

TRAIL MAPPING BY NRPC

REQUEST FROM CONSERVATION COMMISSION

STAFF REPORT

November 17, 2021

PURPOSE: The Conservation Commission is requesting the release of \$9,020.00 to fund a trail mapping project to be performed by NRPC.

ATTACHMENTS:

- A. Letter from Bill Collins, Conservation Commission Chair, to Town Planner, dated September 14, 2021.
- B. Memorandum from NRPC to Bill Collins, Conservation Commission Chair, with scope of services, dated August 5, 2021.

COMMENTS:

Please see Attachments A & B for the request and description of the proposed project. If approved, funding for this project would be withdrawn from the recreation fee account which has a current balance of \$41,605.03.

DRAFT MOTIONS

APPROVE funding of the project with recreation fees:

I move to recommend to the Board of Selectmen the release of \$9,020.00 from the Recreation Fee Account, 09-2000-2050-000-182, for the NRPC Trail Mapping project in accordance with the request made by the Conservation Commission.

Motion by: _____ Second: _____ Carried/Failed: _____



TOWN OF HUDSON

Conservation Commission



William Collins, Chairman

Dave Morin, Selectmen Liaison

12 School Street • Hudson, New Hampshire 03051 • Tel: 603-886-6008 • Fax: 603-816-1291

DATE: September 14, 2021

From: Bill Collins
Conservation Commission Chairman
Town Of Hudson NH

To: Brian Groth
Town Planner
Town of Hudson NH

Dear Mr. Groth,

The Hudson Conservation Commission along with the Nashua Regional Planning Commission, is in the early stages of a plan to update and create informational resources such as trail maps, downloadable mobile mapping apps and other information types that can be used by the public to enhance their experience when using the many open space properties throughout our community. There is currently limited information for these properties posted on the town's website but most of it is well out of date and in some cases provide incorrect data. Thus, the commission feels that it's time for a major update to take place and would like to ask that the Planning Board to authorize the expenditure of \$9020.00 from the Recreational Fund (that the PB manages) to pay for the services proposed by NRPC. Attached you will find the NRPC proposal which contains the descriptions of the various updates to be implemented along with the pricing schedule. To get the most bang for the buck and after careful considerations the Conservation Commission has preselected seven of the most popular properties for passive recreation in town and will move forward upon approval. These are Benson's Park, Musquash Conservation Land, Robinson Pond Recreational Area, Kimball Hill Town Forest, Rangers Town Forest, Colburn Town Forest, and Pelham Road Conservation Land.

In the long run it's the public utilizing these properties for hiking, cross country skiing, fishing and other forms of recreational activities that will benefit greatly by having the information they need readily available when they head for the outdoors.

Thank you for your time and I look forward to hearing from you. If you'd like to further information please feel free to contact me at your earliest convenience.

Sincerely,
William Collins, HCC Chairman

Cc: EDhima, TMalley, DStickney, DMorin



August 5, 2021

William Collins
Chair, Conservation Commission
Town of Hudson, NH
12 School Street
Hudson, NH 03051

