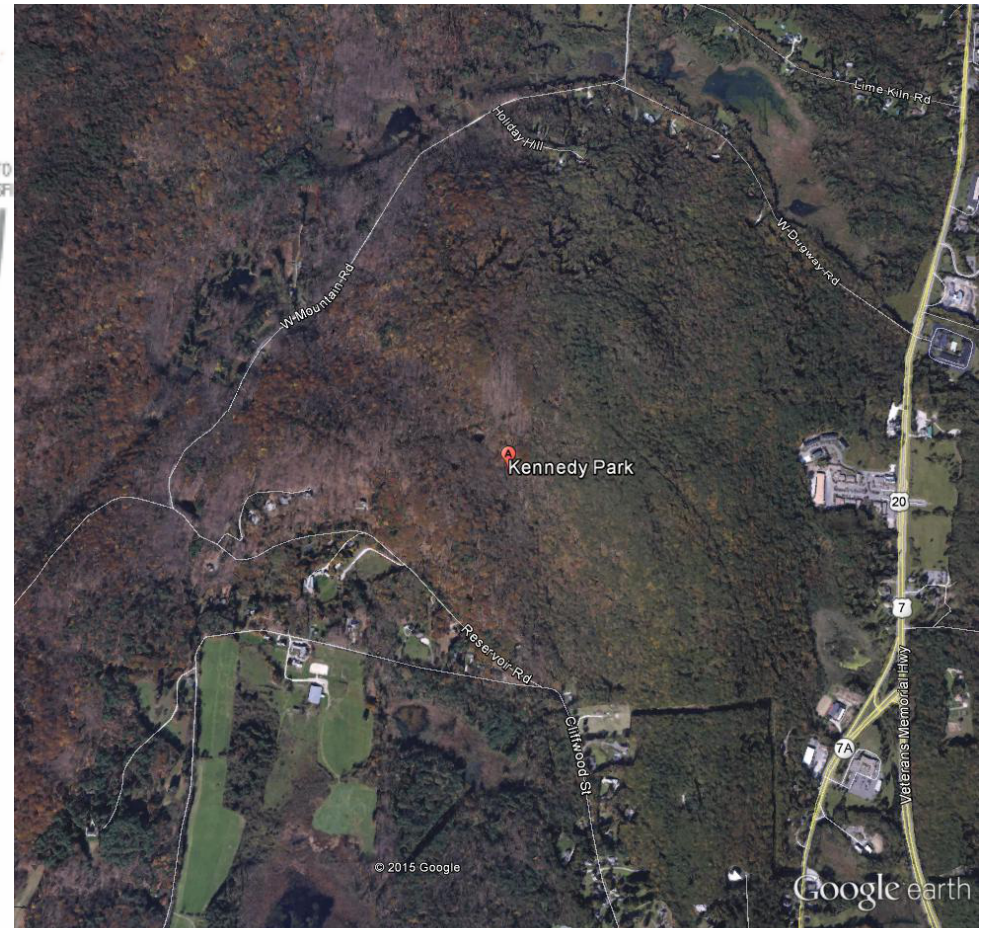
