



Waterbury Conservation Commission

Minutes

November 9 Meeting

In person and Zoom

Draft

Commission attendees: Billy Vigdor, Tracy Sweeney, Kelsey Applegate, Allan Thompson, Steve Hagenbuch, Joan Beard, Meg Baldor

Commissioner Absence: Linda Gilpin

Public: Alyssa Johnson (Select Board), Pageen Mulhern

- Meeting convened at 7:05 pm

- Agenda modifications
 - Kelsey asked and the Commission agreed to discuss the housing task force and to summarize the Climate Smart Communities webinar
 - Billy asked and the Commission agreed to discuss the Budget and Annual Report

- Housing task force
 - Kelsey and Alyssa described the housing task force, recently established by the Select Board.
 - Kelsey proposed that the Conservation Commission could contribute to the task force as a way to offer a conservation perspective to the planning and zoning processes.
 - Allan advised that we stay within our purview and not take a central role. Billy thought it best to keep up to date and provide our perspectives where conservation issues arose. Alyssa agreed.
 - Billy also suggested we develop a liaison role.
 - Kelsey and Meg volunteered to attend the first meeting. Decisions about the Conservation Commission's role may be made after the first task force meeting.

- Climate Smart Communities webinar
 - Kelsey and Meg attended the Climate Smart Communities webinar, which is a program in New York for reducing climate impact at the community level.
 - Kelsey expressed that a Climate Task Force (a key component of the NY Climate Smart Communities program) could be implemented in Waterbury.
 - Alyssa pointed out that Waterbury LEAP and the Waterbury Energy Committee are already doing related work, and recommended connecting with them.



- Kelsey volunteered to reach out to Waterbury LEAP and/or the Waterbury Energy Committee to seek to attend one of each other's meetings
- Budget
 - Billy informed the Conservation Commission that approximately \$400 is left of the yearly budget, and that \$250 had been spent/allocated to cosponsor the Family Forest Carbon Program and \$50 had been spent/allocated to certification with the Association of Conservation Commissions.
 - Billy proposed to donate to the Catalyst Fund that is managed by the Shutesville Hill Wildlife Corridor Partnership. Tracey pointed out that our budget may not be able to be spent on donations. More research is required prior to choosing this option. Billy will follow up with Bill Shepeluk and Tom Leitz.
 - Meg suggested applying for the Association of Conservation Commission's small grant program. Allan informed the Conservation Commission that the grant opportunities come out in March every year. Joan suggested that the grant program could help us brainstorm ideas for the grants and our budget.
 - Kelsey suggested the remaining budget could be used for riparian buffer plantings at the Hope Davey Park. Billy thought the Friends of the Winooski may have funds available for tree planting.
- Annual Report
 - Billy asked the Conservation Commission to start brainstorming contributions for the year.
- Public Comments: none
- Welcome to Meg Baldor as a new Commissioner
 - Meg discussed her background in health surveillance and her passion for conservation.
- Approve minutes from prior meetings
 - Allan made a motion to approve the minutes and Joan seconded the motion. There was no discussion. The Conservation Commission voted unanimously in favor.
- Discuss dates for the Community Values Mapping exercise
 - Billy suggested trying for April 13th or April 20th.
 - Billy volunteered to reach out to Revitalizing Waterbury as a potential cosponsor.
 - Steve volunteered to reach out to Jens about the two dates Billy proposed, and to ask if UVM students attending the NR206 class could be involved in planning and executing the exercise.



- Meg volunteered to reach out to Brookside school as a potential cosponsor and location
- The Conservation Commission will also brainstorm a list of organizations to reach out to as potential sponsors. Alyssa recommended starting with Revitalizing Waterbury's online list of community organizations

- Reminder regarding the Family Forest Carbon Program November 15 at 7pm
 - Kelsey shared the Family Forest Carbon Program flier with the Waterbury Tree Committee.
 - Allan drafted a flier and it was used by the Stowe Land Trust to promote the program.
 - Billy volunteered to put the information on Front Porch Forum, share with Lisa Scagliatti, and ask ZenBarn to advertise the event.
 - Joan volunteered to print and distribute the flier.
 - Steve recommended putting a notification in the WDEV community calendar

- Prepare comments on the Hope Davey Parks Steering Committee
 - Billy created and shared a draft of the comments, which the Conservation Commission discussed and revised.
 - Allan made a motion to accept the current draft subject to technical and non-substantive edits. Steve seconded the motion.
 - Meg proposed to amend the motion to remove parts of the description of disc golf value to the community.
 - The motion failed by a count of two in favor and four opposed. Tracy had to leave the meeting before the vote.
 - The Commission voted 6-0 to accept and submit the comments to the Parks Steering Committee.
 - A copy of the final comments and maps are attached to these minutes.

