouragement, with the understanding of proximity to roads. Councilor Williams had the same thought about snags, noting that locust in particular is very valuable for woodpeckers and insects. Mr. Haynes supported leaving the snags too.

Councilor Williams noted that there were two trees listed for Moore Farm Road, but upon visiting, he saw three trees marked with ribbons; they all looked dead, so he did not see a problem. He noticed a lot of dead spruce in the Nims Road area, which looked like an explosion of a spruce disease that they should keep an eye on. Mr. D’Arcangelo said that third marked tree on Moore Farm Road is not within the scenic road right-of-way and therefore is not subject to Council permission, only that of the landowner.

A motion by Mr. Bergman to draft a letter to City Council recommending leaving the tree snags for habitat was duly seconded by Mr. Haynes. The motion carried unanimously.

That letter would first go to the Municipal Services, Facilities, and Infrastructure (MSFI) Committee before the City Council.

Mr. Bergman said that this should be a general Commission policy for future tree clearing or thinning. The Chairman was fine setting that precedent for the Commission, but the recommendation would need to be made to Council in each individual case. Ms. Clark noted that at the Council hearing, Councilor Jones wondered if this could become a part of City policy. On that note, Councilor Williams thought there would be a spirited discussion at the MSFI meeting the third Wednesday of May at 6:00 PM; he encouraged all to attend. Mr. D’Arcangelo would be there.

- 4) **Informational**
  - A) **Subcommittee Reports**
    - i) ***Outreach Subcommittee***

Mr. Haynes reported that the Subcommittee had not met and there was nothing new to report. Mr. Reilly mentioned the birding event on May 21, which would be announced soon in a press release that Mr. Haynes was writing. Ms. Clark noted that Mr. Bill had been trekking through Robin Hood Park in search of geological features. Mr. Bill was anticipating an event this fall.

- ii) ***ARM Fund Subcommittee***

Chair Von Plinksy said there had been no meeting but that he had grand plans moving forward. Ms. Clark found something for the Subcommittee: a Wildlines Magazine from the University of NH about identifying and creating critical access to wildlife corridors. She would share contact information via Ms. Marcou.

**iii) Greater Goose Pond Forest Stewardship**

Mr. Haynes said there was a recent meeting and they continue working on the project list, with workshops and signage. In response to the Chairman, Mr. Haynes did not think there was anything the group needed from the full Commission at this time; they are working well with the Director of Parks, Recreation, and Facilities, Andy Bohannon's, guidance. Mr. Haynes knows the Commission is ready to help.

**B) Invasive Species**

Councilor Williams noted that he acquired some trash bags. The first event of the season will be the Garlic Mustard Challenge the second Saturday in May, which the Commission needed to start promoting. Like last year, they would include flyers in the Green Up Keene event materials, which Ms. Marcou would assist in printing and distributing. Councilor Williams wanted to advertise more than just the Garlic Mustard Challenge, but also the rest of the invasive schedule. He also wanted people to report garlic mustard in their neighborhoods so he can plan events outside his Ward.

**5) Discussion Items**

**A) Joint Council Meeting – Eversource Scenic Roads**

**B) NH Association of Conservation Commission Dues**

Chair Von Plinsky felt that the NH Association of Conservation Commissions (NHACC) had changed their due date, which was April. The dues requested were \$774.45. He hoped for discussion on whether they should pay the full amount. The Chair noted that the budget needed to be expended by June 30. He added that the NHACC is a good non-partisan voice representing Keene in Concord and he recommended paying the dues but was open to questions or concerns. Ms. Clark noted that they conduct lunchtime workshops that are available to the Commissioners and she hoped everyone received the NHACC emails.

Ms. Marcou confirmed that the Commission had not yet spent any of the \$1,500 budget; she also confirmed that no fee was due to Bee City USA during this fiscal year. Discussion ensued about the other matters that the Commission sought funding for as well: honorarium for the bird walk, the usual annual support for the Ashuelot River Local Advisory Committee (ARLAC), trail maintenance workshop, speaking events, and invasive species.

The commission agreed to divide the budget at the May meeting.

