



CONSERVATION COMMISSION

AGENDA

Monday, October 17, 2022

4:30 PM

**Room 22, Parks & Recreation
Center**

Commission Members

Alexander Von Plinsky, IV, Chair
Councilor Andrew Madison, Vice Chair
Kenneth Bergman
Art Walker
Eloise Clark

Councilor Robert Williams
Brian Reilly, Alternate
Thomas P. Haynes, Alternate
Steven Bill, Alternate
John Therriault, Alternate

1. Call to Order
2. Approval of Meeting Minutes – September 19, 2022
3. Report- outs
 - a) Greater Goose Pond Forest Stewardship Subcommittee
 - b) Outreach
 - c) Invasive Species
4. Discussion Items:
 - a) Conservation Commission speaking events
 - b) Airport proposed wildlife control fence
 - c) Budget Planning
 - d) 30x30 Program
 - e) Downtown Tree Inventory
 - f) Photo library
5. New or Other Business
6. Adjourn – Next meeting date: **Monday, November 21, 2022**

1 City of Keene
2 New Hampshire

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5 CONSERVATION COMMISSION
6 MEETING MINUTES
7

Monday, September 19, 2022

4:30 PM

Room 22,
Recreation Center

Members Present:

Alexander Von Plinsky, IV, Chair
Councilor Robert Williams
Art Walker
Ken Bergman
Thomas Haynes, Alternate (Voting)
Steven Bill, Alternate (Voting)
John Therriault, Alternate (Voting)

Staff Present:

Mari Brunner, Senior Planner

Members Not Present:

Councilor Andrew Madison, Vice Chair
Eloise Clark
Brian Reilly, Alternate

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9
10 **1) Call to Order**

11
12 Chair Von Plinsky called the meeting to order at 4:30 PM.

13
14 **2) Approval of Meeting Minutes – August 15, 2022**

15
16 A motion by Mr. Bergman to approve the August 15, 2022, minutes was duly seconded by Mr.
17 Therriault and the motion carried unanimously.

18
19 **3) NHDES Standard Dredge and Fill Wetlands Permit Application – Wilson Pond Dam**

20
21 Chair Von Plinsky welcomed guests: Ken Dooley of the School District and Charles Johnston
22 from Dubois and King, this project's manager. Chair Von Plinsky recalled a discussion last
23 month about this application, which included comments from Jim Phippard, who was also
24 present at the meeting. Mr. Johnston would walk the Committee through the project.

25
26 Mr. Johnston shared photos of the project plans. He said Dubois and King began working on this
27 project with the School District in 2018, The goal was to bring the dam back into compliance for
28 a significant hazard dam, which it was upgraded to in winter of last year, meaning it lacks
29 hydraulic capacity to pass the design storm and may not be stable in its current condition. The

30 goal is to reshape the earthen part of the dam, with a stone fill portion of the dam that the water
31 flows over during normal storms and flows several feet over during 100-year floods, making its
32 way under Arch Street. The historical records show a dry laid stone wall with a concrete cap, the
33 latter of which was discarded in the 1980s, when the smaller area was deemed unstable and
34 backfilled with stone. They were supposed to keep the concrete cap exposed via an overflow
35 spillway but that did not happen. The Dam Bureau reclassified this an earth embankment dam,
36 meaning it cannot overtop without causing damage to it. They recognize there is not a lot of
37 hydraulic capacity here, so we developed a plan to reconfigure the dam so there is a designated
38 stable area the water flows through that is concrete grouted stone fill, and raise a portion of the
39 earth embankment to maintain the park area that will not top over. This will keep water
40 controlled within one foot of the grass portion of the dam and does not significantly increase
41 flows through Arch Street. It also replaces the intake structure from a one-sided stop-log
42 structure to a four-sided spillway, giving it better control over the normal pool, and replaces the
43 crushed outlet pipe no longer flowing. There are subsurface improvements to capture
44 groundwater through the dam so the soils are more stable. In addition to some tree removal
45 shows on the plans. All trees and shrubs must be removed within 15' of the tow of the dam. They
46 were able to retain one tree within 10'. He mentioned the abutting homes where there would be
47 some tree removal, in addition to at the end of the dam. He showed the different wetland
48 classifications in the system and the impacts.