- Meeting adjourned 9:46 pm

Respectfully submitted by Kelsey Applegate November 30, 2022



November 11, 2022

To: The Hope Davey and Ice Center Area Steering Committee (the SC)

cc: Waterbury Select Board

The Waterbury Conservation Commission (Commission) submits the following comments to the SC pursuant to its responsibility to represent the public interest¹ regarding The Hope Davey and Ice Center Area Parks Study, with a particular focus on October 20, 2022 Vision Framework.² The Commission is uniquely qualified to submit these comments because it is responsible for considering both recreation and conservation issues when advising municipal bodies.³

Hope Davey Natural Resource Inventory Comments and Supplement

For the purpose of these comments, Hope Davey can be divided into three parts. The first, is the area west of the drainage swale where the baseball and soccer fields are located.⁴

The second area (Area 2) is from the Class II wetlands and buffer along the drainage swale to the boundary between the Little River Watershed and the Graves Brook-Winooski River Watershed, which is depicted on Map 1.⁵ It appears that all stormwater in this area is absorbed by the park land, the Class II wetlands around the drainage swale, or flows to Little River.

The third area (Area 3) is between the watershed boundaries to and beyond Thatcher Brook. It appears that all stormwater not absorbed by the wetlands or park land in Area 3 flows to the Thatcher Brook. The SEG Map shows three distinct Class II Area 3 wetlands at the southern boundary of the park. The Commission is attaching Map 2, Hope Davey Wetlands, that shows these wetlands and buffers more clearly.⁶ These wetlands feed a stream that flows into the

¹ Rules, Waterbury Conservation Commission ¶ III(d) (“Bylaws”).

² The Framework is accompanied by a Natural Resources Hope Davey Park map, which we refer to as the “SEG Map.”

³ Bylaws, ¶ II (“The Commission *shall* make recommendations to any municipal ... body which it feels are needed to implement the purposes of the Commission”) (emphasis added).

⁴ This area has no wetlands or other sensitive resources of which the Commission is aware. As such, the Commission will not comment on a plan in Area 1.

⁵ Map 1 Watersheds & Highest Priority Surface Waters and Riparian Areas depicts the watershed boundary by a yellow line.

⁶ Map 2 Hope Davey Wetlands. The underlying data are provided by the Vermont Agency of Natural Resources. Map 2 was prepared at the Commission’s request by Shawn White, Project Manager, Friends of the Winooski. We thank Shawn for her assistance. Map 2 also shows two “Project Areas,” which are not defined by the State but we believe they coincide with potential wetlands.

Thatcher Brook. To put this in perspective, these wetlands and their buffers appear to cover most, if not all of the 9th hole and some of the 10th hole.

The eastern part of Area 3 is also identified by the Waterbury Town Plan as Highest Priority Surface Waters and Riparian Areas.⁷ This highest priority area covers most of the area around the 8th, 9th, and 10th holes. There is a wooded area along a ridge to the west of the 9th hole that has a great deal of erosion and soil compaction.⁸ The land adjacent to Thatcher Brook, the 9th hole, is flat and grassy. There is no woody vegetation and only a few trees to absorb stormwater. A good deal of Area 3 cannot therefore slow the flow of water to Thatcher Brook. In fact, there is a man-made, older drainage ditch that moves water from the hill on the 8th hole across the 9th hole tee boxes to Thatcher Brook.

