

CONSERVATION COMMISSION

AGENDA

Monday, June 16, 2025

5:00 PM

2nd Floor Conference Room City Hall

Commission Members

Councilor Andrew Madison, Chair Councilor Robert Williams, Vice Chair Katie Kinsella Art Walker Barbara Richter Steven Bill Gary Flaherty Bob Milliken, Alternate Thomas P. Haynes, Alternate John Therriault, Alternate Alexander Von Plinsky, Alternate Kenneth Bergman, Alternate

- 1. Call to Order
- 2. Approval of Meeting Minutes May 19, 2025

3. Report-outs:

- a) Greater Goose Pond Forest Stewardship Subcommittee
- b) Invasive Plant Species
- c) Land Conservation / easement monitoring
- d) Pollinator Updates

4. Discussion Items:

- a) Master Plan Update
- b) Outreach
- c) Budget
 - i. Materials for invasive plant species program
- d) Potential land acquisition 0 Old Gilsum Road, TMP# 218-015-000
- e) Annual report to City Council

5. New or Other Business

- a) NHDES Standard Dredge & Fill Application: Eversource T198 Line Project
- 6. Adjourn Next meeting date: Monday, July 21, 2025

1 2 3	<u>City of Keene</u> New Hampshire					
4 5 6 7	CONSERVATION COMMISSION MEETING MINUTES					
	Monday, May 19, 2025	5:00 PM	2nd Floor Conference Room, City Hall			
	Members Present: Councilor Andrew Madison, Chair Councilor Robert Williams, Vice Chair Art Walker Steven Bill Barbara Richter Katie Kinsella Bob Milliken, Alternate Alexander Von Plinsky, IV, Alternate Ken Bergman, Alternate Thomas Haynes, Alternate (Voting) John Therriault, Alternate Members Not Present: Gary Flaherty	<u>Staff Pres</u> Mari Brun	e e			
8 9 10	1) <u>Call to Order</u>					
10 11 12	Chair Madison called the meeting to order	at 5:09 PM.				
13	2) Approval of Meeting Minutes – Ap	oril 21, 2025				

Revisions: 15

16	1.	Lines 328–333, Mr. Bergman requested slight revisions to his language represented as,
17		"Mr. Bergman mentioned visiting Airport Director, David Hickling, who expressed
18		frustration that although the Environmental Impact Report prepared by McFarland
19		Johnson after its Environmental Survey in Fall 2024 adopted a broad view of the
20		Environmental Impact of a wildlife control fence, one reviewer from NH Fish & Game
21		recommended a narrower view that would require placing the fence along Airport Road,
22		which Mr. Hickling, this Commission, and the public did not want. Mr. Hickling was
23		awaiting a decision but had not yet received one."
24	2.	Lines 339–340, change the word "and" to "but," and the word "buying" to "funding."
25	3.	Line 408, change "Stilwell Farms" to "Stonewall Farm."
26		
27	A mot	ion by Vice Chair Williams to adopt the April 21, 2025 minutes as amended was duly

seconded by Mr. Walker and the motion carried unanimously. 28

3) <u>Report-Outs:</u>

31 32

A) Greater Goose Pond Forest Stewardship Subcommittee

Mr. Haynes reported that the Subcommittee met on Friday, May 9, and he reviewed their updates. First, on maps and signage, he said they hoped to determine funding at some point to replace the smaller maps with larger metal maps on four of the major trailheads. The Subcommittee continued putting-up signs along the trails as well.

37

Mr. Havnes recalled the April meeting (he was not present), when the Commission had a lengthy 38 discussion about the issues of new, unauthorized bike trails. Mr. Haynes stated it was not really 39 40 an issue, although the Subcommittee saw some new trails in the Forest. He said the 41 Subcommittee was working with the New England Mountain Bike Association (NEMBA) and stated that placing new signage did not feel necessary. The Subcommittee knew who was 42 43 creating some of the unauthorized trails and was working with them. Instead of signage, the 44 Subcommittee would develop recommendations so that anyone else interested in proposing a 45 new bike trail would have those to follow and be good stewards of future trails. Ms. Richter 46 asked if the Subcommittee could share those recommendations with the City, as there was a lot of discussion of needing help with the unauthorized bike trails at Robin Hood Park/Beech Hill. 47 Mr. Haynes said the guidelines were in progress and Mr. Walker added the Director of Parks and 48 Recreation, Carrah Fisk-Hennessey, was aware other areas were having the same problem and 49 would be in touch with her peers at those other agencies about options. Mr. Bill noted the 50 Subcommittee's idea for those interested in building new bike trails to appear before a committee 51 to seek permission. He said part of the problem was it being one of many uncontrollable/ 52

- unenforceable activities in the Forest, like building fires and swimming. Ms. Richter was glad to
 know the Subcommittee was working on the dilemma and said the guidelines would be helpful
- 55 to share.
- 56

57 Next, Mr. Haynes shared that the Subcommittee established its summer 2025 trail work

- schedule, with volunteer workdays in the Park the first Saturday of each month and normal
- 59 Subcommittee meetings the second Friday of each month. He said to hopefully anticipate
- additional workdays announced by email list. Mr. Haynes also reported that the Subcommittee
- 61 continued its spring trail maintenance, and the water bars and bridge work from 2024 seemed to
- 62 be doing well despite the amount of water this spring.
- 63

Regarding outreach, Mr. Haynes recalled the Commission approving an honorarium for Steven
Lamonde for a bird walk, which would not be occurring, but he thanked the Commission for the
approval. Instead, via the Parks and Recreation Department, Mr. Haynes would lead a youth
group doing trail work at the end of June.

68

Also on trails, he recalled in 2024 when the City acquired the parcel of land by the water tower

bordering Old Gilsum Road. He noted an old logging road roughly through the middle of the

71 parcel that volunteers would work to make more usable on Saturday workdays, creating

connectors to the already established trails so the parcel will have better walking and biking

73 access.

75 Next, Mr. Haynes reported on the Subcommittee's work to create a bridge at the spillway. The group was awaiting engineered plans (end of May), which would be sent to a City Council 76 Standing Committee before being approved by City Council (hopefully by end of June). Once 77 approved, the Subcommittee could start community fundraising to cover costs of the bridge. Mr. 78 79 Haynes said the process was taking longer than some anticipated. Vice Chair Williams warned of the Council's summer vacation in August, noting it could delay the approval process. Mr. 80 Haynes said it was in the City Engineer's hands and there was nothing the Subcommittee could 81 do until the Engineer's parts were completed. Chair Madison anticipated it would be forwarded 82 to the Municipal Services, Facilities & Infrastructure Standing Committee, which only meets 83 once monthly before sending matters back to Council. Mr. Haynes said the Subcommittee was 84 85 trying to be patient, acknowledging the Engineering Division had a lot going on. 86 **Invasive Plant Species** B) 87 88 Vice Chair Williams reported that the first invasive species removal event of the season would 89 be immediately following this meeting at 6:30 PM at the Stone Arch Bridge along Court Street, 90 91 where the Commission had worked to remove invasives for the previous three years. While there were still invasives to address, it was getting better thanks to this effort. Vice Chair 92 Williams had acquired some ferns to replace some of the invasives. 93 94 95 Next, Vice Chair Williams shared the schedule for upcoming invasive species removal events (often on Monday holidays when people are off work/school, or in the evenings): 96 Monday, June 16, 6:30 PM at Ellis Harrison Park, clearing knotweed where the 97 • Commission had been making progress for the previous few years. 98 • Monday, August 25, 6:30 PM at Woodland Cemetery 99 • Monday, October 13, 5:00 PM at Robin Hood Park 100 • Tuesday, November 11, 4:00/4:30 PM on the Rail Trail 101 102 He noted the empty slots in the schedule because July, for example, would typically be quite hot; 103 if anyone found an additional opportunity, however, Vice Chair Williams was willing to 104 schedule something. Mr. Bill asked if there was any progress on the City establishing a more 105 formal connection to ... Vice Chair Williams said he heard ... more information about that, 106 which was frustrating, but at least they were working on it. 107 Land Conservation/Easement Monitoring 108 **C**) 109 Mr. Bergman mentioned a few weeks before this meeting, running into former Commissioner, 110 111 Deb LeBlanc, who needed to return the easement monitoring binders to the Community Development Department. Ms. Brunner said she had not received them yet, noting she emailed 112 Ms. LeBlanc a few times about them after she resigned from the Commission. Ms. Brunner knew 113 there was other loose information in the Community Development Department, but Mr. Von 114 Plinsky said Ms. LeBlanc had the more site-specific binders that would be most useful, and Ms. 115 116 Brunner agreed. Ms. Richter said she would reach out to Ms. LeBlanc directly.

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D) **Pollinator Updates**

Mr. Therriault reported that May 20 was World bee Day as proclaimed by the United Nations. 120 The Xerces Society—Sponsor of Bee City USA—invited Mr. Therriault to a webinar on ground 121 nesting bees, which was open to everyone, and he forwarded the invitation to Ms. Brunner. 122 These unmanaged, typically solitary native bees make up the largest percentage of the bee 123 population in general; only the queen survives the winter and starts a new nest the next year. Mr. 124 Haynes asked if they typically stay in the same hole, but Mr. Therriault was unsure, encouraging 125 Mr. Haynes to attend the webinar. Mr. Haynes noted he would be stung mowing his yard but not 126 always from the same holes. Mr. Therriault said they like bare ground because grass is a barrier. 127 Bumblebees he learned, for example, like abandoned mouse nests because of the downy fur 128 129 material that is available efficiently.

130

Mr. Therriault also shared Pollinator Week 2025: June 16-22. He noted the Xerces Society had a 131

- sample proclamation in case the City wanted to declare its commitment, and Chair Madison said 132
- he would share it with the Mayor. Mr. Therriault noted all the City activities for Pollinator Week, 133
- including Pollinator Pallooza at Ashuelot River Park on Tuesday, June 24, with 8-10 134
- organizations, farms, nurseries, and educational organizations about pollinators for kids. Chair 135

Madison asked Ms. Brunner to ensure Pollinator Pallooza (organized by Cheshire County 136

- Conservation District) would be included in the Mayor's Proclamation on Pollinator Week. Mr. 137 Therriault mentioned that while he had seen signs around town for No Mow May, it would not 138
- work if one's lawn was only grass; wildflowers would be needed to have a benefit for the 139
- pollinators. 140
- 141
- Vice Chair Williams mentioned the City recently acquiring a small strip of land along the corner 142 of Beaver Street and Damon Court that would not have much use but might be good for 143 pollinators. He suggested that Mr. Therriault scout it for pollinator opportunities.
- 144 145

4) **Discussion Items Master Plan Update** A)

146 147 148

Ms. Brunner reported on the Master Plan Update, which she said was in the final sprint, focused 149 on staff reviewing the draft Plan, incorporating edits, and sending the draft to the Steering 150 Committee for review. The draft Plan would be revealed to the public at the June 3 Future 151 152 Summit, which Ms. Brunner hoped the whole Commission could attend from 5:00-7:00 PM at the Keene Public Library, Heberton Hall; with food, childcare for potty trained kids, and a raffle, 153 the event would feel like a celebration. Then, on June 10, the Master Plan Steering Committee 154 155 would discuss the draft Plan for the first time and may or may not be prepared to vote to recommend its adoption to City Council that night. 156 157

- 158
- B)

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Outreach

Mr. Bill recalled the Commission wanting to tour Keene's Wastewater Treatment Plant. He 160 called to seek information but had not received a call back yet. If the Commission was still 161 interested, he would continue pursuing the opportunity, noting the Plant closes at 3:00 PM, so the 162

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group would have to plan accordingly. He thought the Ashuelot River Local Advisory 163 Committee (ARLAC) might be interested too. Chair Madison said he would meet with ARLAC 164 on May 20 and inquire. Mr. Bergman also recalled the Commission's long-term goal to visit 165 Keene's water source in Roxbury, and he hoped that could still happen with the Public Works 166 Department's help. Chair Madison said he would follow up. 167 168 169 **C**) Budget 170 Chair Madison asked how much remained in the Commission's Budget. Ms. Brunner reported 171 that to date, the Commission had approved \$950 to the NH Association of Conservation 172 Commissions and \$200 in annual dues to Bee City USA. The honorarium for Steven Lamonde 173 174 did not happen as planned. So, there was \$850 remaining of the Commission's \$2,000 fiscal year 175 Budget. 176 i) Annual ARLAC Request 177 178 Ms. Brunner said the Commission had not yet received the normal annual request from the 179 Ashuelot River Local Advisory Committee (ARLAC) for E. coli monitoring of the Ashuelot 180 River, but she recalled the Commission typically donating \$150. Chair Madison noted a conflict-181 of-interest because he was a member of ARLAC and recused himself from this Budget 182 consideration. 183 184 Mr. Haynes made the following motion, which was duly seconded by Mr. Bill. On a vote of 7–0, 185 the Conservation Commission approved donating \$150.00 to the Ashuelot River Local Advisory 186 Committee. Chair Madison abstained. 187 188 **CCCD** Farm Camp 189 ii) 190 Chair Madison recalled this camp encourages kids to get involved with agriculture and the 191 Cheshire County Conservation District (CCCD) was seeking a \$250 donation. Vice Chair 192 Williams wanted to be transparent that the original request was made in March, and the 193 Commission had pushed its Budget discussion a few months since, and now the CCCD's request 194 had closed for 2025. So, this donation would be applied to the 2026 Camps. Vice Chair Williams 195 also recalled this donation would be for the whole District of Cheshire County, but almost all 196 197 kids using the scholarships were Keene residents, so the money would remain local. 198 It was confirmed there would be no issue for next year's Budget. The Commission's Budget does 199 200 not roll over; it returns to the General Fund at the end of the fiscal year if unused. 201 Mr. Walker made the following motion, which was duly seconded by Vice Chair Williams. On a 202 203 vote of 8–0, the Conservation Commission approved donating \$250.00 to the Cheshire County Conservation District Farm Camp. 204 205 Materials for Invasive Plant Species Programs 206 iii) 207

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- 208 Discussion ensued about Vice Chair Williams' needs for invasive plant removal and
- 209 replacement, as anything unused from the Commission's Budget would return to the General
- Fund at the end of the fiscal year. There was \$450 remaining, and Vice Chair Williams was
- 211 unsure if that was too much to spend on replacement plants. Mr. Therriault wondered if he
- needed other materials, like tarps. Vice Chair Williams said yes, as well as things like polediggers, which are not cheap.
- 213 c 214
- Chair Madison suggested using the remaining funds to buy items to establish the long-term invasive species removal program, noting it was now in its 4th/5th established year. Largely run by volunteers with their own hands, gloves, and tools. The Chair thought it would be reasonable for the Commission to buy gloves, bags, durable tools, tarps, and other equipment to sustain this program for success through future summers. Vice Chair Williams agreed things like gloves
- 220 would certainly be welcome. The Chair thought investing in the program this way might garner
- 221 more involvement.
- 222
- 223 Further discussion ensued on where these tools/materials would be stored and in whose custody.
- 224 Chair Madison suggested the Parks Department so they would be available in case a
- neighborhood group wanted to work in a park, for example. Ms. Brunner suggested
- 226 incorporating it with the existing Seed & Tool Lending Library at the Keene Public Library. Mr.
- Bill mentioned experiences with trail work that became problematic accessing tools through a
- particular department, so he thought the Lending Library might be a solution. Given theLibrary's experience lending tools vs. the Public Works Department, for example, Chair
- Madison thought it worth investigating how to partner with the Library in this way (e.g.,
- ensuring scheduled invasive species workdays would be blocked out for availability, and an
- individual inventory for the Commissions items). Vice Chair Williams would discuss it as a
- 233 member of the Library Board of Trustees as well. Chair Madison was comfortable leaving the
- discretion of what tools and equipment to purchase to Vice Chair Williams. The Commission
- agreed to approve this final expense at the June meeting, pending any other final requests/needs arising in the upcoming month.
- 237
- Discussion ensued about whether Vice Chair Williams would want the funds to be used only for
 tools or for some plants as well. He said yes, approximately \$100 for plants would be ideal too,
- and it would be nice to make those purchase earlier in the season.
- Mr. Bill made the following motion, which was duly seconded by Ms. Richter. On a vote of 8–0,
 the Conservation Commission approved allocating \$100.00 to Vice Chair Williams to spend on
 plants for invasive species replacement in the City.
- 245 246

D) Potential Land Acquisition - 0 Old Gilsum Road, TMP# 218-015-000

Mr. Haynes discussed the email Ms. Brunner shared about the property at 0 Gilsum Road that
borders the parcel the City purchased in spring 2024. Mr. Haynes thought the City should
acquire this property. Ms. Brunner displayed a map, and Mr. Haynes oriented the Commission
with this 0.75-acre parcel at the end of Old Gilsum Road. It seemed this would be another parcel

- rights-of-ways. Mr. Haynes said the parcel went on the market approximately two weeks before
- this meeting, and he thought the City could likely acquire it for a reasonable price with the
- 255 Conservation Land Acquisition Fund. He was unsure if it had been purchased in that time since.
- Vice Chair Williams recalled legislation in NH this year that would make it much easier to build
 on Class VI Roads such as Old Gilsum Road, so he thought that was an extra reason to pursue
 this. Chair Madison agreed there were currently many efforts at the State House to restrict towns
 and cities' abilities to regulate land use at the local level.
- 261
- Chair Madison thought the best course of action was to refer this to the City Manager, Elizabeth 262 Ferland. Ms. Brunner agreed that if the Commission wanted to recommend using the 263 264 Conservation Land Acquisition Fund, it would need to hold a Public Hearing, and there was not 265 enough time in advance of this meeting to notice a Hearing (10 days' notice required for a real estate acquisition). Chair Madison asked to hold a Public Hearing at the next Commission 266 meeting. Ms. Brunner would check the remaining balance in the Conservation Land Acquisition 267 Fund (she believed it was over \$100,000). Then, Chair Madison explained the City Council 268 would vote on whether to approve the City Manager negotiating and executing a real estate deal, 269 270 which would occur during a non-public session of the City Council. Conversely, because of two Commissioners on the City Council, Ms. Brunner suggested holding a Joint Public Workshop of 271 the City Council-Conservation Commission, which two other Commissioners would need to 272 attend to form a quorum of four members; then, the Council would have its own non-public 273 session to vote on the purchase. She mentioned the alternative for the Commission to have its 274 Public Hearing and own non-public session, which she was advised it should do more often. 275 Chair Madison thought a Joint City Council-Conservation Commission Public Workshop would 276 277 be the best course of action. Ms. Brunner agreed with a suggestion that the Commission would first need to vote to approve the property purchase in a non-public session following a noticed 278 Public Hearing 279
- 280

Mr. Haynes wondered if waiting one month would be acting soon enough. Vice Chair Williams 281 said he looked at the website and there were several similar properties for sale and barring quick 282 moving by the City of Concord, he did not think so, as the properties had been available for two 283 decades. He thought the Commission could probably feel comfortable waiting, especially given 284 the prices. Chair Madison added the real estate frenzy from the pandemic with mass amounts of 285 people from out-of-state buying local properties had largely slowed down. Since these were not 286 287 houses and were undevelopable lots, he did not think there was as much concern, and there was nothing the Commission could do without a Public Hearing regardless. Discussion ensued briefly 288 as the Commission reviewed the surrounding parcels on the map for further context. Mr. Haynes 289

- 290 pointed out this parcel would be contiguous with the City's Goose Pond Forest parcels.
- Discussion ensued about the surrounding three tax map parcels for sale and perhaps the need toresearch them as well.
- 293

Ms. Brunner would communicate with the City Manager, schedule the Joint Public Workshop,and check how the adjacent parcel was acquired in 2024.

- 296
- 297 5) <u>New or Other Business</u>

Mr. Haynes reported that at the Greater Goose Pond Forest Stewardship Subcommittee meeting, 299

a member mentioned the solar project proposed on Old Gilsum Road's work lapsed and he asked 300

if that was true and for other updates. Chair Madison said yes, and the project died; it sounded 301

like they wanted to do something they were unable to make happen, so they moved on. Chair 302

- Madison said their Conditional Use Permit CUP expired and if it came up again, the Commission 303
- would discuss it, but otherwise he removed it from the agenda after 18 months with no updates. 304 Ms. Brunner agreed they had two Variances that expired at the beginning of May 2025.
- 305
- 306

Mr. Bergman recalled the Commission conducting a site visit for a proposed development on 307 Whitcomb's Mill Road for a wetlands referral. He said the applicant died but the wife still owned 308

309 the property and asked the status of the permits there. Ms. Brunner replied the applicant

submitted an extension request just in time. It sounded like the same contractor, Mike Pappas, 310

who purchased the old Cobblestone building site and other properties that had been in a similar 311

312 holding pattern bought it, so Ms. Brunner was unsure how quickly they would be developed. Mr.

Bergman continued, mentioning other past projects the Commission had reviewed, pointing out 313

that the Cottage Court tree clearing on Court Street commenced and the new dam beneath 314

Wilson Pond at the High School is an amazing structure. The new dam is slightly lower than the 315

original and will overtop earlier and stay overtopped longer, backing water up to the Country 316

Club; brief discussion ensued as Mr. Bergman and Mr. Therriault described the benefits of the 317

- Country Club fairways for absorbing flood waters. 318
- 319

On a related note, Mr. Bergman mentioned that water at the Dillant-Hopkins Airport usually 320

comes from Wilson Pond and Swanzey under Route 32 & Old Homestead Hwy into the marsh 321

and drains under the road and into the swamp, then to the Ashuelot River. He said the Ashuelot 322

River had been so high and beavers so busy at the Airport that water was flowing backward from 323

the River and the swamp was very flooded. So, beavers had to be actively trapped at the Airport 324

for some time; they get into culverts and cause all kinds of issues. So, the City retained a pair of 325 trappers. The water levels got so high that for some time the traps could not even be secured. 326

327

Mr. Bill referred to the Court Street development and questioned how much was based on 328

modeling, asking if there was any truth that after five inches of rain in a half day, someone goes 329

and studies the discharges to compare to the models; how well would the City know the models 330

are working? Chair Madison said he did not have an answer. Mr. Bill stated it would become 331

332 really critical, noting a lot of the Commission's decisions were based on how well applicants'

models work. He wondered if someone from an engineering company could come explain to the 333

Commission how they ground truth these models, because it felt like an idle exercise to him 334

otherwise. Ms. Richter asked if he was talking about stormwater basins and Ms. Brunner said the 335 hydroCAD models for stormwater management design. So, Ms. Richter said they should be 336 testing soil samples to determine rate of infiltration. Mr. Bill also questioned spacing on those 337

things, stating the Commission did not have good idea of those. 338

- 339
- 340

6) Adjournment – Next Meeting Date: Monday June 16, 2025

341

There being no further business, Chair Madison adjourned the meeting at 6:12 PM. 342

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343

- 344
- Respectfully submitted by, Katryna Kibler, Minute Taker 345
- May 26, 2025 346

347

- Reviewed and edited by, 348
- Mari Brunner, Senior Planner 349

350



May 27, 2025

NHDES Water Division/Land Resources Management Wetlands Bureau 29 Hazen Drive, P.O. Box 95 Concord, New Hampshire 03302

Re: Standard Dredge and Fill Wetlands Permit Application Eversource T198 Line Project Keene, Swanzey, and Troy, New Hampshire

Dear NHDES:

On behalf of the Public Service Company of NH d/b/a Eversource Energy, Normandeau Associates, Inc. ("Normandeau") is submitting this Standard Dredge and Fill Wetlands Permit Application for the proposed Eversource T198 Line Project (or Project) in accordance with the Fill and Dredge in Wetlands Act (RSA 482-A), Administrative Rules (Env-Wt 100-900).

Eversource is proposing the replacement of fifty (50) existing wooden H-frame structures, as well as the permanent removal of 2 existing wooden structures, on the existing 115kV T198 Transmission Line (T198) in the City of Keene and Towns of Swanzey and Troy. The proposed project would result in a total of 880 square feet of permanent and 384,578 square feet of temporary impact to delineated wetlands and streams.

Included with this submittal is the completed Permit Application Form, the application fee check, a detailed project overview narrative, required plans and figures, and additional supporting materials.

Please feel free to contact Jeremy Fennell at 603-634-3396 (jeremy.fennell@eversource.com) or William McCloy at 802-861-7038 (wmccloy@normandeau.com) if you have any questions.

Sincerely,

Attachments: Wetlands Permit Application

CC: US Army Corps of Engineers, Mason Gamble via File Share

Standard Dredge and Fill Wetlands Permit Application

Eversource T198 Line Project

Prepared For

EVERSURCE

Eversource Energy 13 Legends Drive Hooksett, NH 03106

Prepared By Normandeau Associates, Inc. 25 Nashua Road Bedford, NH 03110 (603) 472-5191

May 27, 2025

Table of Contents

Standard Dredge and Fill Wetlands Permit Application Form and Copy of Fee Check

Project Introduction Narrative

- Site Location
- **Project Description**
- **Project Need**
- **Project Alternatives**

Attachment A: NHDES Attachment A: Minor and Major Projects Form

Attachment B: Identification of Natural and Cultural Resources

- **Site Description**
- **Identification of Cultural Resources**
- Identification of Jurisdictional Wetlands
- **Identification of Priority Resource Areas**
- Identification of Jurisdictional Streams
- Identification of Potential Vernal Pools and Vernal Pools
- Identification of Rare, Threatened and Endangered Species and Natural Communities
- **Invasive Species**
- **Attachment C: NHDES Avoidance and Minimization Checklist Form**
- Attachment D: NHDES Project Specific Worksheet for "Utility Projects; Projects in Public Right-of-Way"
- Attachment E: US Army Corps of Engineers Appendix B Checklist
- Attachment F: USGS Topographic Project Location Map (1"=2,000' Scale)
- **Attachment G: Final Plans**
- **Attachment H: Impact Summary and Tables**
- **Attachment I: Parcel Map and List of Parcels**
- **Attachment J: Construction Sequence Narrative**

Project Construction Sequence Narrative

- **Attachment K: NHNHB Consultation**
- **Attachment L: NHFG and USFWS Consultation**
- Attachment M: A statement of whether the applicant has received comments from the local Board of Selectmen, local Conservation Commission, Local River Advisory Council, or Federal Agencies and, if so, how the applicant has addressed the comments

Attachment N: Compensatory Mitigation Plan Attachment O: Abutter Notifications Attachment P: Easements and Other Landowner Agreements Attachment Q: Photo Log of Identified Natural Resources Attachment R: Wetland Function and Value Forms Standard Dredge and Fill Wetlands Permit Application Form and Copy of Fee Check



STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION Water Division / Land Resources Management Check the Status of your Application



RSA/Rule: RSA 482-A/Env-Wt 100-900

APPLICANT'S NAME: Eversource Energy, T198 TOWN NAME: Keene, Swanzey, Troy

			File No.:
Administrative	Administrative	Administrative	Check No.:
Use Only	Use Only	Use Only	Amount:
			Initials:

A person may request a waiver of the requirements in Rules Env-Wt 100-900 to accommodate situations where strict adherence to the requirements would not be in the best interest of the public or the environment but is still in compliance with RSA 482-A. A person may also request a waiver of the standards for existing dwellings over water pursuant to RSA 482-A:26, III(b). For more information, please consult the <u>Waiver Request Form</u>.

SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))	
Please use the <u>Wetland Permit Planning Tool (WPPT</u>), the Natural Heritage Bureau (NHB) <u>DataChe</u> <u>Restoration Mapper</u> , or other sources to assist in identifying key features such as: <u>Priority Resource</u> <u>protected species or habitats</u> , coastal areas, designated rivers, or designated prime wetlands.	
Has the required planning been completed?	•Yes No
Does the property contain a PRA? If yes, provide the following information:	Yes No
• Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHFG) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04.	OYes No
 Protected species or habitat? If yes, species or habitat name(s): Multiple, see attached NHB Project ID #: 	•Yes No
• Bog?	OYes No
• Floodplain wetland contiguous to a tier 3 or higher watercourse?	Yes No
Designated prime wetland or duly-established 100-foot buffer?	OYes No
• Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	OYes No
Is the property within a Designated River corridor? If yes, provide the following information:	Yes No
Name of Local River Management Advisory Committee (LAC): Ashuelot River LAC	
• A copy of the application was sent to the LAC on Month: 05 Day: 27 Year: 2025	

For dredging projects, is the subject property contaminated?

• If yes, list contaminant: N/A

Is there potential to impact impaired waters, class A waters, or outstanding resource waters?

Ves No

Yes

For stream crossing projects, provide watershed size (see WPPT or Stream Stats): N/A

SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))

Provide a description of the project and the purpose of the project, the need for the proposed impacts to jurisdictional areas, an outline-of the scope of work to be performed, and whether impacts are temporary or permanent.

Eversource is proposing the replacement of fifty (50) existing wooden H-frame structures, as well as the permanent removal of 2 existing wooden structures, on the existing 115kV T198 Transmission Line (T198) in the City of Keene and Towns of Swanzey and Troy. By municipality, the number of structures to be replaced are 12 in Keene. 35 in Swanzey, and 3 in Troy. The two structures to be permanently removed are located in Swanzey. Access to the work areas will be via existing road/trails where possible and will largely be confined to the transmission line right-of-way (ROW). Land disturbance impacts will be required to access the existing wooden poles for removal and install the replacement steel structures. Gravel access roads and work pads will be established at each pole location in uplands to facilitate crane and truck access, while timber mats will be placed at wetland crossing locations and around poles to minimize impacts from construction equipment. Stream crossings will be bridged with mats to maintain flow. Work pads will measure 100 feet by 100 feet on average during construction and upland gravel work pads will be reduced to 30 feet by 60 feet during restoration. All timber mats will be removed from all wetlands and stream crossings during restoration as soon as feasible. Utility Maintenance BMPs will be followed and oversight monitoring will be conducted at least weekly. Work will occur in Priority Resource Areas consisting of Floodplain Wetlands Contiguous to a Tier 3 or Higher Watercourse and/or wetlands with Documented Occurrence of a Protected Species or Habitat. A pre-application meeting was completed with NHDES on May 14, 2025. Coordination with NHFG regarding required pre-application consultations is in progress.

SECTION 3 - PROJECT LOCATION

Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.

ADDRESS: Eversource T198 Transmission Line Right-of-Way (ROW)

TOWN/CITY: City of Keene, Town of Swanzey and Troy

TAX MAP/BLOCK/LOT/UNIT: Multiple, see attached list

US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: N/A
Ashuelot River and multiple tributaries

(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places): 42.886074, -72.277272

SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) IN If the applicant is a trust or a company, then complete v	•						
NAME: Public Service Company of NH d/b/a Eversource Energy, Attn: Jeremy Fennell							
MAILING ADDRESS: 13 Legends Drive							
TOWN/CITY: Hooksett ZIP CODE: 031							
EMAIL ADDRESS: jeremy.fennell@eversource.com							
FAX: N/A	PHONE: 603-634-3396						
ELECTRONIC COMMUNICATION: By initialing here, I her this application electronically.	ELECTRONIC COMMUNICATION: By initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically.						
SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-	Wt 311.04(c))						
LAST NAME, FIRST NAME, M.I.: McCloy, William S.							
COMPANY NAME: Normandeau Associates, Inc.							
MAILING ADDRESS: 25 Nashua Road							
TOWN/CITY: Bedford		STATE: NH	ZIP CODE: 03110				
EMAIL ADDRESS: wmccloy@normandeau.com							
FAX: N/A	PHONE: 802-861-7038						
ELECTRONIC COMMUNICATION: By initialing here, I hereby authorize NHDES to communicate all matters relative to this application electronically.							
SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFFERENT THAN APPLICANT) (Env-Wt 311.04(b)) If the owner is a trust or a company, then complete with the trust or company information. Same as applicant							
NAME:							
MAILING ADDRESS:							
TOWN/CITY:	STATE:	ZIP CODE:					
EMAIL ADDRESS:							
FAX:	AX: PHONE:						
ELECTRONIC COMMUNICATION: By initialing here, I here this application electronically. JF	eby authorize NHDES to com	ımunicate all ma	itters relative to				

SECTION 7 - RESOURCE-SPECIFIC CRITERIA ESTABLISHED IN Env-Wt 400, Env-Wt 500, Env-Wt 600, Env-Wt 700, OR Env-Wt 900 HAVE BEEN MET (Env-Wt 313.01(a)(3))

Describe how the resource-specific criteria have been met for each chapter listed above (please attach information about stream crossings, coastal resources, prime wetlands, or non-tidal wetlands and surface waters):

Eversource has worked diligently to address the rules, where applicable, and as described in the wetland rules under several chapters and consistent with recent wetland permits filed by Eversource for similar projects across New Hampshire.

ENV-WT 400: Resources were delineated and the project has been appropriately classified in coordination with NHDES and others and according to the rules; additional information is included in the narrative and associated attachments.

ENV-WT 500: The project specific worksheet, as per RSA 482-A/ENV-WT 521 FOR UTILITY PROJECT is provided in Attachment D.

ENV-WT 600: Not applicable, project not located in coastal or tidal areas.

ENV-WT 700: Not applicable, no prime wetlands.

ENV-WT 800: Compensatory mitigation details in Attachment L.

ENV-WT 900: No permanent stream crossing propose, most streams spanned with no impacts.

SECTION 8 - AVOIDANCE AND MINIMIZATION

Impacts within wetland jurisdiction must be avoided to the maximum extent practicable (Env-Wt 313.03(a)).* Any project with unavoidable jurisdictional impacts must then be minimized as described in the <u>Wetlands Best Management</u> <u>Practice Techniques For Avoidance and Minimization</u> and the <u>Wetlands Permitting: Avoidance, Minimization and Mitigation fact sheet</u>. For minor or major projects, a functional assessment of all wetlands on the project site is required (Env-Wt 311.03(b)(10)).*

Please refer to the application checklist to ensure you have attached all documents related to avoidance and minimization, as well as functional assessment (where applicable). Use the <u>Avoidance and Minimization Checklist</u>, the <u>Avoidance and Minimization Narrative</u>, or your own avoidance and minimization narrative.

*See Env-Wt 311.03(b)(6) and Env-Wt 311.03(b)(10) for shoreline structure exemptions.

SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)

If unavoidable jurisdictional impacts require mitigation, a mitigation <u>pre-application meeting</u> must occur at least 30 days but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.

Mitigation Pre-Application Meeting Date: Month: Day: Year: 5/14/2025

(N/A - Mitigation is not required)

SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (Env-Wt 313.01(a)(1)c)

Confirm that you have submitted a compensatory mitigation proposal that meets the requirements of Env-Wt 800 for all permanent unavoidable impacts that will remain after avoidance and minimization techniques have been exercised to the maximum extent practicable:

(N/A – Compensatory mitigation is not required)

SECTION 11 - IMPACT AREA (Env-Wt 311.04(g))

For each jurisdictional area that will be/has been impacted, provide square feet (SF) and, if applicable, linear feet (LF) of impact, and note whether the impact is after-the-fact (ATF; i.e., work was started or completed without a permit).

Irm@des.nh.gov or (603) 271-2147 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095 des.nh.gov

For intermittent and ephemeral streams, the linear footage of impact is measured along the thread of the channel. Please note, installation of a stream crossing in an ephemeral stream may be undertaken without a permit per Rule Env-Wt 309.02(d), however other dredge or fill impacts should be included below.

For perennial streams/rivers, the linear footage of impact is calculated by summing the lengths of disturbances to the channel and banks.

Permanent (PERM.) impacts are impacts that will remain after the project is complete (e.g., changes in grade or surface materials).

Temporary (TEMP.) impacts are impacts not intended to remain (and will be restored to pre-construction conditions) after the project is completed.

JUF	RISDICTIONAL AREA	PERM.	PERM.	PERM. ATF	TEMP. SF	TEMP.	TEMP. ATF
	Forested Wetland	-	-		2,274	-	
Wetlands	Scrub-shrub Wetland	820	-		325,369	-	
	Emergent Wetland	20	-		32,833	-	
	Wet Meadow	40			12,847	-	
	Vernal Pool	-	-		5,650		
	Designated Prime Wetland	-	_	Π	-	-	
	Duly-established 100-foot Prime Wetland Buffer	-	-		-	-	
	Intermittent / Ephemeral Stream	-	-		-	-	
e	Perennial Stream or River		-		3,092	16	
Surface	Lake / Pond	-	-		2,514	-	
Su	Docking - Lake / Pond	N/A	N/A		N/A	N/A	
	Docking - River	N/A	N/A		N/A	N/A	
10	Bank - Intermittent Stream	-	-		-	-	
Banks	Bank - Perennial Stream / River	-	-		0	32	
Ba	Bank / Shoreline - Lake / Pond	-	-		-	-	
	Tidal Waters	N/A	N/A		N/A	N/A	
-	Tidal Marsh	N/A	N/A		N/A	N/A	
a	Sand Dune	N/A	N/A		N/A	N/A	
Tidal	Undeveloped Tidal Buffer Zone (TBZ)	N/A	N/A		N/A	N/A	
	Previously-developed TBZ	N/A	N/A		N/A	N/A	
	Docking - Tidal Water	N/A	N/A		N/A	N/A	
	TOTAL	880	-	_	384,578	48	
EC	TION 12 - APPLICATION FEE (RSA 482-A:3, I)						
Ī	MINIMUM IMPACT FEE: Flat fee of \$400.						
	NON-ENFORCEMENT RELATED, PUBLICLY-FUN IMPACT CLASSIFICATION: Flat fee of \$400 (ref					TS, REGARDI	ESS OF
	MINOR OR MAJOR IMPACT FEE: Calculate usin	g the table l	below:				
	Permanent and temporal	ry (non-dock	(ing): 385.4	455 SF	385,458 St	× \$0.40 =	\$ 154,
		ocking struc		SF		× \$2.00 =	\$0
-	Permanent d			SF		× \$4.00 =	\$0
				ctures (incl	uding docks)	add \$400 =	\$0
					0	Total =	\$ 154,

Minim	um Impact Project	r Project 🔳 Major Project			
SECTION 14 - REQUIRED CERTIFICATIONS (Env-Wt 311.11)					
Initial eac	h box below to certify:				
Initials:	To the best of the signer's knowledge and belief, all required notifications have been provided.				
Initials:	The information submitted on or with the application is true, complete, and not misleading to the best of the signer's knowledge and belief.				
Initials:	 The signer understands that: The submission of false, incomplete, or misleading information constitutes grounds for NHDES to: Deny the application. Revoke any approval that is granted based on the information. If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1. 				
		refer the matter to the joint board of licensure and certi	ication		
Initials:	established by RSA 310-A:1. If the applicant is not the owner of the putthe signer that he or she is aware of the a	roperty, each property owner signature shall constitute application being filed and does not object to the filing.			
SECTION 1	established by RSA 310-A:1. If the applicant is not the owner of the pi the signer that he or she is aware of the a 5 - REQUIRED SIGNATURES (Env-Wt 311	roperty, each property owner signature shall constitute application being filed and does not object to the filing. .04(d); Env-Wt 311.11)	certification by		
SECTION 1	established by RSA 310-A:1. If the applicant is not the owner of the provident the signer that he or she is aware of the second	roperty, each property owner signature shall constitute application being filed and does not object to the filing.	certification by		
SECTION 1	established by RSA 310-A:1. If the applicant is not the owner of the pi the signer that he or she is aware of the a 5 - REQUIRED SIGNATURES (Env-Wt 311	roperty, each property owner signature shall constitute application being filed and does not object to the filing. .04(d); Env-Wt 311.11)			
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SECTION 1 SIGNATURE SIGNATURE SIGNATURE	established by RSA 310-A:1. If the applicant is not the owner of the pithe signer that he or she is aware of the signer that he or she	roperty, each property owner signature shall constitute application being filed and does not object to the filing. .04(d); Env-Wt 311.11) PRINT NAME LEGIBLY: PRINT NAME LEGIBLY: PRINT NAME LEGIBLY: PRINT NAME LEGIBLY:	DATE: 05/27/25		
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SECTION 1 SIGNATURE SIGNATURE SIGNATURE SECTION 1 As require plans, and	established by RSA 310-A:1. If the applicant is not the owner of the provident is not the owner of the provident is aware of the signer that he or she or she is aware of the signer th	roperty, each property owner signature shall constitute application being filed and does not object to the filing. .04(d); Env-Wt 311.11) PRINT NAME LEGIBLY: Jeremy Fennell PRINT NAME LEGIBLY: PRINT NAME LEGIBLY: William S McCloy v-Wt 311.04(f)) that the applicant has filed four application forms, form	DATE: 05/27/29 DATE: 05/27/29 DATE: 05/27/29		

DIRECTIONS FOR TOWN/CITY CLERK:

Per RSA 482-A:3, I(a)(1)

- 1. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
- 2. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
- 3. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board.
- 4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

DIRECTIONS FOR APPLICANT:

Submit the original permit application form bearing the signature of the Town/City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery at the address at the bottom of this page. Make check or money order payable to "Treasurer – State of NH".

PSNH - T	RANSMISSION DBA EVERSOURCE E	ENERGY Bank of America	Higher Standards	DATE 05/20/2025	48750
PAY On	e Hundred Fifty-Four Thousand One Hu	undred Eighty-Three Dollars &	20/100 US Dollars	USD	\$154,183.20
	NHDES ARM FUND OF NHDES WETLANDS BUREAU 29 HAZEN DR PO BOX 95 CONCORD,NH 03302,UNITED STA	ATES	8	John M. M. M. Authorized Sign	
	RANSMISSION DBA EVERSOURCE EI 117, HARTFORD, CT 06102-5017	NERGY			48750 Date:05/19/2025
INVOICE D		PO#	DISC AMT	CURR	PAYMENT AMT
04/28/2025 Pymt Com			\$	USD	\$154,183.20

Total: \$154,183.20

Project Introduction Narrative

Site Location

The proposed project involves the replacement of 50 existing transmission line structures and the removal of two structures along the existing T198 Transmission Line in portions of Keene, Swanzey and Troy, New Hampshire. The T198 Transmission Line is approximately 11.1 miles in length and begins at the Monadnock Substation in Troy and continues northeasterly to the Keene Substation in Keene, New Hampshire. Existing ROW where the proposed project is located varies in width (approximately 125-ft to 225-ft).

See Attachment F USGS Site Locus Map and Attachment G for Plans with aerial photo background.

Project Description

Eversource is proposing to replace 50 existing utility structures along the T198 Transmission Line, as well as completely remove two structures from the transmission line. This maintenance work requires temporary timber matting within wetlands for work pad placement and associated access to each structure.

The existing structures are wooden H-frame structures and will be replaced with steel equivalent H-frame structures. The replacement structures are constructed with weathered steel material, so that over time the steel material will weather from an orange color to a dark brown color to blend in with the environment. Due to updates to the National Electrical Safety Code Standards (NESC) since the T198 Transmission Line was originally built in 1962, structure heights of new replacement structures are required to be taller than the existing wooden poles to meet new NESC clearances. New structure heights are typically higher where there are crossings over public roads and distribution lines, as well as ground clearance where there's a shift in topography since new structures are offset from existing location approximately 5-10-feet.

Based on recent and ongoing correspondence with NHDES, the need for temporary wetland matting in very poorly drained soils during the active growing season, and potentially for mats to be in place for more than one growing season, it is not anticipated the proposed project meets the minimum impact criteria Per Env-Wt 521.06 (a). Therefore, the project is anticipated to be classified as a major impact project.

Project Need

Eversource supplies electrical transmission and distribution services from within their existing, maintained ROWs. Maintenance of Eversource's electrical infrastructure is necessary to ensure the continued safety and reliability of the system. Replacement of the poles prior to significant deterioration of crossarms or the pole itself is of the utmost importance in regard to maintaining service and ensuring safety of the public. Therefore, the T198 Line Project is beneficial to public health and safety.

During an inspection of the T198 Transmission Line, it was observed that the structures are old and worn and have been subjected to pole splitting, woodpecker damage and rot, and must be replaced due to the state of deterioration of these structures over the past 60+ years.

The proposed structure replacement work will require temporary impact to place temporary timber matting within wetlands for replacement work areas and associated access. The existing wood structures will be replaced with a new steel counterpart and will require heavy machinery to install. Access and work pad locations in wetlands will be restored as part of required impact minimization.



Line T198 – Structure 130

Project Alternatives

Due to the existing location of the transmission line in a routinely maintained and mowed corridor, there is no alternative site which would result in less impact and maintain the existing infrastructure. The proposed project was designed to minimize direct impacts to wetlands and surface water resources to the greatest extent, while maximizing safety during construction. Rather than propose permanent access and permanent fill in wetlands, or a new ROW in currently forested areas, Eversource proposes temporary impacts to wetlands in the existing ROW to access the utility structures and stage equipment on a work pad around the structures to complete the replacement work and will be restored upon completion of work. Many structures in the Project area cannot be accessed without temporary access in wetlands. In addition, two-way access is required in ROW stretches that lack frequent road crossings to ensure worker access to emergency services during construction. To minimize proposed temporary impacts, Eversource has identified potential off-ROW access points and coordinated review by underlying landowners. Where access is provided, Eversource will utilize off-ROW access points to minimize the total proposed wetland impact.

Attachment A: NHDES Attachment A: Minor and Major Projects Form



STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION ATTACHMENT A: MINOR AND MAJOR PROJECTS Water Division/Land Resources Management Wetlands Bureau



RSA/ Rule: RSA 482-A/ Env-Wt 311.10; Env-Wt 313.01(a)(1); Env-Wt 313.03

APPLICANT'S NAME: Eversource Energy, Attn: Jeremy Fennell, T198 Line TO

TOWN NAME: Keene, Swanzey, Troy

Attachment A is required for all minor and major projects, and must be completed in addition to the Avoidance and Minimization Narrative or Checklist that is required by Env-Wt 307.11.

For projects involving construction or modification of non-tidal shoreline structures over areas of surface waters having an absence of wetland vegetation, only Sections I.X through I.XV are required to be completed.

PART I: AVOIDANCE AND MINIMIZATION

In accordance with Env-Wt 313.03(a), the Department shall not approve any alteration of any jurisdictional area unless the applicant demonstrates that the potential impacts to jurisdictional areas have been avoided to the maximum extent practicable and that any unavoidable impacts have been minimized, as described in the <u>Wetlands Best</u> <u>Management Practice Techniques For Avoidance and Minimization</u>.

SECTION I.I - ALTERNATIVES (Env-Wt 313.03(b)(1))

Describe how there is no practicable alternative that would have a less adverse impact on the area and environments under the Department's jurisdiction.

THE PROPOSED PROJECT IS LOCATED WITHIN AN EXISTING AND MAINTAINED UTILITY ROW, AND WILL REPLACE EXISTING UTILITY POLES IN THE SAME ALIGNMENT AS THE EXISTING UTILITY LINE; AT ONE LOCATION, TWO EXISTING STRUCTURES WILL BE REMOVED AND NOT REPLACED RESULTING IN A REDUCTION IN THE TOTAL NUMBER OF STRUCTURES IN WETLAND AREAS. THIS PROJECT IS NECESSARY TO ALLOW EVERSOURCE TO CONTINUE TO SAFELY AND EFFICIENTLY PROVIDE ELECTRICITY TO THE PUBLIC AND FOR MAINTENANCE OF AN EXISTING UTILITY LINE. THE PROPOSED PROJECT IMPACTS ARE MINIMIZED BY UTILIZING EXISTING ACCESS ROUTES AND TRAILS TO THE EXTENT PRACTICABLE. IN ADDITION, PROJECT TEAM HAS HAD MULTIPLE PROJECT MEETINGS AND SITE WALKS TO REVIEW WETLAND CROSSINGS AND WORK PAD LOCATIONS TO IDENTIFY WHERE IMPACTS TO WETLANDS COULD BE FURTHER AVOIDED AND MINIMIZED. WHERE POSSIBLE, EVERSOURCE HAS SOUGHT OFF-ROW AGREEMENTS TO MINIMIZE IMPACTS, AND IS CROSSING IN NARROW PORTIONS OF WETLANDS WHERE FEASIBLE BASED ON GRADES AND LINE CLEARANCES. DUE TO THE LOCATION OF THE EXISTING TRANSMISSION LINE AND LOCATION OF THE PROPOSED STRUCTURE REPLACEMENTS, THERE IS NO ALTERNATIVE THAT WOULD HAVE LESS ADVERSE IMPACT ON THE AREA AND ENVIRONMENT. THE PROJECT AVOIDS IMPACTS IN NEW LOCATIONS BY UTILIZING THE EXISTING ROW, USING PRE-EXISTING ON- AND OFF-ROW ACCESS ROUTES, AND BY AVOIDING PERMANENT WETLAND CROSSINGS WITH PERMANENT FILL AND CULVERTS.



SECTION I.II - MARSHES (Env-Wt 313.03(b)(2))

Describe how the project avoids and minimizes impacts to tidal marshes and non-tidal marshes where documented to provide sources of nutrients for finfish, crustacean, shellfish, and wildlife of significant value.

THE PROPOSED PROJECT DOES NOT PROPOSE ANY WETLAND IMPACT TO TIDAL WETLAND SYSTEMS FOR WORK PAD PLACEMENT OR ASSOCIATED ACCESS. ALL OF THE PROPOSED IMPACTS ARE TO FRESHWATER WETLAND SYSTEMS. THE MAJORITY OF THE IMPACTS ARE TEMPORARY, WITH APPROXIMATELY 880 SQUARE FEET OF PERMANENT FRESHWATER WETLAND IMPACTS TO ERECT REPLACEMENT STRUCTURES. IMPACTS HAVE BEEN AVOIDED AND MINIMIZED TO THE GREATEST EXTENT BY SHIFTING WORK AREAS AND ACCESS ROADS OUT OF WETLANDS AND CROSSING WETLANDS AT THE NARROWEST AREA IN WETLANDS WHERE POSSIBLE. IT IS NOT ANTICIPATED THAT TEMPORARY WETLAND IMPACTS DUE TO TIMBER MATTING WILL HAVE LONG TERM IMPACTS TO THE WETLANDS OR THE WETLAND SYSTEMS ABILITY TO PROVIDE SOURCES OF NUTRIENTS TO WILDLIFE OF SIGNIFICANT VALUE. LARGE MARSH WETLAND COMPLEXES ARE NOT PRESENT WITHIN THE T198 LINE ROW OR HAVE BEEN AVOIDED. MOST OF THE PROPOSED TEMPORARY IMPACTS ARE ASSOCIATED WITH SCRUB-SHRUB WETLANDS, WITH LESSER IMPACTS TO EMERGENT AND WET MEADOW TYPE WETLANDS. THE MAJORITY OF THE WORK WILL BE CONDUCTED IN THE NON-GROWING SEASON ACCORDING TO NHFG TOY RECOMMENDATIONS AND WILL BE TEMPORARY IN NATURE; THEREFORE ALL IMPACTED HABITAT IS EXPECTED BE EFFECTIVELY RESTORED FOLLOWING CONSTRUCTION.

SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3))

Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.

THE MAJORITY OF IMPACTS TO WETLANDS ARE TEMPORARY USING TIMBER MATTING FOR WORK PADS AND ASSOCIATED ACCESS. ONE LARGE PERENNIAL STREAM CROSSING, USING TIMBER MATS, IS PROPOSED. OTHER SMALLER STREAMS IN WETLAND SW2, ALONG THE ACCESS ROAD TO STRS 65 AND 66, AND IN WETLAND TW5 WILL BE COMPLETELY BRIDGED UTILIZING TEMPORARY TIMBER MATTING TO PROVIDE FOR HYDROLOGIC CONNECTIVITY DURING CONSTRUCTION; NO IMPACTS TO THE STREAM BED OR BANKS WILL OCCUR AT THESE CROSSINGS. WHEN NECESSARY, MATTING CROSSINGS ARE ENLARGED CONCURRENTLY WITH LARGE STORM EVENTS. HYDROLOGIC CONNECTIVITY IS MONITORED DURING CONSTRUCTION BY BOTH ENVIRONMENTAL MONITORS AND EVERSOURCE CONSTRUCTION REPRESENTATIVES AS PART OF EROSION CONTROL MONITORING AND SAFETY OVERSIGHT.

SECTION I.IV - JURISDICTIONAL IMPACTS (Env-Wt 313.03(b)(4))

Describe how the project avoids and minimizes impacts to wetlands and other areas of jurisdiction under RSA 482-A, especially those in which there are exemplary natural communities, vernal pools, protected species and habitat, documented fisheries, and habitat and reproduction areas for species of concern, or any combination thereof.

AVOIDANCE AND MINIMIZATION OF IMPACTS TO JURISDICTIONAL WETLANDS AND SURFACE WATERS WERE AVOIDED BY CAREFUL DESIGN OF THE PROJECT. THE NHB HAS IDENTIFIED DWARF WEDGEMUSSEL, AMERICAN EEL, MARSH WREN, N. LEOPARD FROG, SORA, AND WOOD TURTLE ALONG WITH A SILVER-MAPLE-FALSE NETTLE-SENSITIVE FERN FLOODPLAIN FOREST NATURAL COMMUNITY. THE USFWS HAS IDENTIFIED NORTHERN LONG-EARED BAT, TRICOLORED BAT, DWARF WEDGE MUSSEL AND MONARCH BUTTERFLY. THE EXISTING ROW PASSES THROUGH THE SILVER MAPLE FLOODPLAIN FOREST, HOWEVER IT WILL NOT RESULT IN DIRECT IMPACTS BECAUSE THE MAINTAINED ROW IS NOT FORESTED AND ONLY EXISTING OFF-ROW ACCESS ROADS WILL BE USED; ALL IMPACTS TO NON-FORESTED WETLANDS ALONG THE FLOODPLAIN WILL BE MATTED. THE PROJECT HAS AVOIDED THE ASHUELOT AND S. BRANCH OF THE ASHUELOT AND THEREFORE NO IMPACTS TO DWARF WEDGE MUSSEL OR AMERICAN EEL ARE ANTICIPATED. POTENTIAL AND CONFIRMED VERNAL POOLS HAVE BEEN IDENTIFIED AND AVOIDED WHERE POSSIBLE; HOWEVER COMPLETE AVOIDANCE WAS NOT POSSIBLE IN ALL INSTANCES DUE TO THE SIZE AND ORIENTATION OF THE POOL HABITAT AND LACK OF EXISTING, VIABLE OFF-ROW ACCESS ROUTES. THE NHFG HAS RECOMMENDED THAT ALL WORK WITHIN AND ALONG THE FLOODPLAIN WETLANDS BE CONDUCTED BETWEEN OCT 16 AND APRIL 14: THIS WILL MINIMIZE IMPACTS TO PVPS AND WILL ENSURE THAT WORK WILL NOT SUBSTANTIALLY OVERLAP WITH WETLAND USE BY MARSH WREN, N. LEOPARD FROG, SORA, WOOD TURTLE, NLEB AND TRICOLOR BAT AND MONARCH BUTTERFLY. WHERE POSSIBLE, WETLANDS CROSSINGS ARE LOCATED AT THE NARROWEST PORTION OF THE WETLAND, ACCESS AND WORK PADS WERE AVOIDED IN VPD SOILS, AND ACCESS WAS SHIFTED TO THE SIDE OF THE ROW WITH THE LEAST AMOUNT OF WETLAND CROSSING IMPACT. ADDITIONAL AVOIDANCE AND MINIMIZATION DETAILS ARE PROVIDED IN THE NARRATIVE PORTIONS OF THE PERMIT APPLICATION.

SECTION I.V - PUBLIC COMMERCE, NAVIGATION, OR RECREATION (Env-Wt 313.03(b)(5))

Describe how the project avoids and minimizes impacts that eliminate, depreciate or obstruct public commerce, navigation, or recreation.

THE PROPOSED PROJECT IS LOCATED WITHIN AN EXISTING AND MAINTAINED UTILITY LINE CORRIDOR AND NOT WITHIN PUBLIC ROADWAYS EXCEPT FOR ENTERING AND EXITING THE ROW. THEREFORE, IT IS NOT ANTICIPATED THE PROPOSED PROJECT WILL HAVE SIGNIFICANT IMPACT TO PUBLIC COMMERCE. IN ADDITION, THERE ARE NO IMPACTS PROPOSED TO THE ASHUELOT RIVER OR S. BRANCE OF THE ASHUELOT RIVER; THEREFORE NO IMPACTS TO NAVIGATION BY RECREATIONAL USERS OF THE RIVERS ARE ANTICIPATED. THE ASHUELOT RAIL TRAIL IS LOCATED PARALLEL TO THE PROJECT AREA IN KEENE AND NORTHERN SWANZEY, HOWEVER ASIDE FROM ONE CROSSING ON AN EXISTING TOWN ROAD, NO DIRECT IMPACTS OR USE OF THE RAIL TRAIL ARE PROPOSED. CONTRACTORS WILL BE MADE AWARE OF THE LOCATION OF THE RAIL TRAIL AND APPROPRIATE SIGNAGE WILL BE USED TO ALERT TRAIL USERS OF THE PROJECT WORK WHEN CONSTRUCTION IS ACTIVE. THEREFORE, NO IMPACTS TO RECREATION ARE ANTICIAPTED.

SECTION I.VI - FLOODPLAIN WETLANDS (Env-Wt 313.03(b)(6))

Describe how the project avoids and minimizes impacts to floodplain wetlands that provide flood storage.

THE PROJECT WILL BE LOCATED WITHIN AN EXISTING AND MAINTAINED UTILITY CORRIDOR THAT IS LOCATED WITHIN MAPPED FEMA FLOODPLAINS IN SEVERAL LOCATIONS. THE MAPPED FLOODPLAINS ASSOCIATED WITH THE ASHUELOT AND S. BRANCH OF THE ASHUELOT RIVER ARE EXTENSIVE, AND THE UTILITY CORRIDOR AND ASSOCIATED POLES HAVE BEEN LOCATED IN THE FLOODPLAIN FOR DECADES. DUE TO THE SIZE OF THE FLOODPLAIN AND THE LOCATION OF THE T198 UTILITY CORRIDOR THROUGH IT, COMPLETE AVOIDANCE WAS NOT POSSIBLE AND NO PRACTICAL ALTERNATIVED EXIST TO AVOID THE MAPPED FLOODPLAIN AREAS. THERE WILL NOT BE A NET INCREASE IN THE NUMBER OF POLES WITHIN THE FLOODPLAIN, IN FACT DUE TO THE PERMANENT REMOVAL OF TWO STRUCTURES FROM THE FLOODPLAIN, THERE WILL BE A NET REDUCTION OF THE NUMBER OF POLES IN THE FLOODPLAIN AREAS. ALL WORK AREAS WITHIN THE FLOODPLAINS WILL BE TEMPORARY AND MATTED INCLUDING NEARLY ALL UPLAND AREAS AND ALL WETLAND AREAS IN KEENE AND SWANZEY. NO CHANGES TO THE FLOODPLAIN STORAGE OR FLOOD ATTENUATION CAPACITY WILL RESULT FROM THIS PROJECT AND NO NEGATIVE IMPACTS TO NEARBY LANDOWNERS ARE ANTICIPATED.

SECTION I.VII - RIVERINE FORESTED WETLAND SYSTEMS AND SCRUB-SHRUB – MARSH COMPLEXES (Env-Wt 313.03(b)(7))

Describe how the project avoids and minimizes impacts to natural riverine forested wetland systems and scrub-shrub – marsh complexes of high ecological integrity.

ONE LARGE RIVERINE FORESTED WETLAND AND SCRUB-SHRUB-MARSH COMPLEX WETLAND IS LOCATED WITHIN AND ADJACENT TO THE T198 UTILITY CORRIDOR IN KEENE AND SWANZEY, AND IS ASSOCIATED WITH THE ASHUELOT RIVER, S. BRANCH OF THE ASHUELOT AND OTHER UNNAMED TRIBUTARIES. NEARLY ALL OF THE IMPACTED WETLANDS ARE SCRUB-SHRUB OR EMERGENT WITHIN THIS WETLAND COMPLEX. THE UTILITY ROW CLEARING WILL NOT BE EXPANDED, AND ONLY TEMPORARY IMPACTS TO FORESTED WETLANDS ASSOCIATED WITH AN EXISTING ACCESS ROAD CROSSING ARE PROPOSED; ALTHOUGH BECAUSE THE ROAD ALREADY EXISTS NO CLEARING IS REQUIRED. ALL WORK AREAS IN THIS WETLAND COMPLEX WILL BE MATTED DURING CONSTRUCTION. WORK WILL BE COMPLETED BETWEEN OCTOBER 16 AND APRIL 14 TO FURTHER AVOID AND MINIMIZE IMPACTS TO WILDLIFE THAT COULD UTILIZE THIS WETLAND, PER RECOMMENDATIONS BY NHFG. TWO STRUCTURES WILL BE PERMANENTLY REMOVED FROM THE WETLAND COMPLEX REDUCING THE TOTAL NUMBER OF POLES AND ELIMINATING THE NEED TO RETURN TO THESE AREAS FOR FUTURE MAINTENANCE. EVERSOURCE IS ALSO COMPLETING ALL OF THE STRUCTURE REPLACEMENTS BETWEEN THE ASHUELOT RIVER CROSSING AND THE KEENE WWTP ACCESS ROAD DURING THIS PROJECT TO REDUCE THE NUMBER OF MAINTENANCE MOBILIZATIONS AND ASSOCIATED TEMPORARY WETLAND IMPACTS IN THESE AREAS (STR 129-114, AND 108-104). THE MATTING, ADHERANCE TO RECOMMENDED TOY RESTRICTIONS, MONITORING AND RESTORATION OF TEMPORARY IMPACTS WILL MINIMIZE IMPACTS TO THIS WETLAND RESTRICTIONS, MONITORING AND RESTORATION OF TEMPORARY IMPACTS WILL MINIMIZE IMPACTS TO THIS WETLAND SYSTEM TO THE GREATEST EXTENT POSSIBLE.

SECTION I.VIII - DRINKING WATER SUPPLY AND GROUNDWATER AQUIFER LEVELS (Env-Wt 313.03(b)(8)) Describe how the project avoids and minimizes impacts to wetlands that would be detrimental to adjacent drinking water supply and groundwater aquifer levels.

THE FOOTPRINT OF THE PROPOSED POLE REPLACEMENT IS MINIMAL AND IS NOT ANTICIPATED TO BE DETRIMENTAL TO ADJACENT DRINKING WATER SUPPLY AND GROUNDWATER AQUIFER LEVELS. THE PROJECT AREA IS NOT LOCATED WITHIN MAPPED GA1 OR GAA GROUNDWATER RESOURCES OR WITHIN A SOURCE WATER PROTECTION AREA OR WELLHEAD PROTECTION AREA. THE PROJECT AVOIDS DISTURBANCE TO THE ASHUELOT RIVER AND THEREFORE THERE IS NO PROPOSED DETRIMENTAL IMPACT TO DRINKING WATER SUPPLY OR GROUNDWATER AQUIFER LEVELS.

SECTION I.IX - STREAM CHANNELS (Env-Wt 313.03(b)(9))

Describe how the project avoids and minimizes adverse impacts to stream channels and the ability of such channels to handle runoff of waters.

THE PROJECT DOES NOT PROPOSE ANY PERMANENT STREAM CROSSINGS. TEMPORARY CROSSINGS ARE DESIGNED TO SPAN CHANNELS AND AVOID OBSTRUCTING STREAM FLOW. ONE BROOK CROSSING IS CURRENTLY PROPOSED TO INCLUDE TEMPORARY MATTING WITHIN THE STREAM/WETLAND COMPLEX HOWEVER AN OPENING TO ALLOW FOR FLOW WILL BE MAINTAINED. SECTION I.X - SHORELINE STRUCTURES - CONSTRUCTION SURFACE AREA (Env-Wt 313.03(c)(1)) Describe how the project has been designed to use the minimum construction surface area over surface waters necessary to meet the stated purpose of the structures.

THERE ARE NO PROPOSED NEW STRUCTURES IN SURFACE WATERS SUCH AS DOCKS OR PERMANENT ROAD CROSSINGS. IMPACTS HAVE BEEN MINIMIZED TO THE GREATEST EXTENT THROUGH CAREFUL DESIGN AND USE OF CONSTRUCTION EQUIPMENT WITH THE LEAST GROUND DISTURBANCE. TIMBER MATTING IS UTILIZED TO MINIMIZE AND PREVENT RUTTING AND COMPACTION IN WETLANDS.

SECTION I.XI - SHORELINE STRUCTURES - LEAST INTRUSIVE UPON PUBLIC TRUST (Env-Wt 313.03(c)(2)) Describe how the type of construction proposed is the least intrusive upon the public trust that will ensure safe docking on the frontage.

THE PROPOSED PROJECT DOES NOT INVOLVE IMPACTS TO SHORELINE FRONTAGE THAT WOULD IMPACT DOCKING.

SECTION I.XII - SHORELINE STRUCTURES – ABUTTING PROPERTIES (Env-Wt 313.03(c)(3))

Describe how the structures have been designed to avoid and minimize impacts on ability of abutting owners to use and enjoy their properties.

THE PROPOSED PROJECT IS WITHIN AN EXISTING AND MAINTAINED TRANSMISSION LINE ROW. EVERSOURCE HOLDS EASEMENTS ACROSS PRIVATE PROPERTIES TO MAINTAIN THE ELECTRICAL INFRASTRUCTURE. EXISTING UTILITY POLES WILL BE REPLACED IN THE SAME ALIGNMENT AND THE ROW CORRIDOR WILL CONTINUE TO BE MAINTAINED AS AN EXISTING AND ROUTINELY MOWED ROW. EVERSOURCE IS NOT PROPOSING TO EXPAND THE WIDTH OF THE ROW AND NO NEW LINES ARE PROPOSED TO BE INSTALLED. IT IS NOT ANTICIPATED THAT THE PROJECT WILL IMPACT ABUTTING PROPERTY OWNERS' ABILITY TO USE AND ENJOY THEIR PROPERTIES. IN ADDITION, EVERSOURCE PROJECT SERVICES ENGAGES LANDOWNERS WITH QUESTIONS AND CONCERNS THROUGHOUT A PROJECT.

SECTION I.XIII - SHORELINE STRUCTURES - COMMERCE AND RECREATION (Env-Wt 313.03(c)(4))

Describe how the structures have been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.

THE PROJECT DOES NOT PROPOSE DIRECT IMPACT TO SURFACE WATERS WHICH WOULD IMPACT NAVIGATION, PASSAGE, COMMERCE, AND RECREATION. THERE ARE NO DIRECT IMPACTS TO THE ASHUELOT RIVER OR S. BRANCH ASHUELOT RIVER. NO DIRECT IMPACTS OR USE OF THE ASHUELOT RAIL TRAIL ARE PROPOSED AND APPROPRIATE SIGNAGE AND OTHER INFORMATION WILL BE DEPLOYED WHEN WORKING NEAR THE RAIL TRAIL. THEREFORE, THE PROJECT DOES NOT PROPOSE IMPACTS TO THE PUBLIC'S RIGHT TO NAVIGATION, PASSAGE, COMMERCE, AND RECREATION. SECTION I.XIV - SHORELINE STRUCTURES – WATER QUALITY, AQUATIC VEGETATION, WILDLIFE AND FINFISH HABITAT (Env-Wt 313.03(c)(5))

Describe how the structures have been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.

THE PROPOSED PROJECT HAS BEEN DESIGNED TO MINIMIZE DIRECT IMPACTS TO WETLANDS AND SURFACE WATERS TO THE GREATEST EXTENT. TEMPORARY WETLAND IMPACTS HAVE BEEN MINIMIZED TO THE EXTENT NECESSARY TO SAFELY REPLACE EXISTING STRUCTURES ON THE T198 TRANSMISSION LINE. EXISTING ACCESS WITHIN THE ROW HAS BEEN UTILIZED TO THE GREATEST EXTENT, AND TIMBER MATTING WILL BE UTILIZED WITHIN WETLANDS TO MINIMIZE AND PREVENT RUTTING AND COMPACTION TO WETLANDS AND WETLAND VEGETATION. THE PROPOSED PROJECT WILL UTILIZE NHDES BEST MANAGEMENT PRACTICES (BMPS) MANUAL FOR UTILITY MAINTENANCE IN AND ADJACENT TO WETLANDS AND WATERBODIES IN NEW HAMPSHIRE (MARCH 2019) AND THE NEW HAMPSHIRE STORMWATER MANUAL AS REQUIRED AS PART OF THE NHDES ALTERATION OF TERRAIN PERMIT FOR THE PROJECT. IN ADDITION, THE PROJECT WILL PREPARE A STORMWATER POLLUTION PREVENTION PLAN AS PART OF THE EPA CONSTRUCTION GENERAL PERMIT. EVERSOURCE WILL RETAIN AN ENVIRONMENTAL MONITOR TO COMPLETE EROSION CONTROL INSPECTIONS AND ADVISE THE TEAM ON PRACTICES TO MAINTAIN COMPLIANCE WITH WATER QUALITY. EVERSOURCE WILL ADHERE TO ALL BMPS PROVIDED FOR SPECIES PROTECTION BY NHB AND NHFG. AREAS ADJACENT TO ACCESS ROUTES AND WORK PADS ARE ANTICIPATED TO CONTINUE TO PROVIDE HABITATS TO A VARIETY OF SPECIES MAMMALS AND BIRDS AND THE TOY RESTRICTION PROPOSED BY NHFG WILL RESULT IN SUBSTANTIAL REDUCTION FOR WILDLIFE AND HABITAT IMPACTS. AFTER CONSTRUCTION, WETLAND IMPACTS WILL BE RESTORED AND UPLAND WORK PADS REDUCED TO APPROXIMATE 30 X 60 FOOT PADS AS PART OF UPLAND RESTORATION. THEREFORE, THE PROJECT IS NOT ANTICIPATED TO HAVE LONG-TERM IMPACTS ON SPECIES ASSOCIATED WITH WETLANDS GIVEN THE ROW HAS BEEN MANAGED AS A UTILITY CORRIDOR. NO STRUCTURES ARE PROPOSED IN STREAMS OR FISH HABITAT.

SECTION I.XV - SHORELINE STRUCTURES – VEGETATION REMOVAL, ACCESS POINTS, AND SHORELINE STABILITY (Env-Wt 313.03(c)(6))

Describe how the structures have been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.

THE PROPOSED STRUCTURE TO BE REPLACED IS LOCATED WITHIN AN EXISTING AND MAINTAINED UTILITY ROW AND DOES NOT PROPOSE REMOVAL OF TREES WITHIN SHORELAND JURISDICTION. TIMBER MATTING WILL BE UTILIZED WITHIN WETLANDS TO PROVIDE A STABLE AND SAFE SURFACE FOR CONSTRUCTION EQUIPMENT TO REPLACE THE EXISTING UTILITY POLE WHILE BUFFERING WETLAND VEGETATION FROM DIRECT IMPACT. TIMBER MATTING WILL BE UTILIZED TO BRIDGE MAT OVER TEMPORARY STREAM CROSSINGS, SPANNING OVER THE BANKS. BANKS WILL BE SEEDED AND MULCHED AS NECESSARY.

PART II: FUNCTIONAL ASSESSMENT

REQUIREMENTS

Ensure that project meets the requirements of Env-Wt 311.10 regarding functional assessment (Env-Wt 311.04(j); Env-Wt 311.10).

FUNCTIONAL ASSESSMENT METHOD USED:

HIGHWAY METHOD, SEE FUNCTION AND VALUES WORKSHEET AND APPLICATION NARRATIVE FOR ADDITIONAL DETAILS. NH METHOD WAS USED FOR THE ECOLOGICAL INTEGRITY FUNCTION. WETLAND FUNCTIONS AND VALUES/SERVICES HAVE BEEN TAKEN INTO CONSIDERATION REGARDING AVOIDANCE AND MINIMIZATION AND SITING FOR THE PROJECT.

NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: BENJAMIN GRIFFITH, JAMIE O'BRIEN, ELIZABETH OLLIVER

DATE OF ASSESSMENT: FALL 2024 AND SPRING 2025

Check this box to confirm that the application includes a NARRATIVE ON FUNCTIONAL ASSESSMENT:

For minor or major projects requiring a standard permit without mitigation, the applicant shall submit a wetland evaluation report that includes completed checklists and information demonstrating the RELATIVE FUNCTIONS AND VALUES OF EACH WETLAND EVALUATED. Check this box to confirm that the application includes this information, if applicable:

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Note: The Wetlands Functional Assessment worksheet can be used to compile the information needed to meet functional assessment requirements.

Attachment B: Identification of Natural and Cultural Resources

Site Description

The T198 Line Project area, or site, is located in a mix of commercial and predominantly rural, privately owned areas in the City of Keene and Towns of Swanzey and Troy within a cleared and maintained ROW. The site includes a section of the existing A152 transmission line in Keene and northern Swanzey, however no work is proposed along the A152 line as a part of this project. Natural cover within the ROW includes upland shrublands and wetland emergent and scrubshrub habitats. From near NH Route 101 in Keene, the ROW extends south past the Keene State College athletic fields to the Ashuelot River, in Swanzey, where it crosses the river and continues south through an extensive floodplain wetland complex west of the Keene Airport and Airport Road. The ROW then passes through an existing gravel pit and ascends into hillier terrain in Swanzey and Troy.

Identification of Cultural Resources

Normandeau Associates, Inc. (Normandeau) has been retained by Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource) to provide professional services for this project that relate to natural and cultural resource identification and assessment as well as permit applications for natural resource impacts required to complete the project. Normandeau has teamed with Independent Archaeological Consulting, LLC (IAC) to address cultural and historic resources.

A Request for Project Review (RPR) submitted by the Project was received by NH Division of Historical Resources (NHDHR) on December 19, 2024 and supplemented by results from Phase IB testing completed in areas proposed to be impacted by this project previously identified as archaeologically sensitive during previous Phase IA assessments of the T198 IROW. Based on the results of the Phase IB testing, impacts to confirmed cultural resources in the project footprint will be avoided using timber matting to bridge existing stone walls and/or using existing breaches in stone walls. Additionally, exclusionary fencing will be installed in select locations to prevent construction of work pads overtop cultural resources. Based on the results of the Phase IB testing and the Project's proposed avoidance measures, NHDHR returned a determination on January 1, 2025 that no historic properties will be affected by the Project and no further archaeological study is necessary. See a copy of the NHDHR response to the RPR at the end of Attachment E.

Identification of Jurisdictional Wetlands

Normandeau delineated and classified wetlands, photographed resources, and recorded data relevant to functions and values in 2024 with supplemental spot checks in early 2025. Normandeau confirmed wetland boundaries and conducted additional data collection in July, August, and October 2024 including field mapping of very poorly drained soils and rare, threatened, and endangered plants. The wetland delineation was conducted in accordance with the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual using the Routine Determinations Method and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual as required by the New Hampshire Department of Environmental Services (NHDES) Wetlands Bureau and the USACE. As directed by DES, the approximate boundaries of soils mapped as histosols and/or histic epipedon soils have been included on project plans and are referred to below as very poorly drained (VPD) soils. The wetland delineation and characterization was conducted by Normandeau's New Hampshire Certified Wetland Scientists (CWSs): Mr. Benjamin Griffith (CWS No. 298), Normandeau's Ms. Jamie O'Brien (CWS No. 329), and Dr. Elizabeth Olliver (CWS No. 337), with additional support from Mr. William McCloy (CWS No. 268) in 2024 and 2025. Photos of delineated resources are available in Attachment Q.

A function and values assessment was completed for each wetland according to the Highway Method as required by NHDES. All wetlands were evaluated in the field, with supplemental information added based on desktop reviews and additional information (e.g. presence of rare, threatened, or endangered (RTE) species that became known following the field investigation) (Table 1). Where possible, the project team used the functions and values (or services) of wetlands to prioritize the avoidance and minimization of impacts. Where practicable, priority was given to wetlands with more principal functions and/or values/services including wildlife habitat, flood flow alteration and known or observed presence of RTE species. See Attachment R for function and value forms.

Wetland		Functions and Values														
	Cowardin	GR	GD	FA	FH	SR	NT	PE	SS	WH	RE	EV	UH	VA	TE	EI
				Kee	ne Sta	nte Co	llege	Wetla	nds							
KW11	PEM1B (100%)	-	-	Р	-	Р	S	S	-	S	S	S	-	S	-	5.5
KW12H	PEM1E (100%)	Р	-	Р	-	Р	S	S	-	Р	Р	S	-	S	-	5.9
KW12G	PSS1E (100%)	Р	-	Р	-	Р	S	S	-	Р	Р	S	-	S		6.3
KW12F	PEM1E (100%)	-	-	Р	-	S	S	S	-	S	Р	S	-	S	-	7.2
KW12E	PSS1E (100%)	-	-	Р	-	S	S	S	-	S	Р	S	-	S	-	6.8
KW12D	PSS1E (100%)	S	-	Р	-	Р	S	S	-	Р	Р	S	-	S	-	5.5
KW12C	PSS1E (100%)	S	-	Р	-	Р	S	S	-	S	Р	S	-	-	-	5.5
KW12B	PSS1E (100%)	Р	-	Р	-	Р	S	S	-	Р	Р	S	-	S	-	5.9
KW12A	PSS1E (100%)	Р	-	Р	-	Р	S	S	-	Р	Р	S	-	S	-	6.3
KW13	PSS1B (100%)	S	-	Р	-	Р	S	S	-	S	-	-	-	S	-	5.
KW14	PSS1E (100%)	Р	-	Р	-	Р	S	S	-	Р	Р	S	-	S	-	5.
KW15.1	PEM1B (100%)	-	-	-	-	Р	-	-	-	S	S	-	-	-	-	5.
	Ashuelo	t River	and S	outh I	Branc	h of tl	he Ast	nuelot	Rive	r Flood	plain C	omple	x			
1011115 2	PSS1E (89%)		6						Р	Р		Р	Р	Р	s	7.
KW15.2	PAB4G (11%)	S	S	P	P	P	P	P	P	Р	Р	P	P	P	3	1.
KW15.3	PSS1E (100%)	S	S	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	S	7.
SAW1	PSS1E (100%)															
SAW1A	PSS1E (100%)															1
SAW1B	PSS1E (100%)	S	S	P	P	P	P	P	P	Р	S	S	P	P	S	
SAW2	PSS1E (100%)	1														

 Table 1. Summary of the functions and values of each jurisdictional wetland in the vicinity of the Eversource T198

 Line Project.

