City of Keene
New Hampshire

ASHUELOT RIVER PARK ADVISORY BOARD MEETING MINUTES

Tuesday, October 13, 2026 **8:15 AM** **Room 22, Recreation Center**

Members Present:
Paul Bocko, Chair
Suzy Krautmann, Vice Chair
Kelly Cook
Arthur Winsor
Leslie Casey
Dian Mathews
Richard Roth, Alternate

Staff Present:
Carrah Fisk-Hennessey, Parks & Recreation Director
Bryan Ruoff, City Engineer

Members Not Present:
Thomas Haynes, Alternate

1. Welcome and Call to Order

Chair Bocko called the meeting to order at 8:15 AM.

2. Approval of September 15, 2026 Meeting Minutes

Ms. Casey made a motion to approve the meeting minutes of September 15, 2026. Ms. Krautmann seconded the motion, which passed by a vote of 5 to 0. Mr. Roth and Mr. Winsor abstained.

3. Friends of Ashuelot River Park Arboretum Report

Ms. Mathews reported the following on behalf of the Friends:

- Their last meeting of the gardening season will happen soon. They generally stop gardening in October when the weather gets too cold
- Friends have resumed meeting on Fridays, since some people are now taking the Forestry course on Sundays
- They are almost finished with the revisions of the cobblestone procedures, which will go into the kiosk

Mr. Winsor stated that the park looked beautiful for Art in the Park, thanks to the Friends and the KPRD staff.

Ms. Casey and Ms. Mathews added to the Friends report:

- They have not yet flagged the invasive shrubs. Maybe they can do that this Friday
- They emailed photos to Ms. Fisk-Hennessey of invasive plants springing back up on the far end, along the river past the Starbucks building, on tricky terrain
- They might plant more shrubs this season, to replace some perennials they removed

City Engineer Bryan Ruoff stated that the City's Capital Improvement Plan (CIP) includes a project to do some renovations for parks and trails. In Ashuelot River Park, the idea would be to restore the Jonathan Daniels Trail with a stone dust material, and clean that up, making it less of a tripping hazard. At one point, they had talked about a water fill, like a hose bibb. He asked if there is anything else needed within the park that goes beyond what can be done by the Friends, that might need City staff.

Ms. Fisk-Hennessey added that the other part of the Jonathan Daniels Trail they are improving is the section where it is eroded. They are looking for ways to move it.

Chair Bocko asked for clarification on what CIP projects are. Mr. Ruoff explained that they are the bigger City projects costing more than $50,000 a year. The Trails Program has about $50,000 per year, although it varies year to year. The CIP has specific locations for new improvements. It does not necessarily mean the City would go out to bid and get a contractor, but in some cases, to get the work done quicker, they would. Ms. Fisk-Hennessey stated that a perfect example of some of the Trails funding was the redecking of the suspension bridge, which was completed by City staff, with CIP money for the materials.

Mr. Winsor asked if these CIP funds could include something like the natural playground and expansion plantings, Ms. Fisk-Hennessey replied that those items are built into the Ashuelot Green Space Project right now. Mr. Ruoff replied that is its own project. He continued that it includes some environmental permitting and other work that goes beyond what City engineers can do in house.

Discussion continued, and Ms. Fisk-Hennessey clarified that the CIP is a seven-year planning document, so they are forecasting seven years to the future. Mr. Ruoff stated that anyone who has thoughts on CIP projects can contact him or Ms. Fisk-Hennessey.

4. Finance Report

Ms. Fisk-Hennessey stated that the Finance Report shows that the ARPAB has committed $300.00 to Martin Royle for "educational signage." She continued that they anticipate receiving his invoice for the initial conceptual work. For the invasive species treatments that have happened so far in the park, the ARPAB has committed to Vegetation Control Service, a program they have worked together with the City's Highway Division.

Ms. Casey asked about plantings for this calendar year. She asked if the Friends should pre-order and spend money on that. Ms. Fisk-Hennessey replied yes.

Mr. Winsor stated that the English Oak tree continues to get worse. He continued that he has spoken about it with Jim Tatem, the Bartlett representative. He thinks it will need to be taken down eventually. They do not know why the tree is not doing well, but they do not think it is related to drought. Mr. Tatem sent samples from the tree to a lab, but he has not heard an update yet. He really would like to know why this tree has "lost its dignity," to use the terminology of Arborist Jeff Garland.