Thatcher Brook is home to a wood turtle population along with other reptile, amphibian, and bird species. Vermont Fish and Wildlife identifies the wood turtle as a “species of conservation concern” in Vermont “due to its region-wide decline.”⁹ The U.S. Fish and Wildlife Service states the “wood turtle is designated as a Species of Greatest Conservation Need (SGCN) in the State Wildlife Action Plans of all 17 states in which they occur, and is considered endangered by the International Union for Conservation of Nature.”¹⁰ Fish and Wildlife will review the wood turtle status in 2023.¹¹

The Thatcher Brook Wetlands Mitigates Flooding Risk to Waterbury Village

Wetlands act as sponges to absorb rainfall and snowmelt. During heavy rainfall events, healthy, functioning wetlands reduce flow in nearby streams and help prevent flooding. The Thatcher Brook wetlands plays a key storage role for the Village. A comprehensive stream assessment conducted by Bear Creek Environmental for the Central Vermont Regional Planning Commission concluded:

Undeveloped floodplains and extensive wetlands in Waterbury Center along Graves Brook, Thatcher Brook, and their tributaries provide tremendous storage of floodwaters and sediment. These areas allow raging floodwaters to disperse energy, drop out sediment, and slow down before reaching Waterbury Village, where development is dense along the banks of Graves Brook. *It is of critical importance to*

⁷ Waterbury Municipal Plan Resources Map, Map 2-5. Map 1 contains a better view of the Highest Priority Surface Waters & Riparian Areas.

⁸ Minutes (Unapproved) of August 26, 2022 of Waterbury Parks Steering Committee, (identifying soil compaction, erosion and tree health issues in the park), https://www.waterburyvt.com/fileadmin/files/Zoning_Planning/Hope_Davey_and_Ice_Center_Area_Parks_Study/Minutes_20220826_Parks_Study_Steering_Committee.pdf?02a87ca96b78a2b27fed875221d75f5da3ca3cba. A site-walk with the Commission, the Recreation Committee, neighbors and disc golf representatives three years ago showed a high degree of erosion and compaction in Area 3. The disc golf community has attempted to erect some barriers to limit foot traffic between holes. They also “close” the course during mud season. We suspect that these efforts have reduced the rate of decay but recent site walks show that the erosion and compaction, particularly in the wooded area of Area 3, to be significantly greater than several years ago.

⁹ <https://vtfishandwildlife.com/learn-more/vermont-critters/reptiles/wood-turtle>.

¹⁰ Wood Turtle, <https://www.fws.gov/species/wood-turtle-glyptemys-insculpta>.

¹¹ *Id.*

*protect these floodplains and wetlands upstream to mitigate future flooding and protect people and infrastructure.*¹²

Healthy wooded buffers with loose soils and deep leaf litter enhance absorption of stormwater, protect water quality, reduce the impact of human activities on wetlands and streams, and guard against invasive species, among other benefits. Landscaped areas are much less effective at providing such services,¹³ especially when soils are compacted and/or covered only with turf grasses, as is the case in Area 3. The Town Plan highlights the importance of wetlands: “[f]orested headwater areas and the wetlands associated with these surface waters ... *buffer the impacts of severe storms and the associated flooding.*”¹⁴ The Town Plan highlights that there should be “flood resiliency, mitigation and restoration following flood events such as Tropical Storm Irene.”¹⁵ The action plan set out in the Town Plan is to “[w]ork with public and private landowners to establish riparian buffers where needed and maintain existing adequate riparian buffers.”¹⁶ That is what we are suggesting here.

According to the request for proposals that are part of this park study, conservation funds were used to purchase land in Hope Davey Park. Thus, conserving natural resources should continue to be an important goal of any park plan.

In addition to safety protections, there are large economic benefits to protecting wetlands and floodplains. In the aftermath of Hurricane Irene, a University of Vermont study found the wetlands, floodplains, and associated forested buffers along Otter Creek saved Middlebury between \$126,000 and \$450,000 of flood-related damage annually and prevented \$1.8 million dollars of damage during Irene.¹⁷

Thus, protecting the wetlands and riparian areas will reduce the flooding risk to the Village and provide a large economic savings. This is particularly important given climate change and additional stresses placed on the Thatcher Brook wetlands from upstream development.

Hope Davey Nature Trails Have a Long History and Public Support

Since the mid-1900s, nature trails have been located in Areas 2 and 3.¹⁸ Hiking is an important social and cultural part of the Waterbury community. There are other hiking facilities in town, but to satisfy the community interest, efforts continue to add additional trails, such as a recreation path. The community welcomes convenient and locally accessible walking and hiking

¹² Waterbury VT Middle Winooski River Corridor Plan, Executive Summary, https://anrweb.vt.gov/PubDocs/DEC/SGA/finalReports/112_CPB.pdf (emphasis added). The study rated as “fair” the floodplains along large stretches of Thatcher Brook.

