

Richmond Emerald Ash Borer Preparedness and Response Plan

The Richmond Conservation Commission (RCC), town officials, and volunteers have been preparing for the impending arrival of emerald ash borer (EAB) since 2019 by, for example, inventorying ash trees along 20 miles of Richmond's road. These preparedness efforts proved timely: EAB was detected just north of Richmond's village during the fall of 2020. We, as members of the Richmond EAB Taskforce, are committed to proactively addressing the ongoing EAB invasion and set forth this preparedness and response plan.

Our vision is to maintain the beauty, character, and shady canopy cover of our town's historic village, major recreation corridors, and roads while ensuring public safety and the myriad ecological functions that healthy, diverse trees afford. We will pursue this vision in three phases, summarized here, with the timeline detailed in Tbl. 1:

Phase 1: Village Management and Resident Outreach

In **phase 1** of our plan, we will treat the most prominent ash within the village, around the iconic Round Church, along a riverside trail on municipal land, and at the entrance to our recently acquired town forest (Andrews Community Forest, ACF). Within the village, we will replace smaller or less healthy trees with a diversity of native species (Fig. 1). The EAB Taskforce will begin to solicit bids from ISA-certified tree service providers to complete this management in March 2021, with treatments, removals, and replacements to occur throughout spring 2021 (during the non-flight season of EAB). Tops and unusable wood will be chipped and applied as mulch in a riparian restoration project in Volunteers Green Park by EAB Taskforce volunteers. Local artisans and woodworkers will be identified to create chairs/benches for the Town Center and bowls to be raffled to the community. These efforts will be supported by volunteers and funded by a \$15,000 grant from the Vermont's Urban and Community Forestry Program and a requisite \$15,000 match (sought through the RCC's Conservation Reserve Fund).

Implementation of Phase 1 will be accompanied by public and landowner outreach efforts via multiple avenues. These include a webinar given by Chittenden County Forester Ethan Tapper regarding EAB at the ACF (September 2020), posts to Front Porch Forum, and updates at Selectboard meetings (public, but held remotely) **as well as the annual Town Meeting (public, but held remotely)**. Because we do not assume these virtual communications will reach all Richmond residents, we will also send an informational postcard to all postal patrons briefly explaining the town's response to EAB and management options for landowners (Fig. 2). As with other town communications sent via the mail, we will print postcards without individual addresses, pay bulk postage with the town's account, and provide the proper number of postcards by postal route to Richmond's Post Office, to be distributed to every mailbox by mail carriers.

