

FRIENDS OF THE

*Winooski*



Friends of the Winooski River  
work together for a clean,  
healthy, and resilient watershed.

Lake Champlain

Burlington ●

Richmond ●

Waterbury ●

Montpelier ●

Cabot ●

Northfield ●

Barre ●

Winooski River

Little River

North Branch

Kingsbury Branch

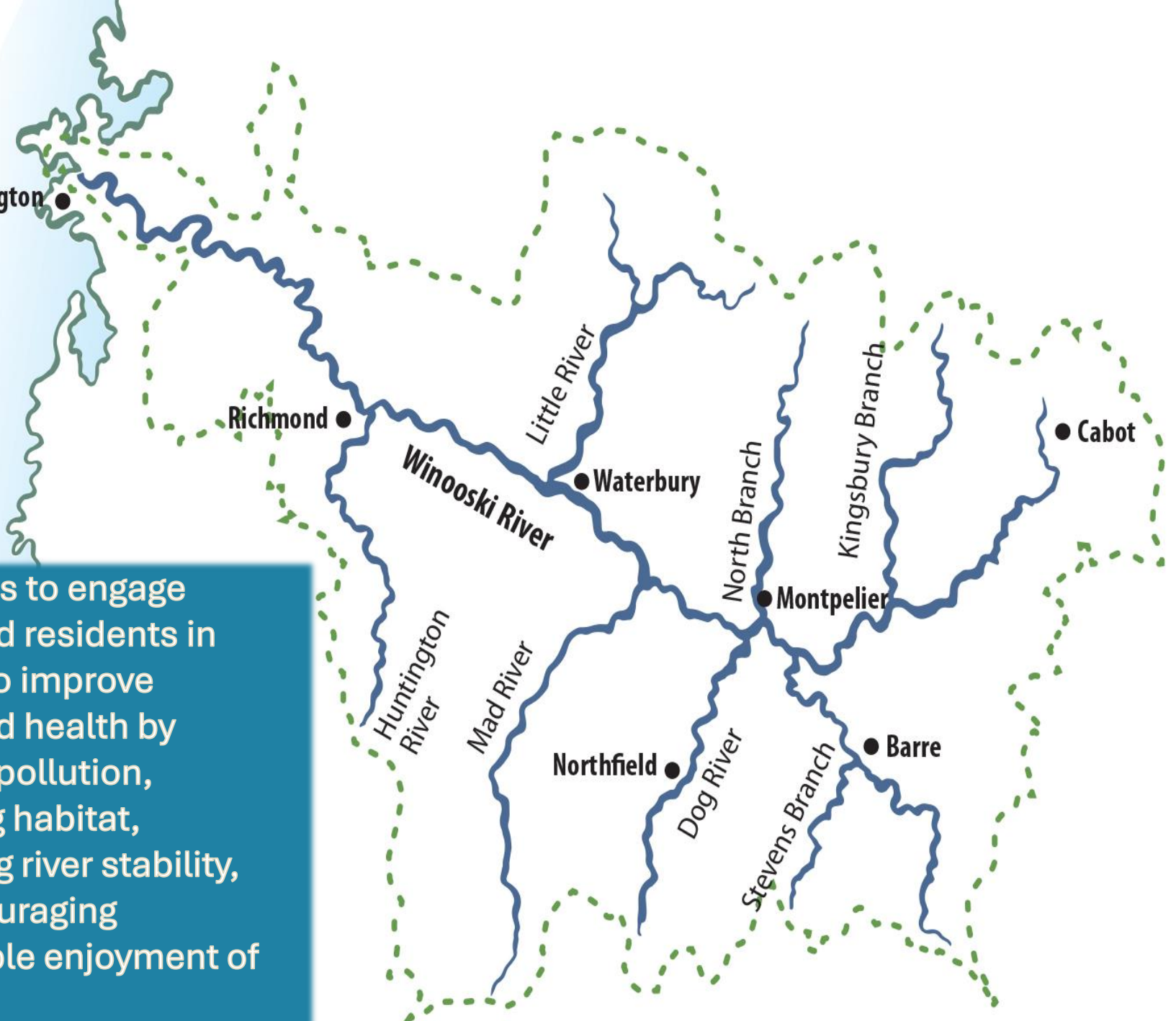
Huntington River

Mad River

Dog River

Stevens Branch

Our goal is to engage watershed residents in working to improve watershed health by reducing pollution, improving habitat, increasing river stability, and encouraging sustainable enjoyment of the river.