¹³ The Bountiful Benefits of Wetland Buffers, VT Dept of Environmental Conservation, https://dec.vermont.gov/sites/dec/files/documents/wl_BountifulBenefitsOfWetlandBuffers.pdf.

¹⁴ Waterbury Town Plan, at 54 (emphasis added).

¹⁵ *Id.*, at 66. While the Town has taken significant efforts to address flood plain hazards in the village, we are unaware of any such efforts upstream along Thatcher Brook.

¹⁶ *Id.*, at 68.

¹⁷ Keri B. Watson, et al, Quantifying flood mitigation services: The economic value of Otter Creek wetlands and floodplains to Middlebury, VT, Ecological Economics, Volume 130, 2016, at 16-24.

¹⁸ The Hope Davey Park pavilion has a map of the walking trails.

trails. Further, a trail network in Hope Davey makes the park more attractive to a wider array of residents. Thus, having trails in Hope Davey Park is a valuable amenity for the Town.

Disc Golf is a Valuable Recreation Activity

Disc golf is a relatively new activity to Hope Davey, introduced in the mid-2000s and expanded over time. There is a significant community of avid disc golfers. The facility has added to the already extensive recreation facilities in Waterbury. It is part of the Waterbury culture to have an active and vibrant Town population with a variety of high quality locally accessible recreation facilities.¹⁹ The disc golfers believe that a quality disc golf course attracts people that promotes and supports the town economy.²⁰

Recommendations

There are benefits from disc golf and the nature trails in Hope Davey Park but they are not as large or as important as the flooding mitigation and economic benefits provided by protecting the “highest priority” Class II Thatcher Brook wetlands. On balance, therefore, protecting these resources should take priority over disc golf or the nature trails. This is particularly important as climate change is expected to increase the severity of storms and development upstream of Thatcher Brook will add stress to the Thatcher Brook wetlands. The Commission therefore makes the following recommendations.

1. There should be a 100’ do not disturb buffer along Thatcher Brook, which complies with Fish and Wildlife Department Guidance.²¹ The Town should plant trees and encourage natural regeneration of native woody vegetation in this buffer.²²
2. For all other park plans in Areas 2 and 3, all nature trail and disc golf course designs should comply with the Vermont Wetlands Program Public Guidance.²³ In particular, tees and holes should not be located in wetlands or buffers.²⁴
3. An independent review should be taken to determine if wetlands permits are required when reconfiguring the recreation activities in Areas 2 and 3.
4. Native trees and woody vegetation should be planted or allowed to regenerate to restore wetland habitats and their functions.

¹⁹ According to Disc Golf Scene, the disc golf course has a B+ rating and is ranked tenth, tied with fifteen other disc golf courses, in Vermont. <https://www.discgolfscene.com/courses/Vermont/top-rated>.

²⁰ We are unaware of any quantification of the economic benefits of disc golf or of hiking trails.

²¹ Vermont Fish and Wildlife Department, “Mapping Vermont’s Natural Heritage, A Mapping and Conservation Guide for Municipal and Regional Planners in Vermont,” 51 (2019) (wetlands “surrounded by a steep slopes is therefore at a high risk of erosion and may benefit from a 100- to 300-foot buffer, wherever possible”).

²² The SC should also consider planting trees along the swale and in the upper wetlands in Hope Davey Park to park.

²³ https://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/WTLD_TrailGuidance.pdf.

²⁴ This recommendation is consistent with the recommendation of the Professional Disc Golf Association, <https://www.pdga.com/course-development/skill-level-guidelines> (recommending avoiding water hazards).

5. Park maintenance activities should consider the impact on native flora and fauna including but not limited to pollinators, birds, and native plants.
6. The park plan should include monitoring and enforcing any rules and identifying funding sources.