SWOX	PUB1H (100%)	1				1		I	1	1	l	1				1
	PSS1E (82%)	1														
	PEM1E,F (9%)															
SW1Z	PFO1E (5%)															
	PUB1H (3%)															
	PSS1E (95%)		1	1	1	1	1	\vdash	1-		1				+	
SW1Y	PFO1E (5%)	S	S	P	S	S	P	S	-	P	-	-	S	-	-	10
SW1	PSS1E (100%)	S	S	P	S	S	S	S	-	P	-	-	s	-	-	10
	PSS1E (65%)				1			1			1			1	-	†
SW1.1	PFO1E (35%)	S	S	P	S	P	P	S	-	P	-	-	S	-	-	10
SW1.1A	PFO1C (100%)	-	-	P		-	-	-	-	-	-	-	-	-	-	4.6
SW1.1B	PFO1E (100%)	-	-	P	-	s	s	P	1 -	P	-	s	S	-	-	6.2
SW1.1C	PSS1C (100%)	-	-	P	-	S	Р	S	-	Р	-	-	S	-	-	7.6
	PSS1E (65%)		1			<u> </u>	1		-					1	<u> </u>	1
SW2.3	PEM1E (35%)	S	S	P	S	P	P	S	-	P	-	-	S	-	-	8.1
SW1.3	PSS1E (100%)	S	S	Р	S	P	S	S	-	P	-	-	S	-	-	9.5
	PSS1E (88%)		1										Í			1
SW2.1	PUB3H (7%)	s	s	Р	S	s	Р	s	-	Р	-	-	s	-	-	9.5
	PEM1E (5%)								1					1		
	PSS1E (60%)		1											1-		
SW2	PEM1E (34%)	s	s	Р	P	s	P	Р	Р	Р	-	-	s	-	-	7.7
	PFO1E (7%)						Ì									
SW2-E1	PSS1E (100%)	S	-	Р	-	Р	-	S	-	S	-	-	-	-	-	7.7
SW2-E2	PSS1E (100%)	S	S	Р	S	Р	Р	S	-	Р	-	-	S	-	-	7.7
SW2.2	PSS1E (100%)	S	S	Р	S	Р	Р	S	-	Р	-	-	S	-	-	7.7
				Ren	nainin	g Swa	inzey	Wetla	nds							
SW7	PSS1E (100%)	S,	-	Р	-	S	S	S	-	S	-	-	-	S	-	7.7
SW8	PSS1E (100%)	S	-	Р	-	S	S	Р	-	Р	-	-	-	S	-	10
SW9	PSS1E (100%)	S	S	S	-	-	S	Р		Р	-	-	-	S	-	10
SW10	PSS1E (100%)	-	-	S	-	-	S	Р	•	Р	-	-	-	S	-	10
SW11	PSS1E (100%)	-	-	S	-	S	S	Р	-	Р	-	-	-	S	-	10
SW20	PEM1E (100%)	-	-	S	-	Р	S	-	-	-		-	-	-	-	3.7
SWB1	PSS1E (100%)	-	-	S	-	-	-	S	-	Р	-	-	-	-	-	9
SW23	PSS1E (100%)	_	S	S	-	-	_	Р	-	Р	-	-	-	-	-	5.4
SW23.1	PSS1E (100%)	-	S	Р	-	S	S	S	Р	S	-	-	-	S	-	4
SW23.2	PSS1E (100%)	-	S	Р	-	Р	S	S	-	S	-	-	-	-	-	3.2
SW28.2	PSS1E (100%)	-	Р	Р	-	S	S	S	Р	Р	S	S	-	S	-	8.6
SW28.1	PSS1E (100%)	-	Р	Ρ	-	Р	Р	Р	Р	Р	S	S	Р	S	-	8.1
	PSS1F (100%)	-	Ρ	Р	-	S	S	Р	S	Р	S	S	Р	S	-	7.1
SW28	13511 (10070)					Р	S	-	_	S					-	8
SW28 SW31	PSS1E (100%)	-	-	Р	-	Р	2	-		3				-	_	
	<u> </u>	-		P S	-	P	S	-	-	S	-	-	-	-	-	8.5

	1			Ē.		6		r d		n 13		r i	r i	í	i 1	r i	
TW1	PSS1E (89%)	- I	_	s	_	s	s	_	_	Р	s	_	_	_	_	8.5	
1001	PFO1E (11%)					Ĵ					5			_		0.5	
TW3	PEM1B (100%)	-	-	-	-	S	-	-	-	S	-	-	-	-	-	8.5	
TW4	PSS1B (100%)	-	-	S	-	-	-	-	-	-	-	-	-	-	-	7.6	
TAUE	PEM1E (98%)			6	Р	-		6		-	Р	6			6		7.6
TW5	PFO1E (2%)	-	S		S	S	S	S	S	P	S	-	S	S	-	7.6	
TWA1	PEM1B (100%)	-	-	S	-	-	-	-	-	-	-	-	-	-	-	4.5	
TW6	PSS1E (100%)	-	-	S	-	S	-	-	-	S	S	-	S	-	-	7.1	
TW7	PSS1E (100%)	-	-	S	-	S	-	-	-	Р	S	-	S	-	-	9	
TW8	PSS1E (100%)	S	-	Р	-	S	Р	-	-	S	S	S	S	-	S	7.1	

GR = Groundwater recharge; GD = Groundwater discharge; FA = Flood flow alteration; FH = Fish & shellfish habitat; SR = Sediment/toxicant/pathogen retention; NT = Nutrient removal/retention/transformation; PE = Production export; SS = Sediment/shoreline stabilization; WH = Wildlife habitat; RE = Recreation (consumptive and nonconsumptive); EV = Educational/scientific value; UH = Uniqueness/heritage; VA = Visual quality/aesthetics; TE = Threatened/endangered species or habitat; EI = Ecological integrity.

Keene State College Wetlands

The wetlands in Keene north of Krif Road consist of a series of palustrine scrub-shrub, emergent, and wet meadow wetlands directly abutted by development, including Route 101, the Ashuelot Rail Trail, and the Keene State College athletic facilities. The shrub layer of these wetlands is dominated by meadowsweet (*Spirea latifolia*), dogwoods (*Cornus sp.*), false glossy buckthorn (*Frangula alnus*), and buttonbush (*Cephalanthus occidentalis*). The herbaceous layer of these wetlands is dominated by sedges (*Carex sp.*), common grass-leaved-goldenrod (*Euthamia graminifolia*), smartweeds (*Persicaria sp.*), soft rush (*Juncus effusus*), bulrushes (*Scirpus sp.*), colonial bendgrass (*Agrostis capillaris*), spotted water-hemlock (*Cicuta maculata*), sensitive fern (*Onoclea sensibilis*), and purple loosestrife (*Lythrum salicaria*).

Overall, the principal functions of these wetlands are flood flow alteration and sediment retention. While not contiguous to the Ashuelot River, they are within its mapped 100-year floodplain and receive sediment laden surface water runoff from the development that surrounds them that contains significant amounts of impervious surfaces. Many of these wetlands also provide wildlife habitat and recreation, as they constitute a large wildlife corridor of suitable habitat for amphibians, wetland songbirds, insects, and small mammals and are adjacent to the network of established walking paths associated with the college that offer easy access for nature viewing and birding. Many of these wetlands are also at least suitable for groundwater recharge, nutrient retention, production export, educational value, and visual aesthetics, with some of these functions and/or values being a principal feature of certain wetlands.

Ashuelot River and South Branch of the Ashuelot River Floodplain Complex

The wetlands south of Krif Road in Keene down to Old Homestead Highway in Swanzey are part of the large complex of floodplain wetlands associated with the Ashuelot River, which flows parallel to the ROW near Structures 114 through 129, and the South Branch of the Ashuelot River, which meanders around and through the ROW near Structures 102 through 109. In the ROW, these wetlands consist of a matrix of palustrine scrub-shrub, emergent, and flooded oxbows. Outside of the maintained ROW, portions of this wetland complex consist of silver maple - false nettle - sensitive fern floodplain forest, an exemplary natural community in NH. This wetland complex is bordered by rural to light residential development to the west and the Keene Dillant-Hopkins Airport, the Keene Waste Water Treatment facility, and an active gravel pit to the east. The shrub layer of the wetlands in the ROW is dominated by meadowsweets, winterberry (*llex verticillate*), maleberry (*Lyonia ligustrina*), buttonbush, and false glossy buckthorn. The herbaceous layer is dominated by sedges, bulrushes, sensitive fern, royal fern (*Osmunda spectabilis*), tall-white aster (*Doellingeria umbellata*), water pepper (*Persicaria hydropiper*), goldenrods (*Solidago rugosa* and *Solidago gigantea*), three-way sedge (*Dulichium arundinaceum*), bluejoint (*Calamagrostis canadensis*), and rattlesnake manna grass (*Glyceria canadensis*).

This wetland complex constitutes the highest functioning and most valuable wetlands in the project area. They all provide flood flow alteration as principal functions, as they are within the 100-year floodplain of the Ashuelot River and/or South Branch of the Ashuelot River, with some being directly contiguous to the river channel. Nearly all of them also provide as principal functions nutrient removal and attenuation and wildlife habitat, as they have significant potential for nutrient transformation and contain a matrix of habitats suitable for many wetland-dependent wildlife species, including multiple rare, threatened, or endangered species. Those wetlands directly contiguous to the Ashuelot, South Branch of the Ashuelot, and/or one of their tributaries also actively provide shoreline stabilization as a principal function. All these wetlands are also suitable for groundwater recharge, as they are underlain by high-yield stratified drift aquifers that are potentially valuable for drinking water (GA2 groundwater classification), and those directly contiguous with the rivers and/or their tributaries are also suitable for groundwater discharge. Many of these wetlands are at least suitable for sediment retention, production export, and fish and shellfish habitat, as they contribute to the suitability of the Ashuelot River as fish and shellfish habitat through the exporting of nutrients and help to maintain its high water quality. Those wetlands in the northern portion of this complex also provide recreation, educational value, and visual quality as principal functions, as they are part of or near the Keene State College Wildlife Management Area (WMA), providing enhanced accessibility for nature viewing and significant opportunity for educational programs. The wetlands further south in this complex were determined to not be suitable for these same functions and values due to reduced accessibility. Finally, all these wetlands are at least suitable for uniqueness/heritage, as they are part of a large and unique type of wetland system NH that contains an exemplary natural community outside of the ROW, provides numerous functions and values, and contains archeologically sensitive areas and habitat for multiple RTE wildlife species.

Remaining Swanzey Wetlands and Troy Wetlands

The wetlands southwest of Whitcomb Road in Swanzey down to the town line with Troy consist almost entirely of palustrine scrub-shrub wetlands within a hilly terrain surrounded by forested

land with pockets of rural residential development. The shrub/sapling layer of these wetlands is dominated by meadowsweets, false glossy buckthorn, red maple (*Acer rubrum*), and gray birch (*Betula populifolia*), and yellow birch (*Betula alleghaniensis*). The herbaceous layer of these wetlands is dominated by sedges, bulrushes, sensitive fern, goldenrods, tall-white asters, bluejoint, fowl manna grass (*Glyceria striata*), cinnamon fern (*Osmundastrum cinnamomeum*), interrupted fern (*Osmunda claytoniana*), and New York fern (*Parathelypteris noveboracensis*).

Nearly all these wetlands provide as principal functions, or are at least suitable for, flood flow alteration and sediment retention, as they detain surface water runoff and the sediments transported by them. Many of these wetlands also provide wildlife habitat and production export as principal functions, as they provide suitable habitat and food sources for a range of wetland dependent wildlife species, including amphibians traversing the upland landscape. Nearly all these wetlands are suitable for nutrient removal, as they contain sufficiently dense vegetation cover to utilize any excess nutrients transported to them. Wetlands SW28 and SW28.1 provide groundwater discharge and uniqueness/heritage as a principal function and value, as this is a system of unique high gradient seep wetlands that generate a perennial stream and contains a plant community with rare wetland plants.

Troy Wetlands

The wetlands between the town line with Swanzey and West Hill Road in Troy also consist of mainly palustrine scrub-shrub wetlands, within a rolling terrain surrounded by forested land with some evidence of active logging occurring outside of the ROW in certain areas. The shrub/sapling layer of these wetlands is dominated by meadowsweets, red maple, gray birch, with dominance of highbush blueberry (*Vaccinimum corymbosum*) and maleberry in select wetlands. The herbaceous layer of these wetlands is dominated by sedges, bulrushes, rushes (*Juncus canadensis* and *Juncus pylaei*), cinnamon fern, interrupted fern, New York fern, and swamp dewberry (*Rubus hispidus*).

Overall, these wetlands have lower functions and values as compared to other wetlands on the project due to their smaller size and more isolated positions in the landscape. They are most suitable for flood flow alteration, sediment retention, and wildlife habitat, as they detain surface water runoff and the sediments transported by them from pre-existing access roads and ATV trails adjacent to them, and provide habitat for a range of wetland dependent wildlife species, including amphibians traversing the upland landscape. Those wetlands that occur in the vicinity of the existing ATV trails also have some suitability for recreation and uniqueness/heritage due to the presence of stone walls and other points of archaeological interest, but in a limited capacity.

Justification for the functional assessment of each wetland presented in Table 1 may be found in Attachment R.

Identification of Jurisdictional Streams

Normandeau delineated and classified streams concurrently with the wetland delineations in 2024 and 2025. The original high-water mark (OHWM) and top-of-bank (TOB) of larger perennial streams including the Ashuelot River, South Branch of the Ashuelot River, and one unnamed tributary that occurs in or within the vicinity of project activities were identified and mapped. For smaller perennial, intermittent, and ephemeral streams, only the centerline identified and mapped. All those streams mapped as a centerline will be completely spanned with no impacts to bed or banks. See Table H-2 in Attachment H for the list of identified jurisdictional streams.

Identification of Potential Vernal Pools and Vernal Pools

As Normandeau's delineations were largely completely outside of the vernal pool season, delineation of potential vernal pools (PVPs) in the vicinity the Project footprint were based on field observations of likely vernal pool habitat and review of aerial imagery. During spring 2025 spot checks that were completed for areas where additional wetland delineation was required, a few verified vernal pools were identified and added to the mapping. All verified VPs have been avoided; and previously undeveloped upland buffers around the pools will be restored. Not all PVPs were avoidable due to several being larger oxbow depressions that cross the entire ROW. However, the time of year (TOY) recommendation from NHFG will require dormant season and/or winter work with the comprehensive use of matting and frozen conditions in all PVPs and impacts are expected to be minimal.

Vernal Pool	Status	Impacts Proposed?
KVP12H	Verified	Temp. impacts to buffer
KW12D-1	Potential	No
KW15.3-1	Potential	Temp. impacts to buffer and installation of one structure pole
SAVP1A	Verified	Improvement of existing access road in buffer
SW1Z-1	Potential	Temp. impacts to buffer and pool
SW1Z-2	Potential	Temp. impacts to buffer
SW1Z-3	Potential	Temp. impacts to buffer
SW1Z-4	Potential	Temp. impacts to buffer
SWVP1.1B	Verified	Improvement of existing access road in buffer
SW1.1-7	Potential	Temp. impacts to buffer
SW1.1-8	Potential	Temp. impacts to buffer and pool
SW1.1-5	Potential	Temp. impacts to buffer
SW1.1-4	Potential	Temp. impacts to buffer
SW1.1-6	Potential	Temp. impacts to buffer
SW1.1-3	Potential	Temp. impacts to buffer and pool
SW1.1-2	Potential	Temp. impacts to buffer and pool
SW1.1-1	Potential	Temp. impacts to buffer and pool

 Table 2. Summary of the functions and values of each jurisdictional wetland in the vicinity of the Eversource T198

 Line Project.

Identification of Priority Resource Areas

Normandeau delineated and classified 26 wetlands as being priority resource areas (PRAs), either due to being a floodplain wetland contiguous with a tier 3 or higher watercourse or having a documented occurrence of a protected species or habitat. See Table H-1 in Attachment H for a list of the wetlands identified as PRAs. See supplemental maps at the end of Attachment E for the location of mapped PRAs relative to the Project footprint.

Identification of Rare, Threatened and Endangered Species and Natural Communities

The Natural Heritage Bureau (NHB) data check (NHB24-3243) has identified one invertebrate species, the dwarf wedgemussel (*Alasmidonta heterodon*), five vertebrate species including the wood turtle (*Glyptemys insculpta*), sora (*Porzana carolina*), northern leopard frog (Lithobates pipiens), marsh wren (*Cistothorus palustris*) and american eel (*Anguilla rostrata*) (See Attachment K for NHB Consultation and Attachment L for NHFG Consultation details). In addition, the NHB identified the silver maple - false nettle - sensitive fern floodplain forest as being present along the Ashuelot River in Swanzey. Normandeau has completed consultation with NHB and incorporated their recommendations into the project plans and specifications. Consultation with NHFG is ongoing at the time of this permit application.

During the wetland delineation, Normandeau field ecologists identified multiple small patches of Nuttal's reed grass (*Calamagrostis cinnoides*, State Endangered). The identified patches are near existing access roads and will be avoided to the extent practicable per NHB recommendations. NHB indicated that this species was likely to be delisted in 2025 due to the number of recent observations. Normandeau ecologists also observed N. leopard frog adults in Keene and transmitted these observations to NHFG. No other listed rare, threatened, and/or endangered species were observed during Normandeau's wetland delineations.

In the IPaC report for the project, the United States Fish and Wildlife Service (USFWS) identified the potential presence of the northern long-eared bat (*Myotis septentrionalis*), tricolored bat (*Perimyotis subflavus*), monarch butterfly (*Danaus plexippus*), and dwarf wedgemussel within the vicinity of the project area (see Attachment L). The proposed project involves very limited tree cutting with greater than 3-inch diameter at breast height (dbh) associated with danger tree removal. Eversource will coordinate with the US Fish and Wildlife Service (USFWS) and U.S. Army Corps of Engineers (USACE) to determine if best management practices are required. No records of known northern long-eared bat roost trees or hibernacula were noted by the NHB near the project area. Completion of the relevant determination keys resulted in a determination of Not Likely to Adversely Affect (NLAA) for both bat species and the dwarf wedgemussel (Attachment L). These results have been shared with the lead federal action agency contact for the Project for completion of required coordination with USFWS.

Invasive Species

Based on data collection during Normandeau's wetland delineation efforts, invasive plant species within the project footprint include false glossy buckthorn, purple loosestrife, autumn

Eversource T198 Line Project

olive, oriental bittersweet, and multiflora rosa and were documented in multiple locations within the project area. All work will comply with the *NHDES Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire* dated March 2019, which includes BMPs regarding the prevention of spreading invasive species.

During inspections by the environmental monitor, matting will be confirmed to be cleaned of plant debris and soil prior to being brought on site and placed within wetlands to prevent the introduction of new invasive species. In general, matting is typically cleaned using pressurized air and/or sweeping. Matting that is not observed to be clean at the laydown areas will be reported to the site civil contractor who will be directed to clean mats prior to transportation of mats into the ROW and placed within wetlands. Once timber mats are pulled from wetlands, when necessary (e.g. where work occurs in invasive plant locations), matting will be cleaned prior to transportation from the project area to further prevent the spread of invasive plant species. Seed mixes utilized for restoration will consist of native/naturalized plants.

Attachment C: NHDES Avoidance and Minimization Checklist Form



AVOIDANCE AND MINIMIZATION CHECKLIST Water Division/Land Resources Management Wetlands Bureau Check the Status of your Application



RSA/Rule: RSA 482-A/ Env-Wt 311.07(c)

This checklist can be used in lieu of the written narrative required by Env-Wt 311.07(a) to demonstrate compliance with requirements for Avoidance and Minimization (A/M), pursuant to RSA 482-A:1 and Env-Wt 311.07(c).

For the construction or modification of non-tidal shoreline structures over areas of surface waters without wetland vegetation, complete only Sections 1, 2, and 4 (or the applicable sections in <u>Attachment A: Minor and Major Projects</u> (NHDES-W-06-013).

The following definitions and abbreviations apply to this worksheet:

- "A/M BMPs" stands for <u>Wetlands Best Management Practice Techniques for Avoidance and Minimization</u> dated 2019, published by the New England Interstate Water Pollution Control Commission (Env-Wt 102.18).
- "Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes (Env-Wt 103.62).

SECTION 1 - CONTACT/LOCATION INFORMATION

APPLICANT LAST NAME, FIRST NAME, M.I.: Eversource Energy, Attn: Fennell, Jeremy

PROJECT STREET ADDRESS: T198 Transmission Line ROW

PROJECT TOWN: Keene, Swanzey, Troy

TAX MAP/LOT NUMBER: Multiple, See Parcel List

SECTION 2 - PRIMARY PURPOSE OF THE PROJECT

Env-Wt 311.07(b)(1) Indicate whether the primary purpose of the project is to construct a water-access structure or requires access through wetlands to reach a buildable lot or the buildable portion thereof.

🗌 Yes 🔀 No

If you answered "no" to this question, describe the purpose of the "non-access" project type you have proposed:

Eversource is proposing to replace 50 and remove 2 existing utility structures along the existing T198 Tranmission Line in portions of Keene, Swanzey, and Troy. The existing wooden structures will be replaced with weathered steel. The project requires temporary freshwater wetland impacts for timber matting access and work pad placement around utility poles, as well as permanent wetland impact for the installation of the proposed replacement structures. Upon completion of work, temporary timber matting will be removed and temporarily impacted wetland areas will be mulched and seeded with a native seed mix, as necessary. All disturbed upland areas will be restored and/or stabilized according to project plans and applicable BMPs.

Check the appropriate	DJECT DESIGN TECHNIQUES e boxes below in order to demonstrate that these items have been considered in (not applicable) for each technique that is not applicable to your project.	the planning of
Env-Wt 311.07(b)(2)	For any project that proposes new permanent impacts of more than one acre or that proposes new permanent impacts to a Priority Resource Area (PRA), or both, whether any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs.	Check
Env-Wt 311.07(b)(3)	Whether alternative designs or techniques, such as different layouts, construction sequencing, or alternative technologies could be used to avoid impacts to jurisdictional areas or their functions and values.	Check
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(1) Env-Wt 311.10(c)(2)	The results of the functional assessment required by Env-Wt 311.03(b)(10) were used to select the location and design for the proposed project that has the least impact to wetland functions.	Check
Env-Wt 311.07(b)(4) Env-Wt 311.10(c)(3)	Where impacts to wetland functions are unavoidable, the proposed impacts are limited to the wetlands with the least valuable functions on the site while avoiding and minimizing impacts to the wetlands with the highest and most valuable functions.	Check
Env-Wt 313.01(c)(1) Env-Wt 313.01(c)(2) Env-Wt 313.03(b)(1)	No practicable alternative would reduce adverse impact on the area and environments under the department's jurisdiction and the project will not cause random or unnecessary destruction of wetlands.	🔀 Check 🔲 N/A
Env-Wt 313.01(c)(3)	The project would not cause or contribute to the significant degradation of waters of the state or the loss of any PRAs.	Check
Env-Wt 313.03(b)(3) Env-Wt 904.07(c)(8)	The project maintains hydrologic connectivity between adjacent wetlands or stream systems.	Check
Env-Wt 311.10 A/M BMPs	Buildings and/or access are positioned away from high function wetlands or surface waters to avoid impact.	Check
Env-Wt 311.10 A/M BMPs	The project clusters structures to avoid wetland impacts.	Check
Env-Wt 311.10 A/M BMPs	The placement of roads and utility corridors avoids wetlands and their associated streams.	🔀 Check 🗌 N/A
A/M BMPs	The width of access roads or driveways is reduced to avoid and minimize impacts. Pullouts are incorporated in the design as needed.	🔀 Check 🗌 N/A
A/M BMPs	The project proposes bridges or spans instead of roads/driveways/trails with culverts.	🔀 Check 🗌 N/A

Irm@des.nh.gov or (603) 271-2147 NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

The project is designed to minimize the number and size of crossings, and crossings cross wetlands and/or streams at the narrowest point.	Check
Wetland and stream crossings include features that accommodate aquatic organism and wildlife passage.	Check
Stream crossings are sized to address hydraulic capacity and geomorphic compatibility.	🛛 Check 🗌 N/A
Disturbed areas are used for crossings wherever practicable, including existing roadways, paths, or trails upgraded with new culverts or bridges.	Check
AL SHORELINE STRUCTURES	
The non-tidal shoreline structure has been designed to use the minimum construction surface area over surfaces waters necessary to meet the stated purpose of the structure.	Check
The type of construction proposed for the non-tidal shoreline structure is the least intrusive upon the public trust that will ensure safe navigation and docking on the frontage.	Check
The non-tidal shoreline structure has been designed to avoid and minimize impacts on the ability of abutting owners to use and enjoy their properties.	Check
The non-tidal shoreline structure has been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.	Check
The non-tidal shoreline structure has been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.	Check
The non-tidal shoreline structure has been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.	🔀 Check 🗌 N/A
	crossings cross wetlands and/or streams at the narrowest point. Wetland and stream crossings include features that accommodate aquatic organism and wildlife passage. Stream crossings are sized to address hydraulic capacity and geomorphic compatibility. Disturbed areas are used for crossings wherever practicable, including existing roadways, paths, or trails upgraded with new culverts or bridges. AL SHORELINE STRUCTURES The non-tidal shoreline structure has been designed to use the minimum construction surface area over surfaces waters necessary to meet the stated purpose of the structure. The type of construction proposed for the non-tidal shoreline structure is the least intrusive upon the public trust that will ensure safe navigation and docking on the frontage. The non-tidal shoreline structure has been designed to avoid and minimize impacts on the ability of abutting owners to use and enjoy their properties. The non-tidal shoreline structure has been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation. The non-tidal shoreline structure has been designed to avoid and minimize impacts to water quality, aquatic vegetation, and wildlife and finfish habitat. The non-tidal shoreline structure has been designed to avoid and minimize impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.

Minimization of impacts to jurisdictional wetlands and surface waters were avoided by careful design of the project (see Avoidance and Minimization Checklist, above). Eversource completes routine weekly and bi-weekly meetings during design to minimize and avoid impacts to wetlands, archeological features, and protected species areas as directed by NHFG and NHB. In addition, Eversource completes multiple constructability walk downs in the field with consultants and completes site visits with abutters as requested. On the T198 line, these walkdowns were completed in 2024 and included Normandeau and other project participants. This information is compiled and reviewed by Eversource Project Managers, Eversource Environmental Specialists, Eversource Engineers, Eversource Project Services (outreach staff to landowners), and wetland and archaeology consultants. In addition, Eversource coordinates reviews with underlying municipalities, and incorporates feedback from Planning and Zoning staff, as well as road agents and DOT district engineers. Data collection and planning for the T198 Line Project has been ongoing since 2024.

Although access and work pad placement within wetlands is necessary due to the required engineered span widths between structures, impacts were minimized by avoiding wetlands to the greatest extent possible while continuing to provide safe and adequate work areas for construction and meeting engineering constraints.

Where possible, wetlands crossings are located at the narrowest portion of the wetland, access and work pads were avoided in VPD organic soils, and access was shifted to the side of the ROW with the least amount of wetland crossing impact. Where access and work pads could not be placed in the least impactful location to wetlands, this was the result of engineering requirements for span width between structures and avoidance of existing recreational trails when possible.

Following completion of construction, exposed upland and wetland soils will be seeded as necessary and mulched with weed free mulch and/or erosion control blankets. Best Management Practices (BMPs) will be implemented on Site to reduce/limit potential effects. Due to similar footprint of the existing structures, it is not anticipated that the project will have adverse impacts on the functions and values of the freshwater wetlands. Wetlands located within the project area will continue to provide principal functions and values.

Table C-1. Summary of proposed wetland and wetland function and value impact avoidance and minimization from project design and off-ROW access route use on the T198 Line Project

Map Sheet	Structure Number(s)	Avoidance & Minimization Description	Wetland Function & Value/Service*	NHFG TOY Limit?	Off-ROW Access Road?	Off-ROW Access Provides Wetland Avoidance and Minimization?
1	145	Structure located in wetland and cannot be shifted out; access uses upland trail where possible to reduce amount of wetland impacts. Timber matting minimizes permanent impacts to structure footings.	KW11: Perm. impacts restricted to structure footings. No perm. impacts to principal F&Vs anticipated: FA and SR	No	No	N/A
1&2	144-139	Access uses existing trails where possible (landowner restricted use of some trails near stadium); all areas matted (uplands and wetlands) minimizes ground disturbance to greatest extent feasible; access route crossing KW12D placed to avoid potential vernal pool (PVP) and its 50-ft buffer; Off-ROW access via Krif Road and Stadium parking lot could be used to avoid crossing KW12D entirely (Permission Obtained)	KW12A-H: No perm. impacts to principal F&Vs anticipated: FA, SR, WH, RE	No	Yes	Yes, could remove need to cross KW12D
3	138-137	Most flooded portion of KW14 next to rail trail with highest WH functionality is avoided; all areas matted (uplands and wetlands) minimizes ground disturbance to greatest extent feasible.	KW14: No perm. impacts to principal F&Vs anticipated: FA, SR, WH, RE	No	No	N/A
3	136-135	Access route shifted to utilize existing trail through to Str 134; all areas matted (uplands and wetlands) minimizes ground disturbance to greatest extent feasible; limited opportunities to further avoid/minimize due to extent of wetlands in this area	KW15.1-KW15.3: Perm. impacts restricted to structure footings in KW15.2 and KW15.3. No perm. impacts to principal F&Vs anticipated: FA, FH, SR, NT, PE, SS, WH, RE, EV, UN, VA	Yes	No	N/A
4	134-132	Access from Str. 134 to 133 shifted to avoid oxbow (PAB4G) where N. leopard frog (NH SC) was observed; Str. 133 work pads avoid oxbow wetland area and structure is being shifted further way from the wetland; limited opportunities to further avoid/minimize due to extent of wetlands in this area	KW15.2 & KW15.3: Perm. impacts restricted to structure footings in KW15.2. No perm. impacts to principal F&Vs anticipated: FA, FH, SR, NT, PE, SS, WH, RE, EV, UN, VA	Yes	No	N/A
5&6	Access to Strs 129-122	Existing off-ROW access from Airport Road to Str 130 will be used (<u>Permission</u> <u>Obtained</u>) with minor temp. wetland impacts; off-ROW access avoids Ashuelot River and takes advantage of existing culverts; this access has been used recently and services municipal utilities	SAW1, SAW2, SAW1B & SWOX: No perm. impacts to the principal F&Vs associated with these wetlands, which are part of high-functioning floodplain wetland complex avoided by using existing access road: FA, FH, SR, NT, PE, SS, WH, UN, VA	Yes	Yes	Yes, reduces need to impact wetland/riverine crossing south of Str 122; use of existing trail eliminates need for new access near/within Exemplary Natural Community (ENC)
7	Str 129-126	Access roads shifted west to avoid PVPs and VPD soils (Strs 129-127); access routes shifted east to avoid Ashuelot River (Str 126-125); TOY restriction requiring work be done during frozen/winter conditions will further minimize impacts to wildlife, wildlife habitat, and VPD organic soils; limited opportunities to further avoid/minimize due to extent of wetlands in this area	SW1Z: Perm. Impacts restricted to structure footings. No perm. Impacts to principal F&Vs anticipated: FA, FH, SR, NT, PE, SS, WH, UN, VA	Yes	Yes	See above (Sheets 5 & 6)
8	Str 125-122	Access road and work pad at Str 125 have been reconfigured to avoid Ashuelot River bank; (see above regarding TOY restrictions and limitations on avoidance/minimization)	See above.	Yes	Yes	See above (Sheets 5 & 6)
9	Str 121-118	Access road shifted west to avoid/minimize wetland impacts; (see above regarding TOY restrictions and limitations on avoidance/minimization)	SW1Z: See above SW1Y & SW1: Perm. impacts restricted to structure footings. No perm. impacts to principal F&Vs: FA, NT, WH	Yes	Yes	See below (Sheets 10 & 11)

Map Sheet	Structure Number(s)	Avoidance & Minimization Description	Wetland Function & Value/Service*	NHFG TOY Limit?	Off-ROW Access Road?	
10	Str 117-114	Access road shifted to west side of ROW to avoid PVPs and oxbow areas as much as practicable; (see above regarding TOY restrictions and limitations on avoidance/minimization)	SW1 & SW1.1: Perm. impacts restricted to structure footings. No perm. impacts to principal F&Vs: FA, SR, NT, WH	Yes	Yes	
10 & 11	Access to Str 117 and 121- 114	Existing off-ROW access road (<u>Permission Obtained</u>) along trail from Airport Road to Str 117	SW1.1A-C: No perm. impacts to principal F&Vs: FA, NT, PE, WH	Yes	Yes	1
12	Str 108-106	Uses existing Class VI road (Causeway Road) to access ROW avoiding extensive wetland crossings to north in ROW; Access route avoids wetland SW2.3 and crosses SW1.3 at narrow area near existing trail; access between Str. 107 & 106 crosses at narrowest portion; Str 106 shifted north away from wetland edge; use of timber matting in all areas (wetlands and uplands) minimizes ground disturbance to greatest extent practicable	SW1.3, SW2.1, & SW2: No perm. impacts to principal F&Vs: FA, FH, SR, NT, PE, SS, WH	Yes	Yes	
13	Str 105-104	Str 105 and 104 will be removed completely and require temporary impacts only; access roads have been shifted to avoid wider portions of perennial stream that must be crossed between Strs. 104 and 105; work pads made smaller as less equipment needed to remove a structure; area is at risk of avulsion and removing structures reduces risk of future failures and access to repair	SW2: No perm. impacts to principal F&Vs: FA, FH, NT, PE, SS, WH	Yes	Yes	
13, 14 & 15	Str 103-101	Access road to Str 103 shifted to avoid larger wetland crossing and cross at narrow point; Str 101 work pad and Str shifted out of or away from wetland SW2.2; Area will be accessed via off-ROW route (<u>Permission Obtained</u>) from Old Homestead Highway;	SW2: No perm. impacts to principal F&Vs: FA, FH, NT, PE, SS, WH	Yes	Yes	
16 & 17	Str 91-86	Access route shifted to use existing access routes through terrain and to avoid new wetland crossings and minimize impacts (e.g. SW10, SW11); Str 88 and 87 shifted away from wetlands	SW7-11: No perm. impacts principal F&Vs: FA, SR, PE, WH	No	No	
18	Str 78	Access crosses SW20 (roadside ditch) at narrow point; ditch not avoidable as spans entire width of ROW; access road shifted to avoid Wetland SWB1	SW20: No perm. impacts to principal F&Vs: SR	No	No	
19	Str 73	Access shifted to avoid landowner yard and wetland/stream complex; Str. 73 shifted NW to avoid stonewall impacts; temporary matting in all areas (wetlands and uplands) minimizes ground disturbance to greatest extent practicable	SW23 & SW23.2: Perm. impacts restricted to structure footings in SW23. No perm. impacts to principal F&Vs anticipated: FA, PE, WH	No	No	
20 & 21	Str 66 & 65	Existing bridge and off-ROW access road from Flat Roof Mill Road (<u>Permission</u> <u>Obtained</u>) to be used; eroded streams to be bridged; access shifted to west side of ROW to avoid and minimize wetland impacts; Str 66 shifted to center of upland island; Str 65 shifted towards upland island	SW28 & SW28.1: No perm. impacts to principal F&Vs: GD, FA, SR, NT, PE, SS, WH, UH	Yes	Yes	
22	Str 56-53	Access mostly upland; work pad for Str 54 shifted SE to minimize temp impact to SW32; work pad at Str 56 shifted slightly NW to minimize impacts to SW30; SW31 not avoidable but will be matted	SW30-32: No perm. impacts to principal F&Vs: FA and SF	No	No	Ī

Standard Dredge and Fill Wetlands Permit Application

Off-ROW Access Provides Wetland Avoidance and Minimization?
See below (Sheets 10 & 11)
Yes, may not need to do crossing between Strs 122 and 121 avoiding those temporary impacts to riverine wetland; off-ROW access avoids need to use WWTP road and cross oxbow between road and Str 114 to south
Use of Causeway Road completely avoids need to access across extensive wetlands located North of Str 109
See Causeway Road, above
Use of existing off-ROW access through gravel pit (aerial image does not reflect current conditions) avoids otherwise required wetland and brook crossings
N/A
N/A
N/A
Off-ROW access from Flat Roof Mill Road provides critical access not afforded elsewhere and uses existing bridge
N/A

Map Sheet	Structure Number(s)	Avoidance & Minimization Description	Wetland Function & Value/Service*	NHFG TOY Limit?	Off-ROW Access Road?	Off-ROW Access Provides Wetland Avoidance and Minimization?
23	Str 52-50	Existing access road used in this stretch; access from 49-50 needs to use existing stone wall breach therefore TW4 cannot be avoided but will be matted	TW1, TW3, & TW4: No perm. impacts to principal F&Vs: WH	No	No	N/A
24	Str 48-46	TWA1 avoided; access uses existing ATV trail through TW5 and TW6, as well as existing stone wall breaches/low points	TW5 & TW6: No perm. impacts to principal F&Vs: FA and WH	No	No	N/A
25	Str 45-42	Existing access roads and existing ATV trails through TW7 and TW8	TW7 & TW8: No. perm. impacts to principal F&Vs: FA, NT, WH	No	No	N/A

Standard Dredge and Fill Wetlands Permit Application

Attachment D: NHDES Project Specific Worksheet for "Utility Projects; Projects in Public Right-of-Way"



UTILITY PROJECTS; PROJECTS IN PUBLIC RIGHT-OF-WAY PROJECT-SPECIFIC WORKSHEET FOR STANDARD APPLICATION Water Division/Land Resources Management Wetlands Bureau <u>Check the Status of your Application</u>



RSA/Rule: RSA 482-A/ Env-Wt 521

APPLICANT LAST NAME, FIRST NAME, M.I.: Fennell, Jeremy; Eversource Energy, T198 Line

This worksheet summarizes the criteria and requirements for a Standard Permit for "Utility Projects; Projects in the Public Right-of-Way", as outlined in Chapter Env-Wt 500. In addition to the project-specific criteria and requirements on this worksheet, all Standard Applications must meet the criteria and requirements listed in the <u>Standard Dredge and Fill</u> <u>Wetlands Permit Application form (NHDES-W-06-012)</u>.

SECTION 1 - APPLICABILITY (Env-Wt 509.02(b); Env-Wt 521.01)

This worksheet is for residential utility projects and other utility projects within a public right-of-way.

Do **not** use this worksheet for utility projects that involve the construction of a substation, parking lot, or storage facility on utility property, which must be reviewed under the standards for commercial projects specified in Env-Wt 524.

Do not use this worksheet if the project is located in a coastal (tidal) area.

SECTION 2 - APPROVAL CRITERIA FOR STANDARD UTILITY PERMITS (Env-Wt 521.03)

In addition to meeting the criteria established in Env-Wt 300, an application for a utility project must meet the following approval criteria:

If the project as a whole crosses multiple properties, it is submitted as a single project and is not segmented into multiple proposed projects for the purpose of avoiding eligibility or classification requirements.

The project is, to the greatest extent practicable, within existing rights-of-way and developed areas.

Construction will be undertaken in the least environmentally-impactful manner.

If the project involves greater than one acre of contiguous permanent wetland or watercourse impact, an off-site alternatives analysis is done.

SECTION 3 - APPLICATION REQUIREMENTS FOR UTILITY PROJECTS (Env-Wt 521.04)

An application for a utility project must include the following project-specific information:

A plan showing:

The extent and location of all wetlands and watercourses within the project area.

A wetland delineation, functional assessment, and impact analysis in accordance with Env-Wt 300.

- The location of any existing utility corridors and facilities.
- The location of the proposed utility corridors and facilities.
- The location of any proposed impacts, crossings, construction areas, and clearings.

Irm@des.nh.gov or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO BOX 95, Concord, NH 03302-0095

www.des.nh.gov

A recent aerial photograph of the project area overlain by the items specified above.

An invasive species control plan.

A construction sequence plan describing measures proposed to minimize impacts to water quality, impacts to nesting and breeding species, and to prevent compaction of wetlands soils.

The locations of staging areas, off right-of-way access roads, temporary access roads, and new station locations.

A description of the methods, techniques, vehicles, and equipment proposed to access and conduct the project.

Prior to the start of work, perimeter erosion controls (i.e. silt fence and/or straw wattle) will be temporarily installed in uplands to prevent sedimentation into wetlands and protect water quality; other sensitive areas will be fenced off according to recommendations from NHB, NHFG and NHDHR as required. In wetlands, replacement of the structures will be completed from temporary work pads constructed using timber mats. A variety of different equipment types will be used to complete the work and will be provided by the contractor(s). Timber matting is utilized to prevent rutting and compaction of wetland soils. A drill rig and crane will be operated from temporary work pads to excavate the new pole locations, install the caisson grounding rings, and erect the structures, respectively. Upon completion of work, exposed soils in impacted areas will be restored to original grades, seeded with native seed mix as necessary, and stabilized using jute erosion control blankets as necessary or loose mulch. Work areas will be reviewed until stabilized.

A description of measures proposed to minimize and avoid impacts to wetlands and surface waters.

Impacts to wetlands have been avoided and minimized to the greatest extent by utilizing existing upland access routes where possible, utilizing temporary timber matting to access through wetlands, and adjusting access to cross the narrowest portion of wetlands and avoid very poorly drained soils and other sensitive areas where possible. Off right-of-way access routes are proposed to further avoid and minimize impacts to wetland but are dependent on securing agreements with underlying property owners. Where agreements are secured, Eversource will utilize off ROW access routes to avoid and minimize wetland impact. In some instances, wetlands could not be completely avoided. These locations were the result of engineering requirements for span width between structures, avoidance of existing structures, existing recreational trails or the lack of height clearance for equipment to cross under the lowest phase wires. Upon completion of construction, timber matting will be removed and temporarily impacted wetland areas will be seeded, as necessary, and mulched for restoration.

SECTION 4 - DESIGN & CONSTRUCTION REQUIREMENTS FOR UTILITY PROJECTS (Env-Wt 521.05)
In addition to the design and construction requirements in Env-Wt 300, the following requirements apply to utility projects:
The project must be designed to avoid and minimize construction access over, or work in or upon, organic soils.
The project must be designed in accordance with Env-Wt 313.03.
Construction access or work shall be prohibited in priority resource areas unless the work:
 Is authorized as an SPN or a project type exception under Env-Wt 407, or
Causes only temporary impacts.
All project activities must be performed, located, constructed, and maintained in accordance with the <u>Best</u> <u>Management Practices Manual, Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New</u> <u>Hampshire</u> (Utility BMPs).
No project shall cause permanent filling of wetlands in excess of 10,000 square feet unless mitigation is provided in accordance with Env-Wt 800.
Swamp mats shall be:
Used in any area necessary to provide access,
Removed as soon as the work is completed, and
In no case left in place longer than one growing season.
SECTION 5 - MAINTENANCE & REPAIR (Env-Wt 521.07)
Maintenance and repair must be carried out in accordance with the Utility BMPs.
SECTION 6 - UTILITY PROJECT CLASSIFICATION (Env-Wt 521.06)

Refer to Env-Wt 521.06 for project classification.

Eversource T198 Line Project

Standard Dredge and Fill Wetlands Permit Application

Attachment E: US Army Corps of Engineers Appendix B Checklist

The completed checklist and supporting discussion and mapping is included below.

Please note that a separate Pre-Construction Notification (PCN) permit application will be filed under separate cover to the USACE pursuant to Section 404 of the Clean Waters Act. Eversource and Normandeau will coordination with the USACE in parallel with the NHDES SDF permit application process.



US Army Corps

of Engineers New England District Appendix B New Hampshire General Permits Required Information and USACE Section 404 Checklist

Required Information

In order for USACE to properly evaluate your application, applicants must submit the following information for all projects along with the NHDES Wetlands Bureau application or permit notification forms. Some projects may require more information. Check with USACE at (978) 318-8832 for project-specific requirements. For your convenience, this Appendix B is also attached to the NHDES Wetlands Bureau application and Permit by Notification forms.

- NHDES Wetlands Permit Application.
- · Request for Project Review Form by the NH DHR: https://www.nh.gov/nhdhr/review/rpr.htm.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible plans no larger than 11"x17" with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show MLW and MHW elevations. Show the HTL elevations when fill is involved. In other waters, show the OHW elevation.
- On each plan, show the following for the project:
 - Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. In coastal waters this may be mean higher high water (MHHW), MHW, MLW, mean lower low water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983 2001.
 - Horizontal state plane coordinates in U.S. survey feet based on the Traverse Mercator Grid system for the State of New Hampshire (Zone 2800) NAD 83.
 - \circ Project limits with existing and proposed conditions.
 - Limits of any FNP in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the FNP.
 - Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the OHW in inland waters and below the HTL in coastal waters.
 - \circ Delineation of all waterways and wetlands on the project site.
- Use Federal delineation methods and include USACE wetland delineation data sheets (GC 2).
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact USACE for guidance.



US Army Corps of Engineers ®

Of Engineers ® Appendix B New England District New Hampshire General Permits Required Information and USACE Section 404Checklist

USACE Section 404 Checklist

1. Attach any explanations to this checklist. Lack of information could delay a USACE permit determination.

2. All references to "work" include all work associated with the project construction and operation. Work

- includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
- 3. See GC 3 for information on single and complete projects.
- 4. Contact USACE at (978) 318-8832 with any questions.
- 5. The information requested below is generally required in the NHDES Wetland Application. See page 61 for NHDES references and Admin Rules as they relate to the information below.

1. Impaired Waters	Yes	No
1.1 Will any work occur within 1 mile upstream in the watershed of an impaired water? See the following to determine if there is an impaired water in the vicinity of your work area. * https://nhdes-surface-water-quality-assessment-site-nhdes.hub.arcgis.com/ https://www.des.nh.gov/water/rivers-and-lakes/water-quality-assessment https://www4.des.state.nh.us/onestopdatamapper/onestopmapper.aspx	x	
2. Wetlands	Yes	No
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200 feet of any proposed work?	X	
2.2 Are there proposed impacts to tidal SAS, prime wetlands, or priority resource areas? Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) DataCheck Tool for information about resources located on the property at <u>https://www4.des.state.nh.us/NHB-DataCheck/</u> .	x	
2.3 If wetland crossings are proposed, are they adequately designed to maintain hydrology, sediment transport & wildlife passage?	x	
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		x
2.5 The overall project site is more than 40 acres?	X	
2.6 What is the area of the previously filled wetlands?	~1080) SF
2.7 What is the area of the proposed fill in wetlands?	880 SF	Perm
2.8 What % of the overall project sire will be previously and proposed filled wetlands?	<0.00	001%
3. Wildlife	Yes	No
3.1 Has the NHB & USFWS determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require an NHB ID number & a USFWS IPAC determination.) NHB DataCheck Tool: <u>https://www4.des.state.nh.us/NHB-DataCheck/</u> . USFWS IPAC website: https://ipac.ecosphere.fws.gov/	x	

 3.2 Would work occur in any area identified as either "Highest Ranked Habitat in N.H." or "Highest Ranked Habitat in Ecological Region"? (These areas are colored magenta and green, respectively, on NH Fish and Game's map, "2010 Highest Ranked Wildlife Habitat by Ecological Condition.") Map information can be found at: PDF: <u>https://wildlife.state.nh.us/wildlife/wap-high-rank.html</u>. Data Mapper: <u>www.granit.unh.edu</u>. GIS: <u>www.granit.unh.edu/data/downloadfreedata/category/databycategory.html</u>. 				
3.3 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		X		
3.4 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?				
3.5 Are stream crossings designed in accordance with the GC 31?				
4. Flooding/Floodplain Values				
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?	X			
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?				
5. Historic/Archaeological Resources				
For a minimum, minor or major impact project - a copy of the RPR Form (<u>www.nh.gov/nhdhr/review</u>) with your DES file number shall be sent to the NH Division of Historical Resources as required on Page 37 GC 14(d) of the GP document**				
6. Minimal Impact Determination (for projects that exceed 1 acre of permanent impact)	Yes	No		
On and off-site alternative analysis. Provide additional information and description for how the below criteria are met. 6.1 Will there be complete loss of aquatic resources on site? 6.2 Have the impacts to the aquatic resources been avoided and minimized to the greatest	ed perm s < 1 acro			
6.3 Will all aquatic resource function be lost?		-		
6.3 Will all aquatic resource function be lost?6.4 Does the aquatic resource (s) have regional significance (watershed or ecoregion)?				
 6.3 Will all aquatic resource function be lost? 6.4 Does the aquatic resource (s) have regional significance (watershed or ecoregion)? 6.5 Is there an on-site alternative with less impact? 				
 6.3 Will all aquatic resource function be lost? 6.4 Does the aquatic resource (s) have regional significance (watershed or ecoregion)? 6.5 Is there an on-site alternative with less impact? 6.6 Is there an off-site alternative with less impact? 				
extent practicable? 6.3 Will all aquatic resource function be lost? 6.4 Does the aquatic resource (s) have regional significance (watershed or ecoregion)? 6.5 Is there an on-site alternative with less impact? 6.6 Is there an off-site alternative with less impact? 6.7 Will there be a loss to a resource dependent species? 6.8 Are indirect impacts greater than 1 acre within and adjacent to the project area?				

*Although this checklist utilizes state information, its submittal to USACE is a federal requirement. ** If your project is not within Federal jurisdiction, coordination with NH DHR is not required under Federal law.

Supplemental Supporting Information for Appendix B – New Hampshire General Permits

Section 1. Impaired Waters

The surface water bodies in the vicinity of the Ashuelot River and South Branch of the Ashuelot River, as well as several tributary streams. The Ashuelot River flows generally southernly through the City of Keene, occurring east of the T198 ROW in the vicinity of the Project. It then crosses the T198 ROW near the Keene/Swanzey municipal boundary and continues to flow southernly to the west of the ROW. The South Branch of the Ashuelot River flows northeasternly, with its flow crossing the T198 ROW in multiple locations. The Ashuelot River, South Branch of the Ashuelot River, and all their tributaries that occur in the vicinity of the Project are classified as Class B waters. Class B waters are considered acceptable for fishing, swimming, and other recreational purposes, and for use as water supplies after adequate treatment has been applied. There shall be no disposal of sewage or waste in said waters except those which have received adequate treatment to prevent the lowering of the biological, physical, chemical, or bacteriological characteristics, nor shall such disposal of sewage or waste be inimical to aquatic life or to the maintenance of aquatic life in said receiving waters.

The Project is in the HUC 12 Keene Tributaries and South Branch Ashuelot River Watersheds. The watersheds of eight water quality assessment units overlap the Project footprint (Table E-1). Both Ashuelot River and one of the South Branch of the Ashuelot River's assessment units are listed as either Poor or Severe for Aquatic Life Integrity and Poor for Fish Consumption, but Good for Potential Drinking Water Supply on the 2024 305(b)/303(d) Assessment Watershed Report Card and are mapped as Surface Waters with Impairments with a ¼-mile Buffer. The remaining assessment units have no designation regarding Aquatic Life Integrity, due to a lack of supporting data related to this use but are also listed as Poor for Fish Consumption but Good for Potential Drinking Water Supply. Where data is available, certain assessment units are listed as Poor to Severe for Primary Contact Recreation, but Marginal to Good for Secondary Contact Recreation. No data to support a designation regarding Wildlife is available for any of the assessment units in the vicinity of the Project. Copies of the 2024 305(b)/303(d) Assessment Watershed Report Card for each assessment unit in the vicinity of the Project is provided below. Mapping of where the quarter-mile buffer of these surface waters overlaps the Project footprint is provided in the supplemental maps at the end of this attachment.

Please see Table E-1 below for a summary of the assessment units in the vicinity of the Project and a general description proposed impacts in each. Direct impacts to the largest waterbodies in the vicinity of the Project (the Ashuelot and South Branch of the Ashuelot Rivers) are to be completely avoided using existing off ROW access roads and through careful planning of work pad placement where the channel is near structures to be replaced. Direct impacts to their tributaries have been avoided to the extent practicable, again through the use of existing access roads. Where avoidance is not feasible, temporary timber mat access routes will be installed such that hydrology is maintained and will be removed as soon as work is complete. Finally, erosion and sediment controls will be installed and maintained throughout construction and all disturbed soils stabilized prior to project close out to avoid water quality impacts to surface waters.

Table E-1. Summary of water quality assessment units whose watersheds overlap the footprint of the Eversource T198 Line Project.

Assessment Unit ID	Assessment Unit Name	Legislative Class		Comment
NHRIV802010301-09	ASHUELOT RIVER - ASHUELOT RIVER DAM POND TO OTTER BR	В	Aquatic Life Integrity: 5-M Fish Consumption: 4A-M Potential Drinking Water Supply: 2-G Primary Contact Recreation: 4A-P Secondary Contact Recreation: 2-G Wildlife: 3-ND	Strs. 142-145 occur in this AU's watershed, but not in close proximity.
NHRIV802010301-11	ASHUELOT RIVER - OTTER BR TO KEENE WWTF	В	Aquatic Life Integrity: 5-M Fish Consumption: 4A-M Potential Drinking Water Supply: 2-G Primary Contact Recreation: 4A-M Secondary Contact Recreation: 2-M Wildlife: 3-ND	Project to occur in close proximity of the channel near Strs. 124-125 and 129, but will not directly impact/cross.Impacts in its vicinity will occur during frozen/winter conditions per NHFG recommended TOY restrictions.
NHRIV802010301-28	UNNAMED BROOK	В	Aquatic Life Integrity: 3-ND Fish Consumption: 4A-M Potential Drinking Water Supply: 2-G Primary Contact Recreation: 3-ND Secondary Contact Recreation: 3-ND Wildlife: 3-ND	Channel to be crossed by project via existing access road with culvert crossing leading from Airport Rd. to Str. 129 in ROW. Use of access road to occur during frozen/winter conditions per NHFG recommended TOY restrictions.
NHRIV802010301-29	UNNAMED BROOK	В	Aquatic Life Integrity: 3-ND Fish Consumption: 4A-M Potential Drinking Water Supply: 2-G Primary Contact Recreation: 3-ND Secondary Contact Recreation: 3-ND Wildlife: 3-ND	
NHRIV802010301-30	UNNAMED BROOK	В	Aquetic Life Integrity: 3-ND Fish Consumption: 4A-M Potential Drinking Water Supply: 2-G Primary Contact Recreation: 3-ND Secondary Contact Recreation: 3-ND Wildlife: 3-ND	Channel to be crossed between Strs. 121 and 122 via timber mat access route. Impacts will occur during frozen/winter conditions per NHFG recommended TOY restrictions.
NHRIV802010303-19	UNNAMED BROOK - FROM CUMMINGS POND TO CAREY POND	B	Aquatic Life Integrity: 3-ND Fish Consumption: 4A-M Potential Drinking Water Supply: 2-G Primary Contact Recreation: 3-ND Secondary Contact Recreation: 3-ND Wildlik: 3-ND	Channel to be crossed between Strs. 48 and 49 via timber mat access route.
NHRIV602010303-21	South Branch Ashuelot River - Bridge Brook - Forbush Brook	в	Aquatic Life Integrity: 3-ND Fish Consumption: 4A-M Potential Drinking Water Supply: 2-G Primary Contact Recreation: 3-ND Secondary Contact Recreation: 3-ND Wildlife: 3-ND	Channel to be crossed via existing permanent bridge along access road from Flat Roof Mill Road. Impacts in its vicinity will occur during frozen/winter conditions per NHFG recommended TOY restrictions.
NHRIV802010303-23	SOUTH BRANCH ASHUELOT RIVER	в	Aquatic Life Integrity: 5-M Fish Consumption: 4A-M Potential Drinking Water Supply: 2-G Primary Contact Recreation: 4A-P Secondary Contact Recreation: 2-M Wildlife: 3-ND	Project occurs in close proximity to the channel near Strs. 103-106, but will not directly impact/cross. Impacts in its vicinity will occur during frozen/winter conditions per NHFG recommended TOY restrictions.

Sections 2. Wetlands

See Attachment B for discussion of the identification and nature of jurisdictional wetlands and streams, as well as identified Priority Resource Areas (PRAs). Publicly available mapping of PRAs in the vicinity of the Project are provided in the supplemental maps at the end of this attachment.

Sections 3. Wildlife

The NH Fish & Game 2020 NH Wildlife Action Plan classifies the Ashuelot and South Branch of the Ashuelot Rivers and their floodplains as a combination of Tier 1: Highest Ranked Wildlife Habitat in NH, and Tier 2: Highest Ranked Wildlife Habitat in Ecoregion, and Tier 3: Supporting Landscape as they provide valuable habitat for endangered and rare wildlife species. See the

end of this attachment for maps showing the extent of valuable wildlife habitat in the vicinity of the Project. See Attachment B - Identification of Rare, Threatened and Endangered Species and Natural Communities for a discussion of these wildlife species and the consultations with regulatory agencies that have been completed to date regarding them.

Section 4. Flooding/Floodplain Values

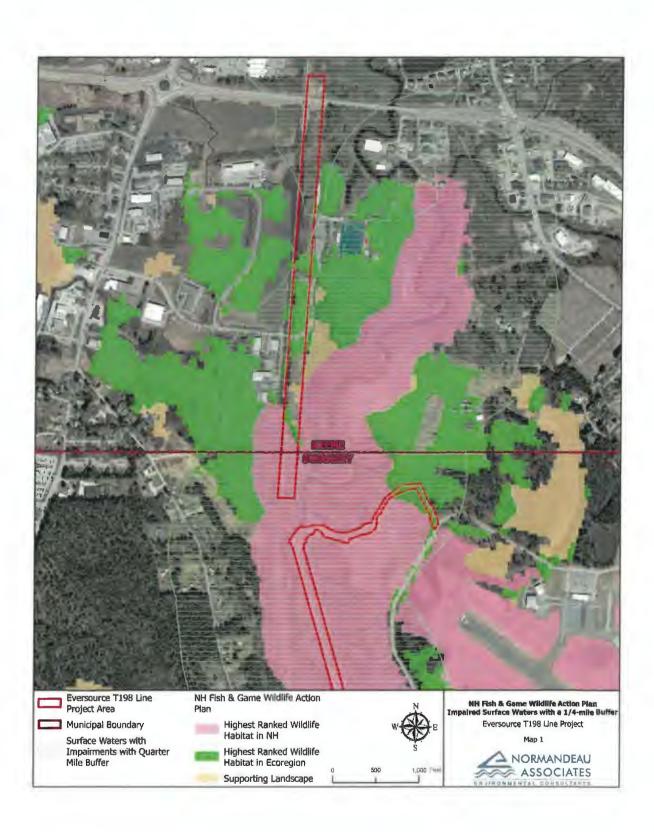
The Federal Emergency Management Agency (FEMA) mapping shows much of the Project footprint is located within the floodway and/or 100-year floodplain of the Ashuelot River, South Branch of the Ashuelot River, and one unnamed tributary of the South Branch of the Ashuelot River. No net increase in Base Flood Elevation is anticipated because of the proposed work. See the end of this attachment for maps showing the extent of FEMA mapped floodways and 100-year floodplain in the vicinity of the Project.

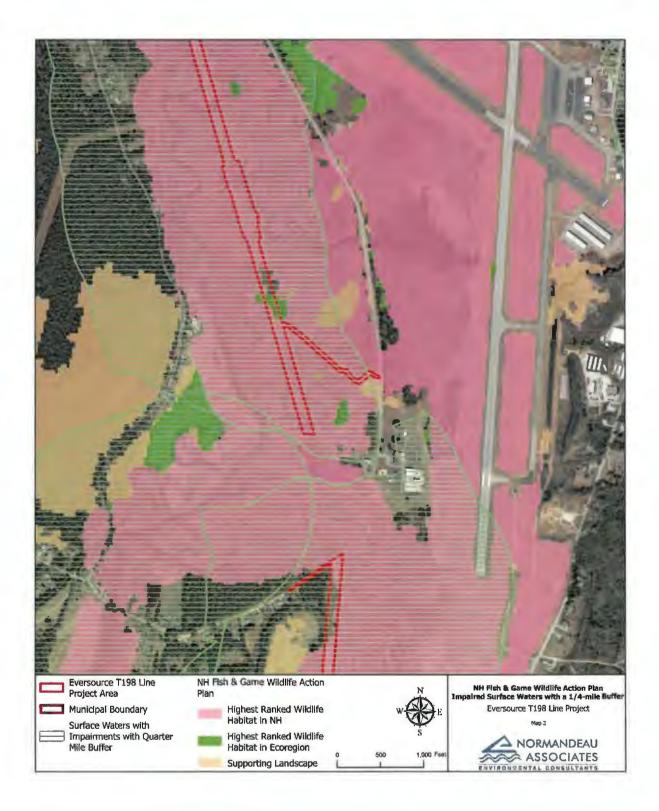
Section 5. Historic/Archaeological Resources

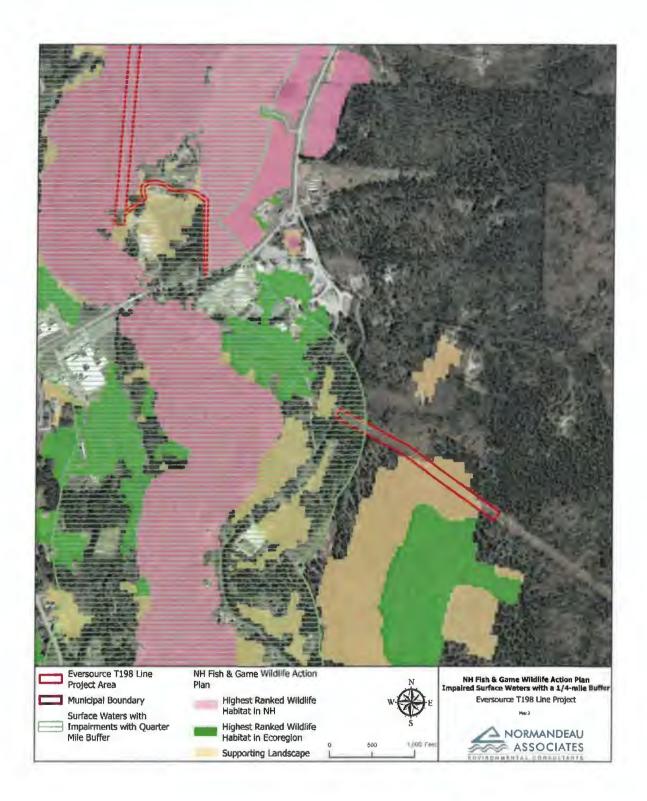
See Attachment B – Identification of Cultural Resources for discussion of the identification of historic and/or archaeological resources in the vicinity of the Project and associated consultation with NH Division of Historical Resources (NHDHR). A copy of the NHDHR response to the Request for Project Review is provided at the end of this attachment.

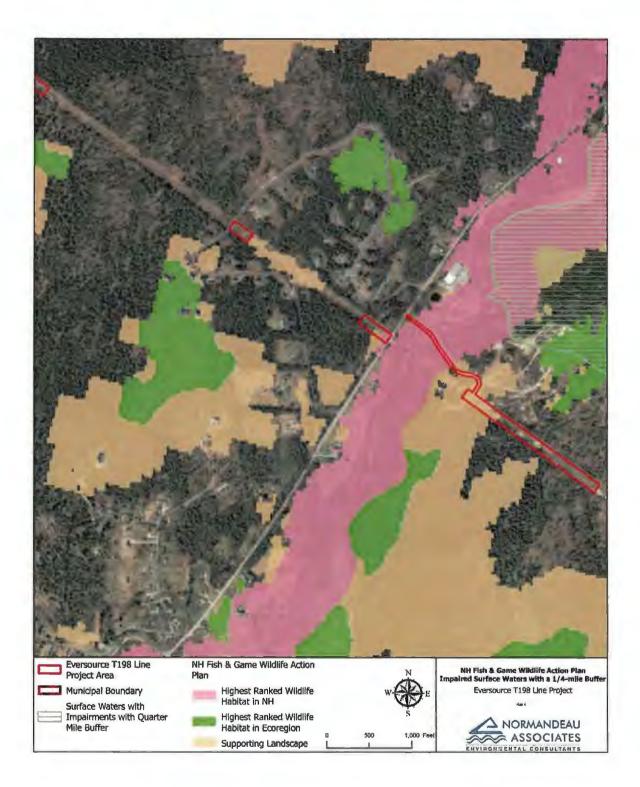
Section 6. Minimal Impact Determination

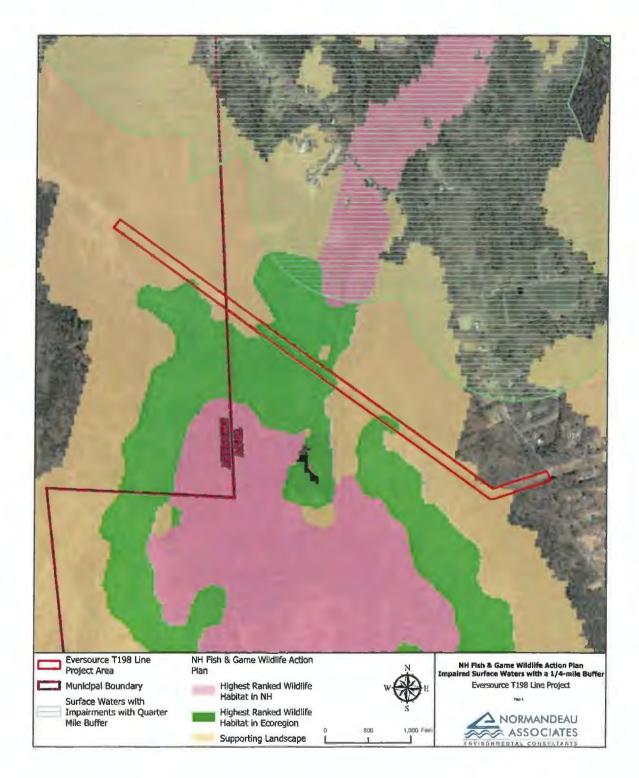
The Project as proposed will result in less than 1 acre of permanent impacts to wetland resources. While the floodplain wetlands of the Ashuelot River and South Branch of the Ashuelot River and their tributaries are aquatic resources of regional significance, the Project will not result in loss of these aquatic resources, their functions, or any resource dependent species. Impacts have been avoided and minimized to the extent practicable, and no feasible on-site or off-site alternatives exist for the Project, as it is in-situ replacement/maintenance of existing infrastructure. See Attachment C for a discussion of avoidance and minimization considerations made by the Project. Compensatory mitigation in the form of payment to the New Hampshire Aquatic Resource Management (ARM) fund is proposed to mitigate for permanent impacts to wetlands by the Project. See Attachment N for copies of the payment calculations for each municipality in which permanent impacts are proposed.











Welcome to New Hampshire's Watershed Report Cards built from the 2024, 305(b)/303(d)

Each Watershed Report Card covers a single 12-digit Hydrologic Unit Code (HUC12), on average a 34 square mile area. Each Watershed Report Card has three components;

- 1. REPORT CARD A one page card that summarizes the overall use support for Aquatic Life Integrity, Primary Contact (i.e. Swimming), and Secondary Contact (i.e. Boating) Designated Uses on every Assessment Unit ID (AUID) within the HUC12.
- 2. HUC 12 MAP A map of the watershed with abbreviated labels for each AUID within the HUC12.
- 3. ASSESSMENT DETAILS Anywhere from one to forty pages with the detailed assessment information for each and every AUID in the Report Card and Map.

How are the Surface Water Quality Assessment determinations made?

All readily available data with reliable Quality Assurance/Quality Control is used in the biennial surface water quality assessments. For a full understanding of how the Surface Water Quality Standards (Env-Wq 1700) are translated into surface water quality assessments we urge the reader to review the 2024 <u>Consolidated Assessment and Listing Methodology</u> (CALM).

Where can I find more advanced mapping resources?

GIS files are available by assessment cycle at the NHDES FTP site.

I'd like to see the more raw water quality data?

The <u>web mapping tool</u> allows you to download the data used in the assessment of the primary contact and aquatic life designated uses by clicking on the "Data Access Waterbody Data (Aquatic Life and Swimming Uses)" link for any assessment unit.

How are assessments coded in the report card?

Assessment outcomes are displayed on a color scale as well as an alpha numeric scale that provides additional distinctions for the designated use and parameter level assessments as outlined in the table below.

		Severe	Poor	Likely Bad	No Data	Likely Good	Marginal	Good
Category	Description	nin Interneta Sector	Not Supporting, Marginal	Insufficient Information – Potentially Not Supporting	No Data	Insufficient Information – Potentially Full Supporting	Full Support, Marginal	Fail Support. Dead
Category 2	Meets standards						2-M or 2-OBS	34
Category 3	Insufficient Information			3-PNS	3-ND	3-PAS		
Category 4A	Does not Meet Standards; TMDL* Completed	44,4	4A-M or 4A-T					
Category 4B	Does not Meet Standards; Other enforceable measure will correct the issue.	-	4B-M or 4B-T					
Category 4C	Does not Meet Standards; Non-pollutant (i.e. exotic weeds)	-	4C-M					
Category 5	Does not Meet Standards; TMDL* Needed	. 64	5-M or 5-T					
Category 5R	Does not Meet Standards; An EPA-approved alternative plan has been completed	144	5R-M					

* TMDL stands for Total Maximum Daily Load studies

Watershed 305(b) Assessment Summary Report:

HUC 12: 010802010301

HUC 12 Name: Keene Tributaries

(Locator map on next page only applies to this HUC12)

Assessment Cycle: 2024

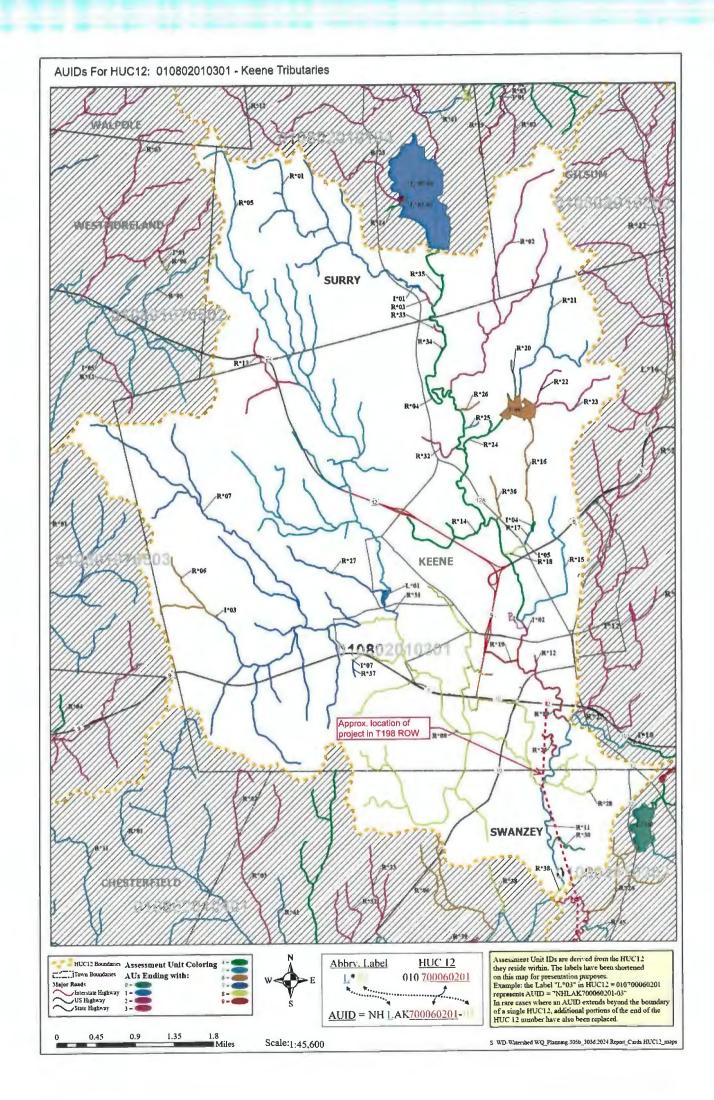
6004	Meers water quality standards/thresholds by a relatively large margin
Marginal	Meets water quality standards/thresholds but only marginally.
Likely Good	Limited data available, however, the data that is available suggests that the parameter is Potentially Attaining Standards (PAS).
No Current Data	Insufficient information to make an assessment decision.
Likely Bad	Limited data available, however, the data that is available suggests that the parameter is Potentially Not Supporting (PNS) water quality standards.
Poor	Not meeting water quality standards/thresholds. The impairment is marginal.
Severe	Not meeting water quality standards/thresholds. The impairment is more severe and causes poor water quality.



Assessment Unit ID	Map Label	Assessment Unit Name	Aquatic Life	Fish Consump.	Swimming	Boating
NHIMP802010301-01	1*01	Rodgers Pond Dam		4A-M	3-ND	3-ND
NHIMP802010301-02	l*02	Ashuelot River Dam Pond	5-P	4A-M	3-ND	3-ND
NHIMP802010301-03	1*03	Grimes Brook - Recreation Pond	3-ND	4A-M	3-ND	3-ND
NHIMP802010301-04	1*04	Unnamed Brook - Kate Tyler Ravine Dam	3-ND	4A-M	3-ND	3-ND
NHIMP802010301-05	1*05	Unnamed Brook - Kate Tyler Ravine	3-ND	4A-M	3-ND	3-ND
NHIMP802010301-06	1*06	Goose Pond	3-ND	4A-M	3-ND	3-ND
NHIMP802010301-07	1*07	Unnamed Brook - Farm Pond	3-ND	4A-M	3-ND	3-ND
NHLAK802010301-01	L*01	Wilson Pond	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-01	R*01	John Britton Brook - To Rogers Pond	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-02	R*02	Sturtevant Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-03	R*03	John Britton Brook - From Rogers Pond To Ashuelot River	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-04	R*04	Ashuelot River - Acoe Dam To Ashuelot River Dam Pond	5-M	4A-M	4A-M	2.6

NHRIV802010301-05	R*05	Black Brook - Dickinson Brook - Unnamed Brook	5 P	4A-M	3-ND	3-ND
NHRIV802010301-06	R*06	Grimes Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-07	R*07	White Brook - Grimes Brook - Hurricane Brook - Hart Brook - Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-08	R*08	Ash Swamp Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-09	R*09	Ashuelot River - Ashuelot River Dam Pond To Otter Br	5-M	4A-M	4A P	2.6
NHRIV802010301-11	R*11	Ashuelot River - Otter Br To Keene Wwtf	5-M	4A-M	4A-M	2-M
NHRIV802010301-12	R*12	Mill Creek	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-13	R*13	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-14	R*14	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-15	R*15	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-16	R*16	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-17	R*17	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-18	R*18	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-19	R*19	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-20	R*20	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-21	R*21	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-22	R*22	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-23	R*23	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-24	R*24	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-25	R*25	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-26	R*26	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-27	R*27	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-28	R*28	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-29	R*29	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-30	R*30	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-31	R*31	Black Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-32	R*32	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-33	R*33	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-34	R*34	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-35	R*35	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-36	R*36	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010301-37	R*37	Unnamed Brook	3-ND	4A-M	3-ND	3-ND

NHRIV802010301-38	R*38	Ashuelot River - Keene Wwtf To South Branch	5-M	4A-M	3-ND	3-ND
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Assessment Unit ID: NHRIV802010301-09 Assessment Unit Name: Ashuelot River -Ashuelot River Dam Pond To Otter Br Town(s) Primary Town is Listed First: Keene Size: 1.7980 MILES Assessment Unit Category: 5-M Beach: N 2024, 305(b)/303(d) - All Reviewed Parameters by Assessment Unit

Designated Use Description	Desig. Use Category	Parameter Name	Parameter Threatened (Y/N)	Last Sample	Last Exceed	Parameter Category	TMDL Priority
Aquatic Life Integrity	5-M	ALKALINITY, CARBONATE AS CACO3	N	1995	1995	3-ND	
		ALUMINUM	N	1992	1992	3-ND	-
		AMMONIA (TOTAL)	N	2002	N/A	3-ND	
		CADMIUM	N	2008	2008	3-ND	
		CHLORIDE	N	2023	N/A	3-PAS	
		COPPER	N	2008	2008	3-ND	
		DISSOLVED OXYGEN SATURATION	N	2022	N/A	2.G	
		IRON	N	1995	N/A	3-ND	
		LEAD	N	2008	2006	3-ND	
		OXYGEN, DISSOLVED	N	2022	2018	3-PAS	
		РН	N	2022	2022	5-M	LOW
		PHOSPHORUS (TOTAL)	N	2022	NLV	3-PAS	-
		TURBIDITY	N	2022	2017	3-PAS	
		ZINC	N	2008	N/A	3-ND	
Fish Consumption	4A-M	COPPER	N	2008	N/A	3-ND	
		MANGANESE	N	1995	N/A	3-ND	

Good	Marginal	Likely Good	No Current Data	Likely Bad	Poor	Severe
Mante water availay	Meets water quality	Limited data available. The	Insufficient information	Limited data available The	Not meeting water quality	Not meeting water
arandards/Hursholds by	standards/thresholds but	data that is available	to make an assessment	data that is available	standards/thresholds. The	quelity
a retatively large	only marginally.	suggests that the	decision.	suggests that the	impairment is marginal.	standards/thresholds
margiii	1 1 1	parameter is Potentially		parameter is Potentially		The impairment is more
		Attaining Standards (PAS)		Not Supporting (PNS)		severe and causes poor
				water quality standards.		water quality
and the second second						

Fish Consumption	4A-M	MERCURY - FISH CONSUMPTION ADVISORY	N			4A-M	
		ZINC	N	2008	N/A	3-ND	
Rotential Droking Water Supply	2.6	COPPER	N	2008	N/A	3-ND	
		ESCHERICHIA COLI	N	2022	2022	3-PAS	
		IRON	N	1995	1995	3-ND	
		MANGANESE	N	1995	1995	3-ND	
		POTASSIUM	N	1995	N/A	3-ND	
		SULFATES	N	1995	N/A	3-ND	
		ZINC	N	2008	N/A	3-ND	1
Primary Divition Indenation	66-P	CHLOROPHYLL-A	N	2002	N/A	3-ND	
		I SCHERICHIA COLL	N	2022	2022	4A.P	
Soundary Contact Bycarelian	1.5	ESCHERICHIA (COU	N	2022	2016	2.6	
Wildlife	3-ND						

Good	Marginal	Likely Good	No Current Data	Likely Bad	Poor	Severe
biomer commission	Meets water quality	Limited data available. The	Insufficient information	Limited data available The	Not meeting water quality	Net construction weather
Starminister Brestmitter By	standards/thresholds but	data that is available	to make an assessment	data that is available	standards/thresholds. The	quality
a management locate	only marginally.	suggests that the	decision.	suggests that the	impairment is marginal.	standards/thresholds
(THE BAT	,	parameter is Potentially		parameter is Potentially		The impairment is more
		Attaining Standards (PAS)		Not Supporting (PNS)		seame and causes prim
				water quality standards.		water quality

Assessment Unit ID: NHRIV802010301-11

Size: 2.3849 MILES

Beach: N

Assessment Unit Name: Ashuelot River - Otter Br Assessment Unit Category: 5-M

2024, 305(b)/303(d) - All Reviewed Parameters by Assessment Unit

To Keene Wwtf

Town(s) Primary Town is Listed First: Keene,

Swanzey

Designated Use Description	Desig. Use Category	Parameter Name	Parameter Threatened (Y/N)	Last Sample	Last Exceed	Parameter Category	TMDL Priority
Aquatic Life Integrity	5-M	ALKALINITY, CARBONATE AS CACO3	N	2018	2018	3-ND	
		ALUMINUM	N	2018	2005	3-ND	
		AMMONIA (TOTAL)	N	2002	N/A	3-ND	
		CADMIUM	N	2005	N/A	3-ND	
		CHLORIDE	N	2023	N/A	3-PAS	
		COPPER	N	2005	2005	3-ND	
		DISSOLVED OXYGEN SATURATION	N	2022	2018	5-M	LOW
		LEAD	N	2005	N/A	3-ND	
		NICKEL	N	2005	N/A	3-ND	
		OXYGEN, DISSOLVED	N	2022	2001	3-PAS	
		РН	N	2022	2022	5-M	LOW
		PHOSPHORUS (TOTAL)	N	2022	NLV	3-PNS	
		TURBIDITY	N	2022	2013	3-PAS	
		ZINC	N	2005	2005	3-ND	
Fish Consumption	4A-M	COPPER	N	2005	N/A	3-ND	

Good	Marginal	Likely Good	No Current Data	Likely Bad	Poor	Severe
deletera esector quality	Meets water quality	Limited data available. The	Insufficient information	Limited data available The	Not meeting water quality	Not meeting water
Stornel and Althoughtmillion day	standards/thresholds but	data that is available	to make an assessment	data that is available	standards/thresholds. The	quality
is an intervaly mean	only marginally.	suggests that the	decision.	suggests that the	impairment is marginal.	standards/thresholds
emargeler.		parameter is Potentially		parameter is Potentially		The impairment is more
		Attaining Standards (PAS)		Not Supporting (PNS)		severe and causes poor
				water quality standards.		water quality.