Dear Mr. Collins,

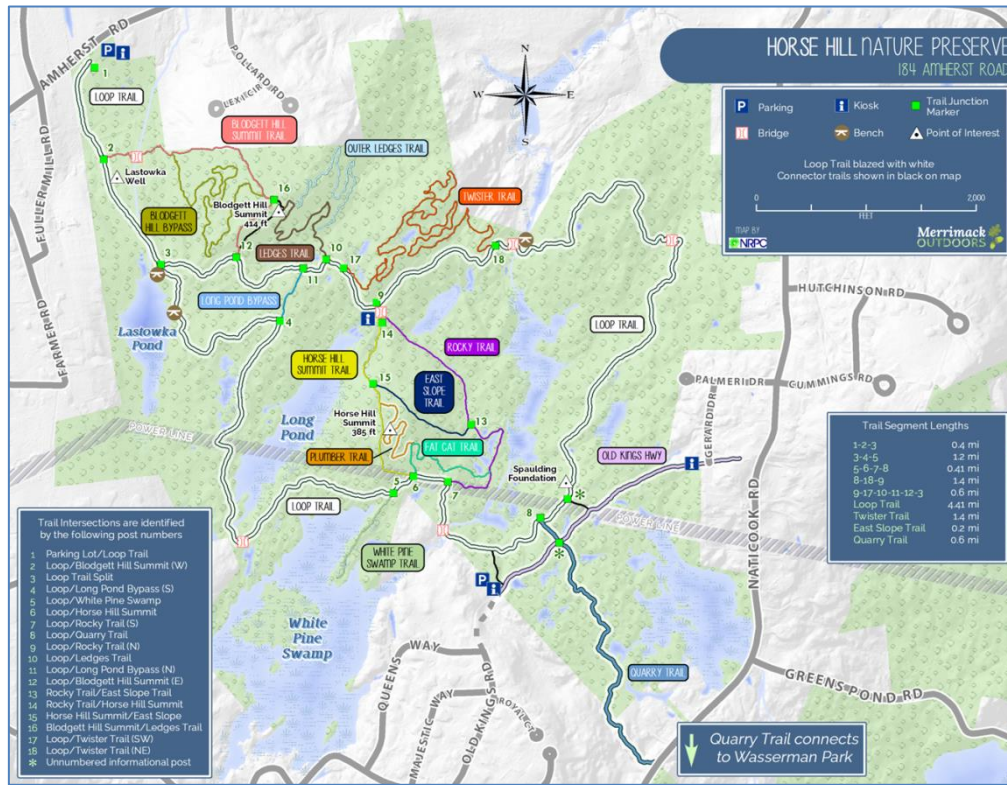
Nashua Regional Planning Commission (NRPC) is pleased to submit this proposal to provide GIS services to the Hudson Conservation Commission. The Conservation Commission protects the town's natural resources; preserves and maintains important land including town forests and trails; advises the select, planning, and zoning boards on conservation matters; and makes on-site visits and recommendations for wetland, water bodies, and dredge and fill permits. The Commission's present goal for this project is to encourage utilization of the existing trail network on its properties through better mapping. Specifically, the Commission would like to make navigable, mobile trail maps available to its stakeholders along with other complimentary map products for the town's primary open-space properties.

Deliverable 1: Data Collection

This project will leverage and extend the existing NRPC GIS trail inventory in Hudson. Additional trail mapping/GPS will be guided by features depicted on existing trail maps and input from Commission experts. During fieldwork NRPC will also take a limited amount of photography (5-10 locations at each property) as suggested by the Commission to incorporate into the map products. NRPC will create intersection posts from nodes in the GPS data, verify permitted use attributes, and work with the Commission to GPS any missing, important landmarks requiring navigation-level mapping accuracy.