49
50 Mr. Therriault asked about the design of the level at full fill and how that compares to the
51 historic full fill prior to this dam work when water was lowered to not put pressure on the dam.
52 Mr. Johnston said the goal is not to lower the historic water level; they measured, and water was
53 always too high at the portion of the rock crest. That was deemed unsafe to maintain from an
54 erosion and structural support perspective and it was plugged, which resulted in the water being
55 high. In spring 2018, the Wetland Bureau issued an emergency order to clean that structure and
56 lower the water to where it was historically supposed to be. The water level the School District
57 has maintained since then is what this project will try to maintain. This concrete structure is set
58 to maintain the water level during normal times. The overall structure or rip rap and stone fill is
59 designed to resist the uplift loads that occur during the 100-year flood events.

60
61 Councilor Williams was concerned about aquatic creatures swimming upstream and populating
62 this area, which he said we want to encourage. He imagined that swimming through a concrete
63 conduit might trap fish. He wondered if there was any way to facilitate creatures entering and
64 exiting during this project. Mr. Johnston said there is currently no connection upstream to
65 downstream for fish passage. The existing structure is a drop structure, so water flows over a set
66 of stop logs before dropping 3–4' into a similar sized culvert that goes through the dam. They are
67 not improving aquatic passage with this project.

68
69 Mr. Bergman asked whether Staff could provide copies of the plans presented, which Ms.
70 Brunner agreed to facilitate. Mr. Johnston said they were in the application.

71

72 The Chairman asked if this permit was concerning the wetland to the left when facing the dam
73 from the road. Mr. Johnston agreed that is the certified wetland delineated specifically; the state
74 delineates all water bodies as wetlands as well and a pond/lake is considered a wetland type as
75 well. The impact plan designated impacts to different types of areas categorized in the State
76 permit. Mr. Johnston continued that a lot of the impacts are temporary, with construction fencing
77 and a sandbag coffer dam, which will be removed when the water level is returned. In the actual
78 project area, these are considered permanent impacts even though already stone fill. The
79 Chairman understood the impacts on the pond but wondered what that left wetland would look
80 like after the project. Mr. Johnston said the goal is to minimize impacts in that area by using
81 rubber matting and other protections from vehicles in a 20' zone of the wetland. They will use
82 measures suggested by the Wetland Bureau and reestablish the ground after the projects. Water
83 will flow out of a pipe and back fill to reestablish the wetland.

84

85 Jim Phippard is an eastern abutter of the dam and strongly favored this recommendation. He
86 asked Mr. Johnston about the work schedule and duration. Mr. Johnston replied that NH does not
87 have a restriction on when a project can occur. At present, the wetland application had been
88 submitted but not reviewed until all signatures have been gathered, including the City's. Then,
89 there is a 60-day period of review—hopefully including public comment on the standard dredge
90 and fill. They are currently reviewing some of the Dam Bureau's stability calculation questions.
91 He expects permits in hand by the end of November, followed by a bid phase, and then he
92 imagined construction beginning late spring/early summer following the snow melt. Overall, the
93 project duration should be two or three months to build, mobilize, set-up control of water
94 systems, excavate and install a core wall, and reshape the downstream rip rap and install the new
95 principal spillway.

96

97 Mr. Bergman asked Mr. Phippard whether the targeted water level was in line with his desire.
98 Mr. Phippard said he looked closely at the plans and believed what Mr. Johnston said was
99 accurate. He cited reasons to restore the former high-water level, including water quality and
100 restoring another ponded area upstream important to the neighborhood, Shadow Lake, which was
101 also drained down. He said there are migratory birds that nest that rely on the pond. He said it
102 was good news there were no restrictions in place due to the nesting period, though he was
103 surprised there were not. Geese are active there, for example. A wetland scientist did complete a
104 Natural Heritage Bureau check, but they said the application was administratively complete
105 except for sign-off from the City, so he did not believe there were any restrictions on that. Mr.
106 Bergman noted that the Natural Heritage Bureau focuses on species of concern (i.e., endangered
107 and threatened) and not on migratory birds.