Fish Consumption	4A-M	MERCURY - FISH CONSUMPTION ADVISORY	N			4A-M	
		NICKEL	N	2005	N/A	3-ND	
		ZINC	N	2005	N/A	3-ND	
Retaintial Dresking Writter Supply	2-5	COPPER	N	2005	N/A	3-ND	
		ESCHERICHIA COLI	N	2022	2022	3-PAS	
		NICKEL	N	2005	N/A	3-ND	
		POTASSIUM	N	2018	N/A	3-ND	
		ZINC	N	2005	N/A	3-ND	
Primary Contact Recreation	4A-M	CHLOROPHYLL-A	N	2010	N/A	3-ND	
		ESCHERICHIA COLI	N	2022	2022	4A-M	
Secondary Contact Recreation	2-M	ESCHERICHIA COLI	N	2022	2022	2-M	
Wildlife	3-ND						

Good	Marginal	Likely Good	No Current Data	Likely Bad	Poor	Severe
Month mater (unbly	Meets water quality	Limited data available. The	Insufficient information	Limited data available The	Not meeting water quality	Not meeting water
stands de/Hypersoldt by	standards/thresholds but	data that is available	to make an assessment	data that is available	standards/thresholds. The	quality _
B TRADUCTORY DATES	only marginally.	suggests that the	decision.	suggests that the	impairment is marginal.	standards/thresholds
HINATORIO		parameter is Potentially		parameter is Potentially		The impairment is more
		Attaining Standards (PAS)		Not Supporting (PNS)		NEVERS and CHURCH STORY
				water quality standards.		water quality.

Assessment Unit ID: NHRIV802010301-28 Assessment Unit Name: Unnamed Brook Town(s) Primary Town is Listed First: Keene, Swanzey

Size: 1.7040 MILES

Leannaisen Loni Sangury: 1-94

2024, 305(b)/303(d) - All Reviewed Parameters by Assessment Unit

-	-		
Be	ac	n:	N

Designated Use Description	Desig. Use Category	Parameter Name	Parameter Threatened (Y/N)	Last Sample	Last Exceed	Parameter Category	TMDL Priority
Aquatic Life Integrity	3-ND	Benthic-Macroinvertebrate Bioassessments (Streams)	N			3-ND	
		Dissolved oxygen saturation	N		1	3-ND	
		Fishes Bioassessments (Streams)	N			3-ND	
		Oxygen, Dissolved	N			3-ND	
		рН	N			3-ND	_
Fish Consumption	4A-M	MERCURY - FISH CONSUMPTION ADVISORY	N			4A-M	
Periodial Draking Watter Sypply	2.9						
Primary Contact Recreation	3-ND	Escherichia coli	N			3-ND	
Secondary Contact Recreation	3-ND	Escherichia coli	N			3-ND	
Wildlife	3-ND						1.00

Good	Marginal	Likely Good	No Current Data	Likely Bad	Poor	Severe
Address over making	Meets water quality	Limited data available. The	Insufficient information	Limited data available The	Not meeting water quality	Not menting water
damaria/likeshalik.in	standards/thresholds but	data that is available	to make an assessment	data that is available	standards/thresholds. The	.guiding
a conservery mage	only marginally.	suggests that the	decision.	suggests that the	impairment is marginal.	standards/thresholds
THE REAL		parameter is Potentially		parameter is Potentially		The impairment is more
		Attaining Standards (PAS)		Not Supporting (PNS)		severe and causes poor
				water quality standards.		water quality.
			-			

Assessment Unit ID: NHRIV802010301-29 Assessment Unit Name: Unnamed Brook Town(s) Primary Town is Listed First: Keene

Size: 0.4740 MILES

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2024, 305(b)/303(d) - All Reviewed Parameters by Assessment Unit

Beach: N

Designated Use Description	Desig. Use Category	Parameter Name	Parameter Threatened (Y/N)	Last Sample	Last Exceed	Parameter Category	TMDL Priority
Aquatic Life Integrity	3-ND	Benthic-Macroinvertebrate Bioassessments (Streams)	N			3-ND	
		Dissolved oxygen saturation	N			3-ND	
		Fishes Bioassessments (Streams)	N			3-ND	
		Oxygen, Dissolved	N			3-ND	
		рН	N			3-ND	
Fish Consumption	4A-M	MERCURY - FISH CONSUMPTION ADVISORY	N			4A-M	
Patential Dressing Water Supply	2.6	1				1	
Primary Contact Recreation	3-ND	Escherichia coli	N			3-ND	
Secondary Contact Recreation	3-ND	Escherichia coli	N			3-ND	
Wildlife	3-ND						

Good	Marginal	Likely Good	No Current Data	Likely Bad	Poor	Severe
Mouts maini quality	Meets water quality	Limited data available. The	Insufficient information	Limited data available The	Not meeting water quality	Nat meeting water
otorofards.0m.mstudds by	standards/thresholds but	data that is available	to make an assessment	data that is available	standards/thresholds. The	dunity
A PERSONALIZATIVE DISTRICT	only marginally.	suggests that the	decision.	suggests that the	impairment is marginal.	standards/thresholds
traight		parameter is Potentially		parameter is Potentially		The impairment is more
		Attaining Standards (PAS)		Not Supporting (PNS)		severe and causes phor
				water quality standards.		water quality.

Assessment Unit ID: NHRIV802010301-30 Assessment Unit Name: Unnamed Brook Town(s) Primary Town is Listed First: Swanzey

Size: 0.6270 MILES

Beach: N

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2024, 305(b)/303(d) - All Reviewed Parameters by Assessment Unit

Designated Use Description	Desig. Use Category	Parameter Name	Parameter Threatened (Y/N)	Last Sample	Last Exceed	Parameter Category	TMDL Priority
Aquatic Life Integrity	3-ND	Benthic-Macroinvertebrate Bioassessments (Streams)	N			3-ND	
		Dissolved oxygen saturation	N			3-ND	
		Fishes Bioassessments (Streams)	N		1	3-ND	
		Oxygen, Dissolved	N			3-ND	
	_	рН	N		1	3-ND	
Fish Consumption	4A-M	MERCURY - FISH CONSUMPTION ADVISORY	N			4A-M	
Patential Drinking Water Supply	2.6						
Primary Contact Recreation	3-ND	Escherichia coli	N			3-ND	
Secondary Contact Recreation	3-ND	Escherichia coli	N			3-ND	
Wildlife	3-ND						

Insufficient information	Limited data available The	Not monting water guality	and the second
the second se			Not meeting water
to make an assessment		standards/thresholds. The	quality standards/thresholds
decision.	parameter is Potentially	impairment is marginal.	The impairment is more
			water goality
	decision.	decision. suggests that the	decision. suggests that the impairment is marginal. parameter is Potentially Not Supporting (PNS)

Welcome to New Hampshire's Watershed Report Cards built from the 2024, 305(b)/303(d)

Each Watershed Report Card covers a single 12-digit Hydrologic Unit Code (HUC12), on average a 34 square mile area. Each Watershed Report Card has three components;

- 1. REPORT CARD A one page card that summarizes the overall use support for Aquatic Life Integrity, Primary Contact (i.e. Swimming), and Secondary Contact (i.e. Boating) Designated Uses on every Assessment Unit ID (AUID) within the HUC12.
- 2. HUC 12 MAP A map of the watershed with abbreviated labels for each AUID within the HUC12.
- 3. ASSESSMENT DETAILS Anywhere from one to forty pages with the detailed assessment information for each and every AUID in the Report Card and Map.

How are the Surface Water Quality Assessment determinations made?

All readily available data with reliable Quality Assurance/Quality Control is used in the biennial surface water quality assessments. For a full understanding of how the Surface Water Quality Standards (Env-Wq 1700) are translated into surface water quality assessments we urge the reader to review the 2024 <u>Consolidated Assessment and Listing Methodology</u> (CALM).

Where can I find more advanced mapping resources?

GIS files are available by assessment cycle at the NHDES FTP site.

I'd like to see the more raw water quality data?

The <u>web mapping tool</u> allows you to download the data used in the assessment of the primary contact and aquatic life designated uses by clicking on the "Data Access Waterbody Data (Aquatic Life and Swimming Uses)" link for any assessment unit.

How are assessments coded in the report card?

Assessment outcomes are displayed on a color scale as well as an alpha numeric scale that provides additional distinctions for the designated use and parameter level assessments as outlined in the table below.

		Severe	Poor	Likely Bad	No Data	Likely Good	Marginal	Good
Category	Description	for Sectors Sector	Not Supporting, Marginal	Insufficient Information – Potentially Not Supporting	No Data	Insufficient Information – Potentially Full Supporting	Full Support, Marginal	- of Southers
Category 2	Meets standards						2-M or 2-OBS	
Category 3	Insufficient Information			3-PNS	3-ND	3-PAS		
Category 4A	Does not Meet Standards; TMDL* Completed		4A-M or 4A-T					
Category 4B	Does not Meet Standards; Other enforceable measure will correct the issue.		4B-M or 4B-T					
Category 4C	Does not Meet Standards; Non-pollutant (i.e. exotic weeds)	424	4C-M					
Category 5	Does not Meet Standards; TMDL* Needed		5-M or					
Category 5R	Does not Meet Standards; An EPA-approved alternative plan has been completed	31.0	5R-M					

* TMDL stands for Total Maximum Daily Load studies

Watershed 305(b) Assessment Summary Report:

HUC 12: 010802010303

HUC 12 Name: South Branch Ashuelot River

(Locator map on next page only applies to this HUC12)

Assessment Cycle: 2024

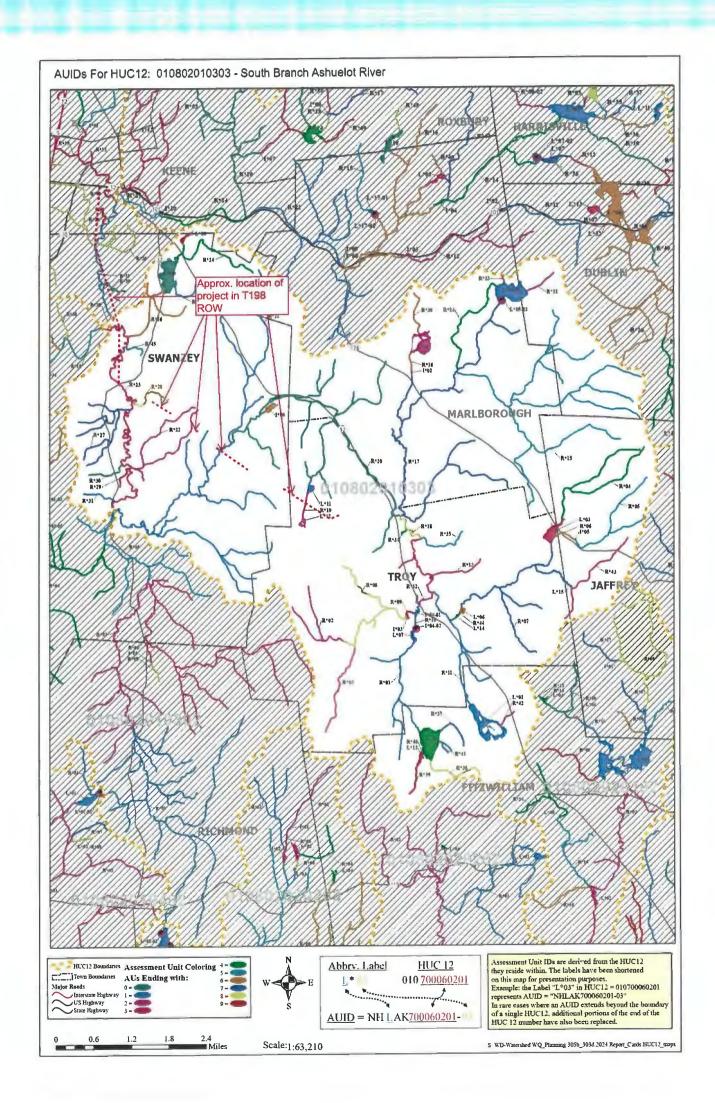
Good	Meets water quality standards/thresholds by a relatively large margin.
Marginal	Meets water quality standards/thresholds but only marginally.
Likely Good	Limited data available, however, the data that is available suggests that the parameter is Potentially Attaining Standards (PAS).
No Current Data	Insufficient information to make an assessment decision.
Likely Bad	Limited data available, however, the data that is available suggests that the parameter is Potentially Not Supporting (PNS) water quality standards.
Poor	Not meeting water quality standards/thresholds. The impairment is marginal.
Severe	Not meeting water quality standards/thresholds. The impairment is more severe and causes poor water quality.



Assessment Unit ID	Map Label	Assessment Unit Name	Aquatic Life	Fish Consump.	Swimming	Boating
NHIMP802010303-02	1*02	Recreation Pond Dam		4A-M	3-ND	3-ND
NHIMP802010303-03	1*03	Silica Pond Dam	3-ND	4A-M	3-ND	3-ND
NHIMP802010303-04-01	I*04-01	Village Pond Dam	3-ND	4A-M	3-ND	3-ND
NHIMP802010303-04-02	1*04-02	Village Pond Dam - Sand Dam Village Pond Town Beach	3-ND	4A-M	4A-M	2.5
NHIMP802010303-05	1*05	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHIMP802010303-06	I*06	Unnamed Brook - South Branch Ashuelot River	3-ND	4A-M	3-ND	3-ND
NHLAK802010303-01	L*01	Bowker Pond	3-ND	4A-M	3-ND	3-ND
NHLAK802010303-02	L*02	Meetinghouse Pond	5-M	4A-M	3-PAS	3-ND
NHLAK802010303-03	L*03	Perkins Pond	3-ND	4A-M	3-ND	3-ND
NHLAK802010303-04	L*04	Rockwood Pond	5-M	4A-M	3-PAS	3-ND
NHLAK802010303-05-01	L*05-01	Stone Pond	4A-P	4A-M	3-PAS	3-ND
NHLAK802010303-05-02	L*05-02	Stone Pond - Town Beach	3-ND	4A-M	16	2.6

NHLAK802010303-06	L*06	Quarry Pond	5-M	4A-M	3-ND	3-ND
NHLAK802010303-07	L*07	Sand Pond	4A-M	4A-M	3-PAS	3-ND
NHLAK802010303-09	L*09	Upper Wilson Pond	3-PNS	4A-M	3-PAS	3-ND
NHLAK802010303-10	L*10	Wilson Pond	5-M	4A-M	3-PAS	3-ND
NHLAK802010303-11	L*11	Corey Pond	3-ND	4A-M	3-ND	3-ND
NHLAK802010303-12	L*12	Unnamed Pond	3-ND	4A-M	3-ND	3-ND
NHLAK802010303-13	L*13	Unnamed Pond	3-ND	4A-M	3-ND	3-ND
NHLAK802010303-14	L*14	Quarry Pond	3-ND	4A-M	3-ND	3-ND
NHLAK802010303-15	L*15	Unnamed Pond	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-01	R*01	Rockwood Brook - Unnamed Brook	5-M	4A-M	2.6	216
NHRIV802010303-02	R*02	Unnamed Brook - To West Hill Reservoir	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-03	R*03	Nester Brook - To West Hill Reservoir	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-04	R*04	Quarry Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-05	R*05	Fassett Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-06	R*06	Fassett Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-07	R*07	Fassett Brook - Quarry Brook - Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-08	R*08	Nester Brook - From West Hill Reservoir	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-09	R*09	Nester Brook - From Silica Pond	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-10	R*10	Rockwood Brook - From Sand Pond	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-11	R*11	Quarry Brook - Unnamed Brook	S-P	4A-M	4A-P	3-ND
NHRIV802010303-12	R*12	South Branch Ashuelot River	3-ND	4A-M	4A-M	3-ND
NHRIV802010303-13	R*13	South Branch Ashuelot River - Unnamed Brook	3-ND	4A-M	4A-M	3-ND
NHRIV802010303-14	R*14	Shaker Brook	5-M	4A-M	3-ND	3-ND
NHRIV802010303-15	R*15	Mountain Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-16	R*16	Unnamed Brook - From Meetinghouse Pond Dam To Recreation Pond	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-17	R*17	Shaker Brook - Unnamed Brook - Brandy Brook - Stone Pond Brook	5-M	4A-M	3-ND	3-ND
NHRIV802010303-18	R*18	South Branch Ashuelot River	5-M	4A-M	4A-P	3-ND
NHRIV802010303-19	R*19	Unnamed Brook - From Cummings Pond To Carey Pond	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-20	R*20	South Branch Ashuelot River	5-M	4A-M	4A-P	3-ND
NHRIV802010303-21	R*21	South Branch Ashuelot River - Bridge Brook - Forbush Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-22	R*22	Unnamed Brook - To South Ashuelot River	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-23	R*23	South Branch Ashuelot River	5-M	4A-M	4A.P	2-M

NHRIV802010303-24	R*24	Upper Wilson Pond Brook - To Wilson Pond	5-M	4A-M	2-6	14.6.
NHRIV802010303-25	R*25	Unnamed Brook	3-PAS	4A-M	3-ND	3-ND
NHRIV802010303-26	R*26	Wilson Pond Brook - To South Branch Ashuelot River	3-PAS	4A-M	246	2-6
NHRIV802010303-27	R*27	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-28	R*28	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-29	R*29	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-30	R*30	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-31	R*31	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-32	R*32	Stone Pond-Inlet	5-M	4A-M	3-ND	3-ND
NHRIV802010303-33	R*33	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-34	R*34	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-35	R*35	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-36	R*36	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-37	R*37	Holman Inlet	5-P	4A-M	3-ND	3-ND
NHRIV802010303-38	R*38	Tommila Inlet	5-M	4A-M	3-ND	3-ND
NHRIV802010303-39	R*39	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-40	R*40	Little Rock Inlet	5=M	4A-M	3-ND	3-ND
NHRIV802010303-41	R*41	Rockwood Pond-Beach Inlet	5-P	4A-M	16	3.6
NHRIV802010303-42	R*42	Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-43	R*43	Quarry Brook - Unnamed Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-44	R*44	Quarry Brook	3-ND	4A-M	3-ND	3-ND
NHRIV802010303-45	R*45	Unnamed Brook	3-ND	4A-M	3-ND	3-ND



Assessment Unit ID: NHRIV802010303-19 Assessment Unit Name: Unnamed Brook - From Cummings Pond To Carey Pond Town(s) Primary Town is Listed First: Troy

Size: 0.3530 MILES

Beach: N

A Opening of Charge and LOND

2024, 305(b)/303(d) - All Reviewed Parameters by Assessment Unit

Designated Use Description	Desig. Use Category	Parameter Name	Parameter Threatened (Y/N)	Last Sample	Last Exceed	Parameter Category	TMDL Priority
Aquatic Life Integrity	3-ND	Benthic-Macroinvertebrate Bioassessments (Streams)	N			3-ND	
	-	Dissolved oxygen saturation	N			3-ND	
		Fishes Bioassessments (Streams)	N			3-ND	P
		Oxygen, Dissolved	N			3-ND	
		рН	N			3-ND	
Fish Consumption	4A-M	MERCURY - FISH CONSUMPTION ADVISORY	N			4A-M	
Pritontial Drocking Writer Gumply	16				[
Primary Contact Recreation	3-ND	Escherichia coli	N			3-ND	
Secondary Contact Recreation	3-ND	Escherichia coli	N			3-ND	
Wildlife	3-ND						

parameter is Potentially Attaining Standards (PAS) Attaining Standards (PAS)
--

Assessment Unit ID: NHRIV802010303-21 Assessment Unit Name: South Branch Ashuelot River - Bridge Brook - Forbush Brook Town(s) Primary Town is Listed First:

Marlborough, Swanzey, Troy

Size: 17.1980 MILES

Beach: N

2024, 305(b)/303(d) - All Reviewed Parameters by Assessment Unit

Designated Use Description	Desig. Use Category	Parameter Name	Parameter Threatened (Y/N)	Last Sample	Last Exceed	Parameter Category	TMDL Priority
Aquatic Life Integrity	3-ND	AMMONIA (TOTAL)	N	2005	N/A	3-ND	
		Benthic-Macroinvertebrate Bioassessments (Streams)	N			3-ND	
		CHLORIDE	N	2005	N/A	3-ND	
		DISSOLVED OXYGEN SATURATION	N	2005	N/A	3-ND	
		Fishes Bioassessments (Streams)	N			3-ND	
		OXYGEN, DISSOLVED	N	2005	N/A	3-ND	
		РН	N	2005	N/A	3-ND	
		PHOSPHORUS (TOTAL)		2019	NLV	3-ND	
Fish Consumption	4A-M	MERCURY - FISH CONSUMPTION ADVISORY	N			4A-M	
Printential Detoking Water Supply	2.6						
Primary Contact Recreation	3-ND	CHLOROPHYLL-A	N	2005	N/A	3-ND	
		Escherichia coli	N			3-ND	
Secondary Contact Recreation	3-ND	Escherichia coli	N			3-ND	
Wildlife	3-ND						

Likely Bad Marginal **Likely Good No Current Data** Poor Severe Saad Limited data available. The Insufficient information Limited data available The Meets water quality Not meeting water quality Not mosting water standards/thresholds but data that is available to make an assessment data that is available standards/thresholds. The suggests that the only marginally. suggests that the decision. impairment is marginal. parameter is Potentially parameter is Potentially Attaining Standards (PAS) Not Supporting (PNS) water quality standards.

Assessment Unit ID: NHRIV802010303-23

Assessment Unit Name: South Branch Ashuelot River

Size: 6.6890 MILES Assessment Unit Category: 5-M Beach: N 2024, 305(b)/303(d) - All Reviewed Parameters by Assessment Unit

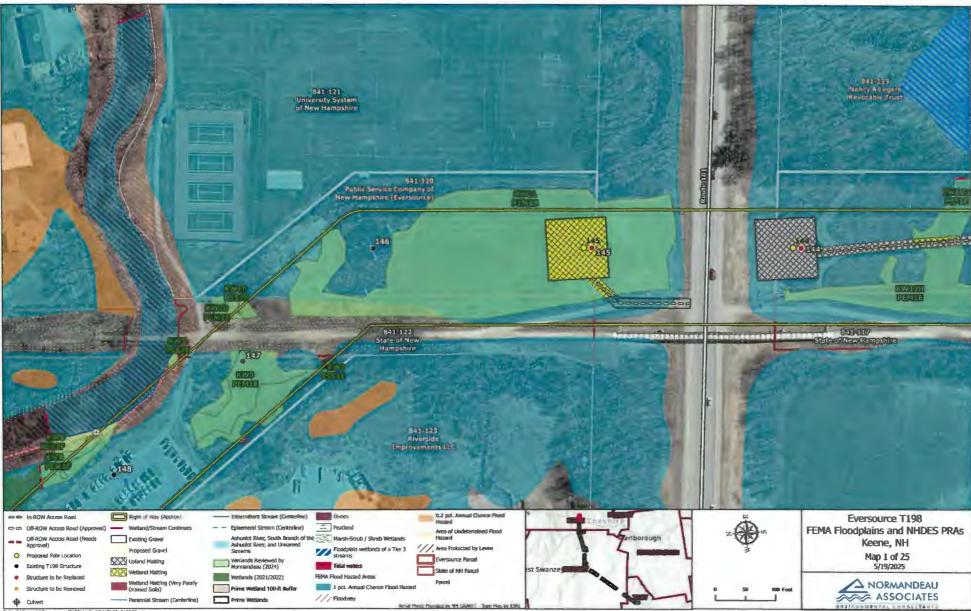
Town(s) Primary Town is Listed First: Swanzey

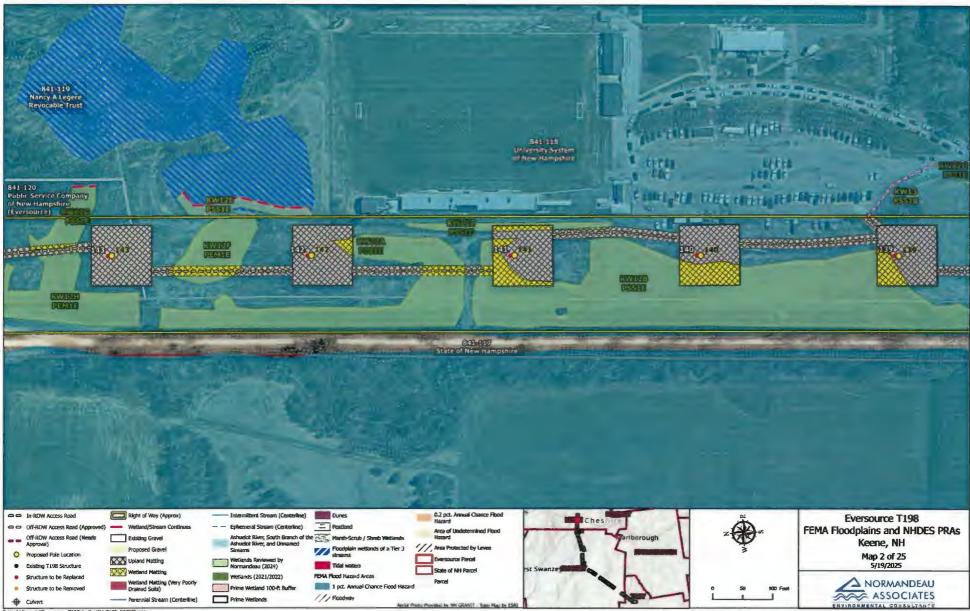
Designated Use Description	Desig. Use Category	Parameter Name	Parameter Threatened (Y/N)	Last Sample	Last Exceed	Parameter Category	TMDL Priority
Aquatic Life Integrity	5-M	ALKALINITY, CARBONATE AS CACO3	N	2015	2015	3-ND	
		AMMONIA (TOTAL)	N	2005	N/A	3-ND	
		Benthic-Macroinvertebrate Bioassessments (Streams)				2-M	
		CADMIUM	N	2008	N/A	3-ND	
		CHLORIDE	N	2023	N/A	3-PAS	
		COPPER	N	2008	2008	3-ND	
		DISSOLVED OXYGEN SATURATION	N	2022	NVA	2.6	
		Fishes Bioassessments (Streams)		2015		3-ND	
		LEAD	N	2008	2006	3-ND	
		OXYGEN, DISSOLVED	N	2022	N/A	3-PAS	
		РН	N	2022	2022	5-M	LOW
		PHOSPHORUS (TOTAL)	N	2022	NLV	3-PAS	
		TURBIDITY	N	2022	2013	3-PAS	
		ZINC	N	2008	N/A	3-ND	
Fish Consumption	4A-M	COPPER	N	2008	N/A	3-ND	

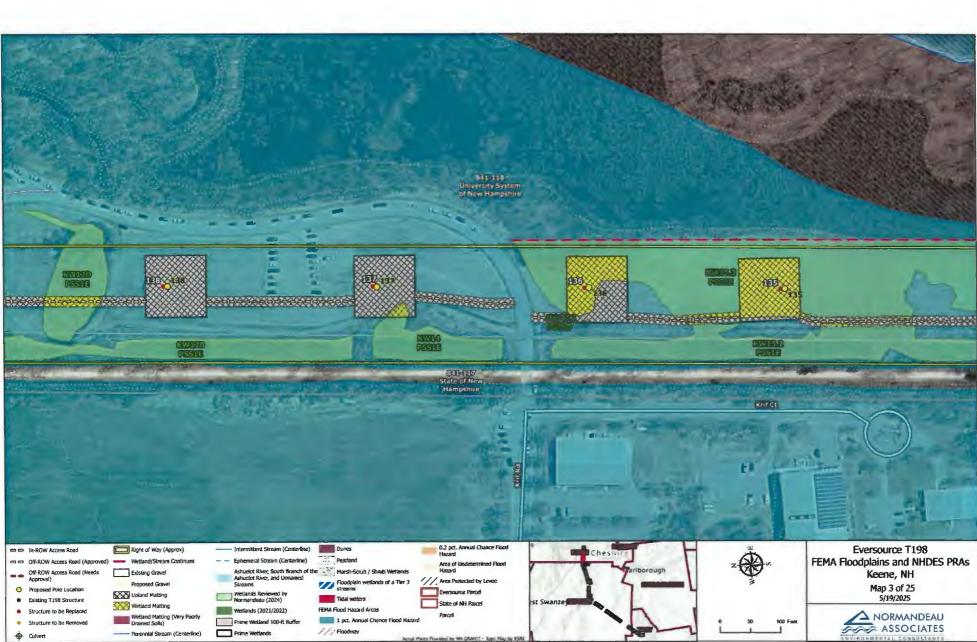
finad	Marginal	Likely Good	No Current Data	Likely Bad	Poor	Severe
Advents white middley	Meets water quality	Limited data available. The	Insufficient information	Limited data available The	Not meeting water quality	Not meeting water
ALEMAN ALEMAN AND A PARTY	standards/thresholds but	data that is available	to make an assessment	data that is available	standards/thresholds. The	quality
a relatively terms	only marginally.	suggests that the	decision.	suggests that the	impairment is marginal.	standards/thresholds
margin		parameter is Potentially		parameter is Potentially		The impairment is more
		Attaining Standards (PAS)		Not Supporting (PNS)		severe and causes poor
				water quality standards.		water quality.
	k					A second second

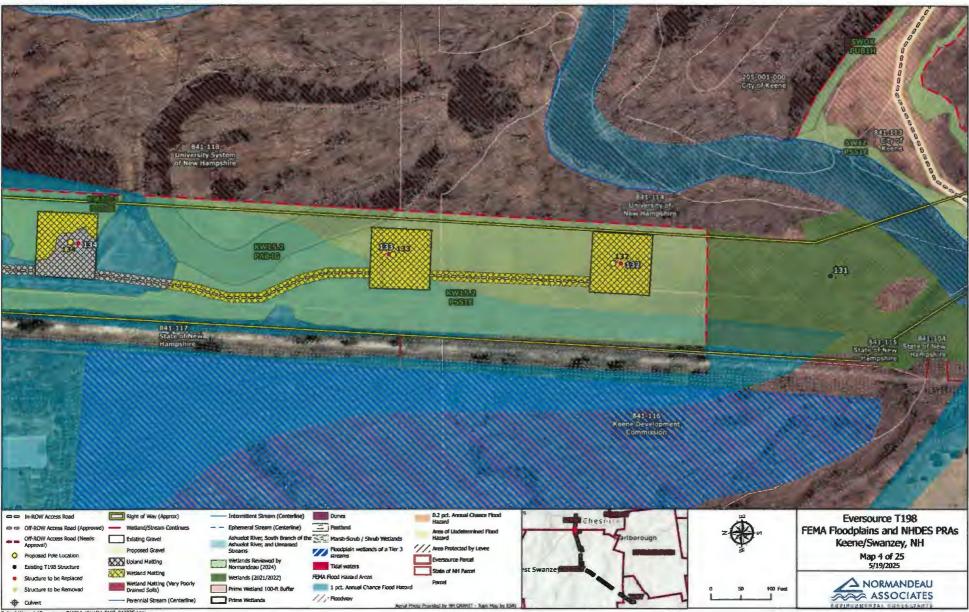
Fish Consumption	4A-M	MERCURY - FISH CONSUMPTION ADVISORY	N			4A-M	
		ZINC	N	2008	N/A	3-ND	
Projectial Dressing Water Sugary.	246	COPPER	N	2008	N/A	3-ND	
		ESCHERICHIA COLI	N	2022	2022	3-PAS	
		ZINC	N	2008	N/A	3-ND	
Primary Cantact Pasteation	10.0	CHLOROPHYLL-A	N	2005	N/A	3-ND	
		ESCHERICHIA COLI	N	2022	3022	AA.P	
Secondary Contact Recreation	2-M	ESCHERICHIA COLI	N	2022	2022	2-M	
Wildlife	3-ND						

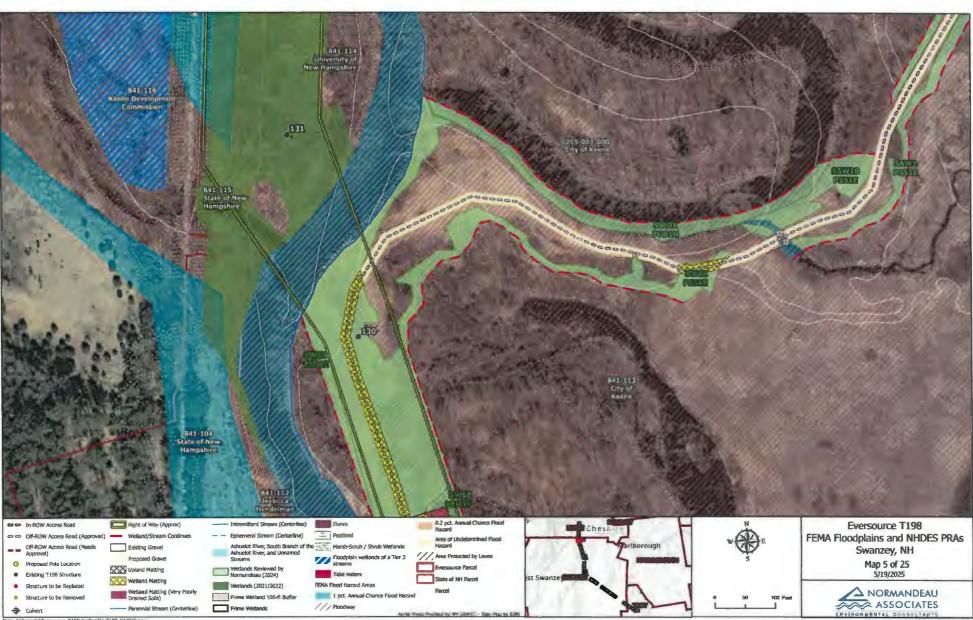
Gand	Marginal	Likely Good	No Current Data	Likely Bad	Poor	Severe
Mante month multiple	Meets water quality	Limited data available. The	Insufficient information	Limited data available The	Not meeting water quality	Not mosting water
reasonano arte consulate a s	standards/thresholds but	data that is available	to make an assessment	data that is available	standards/thresholds. The	quality
a contained in tanges	only marginally.	suggests that the	decision.	suggests that the	impairment is marginal.	standards/thresholds
CONFERENCE OF		parameter is Potentially		parameter is Potentially		The impairment is more
		Attaining Standards (PAS)		Not Supporting (PNS)		severe and causes provi
				water quality standards.		water coality
				water quality standards.		water goality



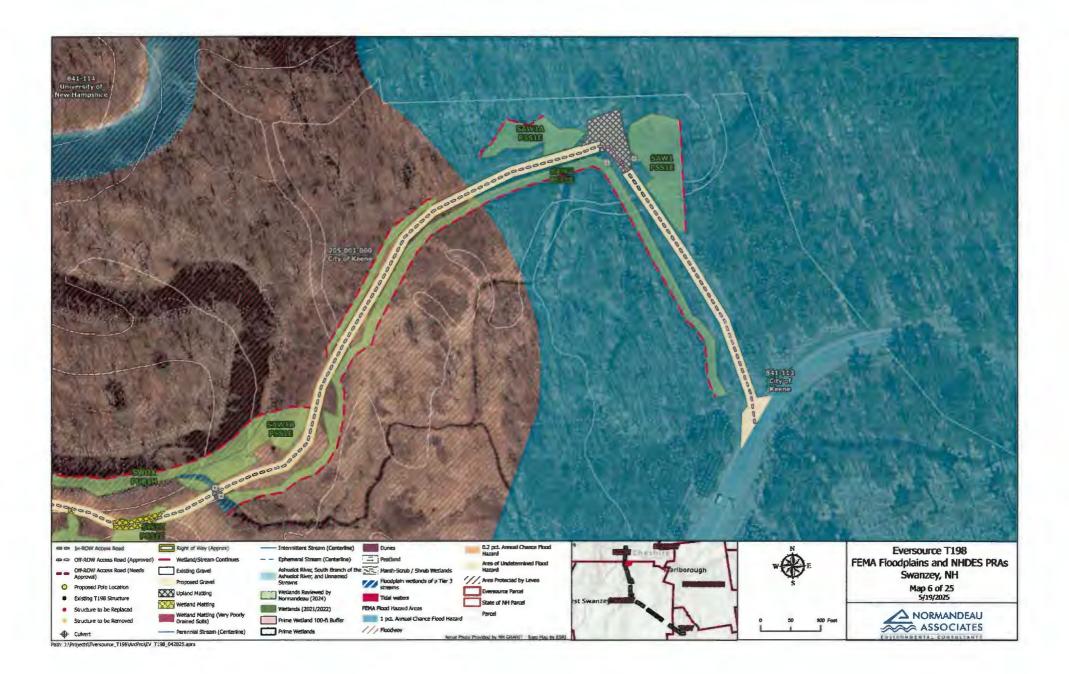


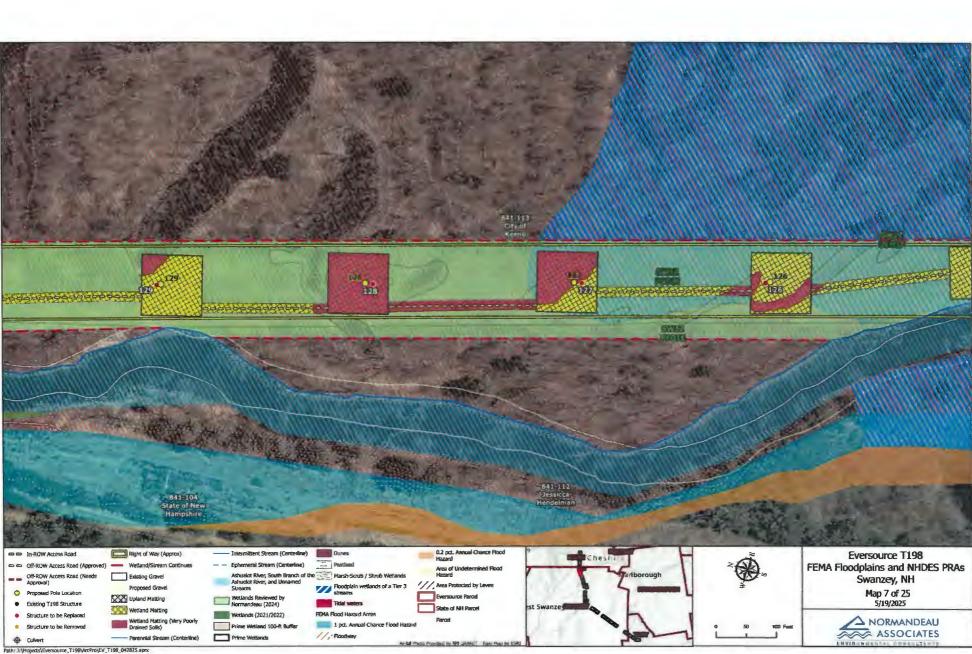


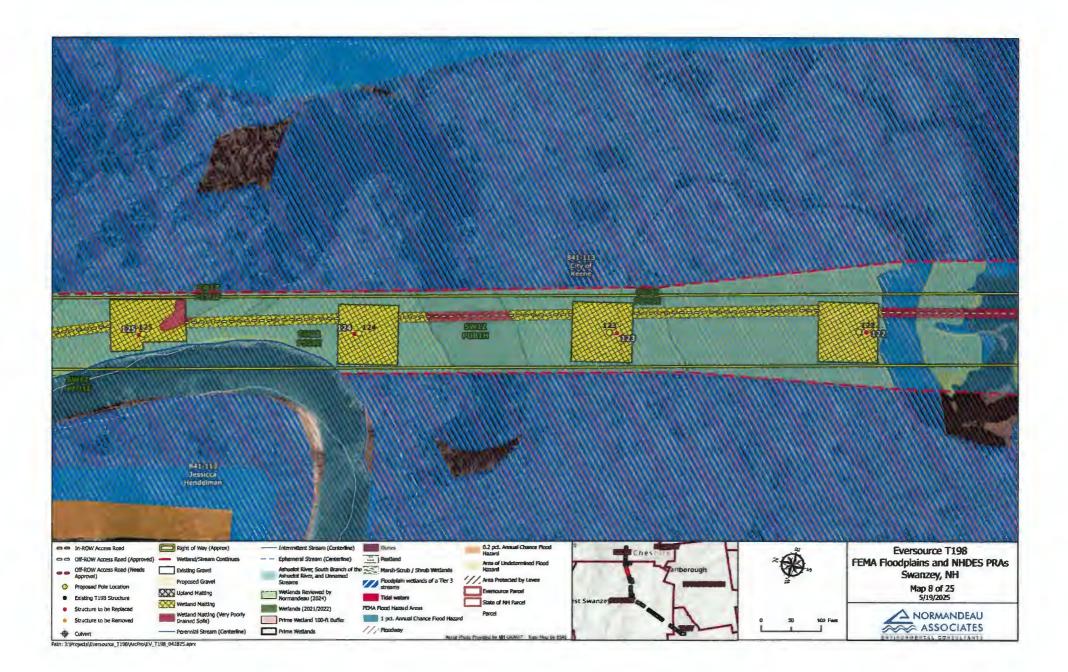


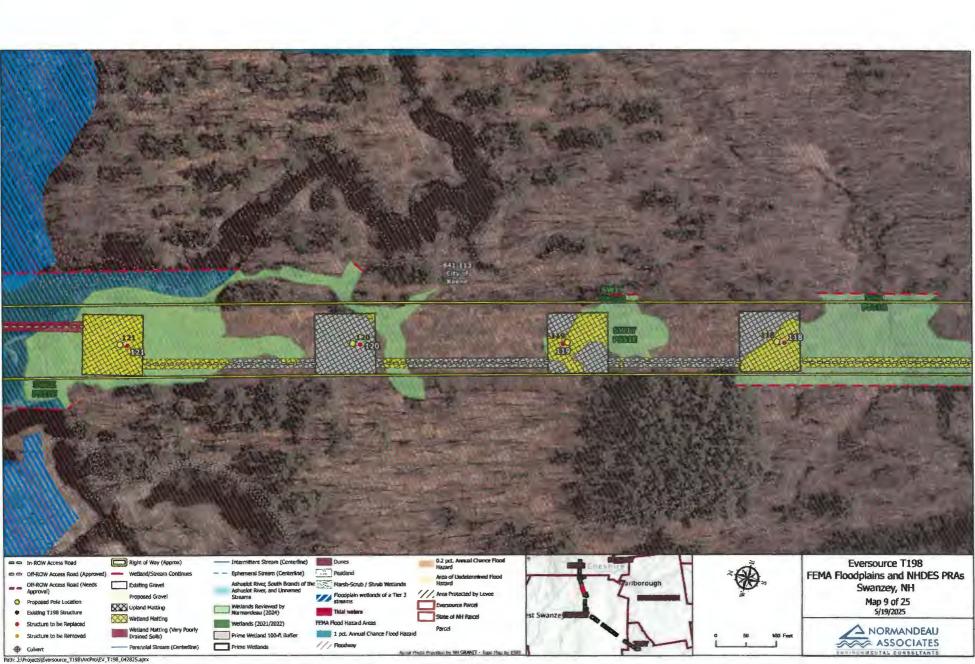


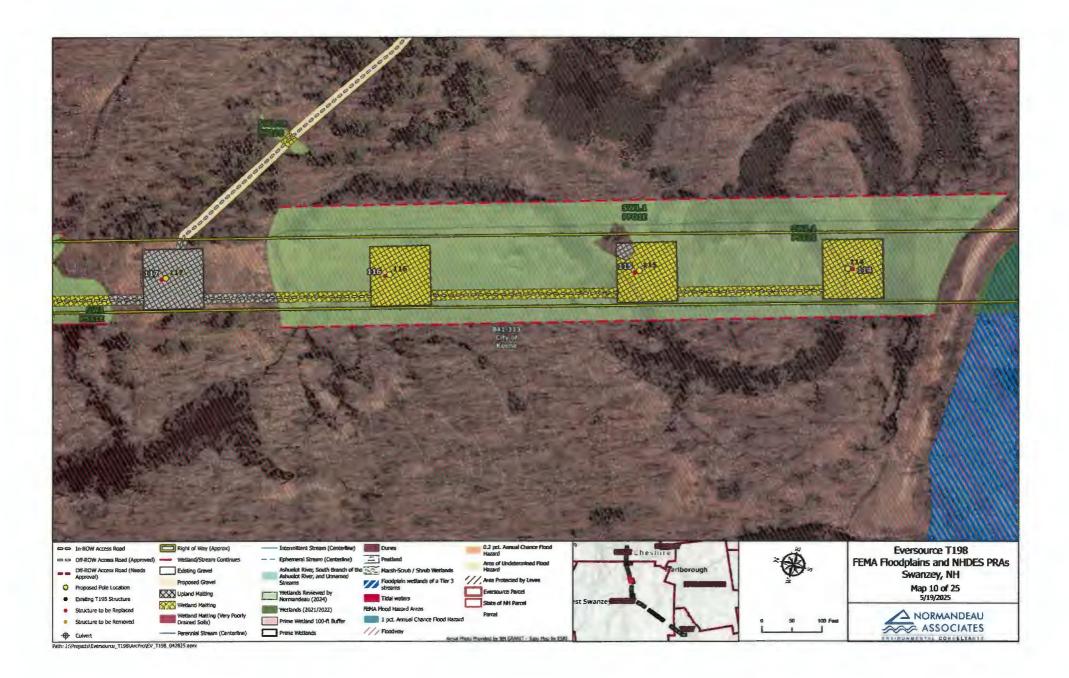
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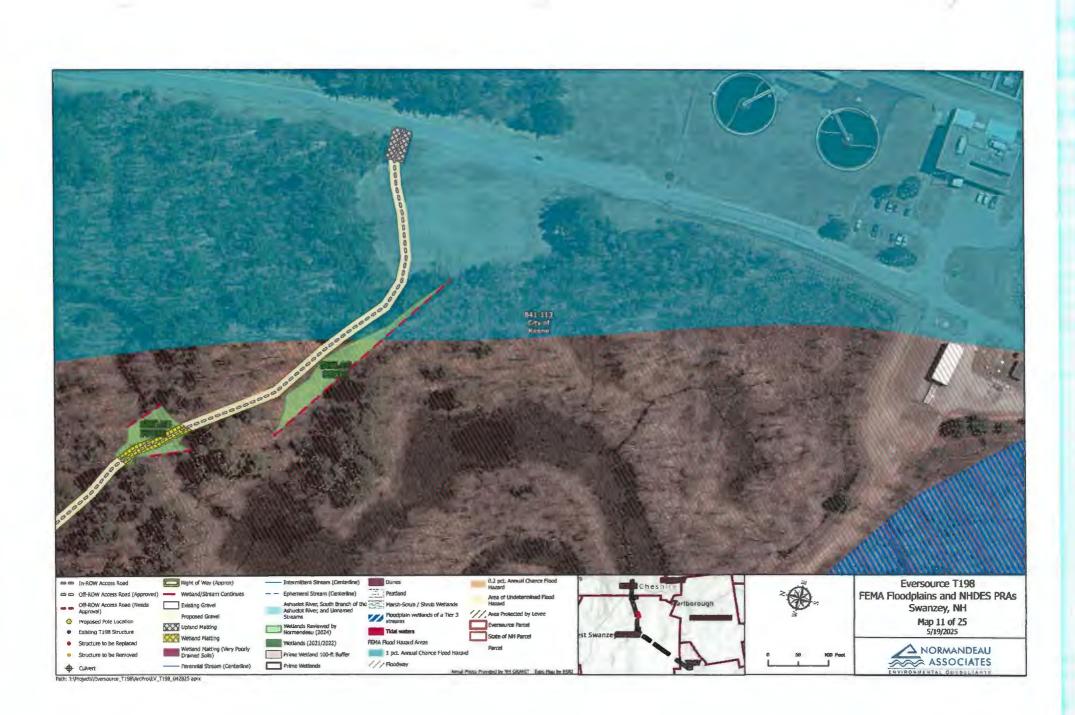


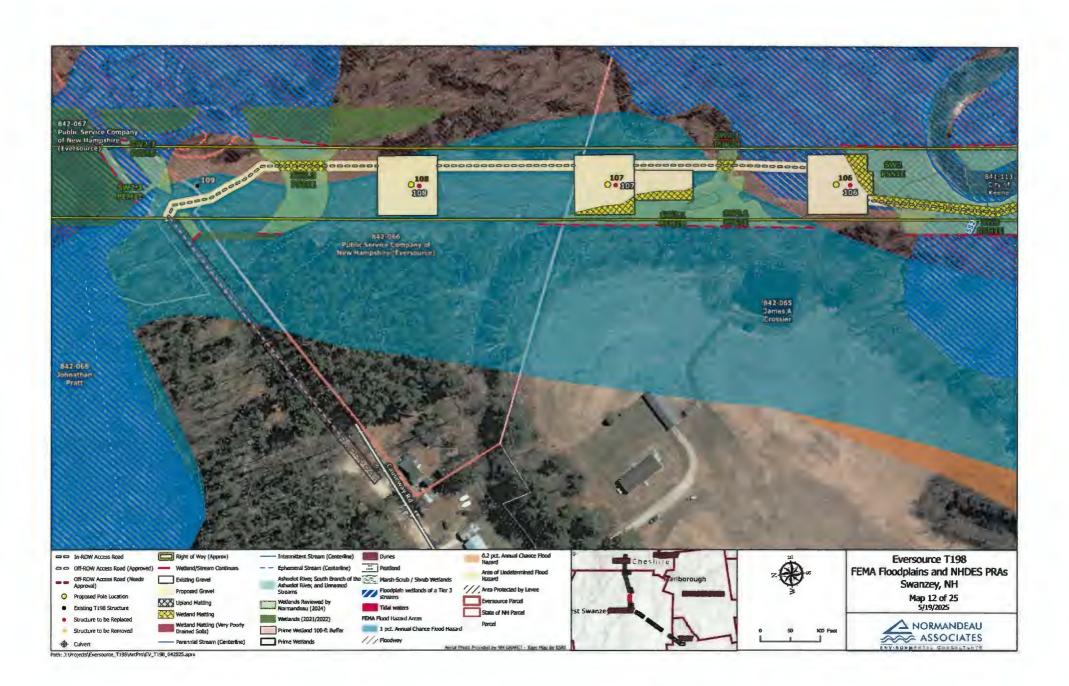


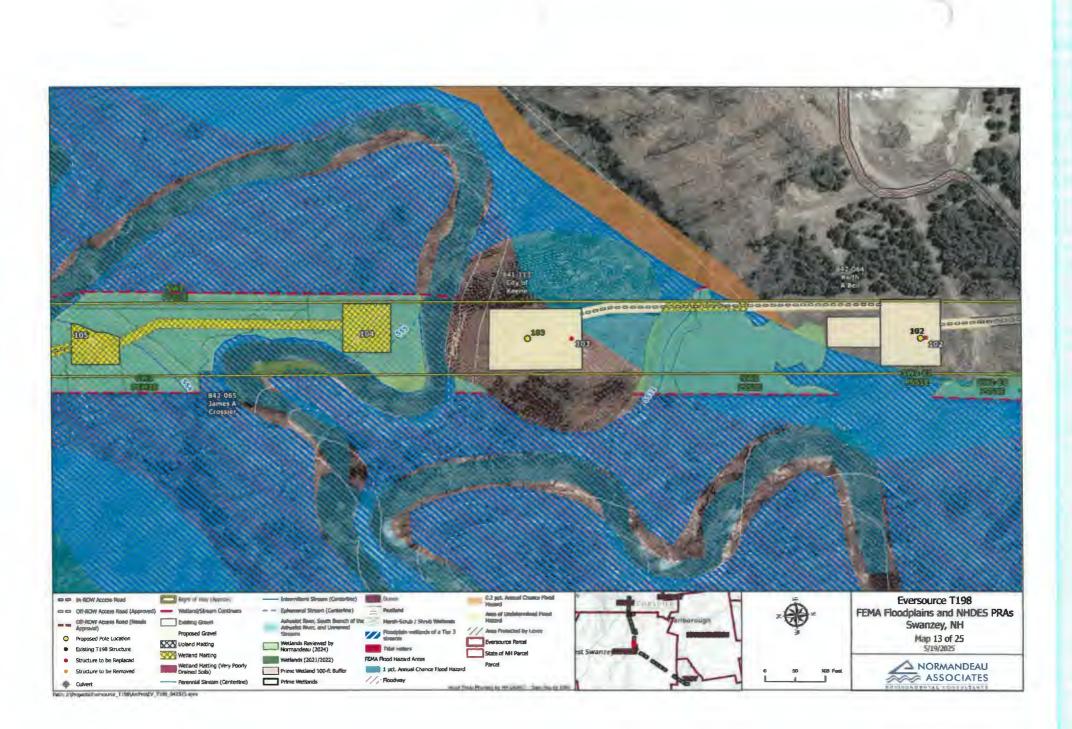




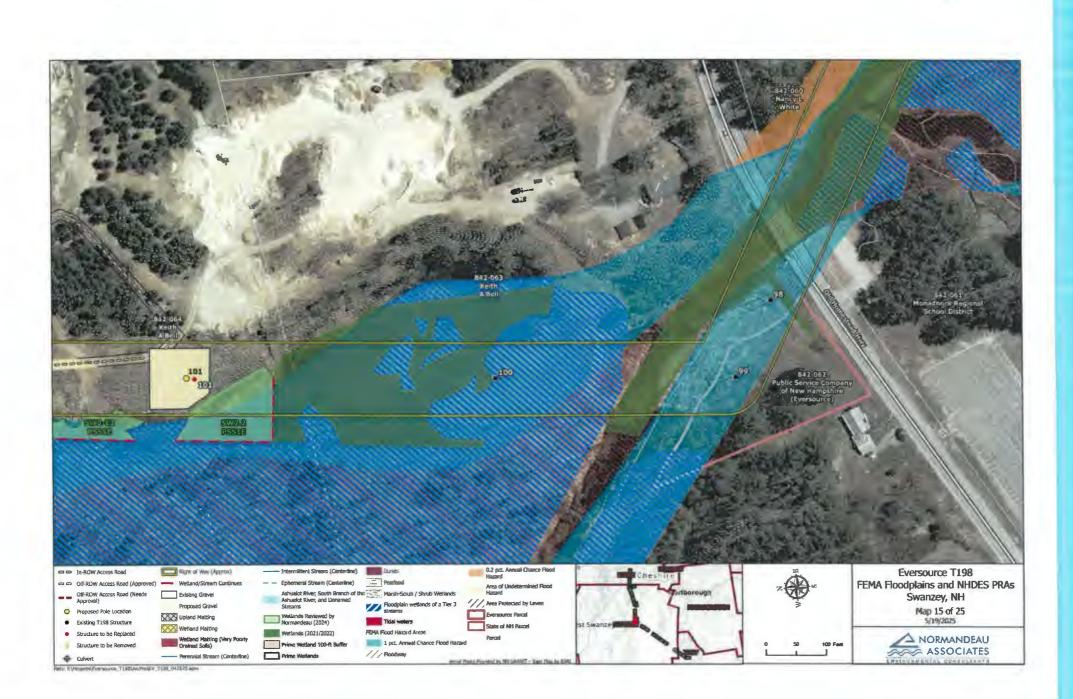






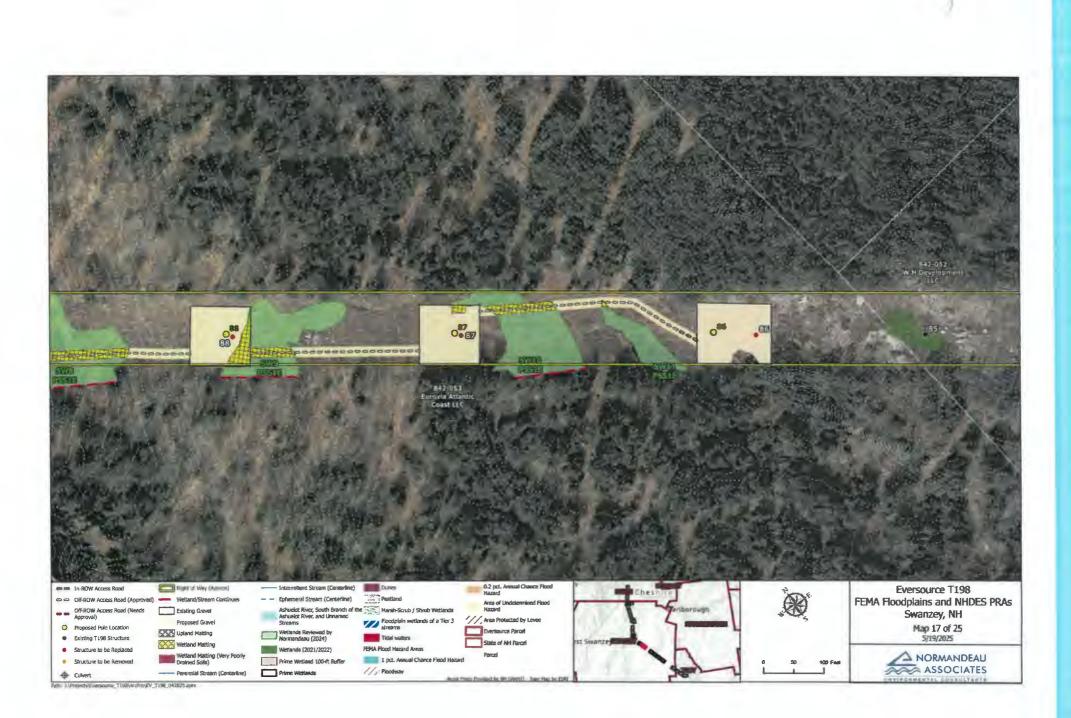








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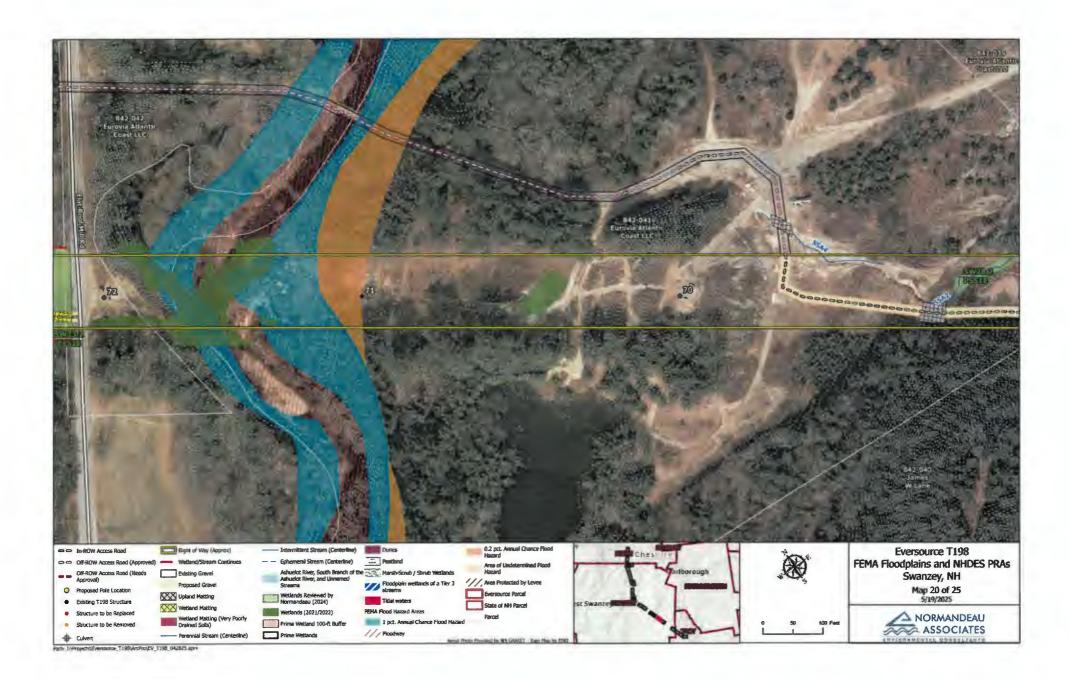


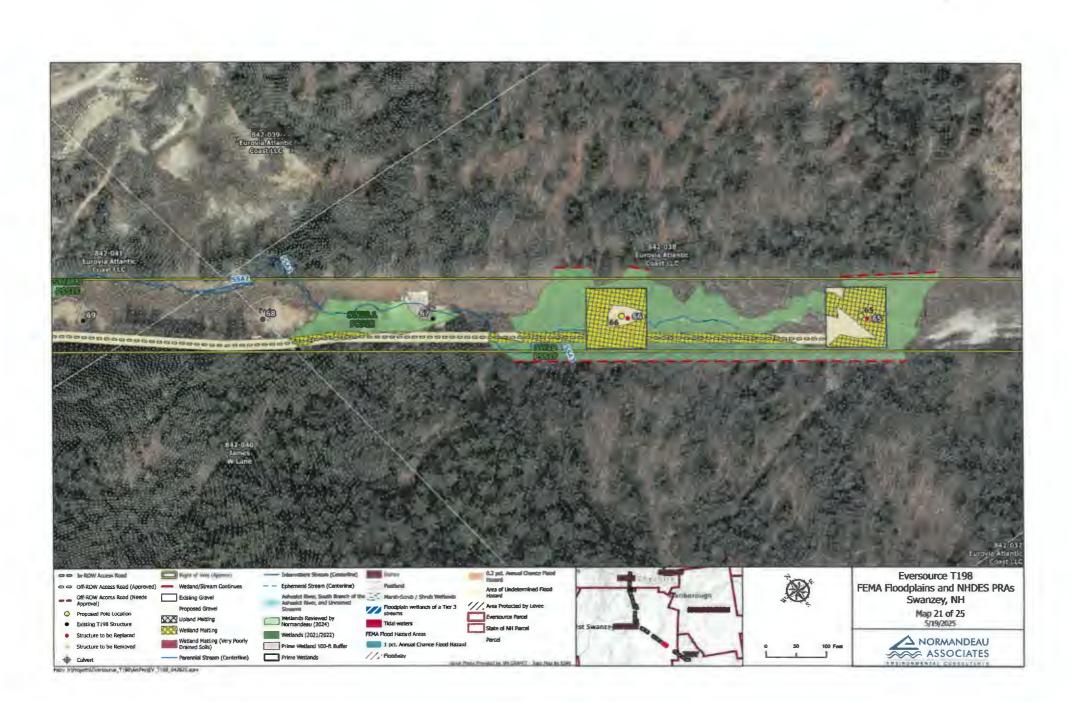


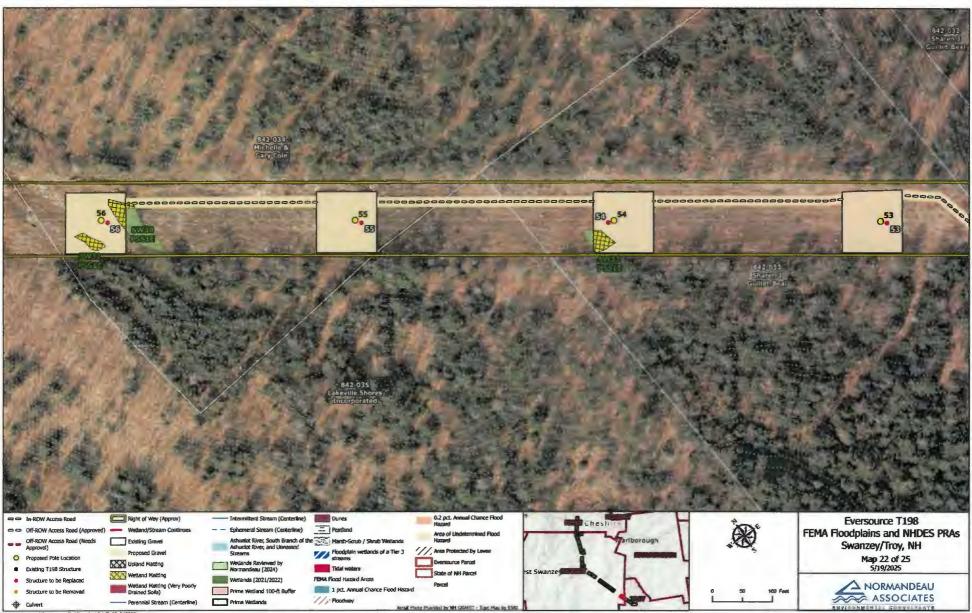
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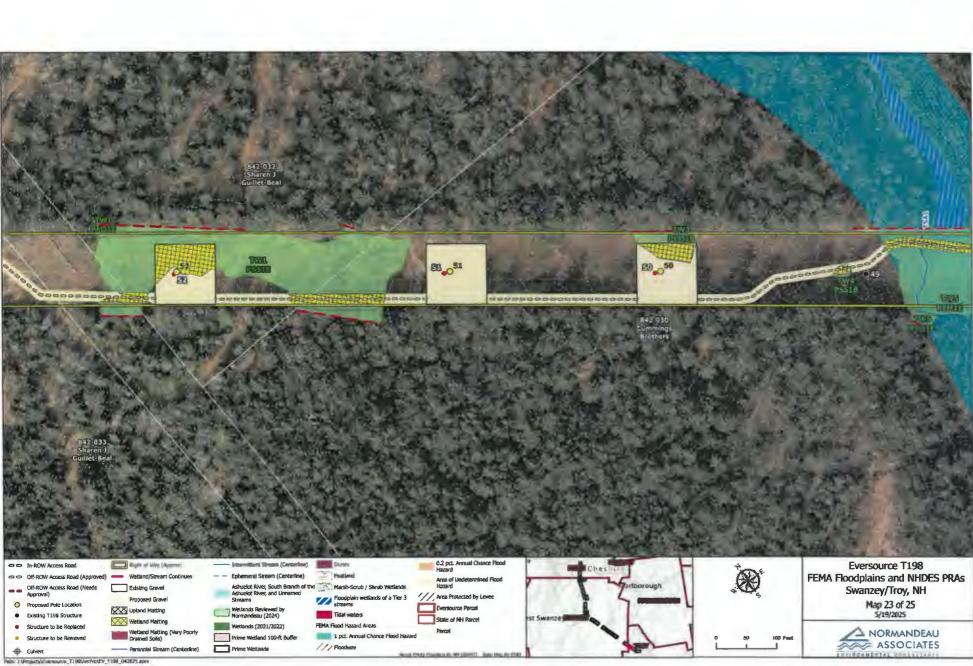


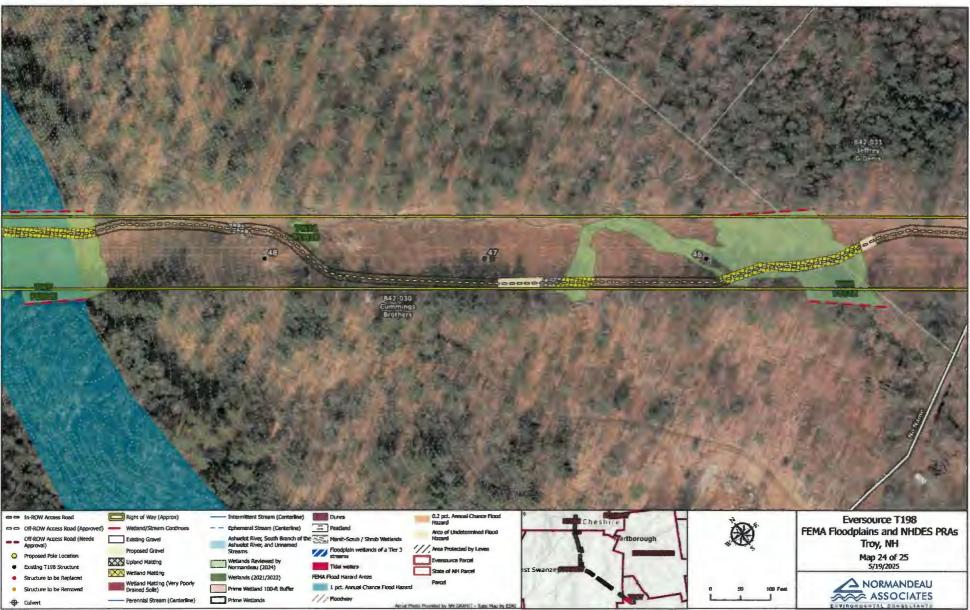
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RECEIVED DEC 1 9 2024

Please mail the completed form and required material to:

New Hampshire Division of Historical Resources State Historic Preservation Office Attention: Review & Compliance 19 Pillsbury Street, Concord, NH 03301-3570

DHR Use On	ly
R&C # 202	MPRO1065
Log In Date	12,19,24
Response Dat	to 19 125
Sent Date	1925

Request for Project Review by the New Hampshire Division of Historical Resources

This is a new submittal

This is additional information relating to DHR Review & Compliance (R&C) #: ESNH-2024-013

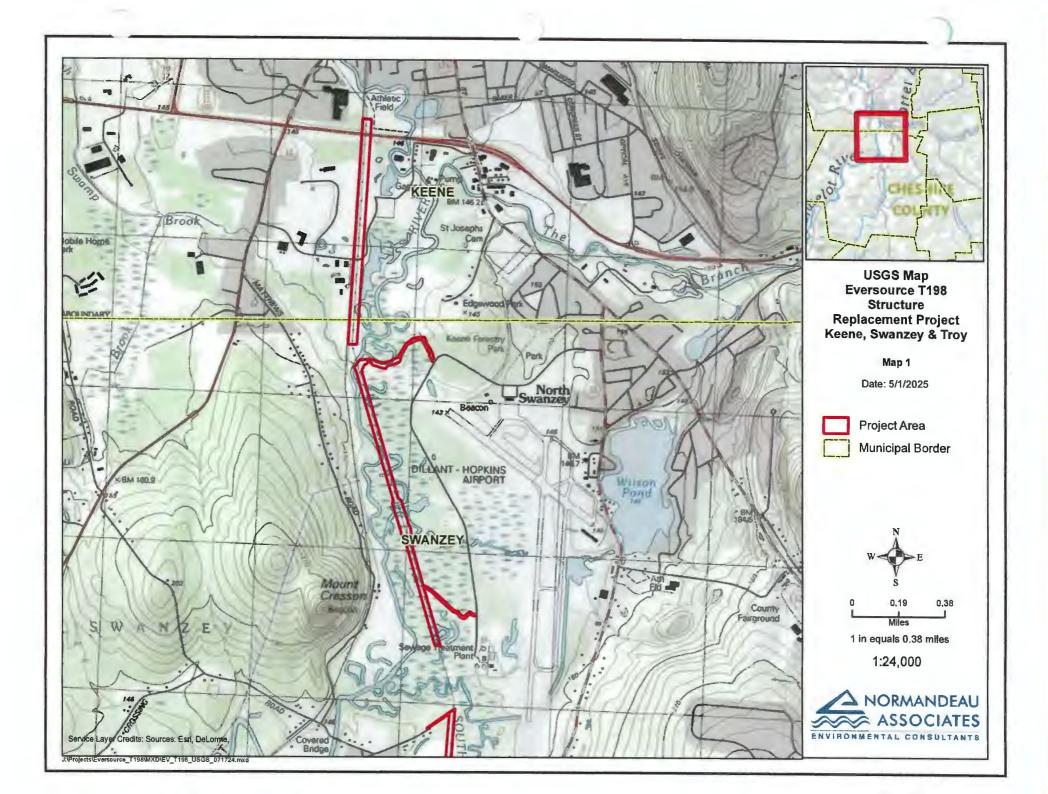
GENERAL PROJECT INFORMATION

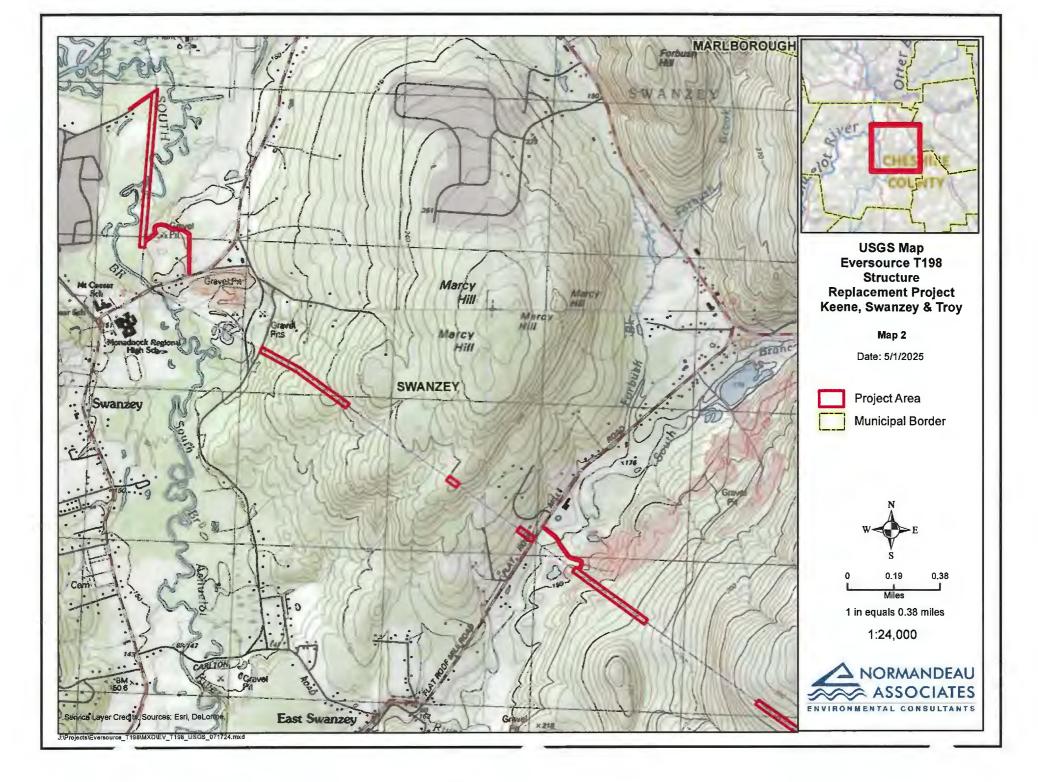
Project Title Eversource Energy T198 Line Structure Replacement	
Project Location T198 Line Structures 49-66, 73, 78-79,87-88, 106, 114-117, 132-137, 141	
City/Town Keene, Swanzey and Troy, NH Tax Map see attached Lot # see attached	
NH State Plane - Feet Geographic Coordinates: Easting 820401 Northing 139189 (See RPR Instructions and R&C FAQs for guidance.)	
Lead Federal Agency and Contact <i>(if applicable)</i> US Army Corps of Engineers, Keith Goulet <i>(Agency providing funds, licenses, or permits)</i> Permit Type and Permit or Job Reference # NH General Permit, NH DES, TBD, Standard Dredge and Fill Permit, Alteration of Terrain Permit, Shoreland Permit	
State Agency and Contact <i>(if applicable)</i> N/A Permit Type and Permit or Job Reference #N/A	
APPLICANT INFORMATION	
Applicant Name Jeremy Fennell, Eversource Energy	
Mailing Address 13 Legends Drive Phone Number 603-634-3396	
City Hooksett State NH Zip 03106 Email Jeremy.Fennell@Eversource.com	
CONTACT PERSON TO RECEIVE RESPONSE	
Name/Company William McCloy, Normandeau Associates, Inc.	
Mailing Address P.O. Box 205 Phone Number 8028617038	
City Rutland State VT Zip 05701 Email wmccloy@normandeau.com	

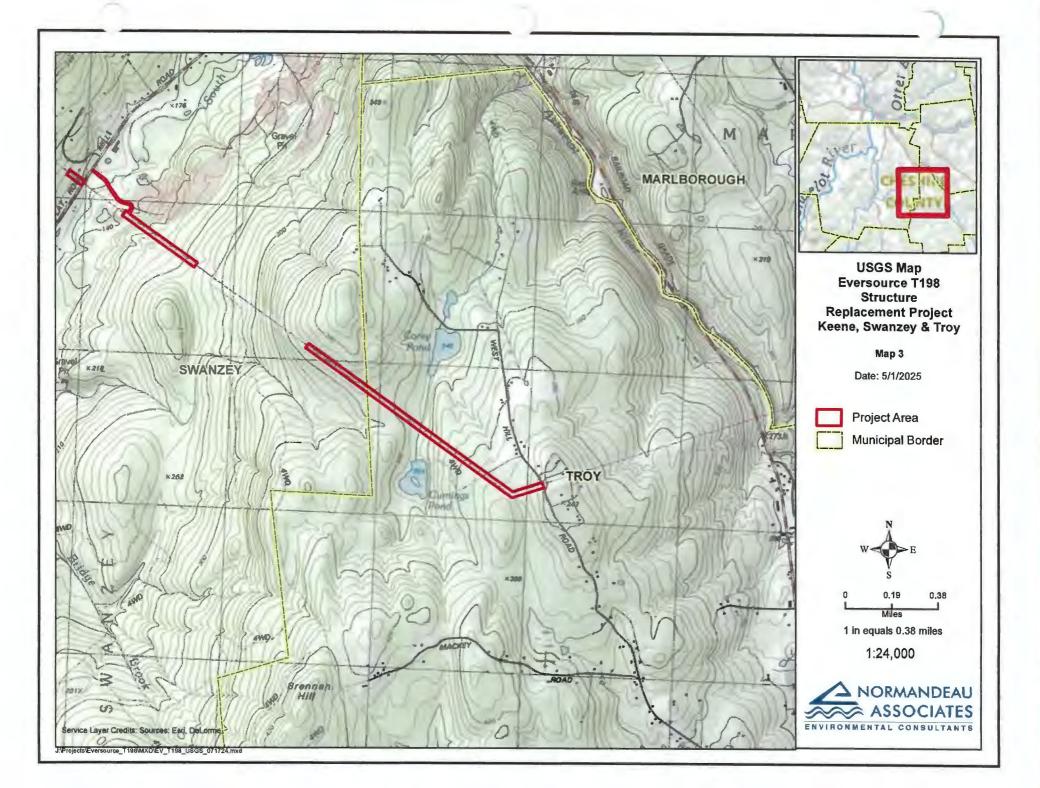
This form is updated periodically. Please download the current form at www.nh.gov/nhdhr/review. Please refer to the Request for Project Review Instructions for direction on completing this form. Submit one copy of this project review form for each project for which review is requested. Please include a self-addressed stamped envelope. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, additional information will be needed to complete the Section 106 review. All items and supporting documentation submitted with a review request, including photographs and publications, will be retained by the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process and the DHR's role in it, www.nh.gov/nhdhr/review website contact the R&C Specialist please visit our at: or marika.s.labash@dncr.nh.gov or 603.271.3558.