Deliverable 2: Trailhead Kiosk Maps

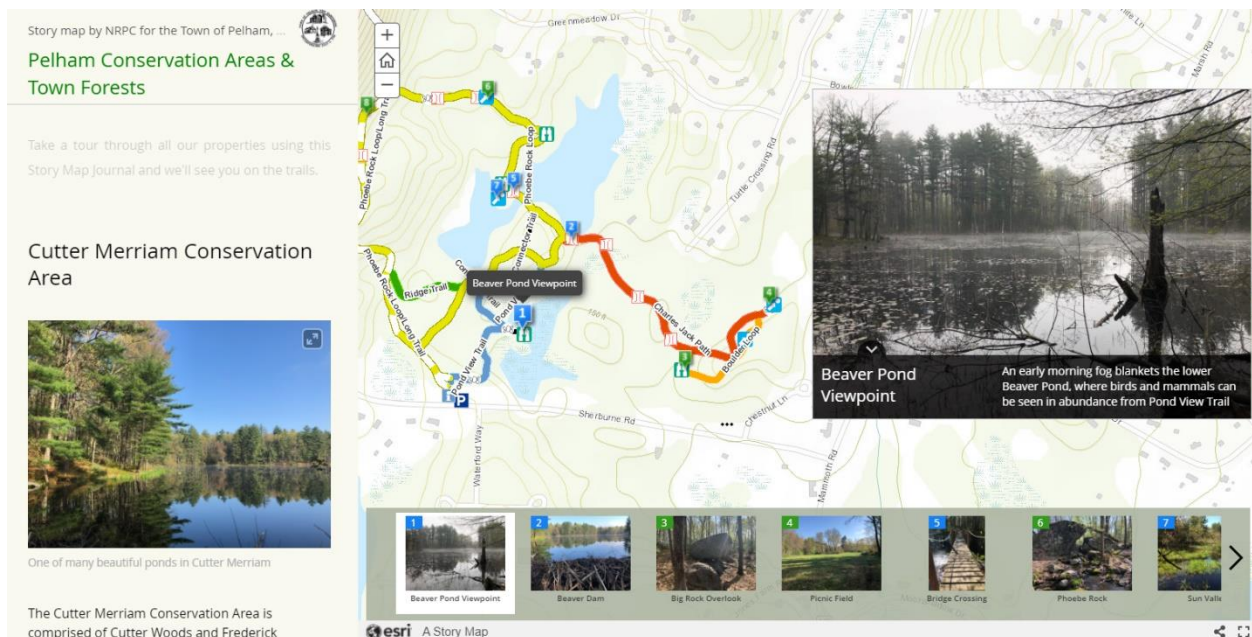
NRPC will create static pdf maps of the trail systems based upon an appealing and uniform cartographic template. The professionally styled maps will communicate trail system overview, property outlines, suggested loops, permitted uses, information on blazes or other trail markings, images of key locations, and a QR code that brings the user to the property's webpage. These maps will be designed for large-format printing, suitable for posting at the trailhead kiosk, but they may also be printed on letter-sized (8.5"x11") layouts.



Example [Trailhead Kiosk Map](#)

Deliverable 3: ESRI StoryMap

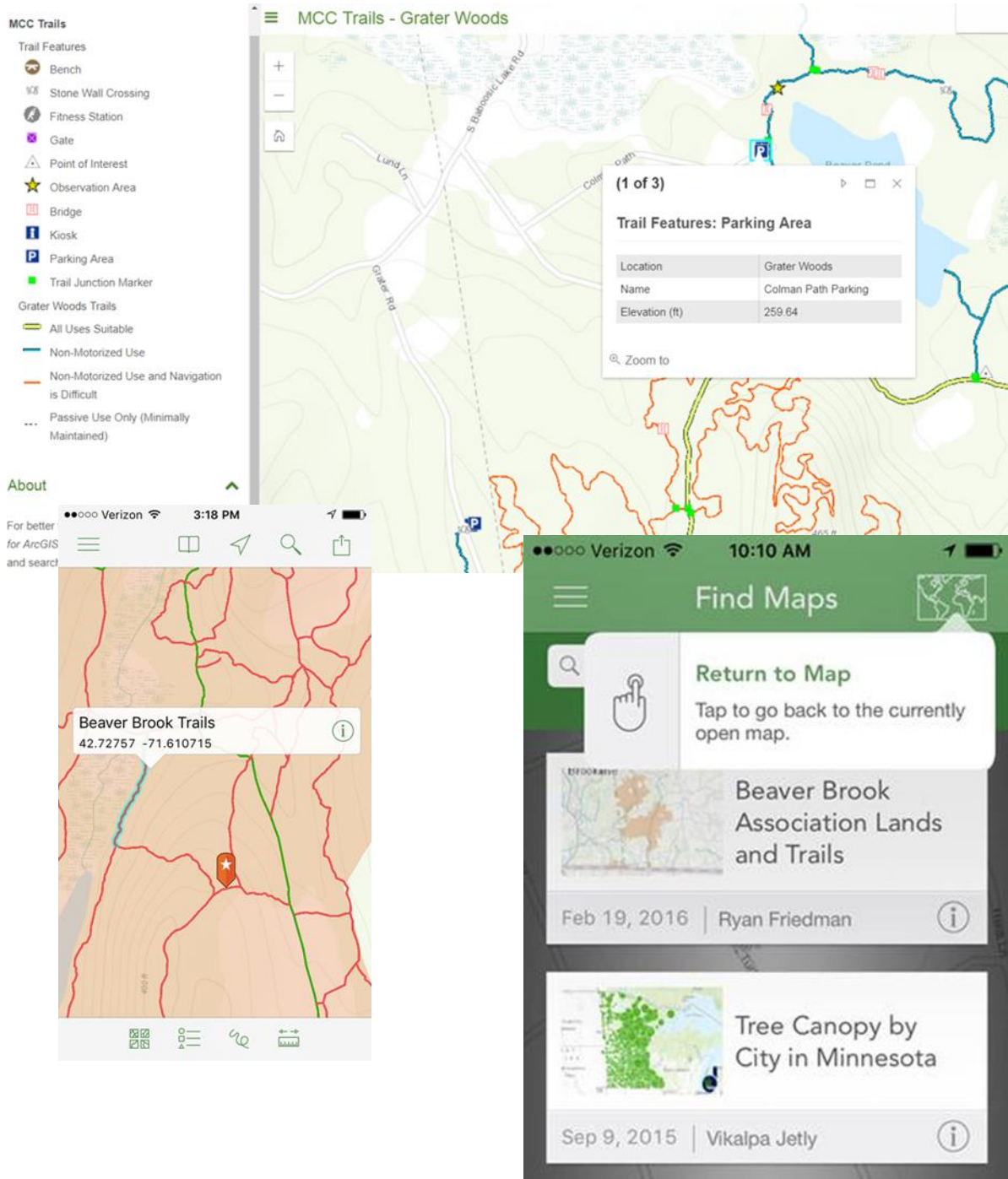
NRPC will create an online ESRI Story Map that will market the locations, photos, and key characteristics of properties featured in this project using engaging, interactive, multimedia content.