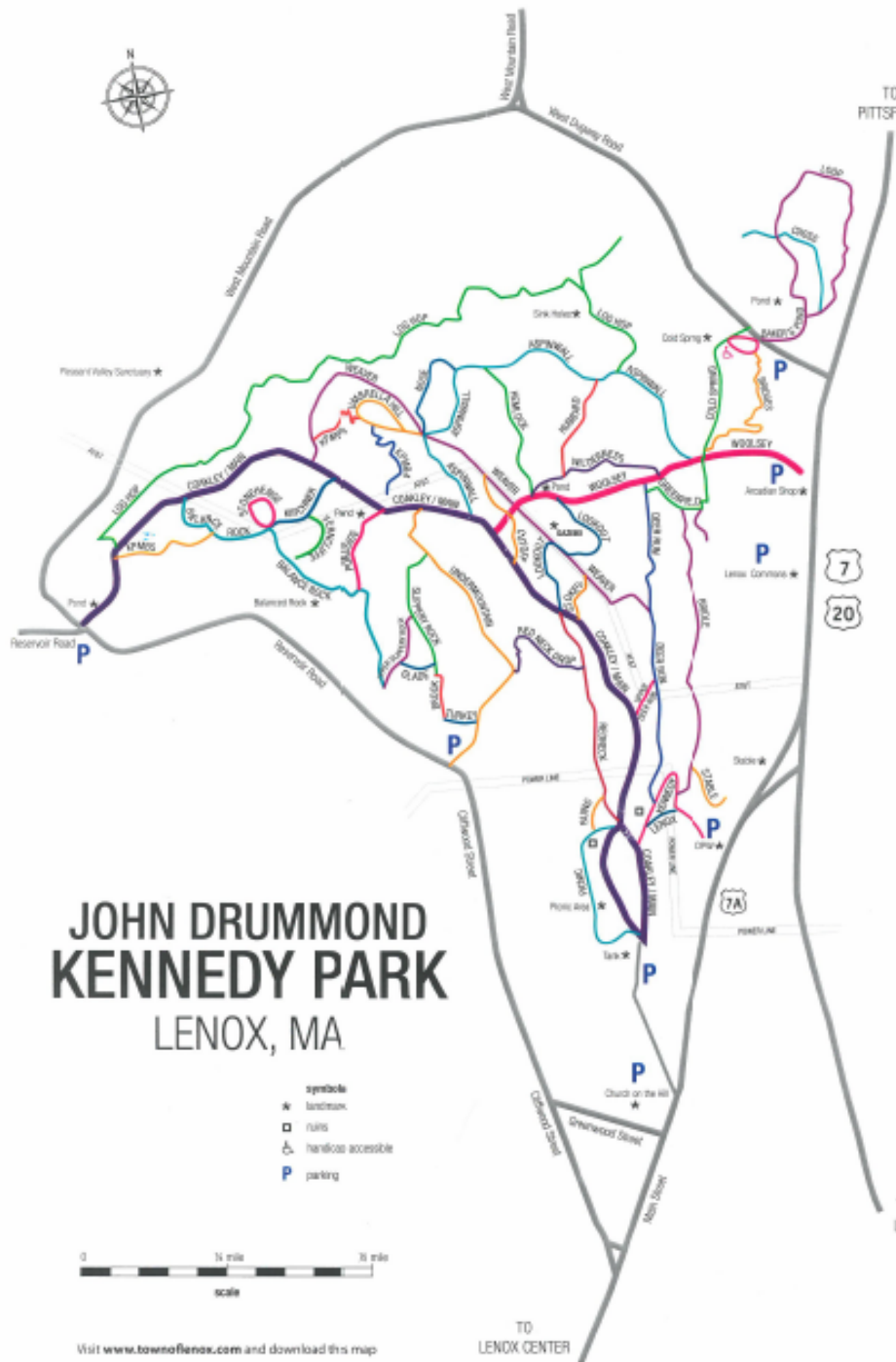