Merse constant for phile public concerns are <u>Marsed monorary resolutions</u> of phuse 18 +Riting, no for ther <u>Archar blog</u> cal Andy is <u>Mecchany</u> . T plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation. Authorized Signature: <u>Mechi Mechi DS 1800</u> Date: <u>1/9/25</u>	
 Attach the Project Mapping using EMMIT or relevant portion of a 7.5' USGS Map. (See RPR Instructions and R&C FAQS for guidance.) Attach a detailed arrative description of the proposed project. Attach a site plan. The site plan should include the project boundaries and areas of proposed excavation. Attach a site plan. The site plan should include the project boundaries and areas adjacent to project location, and specific areas of proposed impacts and disturbances.) (Mormative photo captions are requested.) A DHR records search must be conducted to identify properties within or adjacent to the project area. Provide records search needed to THR review. PROME records search must be conducted to identify properties within or adjacent to the project area. EMMIT or in-house records search conducted on 10/09/2024. Architecture Architecture Architecture (hridges, walls, culverte, etc.) objects, districts or landscapes within the project area? (D Veel (D N) and (D N)/09/2024. Architecture (hridges, structures (hridges, walls, culverte, etc.) objects, districts or landscapes within the project area? (D N etc.) (D N) and (D N)/09/2024. Architecture (D N) (D	PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION
Astach a detailed narrative description of the proposed project. Attach a detailed narrative description of the project boundaries and areas of proposed excavation. Attach a site plan. The site plan should include the project boundaries and areas of proposed excavation. and specific areas of proposed impacts and disturbances.) (Informative photo captions are requested.) A DHR records search must be conducted to identify properties within or adjacent to the DHR website.) Flease note, using EMMIT or Inable 1. (Blenk table forms are available on the DHR website.) Flease note, using EMMIT or Inable 1. (Blenk table forms are available on the DHR website.) Flease note, using EMMIT or Inable 1. (Blenk table forms are available on the DHR website.) Flease note, using EMMIT or Inable 1. (Blenk table forms are available on the DHR website.) Flease note, using EMMIT for the following information: Architecture Architecture Are there any buildings, structures (bridges, walls, culverts, etc.) objects, districts or landscapes within the project area? [2 Yes] No If no, skip to Archaeology section. If yes, submit all of the following information: Approximate age(s): Photographs of each resource or streetscape located within the project area, with captions, along with a mapped photo key. (Digital photographs are accopted. All photographs must be clear, crisp and focused.) If the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures, provide additional photographs alwing detailed project work locations. (i.e. Detail photo of windows if window replacement is proposed.) Archaelog:	Project Boundaries and Description
Are there any buildings, structures (bridges, walls, culverts, etc.) objects, districts or landscapes within the project area? Yes no If no, skip to Archaeology section. If yes, submit all of the following information: Approximate age(s): Photographs of each resource or streetscape located within the project area, with captions, along with a mapped photo key. Objectal photographs are accepted. All photographs must be clear, crisp and focused.) If the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures, provide additional photographs showing detailed project work locations. (i.e. Detail photo of windows if window replacement is proposed.) Archaeology Description of current and previous land use and disturbances. Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.) Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process. DHR Comment/Finding Recommendation This Space for Division of Historical Resources Use Only Insufficient information to initiate review. Additional information concerning the survey or public concerning the survey of the process. DHR Comment/Finding Recommendation This Space for Division of Historical Resources Use Only Insufficient information to initiate review. Additional information to initiate review. No Potential to cause Effects	 Instructions and R&C FAQs for guidance.) Attach a detailed narrative description of the proposed project. Attach a site plan. The site plan should include the project boundaries and areas of proposed excavation. Attach photos of the project area (overview of project location and area adjacent to project location, and specific areas of proposed impacts and disturbances.) (Informative photo captions are requested.) A DHR records search must be conducted to identify properties within or adjacent to the project area. Provide records search results via EMMIT or in Table 1. (Blank table forms are available on the DHR website.) Please note, using EMMIT Guest View for an RPR records search does not provide the necessary information needed for DHR review.
project area? Yes □ No If no, skip to Archaeology section. If yes, submit all of the following information: Approximate age(s): □ Photographs of each resource or streetscape located within the project area, with captions, along with a mapped photo key. (Digital photographs are accepted. All photographs must be clear, crisp and focused.) □ If the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures, provide additional photographs showing detailed project work locations. (i.e. Detail photo of windows if window replacement is proposed.) Archaeology Does the proposed undertaking involve ground-disturbing activity? ⊠ Yes □ No If yes, submit all of the following information: ⊠ Description of current and previous land use and disturbances. ⊠ Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.) Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process. DHR Comment/Finding Recommendation This Space for Division of Historical Resources Use Only □ Insufficient information to initiate review. □ Additional information is needed in order to complete review. □ No Potential to cause Effects □No Historic Properties Affected □ No Adverse Effect □ Adverse Effect □ Must 1 august 1 au	Architecture
 Photographs of each resource or streetscape located within the project area, with captions, along with a mapped photo key. (Digital photographs are accepted. All photographs must be clear, crisp and focused.) If the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures, provide additional photographs showing detailed project work locations. (i.e. Detail photo of windows if window replacement is proposed.) Archaeology Does the proposed undertaking involve ground-disturbing activity? ⊠ Yes □ No If yes, submit all of the following information: ∑ Description of current and previous land use and disturbances. X Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.) Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process. DHR Comment/Finding Recommendation This Space for Division of Historical Resources Use Only Insufficient information to initiste review. □ Additional information is needed in order to complete review. No Potential to cause Effects □No Historic Properties Affected □No Adverse Effect □ Adverse Effect Comments: Musc Constant True Difference of phuse ID + +(Hing, ND +/++Henree, Althour blog: Call Adverse of the phuse ID + +(Hing, ND +/++Henree, Althour blog: Call Adverse of the course of this project, you must contact the Division of Historical Resources are discources are discources of this project, you must contact the Division of Historical Resources are required by federal law and regulation. Authorized Signature: Musc Musc Musc Musc Musc Musc Musc Musc	project area? 🛛 Yes 🗌 No
Does the proposed undertaking involve ground-disturbing activity? Yes □ No If yes, submit all of the following information:	 Photographs of each resource or streetscape located within the project area, with captions, along with a mapped photo key. (Digital photographs are accepted. All photographs must be clear, crisp and focused.) If the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures, provide additional photographs showing detailed project work locations. (i.e. Detail photo of
 Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.) Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process. DHR Comment/Finding Recommendation This Space for Division of Historical Resources Use Only Insufficient information to initiate review. □ Additional information is needed in order to complete review. No Potential to cause Effects □No Historic Properties Affected □No Adverse Effect □ Adverse Effect Comments:	Does the proposed undertaking involve ground-disturbing activity? 🛛 Yes 🗌 No
☐ Insufficient information to initiate review. ☐ Additional information is needed in order to complete review. ☐ No Potential to cause Effects ☐ No Historic Properties Affected ☐ No Adverse Effect ☐ Adverse Effect Comments:	 Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.) Please note that for many projects an architectural and/or archaeological survey or other
Do Potential to cause Effects No Historic Properties Affected No Adverse Effect Adverse Effect Comments: <u>Michae construct for Pife y public concerns are</u> <u>Named manual wesses to instable properties</u> . Sus <u>Based on pre innant wesses of phuse 1B + Effing</u> , no for ther <u>Airchare Diog. Cal. Study is McCessary</u> . <i>I plans change or resources are discovered in the course of this project, you must contact the Division of Historical</i> Resources as required by federal law and regulation. Authorized Signature: <u>Mccess Michaeles</u> <u>Division</u> <u>Date: 1/9/25</u>	DHR Comment/Finding Recommendation This Space for Division of Historical Resources Use Only
Comments: <u>Method construct the Diffe y public conscress are</u> <u>Aussid reporting in acts & Installic conscress are</u> <u>Based on prevening vessils of phuse IB + esting</u> , no for ther <u>archare blog cal Audy is Necessary</u> . If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation. Authorized Signature: <u>Mechi Mechi DS Mec</u> <u>Date</u> : <u>19/25</u>	
Authorized Signature: <u>Memi prin pstra</u> Date: <u>1/9/25</u>	Comments:
	If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation. Authorized Signature: Man Mar DS MD Date: 1/9/25
4	4

Attachment F: USGS Topographic Project Location Map (1"=2,000' Scale)

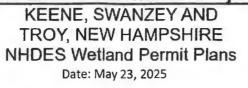


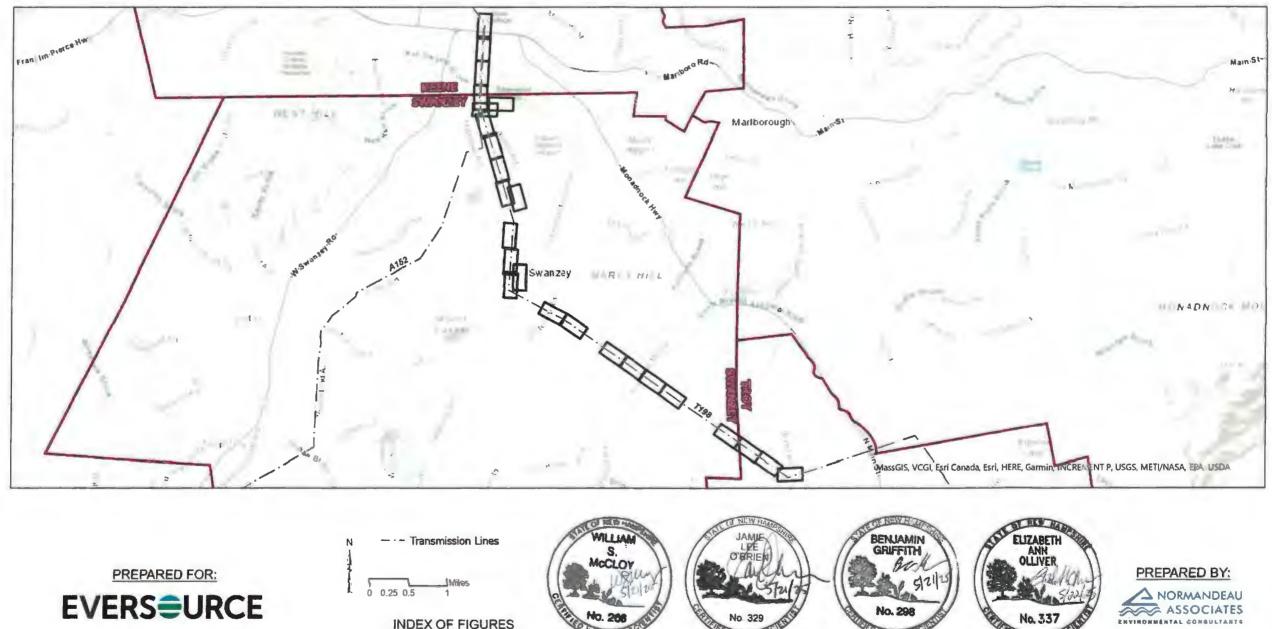




Attachment G: Final Plans

T198 Line Maintenance Project

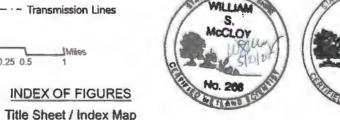






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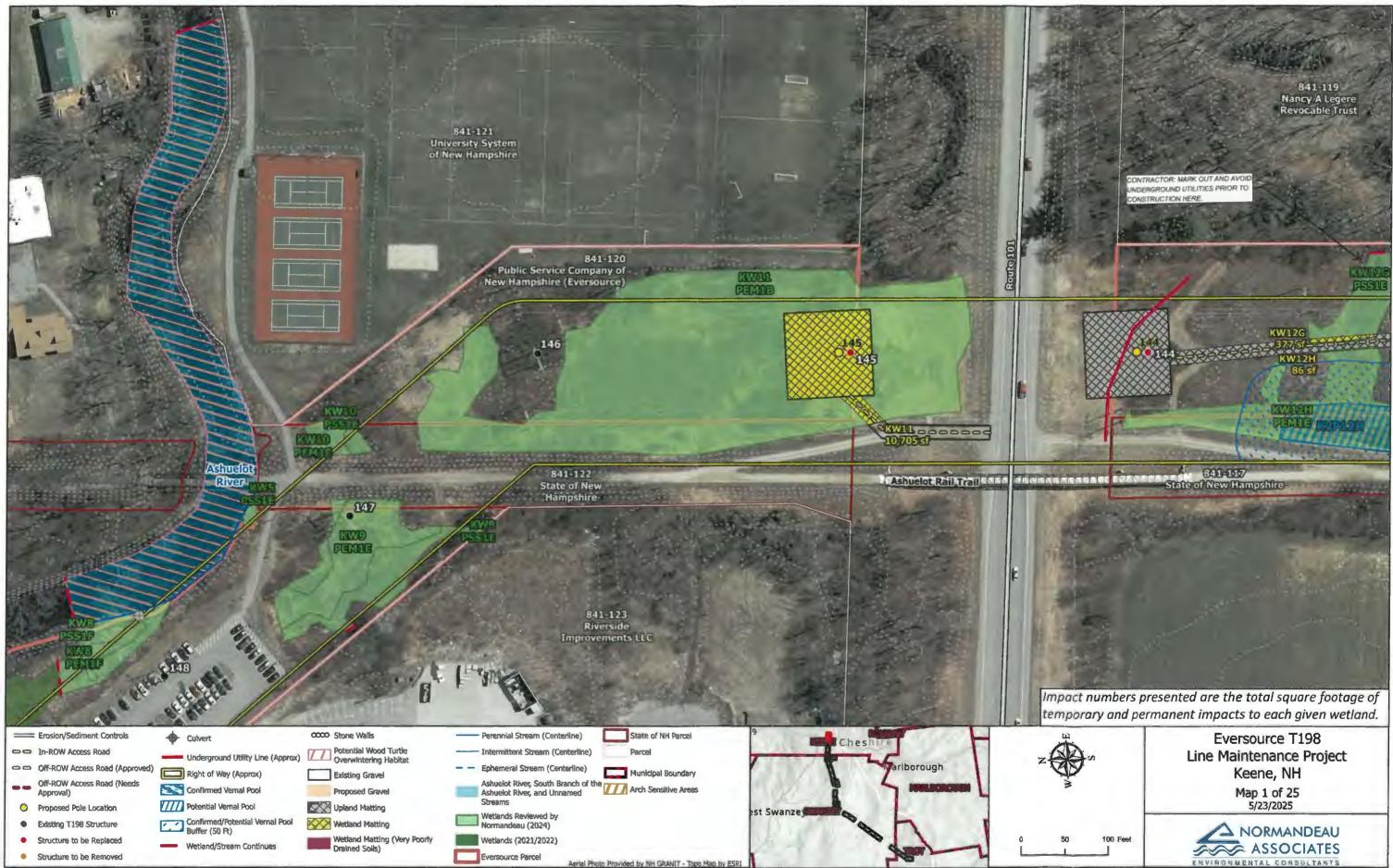
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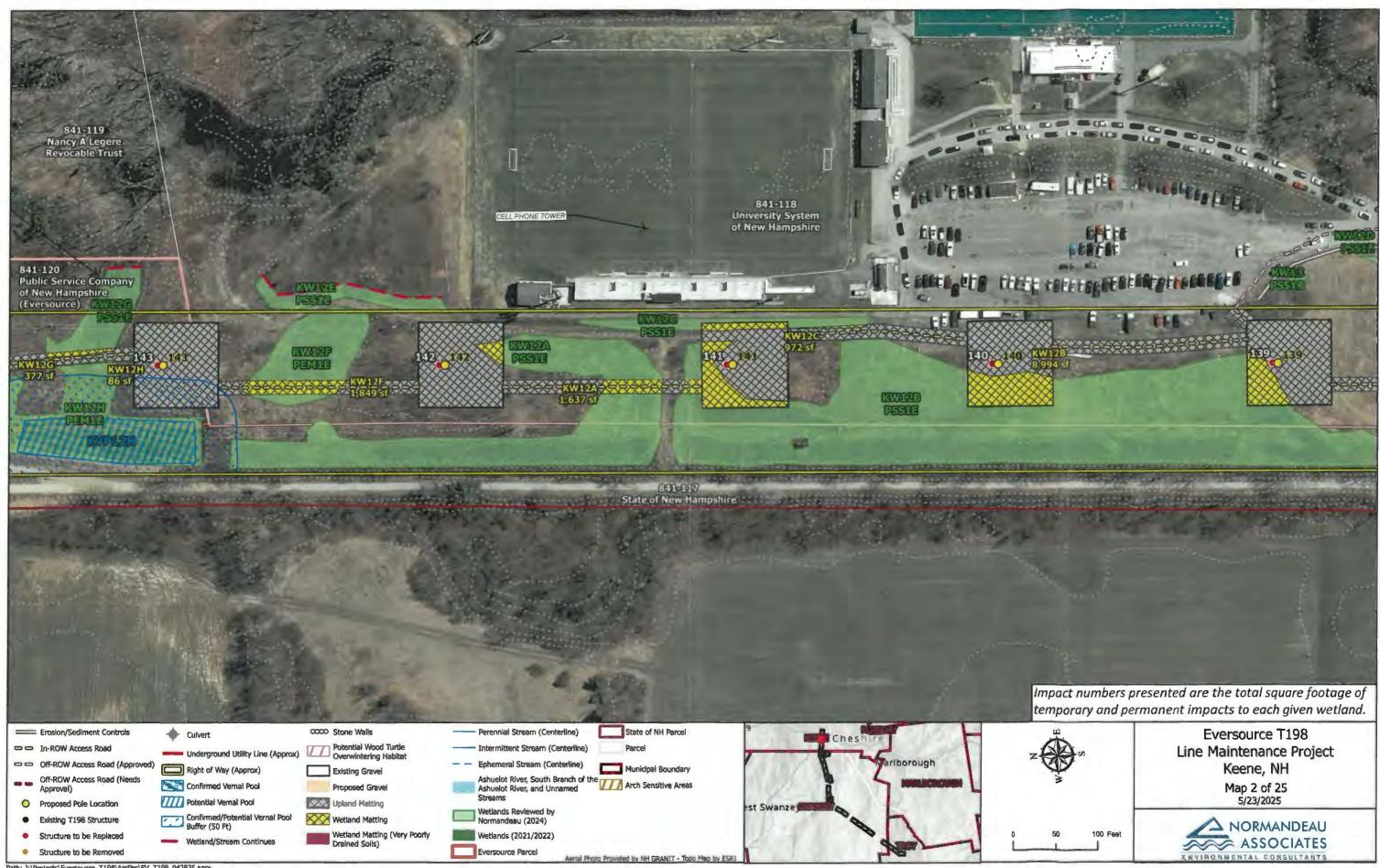


Title Sheet / Index Map Map Sheets 1-25

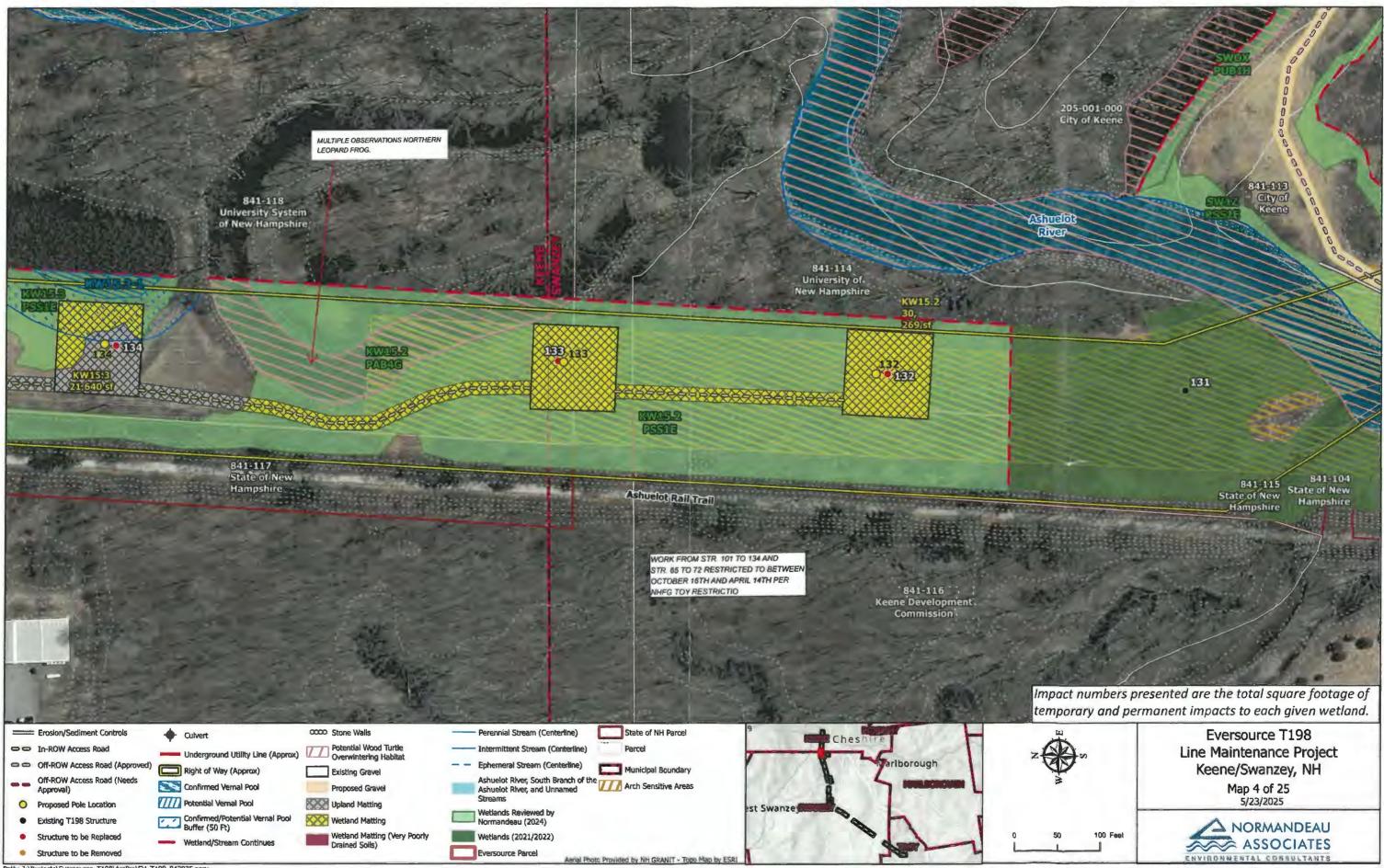


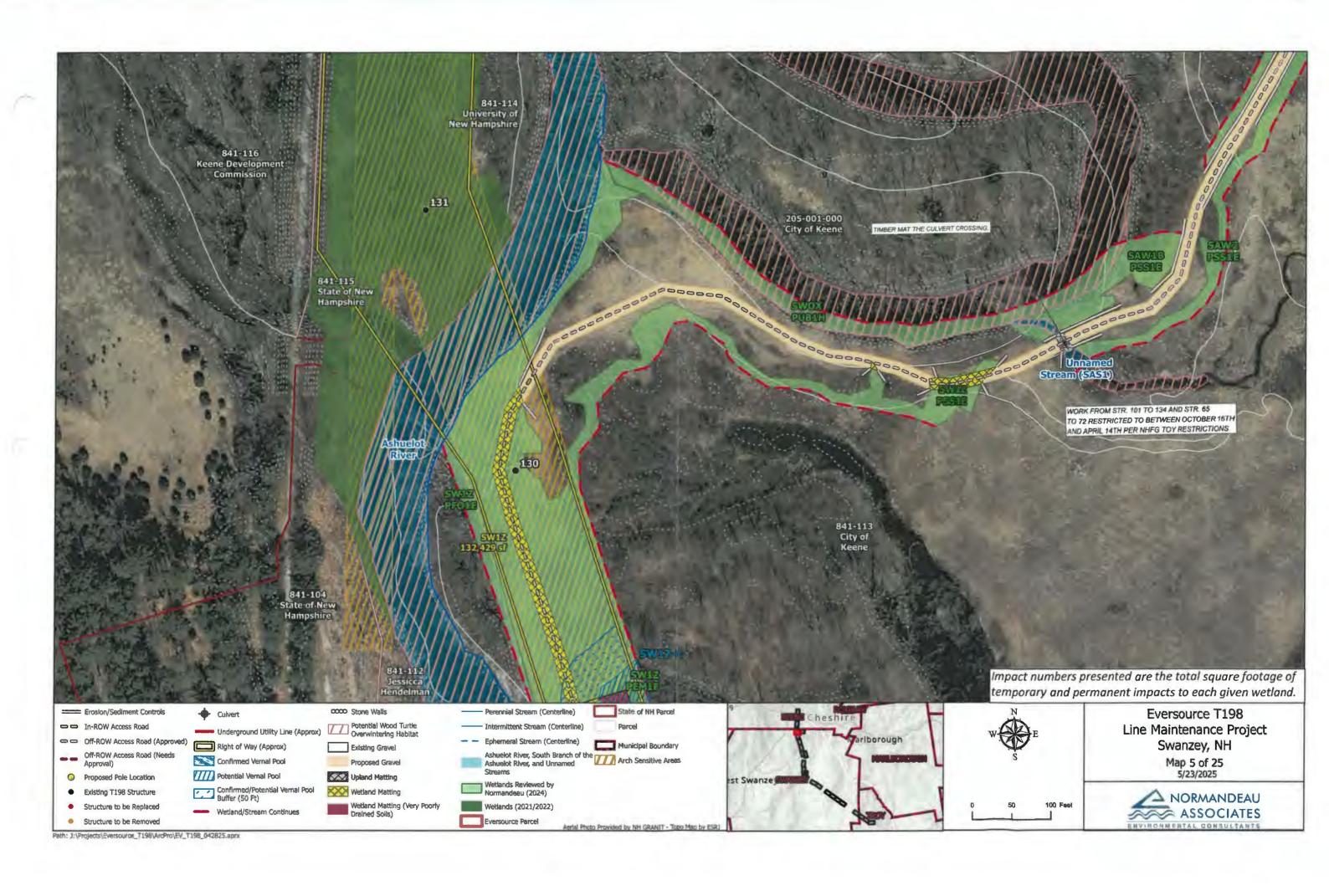
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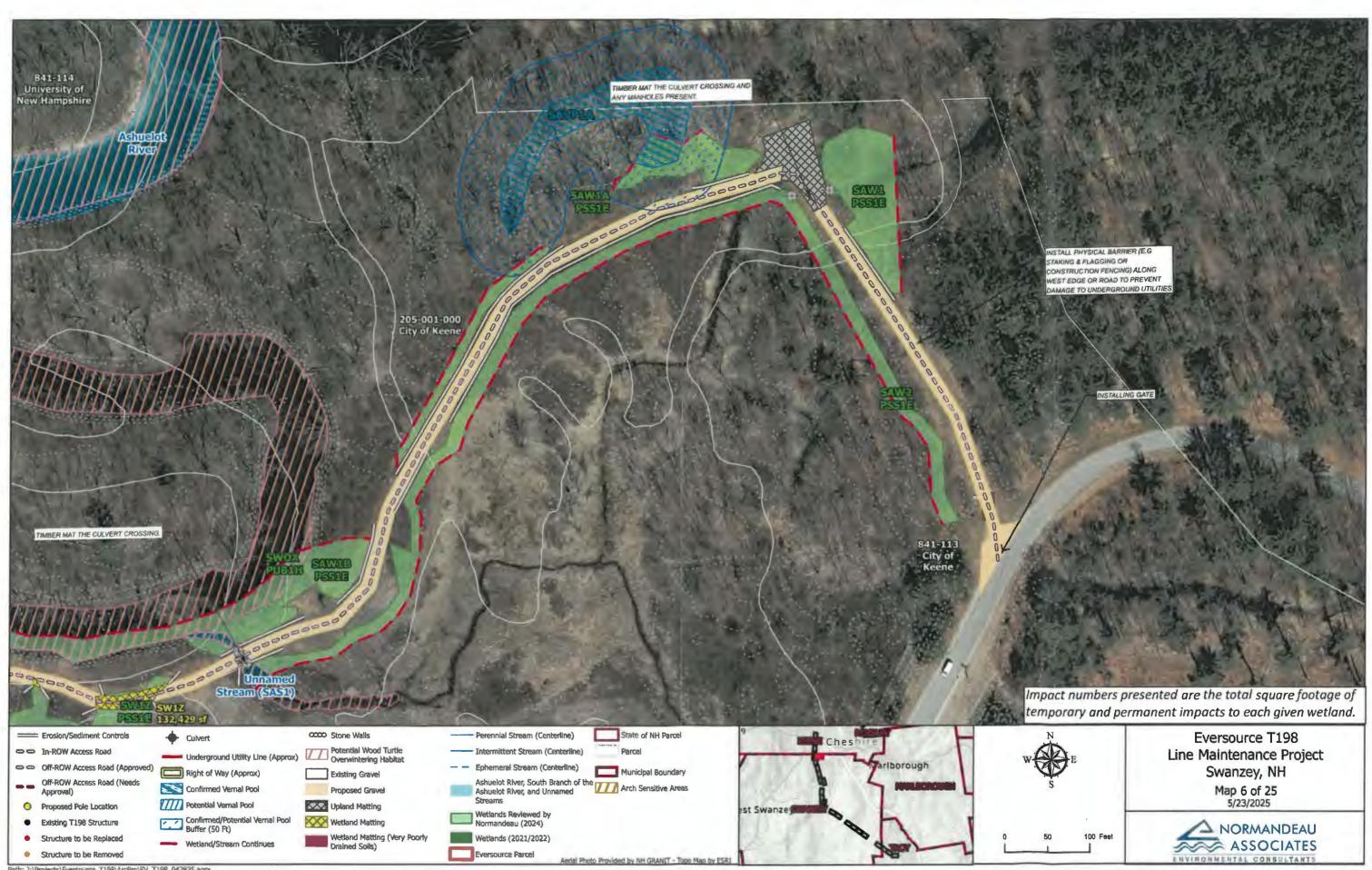


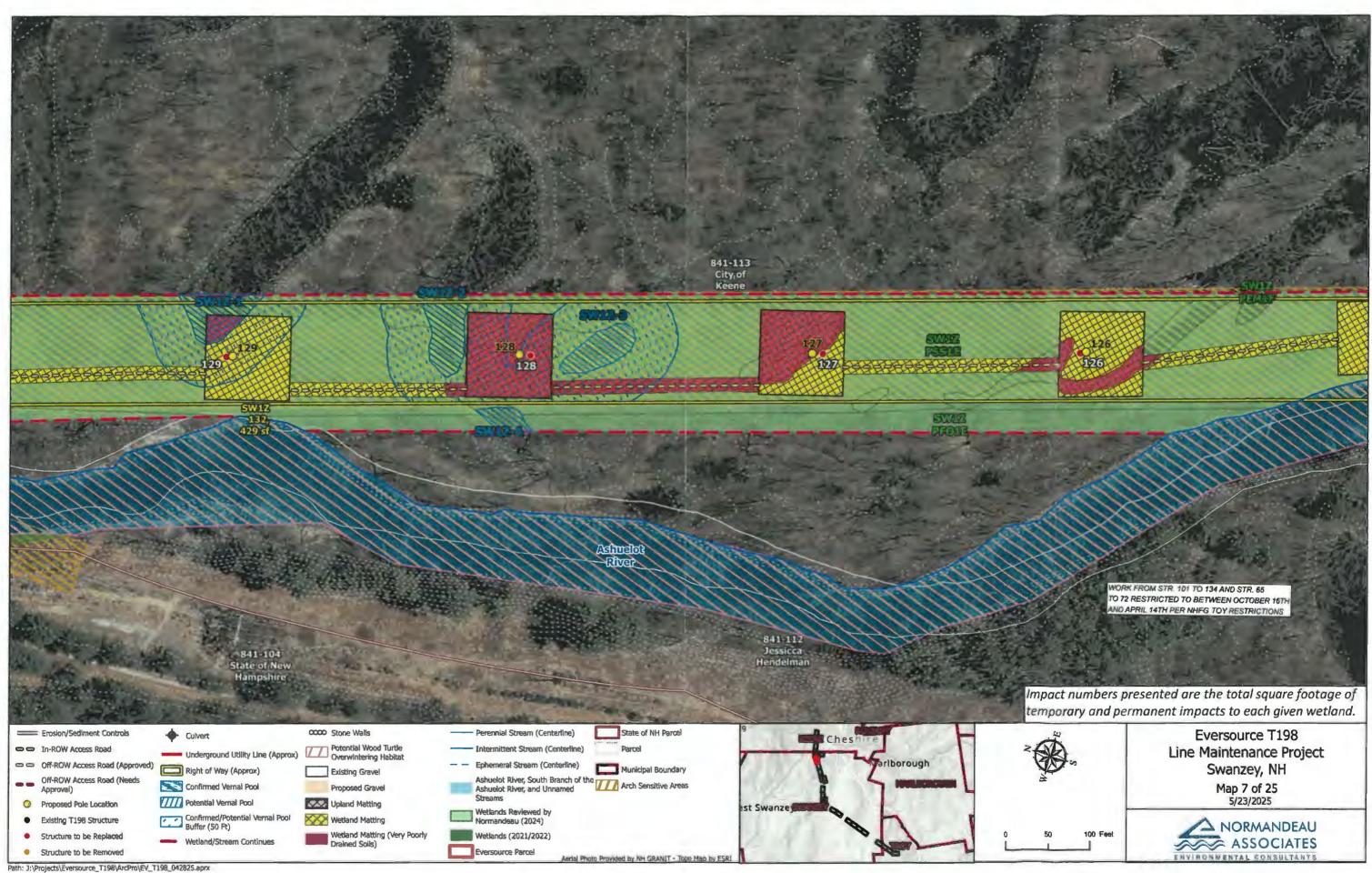


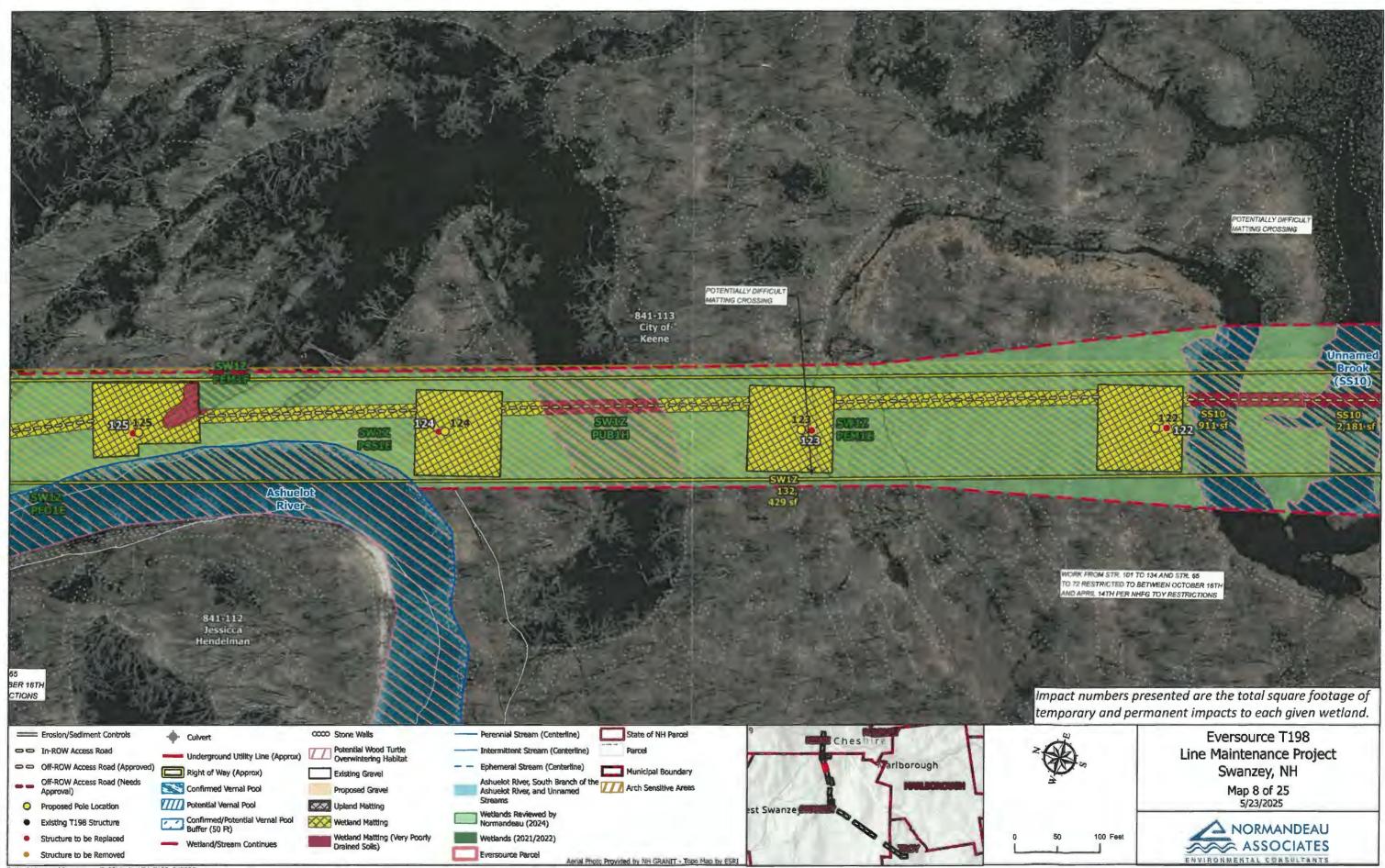


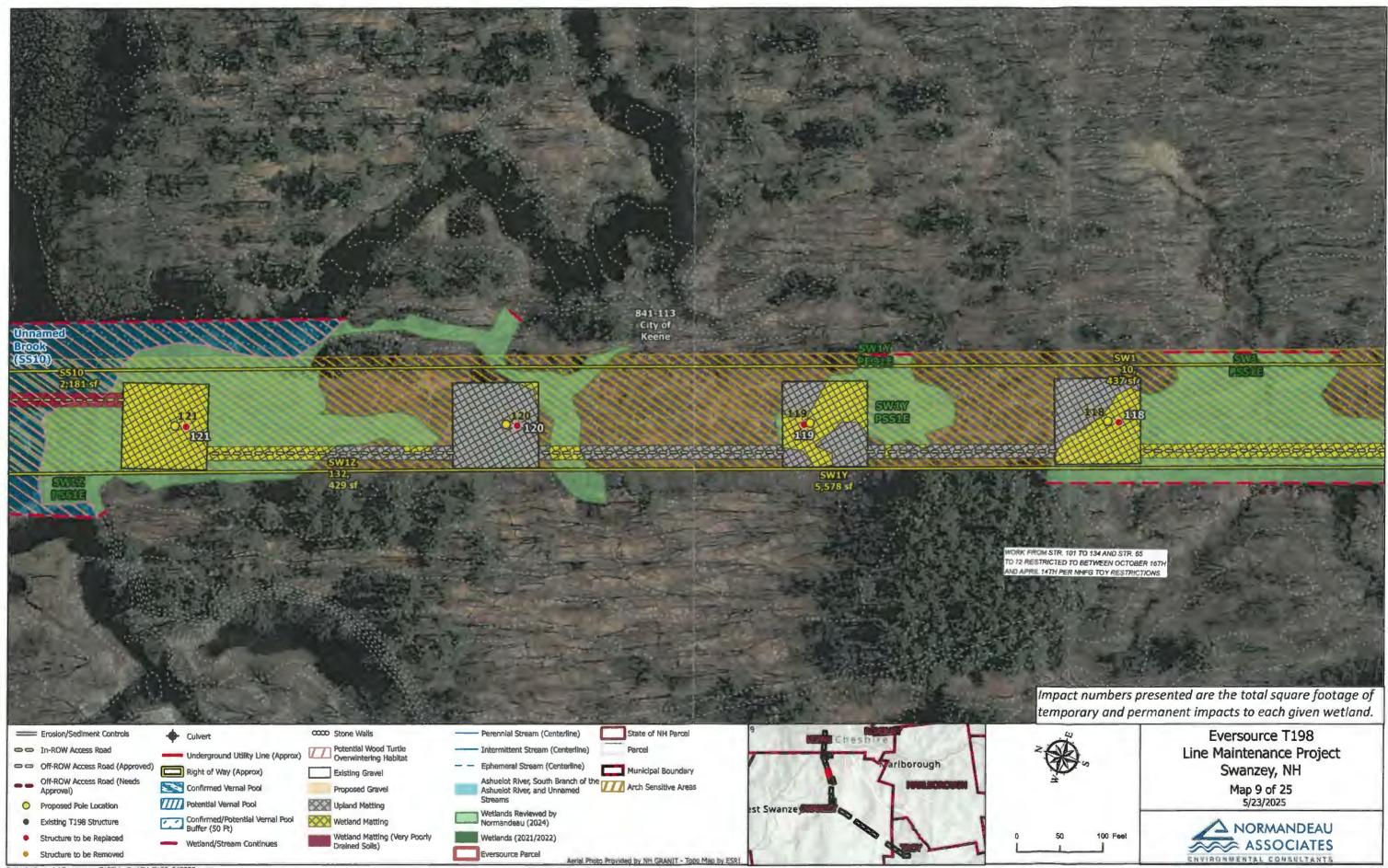


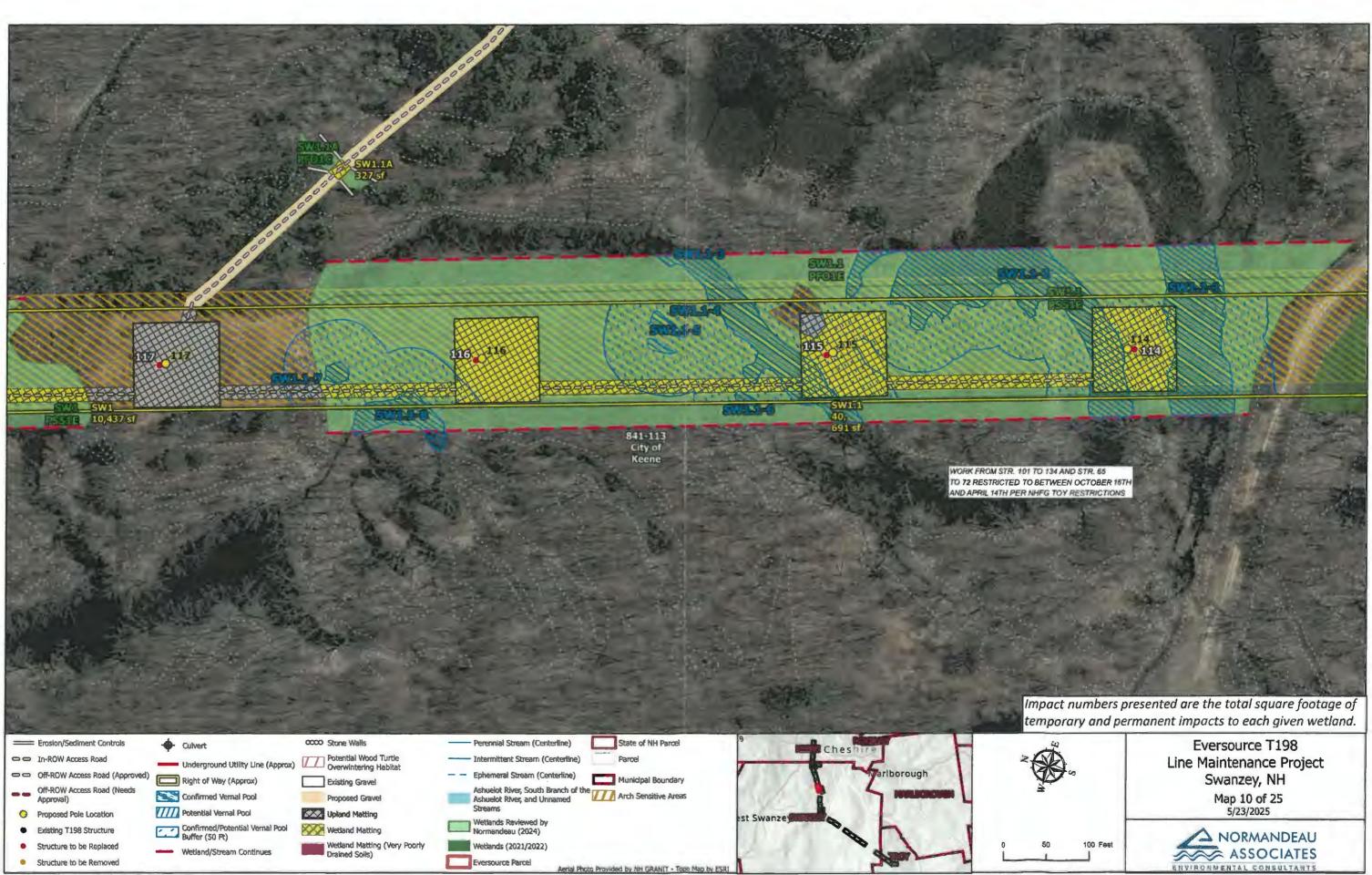




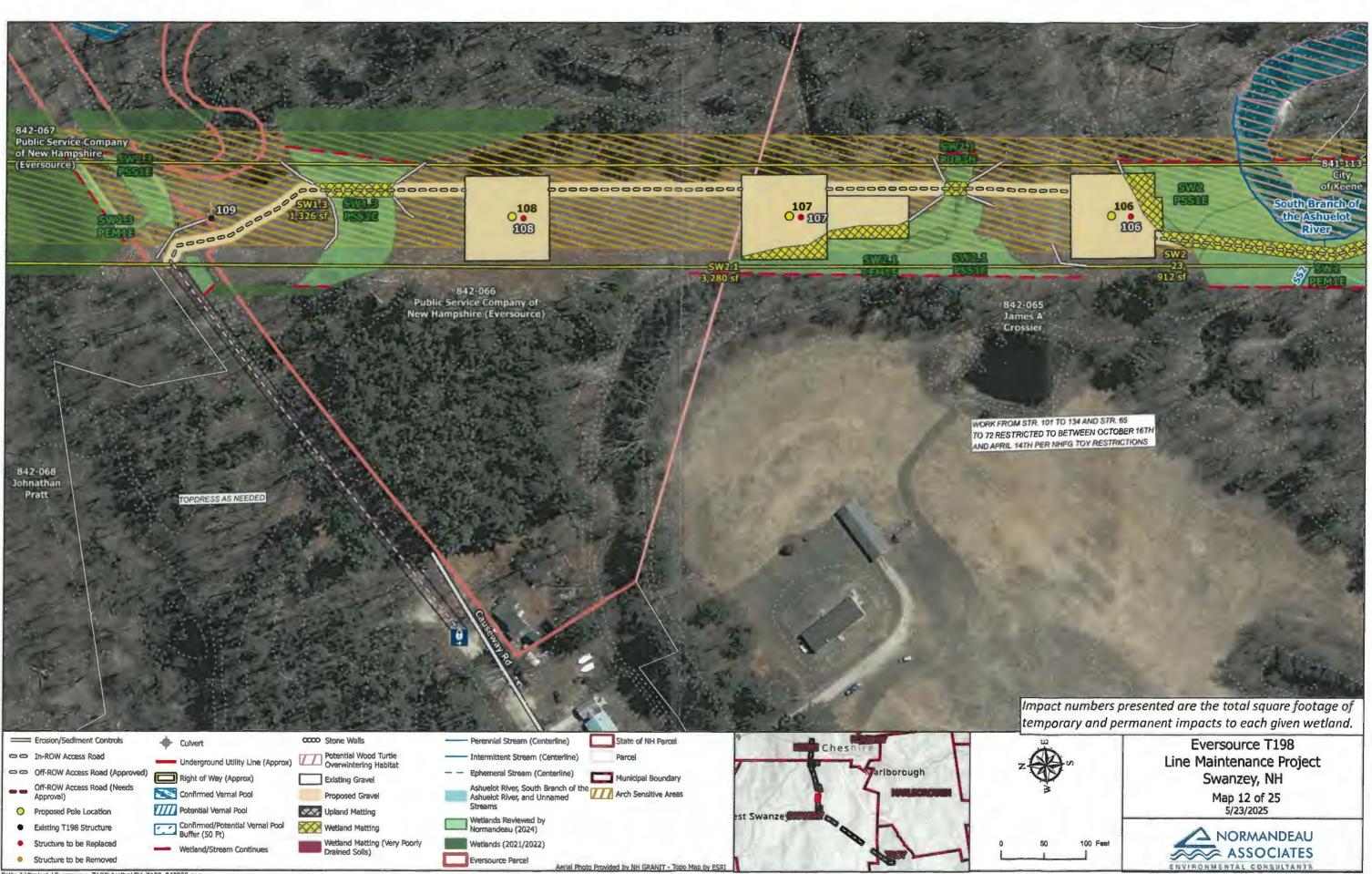


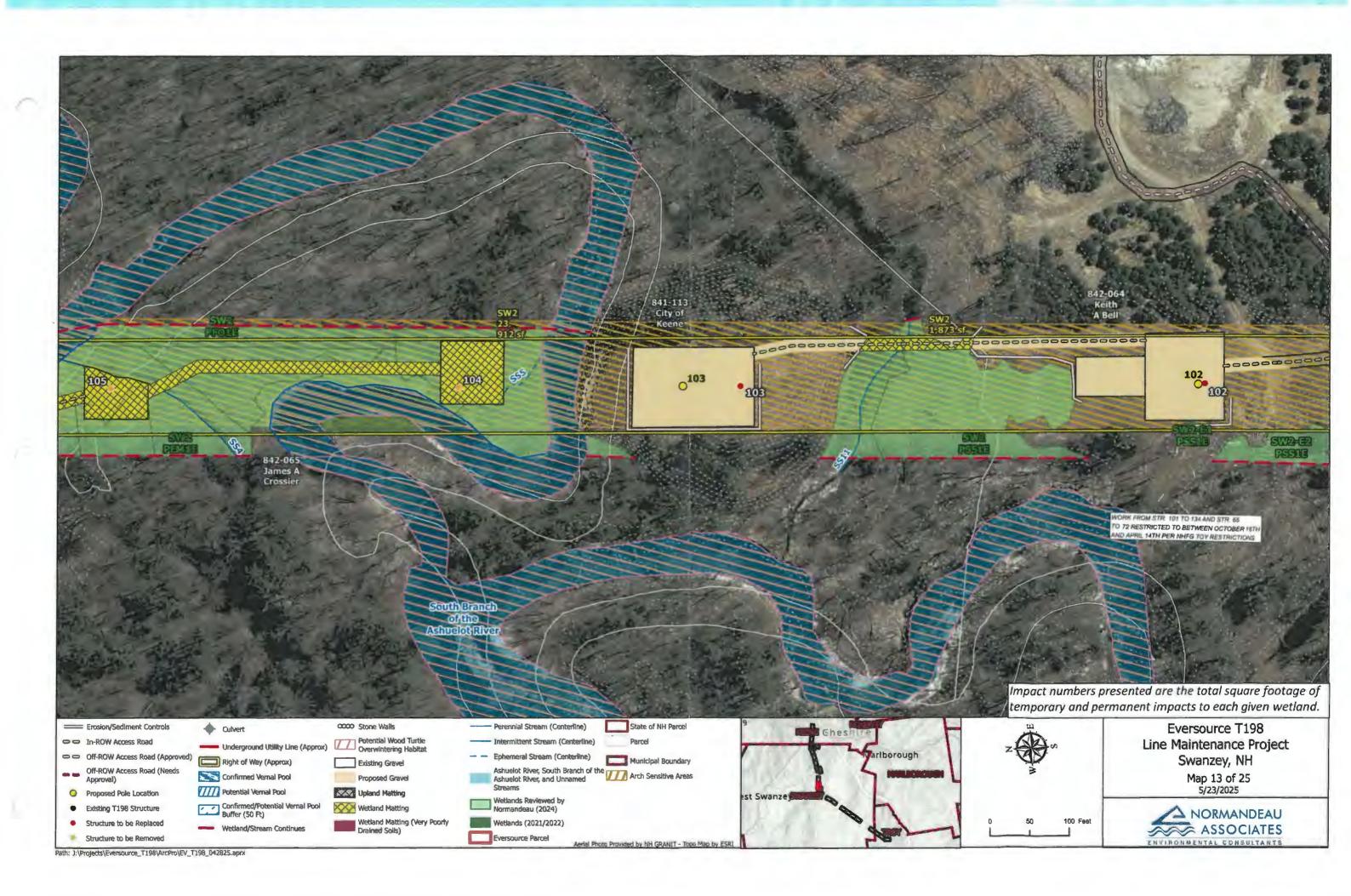


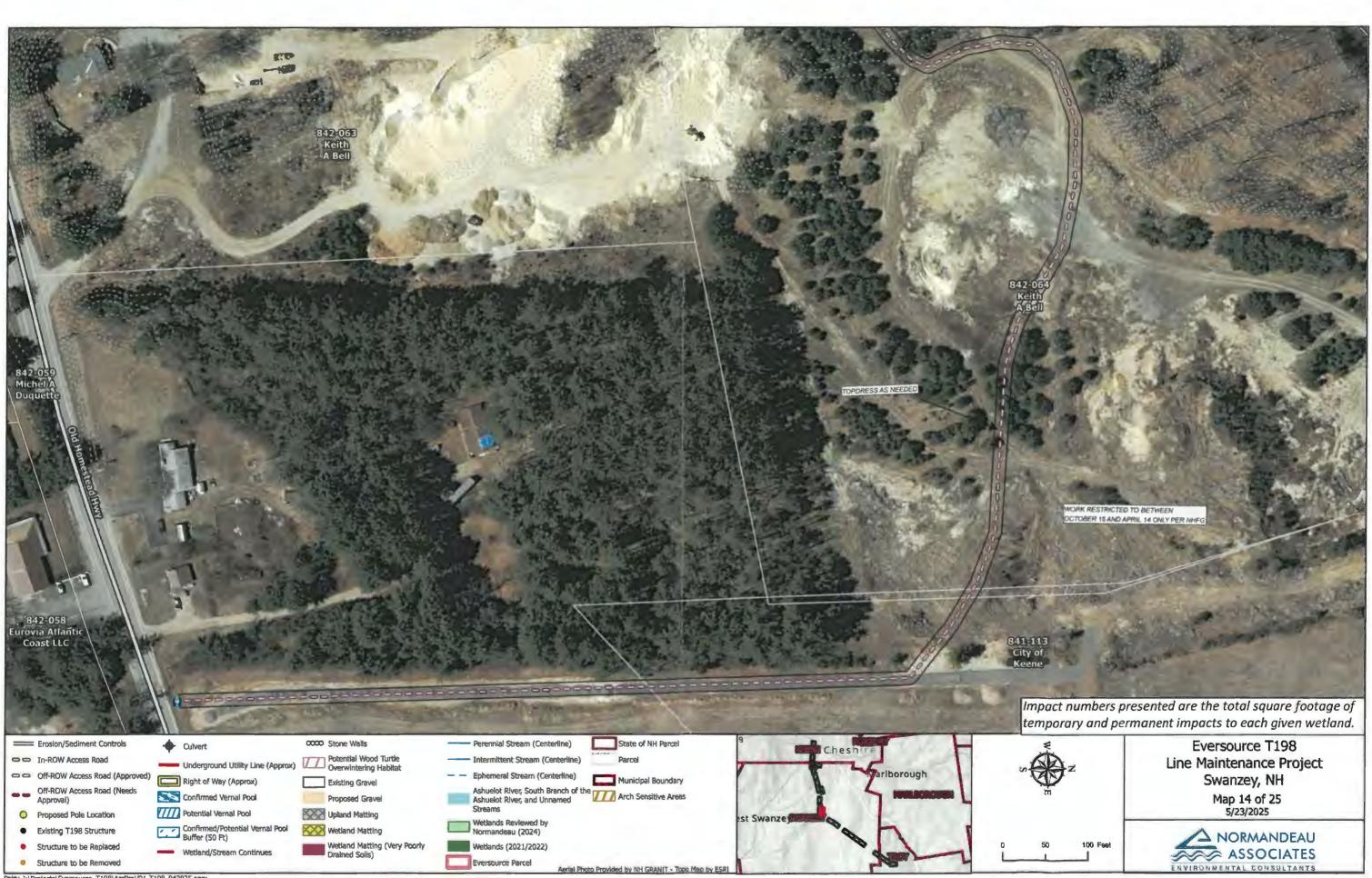


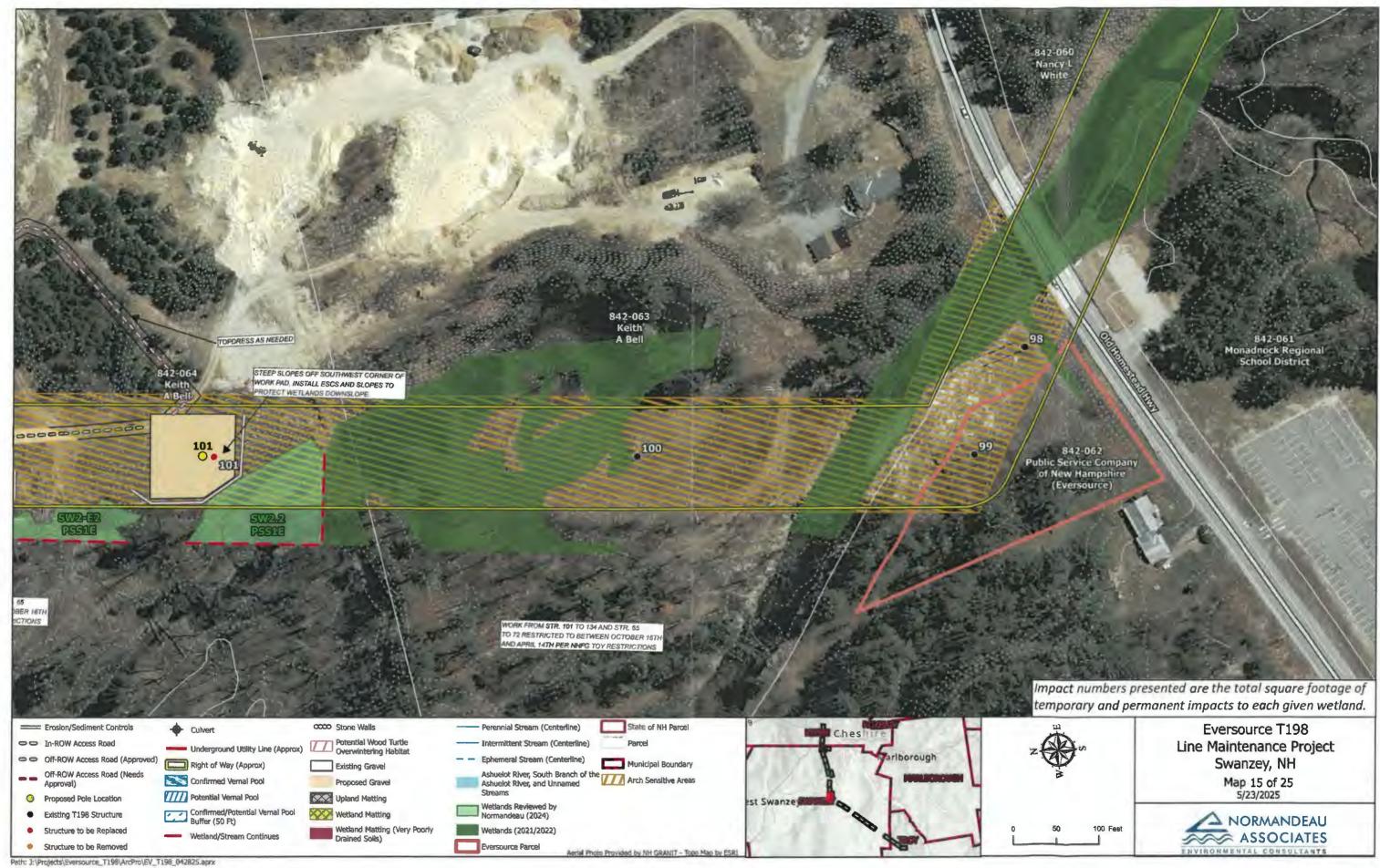


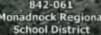


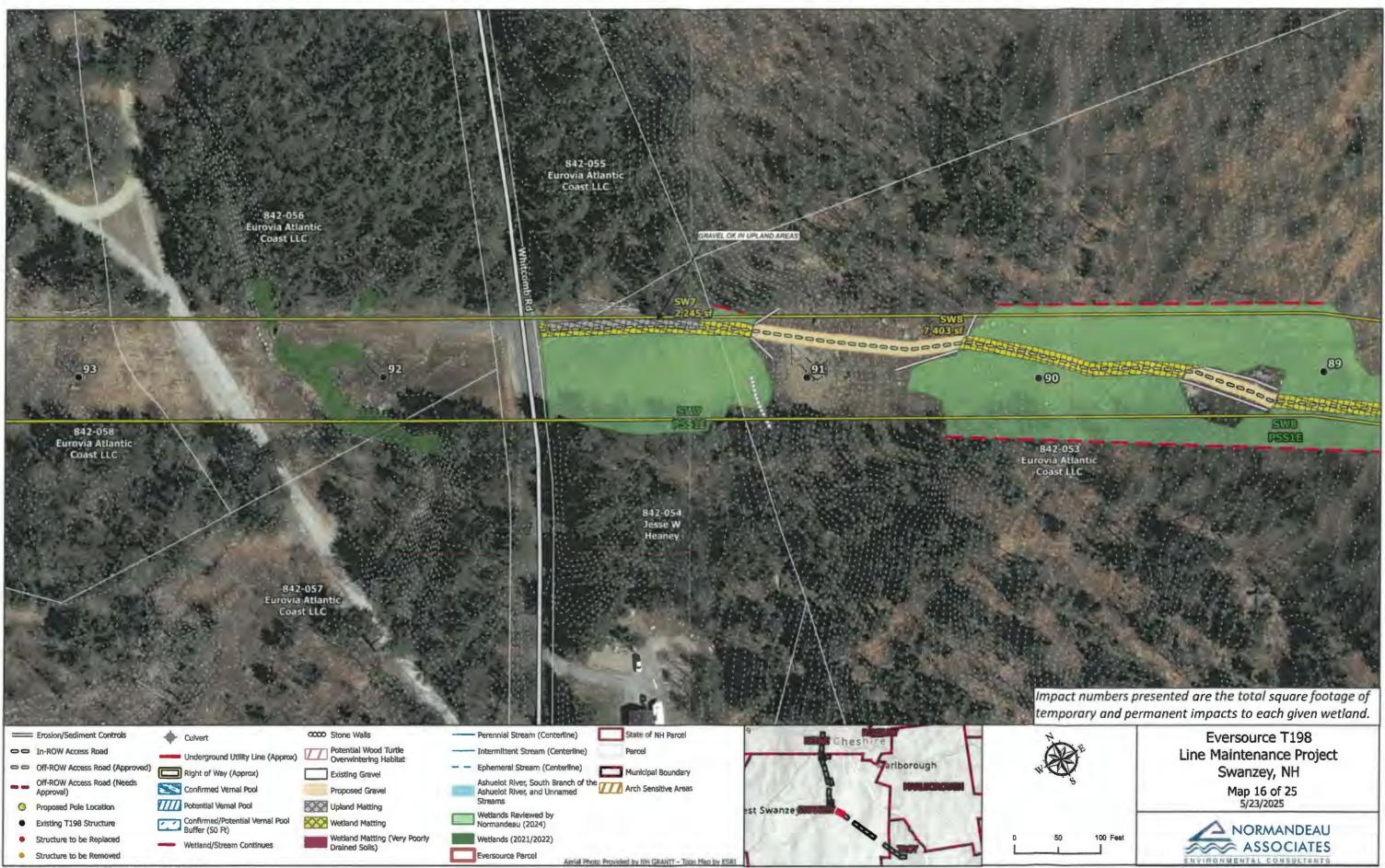


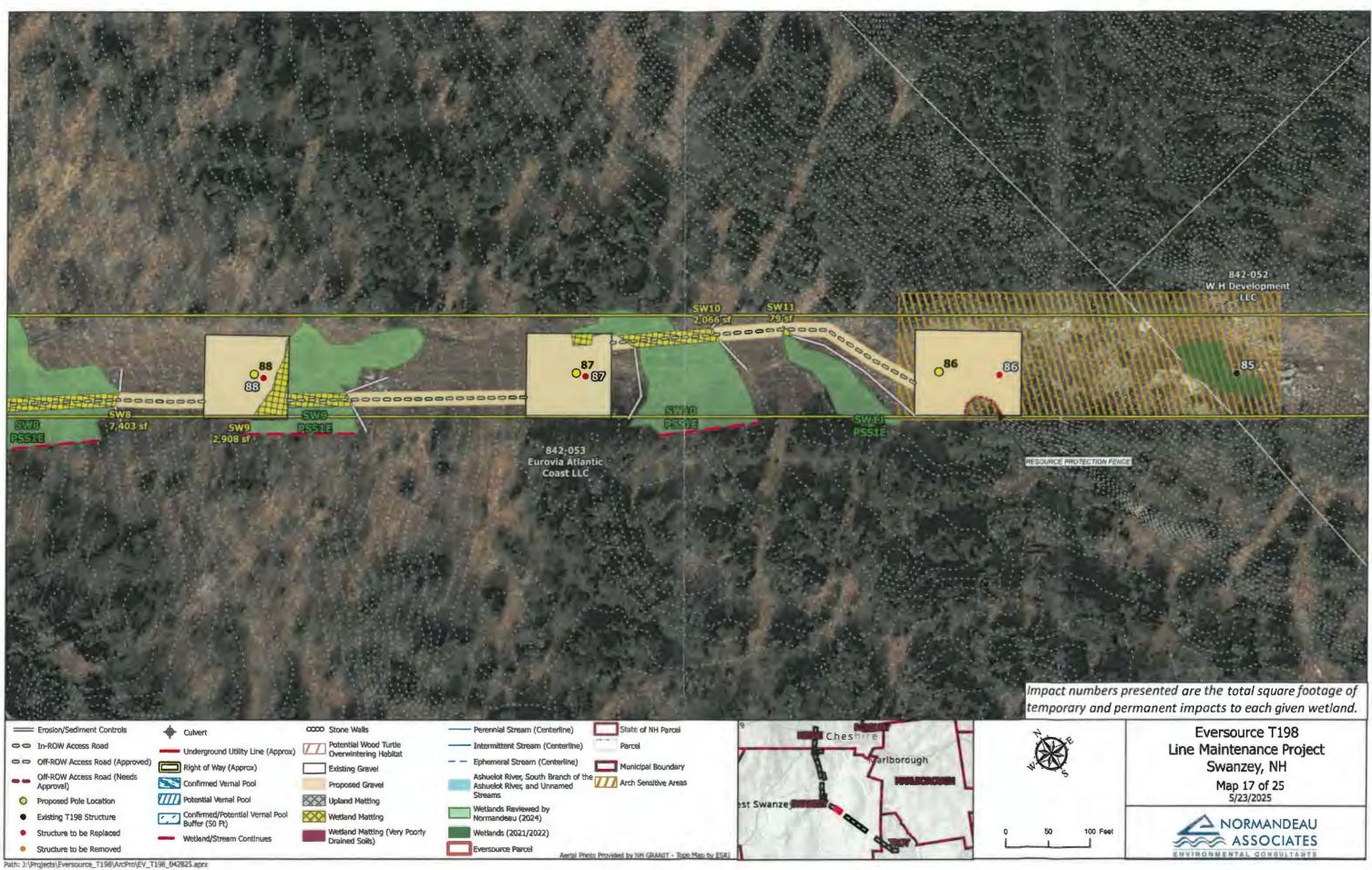


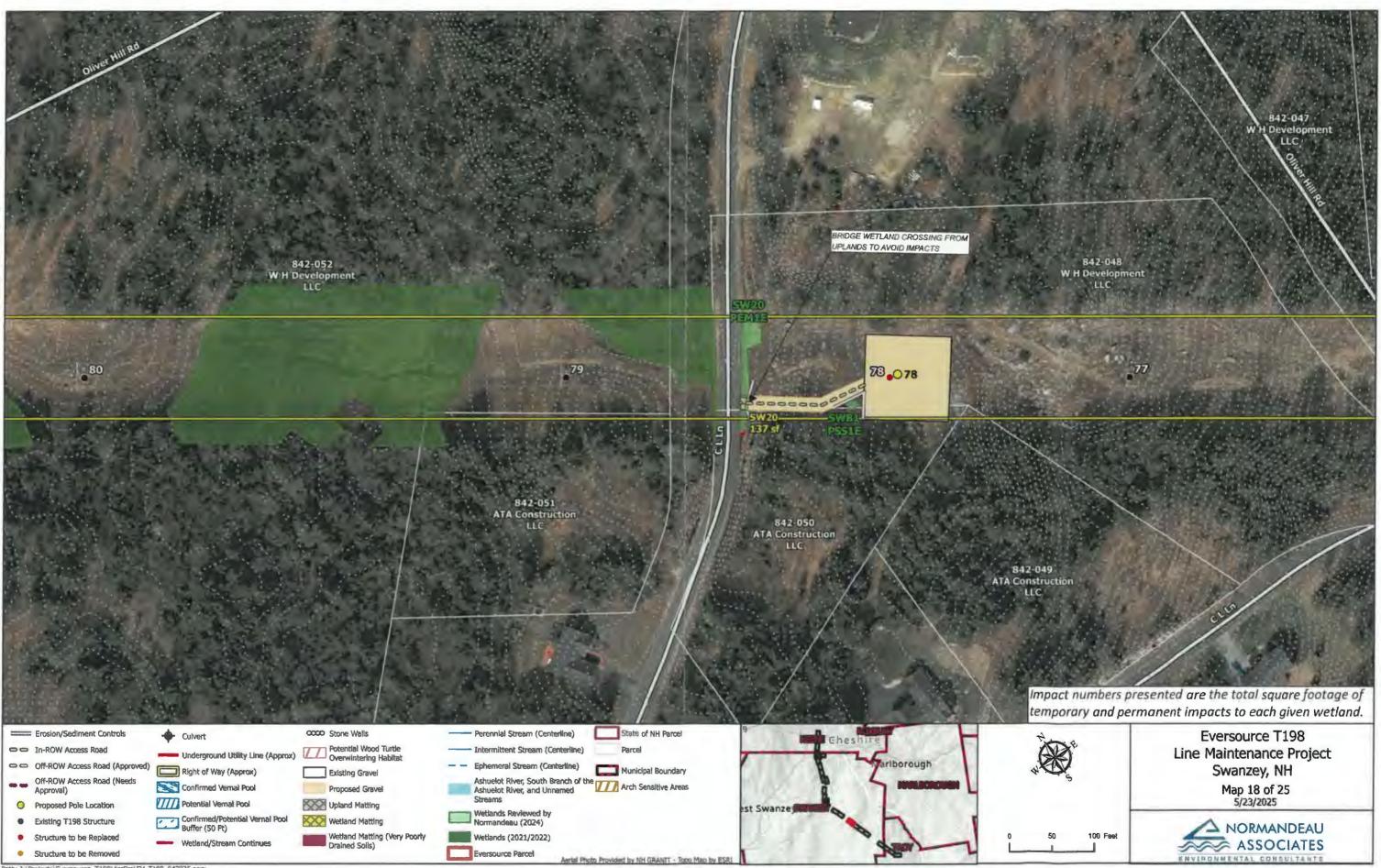




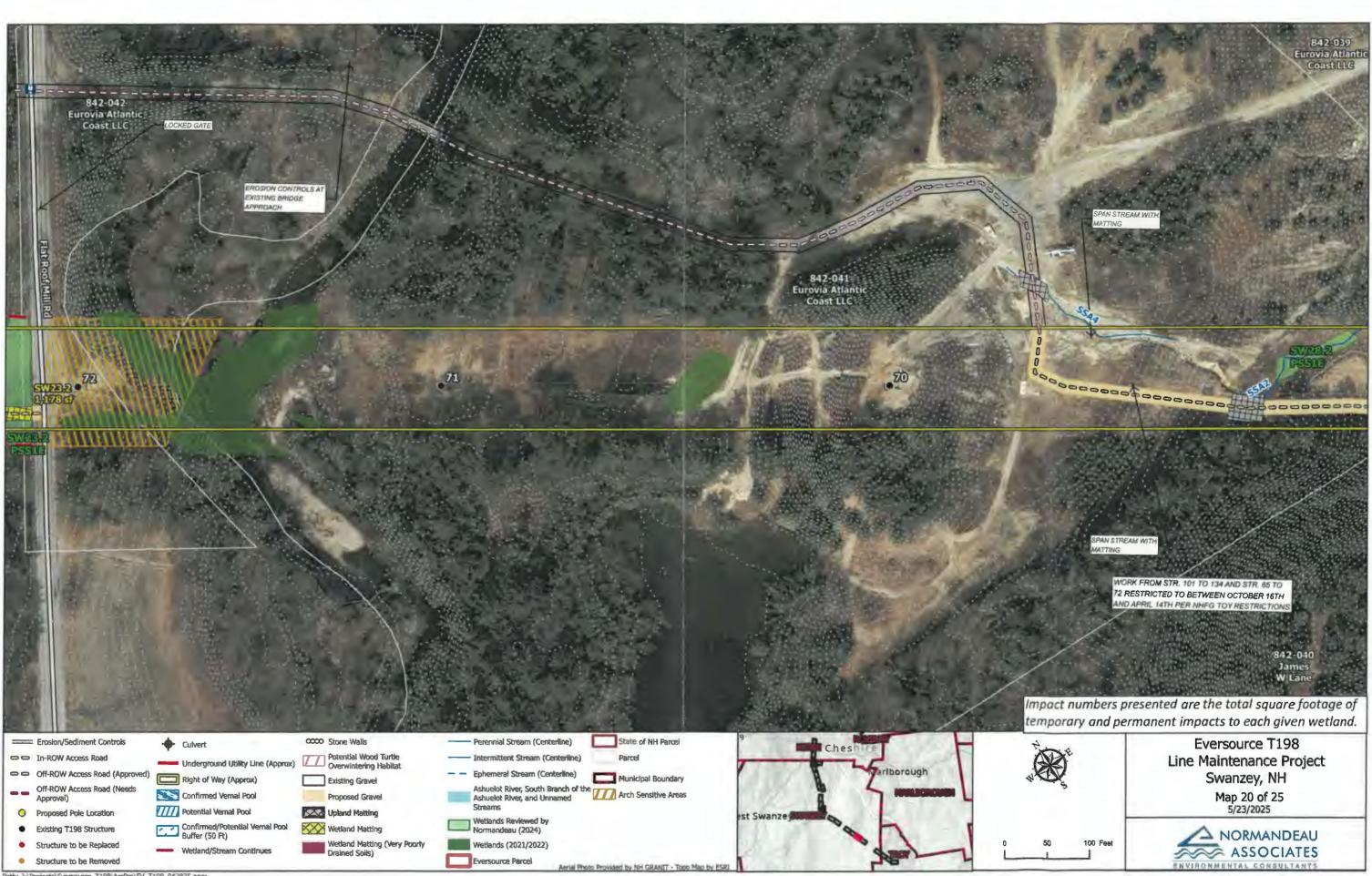


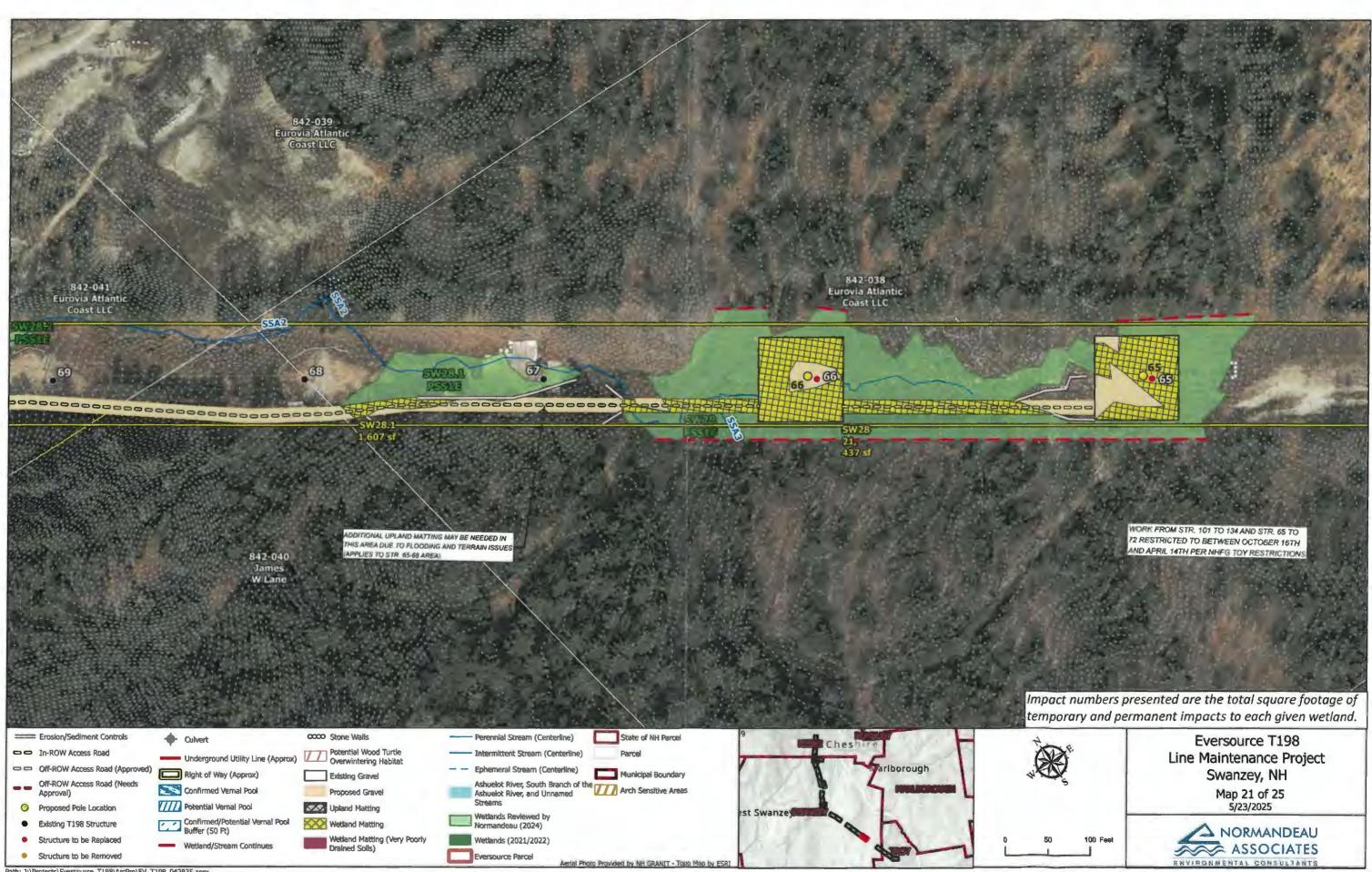


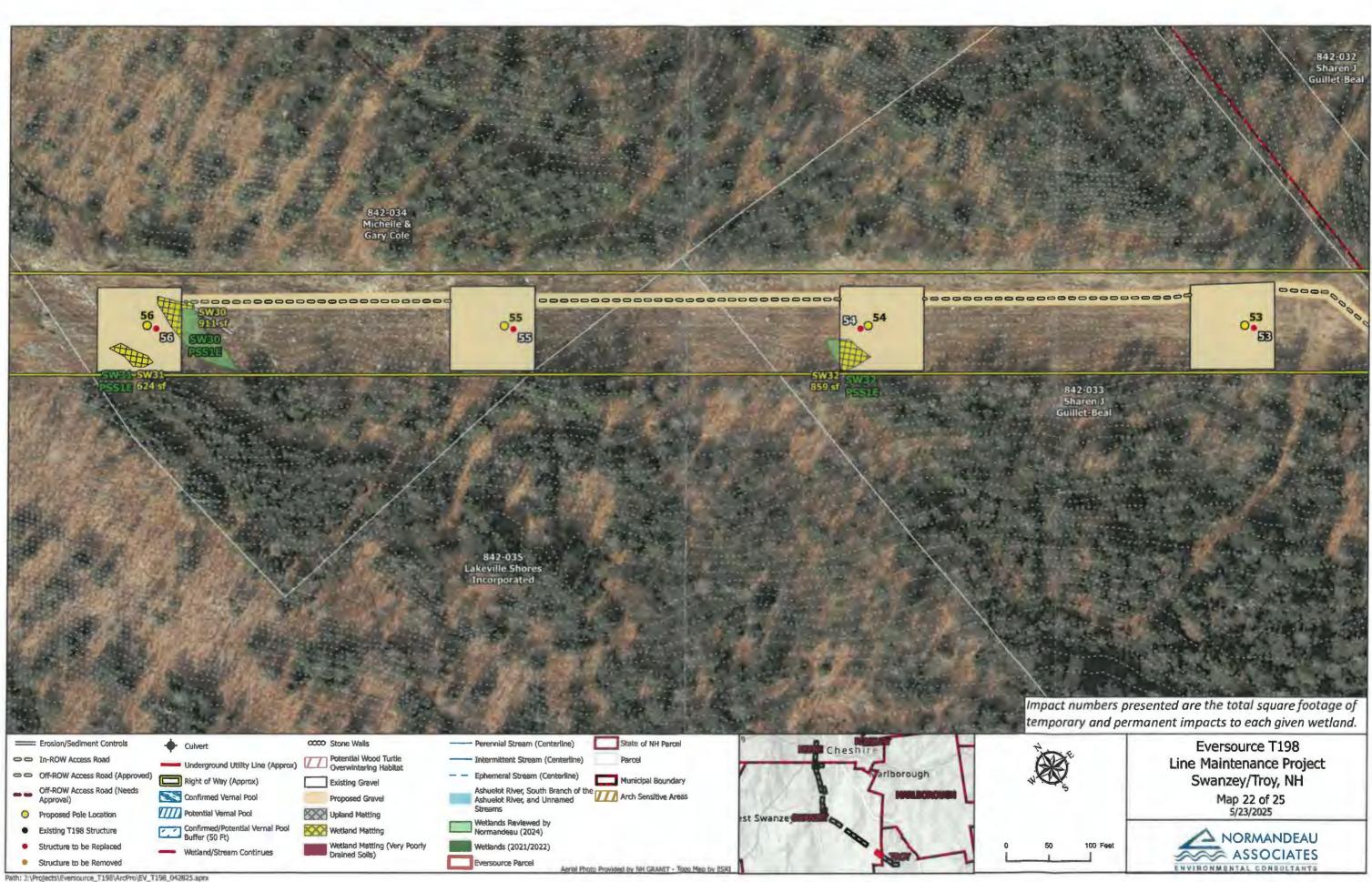




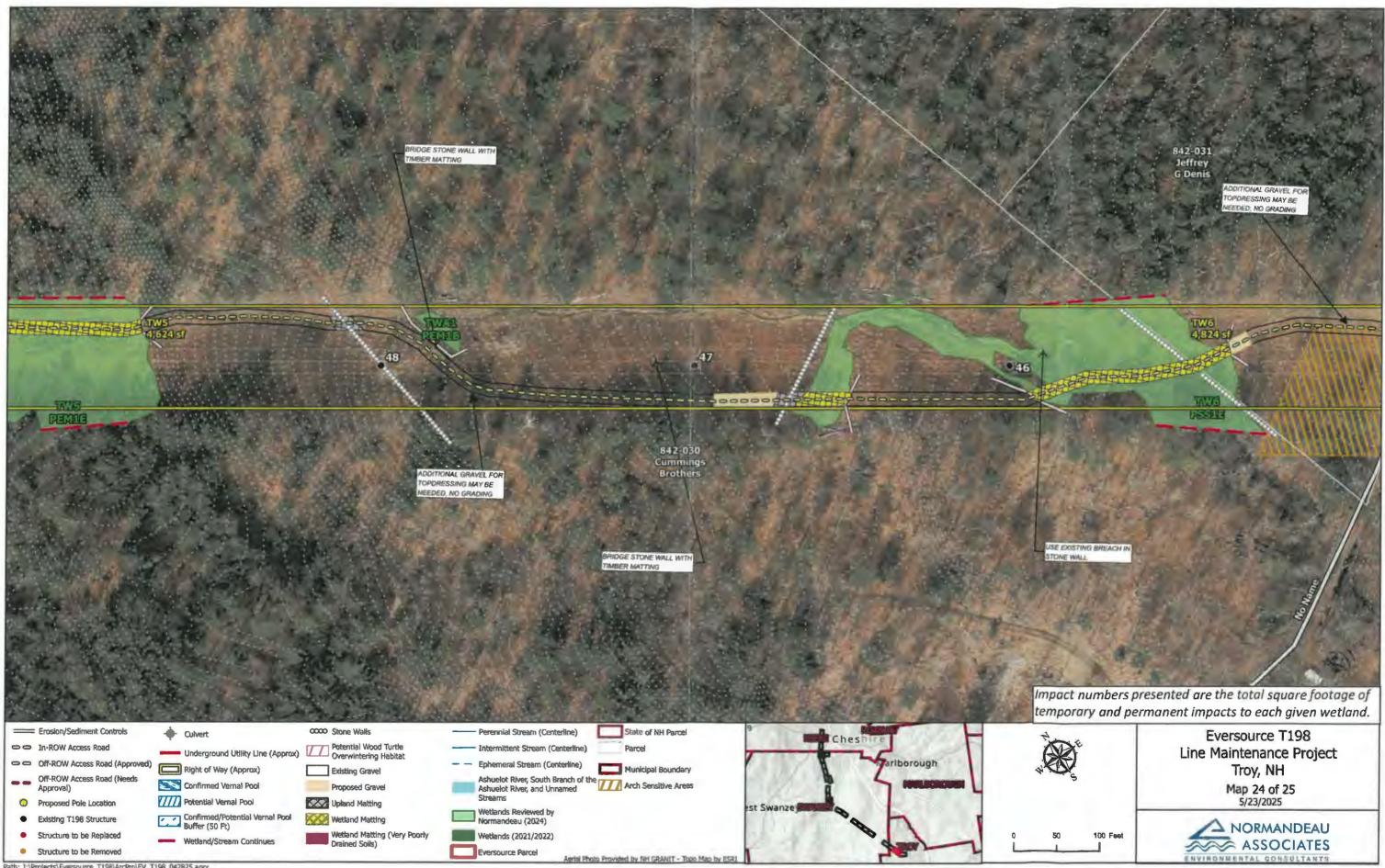


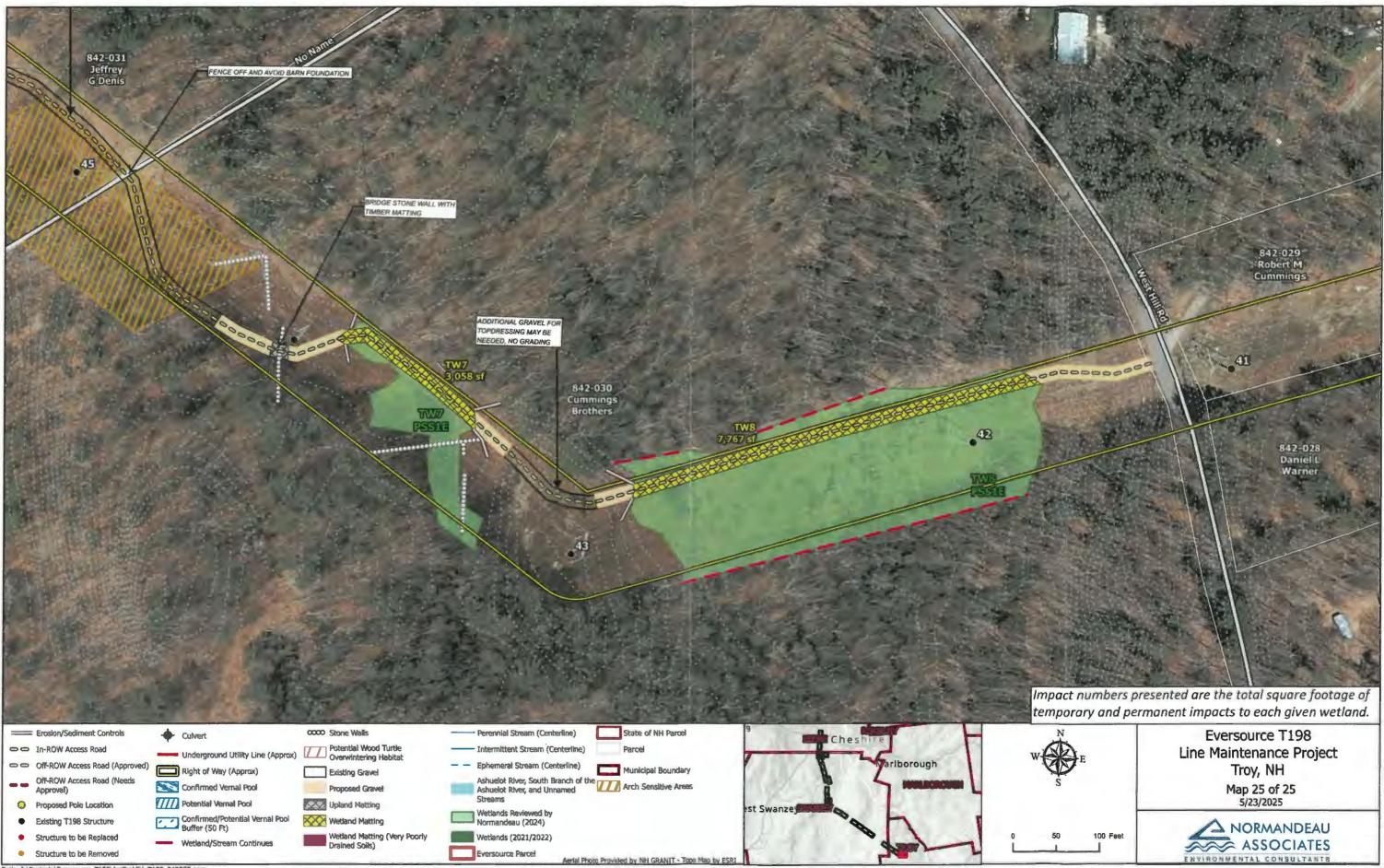












Transmission Line T198 Structure Replacement Project

Rev. May 23, 2025

Construction Sequence:

- 1. Wetland boundaries to be clearly marked prior to the start of construction; Wetlands were reviewed/delineated by Normandeau Associates, Inc. Aug/Sept/Oct 2024 and April 2025. The wetland delineations were completed in accordance with the criteria described in the U.S. Army Corps of Engineers Wetland Delineation Manual Technical Report Y-87-1 (January, 1987) and the Regional Supplement for the Northcentral and Northeast Region (January, 2012) and meet the criteria for wetland delineation in accordance with the NH DES administrative rules Env-W t 301.01.
- 2. MODIFICATIONS IN ACCESS ROUTES, WORK PAD LOCATIONS OR OTHER WETLANDS IMPACT AREAS MUST BE APPROVED BY EVERSOURCE AND IN COMPLIANCE WITH NHDES WETLANDS RULES FOR MINIMUM IMPACT:

ENV-WT 307 - GENERAL REQUIREMENTS ENV-WT 313.03 - AVOIDANCE AND MINIMIZATION ENV-WT 521 - UTILITY PROJECT SPECIFIC CONDITIONS

- 3. Sediment and erosion control measures shall be installed in accordance with the plans and detail provided, as necessary.
- 4. Wetland impacts associated with wetland crossings are required for access between structures within the right of way. Construction activities shall occur during periods of low flow.
- 5. Adequate precaution shall be exercised to avoid spillage of fuel oils, chemicals, or similar substances; no fuels, lubricants, chemicals or similar substances shall be stored beneath trees or in the vicinity of any wetlands, river, stream or other body of water; or in the vicinity of natural or man-made channels leading thereto. No power equipment shall be stored, maintained, or fueled in any area adjacent to a wetland, river, stream or other body of water.
- 6. Remove completely all contamination from any spillage of chemicals or petroleum product with complete rehabilitation of the affected area.
- 7. Access routes have been selected to prevent degradation of the right-of-way and minimize environmental impact. Operations shall be confined to the specified access routes within the proposed wetland impact area. Access routes shall not exceed a 16 foot-width.
- 8. Impact to vegetation within wetlands will be limited to the extent necessary to place the timber mats where required.
- 9. Low growing varieties of vegetation adjacent to wetlands shall be preserved to the extent possible. Stumps and rocks shall not be removed, and there shall be no excavations, fills or grading done adjacent to wetlands, unless minor excavations is needed for access.
- 10. Timber mats will be used along access routes within and adjacent to wetland areas. These mats are constructed of heavy timbers or composite material, bolted together, and are placed end-to-end in the wetland to support heavy equipment. All timber mats shall be placed and removed so as not to cause any ruts, channels or depressions, or otherwise cause any undue disturbance to wetlands.
- 11. If timber mat BMP is not sufficient due to high water, additional bmp's may include the placement of geotextile fabric, 3"-4" stone, and gravel to provide a suitable road bed. A temporary culvert may be required in areas of high flow to maintain hydrologic connectivity. All material will be removed from jurisdictional areas after construction completion.
- 12. No material shall be placed in any location or in any manner so as to impair surface water flow into, through or out of any wetland area. No installation shall create an impoundment that will impede the flow of water or cause flooding.
- 13. No material shall be taken from the wetlands area except that which must necessarily be removed for the structure or foundation placement or stabilization. All excess material taken from the wetland will be removed from the site.
- 14. Any proposed support fills shall be clean gravel and stone, free of waste metal products, organic materials and similar debris and shall not exceed the amount permitted. This allowable fill is the only fill that may remain in the wetland after construction. All cut and fills slopes shall be seeded/loamed within 72 hours of achieving finished grade; sooner if heavy rains forecasted.

- 15. Install new poles in the locations designated on the permitting plans.
- 16. Cable installation will be performed in a manner so as to avoid, or limit to the maximum extent possible, traversing wetlands with heavy equipment. In some cases, a helicopter may be used during the installation to minimize impacts.
- 17. Removal of the old pole will occur once the cable has been installed on the new structure. The old structures will be removed from the site. Poles will be cut at the ground surface. Footings will be abandoned in place to minimize impacts.
- 18. All swamp mats, material, and debris will be removed from the work area upon the completion of construction.
- 19. Upland disturbed areas shall be restored and stabilized upon completion of construction. Work pad restoration should include reducing the work pad to a 30 by 60 foot area, and reducing slopes to a maximum of 25%. Stockpiled material should be spread to reduce any unnecessary slopes. Gravel work pads and slopes should be scarified to a minimum of 3" before spreading topsoil/loam.
- 20. All temporary wetland impacts will be re-graded to original contours following construction. New England erosion control/ restoration mix, available through New England wetland plants, Inc., 820 West Street, Amherst, MA 01002, 413-548-8000, or equivalent seed mix shall be applied in wetland areas that are not inundated, as necessary.
- 21. Sediment and erosion control measures will be evaluated and removed if necessary upon the completion of construction.

Winter Construction Notes:

- 1. Proposed vegetated areas which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized. Stabilization methods shall include seeding and mulch, and installation of erosion control blankets on slopes greater than 3:1, and seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting, elsewhere. The installation of erosion control blankets or mulch and netting shall not occur over accumulated snow or frozen ground and shall be completed in advance of thaw or spring melt events.
- 2. Ditches or swales which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be temporarily stabilized with stone or erosion control blankets appropriate for the design flow conditions.
- After November 15th, incomplete road or parking surfaces, where work has stopped for the winter season, shall be protected with a minimum of 3 inches of crushed gravel (NH DOT 304.3).

Erosion Control Notes:

- 1. Installation of erosion control grindings and/or silt fences shall be complete prior to the start of work in any given area. Erosion controls shall be used during construction and removed when all slopes have a healthy stand of vegetation cover.
- 2. An area shall be considered stable if one of the following has occurred: 1) Base course gravels have been installed in areas to be paved, 2) A minimum of 85 percent vegetated growth has been established, 3) A minimum of 3 inches of non-erosive material such stone or riprap has been installed, or 4) erosion control blankets have been properly installed
- 3. Note that all cut and fill slopes shall be seeded/loamed within 72 hours of achieving finished grade
- 4. As required, construct temporary berms, siltation fences, sediment traps, etc. to prevent erosion & sedimentation of wetlands.
- 5. The work area shall be graded and otherwise shaped in such a manner as to minimize soil erosion, siltation of drainage channels, damage to existing vegetation, and damage to property outside limits of the work area. Erosion control grindings will be necessary to accomplish this end
- 6. Any stripped topsoil shall be stockpiled, without compaction, and stabilized with BMPs.

- 11. Unless otherwise authorized by NHDES, the Applicant shall keep a sufficient quantity of erosion control supplies on the site at all times during construction to facilitate an expeditious (i.e., within 24 hour) response to any construction related erosion issues on the site.
- 12. Discharge from dewatering of work areas shall be to sediment basins that are: a) located in uplands; b) lined with hay bales or other acceptable sediment trapping liners; and c) set back as far as possible from wetlands and surface waters.
- 13. Mulch used within any wetland/stream bank restoration areas shall be natural straw or equivalent non-toxic, non-seed-bearing organic material.
- 14. When using an erosion control mix berm, the berm must be a minimum of 12" high, as measured on the uphill side of the barrier, and a minimum of two feet wide at the base.

General Notes

property boundary survey.

Plant Protection - General Avoidance and Minimization Measures

- $(2008)^{"}$

Wildlife Protection - General Avoidance and Minimization Measures

- project area.
- several weeks

Construction Notes

7. Permanent or temporary cover must be in place before the growing season ends. When seeded areas are not mulched, plantings should be made from early spring to May 20 or from August 15 to September 15. No disturbed area shall be left exposed during winter months, plant annual ryegrass prior to October 15th.

- 8. Erosion controls shall be inspected weekly with the timing of weekly visits adjusted if heavy rains/snow melt are forecasted or have occurred.
- 9. Timber mats must be removed after one growing season.
- 10. Any erosion control matting used shall be wildlife friendly. No welded plastic webbing, netting, or other similar form shall be used in erosion/siltation controls to avoid entrapment of snakes and other wildlife within the project area.

1. Base plan provided by Eversource Energy. Eversource Energy provided the utility design. 2. Site plan is for permitting and construction purposes only and does not represent a

3. Limit removal of vegetation to that necessary for construction of the project, Limit tree clearing to the minimum required width to meet safety clearances, leave root systems in place, except over underground installations or where other earthwork must be conducted. Leave herbaceous and shrub vegetation intact wherever practicable. 4. Precautions shall be taken to prevent import or transport of soil or seed stock containing nuisance or invasive species such as Purple Loosestrife, Knotweed, or Phragmites. The contractor responsible for work shall appropriately address invasive species in accordance with the NH DOT "Best Management Practices for Roadside Invasive Plants

5. To prevent the introduction of invasive plant species to the site, the Applicant's contractor(s) shall clean all soils and vegetation from construction equipment and matting before such equipment is moved to the site.

1. Limit the removal of vegetation to that necessary for construction of the project; this will leave associated wildlife habitat as intact as possible.

2. All erosion control materials used will be wildlife-friendly. No welded plastic webbing, netting, or other similar form with openings greater than 1/8-inch shall be used in erosion/siltation controls to avoid entrapment of snakes and other wildlife within the

3. Timber matting will be used in all wetland areas and will remain in place for the shortest duration possible; if possible, passageways will remain open at the wetland crossing to allow for reptiles to cross under the mat-bridge/pathway; matting will remain up to

- 4. Daily sweeps by contractors for all turtle and snake species will be performed when work will occur;
- 5. Any observations of listed species will be reported and no wildlife will be harmed; contact numbers and fliers will be included on the environmental plans
- 6. Wildlife friendly erosion controls will be used; no welded plastic netting will be used;
- 7. Erosion controls will be installed, monitored and maintained to protect adjacent upland and wetland areas from sedimentation and degradation; disturbed areas will be temporarily and permanently stabilized and seeded with a native seed mix; the applicable utility maintenance BMPs will be followed

SPECIFIC RTE PLANT AND NATURAL COMMUNITY BMPS

New Hampshire Natural Heritage Bureau BMPs and Recommendations (Received 2/18/25):

- 1. Exemplary silver maple false nettle sensitive fern floodplain forest
 - Below is a summary of the BMPs and proposed work activities outlined in the provided memo that demonstrate avoidance and minimization of the exemplary natural community (ENC):
 - i. No expansion of the existing cleared ROW is proposed.
 - ii. No construction of new access or significant upgrades to new access are propose in the vicinity of the ENC.
 - iii. Timber mats will be used to establish temporary access routes and work pads in order to protect wetland resources.
 - iv. Any access outside of the ROW in the vicinity of the ENC will be within existing access.
 - v. Existing wooden pole butt will be left in place to avoid wetland disturbance.
 - vi. All other existing wooden structure materials and components will be completely removed from the wetland area and properly disposed of.
 - vii. Excess excavated spoils resulting from the installation of new metal structures will be contained on the project work pads and properly disposed of outside of the wetland.
 - viii. Erosion and sediment controls will be installed along the edge of access roads and work pads as needed.
 - b. There are two potential impacts to the ENC from the proposed work that are addressed below:
 - i. Some of the existing access outside of the ROW in the vicinity of the ENC may need improvements through the application of a top dressing of clean gravel.
 1. As long as all gravel is kept within the access road and excess gravel is not dumped into the ENC, there are no anticipated impacts.
 - ii. Vegetation maintenance will occur within the maintained ROW. If the below recommendations can be adhered to, negative impacts are not anticipated.
 - Vegetation maintenance is recommended under frozen ground conditions (or dry conditions if sustained frozen conditions are not possible) in any areas where the ROW passes through the ENC or wetlands that are hydrologically connected to the ENC.
 - If work cannot occur under frozen ground/dry conditions, complete work by hand and keep vehicles/equipment on existing gravel access roads wherever possible and utilize matting if motorized access is needed to cross wetlands.
 Do not place slash in the wetlands to avoid impacting the hydrology of the ENC.
 - c. The best way to avoid impacts to the exemplary silver maple false nettle sensitive fern floodplain forest is to work under frozen ground conditions, however if this is not practicable then all the above outlined BMPs will avoid/minimize impacts to the exemplary wetland to the greatest extent possible.
- 2. Nuttall's reed grass

- NHB recommends the following BMPs to avoid and minimize impacts to Nuttall's reed grass:
- i. Fence off/flag the locations of the rare plants so they are not incidentally impacted by work including being run over by vehicles or parked on.
- ii. For any rare plants that are completely unavoidable, timber matting should be placed over the rare plants and removed as soon as possible (as indicated in the provided memo).
- If practicable, matting should not be placed over the plants during the growing season (April 1st to November 15th) or for as little of the growing season as possible.

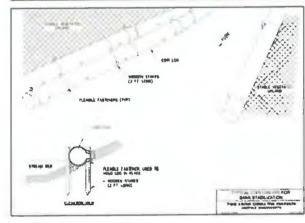
SPECIFIC WILDLIFE BMPS

<u>New Hampshire Fish and Game AoT Permit Conditions in Accordance with Env-Wg 1504.18 –</u> <u>Wildlife Protection Notes (Received TBD):</u>

1. NHFG requests that all work only occur from October 16th – April 14th for T198 Line existing structures 134 – 101 and 72 – 65.

Best Management Practice 4: Coir Logs





Description:

Coir logs, straw wattles, fiber rolls, or SiltSoxx™ consist of compressed weed-free straw fiber or other natural material, placed within a photodegradable mesh cylindrical sock.

Applications:

- Streambank, wetland, and slope protection
 - Check dam applications
 - Perimeter and stockpile containment •
 - Slope stabilization by shortening slope length, reducing runoff velocity, and trapping • mobile soil particles
 - Provides substrate for plant growth upon decay of fiber roll and protects new vegetation growth

Installation:

- For slope stabilization, it is critical that coir logs are installed perpendicular to soil • movement and parallel to the slope contour.
- If additional length is needed for application, ends should be overlapping at least 6 • inches.
- If used in slope stabilization, construct trenches half the diameter of the log in which to place the roll. Lay the coir log along the trench, snugly fitting it against the soil. Ensure no gaps exist between the soil and the fiber roll.
- Install stakes at least every three feet apart along the length of the roll. Additional stakes may be driven on the downslope side of the trenches on highly erosive or very steep slopes.

Best Management Practice 5: Silt Fence



Description:

Silt fence is a temporary sediment barrier consisting of filter fabric attached to supporting posts and entrenched into the soil. This barrier is installed across or at the toe of a slope to intercept and retain small amounts of sediment from disturbed or unprotected areas.

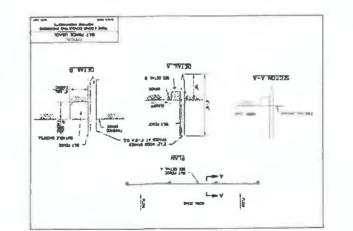
Applications:

- Consider using silt fence barriers where: • Flow to the silt fence from a distributed area occurs as overland sheet flow
- Sedimentation can pollute or degrade
- adjacent wetlands or watercourses
- Sedimentation will reduce the capacity of storm drainage systems or adversely affect adjacent areas.
- Silt fence should not be used in areas of

concentrated flows or across streams, channels, swales, ditches or other drainage ways.

Installation:

- Install silt fence following the contour of the land as closely as possible. •
- The height of the barrier shall not exceed 36 inches. .
- Posts shall be placed at a maximum of 10 feet apart at the barrier location and . driven securely into the ground (minimum of 12 inches).
- A trench shall be excavated approximately 6 inches wide and 6 inches deep along the . line of posts and upslope of the barrier in accordance with recommendations
- The filter fabric will extend a minimum of 8 inches into the trench which shall be • backfilled and the soil compacted over the filter fabric.
- Fabric barriers shall be removed after the upslope area has been permanently stabilized.
- Filter barriers shall be inspected immediately after each rainfall and at least once . daily during prolonged rainfall and any required repairs shall be made immediately.
- Sediment deposits should be removed when they reach approximately one-half the • height of the barrier.





Considerations:

- Apply temporary mulch within 100 feet of streams, wetlands and in lake watersheds within seven days of exposing soil or prior to any storm event.
 - areas that have been temporarily or

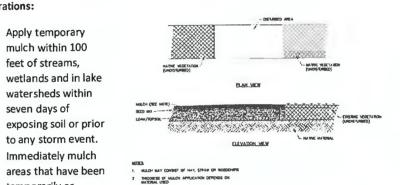
Installation:

Hay or Straw Mulches:

Description:

Temporary mulching is the application of plant residues or other suitable materials to the soil surface. Permanent mulching consists of the application of longterm surface cover such as bark, woodchips or erosion control mix. Permanent mulch can be used as a permanent ground cover, an overwinter stabilization mulch or left to naturalize.

Mulching reduces erosion potential by protecting the exposed soil surface from direct impact by rainfall.



permanently seeded, following seeding.

For areas that cannot be seeded within the growing season, mulch for over-winter protection. Seed the area at the beginning of the next growing season.

Mulch anchoring should be used on slopes with gradients greater than 5% in fall (past September 15), and over-winter (October 15 - May 1).

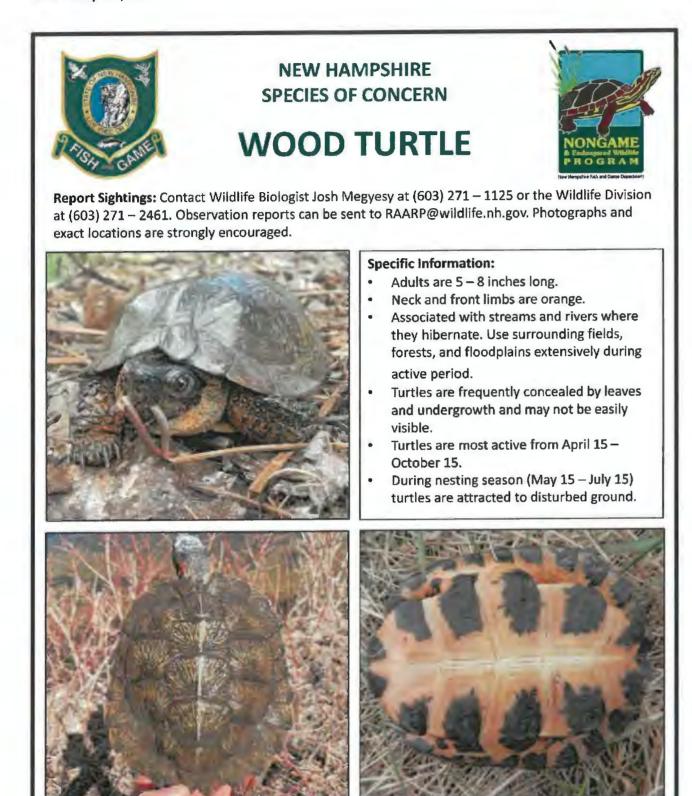
 Use air-dried organic mulches including weed-free hay and straw free of undesirable seeds and coarse materials.

 Application rate should be two bales (70-90 pounds) per 1,000 square feet or 1.5-2 tons (90-100 bales) per acre to cover 75-90% of the ground surface.

 Anchor hay or straw mulch to prevent displacement by wind or flowing water using jute or biodegradable plastic netting or in some cases, organic tackifier.

• When mulch is applied to provide protection over winter (past the growing season), apply it to a depth of four inches (150-200 pounds of hay or straw per 1,000 square feet, or double standard application rate). Seeding cannot generally be expected to grow up through this depth of mulch and will be smothered. If vegetation is desired, remove mulch in the springtime and seed and re-mulch the area.

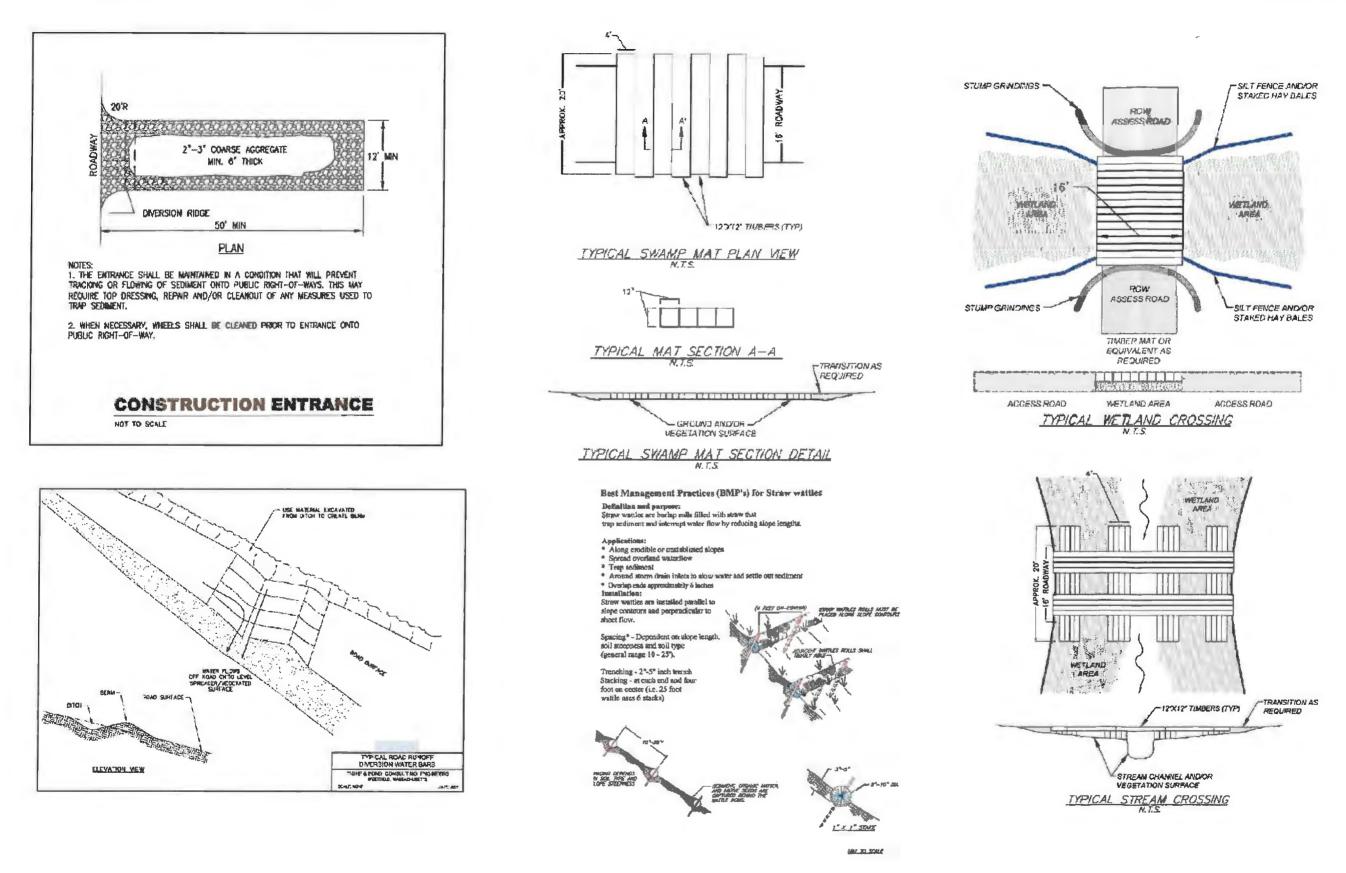
Transmission Line T198 Structure Replacement Project Rev. May 23, 2025



This species is protected under Fis 1400. Thank you for reporting any observations. PLEASE DO NOT DISTURB OR HANDLE WILDLIFE

Construction Notes

Transmission Line T198 Structure Replacement Project Rev. May 23, 2025



Construction Notes

Attachment H: Impact Summary and Tables

Jurisdictional impacts include impacts to delineated wetlands and streams across the entire project area. Tables H-1 through H-3 summarize the total impacts and details for each are included below.

A total of 880 SF (0.02 acres) of permanent wetland impacts are proposed. Proposed temporary wetland impacts total 381,486 SF (8.76 acres). Proposed permanent and temporary stream impacts total 0 SF (0 acres) and 3,092 SF (0.07 acres), respectively. Please note, no impacts to the smaller intermittent and perennial streams are proposed, as they are narrow enough to be completed bridged by timber matting with no impacts to their channel and/or banks.

Wetland	Cowardin	NHDES	Priority	Impacts (sf)	
	Cowardin	Wetland Type	Resource Area	Temp.	Perm.
KW11	PEM1B (100%)	Wet meadow	No	10,665	40
KW12H	PEM1E (100%)	Emergent	No	86	-
KW12G	PSS1E (100%)	Scrub-shrub	No	377	-
KW12F	PEM1E (100%)	Emergent	No	1,849	-
KW12E	PSS1E (100%)	Scrub-shrub	No	-	-
KW12D	PSS1E (100%)	Scrub-shrub	No	1,488	-
KW12C	PSS1E (100%)	Scrub-shrub	No	972	-
KW12B	PSS1E (100%)	Scrub-shrub	No	8,974	20
KW12A	PSS1E (100%)	Scrub-shrub	No	1,637	-
KW13	PSS1B (100%)	Scrub-shrub	No	-	-
KW14	PSS1E (100%)	Scrub-shrub	No	507	-
KW15.1	PEM1B (100%)	Wet meadow	No	63	-
KW15.2	PSS1E (89%)	Scrub-shrub	Var	30,189	80
	PAB4G (11%)	Pond (Oxbow)	Yes	-	-
KW15.3	PSS1E (100%)	Scrub-shrub	Yes	21,560	80
SAW1	PSS1E (100%)	Scrub-shrub	Yes		-
SAW1A	PSS1E (100%)	Scrub-shrub	Yes	-	-
SAW1B	PSS1E (100%)	Scrub-shrub	Yes	-	-
SAW2	P\$\$1E (100%)	Scrub-shrub	Yes	-	-
SWOX	PUB1H (100%)	Pond (Oxbow)	Yes	-	-
ĺ	PSS1E (82%)	Scrub-shrub		114,013	340
SW1Z	PEM1E,F (9%)	Emergent	Yes	15,848	20
	PFO1E (5%)	Forested	Tes	-	-
	PUB1H (3%)	Pond (Oxbow)		2,212	-
SW1Y	PSS1E (95%)	Scrub-shrub	Yes	5,538	40
	PFO1E (5%)	Forested	Tes	-	-
SW1	PSS1E (100%)	Scrub-shrub	Yes	10,397	40
S1A/1 1	PSS1E (65%)	Scrub-shrub	Yes	34,921	120
SW1.1	F331E (03%)	Vernal pool	res	5,650	

Table H-1. Summary of proposed wetland impacts from the Eversource T198 Line Project.

	PFO1E (35%)	Forested		-	-
SW1.1A	PFO1C (100%)	Forested	Yes	327	_
SW1.1B	PFO1E (100%)	Forested	Yes	1,947	-
SW1.1C	PSS1C (100%)	Scrub-shrub	Yes	-	_
SW2.3	PSS1E (65%)	Scrub-shrub		-	-
	PEM1E (35%)	Emergent	Yes	-	-
SW1.3	PSS1E (100%)	Scrub-shrub	Yes	1,326	_
	PSS1E (88%)	Scrub-shrub		2,978	-
SW2.1	PUB3H (7%)	Pond (Oxbow)	Yes	302	-
	PEM1E (5%)	Emergent		-	_
	PSS1E (60%)	Scrub-shrub		15,513	-
SW2	PEM1E (34%)	Emergent	Yes	10,288	-
	PFO1E (7%)	Forested		-	-
SW2-E1	PSS1E (100%)	Scrub-shrub	Yes	-	-
SW2-E2	PSS1E (100%)	Scrub-shrub	Yes	-	_
SW2.2	PSS1E (100%)	Scrub-shrub	Yes	-	-
SW7	PSS1E (100%)	Scrub-shrub	No	2,245	-
SW8	PSS1E (100%)	Scrub-shrub	No	7,403	_
SW9	PSS1E (100%)	Scrub-shrub	No	2,908	-
SW10	PSS1E (100%)	Scrub-shrub	No	2,066	-
SW11	PSS1E (100%)	Scrub-shrub	No	79	
SW20	PEM1E (100%)	Emergent	No	137	-
SWB1	PSS1E (100%)	Scrub-shrub	No	-	_
SW23	PSS1E (100%)	Scrub-shrub	No	9,482	40
SW23.1	PSS1E (100%)	Scrub-shrub	No	-	-
SW23.2	PSS1E (100%)	Scrub-shrub	No	1,178	-
SW28.2	PSS1E (100%)	Scrub-shrub	Yes	- ,	
SW28.1	PSS1E (100%)	Scub-shrub	Yes	1,607	
SW28	PSS1F (100%)	Scrub-shrub	Yes	21,397	40
SW31	PSS1E (100%)	Scrub-shrub	No	624	_
SW30	PSS1E (100%)	Scub-shrub	No	911	-
SW32	PSS1E (100%)	Scrub-shrub	No	859	_
	PSS1E (89%)	Scrub-shrub		8,249	20
TW1	PFO1E (11%)	Forested	No	-	-
TW3	PEM1B (100%)	Wet meadow	No	2,119	
TW4	PSS1B (100%)	Scrub-shrub	No	325	-
	PEM1E (98%)	Emergent	, v	4,624	-
TW5	PFO1E (2%)	Forested	Yes	-	-
TWA1	PEM1B (100%)	Wet meadow	No	-	_
TW6	PSS1E (100%)	Scrub-shrub	No	4,824	-
TW7	PSS1E (100%)	Scrub-shrub	No	3,058	-
TW8	PSS1E (100%)	Scrub-shrub	Yes	7,767	-

Eversource T198 Line Project

		NHDES Stream Type	Priority	Impacts (sf/lf)	
Stream	Cowardin		Resource Area	Temp.	Perm.
Ashuelot River	R2UB2,3 (100%)	Perennial	Yes	-	-
South Branch of the Ashuelot River	R2UB2,3 (100%)	Perennial	Yes	-	-
Unnamed stream (SAS1)	R2UB2 (100%)	Perennial	Yes	-	-
Unnamed stream (SS10)	R2UB3b (100%)	Perennial stream	Yes	3,092/48*	-
Unnamed stream (SS2)	R4SB4 (100%)	Intermittent	Yes	-	-
Unnamed stream (SS3)	R4SB4 (100%)	Intermittent	Yes	-	-
Unnamed stream (SS4)	R2UB2b (100%)	Perennial	Yes	-	-
Unnamed stream (SS5)	R5SB4 (100%)	Ephemeral	Yes	-	-
Unnamed stream (SS11)	R4SB4 (100%)	Intermittent	Yes	-	-
Unnamed stream (SS5A)	R4SB4 (100%)	Intermittent	No	-	-
Unnamed stream (SSA4)	R4SB4 (100%)	Intermittent	Yes	-	-
Unnamed stream (SSA3)	R4SB4 (100%)	Intermittent	Yes	-	-
Unnamed stream (SSA2)	R3UB2 (100%)	Perennial	Yes	-	
Unnamed stream (TSA1)	R2UB2,3 (100%)	Perennial	Yes	-	-

Table H-2. Summary of proposed stream impacts from the Eversource T198 Line Project.

* Total of square feet / linear feet of temporary impacts to perennial stream channel and banks combined.

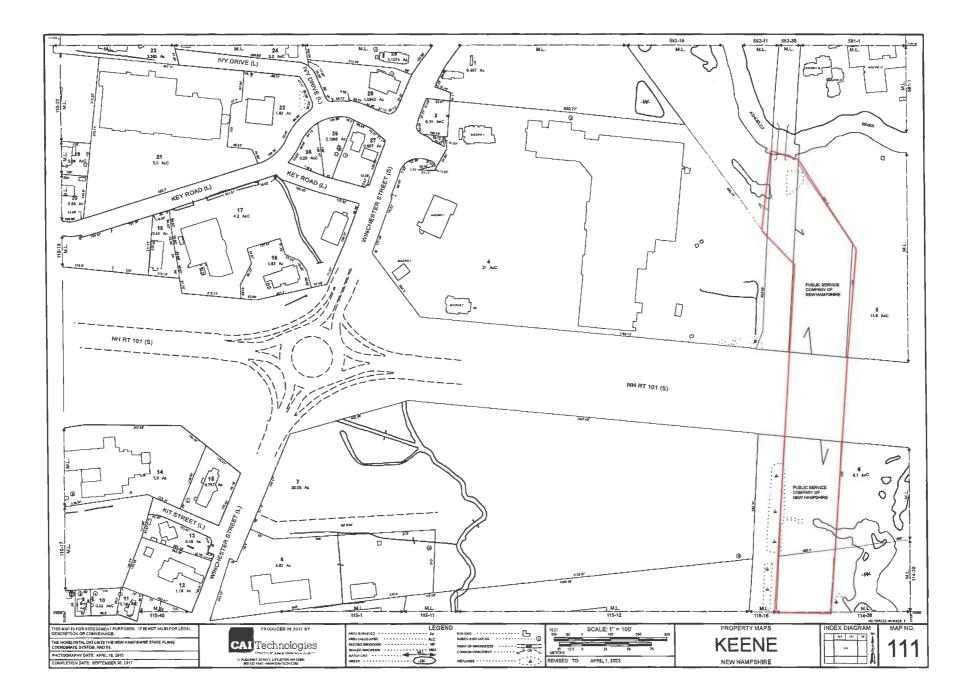
 Table H-3. Summary of total proposed wetland and stream impacts from the Eversource T198 Line Project, broken out by municipality.

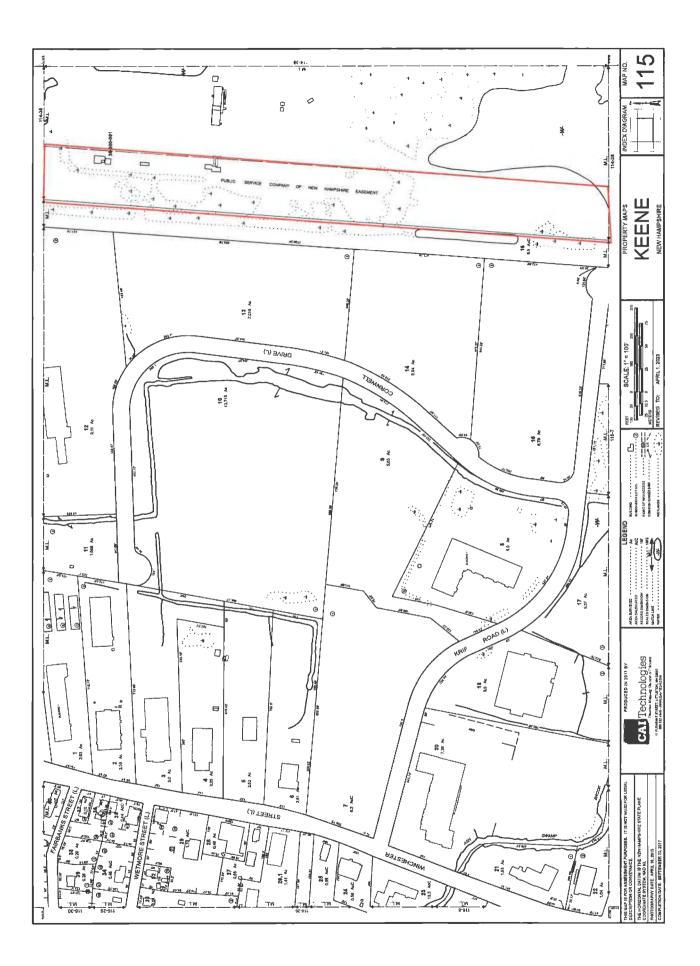
	Total Wetland	Impacts (sf)	Total Stream Impacts (sf/lf)	
Municipality	Temp.	Perm.	Temp.	Perm.
Keene	56,122	140	-	-
Swanzey	294,399	720	3,092	-
Troy	30,966	20	-	-
Total	381,486	880	3,092/48*	

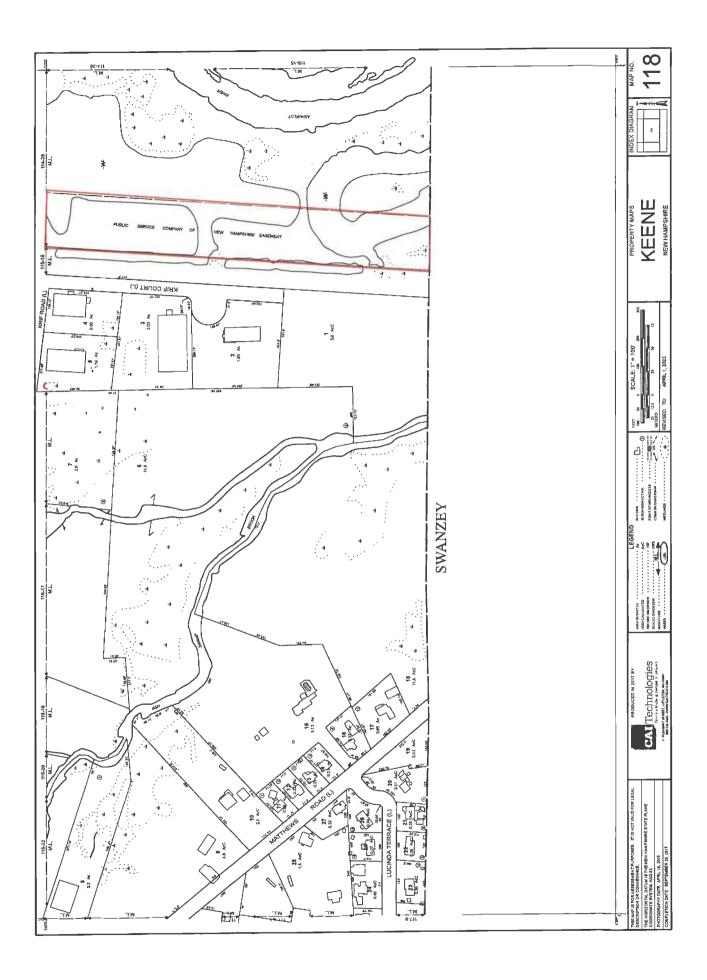
Eversource T198 Line Project

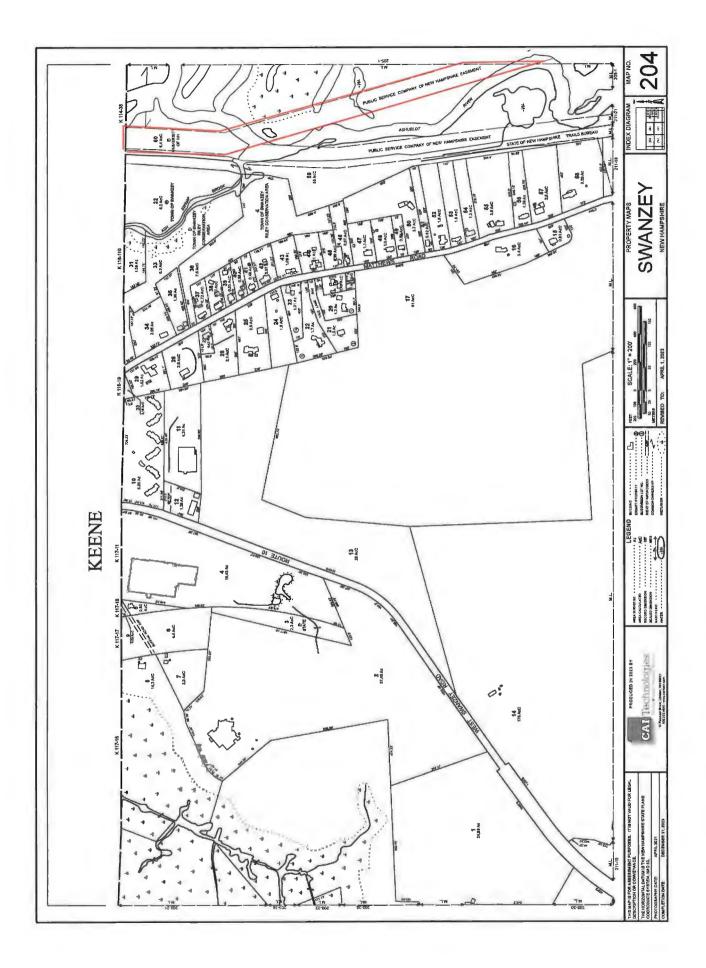
Standard Dredge and Fill Wetlands Permit Application

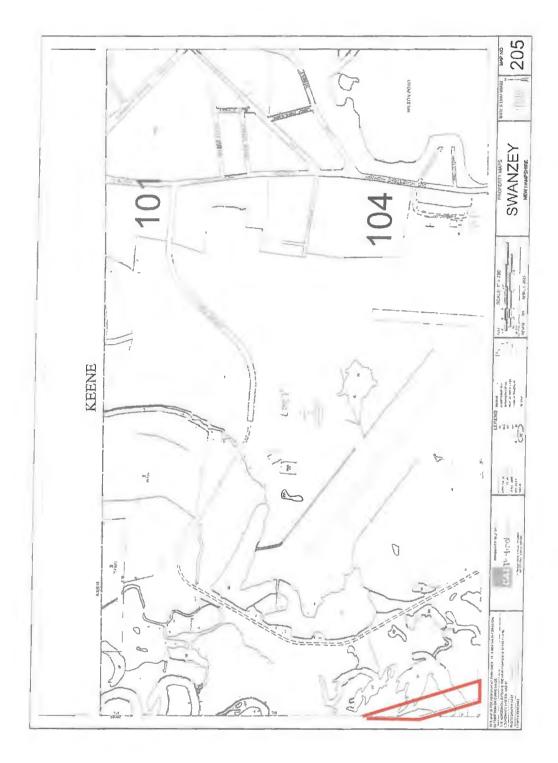
Attachment I: Parcel Map and List of Parcels

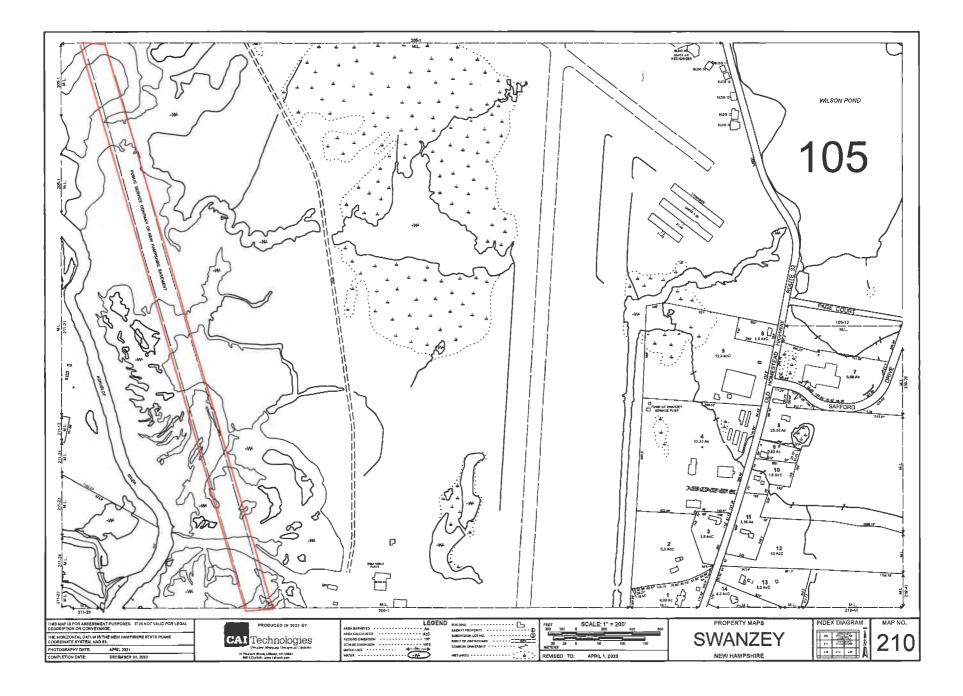


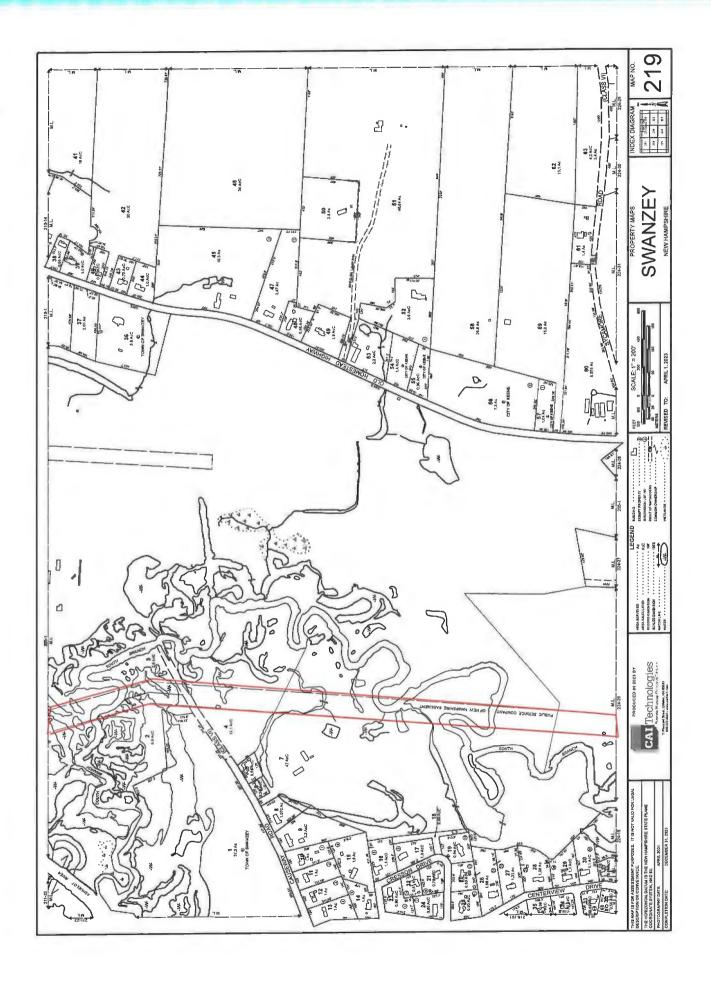


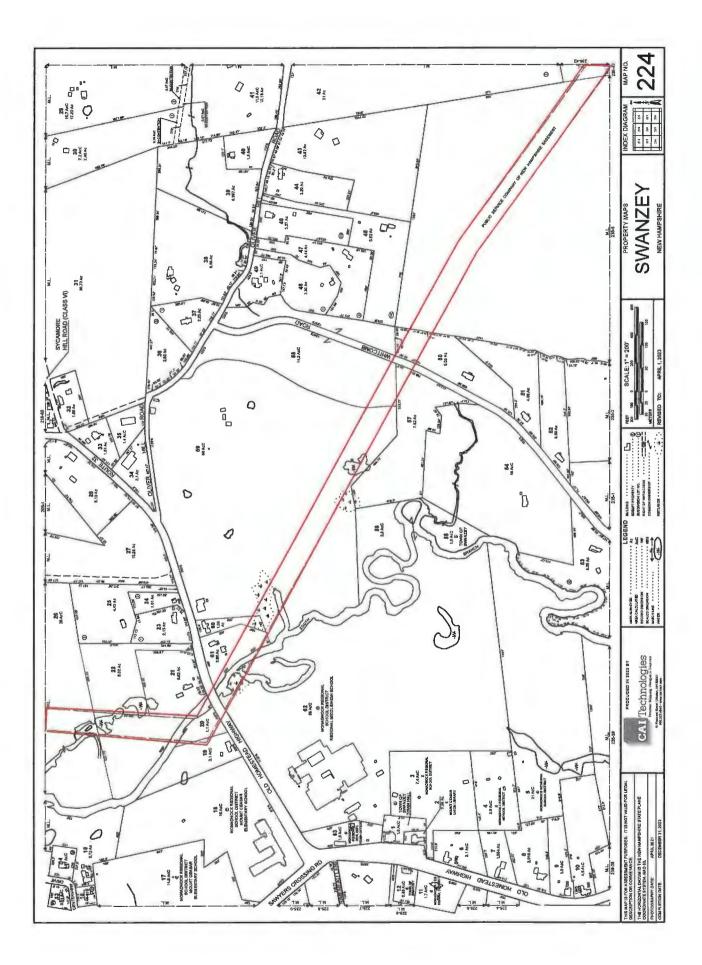


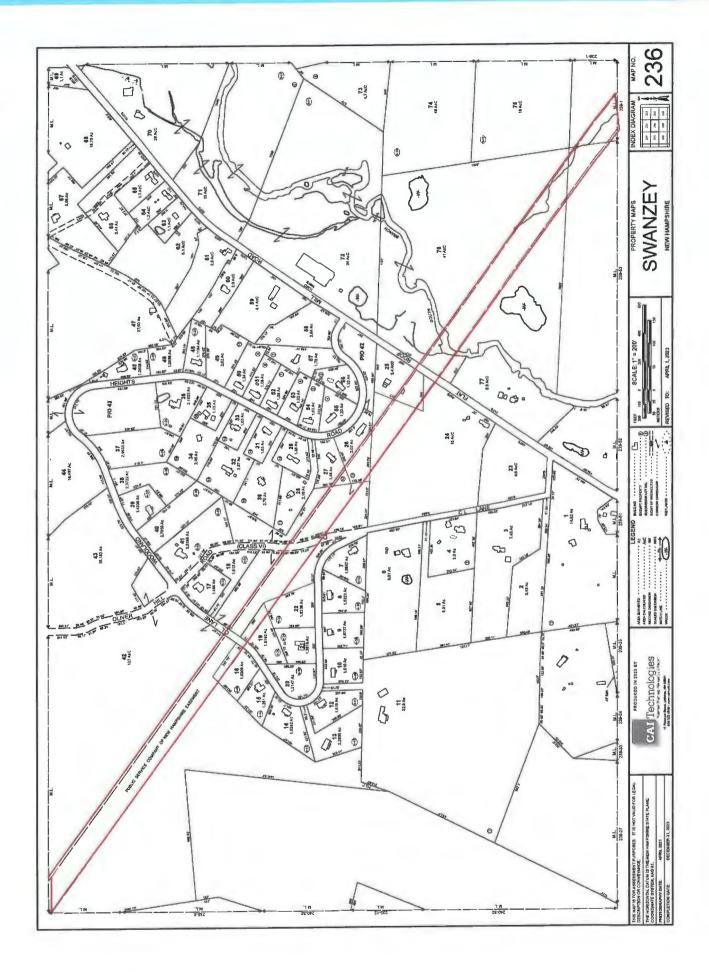


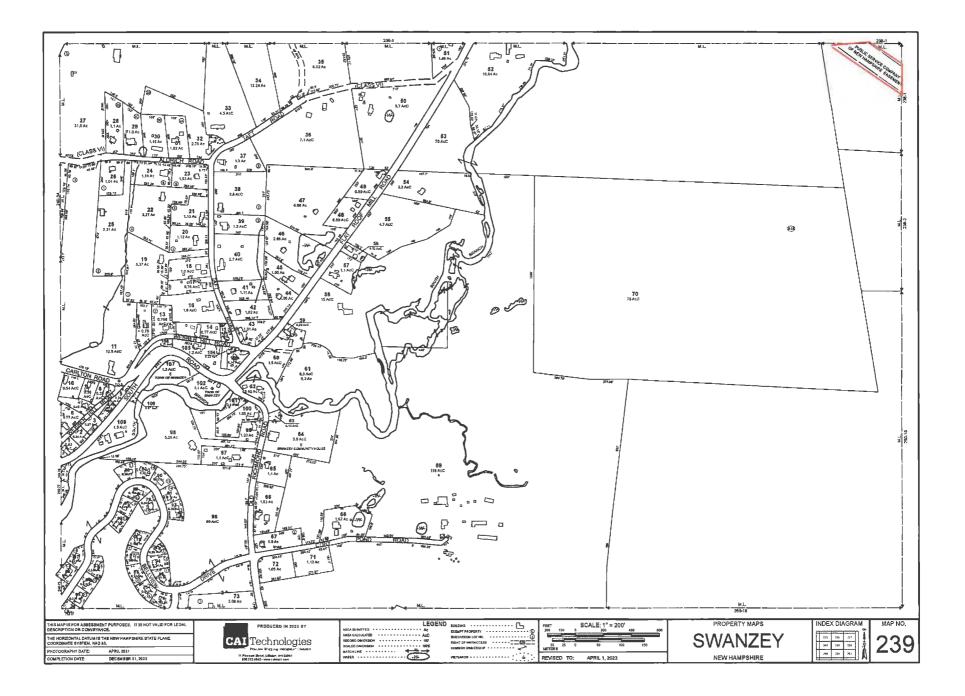


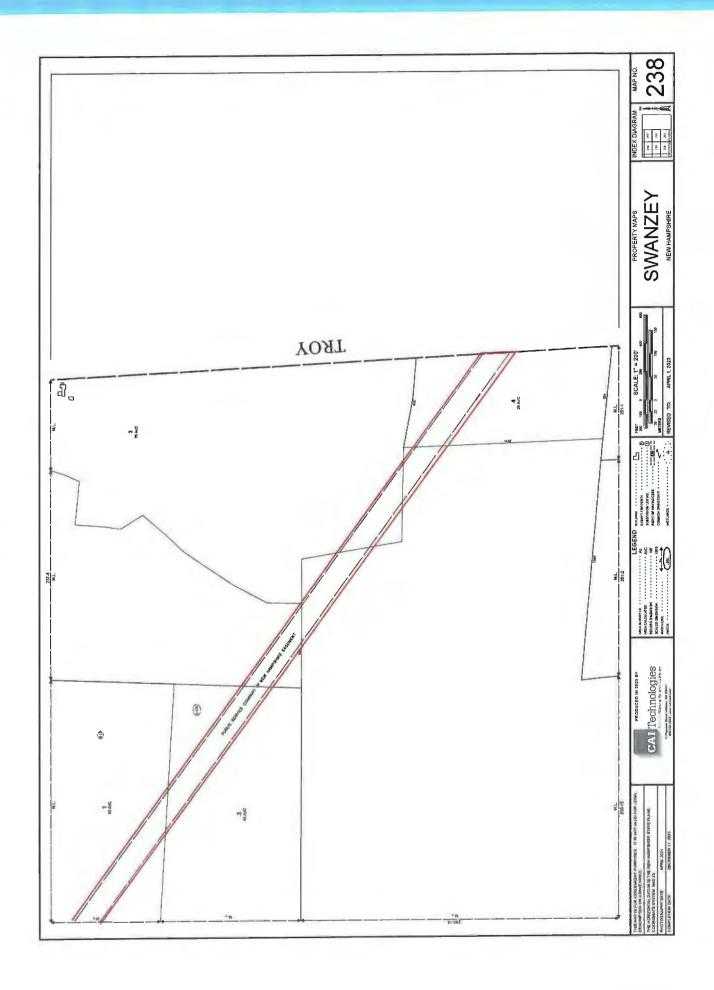


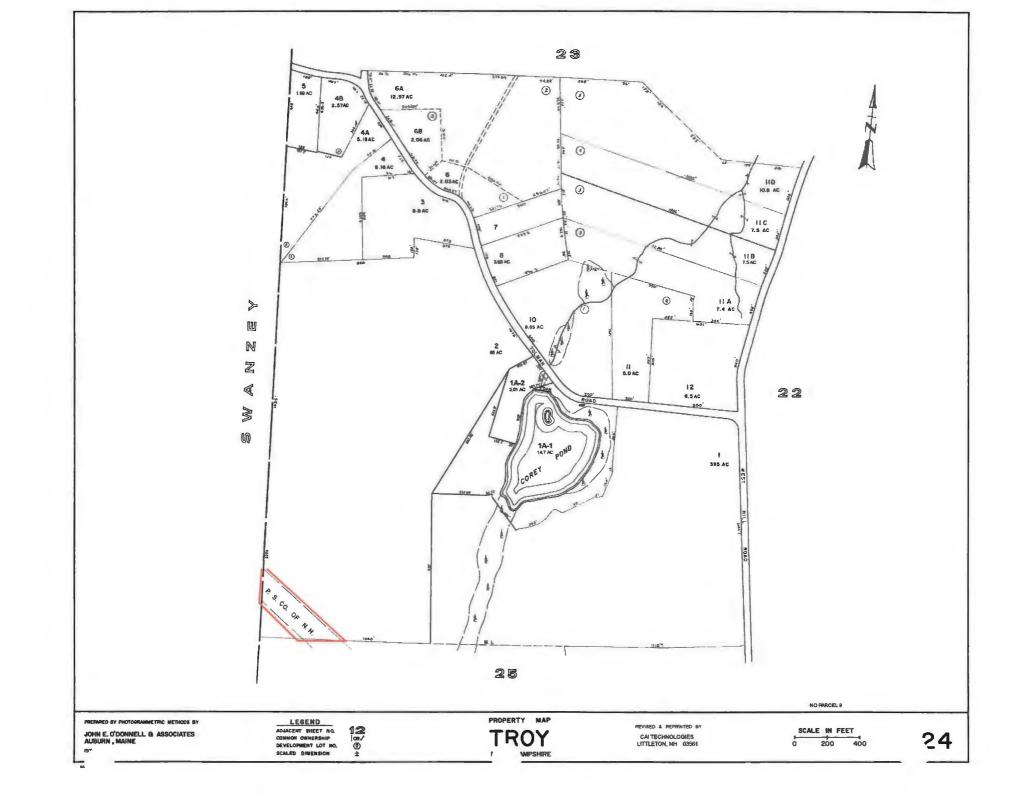


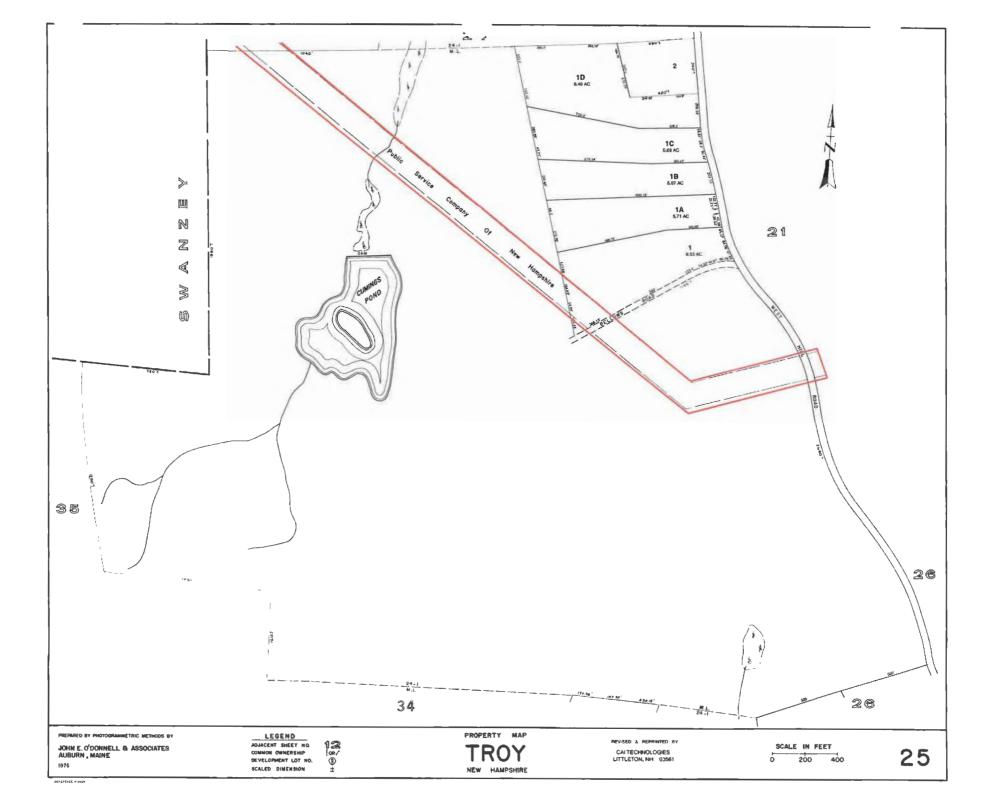












Parcel Number	Owner (First Name)	Owner (Last Name)	City
115-016-000-000	State of New Hampshire		Keene
114-038-000-000	University System of New Hampshire		Keene
	Public Service Company of New Hampshire		
592-018-000-000	(Eversource)		Keene
205-001-000	City of Keene		Swanzey
204-060-000	University System of New Hampshire		Swanzey
238-004-000	Sharen J	Guillet-Beal	Swanzey
238-003-000	Michelle & Gary	Cole	Swanzey
250-019-000	Lakeville Shores Incorporated		Swanzey
238-001-000	Eurovia Atlantic Coast LLC		Swanzey
239-053-000	James W	Lane	Swanzey
236-076-000	Eurovia Atlantic Coast LLC		Swanzey
236-025-000	Joseph	Gallagher	Swanzey
236-024-000	Katarzyna	Duz	Swanzey
236-042-000	W H Development LLC		Swanzey
236-019-000	ATA Construction LLC		Swanzey
235-009-000	Eurovia Atlantic Coast LLC		Swanzey
224-050-000	Jesse W	Heaney	Swanzey
224-026-000	Keith A	Bell	Swanzey
219-007-000	Mark	Call	Swanzey
219-004-000	Public Service Company of New Hampshire (Eversource)		Swanzey
219-003-000	Public Service Company of New Hampshire (Eversource)		Swanzey
219-002-000	Jonathan	Pratt	Swanzey
224-021-000	Rowan	G-ANN & JOHN W III	Swanzey
024-0002-0000	Sharen J	Guillet-Beal	Troy
024-0001-0000	Cummings Brothers		Troy

Attachment J: Construction Sequence Narrative

Project Construction Sequence Narrative

The project construction is proposed to begin in Fall 2025, pending receipt of required regulatory approvals. The following is a description of the anticipated construction sequence for this type of routine work:

- 1. Conduct a pre-construction meeting with team members to review project permits and conditions.
- 2. Complete wetland flag refreshing in advance of construction in individual areas.
- 3. Complete pole spotting and equipment mobilization as work progresses.
- 4. Install sediment and erosion controls in proposed locations. Perimeter controls are installed in tandem with matting installation for proper installation up to stabilized access roads.
- 5. Build access routes and work pads utilizing timber matting in wetlands as designated by plans.
- 6. Install check dams along access routes where necessary.
- Conduct drilling activities, including drilling of approximately 4-ft diameter holes for caisson placement, approximately 7-15 ft below ground surface. Dewatering practices (e.g. dirt bags and temporary sediment basins in uplands) and proper stockpiling will be utilized during drilling. Drill spoils will be properly stabilized in non-jurisdictional areas.
- 8. Conduct structure replacement activities, including installation of new structures, and removal of old structures. Existing structures in wetlands are typically cut and pole butts left in place, while structures in uplands may be removed from the ground.
- 9. Remove temporary timber matting, stabilize exposed soils within the ROW and restore temporarily disturbed wetland areas with appropriate wetland seed mix, as necessary.
- 10. Remove erosion and sedimentation controls following stabilization.
- 11. Complete restoration monitoring and reporting as required by project permits.

It is anticipated that the project will progress as follows:

- Complete structure replacements in upland areas including Structures 138, 137, 102, 101 & 78 in Fall 2025
- Complete remaining structures in 2026 & 2027, as per the plans, permit conditions and applicable time-of-year restrictions

Eversource T198 Line Project

Standard Dredge and Fill Wetlands Permit Application

Attachment K: NHNHB Consultation



Т

NHB DataCheck Results Letter NH Natural Heritage Bureau Please note: maps and NHB record pages are confidential and shall be redacted from public documents.

o:	Elizabeth Olliver, Normandeau Associates, Inc.
	25 Nashua Road
	Bedford, NH 03110
	eolliver@normandeau.com

From: NHB Review NH Natural Heritage Bureau Main Contact: Maddie Severance - <u>nhbreview@dncr.nh.gov</u>

cc: NHFG Review, David Simmons

Date: 11/01/2024 (valid until 11/01/2025)

Re:DataCheck Review by NH Natural Heritage Bureau and NH Fish & GamePermits:MUNICIPAL POR - Keene, Swanzey, and Troy, NHDES - Alteration of Terrain Permit, NHDES - ShorelandStandard Permit, NHDES - Standard Dredge & Fill - Major, NHDES - Standard Dredge & Fill - Minor, NHDES - Utilityactivities in rights-of-way Permit by Notification (PBN), USACE - General Permit, USEPA - Stormwater PollutionPrevention

NHB ID: NHB24-3243

Town:	Keene
Location:	Eversource right-of-way

Project Description: Eversource is proposing to replace select utility structures in the existing and maintained T198 right-of-way in Keene, Swanzey, and Troy, NH. This DataCheck request is an expansion of the proposed footprint for the NHB24-2249 DataCheck results. The footprint for the project has been expanded due to a recently identified need to replace additional structures on the T198 line in the area.

Next Steps for Applicant:

NHB's database has been searched for records of rare species and exemplary natural communities. Please carefully read the comments and consultation requirements below.

NHB Comments: The ROW is within an exemplary silver maple - false nettle - sensitive fern floodplain forest. Please contact NHB answering the following questions:

-Will any work occur outside of the ROW in the vicinity of the exemplary community including building of new access roads/ upgrading existing access?

-Will wetland matting or other methods be utilized to protect the wetland resources in this area? -Will proper erosion controls be utilized to protect the wetland resources in this area?

NHFG Comments: Please refer to NHFG consultation requirements below.



NHB DataCheck Results Letter

NH Natural Heritage Bureau Please note: maps and NHB record pages are confidential and shall be redacted from public documents.

NHB Consultation

If this NHB DataCheck letter includes records of rare plants and/or natural communities/systems, please contact NHB and provide any requested supplementary materials by emailing nhbreview@dncr.nh.gov.

If this NHB DataCheck letter DOES NOT include any records of rare plants and/or natural communities/systems, no further consultation with NHB is required.

NH Fish and Game Department Consultation

If this NHB DataCheck letter DOES NOT include <u>ANY</u> wildlife species records, then, based on the information submitted, no further consultation with the NH Fish and Game Department pursuant to Fis 1004 is required.

If this NHB DataCheck letter includes a record for a threatened (T) or endangered (E) wildlife species, consultation with the New Hampshire Fish and Game Department under Fis 1004 may be required. To review the Fis 1000 rules (effective February 3, 2022), please go to https://www.wildlife.nh.gov/wildlife-and-habitat/nongame-and-endangered-species/environmental-review. All requests for consultation and submittals should be sent via email to NHFGreview@wildlife.nh.gov or can be sent by mail, and **must include the NHB DataCheck results letter number** and **"Fis 1004 consultation request" in the subject line**.

If the NHB DataCheck response letter does not include a threatened or endangered wildlife species but includes other wildlife species (e.g., Species of Special Concern), consultation under Fis 1004 is not required; however, some species are protected under other state laws or rules, so coordination with NH Fish & Game is highly recommended or may be required for certain permits. While some permitting processes are exempt from required consultation under Fis 1004 (e.g., *statutory permit by notification, permit by rule, permit by notification, routine roadway registration, docking structure registration, or conditional authorization by rule*), coordination with NH Fish & Game may still be required under the rules governing those specific permitting processes, and it is recommended you contact the applicable permitting agency. For projects <u>not</u> requiring consultation under Fis 1004, but where additional coordination with NH Fish and Game is requested, please email <u>NHFGreview@wildlife.nh.gov</u>, and include the NHB DataCheck results letter number and "review request" in the email subject line. **Contact NH Fish & Game at (603) 271-0467 with questions.**



NHB DataCheck Results Letter NH Natural Heritage Bureau Please note: maps and NHB record pages are confidential and shall be redacted from public documents.

NHB Database Records:

The following record(s) have been documented in the vicinity of the proposed project. Please see the map and detailed information about the record(s) on the following pages.

Invertebrate Species	State ¹	Federal	Notes
Dwarf Wedge Mussel	Е	E	Contact the NH Fish & Game Dept (see above) and
(Alasmidonta heterodon)			the US Fish & Wildlife Service (see below).
Natural Community	State ¹	Federal	Notes
Silver maple - false nettle - sensitive fern floodplain forest*			Threats are primarily changes to the hydrology of the river, land conversion and fragmentation, introduction of invasive species, and increased input of nutrients and pollutants.
Vertebrate species	State ¹	Federal	Notes
American Eel (<i>Anguilla</i> <i>rostrata</i>)*	SC		Contact the NH Fish & Game Dept (see above).
· · · · · · · · · · · · · · · · · · ·			
Marsh Wren (<i>Cistothorus</i> palustris)			Contact the NH Fish & Game Dept (see above).
Marsh Wren (Cistothorus	 SC		Contact the NH Fish & Game Dept (see above). Contact the NH Fish & Game Dept (see above).
Marsh Wren (<i>Cistothorus palustris</i>) Northern Leopard Frog	 SC SC		

¹Codes: "E" = Endangered, "T" = Threatened, "SC" = Special Concern, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list.