# Priority Challenges



## Phosphorus

Nutrient that helps plants grow, including algae

Main sources are fertilizer (manure, composted plant material, and other) and historically-fertilized soils



## Sediment

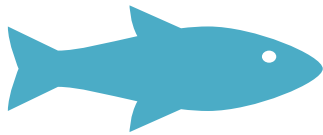
Transports phosphorus

Clogs infrastructure

Worsens erosion (more phosphorus & sediment!)

Smothers streambeds, bad for food chain

# Priority Challenges



## Connectivity

Rivers disconnected from floodplains by development

Fish populations disconnected by barriers like dams and poorly-designed culverts



## Chloride

Increasing amounts of chloride used in snow and ice management, seeing rising levels in waters

# Solutions

## Ecological restoration

- Open up floodplains, reconnect to rivers
- Remove or enlarge barriers (dams, culverts)
- Plant trees and shrubs in buffer areas

## Stormwater management

- Retrofit existing development to manage more rain or make it cleaner before it hits the river
- Design new development to higher standards
- Reduce pollutants in runoff



# Partners

**Federal government:** US Fish & Wildlife Service, FEMA, EPA, Natural Resource Conservation Districts

**State government:** Fish & Wildlife, Forestry, Environmental Conservation, Public Safety, Transportation

**Local government:** Municipalities and RPCs

**Non-profits:** The Nature Conservancy, Trout Unlimited, local watershed groups





Water quality monitoring  
Riparian restoration  
River Cleanups  
Stormwater mitigation  
Habitat Improvement  
Outreach and Education  
Sustainable enjoyment of the river



# Restoration



- Plant trees
- Remove dams
- Replace culverts
- Reconnect floodplains
- Improve stormwater management



A photograph of a dam in a forested area. The dam is a concrete structure with a spillway that has been partially removed, leaving a rocky stream bed. Water is flowing over the rocks, creating a small waterfall. The surrounding area is lush with green trees and foliage. A white text box with a black border is overlaid on the left side of the image.