108

109 The Chairman recognized Mr. Ken Dooley of the Keene School Board, who said he had nothing
110 more to add other than the historic multitude of options explored. He said it was fortunate there
111 was a surplus and the School Board secured funds to fix the dam under the budget. This is
112 probably the only time to do it without impacting taxpayers. He heard concerns with removing
113 the dam entirely, for which there would be unhappiness in the neighborhood. Mr. Dooley

114 thought this was a good compromise to bring the dam back to where it was and to have it
115 secured.

116
117 Mr. Bill asked if the school uses the pond for any classwork. Mr. Dooley said it was used heavily
118 years ago but had not been again until recent interest in keeping it for that. Mr. Bill suggested the
119 pond could act as a science lab on campus, and Mr. Dooley said that would be up to the teachers.
120 Mr. Bill asked if the water would be drawn down for the full three months. Mr. Johnston replied
121 that to complete construction, the must lower the water to reach the portion on the upstream
122 portion of the wall and construct the spillway. The contractor could raise the water sooner, but
123 they are projecting that the water will be lowered during those three months. Notification is
124 required per NH Fish and Game as is monitoring wildlife around the pond perimeter, like when
125 Goose Pond was lowered and regular turtle counts were required. He was unsure whether that
126 would be a restriction in this instance, but there is usually a stipulation for monitoring aquatic
127 species.

128
129 The Chairman heard concerns from Commissioners to include in a motion. Councilor Williams
130 mentioned highlighting aquatic species and the lack of a fish ladder.

131
132 Chair Von Plinsky mentioned the backfill into the wetland at the end of the project, and asked
133 what would occur to reconstruct that wetland. Mr. Johnston replied that wetland mixes would be
134 applied; there is also a grass mix for dams. Those would be applied after mats are removed but it
135 is unclear how well they would survive after the coffer dam is removed. That area backs-up
136 before reaching Arch Street, and during storm events it will activate the spillway and the water
137 could go and kill the wetland mix, thought the area looks to be more shrubs.

138
139 Mr. Bill asked what material underlies that wetlands. Mr. Johnston said they did borings on site,
140 with a monitoring well 25' deep. He said there is a timber layer the stone fill was placed on and
141 then the majority of soils are silty and sandy until about 15' and then it is more of a glacial till.
142 Mr. Bill asked because it would impact how much disruption is caused my equipment.

143
144 Mr. Therriault would love to see native wildflowers planted where soils are disturbed that are not
145 hydraulically sensitive but they must do what is best for the structure of the dam.

146
147 A motion by Chair Von Plinsky to recommend consideration of an upstream passage for aquatic
148 species or submittal of an explanation of why that option is not practical or valuable was duly
149 seconded by Councilor Williams. The motion carried unanimously.

150
151 Chair Von Plinsky thanked the guests for their contributions.

152
153 **4) Report-Outs**
154 **A) Greater Goose Pond Forest Stewardship Committee**
155

156 Mr. Haynes reported that the Committee met the previous week and talked about trail
157 maintenance, signage, trailheads, the potential for future workshops, and potential tools needed.
158 No plans were solidified but likely would be the next month. Their efforts are progressing. They
159 dropped some hemlock timber (if walking up the access road to the right of the spillway and the
160 park areas) to create a walkway over a wet area on the south side of the pond, which could
161 contribute to a workshop/workday on creating good, simple walkways.

162
163 **B) Outreach**

164
165 Mr. Haynes reported that Mr. Bill was willing to lead a geology walk at Robin Hood Park on
166 October 15 from 9:00 AM–11:30 AM. Mr. Bill said he wandered the park and there is a decent
167 exposure of geology near Jordan Road. Mr. Haynes continued that there will be a walk on
168 October 29 at 10:00 AM led by Jeff Littleton on his topic of reading the forested landscape and
169 looking at forest history. The walks will be publicized, and participants can sign-up by calling
170 the Parks and Recreation Department.