Thank you,

Waterbury Conservation Commission

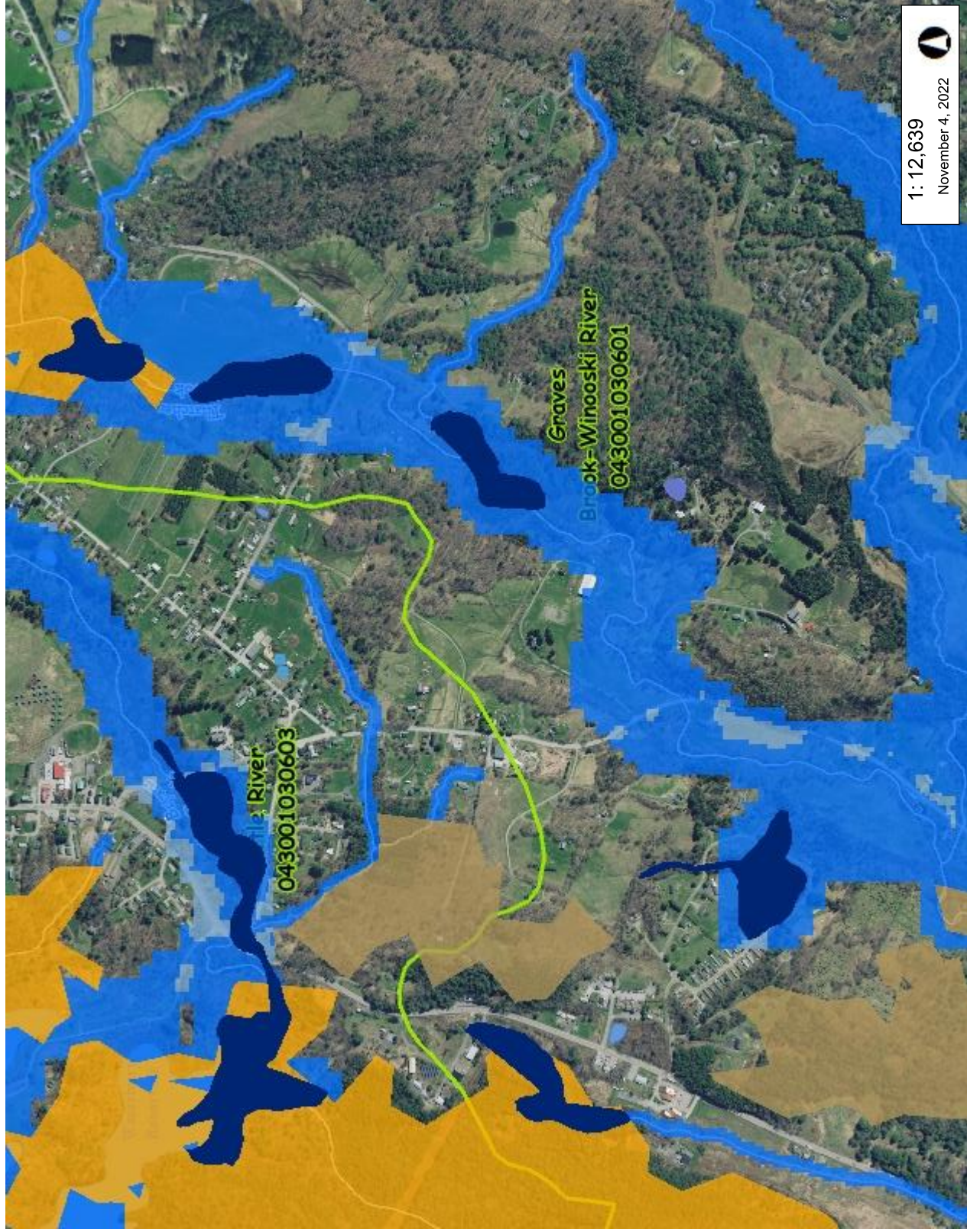


LEGEND

- Aquatic Habitats - Highest Priority
- Wetlands - Highest Priority
- Wetlands - Priority
- Connectivity Blocks - Highest Priority
- Connectivity Blocks - Priority
- Surface Water and Riparian Area Priority
- Surface Water and Riparian Area
- Riparian Wildlife Connectivity
- Waterbody
- Stream
- Intermittent Stream
- Watershed (HU10)
- Subwatershed (HU12)

NOTES

Map created using BioFinder; Two sub watersheds of the Winooski encompass Hope Davey Park; Thatcher Brook and 'drainage swale' are both Highest Priority Riparian Connectivity water corridors