# **Hardy Kiwi Removal in Kennedy Park**

*A joint planning effort between the Division of Fish and Wildlife (Natural Heritage and Endangered Species Program), Mass Audubon and the Town of Lenox*







## The Issue

Hardy kiwi (*actinidia arguta*), introduced from eastern Asia for landscaping and cultivation, is a woody vine that can grow more than 20 feet/year. The leaves have red stalks, its fruits are green, smooth and grape shaped, and the mature bark is grey and flakey. It germinates and grows even in closed-canopy forest, climbs surrounding trees and overwhelms vegetation. Ice and snow weighing on the vines cause trees to snap and fall, creating amphitheaters of solely hardy kiwi.



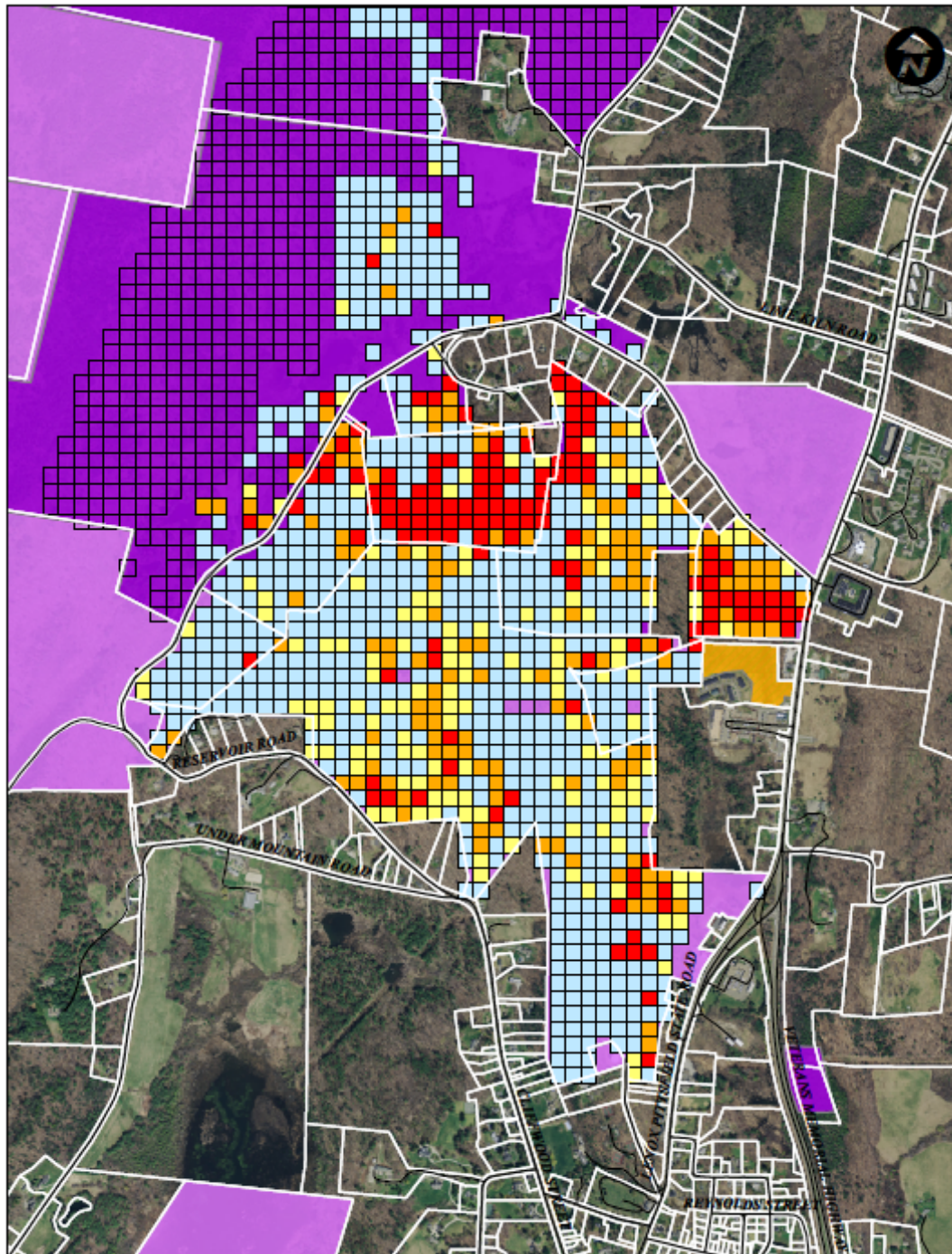


## The Issue

The take over of hardy kiwi creates large openings in the forest canopy, and crowds out the diverse array of native understory species and mix of tree species present in areas such as Kennedy Park. This impacts:

- ✓ Habitat
- ✓ Biodiversity & Resilience
- ✓ Water Quality
- ✓ Trail Use Experience & Safety