Camp Wihakowi Dam  
Before Removal



Camp Wihakowi Dam After Removal



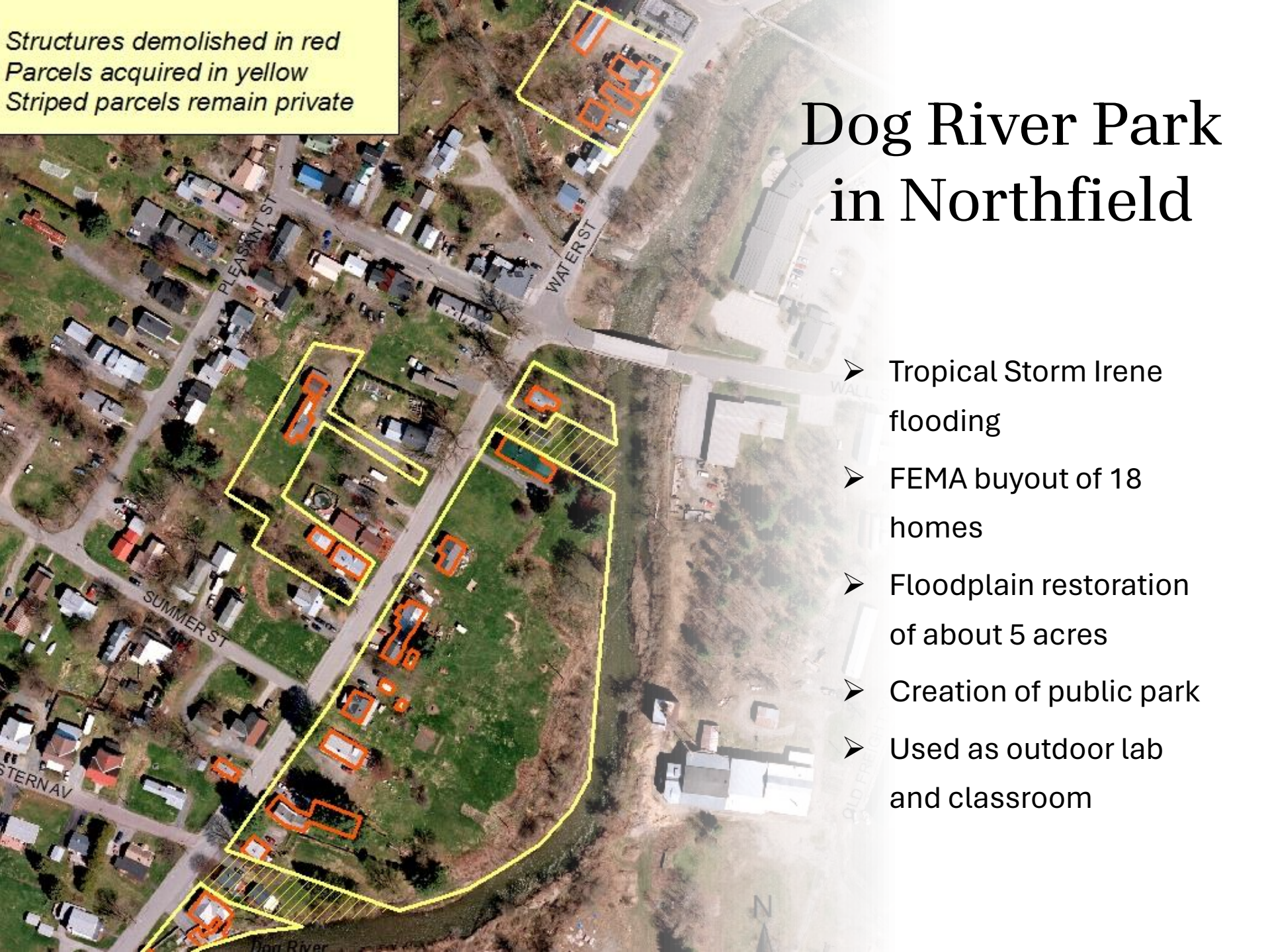


Lockwood Brook in Fayston

Structures demolished in red  
Parcels acquired in yellow  
Striped parcels remain private

# Dog River Park in Northfield

- Tropical Storm Irene flooding
- FEMA buyout of 18 homes
- Floodplain restoration of about 5 acres
- Creation of public park
- Used as outdoor lab and classroom











# Pollinator Habitat

This area has been planted with pollinator-friendly flowers and is protected from pesticides to provide valuable habitat for bees and other pollinators.

To learn how you can help to bring back the pollinators, please visit [www.xerces.org](http://www.xerces.org).











## Benefits

Floodplain reconnection  
8000 cu yds material  
removed, access  
restored

Hazard mitigation  
Numerous households  
removed from risk  
Future flood damage  
costs avoided

Habitat improved: birds, fish,  
wildlife, insects

Recreation enhanced for  
community

Outdoor laboratory for  
schools created

Dog River Park  
July 10, 2023





# Partners Engaged

- Hazard mitigation: FEMA & State
- Planning & Community Development: US, VT, regional, and local
- Fisheries biologists, state & federal
- Archeologists and architectural historian
- Landscape designers
- Geologists
- Engineers
- Teachers & students, K-12 and college
- Community volunteers



# Education & Outreach



Provide resources for watershed residents to learn



Residential assessments: Storm Smart and Stream Wise



School programs



Volunteer water quality monitoring



Support for Municipalities



"The team from Stream Wise and the additional experts all seem excited about the project. We are as well."

*Don - Moretown, VT*

**#StreamWiseStories**





# 2024



Plantings: 1400 trees on 6 sites in Montpelier, Middlesex, Waterbury, Northfield, Marshfield, and East Montpelier



Dam Removal: 6 dams in Barre, Barre Town, Plainfield, Cabot, Calais



Culvert Replacement: 2 in Williamstown and Barre Town



Public River Access Plan in Barre (VOREC)

# 2024



Floodplain Alternatives Analysis projects in Richmond and Plainfield



Baker Pond Access Area Improvement in Brookfield



Bull Run tributary stabilization



Strategic Woody Addition in Cabot

# Paddle with Us



People who enjoy the  
river will take care of the  
river

Onion River Ramble  
June 9

River of Light  
August 17