**C) Radically Rural: No Mow May**

The Chairman received this information on No Mow May, which aims to encourage people to hold off cutting their grass until the end of May to foster essential pollinator habitat during a tough time at the beginning of the season. Ms. Marcou read the associated email:

*We would like to propose bringing “No Mow May” to the city of Keene. Essentially, community members refrain from mowing their lawns for a month. We spoke with the Mayor, and he recommended we reach out to you to help move our proposal forward.*

*If enacted, this would be effective in helping our pollinators. By allowing plants and ‘weeds’ to flower in yards, we are supporting bees, providing them with an ideal habitat and spring food that will sustain them as they come out of hibernation. This support is essential as so many of our pollinators are going extinct. This initiative has been successful in increasing the bee population to five times that of its previous population in several suburban communities in Wisconsin. It is also a great way to bring community members together and feel connected in a time when we are all still adjusting to life during and after Covid.*

*Radically Rural in particular is invested in finding the most successful and innovative ideas to improve our community and enacting them in an accessible way. One of the tracks at our annual summit is Land & Community and we see this proposal as an important step in taking care of our rural ecosystems.*

At minimum, the Chair thought the event could be advertised on the Community Development Department social media and the Conservation Commission webpage. He said they could also recommend that the Council spread the word. Councilor Williams noted that the Council could pass a resolution encouraging no mowing in May. The Commission could send a letter to the MSFI Committee for it to appear before the Council the first week of May. He also suggested an article in the Sentinel. Mr. Bill suggested asking Mr. Bohannon to hold moving throughout the City as a good example. The Chair thought Mr. Bohannon could likely identify some locations, but it would not be possible City-wide. The Chair would also reach out to the Public Works Director, Krt Blomquist, about mowing since they oversee the Highway Division.

Mr. Haynes really thought this was an educational opportunity for the Commission to share this radical rule about pollinators with the community. It was unfortunate that Mr. Therriault was not present for this discussion.

Mr. Bergman was in favor and sympathetic to the goals and purposes but knew that his yard would require heavy equipment to mow if he did not attend to it in May. He said he could commit to his back yard but not front. The Chair suggested strength in numbers with everyone dedicating at least a strip of their lawns.

A motion by Mr. Haynes to recommend to the City Council that the City encourage residents to observe No Mow May and to also encourage City Staff to identify places where not mowing throughout May is possible was duly seconded by Mr. Reilly. The motion carried unanimously.

Mr. Bill also suggested an advertisement in the Monadnock Shopper News.

**D) Beaver Brook to Cemetery**

There was nothing new to report since the visit to the cemetery last month. There would be more discussion in May.

**E) Conservation Commission Speaking Events**

Vice Chair Madison was not present to discuss this matter, but the Chair knew he had a number of potential speakers for an event in early June. He knew Vice Chair Madison had also spoken with the Monadnock Food Co-op about using the amphitheater, but that was still in discussion.

**6) New or Other Business**

**A) Instream Flow Program – Ashuelot River, May 17 & 18, 2022**

This is about outreach sessions on the Ashuelot River. People can attend and observe as measurements and scientific investigations occur. The Chair encouraged all to attend the event near Surrey Mountain and the Sawyer Crossing Bridge in Swanzey.

Ms. Clark provided some background. She said ARLAC had been working on a new management plan but concurrently the State also was hoping to evolve a management plan for the flow to maximize habitat, principally for fish. They hope to develop a series of recommendations about flow to make the best possible habitat for fish. The Chair thought this was fantastic.

Mr. Bergman asked Ms. Clark whether data loggers would be deployed and left in place. Ms. Clark said that they were deployed last year at many sites and ARLAC is helping to identify additional places for the study, like near the Airport. ARLAC hopes to incorporate some of these findings into their management plan.

**B) Land Conservation Investment Program Property Fields Visits, May 24, 25, 26, 2022**

The Chairman said that the Land Conservation Investment Program (LCIP) is different than the Land and Community Heritage Investment Program (LCHIP). This would be on the Commission's May agenda. He said it sounded like this had to do with easement monitoring. They encourage City government to join them when they visit. The Chair will learn and share more at the next meeting. Mr. Haynes wondered if there were specific sites. The Chairman read the associated email from Jocelyn Duffy, Seasonal Steward for the Conservation Land Stewardship Program:



*We are planning a Field Visit to your LCIP conservation properties during one of the following dates: **May 24, 25, 26***

Ms. Clark said it sounded like LCHIP without the historical piece. She said that when people apply for LCHIP funding, there are site visits to various parts of the property to determine eligibility; she wondered if these visits were similar.

The Chairman said there were a lot of unknowns, and he would have more details next month. Ms. Marcou noted that the email requested that the Commission notify them of two days that they are most available during those dates. Mr. Haynes said that it would be nice to know the sites and terrain so people can decide whether they could attend.

Mr. Bergman noted that it is a State agency with their own website. He did not see a list of properties but said it talks about their activities, functions, obligations, and opportunities.

The Chair would stop by the agency's office to seek some answers to questions. He had never heard of them during his time in land conservation.

7) **Adjournment**

**Next Meeting: Monday, May 16, 2022 Keene Parks & Recreation Center, 312 Washington St., Room 22.**

There being no further business, Chair Von Plinsky adjourned the meeting at 5:39 PM.

Respectfully submitted by,  
Katrnya Kibler, Minute Taker  
April 25, 2022

Reviewed and edited by,  
Corinne Marcou, Administrative Assistant