171
172 **C) Invasive Species**

173
174 Councilor Williams said the event on Labor Day at the double Stone Arch Bridge was rained out.
175 He said there was a lot of buckthorns at that location, including some growing out the of the
176 bridge. Before the rain, they cleared the worst of it, but they will need to go back and try to cut
177 more from the bottom, hopefully in the next few weeks. The Councilor said that area is a great
178 place to see a bouquet of different invasive species. He continued reporting the next event on
179 Indigenous Peoples/Columbus Day at Robin Hood Park at 5:00 PM, which will first target the
180 knotweed pulled last year in addition to pulling Norway maple seedlings. Mr. Therriault said the
181 knotweed takes pulling three years in a row. Councilor Williams recalled treating the pulled area
182 last year with seeds, which he did not think had taken; they need to look at other ways to get
183 things to sprout. A notice will be sent and advertised. Chair Von Plinsky noted that the knotweed
184 gets worse the further north and east you go. Councilor Williams said this was the time of year to
185 see it.

186
187 **5) Discussion Items**

188 **A) Conservation Commission Speaking Events**

189
190 Chair Von Plinsky said this was a great idea that had not gotten off the ground yet. He would still
191 like to see this happen and will discuss with Councilor Madison. The Chairman did not want
192 perfect as the enemy of possible. He hoped for at least a small presentation before the end of the
193 year, at either the Recreation Center or the Library.

194
195 **B) Airport Proposed Wildlife Control Fence**

196
197 Mr. Bergman has been checking the Airport Development and Marketing Committee minutes,
198 though they have only met sporadically, hoping to find something. Staff has been out of town

199 recently and there had not been much new to learn. The Chairman is happy to check on this
200 every one to two months. Mr. Bergman would like to invite Airport Director Hickling to a
201 meeting to speak, for which The Chairman would extend the invitation. Councilor Williams
202 thought the ball was rolling as funds were approved recently for the initial planning phase.

203

204 **C) Budget Planning**

205

206 Thanks to Councilor Madison, the Commission budget is now \$2,000 moving forward, which
207 must be spent before June 31, 2023 or it is returned to the General Fund.

208

209 Common annual expenditures include: Bee City USA Membership (\$200), dues to NH
210 Association of Conservation Commissions (approximately \$750), and dues to the Ashuelot River
211 Local Advisory Committee (\$125).

212

213 Mr. Haynes noted that there would ideally be three Goose Pond Through the Seasons walks
214 before the end of the fiscal year with honorariums to presenters up to \$150 each, for a total of
215 \$450.

216

217 Mr. Haynes noted the Outreach Working Group was looking to bring back the Tap to Toilet
218 program, looking at the Keene water system and where our water comes from and goes. He said
219 there could be fees to rent a space, though he was trying to partner with the Historical Society,
220 which has a meeting room, but there could still be a minor fee. This would be a series of
221 programs, including trips to the Water Plant and Wastewater Treatment Plant. They could do the
222 event in spring to have the meetings outdoors.

223

224 Discussion ensued about starting a long-term Goose Pond Forest Stewardship endowment and
225 whether it would be valuable to use \$500 to seed that. Mr. Haynes was unsure of the best
226 approach, noting that endowments usually pull a certain percentage of funds and so it might not
227 be worth it for a few hundred dollars. He suggested perhaps putting what remains at the end of
228 the year into a seed fund to possibly start that endowment. Mr. Bill suggested treating it like seed
229 money to think longer term about it. Mr. Haynes said it was open to discussion. There could be
230 other costs throughout the year relative to Goose Pond for signage, etc. Though Mr. Hayes did
231 mention they are applying for a grant for much of that work.

232

233 Discussion ensued about the costs already listed and how much to leave available for
234 discretionary needs throughout the year.

235

236 Chair Von Plinsky suggested the following annually: at least \$600 for outreach speakers, \$1,000
237 for dues (NHACC, Bee City, and ARLAC), and \$400 remaining. Councilor William suggested
238 \$50–\$150 for invasive species supplies such as seeds and shrubs from that \$400. There was
239 consensus on this structure.