Ms. Cook agreed and added that knowing what is wrong with the tree will determine what they replace it with, too, because they do not want to have a problem with the replacement. Mr. Winsor agreed.

Ms. Mathews asked about the dogwood tree, to the right of where you walk in after parking near the accessible parking space. She continued that it has been losing many branches and has many branches without leaves. She asked if those trees "age out." Mr. Winsor replied yes. It might be the end of that dogwood's lifespan. However, he would not hesitate to put in another dogwood there.

Chair Bocko asked if they brought up these two trees thinking about funding for this year or budgeting for next year. Mr. Winsor replied probably for next year.

Ms. Casey stated that she is thinking about the pink flowering crabapple tree, hemmed in by what looks like a regrown stump of a cottonwood. This tree, too, looks like it is losing its dignity.

5. Project Tracking

a. Ashuelot River Dam - Updates on Eco-Dam Research

Chair Bocko invited Antioch graduate student Kylan Harding to present. He continued that Mr. Harding is doing an internship conducting research on the water of the Ashuelot River Dam.

Mr. Harding introduced himself and explained his background. He stated that his project goal was to look at the dam and assess sediment particle size upstream and downstream. He wanted to see if, because of the presence of the dam, there were differences in sediment particle sizes upstream versus downstream. The second goal was to look at the diversity upstream and downstream of macroinvertebrates, which are invertebrates you can see with your eyes, such as dragonfly larvae, mussels, and snails. Next, he wanted to assess any potential negative impacts the dam has had on the river ecosystem and whether there was a strong difference upstream or downstream.

Mr. Harding continued that his hypothesis was that he would see larger particles upstream, with an accumulation of larger rocks and sediment in the dam reservoir. Regarding macroinvertebrate diversity, the difference he expected to see was restriction of movement of the organisms. Sometimes dams impede the organisms' movements and thus influence their lifecycles, possibly resulting in a difference in the communities upstream versus downstream.

Mr. Harding explained his methods for sediment sampling and macroinvertebrate sampling. He explained his analysis methods of plotting the sieve sizes versus the retained sediment sizes and

created graphs. He showed the upstream and downstream graphs, and stated that if there were big impacts from the dam, he would expect to see different shapes of these graphs. For example, for upstream, he expected to see a large amount of large particles and a significantly smaller amount of smaller particles. Downstream, he would expect to see the opposite. However, he looks at the general shape of the graph, and the shape of the graphs are generally the same. The graph shows that downstream has a little less of the middle-sized sieve than the upstream, but the two graphs even out on both ends of the curve. They follow the same trend, which is the opposite of his hypothesis.

Vice Chair Krautmann asked where on the river he did the sampling. Mr. Harding replied that on the upstream end, he went into the park, past the bridge and the little divot, into the river where the lily pads are. He continued that he tried to get samples from right along the bank and a few meters in. For downstream, he went off of the bike path where the bridge is.

Mr. Harding stated that seeing the shape of the graphs and that the trend is generally the same, he is very comfortable saying he did not see a significant difference in the sediment size distributions.

Mr. Harding continued that regarding the macroinvertebrates, biodiversity indices are a way to quantify biodiversity in an area, and they are hard to compare. You cannot really compare them against each other, but you can convert them to "hill numbers." That essentially puts all the biodiversity indices on the same scale. It allows the comparison of the biodiversity indices of two different communities and still assesses their level of biodiversity. He looked at ten species upstream and seven downstream and analyzed how rare or abundant the species were. He found that the difference in biodiversity is not very drastic between upstream and downstream. The actual level of diversity is generally similar. They do not see a huge dominance of one species upstream with nothing else existing, nor a dominance of one species downstream with nothing else existing.

Mr. Harding continued that he noticed a variation in species, despite the lack of differences in the biodiversity numbers. Upstream was heavy in dragonfly larvae. Downstream had more mussels and whirligig beetles. This variation makes sense because of the difference in community structures. Upstream he sees more reeds, which the dragonfly larvae hide in. Downstream, he sees more mussels and organisms that can nestle in the rock bed and beetles that can sit on the water's surface without much interruption. He sees that different kinds of species dominate the different kinds of communities, which is expected, but the levels of biodiversity were fairly even within both communities, meaning neither the upstream community nor the downstream community was drastically dominated by any one species.