An asterisk (*) indicates that the most recent report for that occurrence was 20 or more years ago.

For all animal reviews, refer to 'IMPORTANT: NHFG Consultation' section above. Contact for federally-listed animals: David Simmons, USFWS, at (603) 223-2541. Contact for federally-listed species: David Simmons, USFWS, at (603) 223-2541.

<u>Disclaimer</u>: NHB's database can only tell you of <u>known</u> occurrences that have been reported to NHFG/NHB. Known occurrences are based on information gathered by qualified biologists or members of the public, reported to our offices, and verified by NHB/NHFG.

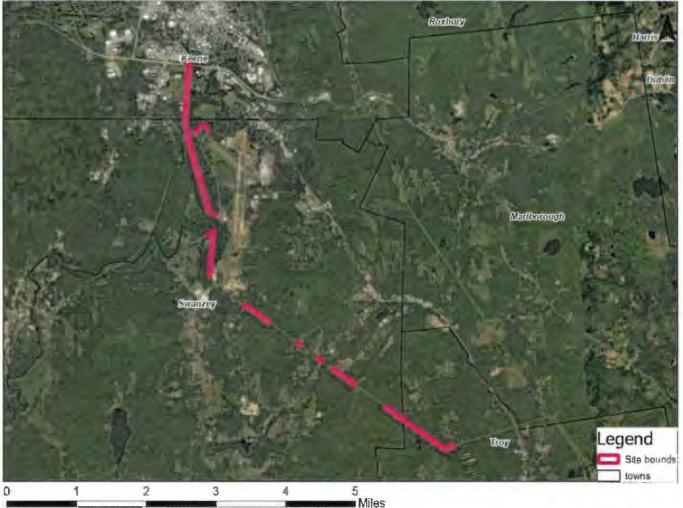
However, many areas have never been surveyed, or have only been surveyed for certain species.

NHB recommends surveys to determine what species/natural communities are present onsite.



NHB DataCheck Results Letter NH Natural Heritage Bureau Please note: maps and NHB record pages are confidential and shall be redacted from public documents.

NHB24-3243



NH Dept. of Natural & Cultural Resources Natural Heritage Bureau - Division of Forests and Lands r <u>eview@dncr.nh.gov</u> (603) 271- 2834



NHB DataCheck Results Letter NH Natural Heritage Bureau Please note: maps and NHB record pages are confidential and shall be redacted from public documents.

NHB24-3243

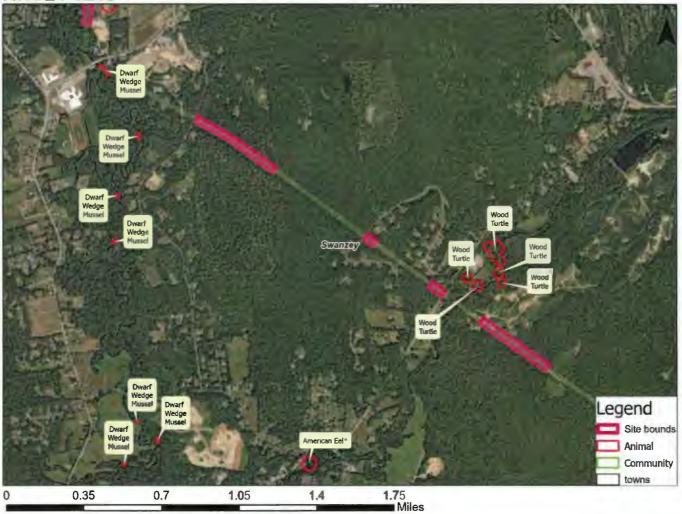


NH Dept. of Natural & Cultural Resources Natural Heritage Bureau - Division of Forests and Lands <u>nhbreview@dncr.nh.gov</u> (603) 271- 2834



NHB DataCheck Results Letter NH Natural Heritage Bureau <u>Please note: maps and NHB record pages are confidential and shall be redacted from public documents.</u>

NHB24-3243



William McCloy

From: Sent: To: Cc: Subject:	DNCR: NHB Review <nhbreview@dncr.nh.gov> Tuesday, February 18, 2025 9:37 AM Elizabeth Olliver Jeremy Fennell; William McCloy RE: Response to NHB Comments Eversource T198 Transmission Line Maintenance Project (NHB24-3243)</nhbreview@dncr.nh.gov>
Follow Up Flag:	Follow up
Flag Status:	Flagged

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Hi Elizabeth,

Thank you for providing a very detailed report, proposed plans, and representative photos of the proposed work area. I also appreciate the documentation of the Nuttall's reed grass (*Calamagrostis coarctata*) discovery and the inclusion of the answers to NHB's questions which help me to assess the proposed impacts to the exemplary silver maple - false nettle - sensitive fern floodplain forest. Below are recommendations broken up in sections for the exemplary natural community (ENC) and the Nuttall's reed grass.

Exemplary silver maple - false nettle - sensitive fern floodplain forest:

Below is a summary of the BMPs and proposed work activities outlined in the provided memo that demonstrate avoidance and minimization of the exemplary natural community (ENC):

- No expansion of the existing cleared ROW is proposed.
- No construction of new access or significant upgrades to new access are propose in the vicinity of the ENC.
- Timber mats will be used to establish temporary access routes and work pads in order to protect wetland resources.
- Any access outside of the ROW in the vicinity of the ENC will be within existing access.
- Existing wooden pole butt will be left in place to avoid wetland disturbance.
- All other existing wooden structure materials and components will be completely removed from the wetland area and properly disposed of.
- Excess excavated spoils resulting from the installation of new metal structures will be contained on the project work pads and properly disposed of outside of the wetland.
- Erosion and sediment controls will be installed along the edge of access roads and work pads as needed.

There are two potential impacts to the ENC from the proposed work that are addressed below:

• Some of the existing access outside of the ROW in the vicinity of the ENC may need improvements through the application of a top dressing of clean gravel.

- As long as all gravel is kept within the access road and excess gravel is not dumped into the ENC, there are no anticipated impacts.
- Vegetation maintenance will occur within the maintained ROW. If the below recommendations can be adhered to, negative impacts are not anticipated.
 - Vegetation maintenance is recommended under frozen ground conditions (or dry conditions if sustained frozen conditions are not possible) in any areas where the ROW passes through the ENC or wetlands that are hydrologically connected to the ENC.
 - If work cannot occur under frozen ground/dry conditions, complete work by hand and keep vehicles/equipment on existing gravel access roads wherever possible and utilize matting if motorized access is needed to cross wetlands.
 - Do not place slash in the wetlands to avoid impacting the hydrology of the ENC.

The best way to avoid impacts to the exemplary silver maple - false nettle - sensitive fern floodplain forest is to work under frozen ground conditions, however if this is not practicable then all the above outlined BMPs will avoid/minimize impacts to the exemplary wetland to the greatest extent possible.

Nuttall's reed grass:

Thank you for the due diligence of completing thorough surveys when Nuttall's reed grass was believed to be detected and for documenting these occurrences with rare plant reporting forms. This is now the third new rare plant population Normandeau has found during recent projects, and I appreciate the continued reporting of these populations.

Based on the provided information, Nuttall's reed grass is not proposed to be permanently impacted and will instead be temporarily impacted due to the plants occurring directly adjacent to access roads, one of which is proposed to be upgraded. These plants respond well to disturbance are unlikely to be severely impacted by the proposed work.

NHB recommends the following BMPs to avoid and minimize impacts to Nuttall's reed grass:

- Fence off/flag the locations of the rare plants so they are not incidentally impacted by work including being run over by vehicles or parked on.
- For any rare plants that are completely unavoidable, timber matting should be placed over the rare plants and removed as soon as possible (as indicated in the provided memo).
 - If practicable, matting should not be placed over the plants during the growing season (April 1st to November 15th) or for as little of the growing season as possible.

Thank you also for indicating additional areas are proposed to be impacted but were not surveyed for Nuttall's reed grass. These areas are all over a half mile away from the documented occurrences and although these areas could support this plant, NHB generally uses a half mile as a recommended survey area. Because of this, and because this plant is currently proposed for delisting and responds well to disturbance, additional surveys are not necessary, and the rare plant will likely be minimally impacted.

As long as the proposed protection measures in the provided memo and the additional BMPs included in this email can be adhered to, NHB has no further concerns regarding NHB24-3243.

Please let me know if you have any questions.

Best,

Madeline (Maddie) Severance (*she/her/hers*) Environmental Reviewer New Hampshire Natural Heritage Bureau (NHB) Division of Forests & Lands N.H. Department of Natural & Cultural Resources 172 Pembroke Rd Concord, NH 03301 (603)-271-2834 nhbreview@dncr.nh.gov nhdfl.dncr.nh.gov NHB DataCheck Tool

From: Elizabeth Olliver <eolliver@normandeau.com> Sent: Thursday, February 13, 2025 1:34 PM To: DNCR: NHB Review <nhbreview@dncr.nh.gov> Cc: Jeremy Fennell <jeremy.fennell@eversource.com>; William McCloy <wmccloy@normandeau.com> Subject: Response to NHB Comments Eversource T198 Transmission Line Maintenance Project (NHB24-3243)

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All,

Below is a OneDrive link to a memo contain responses to comments from NHB on the NHB24-3243 Datacheck results letter. Please note, this is a joint consultation memo sent with both New Hampshire Natural Heritage Bureau and New Hampshire Fish and Game, submitted via separate email chains. The introduction on Page 1, Pages 8 through 10, and Attachments A through E are relevant to the NHB consultation. Page 1 below the introduction through Page 7 are relevant to the NHFG.

EE T198_NHFG and NHB Consultation Memo

Please let us know if you have any questions or require any additional information.

Thank you,

Elizabeth A. Olliver, PhD, NHCWS Normandeau Associates, Inc. 603-637-1122 (direct) 603-714-1231 (cell)

From: DNCR: NHB Review <<u>nhbreview@dncr.nh.gov</u>> Sent: Friday, November 1, 2024 2:07 PM To: Elizabeth Olliver <<u>eolliver@normandeau.com</u>> Cc: FGC: NHFG review <<u>NHFGreview@wildlife.nh.gov</u>>; <u>David_Simmons@fws.gov</u>; <u>jeremy.fennell@eversource.com</u> Subject: NHB Review: NHB24-3243 CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Attached, please find the review of the NH Natural Heritage Bureau's (NHB) database to determine whether the proposed project could impact rare species and exemplary natural communities.

If you received a comment on the DataCheck Letter from NHB, please reply to this email with any documents, photos, or information requested.

If you received a comment on the DataCheck Letter from NHFG, please follow the consultation requirements listed on the DataCheck Letter and coordinate with <u>NHFGreview@wildlife.nh.gov</u>

Best, Maddie

Madeline Severance Environmental Reviewer

NH Natural Heritage Bureau DNCR - Forests & Lands 172 Pembroke Rd Concord, NH 03301 603-271-2834

If there are problems with your DataCheck letter or you need help using the DataCheck Tool, contact: (603) 271-0687

If there is a rare plant or exemplary natural community and an NHB Comment on your DataCheck letter, contact Maddie Severance for any environmental review questions: (603) 271-2834

If there is a rare wildlife species and an NHFG Comment on your DataCheck Letter, contact NHFG for any environmental review questions: (603) 271-0467

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Eversource T198 Line Project

Standard Dredge and Fill Wetlands Permit Application

Attachment L: NHFG and USFWS Consultation

From:	Buchanan, Jennifer
то:	Fennell, Jeremy D; William McCloy; Elizabeth Olliver; FGC; NHFG review
Cc:	Sullivan, Kevin
Subject:	RE: NHB24-3243_ Eversource T198 ROW Structure Replacements_DES AoT and Wetlands#UNK_NHFG RFAI
Date:	Thursday, April 24, 2025 8:49:13 AM
Attachments:	image008.png image009.png image003.png

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Morning Jeremy,

Thank you for providing the iPaC letter. However, further coordination with USFWS is required. The USFWS has asked NHFG not to provide any measures until coordination with the USFWS has been completed. NHFG would need a biological opinion before we can proceed to issue the conservation measures. I would suggest that you reach out directly to the NE Ecological Services Field Office.

The IPaC results indicated the following species is (are) potentially present in your project area and, based on your responses to the Service's Northeast DKey, you determined the proposed Project will have the following effect determinations:

Species

Dwarf Wedgemussel (Alasmidonta heterodon)

Listing Status Deter Endangered NLA

Determination NLAA

Conclusion

<u>Coordination with the Service is not complete</u>. The project has a federal nexus (e.g., funds, permits); however, you are not the federal action agency. Therefore, the ESA consultation status is incomplete and no project activities on any portion of the parcel should occur until consultation between the Service and the Federal action agency (or designated non-federal representative), is completed. Section 7 consultation is not complete until the federal action agency submits a determination of effects, and the Service concurs with the federal action agency's determination. Please provide this technical assistance letter to the lead federal action agency or its designated non-federal representative with a request for its review.

As the federal agency deems appropriate, they should submit their determination of effects to the appropriate Ecological Services Field Office. The lead federal action agency or designated non-federal representative can log into IPaC system using their agency email account and click "Search by record locator" to find this Project using 386-161156750.

Thank you,

Jen

From: Fennell, Jeremy D <jeremy.fennell@eversource.com>
Sent: Tuesday, April 22, 2025 3:21 PM
To: Buchanan, Jennifer <Jennifer.L.Buchanan@wildlife.nh.gov>; wmccloy
<wmccloy@normandeau.com>; Elizabeth Olliver <eolliver@normandeau.com>; FGC: NHFG review
<NHFGreview@wildlife.nh.gov>

Subject: RE: NHB24-3243_ Eversource T198 ROW Structure Replacements_DES AoT and Wetlands#UNK NHFG RFAI

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Hi Jen – attached is the IPaC technical assistance letter for dwarf wedgemussel. Please let us know if you need further information.

Thanks, Jeremy

From: Buchanan, Jennifer < Jennifer.L.Buchanan@wildlife.nh.gov>

Sent: Tuesday, April 22, 2025 10:03 AM

To: Fennell, Jeremy D <<u>jeremy.fennell@eversource.com</u>>; wmccloy <<u>wmccloy@normandeau.com</u>>; Elizabeth Olliver <<u>eolliver@normandeau.com</u>>; FGC: NHFG review <<u>NHFGreview@wildlife.nh.gov</u>> Subject: RE: NHB24-3243_ Eversource T198 ROW Structure Replacements_DES AoT and Wetlands#UNK_NHFG RFAI

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Hi Jeremy,

I received clarification, and we can accept the iPaC letter for federally listed species. Do you have the iPaC letter from USFWS regarding the Dwarf Wedgemussel? I need to have that on file in order to proceed with my conversation measures.

Thanks,

Jen

From: Fennell, Jeremy D < jeremy.fennell@eversource.com>

Sent: Tuesday, April 15, 2025 3:50 PM

To: Buchanan, Jennifer < Jennifer.L.Buchanan@wildlife.nh.gov>; wmccloy

<<u>wmccloy@normandeau.com</u>>; Elizabeth Olliver <<u>eolliver@normandeau.com</u>>; FGC: NHFG review <<u>NHFGreview@wildlife.nh.gov</u>>

Cc: Ramas, Alani <<u>Alani.Ramas@des.nh.gov</u>>; Tilton, Mary Ann <<u>mary.a.tilton@des.nh.gov</u>>; Schlosser, Michael <<u>Michael.J.Schlosser@des.nh.gov</u>>

Subject: RE: NHB24-3243_ Eversource T198 ROW Structure Replacements_DES AoT and Wetlands#UNK_NHFG RFAI

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Hi Jennifer - we accept the accommodation and appreciate you working with us for T198 project.

Regards, Jeremy

From: Buchanan, Jennifer < Jennifer.L.Buchanan@wildlife.nh.gov>

Sent: Monday, April 14, 2025 3:04 PM

To: wmccloy <<u>wmccloy@normandeau.com</u>>; Elizabeth Olliver <<u>eolliver@normandeau.com</u>>; FGC: NHFG review <<u>NHFGreview@wildlife.nh.gov</u>>

Cc: Fennell, Jeremy D <jeremy.fennell@eversource.com</p>
; Ramas, Alani <<u>Alani.Ramas@des.nh.gov</u>
; Tilton, Mary Ann <<u>mary.a.tilton@des.nh.gov</u>
; Schlosser, Michael <<u>Michael.J.Schlosser@des.nh.gov</u>
Subject: RE: NHB24-3243_ Eversource T198 ROW Structure Replacements_DES AoT and
Wetlands#UNK_NHFG RFAI

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Hi Bill,

Thank you for the information and follow-up.

The main concern for NHFG pertains to the time-of-year restriction. I was discussing this project with the turtle taxa expert, given that it is a sensitive Wood Turtle area. My initial time-of-year restriction was for structures 145 - 101 and 72 - 65. After discussing this project, we can narrow it down to structures 134 - 101 and 72 - 65. NHFG hopes this is more achievable, as any more than that could impact priority populations. NHFG would prefer seasonal avoidance due to the sensitive nature of this area.

Please let me know your thoughts,

Jennifer Buchanan Wildlife Biologist

Wildlife Division New Hampshire Fish and Game Department 11 Hazen Drive, Concord, NH 03301 p. 603-271-5860 e. jennifer.l.buchanan@wildlife.nh.gov

wildlife.nh.gov

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The requirements for consultation (Fis 1004) shall not apply to the following: statutory permit by notification, permit by rule, permit by notification, routine roadway registration, docking structure registration, or conditional authorization by rule. Review requests for these projects or other project types should be submitted to <u>NHFGreview@wildlife.nh.gov</u> or can be sent hardcopy by mail – email or mail subject line for these review requests should read "**NHBxx-xxxx_Project Name_Env. Review Request**".

Please provide shapefiles/KMZ/KMLs of the project site (and relevant features if applicable) with your submittal.

Did you know? New Hampshire Fish and Game protects, conserves, and manages more than 500 species of wildlife and thousands of invertebrates. The program relies in part on private contributions to accomplish its work, and to raise matching funds required for state and federal grants. Learn more at <u>www.wildnh.com/nongame</u>

From: William McCloy <wmccloy@normandeau.com>

Sent: Monday, April 14, 2025 2:09 PM

To: Buchanan, Jennifer < Jennifer.L.Buchanan@wildlife.nh.gov>; Elizabeth Olliver

<eolliver@normandeau.com>; FGC: NHFG review <<u>NHFGreview@wildlife.nh.gov</u>>

Cc: Jeremy Fennell <<u>jeremy.fennell@eversource.com</u>>; Ramas, Alani <<u>Alani.Ramas@des.nh.gov</u>>; Tilton, Mary Ann <<u>mary.a.tilton@des.nh.gov</u>>; Schlosser, Michael <<u>Michael.J.Schlosser@des.nh.gov</u>> Subject: RE: NHB24-3243_ Eversource T198 ROW Structure Replacements_DES AoT and Wetlands#UNK_NHFG RFAI

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Afternoon, Jennifer:

I wanted to check in and see if you had any questions about our response to your RFAI – and if you had time in the next few weeks to schedule a virtual meeting to discuss some of your recommendations.

Thanks for your time and attention,

Bill

Bill McCloy Principal Scientist

Normandeau Associates, Inc. 802-861-7038 (direct) 802-855-1246 (cell)

Upcoming PTO: 4/18-4/23

From: William McCloy

Sent: Wednesday, March 26, 2025 4:05 PM

To: Buchanan, Jennifer <<u>Jennifer.L.Buchanan@wildlife.nh.gov</u>>; Elizabeth Olliver
 <<u>eolliver@normandeau.com</u>>; FGC: NHFG review <<u>NHFGreview@wildlife.nh.gov</u>>
 Cc: Jeremy Fennell <<u>jeremy.fennell@eversource.com</u>>; Ramas, Alani <<u>Alani.Ramas@des.nh.gov</u>>;
 Tilton, Mary Ann <<u>mary.a.tilton@des.nh.gov</u>>; Schlosser, Michael <<u>Michael.J.Schlosser@des.nh.gov</u>>
 Subject: RE: NHB24-3243_ Eversource T198 ROW Structure Replacements_DES AoT and
 Wetlands#UNK_NHFG RFAI

Jennifer:

On behalf of Eversource, please find our responses to your RFAI and the requested GIS Shapefiles, attached.

We look forward to an opportunity to discuss the project and your recommended time-of-year restrictions proposed in the RFAI. When you have had a chance to review the responses and updated plans, please let us know when you have time to meet.

Some notes about the attached GIS Shapefiles:

- We have included the requested layers
 - The proposed access road locations and types are in the "Proposed Impacts" SHP
 - This SHP has an Attribute field, called "Type"
 - This includes whether a given area will be Gravel, Upland Matting, Wetland Matting or if there is an Existing Gravel Road
 - The remaining layers should be straight forward (e.g. proposed and existing poles, wetlands, the ROW, PVPs and PVP buffer (50 ft)).
- If you have any issues with these GIS files let me know and we can assist

Thanks,

Bill

Bill McCloy Principal Scientist Normandeau Associates, Inc. 802-861-7038 (direct) 802-855-1246 (cell)

From: Buchanan, Jennifer <<u>lennifer.L.Buchanan@wildlife.nh.gov</u>>
Sent: Wednesday, February 26, 2025 2:32 PM
To: Elizabeth Olliver <<u>eolliver@normandeau.com</u>>; FGC: NHFG review
<<u>NHFGreview@wildlife.nh.gov</u>>
Cc: Jeremy Fennell <<u>ieremy.fennell@eversource.com</u>>; William McCloy
<<u>wmccloy@normandeau.com</u>>; Ramas, Alani <<u>Alani.Ramas@des.nh.gov</u>>; Tilton, Mary Ann
<<u>mary.a.tilton@des.nh.gov</u>>; Schlosser, Michael <<u>Michael.J.Schlosser@des.nh.gov</u>>

Subject: NHB24-3243_ Eversource T198 ROW Structure Replacements_DES AoT and

Wetlands#UNK_NHFG RFAI

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Hi Elizabeth,

On February 26, 2025, New Hampshire Fish and Game completed a review of materials submitted for consultation for **NHB24-3243** on 2/13/25. Eversource proposes to replace 50 structures and remove two structures in the existing T198 transmission line right-of-way (ROW) in Keene, Swanzey, and Troy, NH. Completion of vegetation maintenance within the limits of the ROW is planned to overlap with the completion of this project. The project is expected to occur from January to November 2026.

Pursuant to Fis 1004.05 (c), NHFG determined additional information is necessary for us to continue our review.

- 1. Please provide shapefiles of the project including the ROW boundary, existing and proposed structures with their corresponding numbers, access roads with types (i.e., existing, temporary, ones that need improvements), proposed wetland matting areas, and wetland delineations/types. In addition, vernal pools (VP) and potential vernal pools (PVP) need to be identified (i.e., VP-1, PVP-1, etc.).
- 2. NHFG needs to know the location of vernal pools or potential vernal pools. Please identify these areas in the updated plan sheets.
- 3. Please identify any potential impacts (within 50 feet) to vernal pools and potential vernal pools, if any.
- 4. NHFG requests that all work only occur from October 16th April 14th for T198 Line existing structures 145 101 and 72 65. Is Eversource amendable to this measure?

Pursuant to Fis 1004.06 (b), NHFG is requesting that the above information be received within 30 days of the date of this request (no later than 5/28/2025).

Per Fis 1004.09(b), the NHFG shall not deliver recommendations if the applicant fails to file a complete response to a request for additional information unless the partial response (1) explains why the missing information is unavailable or cannot be provided with the specified time, and (2) agrees in writing to extend the time to complete NHFG's review, and the decision of the referring agency on the underlying permit application, until a reasonable time after the requested information is in fact provided to the department.

Should additional time be necessary to submit the requested information, an extension of the deadline may be requested. Requests for additional time must be received prior to the deadline and follow the guidelines in Fis 1004.10 in order to be approved. If this deadline is not met or extended, you may be required to resubmit for consultation.

Thank you,

Jennifer Buchanan Wildlife Biologist

Wildlife Division New Hampshire Fish and Game Department 11 Hazen Drive, Concord, NH 03301 p. 603-271-5860 e. jennifer.l.buchanan@wildlife.nh.gov wildlife.nh.gov

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New Hampshire Fish and Game requirements for environmental review consultation can be found at: <u>https://gencourt.state.nh.us/rules/state_agencies/fis1000.html</u>. ALL requests for consultation and submittals should be sent via email to <u>NHFGreview@wildlife.nh.gov</u> or can be sent hardcopy by mail. **The NHB DataCheck results letter number needs to be included in the email subject line to read as "NHBxx-xxxx_Project Name_FIS 1004 Consultation Submittal"**.

The requirements for consultation (Fis 1004) shall not apply to the following: statutory permit by notification, permit by rule, permit by notification, routine roadway registration, docking structure registration, or conditional authorization by rule. Review requests for these projects or other project types should be submitted to <u>NHFGreview@wildlife.nh.gov</u> or can be sent hardcopy by mail – email or mail subject line for these review requests should read "**NHBxx-xxxx_Project Name_Env. Review Request**".

Please provide shapefiles/KMZ/KMLs of the project site (and relevant features if applicable) with your submittal.

Did you know? New Hampshire Fish and Game protects, conserves, and manages more than 500 species of wildlife and thousands of invertebrates. The program relies in part on private contributions to accomplish its work, and to raise matching funds required for state and federal grants. Learn more at <u>www.wildnh.com/nongame</u>

From: Elizabeth Olliver < eolliver@normandeau.com>

Sent: Thursday, February 13, 2025 1:34 PM

To: FGC: NHFG review <<u>NHFGreview@wildlife.nh.gov</u>>

Cc: Jeremy Fennell < jeremy.fennell@eversource.com >; William McCloy

<wmccloy@normandeau.com>; Sullivan, Kevin <Kevin.M.Sullivan@wildlife.nh.gov>

Subject: Request for Formal Fis 1004 Consultation for Eversource T198 Transmission Line Maintenance Project (NHB24-3243)

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EE T198 NHFG and NHB Consultation Memo

Please let us know if you have any questions or require any additional information.

Thank you,

Elizabeth A. Olliver, PhD, NHCWS Senior Wetland Scientist Normandeau Associates, Inc. 25 Nashua Road, Bedford, NH 03110 603-637-1122 (direct) 603-714-1231 (cell) eolliver@normandeau.com



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United States Department of the Interior



FISH AND WILDLIFE SERVICE New England Ecological Services Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5094 Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: Project Code: 2025-0086627 Project Name: Eversource T198 Line Structure Replacement Project

05/22/2025 13:18:29 UTC

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Updated 4/12/2023 - *Please review this letter each time you request an Official Species List, we will continue to update it with additional information and links to websites may change.*

About Official Species Lists

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Federal and non-Federal project proponents have responsibilities under the Act to consider effects on listed species.

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested by returning to an existing project's page in IPaC.

Endangered Species Act Project Review

Please visit the "New England Field Office Endangered Species Project Review and Consultation" website for step-by-step instructions on how to consider effects on listed

species and prepare and submit a project review package if necessary:

https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review

NOTE Please <u>do not</u> use the **Consultation Package Builder** tool in IPaC except in specific situations following coordination with our office. Please follow the project review guidance on our website instead and reference your **Project Code** in all correspondence.

Northern Long-eared Bat - (Updated 4/12/2023) The Service published a final rule to reclassify the northern long-eared bat (NLEB) as endangered on November 30, 2022. The final rule went into effect on March 31, 2023. You may utilize the **Northern Long-eared Bat Rangewide Determination Key** available in IPaC. More information about this Determination Key and the Interim Consultation Framework are available on the northern long-eared bat species page:

https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis

For projects that previously utilized the 4(d) Determination Key, the change in the species' status may trigger the need to re-initiate consultation for any actions that are not completed and for which the Federal action agency retains discretion once the new listing determination becomes effective. If your project was not completed by March 31, 2023, and may result in incidental take of NLEB, please reach out to our office at newengland@fws.gov to see if reinitiation is necessary.

Additional Info About Section 7 of the Act

Under section 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to determine whether projects may affect threatened and endangered species and/or designated critical habitat. If a Federal agency, or its non-Federal representative, determines that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Federal agency also may need to consider proposed species and proposed critical habitat in the consultation. 50 CFR 402.14(c)(1) specifies the information required for consultation under the Act regardless of the format of the evaluation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/service/section-7-consultations

In addition to consultation requirements under Section 7(a)(2) of the ESA, please note that under sections 7(a)(1) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species. Please contact NEFO if you would like more information.

Candidate species that appear on the enclosed species list have no current protections under the ESA. The species' occurrence on an official species list does not convey a requirement to

consider impacts to this species as you would a proposed, threatened, or endangered species. The ESA does not provide for interagency consultations on candidate species under section 7, however, the Service recommends that all project proponents incorporate measures into projects to benefit candidate species and their habitats wherever possible.

Migratory Birds

In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see:

https://www.fws.gov/program/migratory-bird-permit

https://www.fws.gov/library/collections/bald-and-golden-eagle-management

Please feel free to contact us at **newengland@fws.gov** with your **Project Code** in the subject line if you need more information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Attachment(s): Official Species List

Attachment(s):

Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300 Concord, NH 03301-5094 (603) 223-2541

PROJECT SUMMARY

Project Code: **Project Name: Project Type:**

2025-0086627 **Eversource T198 Line Structure Replacement Project** Transmission Line - Maintenance/Modification - Above Ground Project Description: Eversource is proposing to replace select utility structures in the existing and maintained T198 right-of-way (ROW) in Keene, Swanzey, and Troy, NH (the Project). Construction will require temporary impacts to wetlands and smaller streams required to establish temporary timber mat access roads and work pads were necessary to complete construction, permanent impacts to select wetlands for installation of replacement structures, and temporary and permanent impacts to uplands to establish access roads and work pads. While the Project is located in the vicinity of portions of the Ashuelot River and South Branch of the Ashuelot Rivers, no impacts to either of these water courses is proposed and appropriate erosion and sediment control best management practices will be utilized through the Project to ensure protection of water quality. Mowing of vegetation in the ROW and select trimming and/or removal of danger trees along the edge of the ROW will be completed as part of the Project, but no expansion of the existing ROW and/or mowing/removal of vegetation is proposed outside of the ROW. All trimming and/or removal of trees will be completed out of the pup season for both northern long-eared bat and tricolored bat. Start of construction is proposed for Fall 2025 and continuing through 2026.

Project Location:

The approximate location of the project can be viewed in Google Maps: https:// www.google.com/maps/@42.847819900000005,-72.22015430671857,14z



Counties: Cheshire County, New Hampshire

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS	
NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/9045</u>	Endang
Tricolored Bat Perimyotis subflavus	Propos
No critical habitat has been designated for this species.	Endang
Species profile: https://ecos.fws.gov/ecp/species/10515	-
CLAMS	
NAME	STATUS
Dwarf Wedgemussel Alasmidonta heterodon	Endang
No critical habitat has been designated for this species.	-
Species profile: https://ecos.fws.gov/ecp/species/784	

INSECTS

NAME

Monarch Butterfly Danaus plexippus Proposed There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

JS igered

sed igered

S igered

STATUS Threatened

05/22/2025 13:18:29 UTC

Project code: 2025-0086627

IPAC USER CONTACT INFORMATION

Agency:Private EntityName:Elizabeth OlliverAddress:25 Nashua RoadCity:BedfordState:NHZip:03110Emaileolliver@normandeau.comPhone:6036371122

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

Name: Mason Gamble

Email: Mason.W.Gamble@usace.army.mil

Phone: 2133920573



United States Department of the Interior



FISH AND WILDLIFE SERVICE New England Ecological Services Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5094 Phone: (603) 223-2541 Fax: (603) 223-0104

In Reply Refer To: Project code: 2025-0086627 Project Name: Eversource T198 Line Structure Replacement Project

05/22/2025 13:14:45 UTC

Federal Nexus: yes Federal Action Agency (if applicable): Army Corps of Engineers

Subject: Technical assistance for 'Eversource T198 Line Structure Replacement Project'

Dear Elizabeth Olliver:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on May 22, 2025, for 'Eversource T198 Line Structure Replacement Project' (here forward, Project). This project has been assigned Project Code 2025-0086627 and all future correspondence should clearly reference this number. Please carefully review this letter. Your Endangered Species Act (Act) requirements may not be complete.

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey), invalidates this letter. Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid. Note that conservation measures for northern long-eared bat and tricolored bat may differ. If both bat species are present in the action area and the key suggests more conservative measures for one of the species for your project, the Project may need to apply the most conservative measures in order to avoid adverse effects. If unsure which conservation measures should be applied, please contact the appropriate Ecological Services Field Office

Determination for the Northern Long-Eared Bat and Tricolored Bat

Based upon your IPaC submission and a standing analysis completed by the Service, your project has reached the following effect determination(s):

Species	Listing Status	Determination
Northern Long-eared Bat (Myotis septentrionalis)	Endangered	NLAA
Tricolored Bat (Perimyotis subflavus)	Proposed	NLAA
	Endangered	

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a) (4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate.

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Dwarf Wedgemussel Alasmidonta heterodon Endangered
- Monarch Butterfly Danaus plexippus Proposed Threatened

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above. Note that if a new species is listed that may be affected by the identified action before it is complete, additional review is recommended to ensure compliance with the Endangered Species Act.

Next Steps

<u>Consultation with the Service is necessary.</u> The project has a federal nexus (e.g., Federal funds, permit, etc.), but you are not the federal action agency or its designated (in writing) non-federal representative. Therefore, the ESA consultation status is <u>incomplete</u> and no project activities should occur until consultation between the Service and the Federal action agency (or designated non-federal representative), is completed.

As the federal agency or designated non-federal representative deems appropriate, they should submit their determination of effects to the Service by doing the following.

1. Log into IPaC using an agency email account and click on My Projects, click "Search by record locator" to find this Project using **386-162388607**. (Alternatively, the originator of the project in IPaC can add the agency representative to the project by using the Add Member button on the project home page.)

DKey Version Publish Date: 05/19/2025

- 2. Review the answers to the Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key to ensure that they are accurate.
- 3. Click on Review/ Finalize to convert the 'not likely to adversely affect' technical assistance letter to a concurrence letter. Download the concurrence letter for your files if needed.

If no changes occur with the Project or there are no updates on listed species, no further consultation/coordination for this project is required for the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place before project implements any changes which are final or commits additional resources.

If you have any questions regarding this letter or need further assistance, please contact the New England Ecological Services Field Office and reference Project Code 2025-0086627 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Eversource T198 Line Structure Replacement Project

2. Description

The following description was provided for the project 'Eversource T198 Line Structure Replacement Project':

Eversource is proposing to replace select utility structures in the existing and maintained T198 right-of-way (ROW) in Keene, Swanzey, and Troy, NH (the Project). Construction will require temporary impacts to wetlands and smaller streams required to establish temporary timber mat access roads and work pads were necessary to complete construction, permanent impacts to select wetlands for installation of replacement structures, and temporary and permanent impacts to uplands to establish access roads and work pads. While the Project is located in the vicinity of portions of the Ashuelot River and South Branch of the Ashuelot Rivers, no impacts to either of these water courses is proposed and appropriate erosion and sediment control best management practices will be utilized through the Project to ensure protection of water quality. Mowing of vegetation in the ROW and select trimming and/or removal of danger trees along the edge of the ROW will be completed as part of the Project, but no expansion of the existing ROW and/or mowing/removal of vegetation is proposed outside of the ROW. All trimming and/or removal of trees will be completed out of the pup season for both northern long-eared bat and tricolored bat. Start of construction is proposed for Fall 2025 and continuing through 2026.

The approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/@42.84781990000005,-72.22015430671857,14z</u>



DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of "may affect, but not likely to adversely affect" for a least one species covered by this determination key.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Is the action area wholly within Zone 2 of the year-round active area for northern longeared bat and/or tricolored bat?

Automatically answered No

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered No

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

6. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

7. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

No

8. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

- 9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)? *No*
- 10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.
 Automatically answered

No

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

No

12. Does the action area contain (1) talus or (2) anthropogenic or naturally formed rock shelters or crevices in rocky outcrops, rock faces or cliffs?

No

13. Will the action cause effects to a covered bridge?

No

14. Are trees present within 1000 feet of the action area?

Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.</u>

Yes

15. Does the action include the intentional exclusion of bats from a building or structure?

Note: Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

No

- 16. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) known or suspected to contain roosting bats? No
- 17. Will the action cause construction of one or more new roads open to the public?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

18. Will the action include or cause any construction or other activity that is reasonably certain to increase average night-time traffic permanently or temporarily on one or more existing roads? Note: For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

20. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

Note: For information regarding NSF/ANSI 60 please visit <u>https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects</u>

No

7 of 13

- 21. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?
 No
- 22. Will the action include drilling or blasting? *No*
- 23. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)? *No*
- 24. Will the proposed action involve the use of herbicides or other pesticides other than herbicides (e.g., fungicides, insecticides, or rodenticides)?
 - No
- 25. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.</u>

No

26. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.</u>

No

27. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

Yes

28. Will the proposed action occur exclusively in an already established and currently maintained utility right-of-way?

Yes

29. Will the proposed action result in the cutting of entire trees outside of the currently maintained utility right-of-way?

No

30. Will tree trimming, limbing, or cutting be used to expand the footprint of any currently maintained utility rights-of-way?

No

31. Will tree trimming, limbing, or cutting in currently maintained utility rights-of-way occur during the pup season?

Note: Bat activity periods for your state can be found in Appendix L of the Service's Range-wide Indiana Bat and Northern long-eared Bat Survey <u>Guidelines</u>.

No

32. Will the proposed action result in the use of prescribed fire?

Note: If the prescribed fire action includes other activities than application of fire (e.g., tree cutting, fire line preparation) please consider impacts from those activities within the previous representative questions in the key. This set of questions only considers impacts from flame and smoke.

No

33. Does the action area intersect the northern long-eared bat species list area? Automatically answered

Yes

34. [Semantic] Is the action area located within 0.5 miles of radius of an entrance/opening to any known NLEB hibernacula? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered No

35. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered No

36. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats?

Automatically answered No

37. [Semantic] Is the action area located within 150 feet of a documented northern long-eared bat roost site?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency. Have you contacted the appropriate agency to determine if your action is within 150 feet of any documented northern long-eared bat roosts?

Note: A document with links to Natural Heritage Inventory databases and other statespecific sources of information on the locations of northern long-eared bat roosts is available here. Location information for northern long-eared bat roosts is generally kept in state natural heritage inventory databases – the availability of this data varies by state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited.

Automatically answered No

38. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?

If unsure, answer "Yes."

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.</u>

Yes

39. Has a presence/probable absence summer bat survey targeting the northern long-eared bat following the Service's <u>Range-wide Indiana Bat and Northern Long-Eared Bat Survey</u> <u>Guidelines</u> been conducted within the project area?

No

40. Are any of the trees proposed for cutting or other means of knocking down, bringing down, topping, or trimming suitable for northern long-eared bat roosting (i.e., live trees and/or snags ≥3 inches dbh that have exfoliating bark, cracks, crevices, and/or cavities)?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <u>https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines</u>.

Yes

41. Does the action area intersect the tricolored bat species list area?

Automatically answered

Yes

42. [Semantic] Is the action area located within 0.5 miles of radius of an entrance/opening to any known tricolored bat hibernacula? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered No

43. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered No

44. Has a presence/probable absence bat survey targeting the <u>tricolored bat and following the</u> <u>Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines</u> been conducted within the project area?

No

45. Is suitable summer habitat for the tricolored bat present within 1000 feet of project activities?

(If unsure, answer ""Yes."")

Note: If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (Tillandsia usneoides), clusters of dead pine needles of large live pines) answer ""Yes."" For a complete definition of suitable summer habitat for the tricolored bat, please see Appendix A in the <u>Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines</u>. *Yes*

46. Do any of the trees proposed for cutting or other means of knocking down, bringing down, topping, or trimming provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (*Tillandsia usneoides*), clusters of dead pine needles of large live pine trees)?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

Yes

47. Will any tree cutting/trimming or other knocking or bringing down of trees be conducted during the Pup Season for tricolored bat?

Note: Bat activity periods for your state can be found in Appendix L of the <u>Service's Range-wide Indiana Bat and</u> <u>Northern long-eared Bat Survey Guidelines</u>.

No

48. Do you have any documents that you want to include with this submission?

No

PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

IPAC USER CONTACT INFORMATION

Agency: Private Entity Name: Elizabeth Olliver Address: 25 Nashua Road City: Bedford State: NH Zip: 03110 Email eolliver@normandeau.com Phone: 6036371122

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

Mason Gamble Name:

- Mason.W.Gamble@usace.army.mil Email:
- Phone: 2133920573



United States Department of the Interior

FISH AND WILDLIFE SERVICE New England Ecological Services Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5094 Phone: (603) 223-2541 Fax: (603) 223-0104



In Reply Refer To: Project code: 2025-0086627 Project Name: Eversource T198 Line Structure Replacement Project

04/22/2025 18:27:14 UTC

Federal Nexus: yes Federal Action Agency (if applicable): Army Corps of Engineers

Subject: Technical assistance for 'Eversource T198 Line Structure Replacement Project'

Dear Elizabeth Olliver:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on April 22, 2025, for "Eversource T198 Line Structure Replacement Project" (here forward, Project). This project has been assigned Project Code 2025-0086627 and all future correspondence should clearly reference this number.

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northeast Determination Key (Dkey), invalidates this letter. *Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.*

To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative effect(s)), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17). Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no further consultation with, or concurrence from, the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical

habitat, formal consultation is required (except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect (NLAA)" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13]).

The IPaC results indicated the following species is (are) potentially present in your project area and, based on your responses to the Service's Northeast DKey, you determined the proposed Project will have the following effect determinations:

Species	Listing Status	Determination
Dwarf Wedgemussel (Alasmidonta heterodon)	Endangered	NLAA

Conclusion

<u>Coordination with the Service is not complete</u>. The project has a federal nexus (e.g., funds, permits); however, you are not the federal action agency. Therefore, the ESA consultation status is incomplete and no project activities on any portion of the parcel should occur until consultation between the Service and the Federal action agency (or designated non-federal representative), is completed. Section 7 consultation is not complete until the federal action agency submits a determination of effects, and the Service concurs with the federal action agency's determination. Please provide this technical assistance letter to the lead federal action agency or its designated non-federal representative with a request for its review.

As the federal agency deems appropriate, they should submit their determination of effects to the appropriate Ecological Services Field Office. The lead federal action agency or designated non-federal representative can log into IPaC system using their agency email account and click "Search by record locator" to find this Project using 386-161156750.

In addition to the species listed above, the following species and/or critical habitats may also occur in your project area and are not covered by this conclusion:

- Monarch Butterfly Danaus plexippus Proposed Threatened
- Northern Long-eared Bat *Myotis septentrionalis* Endangered
- Tricolored Bat Perimyotis subflavus Proposed Endangered

To complete consultation for species that have reached a "May Affect" determination and/or species may occur in your project area and are not covered by this conclusion, please visit the "New England Field Office Endangered Species Project Review and Consultation" website for step-by-step instructions on how to consider effects on these listed species and/or critical habitats, avoid and minimize potential adverse effects, and prepare and submit a project review package if necessary: https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review

If no changes occur with the Project or there are no updates on listed species, no further consultation/coordination for this project is required for the species identified above. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope,

timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project implements any changes which are final or commits additional resources.

Please Note: If the Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) by the prospective permittee may be required. Please contact the Migratory Birds Permit Office, (413) 253-8643, or PermitsR5MB@fws.gov, with any questions regarding potential impacts to Eagles.

If you have any questions regarding this letter or need further assistance, please contact the New England Ecological Services Field Office and reference the Project Code associated with this Project.

04/22/2025 18:27:14 UTC

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Eversource T198 Line Structure Replacement Project

2. Description

The following description was provided for the project 'Eversource T198 Line Structure Replacement Project':

Eversource is proposing to replace select utility structures in the existing and maintained T198 right-of-way (ROW) in Keene, Swanzey, and Troy, NH (the Project). Construction will require temporary impacts to wetlands and smaller streams required to establish temporary timber mat access roads and work pads were necessary to complete construction, as well as temporary and permanent impacts to uplands to establish access roads and work pads. While the Project is located in the vicinity of portions of the Ashuelot River and South Branch of the Ashuelot Rivers, no impacts to either of these water courses is proposed and appropriate erosion and sediment control best management practices will be utilized through the Project to ensure protection of water quality. Start of construction is proposed for as early as fall 2025 and continuing into 2026.

The approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/@42.84781990000005,-72.22015430671857,14z</u>



QUALIFICATION INTERVIEW

- 1. As a representative of this project, do you agree that all items submitted represent the complete scope of the project details and you will answer questions truthfully? *Yes*
- 2. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed species?

Note: This question could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered, or proposed species.

No

3. Is the action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

- 4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) the lead agency for this project? *No*
- 5. Are you including in this analysis all impacts to federally listed species that may result from the entirety of the project (not just the activities under federal jurisdiction)?

Note: If there are project activities that will impact listed species that are considered to be outside of the jurisdiction of the federal action agency submitting this key, contact your local Ecological Services Field Office to determine whether it is appropriate to use this key. If your Ecological Services Field Office agrees that impacts to listed species that are outside the federal action agency's jurisdiction will be addressed through a separate process, you can answer yes to this question and continue through the key.

Yes

6. Are you the lead federal action agency or designated non-federal representative requesting concurrence on behalf of the lead Federal Action Agency?

No

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)?

No

- 8. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)? *No*
- 9. Is the lead federal action agency the Natural Resources Conservation Service? *No*
- 10. Will the proposed project involve the use of herbicide where listed species are present? *No*

- 11. Are there any caves or anthropogenic features suitable for hibernating or roosting bats within the area expected to be impacted by the project?
 No
- 12. Does any component of the project associated with this action include activities or structures that may pose a collision risk to **birds** (e.g., plane-based surveys, land-based or offshore wind turbines, communication towers, high voltage transmission lines, any type of towers with or without guy wires)?

Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.). *Yes*

13. Does any component of the project associated with this action include activities or structures that may pose a collision risk to **bats** (e.g., plane-based surveys, land-based or offshore wind turbines)?

Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.). *Yes*

14. Will the proposed project result in permanent changes to water quantity in a stream or temporary changes that would be sufficient to result in impacts to listed species?

For example, will the proposed project include any activities that would alter stream flow, such as water withdrawal, hydropower energy production, impoundments, intake structures, diversion structures, and/or turbines? Projects that include temporary and limited water reductions that will not displace listed species or appreciably change water availability for listed species (e.g. listed species will experience no changes to feeding, breeding or sheltering) can answer "No". Note: This question refers only to the amount of water present in a stream, other water quality factors, including sedimentation and turbidity, will be addressed in following questions.

No

15. Will the proposed project affect wetlands where listed species are present?

This includes, for example, project activities within wetlands, project activities within 300 feet of wetlands that may have impacts on wetlands, water withdrawals and/or discharge of contaminants (even with a NPDES).

Yes

16. Will the proposed project activities (including upland project activities) occur within 0.125 miles of the water's edge of a stream or tributary of a stream where listed species may be present?

Yes

- 17. Will the proposed project directly affect a streambed (below ordinary high water mark (OHWM)) of the stream or tributary where listed species may be present?*No*
- 18. Will the proposed project bore underneath (directional bore or horizontal directional drill) a stream where listed species may be present?

No

19. Will the proposed project involve a new point source discharge into a stream or change an existing point source discharge (e.g., outfalls; leachate ponds) where listed species may be present?

No

20. Will the proposed project involve the removal of excess sediment or debris, dredging or instream gravel mining where listed species may be present?

No

21. Will the proposed project involve the creation of a new water-borne contaminant source where listed species may be present?

Note New water-borne contaminant sources occur through improper storage, usage, or creation of chemicals. For example: leachate ponds and pits containing chemicals that are not NSF/ANSI 60 compliant have contaminated waterways. Sedimentation will be addressed in a separate question.

No

22. Will the proposed project involve perennial stream loss, in a stream of tributary of a stream where listed species may be present, that would require an individual permit under 404 of the Clean Water Act?

No

- 23. Will the proposed project involve blasting where listed species may be present? *No*
- 24. Will the proposed project include activities that could negatively affect fish movement temporarily or permanently (including fish stocking, harvesting, or creation of barriers to fish passage).

No

25. Will the proposed project involve earth moving that could cause erosion and sedimentation, and/or contamination along a stream or tributary of a stream where listed species may be present?

Note: Answer "Yes" to this question if erosion and sediment control measures will be used to protect the stream. *Yes*

26. Will the proposed project impact streams or tributaries of streams where listed species may be present through activities such as, but not limited to, valley fills, large-scale vegetation removal, and/or change in site topography?

No

27. Will the proposed project involve vegetation removal within 200 feet of a perennial stream bank where aquatic listed species may be present?

No

28. Will erosion and sedimentation control Best Management Practices (BMPs) associated with applicable state and/or Federal permits, be applied to the project? If BMPs have been provided by and/or coordinated with and approved by the appropriate Ecological Services Field Office, answer "Yes" to this question.

Yes

29. Is the project being funded, lead, or managed in whole or in part by U.S Fish and Wildlife Restoration and Recovery Program (e.g., Partners, Coastal, Fisheries, Wildlife and Sport Fish Restoration, Refuges)?

No

- 30. [Semantic] Does the project intersect the Virginia big-eared bat critical habitat? Automatically answered No
- 31. [Semantic] Does the project intersect the Indiana bat critical habitat? **Automatically answered** *No*
- 32. Are federally listed freshwater mussels known to be present in the action area? If unsure, contact the appropriate Ecological Services Field Office for additional information or answer "NO" and continue through the key.

No

33. Did a qualified surveyor conduct a freshwater mussel survey within the action area with the appropriate level of search effort according to local survey guidance?

Note: Answer this question "Yes" if the project is located in WV and the action area is located outside the stream reaches where mussel surveys are required following the West Virginia Mussel Survey Protocol <u>West Virginia</u> <u>Mussel Survey Protocol</u>.

No

34. [Hidden Semantic] Does the project area intersect the AOI of Dwarf Wedgemussel? Automatically answered Vac

Yes

- 35. [Semantic] Does the project intersect the candy darter critical habitat? Automatically answered No
- 36. [Semantic] Does the project intersect the diamond darter critical habitat? Automatically answered

No

- 37. [Semantic] Does the project intersect the Big Sandy crayfish critical habitat?
 Automatically answered
 No
- 38. [Hidden Semantic] Does the project intersect the Guyandotte River crayfish critical habitat?

Automatically answered No

39. Do you have any other documents that you want to include with this submission? *No*

PROJECT QUESTIONNAIRE

- Approximately how many acres of trees would the proposed project remove?
- 2. Approximately how many total acres of disturbance are within the disturbance/ construction limits of the proposed project?
 - 20
- 3. Briefly describe the habitat within the construction/disturbance limits of the project site.

The Project area consists of the existing T198 transmission line right-of-way (ROW), which is periodically mowed to keep vegetation from impacting overhead transmission lines. Upland portions of the ROW are comprised of shrubby or herbaceous meadow. Wetland portions of the ROW are a primarily a mixture of scrub-shrub to wet meadow wetlands. The Ashuelot River and South Branch of the Ashuelot River intersect or occur in close proximity to several portions of the ROW containing the Project, however neither of these rivers will be impacted/crossed as part of the Project. Open water areas associated with abandoned oxbows and beaver impoundments on smaller perennial streams in the ROW are present in select locations within the Project footprint.

IPAC USER CONTACT INFORMATION

Agency: Private Entity Elizabeth Olliver Name: Address: 25 Nashua Road Bedford City: State: NH Zip: 03110 Email eolliver@normandeau.com Phone: 6036371122

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Army Corps of Engineers

Attachment M: A statement of whether the applicant has received comments from the local Board of Selectmen, local Conservation Commission, Local River Advisory Council, or Federal Agencies and, if so, how the applicant has addressed the comments This permit application will be provided to the City of Keene and the Towns of Swanzey and Troy, as required and signatures are included. Eversource and Normandeau are anticipating the need for two local approvals in Keene and one in Swanzey for proposed impacts within protected areas associated with their individual zoning and other related regulations. Eversource and Normandeau are anticipating attending Conservation Commission and other meetings as required by the local permitting process. Comments received as part of the NHDES permit process and local permitting process will be addressed at that time.

Eversource and Normandeau will be filing a separate Pre-Construction Notification (PCN) permit application under separate cover to the USACE pursuant to Section 404 of the Clean Waters Act. Eversource and Normandeau will coordinate with the USACE in parallel with the NHDES SDF permit application process. In addition to the USACE, Eversource and Normandeau will be filing the necessary materials for the Construction General Permit with the US Environmental Protection Agency (US EPA) and drafting a Stormwater Pollutions Prevention Plans (SWPPP). Lastly, Eversource and Normandeau will be coordinating with the USACE, serving as lead federal agency, and the US Fish and Wildlife Service (USFWS) regarding the presence of federally listed species near the project area(s). We are anticipating a final determination of Not Likely to Adversely Affect (NLAA) or No Affect (NA).

Eversource and Normandeau will also provide a copy of this permit application to the Ashuelot River Local River Advisory Councils (LAC) as required and will be attending a meeting, if required, in the near future. Eversource and Normandeau will address any LAC comments when received and will coordinate as needed. No direct impacts to the Ashuelot River are proposed. Mail - Elizabeth Olliver - Outlook

🛓 Outlook

Re: Question about submittal of Standard Dredge and Fill Wetlands Permit to Ashuelot LAC

From Elizabeth Olliver <eolliver@normandeau.com>

Date Tue 5/27/2025 4:36 PM

To Barbara Skuly <bskuly@ne.rr.com>

Cc Jeremy Fennell <jeremy.fennell@eversource.com>; William McCloy <wmccloy@normandeau.com>

Barbara,

Below is a OneDrive link to the digital copy of the full Standard Dredge and Fill Wetlands Permit Application for the Eversource T198 Line Project. Please let me know if you have any trouble accessing/download the application via this link.

Eversource T198 Line Project - Ashuelot River LAC

Representatives of the project will attend the June 17th meeting in Surry. Please schedule for the first item on the agenda if that is still possible. Our Eversource project construction plan sheets are typically printed on 11" x 17" sheets. Please let me know how many copies of the plans you would like us to provide at the meeting.

Please let me know if you require any additional information in the interim.

Thank you,

Elizabeth A. Olliver, PhD, NHCWS Normandeau Associates, Inc. 603-637-1122 (direct) 603-714-1231 (cell)

From: Barbara Skuly <bskuly@ne.rr.com> Sent: Monday, May 26, 2025 8:30 PM To: Elizabeth Olliver <eolliver@normandeau.com> Subject: Re: Question about submittal of Standard Dredge and Fill Wetlands Permit to Ashuelot LAC

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders. Elizabeth,

Thank you for reaching out. A digital copy is fine, but it is better if you can send a link rather than the file due to the size. Hard copies are easier for meetings, so perhaps you can bring the pertinent maps showing the impacted areas to the meeting for review. And yes, having you present at our June 17 meeting would be good. We currently meet upstairs at the Surry Fire Station on Rte 12A in Surry. We begin at 6pm and can schedule you first on the agenda or a bit later if that is preferred.

Thanks again,

Barbara

On 5/23/2025 4:50 PM, Elizabeth Olliver wrote:

Ms. Skuly,

Normandeau is working on behalf of Eversource Energy on the submittal of Standard Dredge and Fill Wetlands Permit (and other related permits) for the replacement of transmission line structures within the existing T198 right-of-way in Keene, Swanzey, and Troy, NH. This project is similar to other recent Eversource projects on the A152 and T198 lines in terms of methods of structure replacement and will require extensive matting in wetlands and floodplain areas associated with the Ashuelot River. Per regulatory requirements, we will plan to send the Ashuelot LAC a copy of the wetlands permit application for your review and comment. Please note, the application will be provided to you on or very near the same date the application is submitted to NHDES for their review. Below are a few questions I have regarding the Ashuelot River LAC review process:

- 1. Would it be acceptable to send you a digital PDF copy of the permit application instead of a printed hardcopy? It would save on paper, as the application is around 330 pages (digitally).
- 2. Does the Ashuelot River LAC want us to present at your next meeting (June 17th) or is your preference for us to send you the application and we can coordinate any real-time discussion needed once you've had an opportunity to review and comment?

Thank you,

Elizabeth A. Olliver, PhD, NHCWS Senior Wetland Scientist Normandeau Associates, Inc. 25 Nashua Road, Bedford, NH 03110 603-637-1122 (direct) 603-714-1231 (cell) eolliver@normandeau.com NORMANDEAU ASSOCIATES ENVIRONMENTAL CONSULTANTS

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Eversource T198 Line Project

Standard Dredge and Fill Wetlands Permit Application

Attachment N: Compensatory Mitigation Plan

Compensatory mitigation is expected to be required due to proposed permanent impacts to Priority Resource Areas (PRA) including Tier 3 Floodplain Wetlands in order to install new transmission line structure poles. Eversource will address this compensatory mitigation requirement through payment to the ARM Fund, consistent with recent permitting efforts for similar projects in New Hampshire. See copies of the ARM Fund payment calculation sheet for impacts in each municipality at the end of this attachment.

 Table L-1. Summary of proposed ARM fund payment as compensatory mitigation for permanent impacts to priority resource area wetlands to complete the T198 Transmission Line Structure Replacement Project.

Town	Permanent Impacts for Pole Installation (SF)	Land Value	ARM Payment					
Keene	140	\$23,929.01	\$853.02					
Swanzey	720	\$11,196.42	\$4,008.12					
Troy	20	\$2,937.89	\$104.51					
Total Anti	Total Anticipated Payment							

Eversource is proposing to track temporary matting, from installation to removal, for the duration of construction. As applicable, a report will be submitted to USACE and DES on a yearly basis for USACE to make a determination on if the temporary matting left in place more than one growing season requires mitigation that will ultimately be paid into the ARM Fund.

Additionally, if wetland mats are left in for >1 growing season, then the following monitoring steps will occur:

Eversource will submit a wetland resource specific (for example: PSS, PEM w/ histosols), etc.) restoration plan 60 days prior to the expiration of the growing season and with a specified duration of monitoring to ensure compliance with successful restoration standards, unless a monitoring plan adjustment is approved by NHDES pursuant to Env-Wt 807.05.

B) Plans and planting schemes shall be designed to ensure restoration of all wetlands and surface waters to pre-impact conditions as specified in Env-Wt 307.12(i). This includes matching the original wetland's hydrologic regime, vegetation species, scope of aerial coverage, wetland function, habitat and soils information.

C) Monitoring reports shall be submitted to NHDES by a Certified Wetland Scientist (CWS) after each of the subsequent growing seasons of the monitoring period:

1) Soil samples collected from previously matted wetland areas shall demonstrate that original hydric soil profiles remain intact in the wetland and that organic soils have not been compacted, broken down, removed, or otherwise disturbed.

2) Hydrophytic vegetation will also be evaluated using the methods identified in the Regional Supplement to determine if the Rapid Test, Dominance Test, or Prevalence Index are met and areas contain less than 5% aerial coverage of invasive and other unacceptable plant species (Corps' New England District Compensatory Mitigation Standard Operating Procedures, Appendix K; Corps Mitigation SOP). This shall include plant species present and documentation of at least 75% cover.

3) Hydrologic regime with documentation of increased or decreased hydrology, flow diversion and ponding in new locations.

4) Documentation of sustained functions and values and restored wildlife habitat

For all other temporary wetland matting <u>removed within one growing season</u>, the following restoration steps will occur:

- a. Temporary impacts described above will require general restoration techniques as described below and 2 years of post-restoration monitoring.
- b. In accordance with Env-Wt 307.11 (h)(2), all mats shall be removed immediately upon work completion in the wetland impact area.
- c. In accordance with Env-Wt 307.11(j), all temporary wetland impact areas shall be restored to pre-impact conditions and elevation as specified in Env-Wt 307.12(i).
- d. Following the removal construction mats on the job site, if rutting, compaction, or other disturbances to the wetland surfaces are observed during mat removal, stabilization and restoration techniques will be implemented.
- e. Re-grade any rutted or compacted wetland surface, either with hand tools or lightly with mechanized equipment, to match the surrounding undisturbed wetland areas and closely match the original condition and elevation of the wetland.
- f. If matting or regrading after mat removal creates significant disturbances to the wetland surface, a native seed mix approved for wetland conditions will be spread on the disturbed soils, Wetmix (New England Wetland Plants, Inc.), and weed-free straw mulch spread to stabilize the area.
- g. The contractors performing the mat removal will have weed-free straw bales immediately available during the mat removal process so the mulch can be spread as exposed soils are created and/or encountered.
- a. In accordance with Env-Wt 307.12(f), if any temporary impact area that is stabilized with seeding or plantings does not have at least 75% successful establishment of wetlands vegetation after 2 growing seasons, the area shall be replanted or reseeded, as applicable.

Eversource T198 Line Project

h. In accordance with Env-Wt 307.12(g), a temporary impact area restored by seeding or plantings shall not be deemed successful if the area is invaded by nuisance species such as common reed or purple loosestrife during the first full growing season following the completion of construction; and a remediation plan shall be submitted to the department that proposes measures to be taken to eradicate nuisance species during this same period.

A report summarizing the observations made during the inspections, including photographs, will be provided to NHDES by December 15th of each year for which monitoring is required.

NHDES AQUATIC RESOURCE MITIGATION FL WETLAND PAYMENT CALCULATION ***INSERT AMOUNTS IN YELLOW CELLS**

KEENE ARM FUND CALCULATIONS

1	Convert square feet of impact to acres:						
INSERT SQ FT OF IMPACT	Square feet of impact =	140.00					
		43560.00					
	Acres of impact =	0.0032					
2	Determine acreage of wetland co	1					
	Forested Wetlands:	0.0048					
	Tidal Wetlands:	0.0096					
	All Other Jurisdicational Areas	0.0048					
	Wetland construction cost:						
	Forested Wetlands:	\$595.49					
	Tidal Wetlands:	\$1,190.97					
		\$1,190.97					
	All Other Jurisdicational Areas	\$595.49					
4	Land acquisition cost (See land va	alue table):					
INSERT LAND VALUE	Town land value:	23929.01					
FROM TABLE WHICH	Forested Wetlands:	\$115.36					
APPEARS TO THE LEFT.	Tidal Wetlands:	\$230.72					
(Insert the amount do not	All Other Jurisdicational Areas	\$115.36					
copy and paste.)							
5	Construction + land costs:						
	Forested Wetlands:	\$710.85					
	Tidal Wetlands:	\$1,421.69					
	All Other Jurisdicational Areas	\$710.85					
6	NHDES Administrative cost:						
	Forested Wetlands:	\$142.17					
	Tidal Wetlands:	\$284.34					
	All Other Jurisdicational Areas	\$142.17					
*****	TOTAL ARM PAYMENT********	**					
	Forested Wetlands:	\$853.02					
	Tidal Wetlands:	\$1,706.03					
	All Other Jurisdicational Areas	\$853.02					

Disclaimer: The ARM Fund In-Lieu Fee (ILF) Payment Calculator is provided as a tool to estima to offset project specific impacts triggering mitigation based on state law. NHDES calculates i impact amounts in combination with construction costs and interest rates. When a NH wetlan instructions for satisfying state mitigation requirements.

STREA	TIC RESOURCE MITIGATION FU M PAYMENT CALCULATION AMOUNTS IN YELLOW CELLS***	
	Right Bank	
PERENNIAL STREAMS: INSERT LINEAR FEET OF IMPACT ON	Left Bank	
BOTH BANKS AND CHANNEL	Channel	
INTERMITTENT STREAMS: INSERT LINEAR FEET OF IMPACT ALONG THREAD OF CHANNEL	Channel	
	TOTAL IMPACT	0.00
	Stream Impact Cost:	\$0.00
	NHDES Administrative cost:	\$0.00
*****	TOTAL ARM FUND STREAM PAYME	
*****	TOTAL ARM FUND STREAM PAYME	NT******* \$0

SWANZEY ARM FUND CALCULATIONS

NHDES AQUATIC RESOURCE MITIGATION FU WETLAND PAYMENT CALCULATION ***INSERT AMOUNTS IN YELLOW CELLS*1

	Convert square feet of impact to						
INSERT SQ FT OF IMPACT	Square feet of impact =	720.00					
	A superation and	43560.00					
	Acres of impact =	0.0165					
2	Determine acreage of wetland co	nstruction:					
	Forested Wetlands:	0.0248					
	Tidal Wetlands:	0.0496					
	All Other Jurisdicational Areas	0.0248					
3	Wetland construction cost:						
	Forested Wetlands:	\$3,062.50					
	Tidal Wetlands:	\$6,125.01					
	All Other Jurisdicational Areas	\$3,062.50					
4	Land acquisition cost (See land va						
INSERT LAND VALUE	Town land value:	11196.42					
FROM TABLE WHICH	Forested Wetlands:	\$277.60					
APPEARS TO THE LEFT.	Tidal Wetlands:	\$555.19					
(Insert the amount do not	All Other Jurisdicational Areas	\$277.60					
copy and paste.)							
5	Construction + land costs:						
	Forested Wetlands:	\$3,340.10					
	Tidal Wetlands:	\$6,680.20					
	All Other Jurisdicational Areas	\$3,340.10					
6	NHDES Administrative cost:						
	Forested Wetlands:	\$668.02					
	Tidal Wetlands:	\$1,336.04					
	All Other Jurisdicational Areas	\$668.02					
******	TOTAL ARM PAYMENT********	* *					
	Forested Wetlands:	\$4,008.12					
	Tidal Wetlands:	\$8,016.24					
	All Other Jurisdicational Areas	\$4,008.12					

Disclaimer: The ARM Fund In-Lieu Fee (ILF) Payment Calculator is provided as a tool to estima to offset project specific impacts triggering mitigation based on state law. NHDES calculates i impact amounts in combination with construction costs and interest rates. When a NH wetlar, instructions for satisfying state mitigation requirements.

STREAT	TIC RESOURCE MITIGATION FU M PAYMENT CALCULATION AMOUNTS IN YELLOW CELLS**	
	Right Bank	
PERENNIAL STREAMS: INSERT LINEAR FEET OF IMPACT ON	Left Bank	
BOTH BANKS AND CHANNEL	Channel	
INTERMITTENT STREAMS: INSERT LINEAR FEET OF IMPACT ALONG THREAD OF CHANNEL	Channel	
	TOTAL IMPACT	0.00
	Stream Impact Cost:	\$0.00
· · · · · · · · · · · · · · · · · · ·	NHDES Administrative cost:	\$0.00
******	TOTAL ARM FUND STREAM PAYME	ENT******* \$0.00

NHDES AQUATIC RESOURCE MITIGATION FL

TROY ARM FUND CALCULATIONS

WETLAND PAYMENT CALCULATION ***INSERT AMOUNTS IN YELLOW CELLS**

1	Convert square feet of impact to	acres:	
INSERT SQ FT OF IMPACT	Square feet of impact =	20.00	
		43560.00	
	Acres of impact =	0.0005	
2	Determine acreage of wetland co	nstruction:	
	Forested Wetlands:	0.0007	
	Tidal Wetlands:	0.0014	
	All Other Jurisdicational Areas	0.0007	
3	Wetland construction cost:		
	Forested Wetlands:	\$85.07	
	Tidal Wetlands:	\$170.14	
	All Other Jurisdicational Areas	\$85.07	
		•	
	Land acquisition cost (See land va	1	
INSERT LAND VALUE	Town land value:	2937.89	
FROM TABLE WHICH	Forested Wetlands:	\$2.02	
APPEARS TO THE LEFT.	Tidal Wetlands:	\$4.05	
(Insert the amount do not	All Other Jurisdicational Areas	\$2.02	
copy and paste.)			
5	Construction + land costs:	· · · · ·	
	Forested Wetlands:	\$87.09	
	Tidal Wetlands:	\$174.19	
	All Other Jurisdicational Areas	\$87.09	
6	NHDES Administrative cost:		
	Forested Wetlands:	\$17.42	
	Tidal Wetlands:	\$34.84	
	All Other Jurisdicational Areas	\$17.42	
	An other Jurisdicational Areas	Ş <u>17.42</u>	
*******	TOTAL ARM PAYMENT********	**	
	Forested Wetlands:	\$104.51	
	Tidal Wetlands:	\$209.02	
	All Other Jurisdicational Areas	\$104.51	

Disclaimer: The ARM Fund In-Lieu Fee (ILF) Payment Calculator is provided as a tool to estima to offset project specific impacts triggering mitigation based on state law. NHDES calculates a impact amounts in combination with construction costs and interest rates. When a NH wetlan instructions for satisfying state mitigation requirements.

NHDES AQUATIC RESOURCE MITIGATION FUND STREAM PAYMENT CALCULATION *****INSERT AMOUNTS IN YELLOW CELLS*** Right Bank** PERENNIAL STREAMS: INSERT Left Bank LINEAR FEET OF IMPACT ON BOTH BANKS AND CHANNEL Channel **INTERMITTENT STREAMS: INSERT LINEAR FEET OF** Channel **IMPACT ALONG THREAD OF CHANNEL** TOTAL IMPACT 0.00 Stream Impact Cost: \$0.00 **NHDES Administrative cost:** \$0.00 ******** TOTAL ARM FUND STREAM PAYMENT******* \$0.00

Attachment O: Abutter Notifications

Eversource T198 Line Project

According to Env-Wt 306.06(c), abutter notification shall not be required for "Utility maintenance or repair projects within a utility right-of-way." Accordingly, no abutter notifications were issued for this submittal. However, Attachment I, provides tax map and lot information for the parcels that intersect the T198 Transmission Line ROW and Attachment P includes existing easement information for the project area.