Example [StoryMap](#)

Deliverable 4: Mobile App

NRPC will create an interactive map on the ESRI ArcGIS online cloud. It will be viewable as its own web page on desktop and mobile browsers and will be available for navigation using ESRI's app for iPhone and Android.



Example [Mobile App](#)

Deliverable 5: Data downloads

To accommodate a variety of technical users NRPC will provide to the Commission generic GPS interchange files (GPX) files of trails and waypoints which can be hosted on the Commission’s website for public download or provided to various town departments.

Pricing

Each type of electronic deliverable is estimated individually according to two scenarios: The Commission may choose to undertake Option 1, Pilot project only, which including a kiosk/brochure map, a mobile application, and associated GPX data only. Option 2 would include the pilot as Phase 1, and then Phase 2 would cover four additional properties of the Commission’s choosing and an ESRI StoryMap. Additional properties beyond 5 could be added at a cost of \$1060/each. No charges will be assessed for trail data collection under any scenario.

		Option 1	Option 2 (Recommended)	
	Item	Pilot Project (1 property only)	Pilot Project Plus 4 additional properties	Additional Properties
1.	Data Collection	No charge	No charge	No charge
2.	Kiosk/brochure Map(s)	\$1000	\$3750	\$500/each
3.	ESRI StoryMap	n/a	\$1050	\$250/each
4.	Mobile App	\$1000	\$1800	\$250/each
5.	GPX files converted from ESRI	\$60	\$300	\$60/each
Total:		\$2600 Total	\$6900 Total (includes Pilot)	\$1060/each

Assumptions

Hudson Conservation Commission will provide written or in-person guidance for GPS field data capture. If requested, NRPC will provide a copy of all project deliverables to Hudson including all ESRI data files. NRPC will also retain a copy of the project outputs, but subsequent edits and updates are not assumed in this scope. This quote does not include custom programming or any large-volume hard-copy printing. NRPC assumes responsibility of hosting online project outputs created during the project.

Total timeline for Option 2 would be approximately 1 year from notice to proceed.

Respectfully,



Sara Siskavich, GISP
 Assistant Director - GIS & IT Programs
 Nashua Regional Planning Commission
 saras@nashuarpc.org