Ms. Casey asked about the mussel species. Mr. Harding replied that mussel species are a little hard to identify, but he knows there is a vulnerable species of mussel found in the Ashuelot River, the dwarf wedge mussel. He believes they are recovering**.**

Mr. Harding continued that regarding ideas for further study and project shortcomings, the main thing he encountered when he started this project was a lack of literature on dams. Very few studies have been done on dam removal. Of the approximately 1,000 studies done in the past 10

years, less than 10% had long-term analysis, and even fewer had analysis of before and after. He would attribute this mainly to dam removal being a relatively newer phenomenon. About 100 to 150 years ago, people put dams in many rivers. In the past 25 to 50 years, many of those dams have broken down or become obsolete or might be impacting species, so there has been an increase in dam removal. However, there has not been an accompanying increase in dam removal research, resulting in this blind spot.

Ms. Mathews asked if he found any of the data from the charrette the Rhode Island School of Design did about five or six years ago. She continued that they invited people from different environmental groups and presented ideas for different fish ladders. The consensus at the end of that charrette was that the dam should not be removed. At that time, there was a dearth of knowledge of what dam removal would actually look like. Mr. Harding replied that he wishes he could have looked at that, but fish are a little harder to assess than what he had the resources for. Ms. Mathews stated that there are four other dams lower than the one at Ashuelot River Park. There might be some analysis on numbers of fish.

Mr. Harding stated that to continue with project shortcomings and needs for further study, he wishes he could have gotten into replication more, and taken more sets of measurements. With any data set, the more replications you get, the more robust the information set, and you can see more of the minor differences that might show up. Sampling location was another issue. It would have been dangerous to sample closer to the dam, but ideally, he wants samples from right in front of the reservoir.

Ms. Mathews asked if he had any expectations for species diversity. Mr. Harding replied that he expected to see a bit of a difference. He continued that he did expect to see, as he did, differences in which species were dominant in each community, since each community has a different structure and vegetation, which influences the types of species that can thrive. He was not sure if he would see a high difference in biodiversity. He thought he would, but he did not.

Mr. Harding stated that in conclusion, the two variables he looked at, sediment particle size and macroinvertebrates, did not seem to be strongly impacted by the dam. Further study could confirm or deny this, but his data found that a little bit upstream and a little bit downstream, they do not see a significant impact caused by the dam on the river ecosystem.

Mr. Winsor stated that he had a question for Mr. Ruoff. He asked if one of the arguments for removing the dam is to allow salmon to get up the river. Chair Bocko replied that removal is not the only solution for that; it could be accomplished through changes. Mr. Harding stated that he expects that for the downriver dams, especially for fish, they might see different results with that.

Ms. Cook stated that if they remove the dam, her question is whether they would lose the dragonfly colonies, the diversity of plants, and those insects found above the dam. Mr. Harding replied that is a difficult and interesting question. The dam has been there for so long that the ecosystem has almost stabilized around it. It might have been different five years after the dam was put in. Nature is resilient and adaptive. He thinks what happens to the dragonflies and other organisms would depend on how much of a physical disturbance is caused by the dam and its removal.

Chair Bocko stated that he and Mr. Harding talked yesterday about how Mr. Harding's data shows there is not a drastic difference in species diversity at these locations. They talked about how the environment above the dam would change if the dam were removed. He does not know if that is a reason not to do it, but it must be considered. The river is very different below the dam, more of a slow-moving river. Above the dam, it is what he calls "pondish."

Chair Bocko asked Mr. Ruoff if he had any thoughts based on Mr. Harding's presentation. He continued that they could do a battery of research over time, but this is a piece. Mr. Ruoff replied that it is valuable information, a great snapshot. He continued that it is an element of the discussion that has not occurred to date. He thinks Mr. Harding's data makes another case for repairing the dam instead of removing it, and maintaining the dam areas. City staff did not want to influence the results at all, so they stayed out of the way. Mr. Harding did excellent work.