1: 12,639
November 4, 2022

211.0 0 106.00 211.0 Feet

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Wetland areas in Hope Davey Park, Waterbury
 Vermont Agency of Natural Resources

vermont.gov

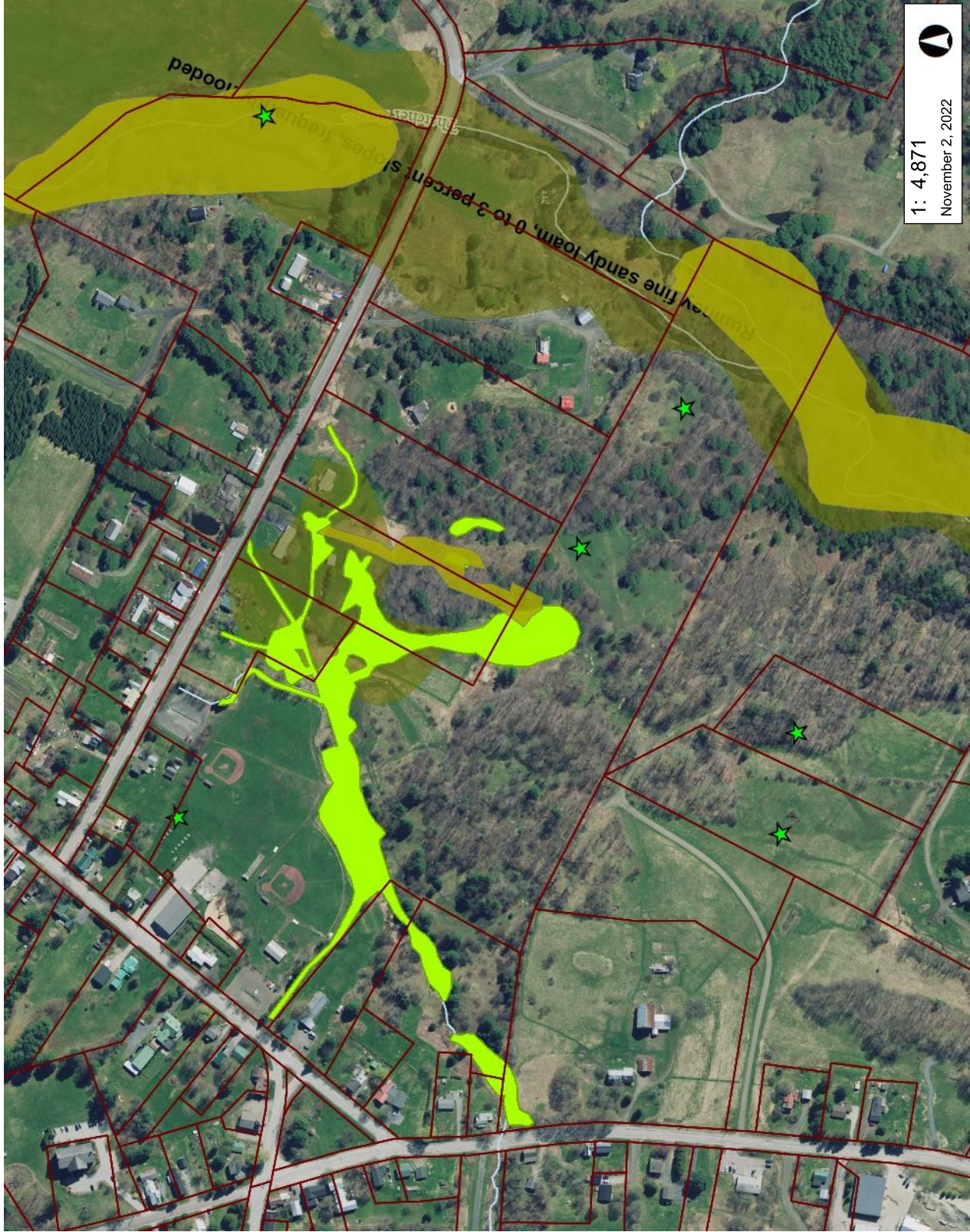


LEGEND

- Vernal Pools Confirmed – AEA
- Vernal Pools Unconfirmed – AI
- Wetland Projects
- Wetland - VSWI
 - Class 1 Wetland
 - Class 2 Wetland
 - Buffer
- Wetlands Advisory Layer
 - Soils - Hydric
 - Parcels (standardized)
 - Stream/River
 - Stream
 - Intermittent Stream
- Town Boundary
- County Boundary

NOTES

Map created using ANR's Natural Resources Atlas



1: 4,871
 November 2, 2022

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 1" = 406 Ft. 1cm = 49 Meters
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