100

Attachment P: Easements and Other Landowner Agreements

			1		1	1	EASM. CO	WEIC		DOCUMENT INFORMAT	103
						-	EASM. CC	MFIG.		DOCUMENT INFORMAT	ION
DOCUMENT NO.	GRANTOR	GRANTEE	FOWN	COUNTY	EASEMENTIFEE	HLQIM	METES & BOUNDS	OTHER	INSTRUMENT DATE	VOLUME	PAGE
	Padalaho I. & Dalama P										
DA-624 (Parcel 1)	Letourneau	PSNH	Troy NH	Cheshire	FEE		x		1/31/1962	692	327
DA-624 [Parcel 2]	Rodolphe J. & Dolores S. Letourneau	PSNH	Troy NH	Cheshire	FEE		x		1/31/1962	692	327
AA-10236 (Parcel 1)	John E. & Lillian G. Enright	PSNH	Troy NH	Cheshire	EASEMENT	150		х	1/31/1962	692	346
EAA-10264		PSNH	Troy NH	Cheshire	EASEMENT	150		х	5/3/1962	695	376
AA-10236 (Parcel 2)	John E. & Lillian G. Enright	PSNH	Troy NH	Cheshire	EASEMENT	150		х	1/31/1962	692	346
EAA-10231	0	PSNH	Troy NH	Cheshire	EASEMENT	1	X		2/5/1962	693	541
EAA-10224	Induig & Alexanstra	PSNH	Troy NH	Cheshire	EASEMENT	150		x	2/15/1962	692	333
EAA-10217	Frederick B. & Pia	PSNH	Troy NH	Cheshire	EASEMENT	150		x	1/23/1962	690	500
E44 10210	Lawrence	PSNH	Troy NH	Cheshire	EASEMENT	150		x	1/23/1962	690	503
EAA-10219 EAA-10241		PSNH	Troy NH	Cheshire	EASEMENT	150		X	3/8/1962	692	197
GFA-45 (Parcel 1)	Reginald L. Luopa, Jean	PSNH	Troy NH / Marlboro NH	Cheshire	EASEMENT	150			4/16/1962	695	355
GFA-45 (Parcel 2)	Reginald L. Luopa, Jean M. Luopa, Gloria L. Smith, Levy Luopa, Fanny Luopa, Carl Valonen	PSNH	Troy NH / Marlboro NH	Cheshire	EASEMENT	150			4/16/1962	695	355
EAA-10215	Roy D. & Viola Raitto Smith	PSNH	Mariboro NH	Cheshire	EASEMENT	150		x	1/23/1962	692	330
EAA-10218	F. T. Cummings, Inc.	PSNH	Marlboro NH	Cheshire	EASEMENT	150		X	1/24/1962	690	501
EAA-10239		PSNH	Marlboro NH	Cheshire	EASEMENT	150		х	1/29/1962	692	349
EAA-10238	Roger Goodnow	PSNH	Marlboro NH	Cheshire	EASEMENT	150		X	2/7/1962	692	348
EAA-10240	Evelyn B. Collins	PSNH	Troy NH	Cheshire	EASEMENT	150		x	1/29/1962	692	351
GCA-288 (1A)	Town of Troy, Swanzey & Keene.	PSNH	Troy NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
EAA-10272	Mona Hendrickson	PSNH	Troy NH	Cheshire	EASEMENT	150	1	X	6/11/1962	698	126

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T198 Line Essemuni Rights

						and the second second	EASM. C	ONFIG.		DOCUMENT INFORMAT	CION
DOCUMENT NO. GRANTOR	GRANTOR	GRANTEE	NMO1	COUNTY	LASEMENT/FEE	HLGIM	METES & BOUNDS	отнек	INSTRUMENT DATE	ΟΓΓΙΜΕ	PAGE
	State of New Hampshire										
FDA-517	(DOT)	PSNH	Troy NH	Cheshire	LICENSE				9/19/2008	N/A	N/A
<u>1)</u>	Stephen Roger Townsend	PSNH	Troy NH	Cheshire	EASEMENT	150		x	2/1/1962	692	339
4-10230 (Parcel 2)	Stephen Roger Townsend	PSNH	Troy NH	Cheshire	EASEMENT	150		х	2/1/1962	692	339
EAA-10222	John A. MacDonald	PSNH	Troy NH	Cheshire	EASEMENT	150		Х	2/23/1962	693	538
A-10216 (Parcel 1)	F. T. Cummings, Inc.	PSNH	Troy NH	Cheshire	EASEMENT	150		х	1/24/1962	690	499
EAA-10227	Edward J. & Helen V. Breen	PSNH	Troy NH	Cheshire	EASEMENT	150		x	2/14/1962	692	334
A-10216 (Parcel 2)	F. T. Cummings, Inc.	PSNH	Troy NH	Cheshire	EASEMENT	150		х	1/24/1962	690	499
EAA-10220	Walter & Felix Tommila (Doing Business as Tommila Brothers)	PSNH	Troy & Swanzey NH	Cheshire	EASEMENT	150		x	1/24/1962	690	504
A-10228 (Parcel	C. L. Lane Company	PSNH	Swanzey NH	Cheshire	EASEMENT	150		х	2/6/1962	692	336
1)	John A. Verburg & John G. Verburg	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	2/1/1962	692	347
<u></u>	Talua & Mashing & Tala	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	2/1/1962	692	347
A-10228 (Parcel 2)		PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	2/6/1962	692	336
EAA-10234	Kenneth P. Lane, Zora A. Lane & William Lane	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	2/9/1962	692	343
A-10233 (Parcel		PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	2/6/1962	692	341
<u>1)</u> 3CA-288 (1B)	Town of Troy, Swanzey &	PSNH	Swanzey NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
EAA-10235	Eilliam K. & Betsey D.	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	2/9/1962	692	344
EAA-10195	Lane	PSNH	Swanzey NH		EASEMENT	150		x	11/22/1961	689	201

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T198 Line Easement Rights

							EASM. CO	ONFIG.		DOCUMENT INFORMA	LION
DOCUMENT NO.	GRANTOR	GRANTEE	IOWN	COUNTY	CASEMENTIFEE	WIDTH	METES & BOUNDS	OTHER	NSTRUMENT DATE	OLUME	AGE
A-10233 (Parcel 2)	Raymond L. Lane	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	2/6/1962	692	341
		PSNH	- A-	Cheshire	EASEMENT	150		X	2/6/1962	692	337
EAA-10232		PSNH	Swanzey NH	Cheshire	EASEMENT	150		X	2/6/1962	692	340
EAA-10271	Grace L. Pitcher, formerly Grace L. Whipple	PSNH	Swanzey NH	Cheshire	EASEMENT	270		х	6/9/1962	698	463
AA-10289 (Parcel	Arthur Whitcomb, Inc.	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	7/30/1962	698	363
AA-10289 (Parcel 2)	Arthur Whitcomb, Inc.	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	7/30/1962	698	363
GCA-288 (1C)	Town of Troy, Swanzey & Keenc.	PSNH	Swanzey NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
EAA-10223	Karl H. & Virginia I. Boes	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	2/19/1962	692	331
EAA-10262	Monadnock Regional School District	PSNH	Swanzey NH	Cheshire	EASEMENT	108		х	5/1/1962	698	240
GCA-288 (1D)	Town of Troy, Swanzey & Keene.	PSNH	Swanzey NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
DDA-621	Gilbert H. & Mary E. Wyman	PSNH	Swanzey NH	Cheshire	FEE				12/28/1961	690	115
EAA-10225	Lloyd A. & Stella M. Allan	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	2/15/1962	693	539
EAA-10288	Keene Sand And Gravel, Inc.	PSNH	Swanzey NH	Cheshire	EASEMENT	150		х	7/30/1962	698	362
AA-10243 (Parcel 1)	Carroll E. & Eleanor Goodell	PSNH	Swanzey NH	Cheshire	EASEMENT	150		х	3/2/1962	692	200
GCA-288 (1F)	Town of Troy, Swanzey & Keene.	PSNH	Swanzey NH	Cheshire	LICENSE				10/1/200B	N/A	N/A
AA-10243 (Parcel 2)	Carroll E. & Eleanor Goodell	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	3/2/1962	692	200
AA-10243 [Parcel 3)	Carroll E. & Eleanor Goodell	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	3/2/1962	692	200

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T198 Line Easement Rights

		i					EASM. CO	ONFIG.		DOCUMENT INFORMATION	
DOCUMENT NO. GRANTOR	GRANTEE	TOWN	COUNTY	EASEMENT/FEE	WIDTH	METES & BOUNDS	ОТНЕК	INSTRUMENT DATE	VOLUME	PAGE	
	Tour of Troy Sugarau &										
CA-288 (1H)	Town of Troy, Swanzey & Keene.	PSNH	Swanzey NH	Cheshire '	LICENSE				10/1/2008	N/A	N/A
EAA-10242	George R. & Marian E. Cuthbert	PSNH	Swanzey NH	Cheshire	EASEMENT	150		х	3/8/1962	692	199
DHA-398	Cecil I. Whitcomb	PSNH		Cheshire	FEE				3/29/1962	692	485
DHA-394	David H. Wetmore	PSNH	Swanzey NH	Cheshire	FEE				2/23/1962	692	329
GCA-288 (11)	Town of Troy, Swanzey & Keene.	PSNH	Swanzey NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
EAA-10263	Guy E. & Hazel S. Ballou	PSNH	Swanzey NH	Cheshire	EASEMENT	150		X	5/1/1962	695	374
AA-10261 (Parcel 1)	Municipal Corporation	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	4/19/1962	695	373
GCA-288 (1J)	Town of Troy, Swanzey & Keene.	PSNH	Swanzey NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
AA-10261 (Parcel 2)	City of Keene, A Municipal Corporation	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	4/19/1962	695	373
GCA-288 (1K)	Town of Troy, Swanzey & Keene.	PSNH	Swanzey NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
AA-10261 (Parcel 3)	City of Keene, A Municipal Corporation	PSNH	Swanzey NH	Cheshire	EASEMENT	150		x	4/19/1962	695	373
GCA-288 (1L)	Town of Troy, Swanzey & Keene.	PSNH	Swanzey NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
AA-10261 (Parcel 4)	City of Keene, A Municipal Corporation	PSNH	Swanzey NH	Cheshire	EASEMENT	150		х	4/19/1962	695	373
GCA-288 (1M)	Town of Troy, Swanzey & Keene.		Swanzey NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
GCA-288 (1N)	Town of Troy, Swanzey & Keene.	PSNH	Swanzey NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
The BODM			Keene NH	Cheshire							
AA-10210 (Parcel 2)	Abraham & Deborah Cohen	PSNH	Keene NH	Cheshire	EASEMENT	150		x	1/17/1962	690	333

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Cornerstone

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			1		1	_	TACKA CO	AND		DO CIUS (DAIN) IN INC.	
							EASM. CO	MPIG.	1	DOCUMENT INFORMA	IIUN
DOCUMENT NO.	GRANTOR	GRANTEE	TOWN	COUNTY	EASEMENTIFEE	WIDTH	METES & BOUNDS	OTHER	INSTRUMENT DATE	VOLUME	PAGE
AA-10210 (Parcel	Abraham & Deborah Cohen	PSNH	Keene NH, Swanzey NH	Cheshire	EASEMENT	150		x	1/17/1962	690	333
DA-234 (Parcel 1)	Thomas J. & Doris M. Sheehan	PSNH	Keene NH	Cheshire	FEE			х	3/31/1948	539	562
<u>DDA-234 (Parcel</u> 2)	Sheehan	PSNH	Keene NH	Cheshire	FEE			x	3/31/1948	539	562
GCA-288 (10)	Town of Troy, Swanzey & Keene.	PSNH	Keene NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
DA-234 [Parcel 3]	Thomas J. & Doris M. Sheehan	PSNH	Keene NH	Cheshire	FEE			x	3/31/1948	539	562
GCA-288 (1P)	Town of Troy, Swanzey & Keene.	PSNH	Keene NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
DDA-1143	Ashuelot Gas & Electric Company	Town of Keene	Keene NH	Cheshire	EASEMENT			x	11/9/1912	363	519
GCA-288 (10)	Town of Troy, Swanzey & Keene.	PSNH	Keene NH	Cheshire	LICENSE				10/1/2008	N/A	N/A
<u>DDA-276</u>	Michael F. & Catherine E. & Julia A. & Mary A. & Helen T. & Annie C. Driscoll (All Single)	PSNH	Keene NH	Cheshire	FEE		x		5/2/1949	552	577
DHA-194			Keene NH	Cheshire	FEE						
EAA-10245	Philip O. & Yvette D. Pellerin	PSNH	Keene NH	Cheshire	EASEMENT		x		4/5/1962	692	596
EAA-10247	Mary C. Loen	PSNH	Keene NH	Cheshire	EASEMENT		X		4/6/1962	694	219
EAA-10244	Walter E. & Viola G. Swett	PSNH	Keene NH	Cheshire	EASEMENT		x		3/28/1962	692	471
EAA-3490	Mary E. Delay	PSNH	Keene NH	Cheshire	EASEMENT		X		9/18/1956	631	598
DDA-259	Gertrude M. Gallison	PSNH	Keene NH	Cheshire	FEE		X		8/8/1948	552	199
DDA-258	Charles W. Partridge Charlestown Woolen	PSNH	Keene NH	Cheshire	FEE		X		11/18/1948	547	450

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T198 Line Exsement Rights

Eversource T198 Line Project

Standard Dredge and Fill Wetlands Permit Application

Attachment Q: Photo Log of Identified Natural Resources

Wetland KW11



Photo 1. Overview of wetland KW11, viewing northeast from the southwestern corner of the wetland towards Str. 145. (10-29-24)

Wetland KW12H



Photo 2. Overview of wetland KW12H, viewing northeast from flag 25 on the western edge of the ROW. (10-29-24)

Wetland KW12G



Photo 3. Overview of wetland KW12G, viewing southwest towards Str. 143 from within the wetland. (10-29-24)

Wetland KW12F



Photo 4. Overview of KW12F, viewing north towards Str. 143. (04-22-25)

Wetland KW12E



Photo 5. Overview of wetland KW12E, viewing northeast from flag 1 on the edge of the upland trail between wetland KW12E and wetland KW12F. (10-29-24)

Wetland KW12C



Photo 6. Overview of wetland KW12C, viewing north along from near the southern end of the wetland. (4-22-25)

Wetland KW12A



Photo 7. Overview of scrub-shrub portion of wetland KW12A, viewing northwest towards the proposed Str. 142 work pad. (10-29-24)



Photo 8. Overview of the flooded scrub-shrub portion of wetland KW12A on western edge of the ROW, viewing north. (04-22-25)

Wetland KW12D



Photo 9. Overview of potential vernal pool portion of wetland KW12D. (07-30-24)

Wetland KW12B



Photo 10. Overview of wetland KW12B, viewing south from on the western edge of the Str. 141 work pad. (07-30-24)



Photo 11. Overview of the flooded portion of wetland KW12B, viewing north from the northeastern corner of the Str. 141 work pad. (04-22-25)

Wetland KW13



Photo 12. Wetland KW13, viewing northeast from the edge of the parking lot. (04-22-25)

Wetland KW14



Photo 13. Overview of wetland KW14, viewing north from the southern end of the wetland. (07-30-24)

Wetland KW15.1



Photo 14. Overview of wetland KW15.1, viewing southwest from the maintained trail between wetland KW15.1 and wetland KW15.3. (08-07-24)

Wetland KW15.3



Photo 15. Representative view of wetland KW15.3, viewing east-southeast towards Str. 136 from the maintained trail between wetland KW15.1 and wetland KW15.3. (08-07-24)

Wetland KW15.2



Photo 16. Overview of the western edge of wetland KW15.2, vewing south from the northern end of the wetland. (08-07-24)



Photo 17. Representative view of the southern portion of wetland KW15.2, viewing south towards Str. 132. (07-31-24)



Photo 18. Overview of the PAB4G portion of wetland KW15.2, viewing north towards Str. 134. No impacts proposed. (08-07-24)



Photo 19. Overview of wetland SAW2, viewing west into the wetland from the edge of the existing access road near the entrance off Airport Road. No impacts proposed. (04-22-25)



Photo 20. Overview of wetland SAW2, viewing southwest into the wetland from the edge of the existing access road near where it turns west. No impacts proposed. (04-22-25)

Wetland SAW1



Photo 21. Overview of wetland SAW1, viewing east into the wetland from the edge of the existing access road. (04-22-25)

Wetland SAW1A



Photo 22. Overview of wetland SAW1A containing vernal pool SAVP1A, viewing northeast into the wetland from the edge near the road. No impacts proposed. (04-22-25)

Wetland SAW1B



Photo 23. Overview of wetland SAW1B, viewing northeast with existing access road visible on the very right edge of the photo. No impacts proposed. (04-22-25)



Photo 24. Existing culverted crossing of stream SAS1, viewing southwest along the existing access road. (04-22-25)

Wetland SWOX



Photo 25. Oxbow (SWOX) north of the upland access road leading to Str. 129 from Airport Road, viewing northwest. No impacts proposed. (10-30-24)



Photo 26. Portion of wetland SW1Z to be impacted within the existing access road, viewing west. (04-22-25)



Photo 27. Portion of wetland SW1Z to be impacted within the existing access road, viewing west. (04-22-25)



Photo 28. Proposed Str. 129 work pad and access route in wetland SW1Z, viewing north. (10-30-24)



Photo 29. Abandoned oxbow (PVP-SW1Z-2) in wetland SW1Z north of the proposed Str. 128 timber mat work pad, viewing northwest. (10-30-24)



Photo 30. Abandoned oxbow (PVP-SW1Z-2) north of the proposed Str. 128 timber mat work pad, viewing southeast. (10-30-24)



Photo 31. Abandoned oxbow (PVP-SW1Z-3) south of the proposed Str. 128 timber mat work pad, viewing northwest. (10-30-24)



Photo 32. Proposed Str. 128 timber mat work pad in wet meadow and scrub-shrub portions of wetland SW1Z, viewing northeast from the western edge of the ROW. (9-20-24)



Photo 33. Proposed Str. 125 timber mat work pad in wet meadow and scrub-shrub portions of wetland SW1Z and on the bank of the Ashuelot River, viewing northwest from the southeastern corner of the proposed work pad. (9-20-24)



Photo 34. Proposed timber mat crossing of oxbow wetland between Strs. 123 and 124, viewing northeast. (10-30-24)



Photo 35. Proposed Str. 123 timber mat work pad in scrub-shrub and wet meadow portions of wetland SW1Z, viewing northeast. (09-20-24)



Photo 36. Proposed Str. 122 timber mat work pad in scrub-shrub portion of wetland SW1Z, viewing east. (09-20-24)



Photo 37. Proposed timber mat crossing of beaver impounded perennial stream SS10 between Strs. 121 and 122, viewing north. (10-30-24)



Photo 38. Proposed Str. 121 timber mat work pad in wetland SW1Z, viewing northeast from the western edge of the ROW. (09-20-24)

Wetland SW1Y



Photo 39. Proposed Str. 119 timber mat work pad in wetland SW1Y, viewing northeast from the western edge of the ROW. (09-20-24)



Photo 40. Overview of wetland SW1, viewing northwest towards Str. 118 from the southern edge of the wetland. (07-30-24)

Wetland SW1.1A



Photo 41. Overview of portion of wetland SW1.1A to be impacted along the proposed access road from Airport Road to Str. 117, viewing northwest. (04-22-25)

Wetland SW1.1B



Photo 42. Overview of vernal pool SVP1.1B in wetland SW1.1B along edge of proposed access route, viewing east. (04-22-

Wetland SW1.1C



Photo 43. Overview of wetland SW1.1C, viewing west. Proposed access route will follow pre-existing track in uplands on the right side of this photo. (04-22-25)



Photo 44. Representative view of wetland SW1.1, viewing north from the proposed Str. 115 work pad. (07-25-24)



Photo 45. Representative view of wetland SW1.1, viewing south from the proposed Str. 115 work pad. (07-25-24)



Photo 46. Representative view of wetland SW2.3, viewing north. No impacts proposed. (07-31-24)

Wetland SW1.3



Photo 47. Representative view of wetland SW1.3, viewing east. (07-31-24)



Photo 48. Oxbow portion (PUBH) of wetland SW2.1, viewing east. (07-31-24)



Photo 49. Representative scrub-shrub portion of wetland SW2.1, viewing northwest. (07-31-24)



Photo 50. Overview of the scrub-shrub portion of wetland SW2, viewing west. (10-31-24)



Photo 51. Overview of the emergent wetland portion of wetland SW2 containing stream SS11, viewing west. (10-31-24)



Photo 52. Representative wet meadow portion of wetland SW2, viewing east from the southern edge of the Str. 106 work pad. (07-31-24)



Photo 53. Representative scrub-shrub portion of wetland SW2, viewing south towards Str. 104 from the southern edge of the Str. 105 work pad. (10-30-24)



Photo 54. Proposed timber mat access route through wetland SW2, viewing south towards Str. 104. Scrub-shrub wetland is present on the left side and background of the photo, wet meadow wetland is present in the foreground of the photo, and South Branch of the Ashuelot on the right side of the photo. (10-30-24)

Wetland SW2-E1



Photo 55. Overview of wetland SW2-E1, viewing west from the eastern edge of the wetland. No impacts proposed. (10-31-24)



Wetland SW2-E2

Photo 56. Overview of wetland SW2-E2, viewing northeast from the western edge of the ROW. No impacts proposed. (10-31-24)

Wetland SW2.2



Photo 57. Overview of wetland SW2.2, viewing south. No impacts proposed. (10-31-24)



Photo 58. Overview of wetland SW7, viewing southeast towards Str. 91. Existing disturbed trail to be used is visible in the front left of the photo. (08-7-24)

Wetland SW8



Photo 59. Overview of wetland SW8, viewing southeast towards Str. 88. (08-07-24)



Photo 60. Overview of wetland SW9, viewing northeast. (08-07-24)



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Photo 61. Overview of wetland SW10, viewing south across proposed timber mat access route. (08-07-24)

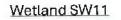




Photo 62. Overview of wetland SW11, viewing south from within the wetland. (10-31-24)



Photo 63. Overview of wetland SW20 off C L Lane, viewing southwest. Impacts to be avoided via bridging from uplands. (08-07-24)

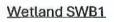




Photo 64. Overview of wetland SWB1, viewing east. No impacts proposed. (08-07-24)

Wetland SW23



Photo 65. Proposed timber met Str. 73 work pad in wetland SW23, viewing northwest. (08-07-24)



Photo 56. Overview of wetland SW23.1, viewing southeast towards Flat Roof Mill Road. No impacts proposed. (08-07-24)

Wetland SW23.1

Wetland SW23.2



Photo 67. Proposed timber mat crossing of wetland SW23.2, viewing southeast towards Flat Roof Mill Road. (08-07-24)

Wetland SW28.2



Photo 68. Overview of wetland SW28.2, viewing east. No impacts proposed. (08-07-24)

Wetland SW28.1



Photo 69. Overview of wetland SW28.1, viewing southeast towards Str. 67. (08-07-24)



Photo 70. Existing rough trail through wetland SW28, with intermittent stream SSA2 generally following the trail, viewing southeast towards Str. 65. (07-25-24)



Photo 71. Proposed timber mat access route through wetland SW28 along the southwestern edge of the ROW to minimze impacts to streams that follow rough trail closer to the ROW center, viewing southeast towards Str. 65. (07-25-24)



Photo 72. Proposed area of impact in wetland SW30 on the eastern corner of the Str. 56 work pad, viewing west. (10-31-24)

Wetland SW31



Photo 73. Proposed area of impact In wetland SW31 for the Str. 56 work pad, viewing west. (10-31-24)

Wetland SW32



Photo 74. Proposed area of impact in wetland SW32 on the western corner of the Str. 54 work pad, viewing northwest. (10-31-24)



Photo 75. Proposed timber mat crossing at the northwestern end of wetland TW1 along previously disturbed trail, viewing northwest. (08-05-24)



Photo 76. Portion of wetland TW1 not disturbed by trail usage, viewing east. (08-05-24)



Photo 77. Proposed timber mat crossing at southeastern end of wetland TW1 along previously disturbed trail, viewing southeast. (08-05-24)





Photo 78. Overview of wetland TW3, viewing east from the northern corner of the proposed work pad. (08-05-24)



Photo 79. Proposed timber mat crossing of wetland TW4 along previously disturbed trail, viewing northwest. (08-05-24)



Photo 80. Portion of wetland TW4 not disturbed by trail usage, viewing east. (08-05-24)



Photo 81. Proposed timber mat crossing of wetland TW5 along previously disturbed trail on northern side of the ROW, viewing northwest. (08-05-24)



Photo 82. Proposed timber mat crossing of stream TSA1 in wetland TW5 within previously disturbed trail on northern side of the ROW, viewing northeast. (08-05-24)



Photo 83 - Stream TSA1 downstream of proposed timber mat crossing location, viewing southwest. (07-24-24)



Photo 84 – Stream TSA1 upstream of proposed timber mat crossing location, viewing north. (07-24-24)



Photo 85. Portion of wetland TW5 not disturbed by trail usage, viewing northwest towards Str. 49 from in the wetland. (08-05-24)



Photo 86. Wetland TWA1 northeast of the proposed upland access road between Strs. 47 and 48, viewing northeast. No impacts proposed. (8-5-24)



Photo 87. Proposed crossing timber mat access along previously disturbed trail at northwestern end of wetland TW6, viewing southeast. (08-06-24)



Photo 88. Portion of wetland TW6 not disturbed by trail usage, viewing west-northwest towards Str. 47 from the northern edge of the ROW. (08-06-24)





Photo 89. Proposed timber mat crossing of wetland TW7 along previously disturbed trail, viewing northwest from southeastern side of the wetland. (07-25-24)



Photo 90. Portion of wetland TW7 not disturbed by trail usage and containing stone walls, viewing northwest towards Str. 44 from within the wetland. (08-06-24)



Photo 91. Proposed timber mat crossing of wetland TW8 along previously disturbed trail, viewing west from the gravel pull off area off West Hill Road. (07-25-24)



Photo 92. Portion of wetland TW8 not disturbed by trail usage, viewing southeast towards the gravel pull off and West Hill Road from within the wetland. (08-06-24)

Attachment R: Wetland Function and Value Forms

						Wetland ID Lat/Long:	KW11 Please see Attachmer Plans	1t G – Project
Total area of wetland?	97,602 sf H	Juman made? No	Is wetland part of a wildlife corridor?	or a "habita	t island"?	Prepared by:	Elizabeth Olliver D	ate 10/29/24
Adjacent land use		Rt 101, athletic fields, PEM1B (100%)	rail trail Distance to nearest roadway or other		10 feet	Wetland Impa Type Ti m	imber Area atting and	10,665 sf (T) 40 sf (P)
Is the wetland a separate hyo	-	Yes	If not, where does the wetland lie in the dr	*		Evaluation ba Office X	ole install ased on: Field	x
How many tributaries contribute to the wetland?			Wildlife & vegetation diversity/abundance	(see attached list)		Corps manua completed?	I wetland delineation Y X N	

Function/	Value	Suitable?		Principal?	Comments
	Groundwater Recharge/Discharge	N	2,4		No evidence of significant groundwater recharge discharge.
	Floodflow Alteration	Y	1,3,4,5,6,9,10,12,1 8		In 100-year floodplain of Ashuelot River but does not border the river. Primarily receives surface water runoff from the surrounding uplands, which include Rt. 101, dirt/gravel Ashuelot Rail Trail, and athletic fields.
and see	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1,2,4	12	Significant potential to detain sediments and toxicants from surface water runoff from Rt. 101, as well as from rail trail.
	Nutrient Removal	Y	1,3,4,8,10,11		Located downslope of athletic fields that are potential source of excess nutrients.
-	Production Export	Y	1,7,12		Large population of flowering and seed generating plants are food sources for small mammals, birds, and nectar-gathering insects.
m	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	7,8,13,17,19		Part of utility ROW wildlife corridor surrounded by development. Provides lot of food sources and cover for small mammals and songbirds. Location adjacent to Route 101 poses risk to wildlife.
A	Recreation	Y	11,12		Easily viewable from the rail trail for birding/nature viewing.
-	Educational/Scientific Value	Y	8,9,10,13		Directly adjacent to Keene State College facilities and easily viewable and accessible from the rail trail. But not a particularly interesting/unique wetland from an educational perspective.
*	Uniqueness/Heritage	N	2,8,9,10,15,17,19, 31		Surrounded by development and provides views from the heavily used rail trail but is a typical maintained utility ROW wetland with no heritage/historical characteristics.
	Visual Quality/Aesthetics	Y	4,6,9		Easily viewable from rail trail, but the view also includes surrounding development/Route 101 from most angles.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 5.5)	N			

Total area of wetland?	21,049 sf Human	made? No	Is wetland part of a wildlife corridor?	🛛 or a "habita	t island"?	Wetland ID Lat/Long:	KW12H Please see Attach Plans	ment G - Project
Adjacent land use	Utility ROW, Rt 101,	athletic fields,	ail trail Distance to nearest roadway or other	development	10 feet	Prepared by: Wetland Imp	Elizabeth Olliver	Date 10/29/24
Dominant wetland system	s present PEM1	E (100%)	Contiguous undeveloped	buffer zone present	No		emp. timber Are atting	a 86 sf
Is the wetland a separate h	ydraulic system?	Yes	If not, where does the wetland lie in the dra	ainage basin		Evaluation ba	ased on:	
How many tributaries con	tribute to the wetland?	0	Wildlife & vegetation diversity/abundance	(see attached list)	,	Office X Corps manua completed?	Fie Wetland delineation Y X N	

Function	/Value	Suitable?		Principal?	Comments
T	Groundwater Recharge/Discharge	Y	2,4,15		In the vicinity of a GA2 groundwater classified area to the south and contains standing water in emergent portion in the spring with no outlet or inlet.
	Floodflow Alteration	Y	1,3,4,5,6,9,10,12,1 8		In 100-year floodplain of Ashuelot River but does not border the river. Primarily receives surface water runoff from the surrounding uplands including Rt. 101, dirt/gravel Ashuelot Rail Trail, and maintained walking trails.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1,2,4,5	Ø	Significant potential to detain sediments and toxicants from surface water runoff from Rt. 101, as well as from rail trail.
	Nutrient Removal	Y	1,3,4,5,7,8,10,11		Located downslope of athletic fields that are potential source of excess nutrients.
-	Production Export	Y	1,4,7,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds, and nectar-gathering insects.
m	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	5,7,8,13,14,16,17, 18,19,20,21		Part of utility ROW wildlife corridor surrounded by development. Provides lot of food sources and cover for small mammals and songbirds. Contains a vernal pool (KVP12H) with fairy shrimp and potentially wood frog egg masses.
A	Recreation	Y	5,10,11,12	Ø	Viewable from the rail trail and maintained walking trails for birding/nature viewing.
	Educational/Scientific Value	Y	5,8,9,10,13	Ø	Is directly adjacent to Keene State College facilities and is easily viewable and accessible from walking trails that pass by it. Vernal pool provides good outdoor classroom opportunity.
*	Uniqueness/Heritage	N	2,8,9,10,15,17,19, 31		Surrounded by development and provides views from the heavily used rail trail but is a typical maintained utility ROW wetland with no heritage/historical characteristics.
	Visual Quality/Aesthetics	Y	4,8,9,10,11		Provides attractive views from rail trail and walking trails, which are easily accessible.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	cological Integrity Score = 5.9)	N			

									Wetland ID	KW12G			
Total area of wetland?	>5,606 sf	Human made?	No	Is wetland part of a wildlife corridor?	Ø	or a "habita	it island"?		Lat/Long:	Please see Plans	Attachmen	nt G – Project	
Adjacent land use	Utility ROW,	Rt 101, athletic f	ïelds	Distance to nearest roadway or othe	r develop	ment	300 feet	_	Prepared by: Wetland Im	Elizabeth Ol	liver D	10/29/24	
Dominant wetland system	s present	PSS1E (100%)		Contiguous undeveloped	buffer zo	one present	No	_	2.	Temp. timber matting	Area	377 sf	
Is the wetland a separate h	ydraulic system?	Yes		If not, where does the wetland lie in the d	rainage b	asin			Evaluation	based on:	_		
				-				_	Office	х	Field	х	
How many tributaries con	tribute to the wet	land?	0	Wildlife & vegetation diversity/abundance	e (see atta	ached list)			Corps manu	al wetland deli	ineation	-	
				-					completed?	Y <u>X</u>	N		

Function	/Value	Suitable?		Principal?	Comments
V	Groundwater Recharge/Discharge	Y	2,4,15		In vicinity of a GA2 groundwater classified area to the south and shows signs of variable water levels outside of the ROW based on aerial imagery.
	Floodflow Alteration	Y	1,3,4,5,6,8,9,10,12 ,18		In 100-year floodplain of Ashuelot River but does not border the river. Primarily receives surface water runoff from the surrounding development including Route 1, maintained walking trails, and athletic facilities.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody,
X	Sediment/Toxicant Retention	Y	1,2,4,5	Ø	Significant potential to detain sediments and toxicants from surface water runoff from Rt. 101 (adjacent to it outside of the ROW), as well as from maintained walking trail (adjacent to it in the ROW).
	Nutrient Removal	Y	1,3,4,5,7,8,10,11		Located downslope of athletic fields that are potential source of excess nutrients.
-	Production Export	Y	1,7,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds, and nectar-gathering insects.
m	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	5,7,8,13,14,18,19, 20,21	Ø	Part of utility ROW wildlife corridor surrounded by development. Provides lot of food sources and cover for small mammals and songbirds. More saturated/flooded areas outside of the ROW could support large insect/amphibian populations.
A	Recreation	Y	5,10,11,12	Ø	Easily viewable/accessible from the rail trail and maintained walking trails for birding/nature viewing.
	Educational/Scientific Value	Y	5,8,9,10,13		Is directly adjacent to Keene State College facilities and is easily viewable and accessible from walking trails that pass by it. Portions in ROW not a particularly interesting/unique wetland from an educational perspective and portions outside of the ROW not investigated for potential education sites.
*	Uniqueness/Heritage	N	2,8,9,10,15,17,19, 31		Surrounded by development and provides views from the heavily used rail trail but is a typical maintained utility ROW wetland with no heritage/historical characteristics.
0	Visual Quality/Aesthetics	Y	4,8,9,10,11		Provides attractive views from rail trail and walking trails, which are easily accessible.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	cological Integrity Score = 6.3)	N			

Total area of wetland?	10,773 sf H	luman made? No	Is wetland part of a wildlife corridor?	or a "habitat i	sland"? 🗆		Wetland ID Lat/Long:	KW12F Please see A Plans	ttachment	t G – Project
Adjacent land use	Utility ROW, a	thletic fields	Distance to nearest roadway or other	r development	150 feet		Prepared by:	Elizabeth Olliv	ver Da	ite 10/29/24
Dominant wetland systems	present	PEM1E (100%)	Contiguous undeveloped	buffer zone present	No		Wetland Imp	act:		
	. –						- 1	emp, timber natting	Area	1,849 sf
Is the wetland a separate hy	draulic system?	Yes	If not, where does the wetland lie in the dr	rainage basin			Evaluation b		-	
How many tributaries contr	ibute to the wetla	nd? 0	Wildlife & vegetation diversity/abundance	e (see attached list)			Office)	<	Field	x
		-					Corps manua	l wetland deline	eation	

completed? Y X N	
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Function/	Value	Suitable?		Principal?	Comments					
Ţ	Groundwater Recharge/Discharge	N	2,4		In the vicinity of a GA2 groundwater classified area to the south, but no evidence of significant groundwater recharge/discharge.					
	Floodflow Alteration	Y	1,3,4,5,6,8,9,10,12 ,18	Ø	In 100-year floodplain of Ashuelot River but does not border the river. Primarily receives surface water runoff from the surrounding development including maintained walking trails and athletic facilities.					
-	Fish and Shellfish Habitat	N		0	No associated watercourse/waterbody.					
X	Sediment/Toxicant Retention	Y	1,2,4		Potential to detain sediment from maintained walking trails directly adjacent to it and possibly neighboring athletic facilities.					
	Nutrient Removal	Y	1,3,4,7,8,10,11		Located downslope of athletic fields that are a potential source of excess nutrients.					
-	Production Export	Y	1,7,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds, and nectar-gathering insects.					
m	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.					
2	Wildlife Habitat	Y	5,7,8,13,14,19,21		Part of utility ROW wildlife corridor surrounded by development. Provides lot of food sources and cover for small mammals and songbirds, but not much other wetland dependent wildlife habitat.					
A	Recreation	Y	10,11,12		Easily viewable/accessible from maintained walking trails directly adjacent to it for birding/nature viewing.					
1	Educational/Scientific Value	Y	8,9,10,13		Is directly adjacent to Keene State College facilities and is easily viewable and accessible from walking trails that pass by it. But, not a particularly interesting/unique wetland type.					
*	Uniqueness/Heritage	N	2,8,9,10,15,16,17, 19,31		Surrounded by development and provides views from the heavily used rail trail and walking trails but is a typical maintained utility ROW wetland with no heritage/historical characteristics.					
2	Visual Quality/Aesthetics	Y	4,9,10,11		Provides attractive views from rail trail and walking trails, which are easily accessible.					
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.					
Other (Ec	ological Integrity Score = 7.2)	Y								

Total area of wetland?	>3,888 sf Human 1	made? No	Is wetland part of a wildlife corridor?	or a "habitat	t island"?	Wetland ID Lat/Long:	KW12E Please see Attachmen Plans	t G – Project
Adjacent land use	Utility ROW, athletic	fields	Distance to nearest roadway or othe	er development	10 feet	Prepared by: Wetland Imp	Elizabeth Olliver	ate 10/29/24
Dominant wetland system	as present PSS1E	(100%)	Contiguous undeveloped	l buffer zone present	No		one Area	N/A
ls the wetland a separate l	hydraulic system?	Yes	If not, where does the wetland lie in the	drainage basin		Evaluation b Office X	ased on: Field	x
How many tributaries cor	tribute to the wetland?	0	Wildlife & vegetation diversity/abundan	ce (see attached list)		Corps manua completed?	al wetland delineation Y X N	

Function/	Value	Suitable?		Principal?	Comments
Ţ	Groundwater Recharge/Discharge	N	2,4		In the vicinity of a GA2 groundwater classified area to the south, but not signs of groundwater recharge/discharge.
	Floodflow Alteration	Y	3,4,5,6,8,9,10,12,1 8	Ø	In 100-year floodplain of Ashuelot River but does not border the river. Primarily receives surface water runoff from the surrounding uplands including maintained walking trails and athletic facilities.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1,2,4		Potential to detain sediment from maintained walking trails directly adjacent to it and possibly neighboring athletic facilities.
	Nutrient Removal	Y	1,3,4,7,8,10,11		Located downslope of athletic fields with potential to be a source of excess nutrients.
-	Production Export	Y	1,7,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds, and nectar-gathering insects.
m	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	5,7,8,13,14,19,21		Part of utility ROW wildlife corridor surrounded by development. Provides lot of food sources and cover for small mammals and songbirds, but not much other wetland dependent wildlife habitat.
A	Recreation	Y	10,11,12		Easily viewable/accessible from maintained walking trails directly adjacent to it for birding/nature viewing.
-	Educational/Scientific Value	Y	8,9,10,13		Is directly adjacent to Keene State College facilities and is easily viewable and accessible from walking trails that pass by it. But, not a particularly interesting/unique wetland type.
*	Uniqueness/Heritage	N	2,8,9,10,15,16,17, 19,31		Surrounded by development and provides views from the heavily used rail trail and walking trails but is a typical maintained utility ROW wetland with no heritage/historical characteristics.
2	Visual Quality/Aesthetics	Y	4,9,10,11		Provides attractive views from rail trail and walking trails, which are easily accessible.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 6.8)	N			

Total area of wetland?	14,921 sf Human	made? No	Is wetland part of a wildlife corridor?	🗹 or a "habita	ut island"? 🛛	Wetland ID Lat/Long:	KW12D Please see Attach Plans	ment G – Project
Adjacent land use	Utility ROW, athletic	fields/parking lot	Distance to nearest roadway or other	r development	10 feet	Prepared by: Wetland Imp	Jamie O'Brien Elizabeth Olliver pact:	Date 07/30/24
Dominant wetland systems pr	resent PSS1E	E (100%)	Contiguous undeveloped	buffer zone present	No		Temp. timber Are natting	a 1,488 sf
Is the wetland a separate hydr	raulic system?	Yes	If not, where does the wetland lie in the da	rainage basin		Evaluation b	ased on:	
How many tributaries contrib	ute to the wetland?	0	Wildlife & vegetation diversity/abundance	e (see attached list)		Office Corps manual completed?	X Fie al wetland delineation Y X N	

Function/Value		Suitable?		Principal?	Comments
<u>_</u>	Groundwater Recharge/Discharge	Y	2,3,4,8,15		Located in a GA2 groundwater classified area with some signs of groundwater recharge, but is relatively small area.
	Floodflow Alteration	Y	3,4,5,6,7,8,9,10,12 ,18	Ø	In 100-year floodplain of Ashuelot River but does not border the river. Primarily receives surface water runoff from the surrounding uplands including maintained walking trails and athletic facility parking lot.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1,2,4	Ø	Significant potential to detain sediment and toxicants from maintained walking trails and athletic facilities parking lot next to it.
	Nutrient Removal	Y	1,3,4,7,8,10,11		Located downslope of athletic fields with the potential to be a source of excess nutrients.
	Production Export	Y	1,7,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds, and nectar-gathering insects.
m	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	5,7,8,13,14,19,20, 21		Part of a wildlife corridor surrounded by development. Provides food sources and cover for wildlife and contains a potential vernal pool.
A	Recreation	Y	5,10,11,12		Easily viewable/accessible from maintained walking trails directly adjacent to it for birding/nature viewing.
-	Educational/Scientific Value	Y	5,8,9,10,13	0	Is directly adjacent to Keene State College facilities and is easily viewable and accessible from walking trail that pass by it. But, not a particularly interesting/unique wetland type.
*	Uniqueness/Heritage	N	2,8,9,10,15,16,17, 19,31		Surrounded by development and provides views from the heavily used rail trail and walking trails but is a typical maintained utility ROW wetland with no heritage/historical characteristics.
3	Visual Quality/Aesthetics	Y	4,8,9,10,11,12		Provides attractive views from rail trail and walking trails, which are easily accessible.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 5.5)	N			

Total area of wetland?	4,232 sf Hum	an made? No	Is wetland part of a wildlife corridor?	🗹 or a "habita	t island"? [- I	Wetland ID Lat/Long:	KW12C Please see Attach Plans	ument G -	Project
Adjacent land use	Utility ROW, athle	tic fields/parking lot	Distance to nearest roadway or other	development	10 feet		Prepared by: Wetland Imp	Jamie O'Brien Elizabeth Olliver	Date	07/30/24
Dominant wetland systems p	present PSS	S1E (100%)	Contiguous undeveloped	buffer zone present	No		~ *	emp. timber Ar	ea 97.	2 sf
Is the wetland a separate hyd	fraulic system?	Yes	If not, where does the wetland lie in the dr	ainage basin			Evaluation b	ased on:		
How many tributaries contril	bute to the wetland?	0	Wildlife & vegetation diversity/abundance	(see attached list)			Office Corps manual completed?	Fi Wetland delineation Y_X_N	eld X	

Function/	Value	Suitable?		Principal?	Comments
T	Groundwater Recharge/Discharge	Y	2,3,4,8,15		Located in a GA2 groundwater classified area with some evidence of groundwater recharge but is relatively small area.
······	Floodflow Alteration	Y	3,4,5,6,8,9,10,12,1 8	Ø	In 100-year floodplain of Ashuelot River but does not border the river. Primarily receives surface water runoff from the surrounding uplands including maintained walking trails and athletic facility parking lot.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1,2,4	Ø	Significant potential to detain sediment and toxicants from maintained walking trails and athletic facilities parking lot next to it.
	Nutrient Removal	Y	3,4,7,8,10,11		Located downslope of athletic fields with potential to be a source of excess nutrients.
-	Production Export	Y	1,7		Small size limits the amount of food sources provided in this wetland as compared to other wetlands in immediate vicinity.
na P	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	7,8,13		Small and narrow strip of wetland along the edge of the ROW, sandwiched between walking trail and maintained access road, provides limited wildlife habitat as compared to other wetlands in immediate vicinity
A	Recreation	Y	10,11,12		Maintained walking trails directly adjacent provide easy access for birding/nature viewing.
-	Educational/Scientific Value	Y	8,9,10,13	0	Easily accessible via walking trails at Keene State College athletic facilities, but is not a particularly interesting/suitable wetland for an outdoor classroom.
×	Uniqueness/Heritage	N	2,8,9,10,17,19,31		Surrounded by development and provides views from the heavily used rail trail and walking trails but is a typical maintained utility ROW wetland with no heritage/historical characteristics.
	Visual Quality/Aesthetics	N	9,10,11		Narrow strip of wetland sandwiched between walking trail and gravel access road with fence running through it does not provide much of a view.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 5.5)	N			

Total area of wetland?	102,174 sf	Human made?	No I	s wetland part of a wildlife corridor?	🗹 or a "habita	t island"? 🛛 🗆
Adjacent land use	Utility ROW,	rail trail, athletic	facilities	Distance to nearest roadway or other	development	30 feet
Dominant wetland systems	present	PSS1E (100%)		Contiguous undeveloped	buffer zone present	No
Is the wetland a separate h	ydraulic system?	Yes	I	if not, where does the wetland lie in the dr	ainage basin	
How many tributaries cont	ribute to the wet	land?	7 0	Wildlife & vegetation diversity/abundance	e (see attached list)	

Lat/Long:	Please see Plans	Please see Attachmen Plans			
Prepared by:	Jamie O'Bri Elizabeth Ol		ate	07/30/24	
Wetland I	mpact:		-		
Туре	Timber matting and pole install	Area		974 sf (T) sf (P)	
Evaluation	n based on:	-			
Office	х	Field	Х		
Corps man	nual wetland deli	ineation			

Function/Value		Suitable?		Principal?	Comments
T	Groundwater Recharge/Discharge	Y	2,3,4,8,15		Located in a GA2 groundwater classified area and shows signs of groundwater recharge.
	Floodflow Alteration	Y	1,3,4,5,6,7,8,9,10, 12,18	Ø	In 100-year floodplain of Ashuelot River but does not border the river. Primarily receives surface water runoff from the surrounding uplands including maintained rail trail, walking trails, and athletic facility parking lot. Ponded water observed in spring observations and in aerial imagery along the western edge against the rail trail.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
×	Sediment/Toxicant Retention	Y	1,2,4,5	Ø	Significant potential to detain sediment and toxicants from surface water runoff from the rail trail, walking trails, and the athletic facilities parking lot.
	Nutrient Removal	Y	1,3,4,5,7,8,10,11		Located downslope of athletic fields with the potential to be a source of excess nutrients.
	Production Export	Y	1,7,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds, and nectar-gathering insects.
-	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	5,7,8,13,14,18,19, 20,21	Ø	Part of utility ROW wildlife corridor surrounded by development. Provides food sources and cover for wildlife and contains intermittently ponded water that could support large amphibian population.
Æ	Recreation	Y	5,10,11,12	Ø	Maintained walking trails directly adjacent to it provide easy access for birding/nature viewing.
A	Educational/Scientific Value	Y	5,8,9,10,13		Directly adjacent to Keene State College facilities and accessible from walking trails that pass it. Contains ponded water that could provide some educational opportunities related to amphibians.
*	Uniqueness/Heritage	N	2,8,9,10,15,16,17, 19,31		Surrounded by development and provides views from the heavily used rail trail and walking trails but is a typical maintained utility ROW wetland with no heritage/historical characteristics.
3	Visual Quality/Aesthetics	Y	2,4,8,9,10,11		Provides attractive views from rail trail and walking trails, which are easily accessible.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Eco	ological Integrity Score = 5.9)	N			

Total area of wetland? 31,343 sf Human	made? No Is wetland part of a wildlife corridor? Or a "	habitat island"? 🛛	Wetland ID Lat/Long Please see Attachment G - Project Plans
Adjacent land use Utility ROW, rail trai	, athletic facilities Distance to nearest roadway or other development	50 feet	Prepared Elizabeth Olliver Date 10/29/24
Dominant wetland systems present PSS11	Contiguous undeveloped buffer zone pres	ent No	Wetland Impact: Type Timber Area 1,637 sf
Is the wetland a separate hydraulic system?	Yes If not, where does the wetland lie in the drainage basin		Evaluation based on:
How many tributaries contribute to the wetland?	0 Wildlife & vegetation diversity/abundance (see attached lis	xt)	Office X Field X Corps manual wetland delineation completed? Y_X_N N

Function/Value		Suitable?		Principal?	Comments
V	Groundwater Recharge/Discharge	Y	2,3,4,8,15		Located in a GA2 groundwater classified area and shows signs of groundwater recharge.
	Floodflow Alteration	Y	1,3,4,5,6,7,8,9,10, 12,18	Ø	In 100-year floodplain of Ashuelot River but does not border the river. Primarily receives surface water runoff from the surrounding uplands including maintained rail trail, walking trails, and athletic facility parking lot. Ponded water observed in spring observations and in aerial imagery along the western edge against the rail trail.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1,2,4,5	Ø	Significant potential to detain sediment and toxicants from surface water runoff from the rail trail, walking trails, and the athletic facilities parking lot.
	Nutrient Removal	Y	1,3,4,5,7,8,10,11	B	Located downslope of athletic fields with the potential to be a source of excess nutrients.
-	Production Export	Y	1,7,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds, and nectar-gathering insects.
un 🔰	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	5,7,8,13,14,18,19, 20,21		Part of utility ROW wildlife corridor surrounded by development. Provides food sources and cover for wildlife and contains intermittently ponded water that could support large amphibian population.
A	Recreation	Y	5,10,11,12		Maintained walking trails directly adjacent provide easy access for birding/nature viewing.
4	Educational/Scientific Value	Y	5,8,9,10,13		Directly adjacent to Keene State College facilities and is easily viewable/accessible from walking trails that pass by it. Contains ponded water that could provide some educational opportunities related to amphibians, though not a confirmed vernal pool.
*	Uniqueness/Heritage	N	2,8,9,10,15,16,17, 19,31		Surrounded by development and provides views from the heavily used rail trail and walking trails but is a typical maintained utility ROW wetland with no heritage/historical characteristics.
0	Visual Quality/Aesthetics	Y	4,6,7,9,10,11,12		Provides attractive views from rail trail and walking trails, which are easily accessible.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	cological Integrity Score = 6.3)	N			

Total area of wetland?	456 sf Huma	an made? No	Is wetland part of a wildlife corridor?	itat island"? 🛛	Wetland ID Lat/Long:	KW13 Please see Attachment G - Project Plans
Adjacent land use	Utility ROW, athlet		Distance to nearest roadway or other development	10 feet	Prepared by: Wetland Imp	Benjamin Griffith Elizabeth Olliver
Dominant wetland systems	s present PSS	S1B (100%)	Contiguous undeveloped buffer zone present	No		one Area N/A
Is the wetland a separate h	ydraulic system?	Yes	If not, where does the wetland lie in the drainage basin		Evaluation ba	
How many tributaries cont	ribute to the wetland?	0	- Wildlife & vegetation diversity/abundance (see attached list)		Office X Corps manua completed?	Field X I wetland delineation

Function/Value		Suitable?		Principal?	Comments			
N.	Groundwater Recharge/Discharge	Y	2,3,4		Located in a GA2 groundwater classified area, but no significant evidence of groundwater recharge/discharge.			
	Floodflow Alteration	Y	3,4,5,6,8,9,10,12,1 8	D	In 100-year floodplain of Ashuelot River but does not border the river. Receives surface water runoff from the surrounding development, primarily the athletic facilities parking lot adjacent to it, but has relatively small storage capacity compared to other wetlands in the vicinity.			
	Fish and Shellfish Habitat	N		0	No associated watercourse/waterbody.			
X	Sediment/Toxicant Retention	Y	1,2,4	Ø	Significant potential to detain sediment from surface water runoff from the athletic facilities parking lot.			
	Nutrient Removal	Y	3,4,7,8,10,11		Located downslope of athletic fields and directly adjacent to the associated parking lot that have the potentia to be a source of excess nutrients.			
-	Production Export	N	1,7,12		Small size limits the amount of food sources provided in this wetland as compared to other wetlands in immediate vicinity.			
m	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.			
2	Wildlife Habitat	N	7,8,13		Small size provides little to no wildlife habitat as compared to other wetlands in immediate vicinity.			
A	Recreation	N	10,11,12		Provides minimal opportunity for birding/nature viewing and no other recreational opportunities.			
-	Educational/Scientific Value	N	8,9,10,13		Is easily accessible via Keene State College athletic facilities parking lot, but it's small size and condition do not make it an ideal wetland for an outdoor classroom and/or place of scientific study.			
*	Uniqueness/Heritage	N	2,8,9,10,17,19,31		Surrounded by development and provides views from the heavily used rail trail and walking trails but is a typical maintained utility ROW wetland with no heritage/historical characteristics.			
3	Visual Quality/Aesthetics	N	9,10,11		Minimally contributes some to nature viewing experience in the area.			
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.			
Other (Eco	ological Integrity Score = 5.5)	N						

Total area of wetland? 11,096 sf Human made? No	Is wetland part of a wildlife corridor?	at island"?	Wetland ID Lat/Long:	KW14 Please see Attachment G – Project Plans
Adjacent land use Utility ROW, rail trail, athletic facilities	Distance to nearest roadway or other development	10 feet	Prepared by: Wetland Impa	Jamie O'Brien Date 07/30/24
Dominant wetland systems present PSS1E (100%)	Contiguous undeveloped buffer zone present	No	Туре Ті	imber Area 507 sf atting
Is the wetland a separate hydraulic system? Yes	If not, where does the wetland lie in the drainage basin		Evaluation ba	0
How many tributaries contribute to the wetland?	Wildlife & vegetation diversity/abundance (see attached list)		1	Field X
		1	completed?	Y <u>X</u> N

Function/Value		Suitable?		Principal?	Comments
<u> </u>	Groundwater Recharge/Discharge	Y	2,3,4,8,15		Located in a GA2 groundwater classified area and shows evidence of groundwater recharge.
	Floodflow Alteration	Y	3,4,5,6,7,8,910,12, 18	Ø	In 100-year floodplain of Ashuelot River but does not border the river. Receives surface water runoff from the surrounding uplands, primarily Krif Road adjacent to it.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1,2,4,5	Ø	Significant potential to detain sediment from surface water runoff from Krif Road, the rail trail, and maintained walking paths.
	Nutrient Removal	Y	3,4,8,9,10,11	D	Located downslope of athletic fields with the potential to be a source of excess nutrients.
4	Production Export	Y	1,4,7,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds, and nectar-gathering insects.
m	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	5,7,8,13,14,17,18, 19,20,21		Part of utility ROW wildlife corridor surrounded by development. Provides food sources and cover for wildlife and contains intermittently ponded water that could support large amphibian population.
Æ	Recreation	Y	5,10,11,12	Ø	Maintained walking trails directly adjacent provide easy access for birding/nature viewing.
-	Educational/Scientific Value	Y	5,8,9,10,13		Is directly adjacent to Keene State College facilities and is easily viewable and accessible from walking trails that pass by it. Contains ponded water that could provide some educational opportunities related to amphibians, though not a confirmed vernal pool.
*	Uniqueness/Heritage	N	2,8,9,10,15,16,17, 19,31		Surrounded by development and provides views from the heavily used rail trail and walking trails but is a typical maintained utility ROW wetland with no heritage/historical characteristics.
C#3	Visual Quality/Aesthetics	Y	4,8,9,10,11		Provides attractive views from rail trail and walking trails, which are easily accessible.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	cological Integrity Score = 5.5)	N			

Total area of wetland?	224 sf Huma	n made? No	Is wetland part of a wildlife corridor?	🗹 or a "habitat	t island"? 🛛	Wetland ID Lat/Long:	KW15.1 Please see Attach Plans	ment G - Project
Adjacent land use	Utility ROW, rail tra	ail, athletic faciliti	- Distance to nearest roadway or other	development	10 feet	Prepared by: Wetland Imp	Jamie O'Brien Elizabeth Olliver	Date 08/09/24
Dominant wetland system	is present PEM	11E (100%)	Contiguous undeveloped	buffer zone present	No	1 21	imber Are	a 63 sf
Is the wetland a separate h	nydraulic system?	Yes	If not, where does the wetland lie in the dra	ainage basin		Evaluation ba	ased on:	
How many tributaries con	tribute to the wetland?	0	Wildlife & vegetation diversity/abundance	(see attached list)		Office X Corps manua completed?	Fiel Wetland delineation YXN	

Function/Value		Suitable?		Principal?	Comments
Ţ	Groundwater Recharge/Discharge	N	2,3,4		Located in a GA2 groundwater classified area but shows no signs of groundwater recharge/discharge.
-	Floodflow Alteration	Y	3,4,5,6,9,10,12,18		In 100-year floodplain of Ashuelot River but does not border the river. Receives surface water runoff from the surrounding development, primarily the Krif Rd. and maintained walking trail.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1,2,4		Has the potential to detain sediment from surface water runoff from Krif Road and maintained walking trail
	Nutrient Removal	N	3,4,8		Has sufficient vegetation density to utilize nutrients but is a relatively small wetland with no clear source of excess nutrients present.
-	Production Export	N	1,7,12		Too small to provide any kind of significant production export in terms of wildlife food source, particularly in comparison to other larger wetlands in the vicinity.
m.	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	5,8,13		Small wetland contributes little to areas wildlife habitat apart from cover.
A	Recreation	Y	10,11,12		Maintained walking trails directly adjacent provide easy access for birding/nature viewing.
-	Educational/Scientific Value	N	8,9,10,13		Small patch of wetland provides no educational opportunities.
*	Uniqueness/Heritage	N	2,8,9,10,17,19,31		In area where development is resulting in rapid wetland loss and provides attractive views from the heavily used rail trail but is a typical utility ROW wetland with no heritage/historical characteristics.
3	Visual Quality/Aesthetics	N	9,10,11		Is not visually distinctive from the surrounding upland landscape.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 5.5)	N	1		

Total area of wetland?	>191,322 sf Hu	man made?	No I	s wetland part of a wildlife corridor?	or a "habitat	t island"?
Adjacent land use	Utility ROW, rai	l trail, Krif Rd.		Distance to nearest roadway or other	r development	10 feet
Dominant wetland system	ns present P	SS1E (89%)/PA	AB4G (11	%) Contiguous undeveloped	buffer zone present	No
Is the wetland a separate	hydraulic system?	No	I	f not, where does the wetland lie in the d	rainage basin	Mid
How many tributaries con	ntribute to the wetland	d?	1 V	Vildlife & vegetation diversity/abundanc	e (see attached list)	

Lat/Long:	Please se Plans	e Attachn	nent (G – Project
Prepared by:	Jamie O'Brien Elizabeth Olli	. D	ate	08/09/24
Wetland In	npact:			
Туре	Timber matting and pole install	Area		,189 sf (T) sf (P)
Evaluation	based on:		-	
Office	х	Field	Х	
Corps mar	ual wetland delir	neation	-	

Function/	Value	Suitable?		Principal?	Comments
T	Groundwater Recharge/Discharge	Y	2,3,4,7,8,15		In a GA2 groundwater classified area, borders the Ashuelot River outside of the project footprint, and shows evidence of variable water levels, but shows no other evidence of groundwater recharge/discharge.
	Floodflow Alteration	Y	1,3,4,5,6,7,8,9,10, 12,13,18		Part of the large complex of foodplain wetlands along the Ashuelot River and receives surface runoff from the adjacent Krif Road, and the Ashuelot Rail Trail.
-	Fish and Shellfish Habitat	Y	6,7,8,14,16,17	Ð	Associated with the Ashuelot River outside of the project footprint. Wetland contributes to the suitability of the river as fish/shellfish habitat.
X	Sediment/Toxicant Retention	Y	1,3,4,5,8,10,12,16		Significant potential to detain sediment from surface water runoff from Krif Road and rail trail, as well as from large riverine flood flows in areas closer to the river.
	Nutrient Removal	Y	1,2,3,4,5,6,7,8,9,1 0,11,15		Riverine floods are a source of potential nutrients. Wetland contains areas of ponded water in abandoned oxbows, in and outside of the ROW, providing significant opportunity for attenuation.
4	Production Export	Y	1,4,7,8,10.12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds, and nectar-gathering insects. Ashuelot River is a method of export from the wetland.
an P	Sediment/Shoreline Stabilization	Y	2,3,4,6,7,9,12,13,1 4,15	Ø	Wetland forms part of the bank of the Ashuelot River outside the project footprint.
2	Wildlife Habitat	Y	2,5,6,7,8,13,14,15, 16,17,18,19,20,21		Part of the Keene State Wildlife Management Area (KSC/USGS). Provides habitat for small mammals, songbirds, insects, amphibians, wood turtle and northern leopard frog (NH species of concern).
A	Recreation	Y	1,4,5,7,10,11,12		Maintained walking paths provide access to northern portions of the wetland. Located in Keene State WMA, which is a well-known birding hotspot.
-	Educational/Scientific Value	Y	1,5,6,8,9,10,11,16	R	Large floodplain wetland complex that provides habitat for RTE species in the Keen State WMA, with maintained trails providing easier access to certain portions.
*	Uniqueness/Heritage	Y	4,8,9,10,11,12,15, 17,19,22,24,26,29, 30	Ø	Part of large floodplain wetland complex of the Ashuelot River. Portions outside the ROW are an exemplary community. Provides habitat for multiple RTE wetland-dependent wildlife species. Provides numerous functions and values.
3	Visual Quality/Aesthetics	Y	3,4,8,9,10,11,12		Attractive views from rail trail and walking trails, with views improving as you progress further south towards the river.
ES	Endangered Species Habitat	Y	1		Associated watercourse (Ashuelot River) is known habitat for dwarf wedgemussel (federally and state endangered)
Other (Ec	colonical Integrity Score = 7.7)	Y			

Other (Ecological Integrity Score = 7.7) Y Notes: Wetland extends beyond the utility ROW. The total area provided is the total area reviewed.

Total area of wetland?	>91,312 sf Human n	nade? No	Is wetland part of a wildlife corridor?	tisland"? 🛛
Adjacent land use	Utility ROW, Krif Rd.		Distance to nearest roadway or other development	10 feet
Dominant wetland syste	ms present PSS1E	(100%)	Contiguous undeveloped buffer zone present	No
Is the wetland a separate	e hydraulic system?	No	If not, where does the wetland lie in the drainage basin	Mid
How many tributaries co	ontribute to the wetland?	1	Wildlife & vegetation diversity/abundance (see attached list)	

Wetland II Lat/Long:		Attachme	ent G -	- Project
Prepared by:	Jamie O'Br Elizabeth O		Date	08/09/24
Wetland In	npact:			
Туре	Timber matting	Area	21	,640 sf
Evaluation	based on:	_		
Office	x	Field	х	
Corps man	ual wetland de ? Y X	lineation N		

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Function/Value		Suitable?		Principal?	Comments
N.	Groundwater Recharge/Discharge	Y	2,3,4,7,8,15		In a GA2 groundwater classified area, borders the Ashuelot River outside of the project footprint, and shows evidence of variable water levels, but shows no other evidence of groundwater recharge/discharge.
	Floodflow Alteration	Y	1,3,4,5,6,7,8,9,10, 12,13,18	V	Part of the complex of large floodplain wetlands along the Ashuelot River and receives surface runoff from the adjacent Krif Road and Keene State College athletic facilities.
-	Fish and Shellfish Habitat	Y	6,7,8,14,16,17		Wetland is associated with the Ashuelot River outside of the project footprint and contributes to the suitability of the river as fish/shellfish habitat.
X	Sediment/Toxicant Retention	Y	1,3,4,5,8,10,12,16		Wetland has potential to detain sediment from surface water runoff from Krif Road, as well as from large riverine flood flows in those portions of the wetland closer to the river.
	Nutrient Removal	Y	1,2,3,4,5,6,7,8,9,1 0,11,15	Ø	Riverine floods are a source of potential nutrients. Wetland contains areas of ponded water in abandoned oxbows in the Ashuelot River floodplain both on the edge of the ROW and outside of it.
-	Production Export	Y	1,4,7,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds and nectar-gathering insects.
and a	Sediment/Shoreline Stabilization	Y	2,3,4,6,7,9,12,13,1 4,15		Portions of wetland outside of the project footprint form the bank of the Ashuelot River.
2	Wildlife Habitat	Y	2,5,6,7,8,13,14,15, 16,17,18,19,20,21	Ø	Wetland is part of the Keene State Wildlife Management Area (KSC/USGS) and is suitable habitat for a range of wetland-dependent wildlife including RTE amphibians and turtles. Edge of a large potential vernal pool is present within the ROW.
A	Recreation	Y	1,4,5,7,10,11,12	Z	Maintained walking paths provide access to northern portions of the wetland. Located in Keene State WMA, which is a well-known birding hotspot.
	Educational/Scientific Value	Y	1,5,6,8,9,10,11,16	Ø	Large floodplain wetland complex that provides habitat for RTE species in the Keen State WMA, with maintained trails providing easier access to certain portions.
*	Uniqueness/Heritage	Y	4,8,9,10,11,12,15, 17,19,22,24,26,30	Ø	Part of the complex of floodplain wetlands associated with the Ashuelot River that is an exemplary community (outside of the ROW) and provides habitat for multiple RTE wildlife species.
	Visual Quality/Aesthetics	Y	3,4,8,9,10,11,12		Provides attractive views from rail trail and walking trails, with views improving as you progress further south towards the river.
ES	Endangered Species Habitat	Y	1		Associated watercourse (Ashuelot River) is known habitat for dwarf wedgemussel (federally and state endangered)
Other (Ec	ological Integrity Score = 7.7)	Y			

`otal area of	wetland? >568,171 sf Human	n made? No	Is wetland part of a	wildlife corrido	r? 🗹 or a "habitat island"? 🗖	Wetland ID SW1Z, SAW1A, B, SAW2, SW0X, SS10 Lat/Long: Please see Attachment G – Project Plans Plans			
otal area of			-			Prepared Benjamin Griffith Date 10/30/24 by: Elizabeth Olliver 10/30/24			
djacent lan	d use Utility ROW, forest		Distance to nea	arest roadway o	r other development >500 feet	Wetland Impact:			
Dominant w	PSSIE (82%), 1 etland systems present (3%)	PEM1E,F (9%),	PFO1E (5%), PUB1H	Contiguous	undeveloped buffer zone present No	Type Timber Area 135,164 sf (T) matting and 360 sf (P) pole install			
the wetlar	d a separate hydraulic system?	No	If not, where does th	- e wetland lie in	the drainage basin Mid	Evaluation based on: Office X Field X			
How many t	ributaries contribute to the wetland?	2	Wildlife & vegetatio	on diversity/abu	ndance (see attached list)	Corps manual wetland delineation completed? Y_X_ N			
Function/	Value	Suitable?		Principal?	Comments				
Ţ	Groundwater Recharge/Discharge	Y	2,3,4,5,7,8,12,15		In a GA2 groundwater classified area, borders the (SS10), but shows no other evidence of groundwa	Ashuelot River, and an unnamed perennial tributary ter recharge/discharge.			
	Floodflow Alteration	Y	1,5,6,7,8,9,10,11,1 3,14,16,17,18		Part of the complex of large floodplain wetlands a	long the Ashuelot River.			
-	Fish and Shellfish Habitat	Y	1,3,4,5, 6,7,8,12,14,16,17	Ø	Wetland is associated with the Ashuelot River and contributes to the suitability of the river as fish/shellfish habitat.				
X	Sediment/Toxicant Retention	Y	1,5,6,10,12,14,16	Ø	Wetland has potential to detain sediment from riverine flood flows from the Ashuelot River.				
	Nutrient Removal	Y	1,2,3,4,5,6,7,8,9,1 0,11,13,14	Z	Large floodplain wetlands of the Ashuelot River w with long water retention times provides significant	with dense vegetation and areas of deeper water open water nt opportunity for nutrient removal.			
-	Production Export	Y	1,2,6,7,8,10,11, 12,13		Large floodplain wetland provides significant food	d source for wildlife and detritus development.			
m	Sediment/Shoreline Stabilization	Y	2,3,4,6,7,9,12,13,1 5		Portions wetland forms the bank of the Ashuelot F	River in the vicinity of the Project and outside of the ROW			
2	Wildlife Habitat	Y	1,2,5,6,7,8,9,10,13 ,14,16,18,19,20,21 ,20,19,18	Ø	Large floodplain wetland complext associated wit wildlife including wood turtle (NH Species of Con (federally and state endangered)	h Ashuelot River with suitable habitat for a range of ncern). Supports suitability of river for dwarf wedgemusse			
A	Recreation	Y	2,3,5,6,10,12		Potential for wetland-based recreation such as hunting, fishing, and general nature viewing, but parking and accessibility somewhat limited.				
-	Educational/Scientific Value	Y	1,2,4,5,8,9,10,11		Large floodplain wetland complex providing habitat for RTE species in the vicinity of college, but more difficult to access than portions further north.				
*	Uniqueness/Heritage	Y	4,5,6,7,8,9,11,12,1 3,14,15,17,18,19,2 2,24,26,27,29,30	Z	Large floodplain complex is unique. Portions of this wetland are an exemplary community (outside of the ROW). Contains habitat for multiple RTE wildlife species and archaeologically sensitive areas.				
3	Visual Quality/Aesthetics	Y	1,3,4,5,8,9,10,11,1		Provides attractive views from multiple locations communities.	containing a variety of wetland classes and vegetation			
ES	Endangered Species Habitat	Y	1			n habitat for dwarf wedgemussel (federally and state			
Other (Ec	ological Integrity Score = 10)	Y	is the total area						

Notes: Wetland extends beyond the ROW. The total area is the total area reviewed for all listed wetland IDs. The percentages provided in Dominant wetland system are for SW1Z only. Impact area is for SW1Z and SS10 only.

T () () ()	12 507 - G Human	madel Ma	To such and a set of a suithing associated	☑ or a "habitat isl	lan dit0		Wetland I Lat/Long:		ee Attachn	nent G – Project
Total area of wetland?	>13,587 sf Humar	n made? No	Is wetland part of a wildlife corridor?		anu ?		Prepared by:	Benjamin Gr Elizabeth Oll		ate 10/30/24
Adjacent land use	Utility ROW, forest		Distance to nearest roadway or oth	er development	>500 feet		Wetland I	mpact:		
Dominant wetland system:	s present PSS1E (9	5%)/PFO1E (5%)	Contiguous un		nt Yes	-	Туре	Timber matting and pole install	Area	5,538 sf (T) 40 sf (P)
Is the wetland a separate h	vdraulic system?	Yes	If not, where does the wetland lie in the	drainage basin	N/A		Evaluation	n based on:	-	
How many tributaries con	ribute to the wetland?	0	Wildlife & vegetation diversity/abundan	ice (see attached list)		-		X nual wetland deli	Field neation N	<u>×</u>

Function	/Value	Suitable?		Principal?	Comments
Ţ	Groundwater Recharge/Discharge	N	2,3,12,15		Located in a GA2 groundwater classified area and shows signs of variable water levels, but no specific evidence of groundwater recharge discharge.
	Floodflow Alteration	Y	5,6,7,8,9,10,18	Ø	In 100-year floodplain of Ashuelot River and may border a perennial tributary of the Ashuelot River outside of the ROW. Receives surface water runoff from the surrounding uplands.
	Fish and Shellfish Habitat	Y	1,7,14		Wetland contributes to the suitability of the Ashuelot River as fish/shellfish habitat.
X	Sediment/Toxicant Retention	Y	4,6,9,16		Wetland has some potential to detain sediment from large riverine floods, but other sources of sediment are limited.
	Nutrient Removal	Y	1,3,5,8,9,10,11	Ø	Wetland is relatively isolated from most of the floodplain and has significant potential for nutrient removal.
-	Production Export	Y	1,7		Provides food sources for a variety of wildlife species including seeds, berries, and nectar.
	Sediment/Shoreline Stabilization	N	2,3		Potentially borders a small portion of perennial stream outside the ROW based on aerial imagery, but unconfirmed during field review.
2	Wildlife Habitat	Y	4,5,6,7,8,13,14	Ø	Contains suitable habitat for a range of wildlife including wood turtle (NH Species of Concern) and supports suitability of Ashuelot River for dwarf wedgemussel (federally and state endangered).
Æ	Recreation	N	3,5		Limited access to this portion of the ROW.
-	Educational/Scientific Value	N	1,5		Limited access to this portion of the ROW.
*	Uniqueness/Heritage	Y	19,24,27,29		Wetland is part of the complex of floodplain wetlands associated with the Ashuelot Riverand, provides habitat for multiple RTE wetland-dependent wildlife species, and contains archaeologically sensitive areas.
200	Visual Quality/Aesthetics	N	8,10,11		Limited access to this portion of the ROW.
ES	Endangered Species Habitat	N			No threatened/endangered species or critical habitat.
Other (Ec	ological Integrity Score = 10)	Y			

	Wetland ID <u>SW1</u> Lat/Long: Please see Attachment G – Project Plans
No Is wetland part of a wildlife corridor? \square or a "habitat island"? \square	Prepared Benjamin Griffith Date 07/30/24 by: Elizabeth Olliver 07/30/24
	Wetland Impact:
Distance to nearest roadway or other development >500 feet	Type Timber Area 10,397 sf (T) matting and 40 sf (P) pole install
Contiguous undeveloped buffer zone present Yes	Evaluation based on:
If not, where does the wetland lie in the drainage basin Mid 1 Wildlife & vegetation diversity/abundance (see attached list)	Office X Field X Corps manual wetland delineation completed? Y_X N
	Distance to nearest roadway or other development >500 feet Contiguous undeveloped buffer zone present Yes If not, where does the wetland lie in the drainage basin Mid

Function/	Value	Suitable?		Principal?	Comments
V	Groundwater Recharge/Discharge	Y	2,3,12,15		Located in a GA2 groundwater classified area and shows signs of variable water levels. No evident seeps or surface water inputs in the area reviewed.
	Floodflow Alteration	Y	1,5,6,7,8,9,10,13,1 8	Ø	In 100-year floodplain of Ashuelot River and likely borders the river outside of the ROW based on aerial imagery but not confirmed during field review. Receives surface water runoff from the surrounding uplands.
-	Fish and Shellfish Habitat	Y	1,7,14		Wetland contributes to the suitability of the Ashuelot River as fish/shellfish habitat.
X	Sediment/Toxicant Retention	Y	1,5,6,10,12,14,16		Wetland has potential to detain sediment from large riverine flood flows from the Ashuelot River and is located between Airport Road and the river.
	Nutrient Removal	Y	1,2,3,4,5,6,7,8,9,1 0,11,13,14		Large floodplain wetland of the Ashuelot River with dense vegetation and seasonal areas of deeper water with long water retention times provides significant opportunity for nutrient removal.
-	Production Export	Y	1,2,6,7,8,10,11, 12,13		Large floodplain wetland provides food source for wildlife and exhibits detritus development.
m	Sediment/Shoreline Stabilization	N	2,3,4		Portions of the wetland may form banks of the Ashuelot outside of the ROW based on aerial imagery, but unconfirmed during field review.
2	Wildlife Habitat	Y	1,2,5,6,7,8,9,10,13 ,14,16,18,19,20,21 ,20,19,18	Ø	Part of a large complex of floodplain wetlands associated with the Ashuelot River. Suitable habitat for a range of wildlife including wood turtle (NH Species of concern) and supports suitable of Ashuelot River as habitat for dwarf wedgemussel (Federally and State Endangered)
A	Recreation	N	3,5		Limited public access to this portion of the ROW.
4	Educational/Scientific Value	N	1,5,11,14		Limited public access to this portion of the ROW.
*	Uniqueness/Heritage	Y	4,5,6,7,8,9,11,12,1 3,14,15,17,18,22,2 4,26,27,29,30		Wetland contains suitable habitat for wood turtle and archaeologically sensitive areas, provides many functional values, and is part of an overall unique complex of floodplain wetlands associated with the Ashuelot River system. Is contiguous with exemplary community.
2	Visual Quality/Aesthetics	N	4,5,8,10,11		Limited public access to this portion of the ROW.
ES	Endangered Species Habitat	N			No threatened/endangered species or critical habitat.
Other (Ec	ological Integrity Score = 10)	Y			

				1 100	_	Wetland II Lat/Long:		e Attachmer	nt G – Project
Total area of wetland? >149,637 sf Huma	n made? No l	is wetland part of a wildlife corridor?	or a "habitat i	sland"?	-	Prepared by:	Benjamin Elizabeth		Date 07/30/24
Adjacent land use Utility ROW, forest	ed, WWTP access roa	ad Distance to nearest roadway or othe	er development	10 feet		Wetland In	npact:		
Dominant wetland systems present PSS1E (55%)/ PFO1E (35%)	Contiguous und	eveloped buffer zone pres	ent No		21	Timber matting and pole install	Area	40,571 sf (T) 120 sf (P)
Is the wetland a separate hydraulic system?	No	If not, where does the wetland lie in the d	rainage basin	Mid		Evaluation	based on:		
					-	Office	х	Field	х
How many tributaries contribute to the wetland?	1	Wildlife & vegetation diversity/abundanc	e (see attached list)			Corps man completed?	ual wetland de	lineation	

Function	/Value	Suitable?		Principal?	Comments
T	Groundwater Recharge/Discharge	Y	2,3,12,15		Located in a GA2 groundwater classified area and shows signs of variable water levels. No evident seeps or surface water inputs in the area reviewed.
	Floodflow Alteration	Y	1,5,6,7,8,9,10,11,1 2,13,14,16,17,18		In 100-year floodplain of Ashuelot River and borders the river outside of the ROW based on aerial imagery Also receives surface water runoff from the surrounding uplands.
-	Fish and Shellfish Habitat	Y	1,7,14		Wetland contributes to the suitability of the Ashuelot River as fish/shellfish habitat.
¥	Sediment/Toxicant Retention	Y	1,5,6,10,12,14,16		Wetland has potential to detain sediment from large riverine flood flows from the Ashuelot River and is located between Airport Road and the river, as well as adjacent to an access road from the wastewater treatment plant.
	Nutrient Removal	Y	1,2,3,4,5,6,7,8,9,1 0,11,13,14		Large floodplain wetland of the Ashuelot River with dense vegetation and seasonal areas of deeper water with long water retention times provides significant opportunity for nutrient removal.
-	Production Export	Y	1,2,6,7,10,11, 12,13		Large floodplain wetland provides food source for wildlife and exhibits detritus development.
m	Sediment/Shoreline Stabilization	N	2,3,4		Portions of the wetland may form banks of the Ashuelot outside of the ROW based on aerial imagery, but unconfirmed during field review.
2	Wildlife Habitat	Y	2,5,6,7,8,9,10,13,1 4,16,18,19,20,21,2 2		Part of a large complex of floodplain wetlands associated with the Ashuelot River. Suitable habitat for a range of wildlife including wood turtle (NH Species of concern) and supports suitable of Ashuelot River as habitat for dwarf wedgemussel (Federally and State Endangered)
A	Recreation	N	3,5		Limited public access to this portion of the ROW.
-	Educational/Scientific Value	N	1,5,11,14		Limited public access to this portion of the ROW.
*	Uniqueness/Heritage	Y	4,5,6,7,8,9,11,12,1 3,14,15,17,18,22,2 4,26,27,29,30		Wetland contains suitable habitat for wood turtle and archaeologically sensitive areas, provides many functional values, and is part of an overall unique complex of floodplain wetlands associated with the Ashuelot River system. Is contiguous with exemplary community.
(Visual Quality/Aesthetics	N	4,5,8,10,11		Limited public access to this portion of the ROW.
ES	Endangered Species Habitat	N			No threatened/endangered species or critical habitat.
Other (Ec	ological Integrity Score = 10)	Y			

* Refer to backup list of numbered considerations.