Chair Bocko and the ARPAB members thanked Mr. Harding for his presentation.

b. Permanent Sign - Working Group Report

Ms. Fisk-Hennessey stated that they had hoped the sign working group could meet after the ARPAB meeting, but that will not work for several people's schedules today. They need to pick a different meeting date and hammer out of the rest of the details. It would be great to get the sign done. Others agreed. Chair Bocko spoke about how the group has been making progress. They have some good work from Mr. Royle, and a river motif for the timeline.

Chair Bocko asked if they wanted to briefly talk about the timeline, which he thinks the working group has narrowed down. Ms. Mathews replied that she and Vice Chair Krautmann went through and decided what really needs to be in the timeline and what does not. She continued that Vice Chair Krautmann used AI to create a write-up summary with 18 "nodes." The working group will compare the AI write-up with their own original timeline and make needed changes. They have also been working on pictures.

Mr. Roth stated that he has a few questions to throw out for the group to consider. One is whether the ARPAB or another group has figured out who the primary users of the park are and who the targeted new users would be if the park continues to develop. He is still hung up on who the audience is. Ms. Mathews replied that the Master Plan for the Ashuelot River Park, created by the Conway School, included the park's audience and surveyed park users. Chair Bocko added that a recent conversation with Keene State College (KSC) students gave anecdotal information.

Mr. Roth stated that they need to determine the primary target audience they expect to read the slides. Then there will be secondary audiences. The content, including the pictures, words, and colors, will draw some people's attention and not others.' How extensive the wording will be will determine how long it takes to read it. They should think about the position of the sunlight in relation to the sign, when thinking about typeface and color contrast. Regarding the language in some of the writing, the word "generously" appears overused, such as noting that a donor "generously" donated X amount to the park. It is unnecessary to use the word "generously,"

because all donations are generous. Much of the content appears to be primarily public relations for previous benefactors, highlighting people's names. He does not think the sign needs so many specific names, to serve a purpose for the target audience. Other content is informational, such as maps and descriptions. Some content is educational, such as the meaning of "Ashuelot" and information about species. Different content applies to different audiences. He is not saying only the primary target audience should have content, but if many people are uninterested in marine biology, for example, that is something to consider. He thinks the purpose of the sign itself, not the history that people could go to a website to read, but the sign itself, should be to excite people and make them want to go experience what the park has to offer. That is what the content should focus on.

Ms. Mathews replied that she likes that, because it gives them a definite focus and streamlines it. She continued that everything could be done with QR codes. And trifold brochures, others added.

Mr. Roth stated that answers to the macular questions would determine details such as how many words would be in each node. Chair Bocko replied that he thinks they are great questions.

Chair Bocko stated that the sign working group will be meeting again. He asked if anyone had final thoughts. Ms. Fisk-Hennessey replied that she wants to say that the target audience might expand due to the expansion of the park itself and the addition of a natural play space.

c. Bird Ecology

Chair Bocko stated that he has disappointing news to share. He had a student who was going to work with him, but that did not work out.

6. Recent/Upcoming Events

Ms. Fisk-Hennessey stated that LuLa, the company that has contracted with the City to design the natural play space for the expansion of the park, will come to the November ARPAB meeting. They will clarify the phases of their work and share what their deliverables will be at the December meeting. The December meeting will be the public meeting to get feedback on their conceptual designs.

Ms. Fisk-Hennessey stated that a walk at Goose Pond will be on October 24, 2026, at 9:00 AM, with Dr. Steven Bill. It will be a glacial geology walk along the Loop Trail.

a. Ethan Tapper event – October 23 at Stonewall Farm

Ms. Fisk-Hennessey stated that KPRD and the UNH Cooperative Extension are hosting Ethan Tapper, an award-winning author and forester. He will be at Stonewall Farm on October 23, 2026, from 3:00 to approximately 4:30 PM. It is free, but people are encouraged to donate to Branch Out For Parks.

7. New/Other Business

Mr. Winsor spoke about an upcoming event with Habitat for Humanity. He's part of the group that will be landscaping the new homes being constructed on Old Walpole Road.

8. Adjourn – Next Meeting scheduled for November 10, 2026

There being no further business, Chair Bocko adjourned the meeting at 9:24 AM.

Respectfully submitted by,
Britta Reida, Minute Taker

Reviewed and edited by,
Carrah Fisk-Hennessey, City Staff