Phase 2: On-going Removals on Richmond Roads

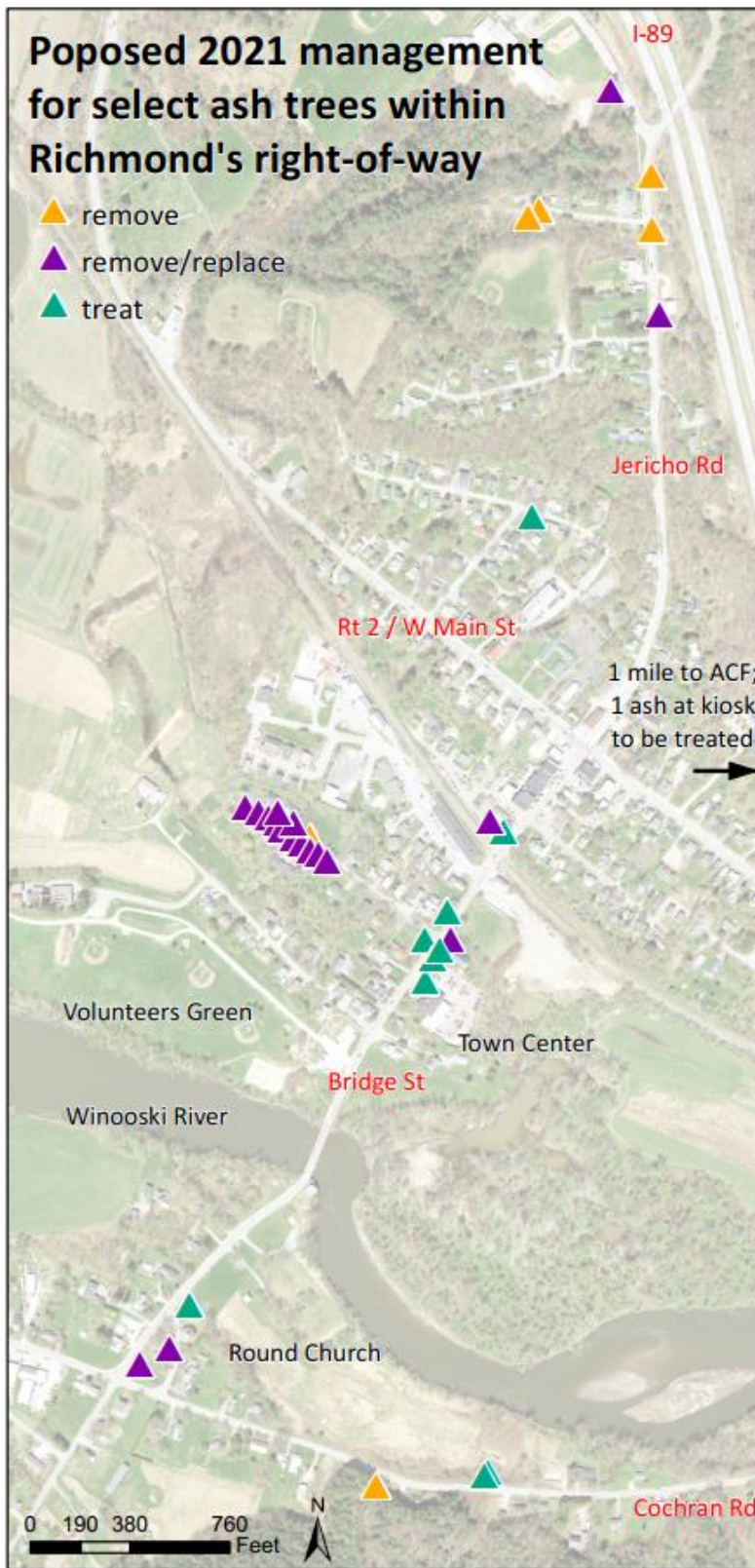
Phase 2 of our plan will unfold over the next five to ten years and will target all trees within the municipal right-of-way (ROW). An ash tree inventory conducted by volunteers during spring 2020 on over 20 miles of roads suggests there may be 1600-2000 ash trees along Richmond's 40 miles of roads. Tree density varies widely: some upland areas have 95-125 ash trees per road mile, while other stretches, particularly along fields and pastures have far fewer. Of the 874 trees inventoried, approximately 215 are 12-24" in diameter and 45 exceed 24" in diameter (Fig. 3).

In the fall 2021, Richmond will solicit bids from ISA-certified tree service providers for removal of the estimated 1600-2000 trees along the ROW. (Ongoing removals by electrical utilities, described below, may substantially reduce the number of trees that require removal.) Richmond will enter into a contract with a tree service provider for removals to commence in winter/spring 2022 and to be completed over the subsequent five years. **The FY2023 municipal budget (established in January 2022) will include this expense, as will subsequent years' budgets.**

The number of trees Richmond may have to remove may be substantially reduced by the preemptive work of electrical utilities in powerline corridors. For example, Green Mountain Power (GMP) has been identifying trees that threaten powerlines and removing them since January 2021. That month, the GMP forester in charge of the utility's EAB response (Alan Serano) walked the village with EAB Task Force coordinator Caitlin Littlefield to ensure that GMP would not remove any trees slated for treatment, per this plan. For the few trees on Town property that GMP felled in January and February 2021, Richmond residents were able to enter a lottery to remove and use the wood (e.g., for firewood). This lottery was coordinated by town staff.