	1.000 0 11					Wetland ID Lat/Long:	SW1.1A Please see Attachmer Plans	nt G – Project
Total area of wetland?	1,838 sf Hur	nan made? No	Is wetland part of a wildlife corridor?	or a "habitat isla	and"?	Prepared by:	Benjamin Griffith D Elizabeth Olliver	Date 04/22/25
Adjacent land use	Forest, rough acce	ess road	Distance to nearest roadway or other	development	10 feet	Wetland Impa		327 sf
Dominant wetland systems	present PFO10	C (100%)	Contiguous under	veloped buffer zone presen	it Yes		atting	
Is the wetland a separate hy-	draulic system?	Yes	If not, where does the wetland lie in the dra	inage basin	N/A	Office X	Field	x
How many tributaries contribute to the wetland?			Wildlife & vegetation diversity/abundance	(see attached list)	Corps manual completed?	wetland delineation Y_X_N		

Function/	Value	Suitable?		Principal?	Comments
T	Groundwater Recharge/Discharge	N	6		Located in a GA2 groundwater classified area, but is underlain by fragipan, impervious soils, or bedrock that inhibits groundwater.
	Floodflow Alteration	Y	5,6,8		In 100-year floodplain of Ashuelot River but does not border the river directly based on aerial imagery. Primarily holds surface water runoff from surrounding uplands after rain events.
	Fish and Shellfish Habitat	N	1	0	No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	N			Very little vegetation to hold any sediments in place.
	Nutrient Removal	N			Insufficient vegetation to utilize nutrients.
	Production Export	N			Limited vegetation/no evidence wetland serves as wildlife food source.
w	Sediment/Shoreline Stabilization	N			No associated watercourse/waterbody.
2	Wildlife Habitat	N			Wetland provides no food sources and/or cover.
A	Recreation	N			Provides no opportunities for wetland-based recreation due to its small size and condition.
-	Educational/Scientific Value	N			Provides no opportunities for an educational site or location of scientific study.
*	Uniqueness/Heritage	N			Very small low value wetland along an existing access road.
0	Visual Quality/Aesthetics	N			Wetland views are not striking or differ from surrounding upland area.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 4.6)	N			

									Wetland ID	SW1.1B		
					-			_	Lat/Long:	Please see Plans	Attachme	nt G – Project
Total area of wetland?	>6,647 sf	Human made —	? No	Is wetland part of a wildlife corridor?	2	or a "habitat	island"?	⁻	Prepared by:	Benjamin G Elizabeth O	-	Date 04/22/25
Adjacent land use	Forest rou	gh access road		Distance to nearest roadway or other	developr	ment	10 feet		Wetland Im	npact:		
Angueoni inna uso		Bir develop roud			actoroph			-	~ 1	Timber	Area	1,947 sf
Dominant wetland systems	present	PFO1E (100%)		Contiguous unde	veloped t	buffer zone pres	sent Yes			matting		
	-							-	Evaluation	based on:		
Is the wetland a separate hy-	draulic system	m? ``	les	If not, where does the wetland lie in the di	ainage ba	isin	N/A		Office	х	Field	х
How many tributaries contribute to the wetland?			0	Wildlife & vegetation diversity/abundance (see attached list)					Corps man completed?	ual wetland del	neation N	

Function	/Value	Suitable?		Principal?	Comments
	Groundwater Recharge/Discharge	N	6,15		Located in a GA2 groundwater classified area, but frangipan, impervious soils, or bedrock occurs in the wetland.
	Floodflow Alteration	Y	1,2,5,6,7,8,9,10,18		In 100-year floodplain of Ashuelot River but does not border the river directly based on aerial imagery. Also receives surface water runoff from the surrounding uplands. Has long waster retention time.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
×	Sediment/Toxicant Retention	Y	1,4,5,9		Wetland has potential to detain sediment from riverine flood flows from the Ashuelot River and adjacent upland areas. Long water retention time wetland with Airport Rd. as a source of sediment upgradient.
	Nutrient Removal	Y	3,5,6,7,8,9,10,11		Floodplain wetland of the Ashuelot River with sufficient dense vegetation to facilitate nutrient uptake.
-	Production Export	Y	1,4,7,8,9	Ø	Moderately vegetated wetland containing a vernal pool that provides food sources for wildlife.
m.	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	4,5,7,8,11,13,16,1 7,18,20		Wetland is part of a complex of floodplain wetlands of the Ashuelot River and contains a vernal pool containing spotted salamander eggs.
A	Recreation	N	3,5		Limited public access to the ROW.
-	Educational/Scientific Value	Y	5,8,9,10,13		Site is accessible from Airport Rd. and contains a vernal pool that could serve as a good education site.
*	Uniqueness/Heritage	Y	5,8,9,12,19		Wetland is part of a complex of floodplain wetlands associated with the Ashuelot River system, but it is not the exemplary community portion. Contains a confirmed vernal pool that could serve as an education site.
3	Visual Quality/Aesthetics	N	2,3,5,8,9,10,11		Limited public access to the ROW.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 6.2)	N			

Total area of wetland?	>8,217 sf Human r	nade? No	Is wetland part of a wildlife corridor?	Wetland ID SW1.1C Lat/Long: Please see Attachment G – Project Plans Prepared Benjamin Griffith Date
Adjacent land use Dominant wetland systems	Forest, rough access ro		Distance to nearest roadway or other development 10 feet	Prepared Benjamin Griffith Date 04/22/25 by: Elizabeth Olliver 04/22/25 Wetland Impact: Type None Area N/A
Is the wetland a separate hy		Yes	If not, where does the wetland lie in the drainage basin N/A	Evaluation based on: Office X Field X
How many tributaries cont	ribute to the wetland?	0	Wildlife & vegetation diversity/abundance (see attached list)	Corps manual wetland delineation completed? Y X N
Function/Value		Suitable?	Principal? Comments	

Function/	Value	Suitable?		Principal?	Comments				
V	Groundwater Recharge/Discharge	N	6		Located in a GA2 groundwater classified area, but frangipan, impervious soils, or bedrock occurs in the wetland.				
	Floodflow Alteration	Y	1,5,6,7,8,9,10,18	Ø	In 100-year floodplain of Ashuelot River but does not border the river directly based on aerial imagery. Also receives surface water runoff from the surrounding uplands.				
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.				
X	Sediment/Toxicant Retention	Y	1,5,9		Wetland has potential to detain sediment from riverine flood flows from the Ashuelot River and adjacent upland areas.				
	Nutrient Removal	Y	2,3,4,7,8,9,10,11	Ø	Floodplain wetland of the Ashuelot River with dense vegetation including a well develop herbaceous layer to facilitate nutrient uptake.				
-	Production Export	Y	1,2,4,7		Dense vegetation and fruiting shrubs provide significant food source for wildlife.				
m	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.				
2	Wildlife Habitat	Y	1,4,5,7,8,9,11,13,1 4,17,19,20,21		Wetland is part of a complex of floodplain wetlands of the Ashuelot River and is suitable habitat for and/or supports suitable habitat for a range of wetland-dependent wildlife including amphibians, nesting wetland songbirds, and wood turtle (NH Species of Concern).				
A	Recreation	N	3,5	0	Some potential for hunting.				
-	Educational/Scientific Value	N	5,8,9,10,13		Site is accessible from Airport Rd., though doesn't contain much of educational interest.				
*	Uniqueness/Heritage	Y	5,17,19,24		Wetland is part of a complex of floodplain wetlands associated with the Ashuelot River system, but it is not the exemplary community portion. It provides suitable habitat for wood turtle.				
\Leftrightarrow	Visual Quality/Aesthetics	N	2,3,5,6,8,9,10,11		Visually contrasting open shrub wetland visible from existing rough access road, but unlikely to be viewed by the public.				
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.				
Other (Ec	ological Integrity Score = 7.6)	Y							

Total area of wetland?	>3,320 sf Human	made? No	Is wetland part of a wildlife corridor?	or a "habitat islar	nd"? 🗆	Wetland ID Lat/Long:	SW2.3 Please see Attachment G – Project Plans
Adjacent land use Dominant wetland systems	Utility ROW, forest, r	esidential prope %)/PEM1E (35		levelopment 10	0 feet	Prepared by: Wetland Imp	
Is the wetland a separate h	ydraulic system?	No	If not, where does the wetland lie in the drain	nage basin	Mid	Type N Evaluation b Office 2	Area N/A ased on:
How many tributaries cont	tribute to the wetland?	1	Wildlife & vegetation diversity/abundance (see attached list)			al wetland delineation

Function	/Value	Suitable?	Rationale (Reference #)	Principal?	Comments Located in a GA2 groundwater classified area with evidence of variable water levels based on aerial imagery.					
T	Groundwater Recharge/Discharge	Y	2,3,7,15							
	Floodflow Alteration	Y	1,5,6,7,8,9,10.13,1 4,17,18		In 100-year floodplain of Ashuelot and South Branch of the Ashuelot Rivers and borders the South Branch of the Ashuelot River outside of the ROW based on aerial imagery. Also receives surface water runoff from the surrounding uplands that include an existing gravel access road off the end of Causeway Road.					
	Fish and Shellfish Habitat	Y	1,7,14		Wetland is associated with the South Branch of the Ashuelot River (borders it outside of the ROW) and contributes to the suitability of the river as fish/shellfish habitat.					
*	Sediment/Toxicant Retention	Y	1,5,6,10,12,14,16	Ø	Wetland likely detains sediment sourced from riverine floods and is located between an existing gravel access road and the river.					
	Nutrient Removal	Y	1,2,6,7,10,11, 12,13		Large floodplain wetland of the South Branch of the Ashuelot River with dense vegetation and seasonal areas of deeper water with long retention times provides significant opportunity for nutrient removal.					
-	Production Export	Y	1,2,4,6,7,8,10,12,1 3		Large floodplain wetland provides food source for wildlife and detritus development.					
m	Sediment/Shoreline Stabilization	N	2,3,4		Portions of the wetland likely forms the bank of the South Branch of the Ashuelot River outside of the ROW, north of the project but not confirmed during field review.					
2	Wildlife Habitat	Y	2,5,6,7,8,13,14,16, 17,18,19,20,21		Wetland is part of a complex of floodplain wetlands of the South Branch of the Ashuelot River and is suitable habitat for a range of wetland-dependent wildlife including wood turtle (NH Species of Concern) and contributes to suitable of the Ashuelot River as habitat for dwarf wedgemussel (Federally and State Endangered).					
A	Recreation	N	3,5		Unlikely to be used for public recreation.					
-	Educational/Scientific Value	N	1,5,11		Accessible via Causeway Road but offers little parking for use as an educational site.					
*	Uniqueness/Heritage	Y	7,11,12,13,15,17,1 8,22,26,27,29,30	Ø	Wetland contains suitable habitat for wood turtle and archaeologically sensitive areas, provides many functional values, and is part of an overall unique complex of floodplain wetlands associated with the Ashuelot River and South Branch of the Ashuelot River system.					
 	Visual Quality/Aesthetics	N	1,3,4,5,8,9,10,11		Provides some views containing a variety of wetland classes and vegetation communities and is accessible via Causeway Road, but unlikely to be accessed much by the public.					
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.					
Other (Ec	ological Integrity Score = 8.1)	Y								

						-	Wetland ID Lat/Long:	SW1.3 Please see Attac Plans	nment G – Proje	ect
Total area of wetland?	>14,018 sf Human n	nade? No	Is wetland part of a wildlife corridor?	or a "habitat	t Island"?		Prepared by:	Benjamin Griffith Elizabeth Olliver	Date 07/3	31/24
Adjacent land use	Utility ROW, forest, re	sidential propert	ies Distance to nearest roadway or othe	r development	10 feet	_	2.8	imber A	ea 1,326 sf	
Dominant wetland systems pr	esent PSS1E (100	%)	Contiguous und	leveloped buffer zone pro	esent No		Evaluation ba	ased on:		<u> </u>
Is the wetland a separate hydr How many tributaries contrib	-	No 1	If not, where does the wetland lie in the of Wildlife & vegetation diversity/abundance	0	Mid	-	*	(F I wetland delineation Y_X_N	eld X	

Function/Value		Suitable?	Rationale (Reference #)	Principal?	Comments
	Groundwater Recharge/Discharge	Y	2,3,7,15		Located in a GA2 groundwater classified area, with signs of variable water levels.
	Floodflow Alteration	Y	1,5,6,7,8,9,10.13,1 4,17,18		In 100-year floodplain of Ashuelot and South Branch of the Ashuelot Rivers and borders the South Branch of the Ashuelot River outside of the ROW based on aerial imagery. Also receives surface water runoff from the surrounding uplands that include an existing gravel access road off the end of Causeway Road.
-	Fish and Shellfish Habitat	Y	1,7,14		Wetland is associated with the South Branch of the Ashuelot River (borders it outside of the ROW) and contributes to the suitability of the river as fish/shellfish habitat.
×	Sediment/Toxicant Retention	Y	1,5,6,10,12,14,16	V	Wetland likely detains sediment sourced from riverine floods and from surface water runoff from the existing gravel access road that occurs directly adjacent to a small portion of this wetland.
	Nutrient Removal	Y	1,2,6,7,10,11, 12,13		Large floodplain wetland of the South Branch of the Ashuelot River with dense vegetation and seasonal areas of deeper water with long retention times provides significant opportunity for nutrient removal.
-	Production Export	Y	1,2,4,6,7,8,10,12,1 3		Large floodplain wetland provides food source for wildlife and detritus development.
m	Sediment/Shoreline Stabilization	N	2,3,4		Portions of the wetland likely forms the bank of the South Branch of the Ashuelot River outside of the ROW, east of the project but not confirmed during field review.
2	Wildlife Habitat	Y	2,5,6,7,8,13,14,16, 18,19,20,21	Z	Wetland is part of a complex of floodplain wetlands of the South Branch of the Ashuelot River and is suitable habitat for a range of wildlife including wood turtle (NH Species of Concern) and contributes to suitable of the Ashuelot River as habitat for dwarf wedgemussel (Federally and State Endangered).
A	Recreation	N	3,5		Unlikely to be used for public recreation.
-	Educational/Scientific Value	N	1,5,11		Accessible via Causeway Road but offers little parking for use as an educational site.
*	Uniqueness/Heritage	Y	4,6,7,11,12,13,15, 17,18,22,26,27,29, 30		Wetland contains suitable habitat for wood turtle and archaeologically sensitive areas, provides many functional values, and is part of an overall unique complex of floodplain wetlands associated with the Ashuelot River and South Branch of the Ashuelot River system.
\Leftrightarrow	Visual Quality/Aesthetics	N	1,3,4,5,8,9,10,11		Provides some views containing a variety of wetland classes and vegetation communities and is accessible via Causeway Road, but unlikely to be accessed much by the public.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 9.5)	Y			
		-^			

		Wetland ID SW2.1 Lat/Long: Please see Attachment G – Project Plans
Total area of wetland? >17,724 sf Human	made? No Is wetland part of a wildlife corridor?	Prepared Benjamin Griffith Date 07/31/24 by: Elizabeth Olliver 07/31/24
Adjacent land use Utility ROW, forest, r	residential properties Distance to nearest roadway or other development 10 feet	Wetland Impact:
	Contiguous undeveloped buffer zone present No	Type Timber Area 3,280 sf matting
		Evaluation based on:
Is the wetland a separate hydraulic system?	No If not, where does the wetland lie in the drainage basin Mid	Office X Field X
How many tributaries contribute to the wetland?	1 Wildlife & vegetation diversity/abundance (see attached list)	Corps manual wetland delineation completed? Y X N

Function/Value		Suitable?	Rationale (Reference #)	Principal?	Comments	
<u> </u>	Groundwater Recharge/Discharge	Y	2,3,7,15		Located in a GA2 groundwater classified area, with signs of variable water levels.	
	Floodflow Alteration	Y	1,5,6,7,8,9,10.13,1 4,17,18	Ø	In 100-year floodplain of Ashuelot and South Branch of the Ashuelot Rivers and borders the South Branch of the Ashuelot River outside of the ROW based on aerial imagery.	
-	Fish and Shellfish Habitat	Y	1,7,14		Wetland is associated with the South Branch of the Ashuelot River (borders it outside of the ROW) and contributes to the suitability of the river as fish/shellfish habitat.	
X	Sediment/Toxicant Retention	Y	1,5,6,10,12,14,16		Wetland likely detains sediment sourced from riverine floods.	
	Nutrient Removal	Y	1,2,6,7,10,11, 12,13	Ø	Large floodplain wetland of the South Branch of the Ashuelot River with dense vegetation and seasonal areas of deeper water with long retention times provides significant opportunity for nutrient removal.	
	Production Export	Y	1,2,4,6,7,8,10,12,1 3	0	Large floodplain wetland provides food source for wildlife and detritus development.	
m	Sediment/Shoreline Stabilization	N	2,3,4		Portions of the wetland likely forms the bank of the South Branch of the Ashuelot River outside of the ROW east of the project but not confirmed during field review.	
2	Wildlife Habitat	Y	2,5,6,7,8,13,14,16, 18,19,20,21	Ø	Wetland is part of a complex of floodplain wetlands of the South Branch of the Ashuelot River and is suitable habitat for a range of wetland-dependent wildlife including wood turtle (NH Species of Concern). Pond provides suitable amphibian habitat.	
Æ	Recreation	N	3,5		Unlikely to be used for public recreation.	
4	Educational/Scientific Value	N	1,5,11	D	Accessible via Causeway Road but offers little parking for use as an educational site.	
*	Uniqueness/Heritage	Y	4,6,7,11,12,13,15, 17,18,22,26,27,29, 30		Wetland contains suitable habitat for wood turtle and archaeologically sensitive areas, provides many functional values, and is part of an overall unique complex of floodplain wetlands associated with the Ashuelot River and South Branch of the Ashuelot River system.	
*	Visual Quality/Aesthetics	N	1,3,4,5,8,9,10,11		Provides some views containing a variety of wetland classes and vegetation communities and is accessible via Causeway Road, but unlikely to be accessed much by the public.	
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.	
Other (Ec	ological Integrity Score = 9.5)	Y				

						Wetland ID	SW2	
	> 90.001 -f - Ham	a mada Di Ma	Teorette dan de la 1940 e continue.		1/10	Lat/Long:	Please see Attach Plans	ment G – Project
Total area of wetland?	>89,991 sf Huma	an made? No	Is wetland part of a wildlife corridor?	or a "habitat islan	.d"? □	Prepared by:	Benjamin Griffith I Elizabeth Olliver	Date 07/31/24, 10/30/24
Adjacent land use	Utility ROW, fores	t, residential, gravel j	bit Distance to nearest roadway or oth	er development 1() feet	Wetland Impa	act:	·····
						<i></i>	imber Area	25,801 sf
Dominant wetland systems	present PSS1E ((60%)/PEM1E (34%)	/PFO1E (7%) Contiguous und	developed buffer zone present	No	m	natting	
						Evaluation ba	ased on:	
Is the wetland a separate hy	draulic system?	No	If not, where does the wetland lie in the	drainage basin	Mid	Office X	General Field	х
How many tributaries contr	ibute to the wetland?	1	Wildlife & vegetation diversity/abundan	ce (see attached list)		1	I wetland delineation Y_X_N	

Function/Value		Suitable?	Rationale (Reference #)	Principal?	Comments
V 0	Groundwater Recharge/Discharge	Y	2,3,7,15		Located in a GA2 groundwater classified area, with signs of variable water levels.
F	Floodflow Alteration	Y	1,5,6,7,8,9,10.13,1 4,17,18	Z	In 100-year floodplain of Ashuelot and South Branch of the Ashuelot Rivers and borders the South Branch of the Ashuelot River. Also receives surface water runoff from the surrounding uplands that include a gravel pit operation east of the utility ROW.
F	ish and Shellfish Habitat	Y	1,3,4,5,6,7,8,10,12 ,14,16,17	Z	Wetland is associated with the South Branch of the Ashuelot River and contributes to the suitability of the river as fish/shellfish habitat.
s s	Sediment/Toxicant Retention	Y	1,5,6,10,12,14,16		Wetland likely detains sediment sourced from riverine flood flows and from surface water runoff from adjacent uplands which includes a gravel pit operation east of the ROW containing Strs. 101 and 102.
N N	Nutrient Removal	Y	1,2,6,7,10,11,12,1 3	Ø	Large floodplain wetland of the South Branch of the Ashuelot River with dense vegetation and seasonal areas of deeper water with long retention times provides significant opportunity for nutrient removal.
P	Production Export	Y	1,2,4,6,7,8,10,12,1 3		Large floodplain wetland provides significant food source for wildlife and detritus development.
S S	Sediment/Shoreline Stabilization	Y	2,3,4,6,7,9,12,13	Ø	Wetland forms the banks of the South Branch of the Ashuelot River.
	Wildlife Habitat	Y	2,5,6,7,8,13,14,16, 18,19,20,21	2	Wetland is part of a complex of floodplain wetlands of the South Branch of the Ashuelot River and is suitable habitat for a range of wetland-dependent wildlife including wood turtle (NH Species of Concern) and contributes to the suitability of the Ashuelot River as habitat for dwarf wedgemussel (Federally and State Endangered).
A	Recreation	N	3,5		Unlikely to be used for public recreation.
	Educational/Scientific Value	N	1,5,11		Northern portion of wetland is accessible via Causeway Road but offers little parking for use as an educational site. No accessibility to the southern portion due to active gravel pit operations.
× (Uniqueness/Heritage	Y	4,7,11,12,13,14,15 ,17,18,22,26,27,29 ,30		Wetland contains suitable habitat for wood turtle and archaeologically sensitive areas, provides many functional values, and is part of an overall unique complex of floodplain wetlands associated with the Ashuelot River and South Branch of the Ashuelot River system.
	Visual Quality/Aesthetics	Y	1,3,4,5,8,9,10,11		Provides views containing a variety of wetland classes and vegetation communities from multiple good vantage points, particularly on the northern side of the river, but unlikely to be accessed much by the public.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
	gical Integrity Score = 7.7)	Y			

Total area of wetland? 391 sf Huma	n made? No Is	wetland part of a wildlife corridor?	or a "habit	tat island"? 🛛 🗆	Wetland ID Lat/Long:	SW2-E1 Please see Attachment G – Project Plans
Adjacent land use Utility ROW, forest, gravel pit Distance to nearest roadway or other development 100 feet						Elizabeth Olliver Date 10/31/24
Dominant wetland systems present PSS1E (00%)	Contiguous und	leveloped buffer zone p	oresent No	Wetland Im Type	pact: None Area N/A
Is the wetland a separate hydraulic system?	Yes If	f not, where does the wetland lie in the	irainage basin	N/A	Evaluation I Office	pased on: X Field X
How many tributaries contribute to the wetland?	N/A V	Vildlife & vegetation diversity/abundan	ce (see attached list)		Corps manu completed?	al wetland delineation

Function/	Value	Suitable?	Rationale (Reference #)	ce #)	Comments
T	Groundwater Recharge/Discharge	Y	2,3,15		Located in a GA2 groundwater classified area, with signs of variable water levels. However, every small in area, so does not capture and infiltrate large amounts of water potentially.
	Floodflow Alteration	Y	3,5,7,8,9,10		In 100-year floodplain of Ashuelot River but mostly serves to capture surface water runoff from adjacent uplands in the utility ROW. Also receives surface water runoff from the surrounding uplands that include a gravel pit operation east of the utility ROW.
	Fish and Shellfish Habitat	N			No associated waterbody/watercourse.
X	Sediment/Toxicant Retention	Y	1,5		Wetland likely detains sediment sourced from surrounding uplands, which includes a gravel pit operation east of the ROW.
	Nutrient Removal	N	3	0	Relatively small and only moderate vegetation density limits nutrient uptake/attenuation functionality.
-	Production Export	Y	1,12		Relatively small wildlife food source.
un	Sediment/Shoreline Stabilization	N	2,3		No associated waterbody/watercourse.
20	Wildlife Habitat	Y	5,7,8		Small size limits its functionality as wildlife habitat, but provides some cover.
A	Recreation	N			Too small for any kind of wetland recreation.
-	Educational/Scientific Value	N			Not accessible due to active gravel pit operations along eastern side of ROW.
*	Uniqueness/Heritage	N	29		Small depressional wetland, likely an old borrow pit, along the edge of the ROW. Although does occur in a archaeologically sensitive area.
	Visual Quality/Aesthetics	N	4		Not visible unless you're right on the very edge of it and does not provide any kind of unique viewing.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Eco	ological Integrity Score = 7.7)	Y			

Total area of wetland?	>5,162 sf Human	made? No	Is wetland part of a wildlife corridor?	or a "habitat islar	nd"? 🗆	1	Wetland ID Lat/Long:	SW2-E2 Please see Attach Plans	ment G – Project
Adjacent land use Utility ROW, forest, gravel pit Distance to nearest roadway or other development 100 feet						Prepared by:	Elizabeth Olliver	Date 10/31/24	
Dominant wetland systems present PSS1E (100%) Contiguous undeveloped buffer zone present No							Wetland Imp		
								one Are	a N/A
Is the wetland a separate hy	ydraulic system?	No	If not, where does the wetland lie in the drainage	ge basin	Mid		Evaluation ba	ased on:	
		-	-			- 1	Office)	Fie	eld X
How many tributaries cont	tribute to the wetland?	1	Wildlife & vegetation diversity/abundance (see	e attached list)			Corps manua	l wetland delineation	n
						1	completed?	Y <u>X</u> N_	

Function	/Value	Suitable?	Rationale (Reference #)	Principal?	Comments				
Ţ	Groundwater Recharge/Discharge	Y	2,3,7,15		Located in a GA2 groundwater classified area, with signs of variable water levels.				
	Floodflow Alteration	Y	3,5,7,8,9,10	Ø	In 100-year floodplain of the South Branch of the Ashuelot River and borders the river outside of the ROW to the west. Also receives surface water runoff from the surrounding uplands that include a gravel pit operation east of the utility ROW.				
-	Fish and Shellfish Habitat	Y	1,3,4,5,6,7,8,10,12 ,14,16,17		Wetland is associated with the South Branch of the Ashuelot River and contributes to the suitability of the river as fish/shellfish habitat.				
X	Sediment/Toxicant Retention	Y	1,5,6,10,12,14,16		Wetland likely detains sediment sourced from riverine flood flows and from surface water runoff from adjacent uplands which includes a gravel pit operation east of the ROW.				
	Nutrient Removal	Y	1,2,6,7,10,11, 12,13	Ø	Floodplain wetland of the South Branch of the Ashuelot River with dense vegetation and seasonal areas of ponded water provides significant opportunity for nutrient removal.				
-	Production Export	Y	1,2,4,6,7,8,10,12,1 3		Large floodplain wetland provides food source for wildlife and detritus development.				
m	Sediment/Shoreline Stabilization	N	2,3,4		Portions of the wetland likely forms the bank of the South Branch of the Ashuelot River outside of the ROW, west of the project but not confirmed during field review.				
2	Wildlife Habitat	Y	2,5,6,7,8,13,14,16, 18,19,20,21		Wetland is part of a complex of floodplain wetlands of the South Branch of the Ashuelot River and is suitable habitat for a range of wetland-dependent wildlife including wood turtle (NH Species of Concern) and contributes to the suitability of the Ashuelot River as habitat for dwarf wedgemussel (Federally and State Endangered).				
A	Recreation	N	3,5		Unlikely to be used for public recreation.				
-	Educational/Scientific Value	N	1,5,11		Little to no accessibility due to active gravel pit operations.				
*	Uniqueness/Heritage	Y	7,11,12,13,17,18,2 2,26,27,29,30		Wetland contains suitable habitat for wood turtle and archaeologically sensitive areas, provides many functional values, and is part of an overall unique complex of floodplain wetlands associated with the Ashuelot River and South Branch of the Ashuelot River system.				
	Visual Quality/Aesthetics	N	1,3,4,5,6,8,11		Provides views containing a variety of wetland classes and vegetation communities from certain vantage points. However, access to those views is hindered by the gravel pit operations.				
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.				
Other (Ed	cological Integrity Score = 7.7)	Y							

 Other (Ecological Integrity Score = 7.7)
 Y

 Notes: Wetland extends beyond the utility ROW. The total area provided is the total area reviewed.

Total area of wetland?	>13,241 sf Human	made? No	Is wetland part of a wildlife corridor?	Ø or a "habitat is	land"?		Wetland ID Lat/Long:	SW2.2 Please see Attach Plans	iment G – I	roject
Adjacent land use	Adjacent land use Utility ROW, forest, gravel pit Distance to nearest roadway or other development 100 feet					_	Prepared by:	Elizabeth Olliver	Date	10/31/24
Dominant wetland systems present PSS1E (100%) Contiguous undeveloped buffer zone present No							Wetland Imp	act:	-	
Dominant wenand Systems				veroped outfor zone press		-	Type N	one Ar	ea N/A	
Is the wetland a separate h	ydraulic system?	No	If not, where does the wetland lie in the dr	ainage basin	Mid		Evaluation ba	used on:		
•			_	-		-	Office X	Fi	eld X	
How many tributaries contribute to the wetland? 1			Wildlife & vegetation diversity/abundance (see attached list)				Corps manua	l wetland delineatio	n	
			_				completed?	Y_X_N		

Function/	Walue	Suitable?	Rationale (Reference #)	Principal?	Comments
T	Groundwater Recharge/Discharge	Y	2,3,7,15		Located in a GA2 groundwater classified area, with signs of variable water levels.
~~~~~	Floodflow Alteration	Y	3,5,7,8,9,10		In 100-year floodplain of the South Branch of the Ashuelot River and borders the river outside of the ROW to the west. Also receives surface water runoff from the surrounding uplands that include a gravel pit operation east of the utility ROW.
-	Fish and Shellfish Habitat	Y	1,3,4,5,6,7,8,10,12 ,14,16,17		Wetland is associated with the South Branch of the Ashuelot River and contributes to the suitability of the river as fish/shellfish habitat.
×	Sediment/Toxicant Retention	Y	1,5,6,10,12,14,16		Wetland likely detains sediment sourced from riverine flood flows and from surface water runoff from adjacent uplands which includes a gravel pit operation east of the ROW.
	Nutrient Removal	Y	1,2,6,7,10,11, 12,13		Floodplain wetland of the South Branch of the Ashuelot River with dense vegetation and seasonal areas of ponded water provides significant opportunity for nutrient removal.
-	Production Export	Y	1,2,4,6,7,8,10,12,1 3		Large floodplain wetland provides food source for wildlife and detritus development.
m	Sediment/Shoreline Stabilization	N	2,3,4		Portions of the wetland likely forms the bank of the South Branch of the Ashuelot River outside of the ROW, west of the project but not confirmed during field review.
2	Wildlife Habitat	Y	2,5,6,7,8,13,14,16, 18,19,20,21	Ø	Wetland is part of a complex of floodplain wetlands of the South Branch of the Ashuelot River and is suitable habitat for a range of wetland-dependent wildlife including wood turtle (NH Species of Concern) and contributes to the suitability of the Ashuelot River as habitat for dwarf wedgemussel (Federally and State Endangered).
A	Recreation	N	3,5		Unlikely to be used for public recreation.
-	Educational/Scientific Value	N	1,5,11		Little to no accessibility due to active gravel pit operations.
*	Uniqueness/Heritage	Y	7,11,12,13,17,18,2 2,26,27,29,30		Wetland contains suitable habitat for wood turtle and archaeologically sensitive areas, provides many functional values, and is part of an overall unique complex of floodplain wetlands associated with the Ashuelot River and South Branch of the Ashuelot River system.
	Visual Quality/Aesthetics	N	1,3,4,5,6,8,11		Provides views containing a variety of wetland classes and vegetation communities from certain vantage points. However, access to those views is hindered by the gravel pit operations.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 7.7)	Y			

Total area of wetland? >30,067 sf Human made? No Is wetland part of a wildlife corridor?  or a "habitat island"?  Lat/Lor	the second se
Adjacent land use       Utility ROW, forest, low density residenti. Distance to nearest roadway or other development       10 feet       Prepare by:	Benjamin Grif Elizabeth Olliv
Contiguous undeveloped buffer zone Wetland	Impact:
Dominant wetland systems present PSS1E (100%) present No	Timber matting
Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin N/A	on based on:
Office	
How many tributaries contribute to the wetland? N/A Wildlife & vegetation diversity/abundance (see attached list)	anual wetland deli

Lat/Long:	Please see A Plans	Please see Attachment G – Project Plans						
Prepared by:	Benjamin Gri Elizabeth Oll		ite	08/07/24				
Wetland Imp	act:		-	-				
21	mber atting	Area	2,24	l5 sf				
Evaluation b	ased on:							
Office X		Field	х					
Corps manua	l wetland del	ineation						
completed?	Y X	N						

Function/	Value	Suitable?	Suitable? Rationale Principa (Reference #)		Comments
<u>_</u>	Groundwater Recharge/Discharge	Y	2,15		Signs of variable water levels in the bottom portion.
	Floodflow Alteration	Y	5,6,18	Ø	Wetland is largely on slope uphill of roadway, but lower part does detain some surface water runoff, slowing runoff onto the road.
-	Fish and Shellfish Habitat	N		0	No associated waterbody/watercourse.
X	Sediment/Toxicant Retention	Y	1		Existing gravel utility roads and work pads upslope are a source of sediment in surface water runoff.
	Nutrient Removal	Y	3,8,9,10,11		Wetland has sufficient vegetation to utilize nutrients, but no apparent excess nutrient source upslope.
	Production Export	Y	1,4,7,8,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds and nectar-gathering insects.
m	Sediment/Shoreline Stabilization	N	2,3		No associated waterbody/watercourse.
2	Wildlife Habitat	Y	5,7,8,13,14,17		Part of a wildlife corridor and possibly provides some habitat for transient amphibians and songbirds, but provides little habitat for specifically wetland dependent species.
A	Recreation	N	3,4		Relatively small wetland with some potential for hunting/hiking in the area, but not really any wetland dependent recreational activities.
-	Educational/Scientific Value	N			No real parking and not really a particularly interesting wetland to serve as a outdoor classroom or research site.
*	Uniqueness/Heritage	N	17,23		Contains a stone wall, but no other unique/heritage features.
0	Visual Quality/Aesthetics	Y	3,9,10,11,12		Wetland is viewable from the roadway and existing gravel access road.
ES	Endangered Species Habitat	N		D	No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 7.7)	Y			

				L	Wetland ID .at/Long:	SW8 Please see Attachmer Plans	nt G – Project
Total area of wetland? >79,076 sf Human	made? No	Is wetland part of a wildlife corridor?	sland"?	b	Prepared by:	Elizabeth Olliver	Pate 08/07/24
Adjacent land use Utility ROW, forest, la	ow density reside	ntial Distance to nearest roadway or other development	>500 ft		Vetland Imp Type 7	pact: Fimber Area	7,403 sf
Dominant wetland systems present PSS1E (10	0%)	Contiguous undeveloped buffer zone prese	ent Yes		<u></u>	natting	
					Evaluation b		
Is the wetland a separate hydraulic system?	Yes	If not, where does the wetland lie in the drainage basin	N/A		Office	X Field	x
How many tributaries contribute to the wetland?	N/A	Wildlife & vegetation diversity/abundance (see attached list)				al wetland delineation Y_X_N	

Function/	/Value	Suitable?	Rationale (Reference #)	Principal?	Comments
T	Groundwater Recharge/Discharge	Y	2,15		Signs of variable water levels in small ponded areas.
	Floodflow Alteration	Y	5,6,7,9,18		Gently sloping wetland with small depressional areas that detain water.
-	Fish and Shellfish Habitat	N			No associated waterbody/watercourse.
X	Sediment/Toxicant Retention	Y	1		Existing rough access road adjacent to the wetland is a small source of sediment
	Nutrient Removal	Y	3,8,9,10,11		Wetland has sufficient vegetation to utilize nutrients, but no apparent excess nutrient source upslope.
-	Production Export	Y	1,4,7,8,12	Ø	Large population of flowering and seed generating plants that serve as food source for small mammals, birds, and nectar-gathering insects.
wi	Sediment/Shoreline Stabilization	N	2,3		No associated waterbody/watercourse.
2	Wildlife Habitat	Y	3,4,5,7,8,13,14,15, 16,17,19,20,21		Part of a wildlife corridor and provides habitat for songbirds and possibly cover for transient amphibians.
A	Recreation	N	3,4		Some potential for hunting/hiking in the area, but not really any wetland dependent recreational activities.
-	Educational/Scientific Value	N			No real parking and not really a particularly interesting wetland to serve as a outdoor classroom or research site.
*	Uniqueness/Heritage	N	17,23		No unique/heritage characteristics.
2	Visual Quality/Aesthetics	Y	3,9,10,11,12		Wetland is viewable from the roadway and existing access road adjacent to the wetland.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
	ological Integrity Score = 10) etland extends beyond the utility BC	Y			* Refer to backup list of numbered considerations

			_	Wetland ID Lat/Long:	SW9 Please see Attachmer Plans	nt G - Project
Total area of wetland? >14,626 sf	Human made? No	Is wetland part of a wildlife corridor?  or a "habitat isl	land"?	Prepared by:	Benjamin Griffith D Elizabeth Olliver	Pate 08/07/24
Adjacent land use Utility RO	W, forest, low density reside	ntial Distance to nearest roadway or other development	>500 ft	Wetland Impa	ict:	
Dominant wetland systems present	PSS1E (100%)	Contiguous undeveloped buffer zone preser		- L	mber Area atting sed on:	2,908 sf
Is the wetland a separate hydraulic syste	m? Yes	If not, where does the wetland lie in the drainage basin	N/A	Office X	Field	х
How many tributaries contribute to the v	vetland? N/A	Wildlife & vegetation diversity/abundance (see attached list)			wetland delineation Y X N	

Function	Walue	Suitable?	Rationale (Reference #)	Principal?	Comments
Ţ	Groundwater Recharge/Discharge	Y	2,8,13,15		Signs of variable water levels in small ponded areas.
	Floodflow Alteration	Y	1,2,5,6,7,9,18		Gently sloping wetland with small depressional areas that detain water.
-	Fish and Shellfish Habitat	N			No associated waterbody/watercourse.
X	Sediment/Toxicant Retention	N		0	No apparent sediment sources upslope of wetland.
	Nutrient Removal	Y	1,8,9,10,11		Wetland has sufficient vegetation to utilize nutrients, but no apparent excess nutrient source upslope.
	Production Export	Y	1,4,7,8,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds, and nectar-gathering insects.
wi	Sediment/Shoreline Stabilization	N	2		No associated waterbody/watercourse.
2-1	Wildlife Habitat	Y	3,4,5,7,8,13,14,15, 16,17,19,20,21		Part of a wildlife corridor and provides habitat for songbirds and possibly cover for transient amphibians.
Æ	Recreation	N	3,4		Some potential for hunting/hiking in the area, but not really any wetland dependent recreational activities.
-	Educational/Scientific Value	N			No real parking and not really a particularly interesting wetland to serve as a outdoor classroom or research site.
*	Uniqueness/Heritage	N	17		No unique/heritage characteristics.
	Visual Quality/Aesthetics	Y	10,11,12		Wetland provides an attractive view from surrounding uplands, though it is a bit of a walk from the roadway.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	cological Integrity Score = 10)	Y			

				1.1		_	Wetland II Lat/Long:		ee Attachn	nent G – Project
Total area of wetland?	>16,555 sf Human	made? No	Is wetland part of a wildlife corridor?	⊠ ora"h 	abitat island"?		Prepared by:	Benjamin G Elizabeth Ol	-	ate 08/07/24
Adjacent land use	Utility ROW, forest,	low density resider	Distance to nearest roadway or othe	t development	>500 ft	-	Wetland Ir Type	npact: Timber matting	Area	2,066 sf
Dominant wetland systems	present PSS1E (10	00%)	Contiguous unde	eveloped buffer zo	one present Yes	-	Evaluation		-	
Is the wetland a separate hyperate hype	draulic system?	Yes	If not, where does the wetland lie in the di	rainage basin	N/A	_		X ual wetland deli	Field	<u>x</u>
How many tributaries contri	bute to the wetland?	N/A	Wildlife & vegetation diversity/abundanc	e (see attached list	)		-	? Y <u>X</u>		

Function/	Value	Suitable?	Rationale (Reference #)	Principal?	Comments
T	Groundwater Recharge/Discharge	N	2		No visible indicators of recharge/discharge.
www	Floodflow Alteration	Y	1,2,5,6,8,9,18		Flat area on the slope that could detain some surface water runoff.
-	Fish and Shellfish Habitat	N			No associated waterbody/watercourse.
×	Sediment/Toxicant Retention	N			No apparent sediment sources upslope of wetland.
	Nutrient Removal	Y	1,8,9,10,11		Wetland has sufficient vegetation to utilize nutrients, but no apparent excess nutrient source upslope.
	Production Export	Y	1,4,7,8,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds and nectar-gathering insects.
www.	Sediment/Shoreline Stabilization	N	2		No associated waterbody/watercourse.
2	Wildlife Habitat	Y	3,4,5,7,8,13,14,15, 16,17,19,20,21		Far from road/development and part of a wildlife corridor the utility ROW provides. Connects to forested areas outside the ROW.
Æ	Recreation	N			Some potential for hunting/hiking in the area, but not really any wetland dependent recreational activities.
	Educational/Scientific Value	N			No real parking and not really a particularly interesting wetland to serve as a outdoor classroom or research site.
*	Uniqueness/Heritage	N	17		No unique/heritage characteristics.
	Visual Quality/Aesthetics	Y	10,11,12		Wetland provides an attractive view from surrounding uplands, though it is a bit of a walk from the roadway.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Eco	ological Integrity Score = 10)	Y			

					_	Wetland ID Lat/Long:	SW11 Please see Atta Plans	ichment G	- Project
Total area of wetland?	5,133 sf Hum	an made? No	Is wetland part of a wildlife corridor?	I or a "habitat island"?		Prepared by:	Elizabeth Olliver	Date	10/31/24
Adjacent land use	Utility ROW, fores	t, low density resid	ential Distance to nearest roadway or other deve	elopment >500 ft		Wetland Impa Type Ti		Area 7	'9 sf
Dominant wetland systems	present PSSIE	(100%)	Contiguous undevelop	bed buffer zone present Yes	5	- 1	atting	_	
Is the wetland a separate hy-	draulic system?	Yes	If not, where does the wetland lie in the drainag	ge basin N/A		Office X		Field >	<u> </u>
How many tributaries contri	ibute to the wetland?	N/A	Wildlife & vegetation diversity/abundance (see	attached list)			l wetland delinea Y <u>X</u> N_		

Function/	Value	Suitable?	Rationale (Reference #)	Principal?	Comments
T	Groundwater Recharge/Discharge	N	2,6		No visible indicators of recharge/discharge. Underlain by bedrock.
~~~~~	Floodflow Alteration	Y	1,2,3,5,6,8,9,18		Flat area on the slope that could detain some surface water runoff.
-	Fish and Shellfish Habitat	N			No associated waterbody/watercourse.
X	Sediment/Toxicant Retention	Y	1		Small sediment source upslope around existing utility pole
	Nutrient Removal	Y	1,3,8,9,10,11		Wetland has sufficient vegetation to utilize nutrients, but no apparent excess nutrient source upslope.
-	Production Export	Y	1,4,7,8,12		Large population of flowering and seed generating plants that serve as food source for small mammals, birds and nectar-gathering insects.
and a start	Sediment/Shoreline Stabilization	N	2,3		No associated waterbody/watercourse.
2	Wildlife Habitat	Y	3,4,5,7,8,13,14,15, 16,17,19,20,21	Ø	Far from road/development and part of a wildlife corridor the utility ROW provides. Connects to forested areas outside the ROW.
A	Recreation	N			Some potential for hunting/hiking in the area, but not really any wetland dependent recreational activities.
4	Educational/Scientific Value	N			No real parking and not really a particularly interesting wetland to serve as a outdoor classroom or research site.
*	Uniqueness/Heritage	N	17	a	No unique/heritage characteristics.
3	Visual Quality/Aesthetics	Y	10,11,12		Wetland provides an attractive view from surrounding uplands, though it is a bit of a walk from the roadway
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 10)	Y			

* Refer to backup list of numbered considerations.

Notes:

					-	Wetland II Lat/Long:	- Children and Chi	Please see Attachment	
Total area of wetland?	>1,681 sf Human ma	ide? No	Is wetland part of a wildlife corridor?	or a "habitat island"?		Prepared by:	Benjamin Grif Elizabeth Olliv		e 08/07/24
Adjacent land use	Utility ROW, road, low	ensity resider	tial Distance to nearest roadway or other devel	opment 10 ft		Wetland Ir	npact:		
,			Contiguous undevelop		-	Туре	Timber matting	Area	137 sf
Dominant wetland systems	present FEWIE (100	/0)	Contiguous undevelop	su bullel zone present 140		Evaluation	based on:	-	
Is the wetland a separate hy	draulic system?	Yes	If not, where does the wetland lie in the drainage	e basin N/A		Office	X	Field	х
						Corps man	ual wetland delin	eation	
How many tributaries contri	bute to the wetland?	N/A	Wildlife & vegetation diversity/abundance (see	attached list)		completed	YX N	1	

Function	/Value	Suitable?	Rationale (Reference #)	Principal?	Comments
Ţ	Groundwater Recharge/Discharge	N			Narrow drainage ditch with no evidence of interfacing with groundwater.
	Floodflow Alteration	Y	3,4,18		Able to absorb some flood flows from impervious road surface adjacent to it.
-	Fish and Shellfish Habitat	N			No associated waterbody/watercourse.
X	Sediment/Toxicant Retention	Y	1,2		Able to detain sediments from road surface runoff.
	Nutrient Removal	Y	4		Able to detain sediments from road surface runoff.
-	Production Export	N			Drainage ditch provides limited wildlife food sources.
m	Sediment/Shoreline Stabilization	N	3		No associated waterbody/watercourse.
2	Wildlife Habitat	N			Proximity to roadway makes this wetland not a great place for wildlife.
A	Recreation	N			Drainage ditch provides no recreational opportunities.
1	Educational/Scientific Value	N			Drainage ditches provides no educational or scientific study potential.
*	Uniqueness/Heritage	N			No unique/heritage characteristics.
	Visual Quality/Aesthetics	N			Wetland does not provide attractive or distinctly different views compared to surrounding uplands.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	cological Integrity Score = 3.7)	N			

Total area of wetland?	128 sf Human	made? No	Is wetland part of a wildlife corridor?	or a "habitat	island"? 🗆	1	Wetland ID Lat/Long:	SWB1 Please see Attach Plans	ment G - Project
Adjacent land use Dominant wetland systems	Utility ROW, forest, lo present PSS1E (10			er development leveloped buffer zone pre:	100 ft sent Yes		Prepared by: Wetland Imp Type N	Benjamin Griffith Elizabeth Olliver act: one Art	Date 08/07/24
Is the wetland a separate hy	ydraulic system?	Yes	If not, where does the wetland lie in the d	Irainage basin	N/A		Evaluation by Office	ased on:	eld x
How many tributaries cont	ribute to the wetland?	N/A	Wildlife & vegetation diversity/abundance	ce (see attached list)			Corps manua completed?	l wetland delineatio	

Function/	Value	Suitable?	Rationale (Reference #)	Principal?	Comments
V	Groundwater Recharge/Discharge	N			Small depressional wetland with no evidence of interfacing with groundwater.
www	Floodflow Alteration	Y	2,18		Small size limits its functionality for floodflow alteration/storage.
	Fish and Shellfish Habitat	N			No associated waterbody/watercourse.
X	Sediment/Toxicant Retention	N			No apparent sediment/toxicant sources upslope of this wetland.
	Nutrient Removal	N	8,9,11		Wetland has sufficient vegetation to utilize nutrients, but no apparent excess nutrient source upslope.
	Production Export	N	1		Very small wetland that is primarily a mosquito breeding location.
m .	Sediment/Shoreline Stabilization	N			No associated waterbody/watercourse.
2	Wildlife Habitat	Y	1,3,4,5,7,8,13,16		Small area of ponded water that could be good for salamanders/other amphibians. Confirmed to not be a vernal pool in spring 2025.
A	Recreation	N			Small size wetland provides no recreational opportunities.
-	Educational/Scientific Value	N			Provides no educational or scientific study potential.
*	Uniqueness/Heritage	N			No unique/heritage characteristics.
	Visual Quality/Aesthetics	N			Wetland does not provide attractive or distinctly different views compared to surrounding uplands.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	cological Integrity Score = 9)	Y			

	Wetland ID	SW23	
	Lat/Long:	Please see Attachmer Plans	t G – Project
Total area of wetland? >20,351 sf Human made? No Is wetland part of a wildlife corridor?	Prepared by:	Benjamin Griffith D Elizabeth Olliver	ate 08/14/24
Adjacent land use Utility ROW, forest, low density residential Distance to nearest roadway or other development 100 feet	Wetland Impa	act:	-
Dominant wetland systems present PSS1E (100%) Contiguous undeveloped buffer zone present No	m	mber Area atting and ole install	9,482 sf (T) 40 sf (P)
Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin Top	Evaluation ba	sed on;	
	Office X	Field	х
How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)	Corps manual	wetland delineation	-
	completed?	Y <u>X</u> N	

Function	/Value	Suitable?	Rationale (Reference #)	Principal?	Comments
T	Groundwater Recharge/Discharge	Y	2,3,5,7,10,11,13		Wetland discharges to an intermittent stream (SS5A).
	Floodflow Alteration	Y	2,5,6,7,8,9,13,18		Reduces flooding of downstream residential property.
-	Fish and Shellfish Habitat	N	8,17		No associated waterbody/watercourse.
X	Sediment/Toxicant Retention	N			No apparent sediment/toxicant sources upslope of this wetland.
	Nutrient Removal	N	8,9,11		Wetland has sufficient vegetation to utilize nutrients, but no apparent excess nutrient source upslope.
	Production Export	Y	1,7,10,12	Ø	False glossy buckthorn provides food sources for birds, small mammals, and nectar-gathering insects.
m	Sediment/Shoreline Stabilization	N	2		No associated waterbody/watercourse.
2	Wildlife Habitat	Y	4,5,6,7,8,13,17		Part of a wildlife corridor the utility ROW serves as and is a substantial food source for wildlife.
A	Recreation	N			No particular recreational opportunities.
-	Educational/Scientific Value	N			No particular opportunities for educational use or scientific study.
*	Uniqueness/Heritage	N	23		Stone wall is present.
	Visual Quality/Aesthetics	N	10,11,12		Not easily viewed from publicly accessible areas.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	cological Integrity Score = 5.4)	N			

Total area o	f wetland? 2,855 sf Human r	nade? No	Is wetland part of a	wildlife corric	or a "habitat island"?	see Attachment G – Project				
Adjacent land use Utility ROW, low density		nsity residenti	al Distance to ne	earest roadway		n Griffith Date 08/07/24 h Olliver				
Dominant v	vetland systems present PSS1E (10	0%)		Contiguou present	Is undeveloped buffer zone Type None No Evaluation based on: Office X	Area N/A				
	nd a separate hydraulic system?	No 1	-		in the drainage basin Bottom Corps manual wetland completed? Y X	d delineation				
	tributaries contribute to the wetland?				bundance (see attached list)					
Function/	Value	Suitable?	Rationale (Reference #)	Principal?	Comments					
Ţ	Groundwater Recharge/Discharge	Y	2,3,5,7,9,10,11,13		Wetland discharges to an intermittent stream (SS5A).					
	Floodflow Alteration	Y	7,8,9,10,11,13,15, 16,17,18	Ø	Reduces flooding of downstream residential property. Culvert is present at base of wetland.					
	Fish and Shellfish Habitat	N	8,17		Associated watercourse does not support fish.					
X	Sediment/Toxicant Retention	Y	1,2		Stream flow is slowed by wetland vegetation. Lawn area upslope of wetland is mowed and may be fertilized					
	Nutrient Removal	Y	3,4,8,9,10,11		Culvert at downstream end of wetland constricts stream flow and mowed and nutrients, which could be attenuated by the wetland.	fertilized lawn would mobilize				
-	Production Export	Y	1,4,7,8,10,12		Insects and birds using wetland, and stream is transporting materials out of we	tland.				
m	Sediment/Shoreline Stabilization	Y	2,3,4,6,9,12,13		Wetland is stabilizing small intermittent stream.					
2	Wildlife Habitat	Y	6,7,8,13,14,15,16, 17,20,21		Small patch of wildlife habitat and food source in proximity to larger wildlife	corridor of the utility ROW.				
A	Recreation	N			No particular recreational opportunities.					
4	Educational/Scientific Value	N	11	0	No particular opportunities for educational use or scientific study. Located clo	ose to private residence.				
*	Uniqueness/Heritage	N	2,18,19,30		No particular heritage/unique characteristics.					
	Visual Quality/Aesthetics	Y	3,6,10,11		Visually different from mowed upland directly next to it.					
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.					
Other (Ec Notes:	ological Integrity Score = 4)	N			* Refer to backup]	ist of numbered considerations.				

								_	Wetland I Lat/Long:		Attachmer	nt G – Project
Total area of wetland?	>8,084 sf	Human made?	No 1	is wetland part of a wildlife corridor?	<u> </u>	or a "habitat i	sland"?		Prepared by:	Benjamin G Elizabeth O	-	oate 08/07/24
Adjacent land use	Utility ROW,	road, low density	residentia	al Distance to nearest roadway or othe	r developr	nent	10 feet		Wetland I	1		
Dominant wetland systems	present PS	SIE (100%)	_	Contiguous unde	eveloped ł	ouffer zone pres	ent No	-	Туре	Timber matting	Area	1,178 sf
								-	Evaluation	n based on:		
Is the wetland a separate hy-	draulic system?	Yes	1	If not, where does the wetland lie in the d	rainage be	sin	Bottom		Office	х	Field	х
How many tributaries contra	ibute to the wet	land?	0	Wildlife & vegetation diversity/abundanc	e (see atta	ched list)		-	-	nual wetland del		

Function	/Value	Suitable?	Rationale (Reference #)	Principal?	Comments
Ţ	Groundwater Recharge/Discharge	Y	2,4,13		Spring at bottom edge of wetland
www	Floodflow Alteration	Y	3,4,5,6,8,9,18	Ø	Wetland receives surface water runoff from mowed lawn area above and impervious road adjacent to it.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1,2	R	Mowed area above wetland and road adjacent to it could be a source of sediments and nutrients.
	Nutrient Removal	Y	3,4,8,9,10,11		Mowed area and road could be sources of sediment and nutrients and wetland has sufficient vegetation density to utilize and attenuate excess nutrients.
-	Production Export	Y	1,4,7,8,12		Provides wildlife food sources, but location directly next to road could limit wildlife usage.
m	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	7,8,13,14,19,20,21		Proximity to road may limit wildlife usage.
A	Recreation	N			No particular recreational opportunities.
	Educational/Scientific Value	N		D	No particular opportunities for educational use or scientific study. Located close to private residence.
*	Uniqueness/Heritage	N			No particular heritage/unique characteristics.
***	Visual Quality/Aesthetics	N	10,11		Viewable from the road, but not visually remarkable.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	cological Integrity Score = 3.2)	N			

									Wetland ID	SW28.2		
Total area of wetland?	1,800 sf H	luman made?	No	Is wetland part of a wildlife corridor?	2	or a "habitat isl	and"?	[—] І	Lat/Long:	Please see Attachm Plans	ent G – F	Project
Adjacent land use	Utility ROW, s	and/gravel pit		Distance to nearest roadway or other	developn	nent _	>500 feet	_	Prepared by: Wetland Impa	Benjamin Griffith Elizabeth Olliver ct:	Date	08/07/24
Dominant wetland systems	present PSS	1E (100%)		Contiguous under	veloped b	uffer zone preser	nt Yes		Type No.	one Area	N/A	
Is the wetland a separate hy How many tributaries conta		nd?	1	If not, where does the wetland lie in the dr Wildlife & vegetation diversity/abundance	0		Bottom	-		sed on: Field wetland delineation Y_XN		
											-	

Function/	Value	Suitable?	Rationale (Reference #)	Principal?	Comments
V	Groundwater Recharge/Discharge	Y	2,4,7,8,12,13		Stream in wetland (SSA2) is losing in places and gaining in others, suggests active recharge/discharge.
	Floodflow Alteration	Y	1,5,8,9,10,11,17,1 8		Wetland detains flood flows from perennial stream and from upland slopes around it.
-	Fish and Shellfish Habitat	N			Associated watercourse is to shallow for fish/shellfish.
X	Sediment/Toxicant Retention	Y	1,6,10,16		Existing gravel roads adjacent to and steep slopes above this wetland are potential sources of sediment.
	Nutrient Removal	Y	3,8,9,10,11,13	0	Stream carries nutrients that could be attenuated in this wetland.
	Production Export	Y	1,4,7,8,10,12		Provides wildlife food sources for songbirds, insects, and small mammals and stream provides outlet for nutrient export from wetland.
w	Sediment/Shoreline Stabilization	Y	2,3,4,5,7,9,12,13,1 5		Undisturbed riparian buffer on both sides of stream helps to stabilize it.
2	Wildlife Habitat	Y	3,4,5,6,7,8,13,14,1 5,16,17,18,19,20,2		Part of the wildlife corridor that is the utility ROW with lots of wildlife usage observed (tracks, scat, audio, and visual observations). Provides cover for amphibians and small mammals.
A	Recreation	Y	13		ATV trail is adjacent to but not within this wetland.
	Educational/Scientific Value	Y	11		Access to a high gradient perennial stream with unique geomorphology.
*	Uniqueness/Heritage	N	11,17,18,22,30		Common wetland type in ROW with no heritage characteristics.
	Visual Quality/Aesthetics	Y	3,4,10,11,12		Diverse plant community and flow regime that is attractive to view.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 8.6)	Y			

				Wetland ID SW28.1 Lat/Long: Please see Attachment G – Project Plans
Fotal area of wetland? 11,582 sf Huma	n made? No	Is wetland part of a wildlife corridor?	island"? 🗍	Prepared Benjamin Griffith Date 08/07/24 by: Elizabeth Olliver 08/07/24
Adjacent land use Utility ROW, forest		Distance to nearest roadway or other development	>500 feet	Wetland Impact: Type Timber Area 1,607 sf
Dominant wetland systems present PSS1E (00%)	Contiguous undeveloped buffer zone pro	esent Yes	Evaluation based on:
the wetland a separate hydraulic system?	No	If not, where does the wetland lie in the drainage basin	Mid	Office X Field X
low many tributaries contribute to the wetland?	1	- Wildlife & vegetation diversity/abundance (see attached list)		Corps manual wetland delineation completed? Y X N

Function/	/Value	Suitable?	Rationale (Reference #)	Principal?	Comments
	Groundwater Recharge/Discharge	Y	2,4,6,7,8,12,13,15		Stream in wetland (SSA2) and groundwater saturation/water table at substrate surface in areas. Restrictive layers vary from 0-4 inches to >1 ft.
	Floodflow Alteration	Y	1,2,5,8,9,10,11,13, 14,16,17,18		Wetland detains flood flows from high gradient perennial stream and from upland slopes around it. Wetland acts as a bench for flood flows to spread out on.
	Fish and Shellfish Habitat	N			Associated watercourse is to shallow for fish/shellfish.
X	Sediment/Toxicant Retention	Y	1,5,6,10,14,15,16	Ø	Diffuse nature of flow of the stream through this wetland increase water residence time and allows retention of some sediment from upslope areas.
	Nutrient Removal	Y	3,8,9,10,11,14	Ø	Stream carries nutrients that could be attenuated in this wetland due to diffused flows.
-	Production Export	Y	1,4,7,8,10,12	Ø	Provides wildlife food sources for songbirds, insects, and small mammals and stream provides outlet for nutrient export from wetland.
m	Sediment/Shoreline Stabilization	Y	1,2,3,4,5,7,8,9,12, 13,14,15		Vegetated riparian buffer on both sides of stream helps to stabilize it even with active stream cutting.
2	Wildlife Habitat	Y	3,4,5,6,7,8,13,14,1 5,16,17,18,19,20,2	Ø	Part of the wildlife corridor that is the utility ROW with lots of wildlife usage observed (tracks, scat, audio, and visual observations). Provides cover for amphibians and small mammals.
A	Recreation	Y	13		ATV trail is adjacent to but not within this wetland.
	Educational/Scientific Value	Y	11		Access to a high gradient perennial stream with unique geomorphology.
*	Uniqueness/Heritage	Y	7,11,12,15,16,17,1 8,22,28,30		Unique wetland type and hydrologic regime.
	Visual Quality/Aesthetics	Y	3,4,10,11,12		Diverse plant community and flow regime that is attractive to view.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Eco	ological Integrity Score = 8.1)	Y			
Notes:					* Refer to backup list of numbered consideration

			Wetland ID SW28 Lat/Long: Please see Attachment G – Project Plans
Total area of wetland? >74,137 sf Human	made? No	Is wetland part of a wildlife corridor?	Prepared Benjamin Griffith Date 08/06/24 by: Elizabeth Olliver 08/06/24
Adjacent land use Utility ROW, forest		Distance to nearest roadway or other development >500 feet	Wetland Impact:
Dominant wetland systems present PSS1F (10	0%)	Contiguous undeveloped buffer zone present Yes	TypeTimberArea21,397 sf (T)matting40 sf (P)
			Evaluation based on:
Is the wetland a separate hydraulic system?	No	If not, where does the wetland lie in the drainage basin Upper	Office X Field X
How many tributaries contribute to the wetland?	0	Wildlife & vegetation diversity/abundance (see attached list)	Corps manual wetland delineation completed? Y X N

Function/	Value	Suitable?	Rationale (Reference #)	Principal?	Comments
V	Groundwater Recharge/Discharge	Y	2,4,7,10,12,13		Spring discharge and signs of long water residency time. Headwaters of watershed producing streams (SSA2 and SSA3). Most surface water is groundwater discharge, not overland flow.
	Floodflow Alteration	Y	2,5,7,8,9,10,11,13, 14,16,17,18		Wetland is the headwaters of watershed with lots of water retention potential from vegetation and soils.
-	Fish and Shellfish Habitat	N			Associated watercourse is too shallow for fish/shellfish.
X	Sediment/Toxicant Retention	Y	1,5,6,10,11,13,14, 15,16		Gravel ATV road (sediment source) is parallel to entire length of wetland.
	Nutrient Removal	Y	1,3,5,6,8,9,10,11,1 2,13,14	٥	Shallow, groundwater fed stream with slow moving water.
-	Production Export	Y	1,4,5,7,8,10,12	Ø	High wildlife/avian usage, lots of insects, and shallow stream that discharges to river downslope.
m	Sediment/Shoreline Stabilization	Y	1,2,3,4,5,7,12,13,1 4,15		Shallow stream is used as ATV road, wetland stabilizes the stream banks.
2	Wildlife Habitat	Y	3,4,5,6,7,8,9,13,14 ,15,16,17,18,19,20 ,21,22		Rare wetland plants/genera are present, like Ericaceae
A	Recreation	Y	4,5,7,13		ATV trail is adjacent to but not within this wetland.
	Educational/Scientific Value	Y	1,5,11		High quality unique wetland vegetation is present.
*	Uniqueness/Heritage	Y	6,7,11,13,15,19,23 ,27,28,30		Unique high gradient wetland type/vegetation community with shallow perennial stream and stone foundation southeast of the proposed Str. 65 work pad.
0	Visual Quality/Aesthetics	Y	3,4,6,8,10,11,12		Hillslope forest borders wetland, creates rare and visually striking ecosystem type.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 7.1)	Y			

				2		_	Wetland I Lat/Long:		ttachmen	t G – Project
Total area of wetland?	624 Human	made? No	Is wetland part of a wildlife corridor?	or a "hal	bitat island"?		Prepared	Benjamin Gr	~	ate 10/31/24
							by:	Elizabeth Oll	ver	
Adjacent land use	Utility ROW, forest		Distance to nearest roadway or other	development	>500 feet		Wetland In	npact:		
Dominant wetland systems	present PSS1E(1)	00%)	Contiguous undev	veloped buffer zone	e present Yes	-	Туре	Timber matting	Area	624 sf
				1		- 1	Evaluation	based on:		
Is the wetland a separate hy	draulic system?	Yes	If not, where does the wetland lie in the dra	inage basin	N/A		Office	x	Field	x
How many tributaries contra	ibute to the wetland?	0	Wildlife & vegetation diversity/abundance	(see attached list)		-	-	ual wetland deli		

Function/	Value	Suitable?	Rationale (Reference #)	Principal?	Comments
V	Groundwater Recharge/Discharge	N			No evidence of groundwater recharge/discharge.
	Floodflow Alteration	Y	3,5,8,9,18		Wetland receives and detains surface water runoff from surrounding uplands.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1	Ø	Wetland captures sediment transported via surface water runoff from further up the slope.
	Nutrient Removal	Y	3,8,11		Wetland has sufficient vegetation density to utilize nutrients, but no apparent source of excess nutrients upslope.
-	Production Export	N	1,7		Small depressional wetland that doesn't offer much production/export.
m	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.
2	Wildlife Habitat	Y	1,3,4,5,7,8,13,		Small depressional wetland that offers some cover for small mammals and insects.
A	Recreation	N			Small depressional wetland that does not offer any recreational opportunities.
	Educational/Scientific Value	N			Small depressional wetland common in utility ROWs that does not offer any educational opportunities.
*	Uniqueness/Heritage	N			Common type of wetland in utility ROW with no heritage characteristics.
	Visual Quality/Aesthetics	N	5,10,11,12		Viewable, but does not provide interesting view, as it is a common type of wetland in utility ROWs.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Eco	ological Integrity Score = 8)	Y			

								_	Wetland I Lat/Long:		Attachme	ent G –	Project
Total area of wetland?	3,005 sf	Human made?	No	Is wetland part of a wildlife corridor?	<u> </u>	or a "habitat is	sland"?		Prepared by:	Benjamin G Elizabeth Ol		Date	10/31/24
Adjacent land use	Utility ROV	W, forest		Distance to nearest roadway or othe	er developr	nent	>500 feet		Wetland I	mpact:			
Dominant wetland systems p		PSS1E (100%)				ouffer zone prese		_	Type Evaluation	Timber matting n based on:	Area	911	sf
Is the wetland a separate hyd	draulic syster	n? Ye	s	If not, where does the wetland lie in the	drainage ba	sin	N/A		Office	х	Field	Х	
How many tributaries contri	bute to the w	vetland?	0	Wildlife & vegetation diversity/abundan	ce (see atta	ched list)		-	Corps man	nual wetland del d? Y <u>X</u>		-	

Function/	Value	Suitable?	Rationale (Reference #)	Principal?	Comments					
V	Groundwater Recharge/Discharge	N			No evidence of groundwater recharge/discharge.					
	Floodflow Alteration	Y	3,5,8,9,18	0	Wetland receives and detains surface water runoff from surrounding uplands.					
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.					
X	Sediment/Toxicant Retention	Y	1	Z	Wetland captures sediment transported via surface water runoff from further up the slope.					
	Nutrient Removal	Y	1,3,8,11		Wetland has sufficient vegetation density to utilize nutrients, but no apparent source of excess nutrients upslope.					
-	Production Export	N	1,7		Small depressional wetland that doesn't offer much production/export.					
and a start	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.					
2	Wildlife Habitat	Y	1,3,4,5,7,8,13		Small depressional wetland that offers some cover for small mammals and insects.					
A	Recreation	N			Small depressional wetland that does not offer any recreational opportunities.					
-	Educational/Scientific Value	N			Small depressional wetland common in utility ROWs that does not offer any educational opportunities.					
*	Uniqueness/Heritage	N			Common type of wetland in utility ROW with no heritage characteristics.					
0	Visual Quality/Aesthetics	N	5,10,11,12		Viewable, but does not provide interesting view, as it is a common type of wetland in utility ROWs.					
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.					
Other (Ec	cological Integrity Score = 8.5)	Y								

Fotal area of wetland? 1,167 sf Human	made? No	Is wetland part of	a wildlife corrido	Tiepared Benjamin Onthin Date 10/31/24							
Adjacent land use Utility ROW, forest Dominant wetland systems present PSS1E (10 s the wetland a separate hydraulic system? How many tributaries contribute to the wetland?	0%) Yes 0	If not, where does	Contiguou the wetland lie in	by: Elizabeth Olliver 10/51/2- by: Elizabeth Olliver 10/51/2- Wetland Impact: Type Timber Area 859 sf matting Evaluation based on: Office X Field X Corps manual wetland delineation completed? Y_X_ N_							
Function/Value	Suitable?	Rationale (Reference #)	Principal?	Comments							
Groundwater Recharge/Discharge	N			No evidence of groundwater recharge/discharge.							
Floodflow Alteration	Y	3,5,8,9,18		Wetland receives and detains surface water runoff from surrounding uplands.							
Fish and Shellfish Habitat	N			No associated watercourse/waterbody.							
Sediment/Toxicant Retention	Y	1	V	Wetland captures sediment transported via surface water runoff from further up the slope.							
Nutrient Removal	Y	1,3,8,11		Wetland has sufficient vegetation density to utilize nutrients, but no apparent source of excess nutrients upslope.							
Production Export	N	1,7		Small depressional wetland that doesn't offer much production/export.							
Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.							
Wildlife Habitat	Y	1,3,4,5,7,8,13		Small depressional wetland that offers some cover for small mammals and insects.							
Recreation	N			Small depressional wetland that does not offer any recreational opportunities.							
	-		-	Small demonstrand wetland common in utility DOWs that does not offer any educational emergencies							

Notes:

4

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3

ES

Educational/Scientific Value

Uniqueness/Heritage

Other (Ecological Integrity Score = 8)

Visual Quality/Aesthetics

Endangered Species Habitat

Ν

Ν

Ν

Ν

Y

5,10,11,12

* Refer to backup list of numbered considerations.

Small depressional wetland common in utility ROWs that does not offer any educational opportunities.

Viewable, but does not provide interesting view, as it is a common type of wetland in utility ROWs.

Common type of wetland in utility ROW with no heritage characteristics.

No threatened or endangered species or habitat present.

			Wetland ID Lat/Long:	TW1 Please see Attachmer Plans	nt G – Project
Total area of wetland? >47,264	sf Human made? N	Is wetland part of a wildlife corridor?	Prepared by:	Elizabeth Olliver	08/05/24
Adjacent land use Utility Re	OW, forest	Distance to nearest roadway or other development >500 feet	Wetland Imp	act:	
Dominant wetland systems present	PSS1E (89%)/ PFO1E (%) Contiguous undeveloped buffer zone present Yes	~ .	imber Area natting	8,249 sf (T) 20 sf (P)
			Evaluation ba	ased on:	
Is the wetland a separate hydraulic sys	tem? Yes	If not, where does the wetland lie in the drainage basin N/A	Office X	X Field	х
How many tributaries contribute to the	wetland? 0	Wildlife & vegetation diversity/abundance (see attached list)	Corps manua completed?	al wetland delineation Y_X_N	

Function/	Value	Suitable?	Rationale (Reference #)	Principal?	Comments
Ţ	Groundwater Recharge/Discharge	N	2,15		No evidence of significant groundwater recharge/discharge.
	Floodflow Alteration	Y	1,3,5,6,7,8,9,18		Potential for high flood storage, but isolation prevents principal function.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1,4,9		Rough ATV trail adjacent to the wetland is a source of sediment.
	Nutrient Removal	Y	1,3,5,7,8,9,11		Wetland has sufficient vegetation density to utilize nutrients, but no apparent source of excess nutrients upslope.
-	Production Export	N	1,7,12		No stream or other obvious source of export
wi	Sediment/Shoreline Stabilization	N			No associated watercourse/waterbody.
2	Wildlife Habitat	Y	3,4,5,7,8,13,17,18, 19,20,21		Abundant frog habitat, contiguous on landscape.
A	Recreation	Y	3,4,5		Evidence of ATV traffic and hunting potentially occurring in this wetland.
	Educational/Scientific Value	N			Not readily accessible and no specific educational use.
*	Uniqueness/Heritage	N			Common wetland structure for power line ROW in undeveloped landscape.
~	Visual Quality/Aesthetics	N	5,10,11,12		Not readily accessed and low contrast from surrounding upland.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 8.5)	Y			

					-			_	Wetland Lat/Long		e Attachmen	t G – Project
Total area of wetland?	>4,303 sf I	Human made? -	No	Is wetland part of a wildlife corridor?		or a "habitat isla	and"?		Prepared by:	Benjamin (Elizabeth (2	ate 08/05/24
Adjacent land use	Utility ROW, f	forest		Distance to nearest roadway or othe	r developm	ient >	>500 feet		Wetland	Impact:		
Dominant wetland systems		M1B (100%)		_		uffer zone presen	it Yes		Type Evaluatio	Timber matting	Area	2,119 sf
Is the wetland a separate hy	draulic system?	Yes		If not, where does the wetland lie in the d	rainage bas	sin	N/A		Office	х	Field	х
How many tributaries contri	bute to the wetla	and?	0	Wildlife & vegetation diversity/abundanc	e (see attac	hed list)	-	-	Corps ma complete	nual wetland de	lineation N	

Function	/Value	Suitable?	Rationale (Reference #)	Principal?	Comments
Ţ	Groundwater Recharge/Discharge	N	2		No evidence of significant groundwater recharge/discharge.
	Floodflow Alteration	N	5,9		Small depression that slightly slopes and receives surface water runoff from surrounding uplands.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	Y	1,4		Rough ATV trail upslope of the wetland on the opposite side of the ROW is a source of sediment.
	Nutrient Removal	N	8		Wetland has sufficient vegetation density to utilize nutrients, but no apparent source of excess nutrients upslope.
-	Production Export	N	1	D	Some blueberries in wetland but not a substantial exporter of nutrients.
	Sediment/Shoreline Stabilization	N			No associated watercourse/waterbody.
2-1	Wildlife Habitat	Y	3,4,5,7,8,19		Some potential for wildlife use, but not significantly so.
A	Recreation	N	3		No specific hunting value.
	Educational/Scientific Value	N			Not readily accessible and no specific educational use.
*	Uniqueness/Heritage	N	13		Common wetland structure for power line ROW in undeveloped landscape.
**	Visual Quality/Aesthetics	N	5,10,11,12		Not readily accessed and low contrast from surrounding upland.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	cological Integrity Score = 8.5)	Y			

					_	Wetland ID Lat/Long:	TW4 Please see Attach Plans	nent G – Project
Total area of wetland?	692 sf Human	n made? No	Is wetland part of a wildlife corridor? 	nd"?		Prepared by:	Benjamin Griffith Elizabeth Olliver	Date 08/05/24
Adjacent land use	Utility ROW, forest		Distance to nearest roadway or other development >	>500 feet	_	Wetland Imp Type T	oact: Timber Are	a 325 sf
Dominant wetland systems p	PSSIB (1	00%)	Contiguous undeveloped buffer zone present	t Yes	_	~ 1	natting	
Is the wetland a separate hyd	Iraulic system?	Yes	If not, where does the wetland lie in the drainage basin	N/A		Office	X Fie	ld X
How many tributaries contri	bute to the wetland?	0	- Wildlife & vegetation diversity/abundance (see attached list)		-	*	al wetland delineation Y X N	1

Function/	Value	Suitable?	Rationale (Reference #)	Principal?	Comments
Ţ	Groundwater Recharge/Discharge	N			No evidence of significant groundwater recharge/discharge.
	Floodflow Alteration	Y	3,5,6		Small depression in rolling landscape.
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	N	1		Rough ATV trail runs through this wetland, but it's well isolated from the rest of the landscape.
	Nutrient Removal	N			No obvious nutrient sources
	Production Export	N			No obvious significant production and/or export of nutrients.
wi	Sediment/Shoreline Stabilization	N			No associated watercourse/waterbody.
2	Wildlife Habitat	N	3,4,5,7		Minimal potential for wildlife usage due to size.
A	Recreation	N	3		Minimal opportunity for recreation.
	Educational/Scientific Value	N			Not readily accessible and no specific educational use.
*	Uniqueness/Heritage	N	13		Common wetland structure for power line ROW in undeveloped landscape.
	Visual Quality/Aesthetics	N	5,10,11,12		Not readily accessed and low contrast from surrounding upland.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	cological Integrity Score = 7.6)	Y			

			_	Wetland ID Lat/Long:	TW5 Please see Attachr Plans	nent G Project
Total area of wetland? >40,268 sf Human	made? No Is	wetland part of a wildlife corridor?		Prepared by:	Benjamin Griffith Elizabeth Olliver	Date 08/05/24
Adjacent land use Utility ROW, forest		Distance to nearest roadway or other development >500	feet	Wetland Imp	act:	
	98%)/PFO1E (2%)		Yes	21	imber Area atting	a 4,624 sf
	0.0).11012(2.0)			Evaluation ba	ased on:	
Is the wetland a separate hydraulic system?	No If	not, where does the wetland lie in the drainage basin M	lid	Office >	K Fiel	d X
How many tributaries contribute to the wetland?	1 W	'ildlife & vegetation diversity/abundance (see attached list)	_	Corps manua completed?	l wetland delineation Y X N	

Function	/Value	Suitable?	Rationale (Reference #)	Principal?	Comments
Ţ	Groundwater Recharge/Discharge	Y	4,7,9,12,13		Wetland is associated with a perennial stream (TSA1) and is a location of groundwater discharge.
	Floodflow Alteration	Y	1,3,5,6,7,8,9,10,13 ,14,16		Moderates discharge to surface water.
	Fish and Shellfish Habitat	Y	4,5,11,14,16		Potentially supports small fish populations and contributes to downstream CW fishery.
X	Sediment/Toxicant Retention	Y	1,10,11,15		Wetland provides sediment detention from stream flows.
	Nutrient Removal	Y	5,12,13,14		Wetland provides nutrient retention along the stream.
	Production Export	Y	1,7,8,10,11,12		Nutrients are being exported in the stream.
	Sediment/Shoreline Stabilization	Y	3,4,5,712,15		Wetland is stabilizing substrate along the edges of the stream.
-	Wildlife Habitat	Y	3,4,5,6,10,14		Large wetland with perennial stream and forested buffer provides significant wildlife habitat.
A	Recreation	Y	3,4,5		Rough ATV trail runs through wetland and there is possibility for hunting.
	Educational/Scientific Value	N	5,		Not readily accessible.
*	Uniqueness/Heritage	Y	7,12,17,18,22		Stone walls are in uplands adjacent to wetland and wetland contains a perennial stream. No other unique/heritage characteristics.
₩>	Visual Quality/Aesthetics	Y	1,2,4,5,8,10,11,12		Not readily accessed, but stream and emergent marsh are attractive for viewing.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
ther (Ec	ological Integrity Score = 7.6)	Y			

Total area of wetland?	1,087 sf Human	nade? No	Is wetland part of a wildlife corridor?	🗹 or a "hab	oitat island"?		Wetland ID Lat/Long:	TWA1 Please see A Plans	ttachmen	t G – Project
Adjacent land use	Utility ROW, forest		Distance to nearest roadway or othe	er development	>500 feet	_	Prepared by:	Benjamin Grit Elizabeth Olli		ate 08/05/24
Dominant wetland systems	present PEM1B (10	00%)	Contiguous und	leveloped buffer zone	present Yes		Wetland Imp	act:		
				· · · · · · · · · · · · · · · · · · ·			Type N	lone	Area	N/A
Is the wetland a separate hy	draulic system?	Yes	If not, where does the wetland lie in the o	lrainage basin	N/A		Evaluation b	ased on:		
			_	-			Office)	<	Field	х
How many tributaries contr	ribute to the wetland?	0	Wildlife & vegetation diversity/abundan	ce (see attached list)			Corps manua	al wetland delin	eation	
			-			1	completed?	Y <u>X</u> N	I	

Function/	Value	Suitable?	Rationale (Reference #)	Principal?	Comments
	Groundwater Recharge/Discharge	N	2		No connection to surface water or signs of groundwater recharge/discharge.
·····	Floodflow Alteration	Y	2,3,5,6,8,17	Ø	Flat area slows surface water runoff from surrounding uplands. Located in the upper part of the watershed
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.
X	Sediment/Toxicant Retention	N	1,2		Not sufficient water retention time to remove sediments/toxicants.
	Nutrient Removal	N			Not sufficient water retention time to remove nutrients.
-	Production Export	N	1,7		No significant sources of nutrients for export and minimal opportunity.
n.	Sediment/Shoreline Stabilization	N			No associated watercourse/waterbody.
2	Wildlife Habitat	N	4,5,7,8		Unlikely to provide significant wildlife habitat due to its small size and short water retention time.
A	Recreation	N	3,4		Rough ATV trail runs past the wetland, but limited other recreational opportunities.
	Educational/Scientific Value	N			Not readily accessible.
*	Uniqueness/Heritage	N			Common wetland type for utility ROW.
	Visual Quality/Aesthetics	N			Not readily accessed and not significantly contrasting from uplands surrounding it.
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.
Other (Ec	ological Integrity Score = 4.5)	N			

							_	Wetland Lat/Long		Attachme	nt G – Project
Total area of wetland?	>39,446 sf Huma	in made? No	Is wetland part of a wildlife corridor?		or a "habitat is	sland"?		Prepared by:	Benjamin (Elizabeth (Date 08/06/24
Adjacent land use	Utility ROW, forest		Distance to nearest roadway or other	developm	ent	>500 feet		Wetland			
Dominant wetland systems	present PSS1E (100%)	Contiguous unde	veloped bu	Iffer zone press	ent Yes	-	Type	Timber matting n based on:	Area	4,824 sf
Is the wetland a separate hy	ydraulic system?	Yes	If not, where does the wetland lie in the dr	ainage basi	in	N/A	_	Office	X nual wetland de	Field	x
How many tributaries cont	ribute to the wetland?	0	Wildlife & vegetation diversity/abundance	(see attacl	hed list)			complete		N	

Function/Value		Suitable?	Rationale (Reference #)	Principal?	Comments				
Ţ	Groundwater Recharge/Discharge				No connection to surface water or signs of groundwater recharge/discharge.				
	Floodflow Alteration	Y	1,3,5,6,9,17		Flat area slows surface water runoff from surrounding uplands and likely holds water in spring.				
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.				
X	Sediment/Toxicant Retention	Y	1,2,4		Access road adjacent to the wetland is a source of sediment/toxicants.				
	Nutrient Removal	N	1,5,7,10		No sources of excess nutrients upslope.				
	Production Export	N	2,4,9		No significant sources/meanings of nutrient export.				
and	Sediment/Shoreline Stabilization	N			No associated watercourse/waterbody.				
2	Wildlife Habitat	N	4,5,6,7,8,15		Opportunity for amphibian usage and wetland songbirds.				
A	Recreation	Y	3,5		Rough ATV trail runs past the wetland, but limited other recreational opportunities.				
-	Educational/Scientific Value	N			Not readily accessible.				
*	Uniqueness/Heritage	Y	17,19,23		Common wetland type for utility ROW, but has stone walls in surrounding uplands.				
3	Visual Quality/Aesthetics	N			Not readily accessed and not significantly contrasting from uplands surrounding it.				
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.				
Other (Ec	ological Integrity Score = 7.1)	Y							

the total area reviewed.

		-						Wetland I Lat/Long:		Attachm	ent G – Proje	ct
Total area of wetland?	14,120 sf	Human made?	No	Is wetland part of a wildlife corridor?	⊠ or a	a "habitat island"?		Prepared by:	Benjamin O Elizabeth O		Date 08/00	5/24
Adjacent land use	Utility ROV	V, forest		Distance to nearest roadway or othe	r development	>500 fee	t	Wetland I	mpact:			
Dominant wetland systems	present I	PSS1E (100%)		Contiguous und	eveloped buffe	r zone present Ye	5	Type Evaluation	Timber matting	Area	3,058 sf	
Is the wetland a separate hy	draulic systen	n? Yes		If not, where does the wetland lie in the d	rainage basin	N/A		Office	х	Field	х	
How many tributaries contr	ibute to the w	etland?	0	Wildlife & vegetation diversity/abundance	e (see attached	list)	_	•	nual wetland del		-	

Function/Value		Suitable?	Rationale (Reference #) 2,6	Principal?	Comments No connection to surface water or signs of groundwater recharge/discharge.				
<u> </u>	Groundwater Recharge/Discharge								
uu	Floodflow Alteration	Y	1,3,4,6,8,9,18		Flat area slows surface water runoff from surrounding uplands after heavy rain.				
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.				
X	Sediment/Toxicant Retention	Y	1		Rough ATV trail through wetland is a source of sediment.				
	Nutrient Removal	N	4,8,9		Receives discharge from clear cut.				
-	Production Export	N	1,4,7,12		No significant sources/meanings of nutrient export.				
	Sediment/Shoreline Stabilization	N			No associated watercourse/waterbody.				
2	Wildlife Habitat	Y	4,5,7,8,13,14,15,1 6,17,19,20,21		Contiguous with other wetlands on the landscape and thus as opportunity to provide significant wildlife habitat.				
A	Recreation	Y	3,4,5		Rough ATV trail passes through the wetland, but limited other recreational opportunities.				
-	Educational/Scientific Value	N	5		Not readily accessible.				
*	Uniqueness/Heritage	Y	13,15,19,23		Common wetland type for utility ROW, but has stone walls in surrounding uplands.				
	Visual Quality/Aesthetics	N			Not readily accessed and not significantly contrasting from uplands surrounding it.				
ES	Endangered Species Habitat	N			No threatened or endangered species or habitat present.				
Other (Ec	cological Integrity Score = 9)	Y							

								-	Wetland I Lat/Long		ee Attachm	ient G -	- Project
Total area of wetland?	>69,621 sf Human made?		No	Is wetland part of a wildlife corridor?	or a "habitat isl		island"?		Prepared by:	Benjamin Elizabeth		Date	08/06/24
Adjacent land use	Utility ROW,	forest		Distance to nearest roadway or other	developm	ent	150 feet		Wetland I	mpact:			
Dominant wetland systems		S1E (100%)		Contiguous unde				-	Туре	Timber matting	Area	7,	767 sf
							-	-	Evaluation	n based on:			
Is the wetland a separate hy	draulic system?	Yes		If not, where does the wetland lie in the dr	ainage bas	sin	N/A		Office	х	Field	d X	
How many tributaries contr	ibute to the wet	land?	0	Wildlife & vegetation diversity/abundance	(see attac	hed list)	-	-	Corps may completed	nual wetland of Participation (lelineation N	_	

Function/Value		Suitable?	Rationale (Reference #)	Principal?	Comments Evidence of variable water levels observed.					
T	Groundwater Recharge/Discharge		2,6,15							
	Floodflow Alteration	Y	1,3,4,6,8,9,18		Sloping wetland with flat area to capture runoff at the bottom of the slope.					
-	Fish and Shellfish Habitat	N			No associated watercourse/waterbody.					
X	Sediment/Toxicant Retention	Y	1,2		Rough ATV trail through wetland is a source of sediment.					
	Nutrient Removal	Y	1,4,8,9	Ø	Impervious gravel ATV trail contributes runoff to wetland and is a possible source of nutrients. Logging activities adjacent to the ROW provides nutrient source. Vegetation density is sufficient to utilize nutrients.					
-	Production Export	N	1,4,7,12		No significant sources/meanings of nutrient export.					
un 2	Sediment/Shoreline Stabilization	N	2,3		No associated watercourse/waterbody.					
2	Wildlife Habitat	Y	4,5,7,8,13,14,15,1 6,17,19,20,21		Contiguous with other wetlands on the landscape and thus as opportunity to provide significant wildlife habitat. Provides habitat for insects and small mammals.					
A	Recreation	Y	3,4,5		Rough ATV trail passes through the wetland, but limited other recreational opportunities.					
	Educational/Scientific Value	Y	1,3,5		Easily accessible from the roadway.					
*	Uniqueness/Heritage	Y	13,15,16,19,24		Rare plant is present in the wetland.					
	Visual Quality/Aesthetics	N	4,5,8,9,10,11		Not readily accessed and not significantly contrasting from uplands surrounding it.					
ES	Endangered Species Habitat	Y	1		Rare plant species present; Calimagrostis coarctata.					
Other (Ec	cological Integrity Score = 7.1)	Y								