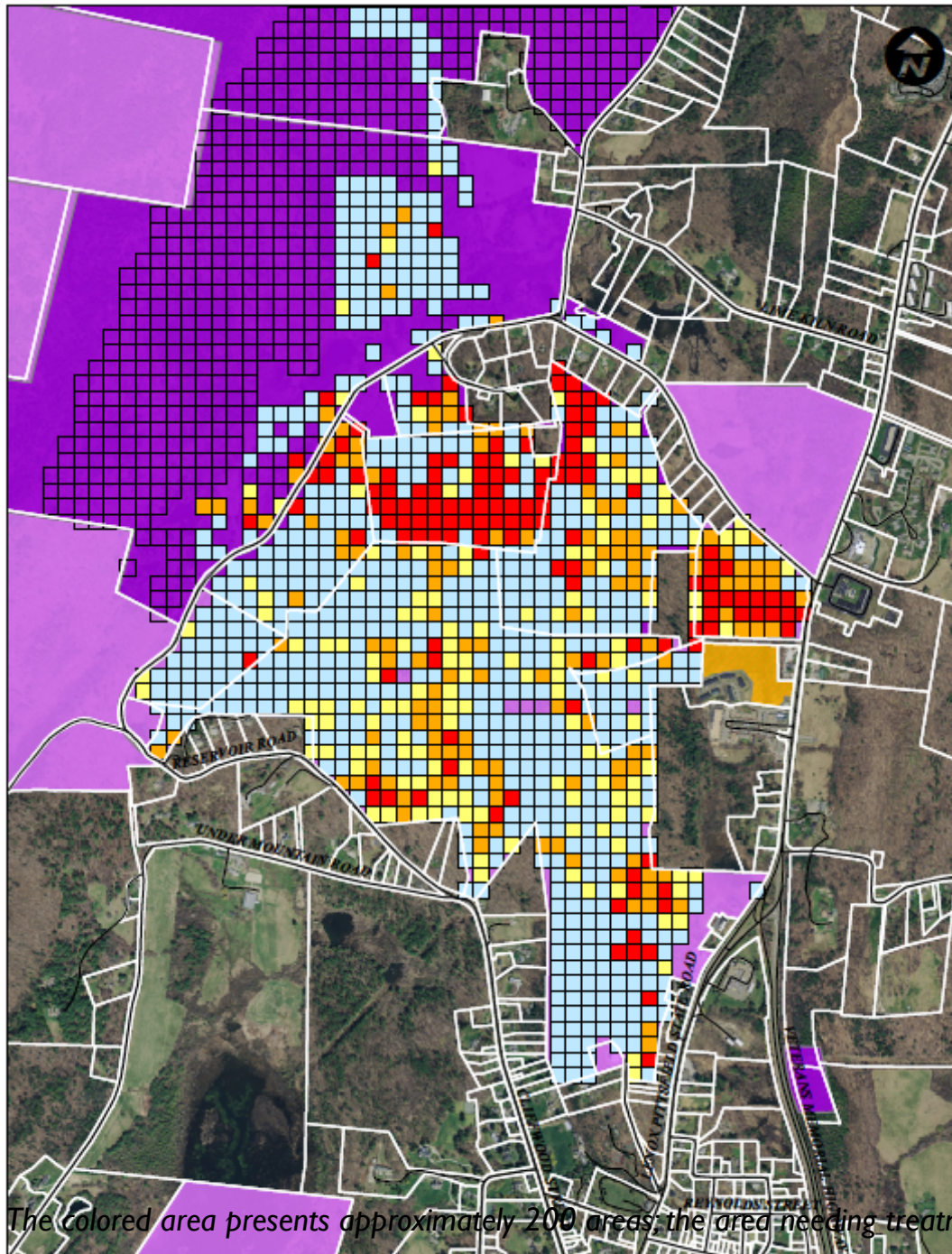


## The Project

A joint effort between the Division of Fish and Wildlife Natural Heritage and Endangered Species Program, Mass Audubon and the Town of Lenox, the work:

- ✓ Identifies and prioritizes extent of hardy kiwi in Kennedy Park & Audubon land
- ✓ Creates a scope of work targeting 95% removal
- ✓ Provides flexibility for follow-up if necessary





## The Project

- ✓ **Blue:** No kiwi observed
- ✓ **Yellow:** A few plants or a patch up to 5 ft x 5 ft
- ✓ **Orange:** Several patches or more greater than 5 ft x 5 ft, or starting to send up climbing vines
- ✓ **Red:** Canopy (trees) being pulled down, dense cover everywhere

The colored area presents approximately 200 acres; the area needing treatment is closer to 100 acres.

All three project team members are eager to manage the hardy kiwi:

- ✓ Kennedy Park and Audubon lands in the project area otherwise are healthy and diverse;
- ✓ NHESP has other investments in the area;
- ✓ The land hosts rare, native species.
- ✓ The dead or weakened trees trail side creates a safety hazard for trail users.

## Goal 2 of the OSRP

Protect plant and wildlife habitats through a number of actions, including:

- ✓ The monitoring and reduction of hardy kiwi spread
- ✓ Trial program continuation to eradicate hardy kiwi in Kennedy Park
- ✓ Work to have hardy kiwi listed as an invasive plant

► *Note: Another popular goal of the OSRP is to reduce the use of herbicides to protect water quality.*





## Scope of Work

Hardy kiwi seedlings and small vines can be controlled by hand pulling. Larger plants can be controlled through the use of a systemic herbicide, applied either as a foliar spray or directly to the freshly cut stump of the vine. For plants growing high into trees, cutting the vine after leaf fall and treating the stump with herbicide and leaving the vine to decay in the tree minimizes damage to the tree.

► *Note: tentative, subject to contract specific work plan.*



# Project Impacts

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Targeting approximately 200 acres of hardy kiwi for removal is not an easy task. It will require:

- ✓ Motorized vehicles along trails (on Town property)
- ✓ Application of herbicide (paint and spray)
- ✓ Trail closures
- ✓ Boundary and area flagging
- ✓ Increased signage
- ✓ Increased day time activity in Kennedy Park
- ✓ Dead vegetation may not be as “attractive” as live vine
- ✓ Fiscal match



# Project Safeguards

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Despite the impacts, there are provisions in the request for proposals to mitigate impacts of the project:

- ✓ Minimal disturbance to native, non-target plants with complete avoidance of delineated areas required
  - ✓ Appropriate permits must be required from the Lenox Cons Comm
  - ✓ Project area must be completed to satisfaction of three parties: NHESP, Audubon and Town of Lenox
  - ✓ Contractor must provide a performance bond
  - ✓ Contractor must comply with DFW's "Best Management Practices for Controlling the Spread of Invasive Plants"
  - ✓ Contractor responsible for appropriate restoration as deemed necessary by NHESP
  - ✓ Signage at parking lots and trail heads
  - ✓ Trail closures for herbicide application & drying period
  - ✓ Abutter notification
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# Potential Ongoing Strategies

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This large effort will not be the only effort undertaken to address hardy kiwi in Kennedy Park:

- ✓ Volunteer ID & Treatment
- ✓ Education & Outreach
- ✓ Ongoing Monitoring
- ✓ Lobby to have hardy kiwi listed as an invasive species at the state level



# Proposed Next Steps\*

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- ▶ **Fall 2015:** Contract Awarded
- ▶ **Fall 2015 to Winter 2015/16:** Permitting Process
- ▶ **Fall 2015/Spring 2016:** Project Start
- ▶ **Fall 2016:** Project Review, and follow up work as necessary
- ▶ **Spring 2017/Fall 2017:** Ongoing monitoring
- ▶ **Ongoing:** Close coordination between NHESP, Mass Audubon, the Town of Lenox and the selected contractor
- ▶ **Ongoing:** Updates to the Town

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▶ *Note: tentative, subject to contract specific work plan.*