Phase 3: Andrews Community Forest EAB Management

Phase 3 of Richmond's response to EAB will unfold concurrently, on ACF. Active forest management is underway already. The forester overseeing that job (Chittenden County Forester Ethan Tapper) will continue to adjust removal targets to capture some ash value while maintaining ash representation throughout the forest (though it is a modest component already). The latter will maintain habitat, ensure genetic diversity (e.g., in case of inherent resistance to EAB), and enable ash tree recruitment post-outbreak. Public education efforts may include girdled/peeled trees, signage, and continued webinars and social media updates. Harvest adjustments and education efforts will be made in consultation with the ACF committee and in conformance with the Selectboard-approved ACF Management Plan.



Large, healthy tree on Baker St to be treated.



A dozen small ash planted at the same time that Church St neighborhood was developed will be replaced.



Healthy ash outside Town Center will be treated

Fig. 1. Proposed 2021 management for ash trees within Richmond's village and surrounding areas.

TREE-KILLING BEETLE IN RICHMOND



POSTAGE PAID

The emerald ash borer (EAB) is a non-native, ½-inch long metallic green beetle that kills ash trees. EAB was detected in Richmond in 2020 and will pose a constant threat to ash trees here for many years to come. Trees in the woods, in yards, and along roads will all be affected. There are multiple management options for each ash tree, depending on its health and location.

What's Richmond doing? With support from VT's Urban and Community Forestry Program, the town has a strategic plan to manage the ash trees within and near the village. Some unhealthy trees will be removed and replaced with a mix of other species spring 2021. Other trees that are important to preserve—for example, for shading or aesthetics—will be treated with a naturally-derived insecticide. Beyond the village, ash trees along Richmond's roads within the public right-of-way will be taken down in the coming years. Utilities like GMP have already been removing trees that threaten powerlines. Landowners will be alerted when roadside trees that are on their property are to be taken down.

Own property? You have several options for managing your ash trees. If your trees are healthy, there are effective insecticide treatment options. A certified arborist can help you determine if that's a good strategy. Otherwise, you may consider removing unhealthy ash trees and replanting different species.

Manage forests? If you own forestland, you may consider harvesting more ash than you would otherwise. But consider leaving some ash in your woods unless it's a safety hazard (e.g., along a trail). Dead trees provide important habitat, and a small percentage of trees may have genetic resistance to EAB. By leaving some ash in your forest, you increase the likelihood of resistant trees passing on their genes and supporting the species' eventual recovery.

Whatever you do, be sure that no ash wood leaves the area so we can slow the spread of EAB.

Find more info on EAB at www.vtcommunityforestry.org/community-planning/tree-pests
Find a certified arborist at www.TreesAreGood.org/findanarborist

Figure 2. Front and back of draft postcard to be delivered to all postal patrons in Richmond spring 2021.