240

241 Regarding the Tap to Toilet event, Mr. Bergman said he personally hoped to have a site visit for
242 the Commission to the Roxbury Reservoirs to get a true impression of where our water really
243 comes from. The area is restricted, and he thinks the Commission has some justification to see
244 the areas. Mr. Bill also suggested the well field. Ms. Brunner attended the NHACC and Cheshire
245 County Conservation District potluck, and the town of Roxbury recently reconstituted their
246 Conservation Commission with the sole purpose to comment on a bridge and they now exist as
247 three members. Ms. Brunner could reach out to a member who wondered if Keene wanted to
248 partner on something with the reservoir. Chair Von Plinsky said that perhaps there could be a
249 joint meeting/field trip to Roxbury in two months. Mr. Haynes said they discussed walks to the
250 reservoirs as a part of this outreach program and that could be a fourth component to the Tap to
251 Toilet series. If not possible for the public, Mr. Bergman suggested a tour for just the
252 Commission. Mr. Haynes recalled a few years ago when a study was being done by the City to
253 understand the watershed in the greater forest and the Commission never heard how it played out
254 in the end. He was curious to know if it was completed. Ms. Brunner would research the status
255 for next month. Mr. Bergman recalled Jim Rubineer's book on the history and layout of Roxbury
256 but said it was hard to really understand the area without seeing it. Mr. Haynes thought Mr.
257 Rubineer might be willing to walk to the sites he uses in his books; he has given talks at the
258 Historical Society.

259

260 **6) New or Other Business**

261

262 Ms. Brunner reminded the Commission of the Source to Sea Clean-Up event Friday, September
263 23 at Ashuelot Park. There is canoe meeting off Water Street on Saturday at 9:00 AM, and there
264 might be something in Winchester and Swanzey on Sunday.

265

266 Mr. Bergman presented two ideas; 1. Create an inventory of all Keene street trees given climate
267 change, development, public service activities, and more, beginning within a certain amount of
268 feet from core streets, much as trees were inventoried and digitized on the Keene State College
269 campus. 2. Create a shared drive of photos from permit applications sites and photos of local
270 nature the public can contribute to that could be available through the Commission webpage,
271 with legal stipulations and Staff oversight. Chair Von Plinsky liked the second idea of a shared
272 drive of photos available through the Commission webpage. He was unsure what it would take
273 for public access and Mr. Bergman assumed the City would control it. Ms. Brunner said there are
274 other things available on the page for public access and so she would look into it. The file
275 storage space would likely come from the Commission budget. The Energy and Climate
276 Committee uses a Google Drive and include the link on all of their agendas. The Chairman said
277 it sounded valuable. Mr. Haynes noted that the Historical Society has 1,000s of photos and
278 someone who has done the scanning to digitize them and perhaps might allow inclusion of these
279 digital photos.

280

281 Regarding a tree inventory, the Chairman saw value but did not know how it could occur. Mr.
282 Haynes recalled that the Ashuelot River Park has a tree inventory with linked QR codes on the
283 trees. He would contact Director Andy Bohannon to see if there is a wider database of City trees,

284 though they hired a company for the Ashuelot Park project. Mr. Bergman recalled that the study
285 included cost estimates of each tree, but it was an expensive service and was out-of-date within a
286 few years. He did not propose something that extensive for the City, but it could be great citizen
287 science or a student project.

288

289 Ms. Brunner said the public library partners with the Historical Society of Cheshire County and
290 they have a shared Flickr account accessible to the public. It sounds like there is precedent of
291 such a partnership but she was unsure if they would accept non-historic photos; it was argued
292 that they would be historic eventually. Mr. Bergman recalled when Keene destroyed the largest
293 living elm tree in Keene. Mr. Bill suggested starting with trees over 100 years-old and other
294 options were discussed like student projects. The Chair thought a partnership was possible. This
295 can be a discussion item next month.

296

297 Mr. Bill mentioned the 30x30 challenge to conserve 30% of the country's land by 2030 and that
298 it seems like something the Commission should promote or seek statistics on. The Chair has dug
299 into the GIS data but said it is difficult to define what is conserved and actually protects species
300 diversity and reduces climate change. The Chair could help with this effort. This can be a
301 discussion item next month.

302

303 Mr. Therriault will share photos of the pollinator garden next month.

304

305 7) **Adjournment – Next Meeting Date: Monday, October 17, 2022**

306

307 There being no further business, Chair Von Plinsky adjourned the meeting at 4:50 PM.

308

309 Respectfully submitted by,
310 Katryna Kibler, Minute Taker
311 September 26, 2022

312

313 Reviewed and edited by,
314 Corinne Marcou, Administrative Assistant

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