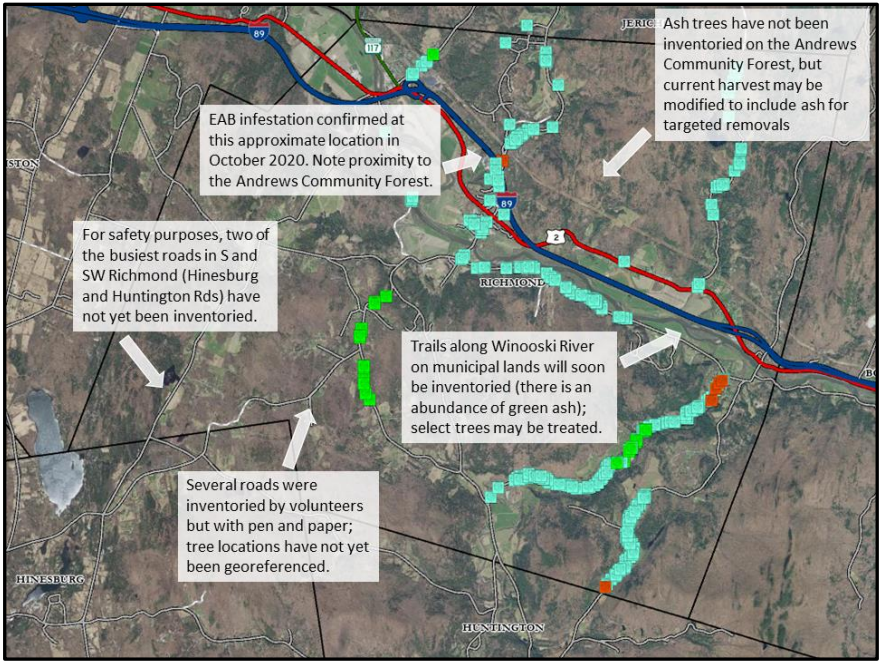


Figure 3. Map from Vermont’s Agency of Natural Resources GIS portal shows locations of inventoried ash trees in Richmond. Red markers are trees identified as leaning into the road. Management for teal trees is yet to be determined, except for those in the village center. (That is the case for green trees, as well, which were labeled mistakenly).

Phase	Objective	Task	Point person	Date
1 - Village, outreach	Remove, replace	Solicit bids from ISA-certified tree service professionals.	Littlefield	1-Mar-21
1 - Village, outreach	Remove, replace	Enter into contract with selected tree service provider	Littlefield, Arneson	1-Apr-21
1 - Village, outreach	Remove, replace	Identify local artisans/woodworkers to produce chairs/benches (for Town Center) or bowls (for raffle) with usable wood	Littlefield, RCC	1-Apr-21
1 - Village, outreach	Remove, replace	Tree service provider commences removals and replacements	Littlefield, Leonetti, Hamerslough	1-May-21
1 - Village, outreach	Remove, replace	Tops and unusable wood is applied as mulch to riparian restoration area in Volunteers Green	Kart, Hamerslough	1-May-21
1 - Village, outreach	Remove, replace	Monitoring and watering of planted trees	Littlefield, Leonetti, Hamerslough	ongoing, after May 2021
1 - Village, outreach	Treatments	Tree service provider commences treatments	Littlefield, Rosovsky	15-Jan-21
1 - Village, outreach	Outreach	Prepare and send informational postcard to all Richmond households	Littlefield, RCC	1-Apr-21
1 - Village, outreach	Funding	Submit invoice to UCF for allowable 1/3 grant (upon signing of grant agreement)	Littlefield, Arneson	1-Mar-21
1 - Village, outreach	Funding	Submit invoice to UCF for allowable 1/3 grant (at project mid-point)	Littlefield, Arneson	1-Jul-21
1 - Village, outreach	Funding	Prepare comprehensive CRF application for \$15k match	Littlefield	1-Jul-21
1 - Village, outreach	Funding	Submit invoice for balance of UCF grant with verification of payment of all expenses	Littlefield, Arneson	15-Jan-22
1 - Village, outreach	Funding	Request funds from CRF to continue treating trees	Littlefield	ongoing, after 2021
2 - ROW	Removals	Solicit bids for removal of all trees within ROW	Gosselin	1-Nov-21
2 - ROW	Funding	Establish annual line item in town budget based on bids	Arneson	15-Jan-22
2 - ROW	Removals	Tree service provider removes 15-20% each yr over 5-7 yrs during non-flight season (October - May)	Gosselin, Arneson	ongoing, after Jan 2022
3 - ACF	Manage ash	Ongoing and future harvests to be modified: more ash may be removed but many retained for wildlife habitat and any inherent EAB resistance	Tapper	ongoing