



The Multiple Benefits of Wetland Conservation & Restoration on Public Lands



Mission Statement

- The conservation of all species of fish, wildlife, and plants and their habitats for the people of Vermont.



What we conserve



Natural Communities



Fish



Habitat



Invertebrates



Wildlife



Plants

Who we serve



Wildlife watchers



Future generations



Anglers



Hunters and Trappers



Communities



Landowners

Department History of Wetland Conservation and Restoration

- Sandbar WMA Acquisition - 1920 (First in Eastern US)
- Dead Creek WMA - 1950s & 60s
- Stream Bank Parcels
- Vermont Duck Stamp Fund - 1985
- NAWCA Grants - 1990s to present
- VT Habitat Stamp Fund - 2015
- EPA – DEC – LCBP Grant Expand and Accelerate Wetland Conservation and Restoration in Vermont's Lake Champlain Basin 2019 to present

100 years later, VFWD has conserved nearly 30,000 acres of wetlands. VFWD owns 101 WMAs constituting 145,000 acres of outstanding wildlife habitat.

Funding

- Pittman Robertson
- License Fees
- Vermont Duck Stamp
- NGO Matching Funds
- Various Grants
- Habitat Stamp
- EPA-DEC-LCBP

Vermont Duck Stamp Fund

Established by Legislature in 1985

First Duck Stamp in 1986

Raised \$5.1 million

Spent \$2.3 million on Projects

Current Balance of \$2.98 million

Interest Balance of \$529,300

Completed 99 Projects involving 12,260 acres

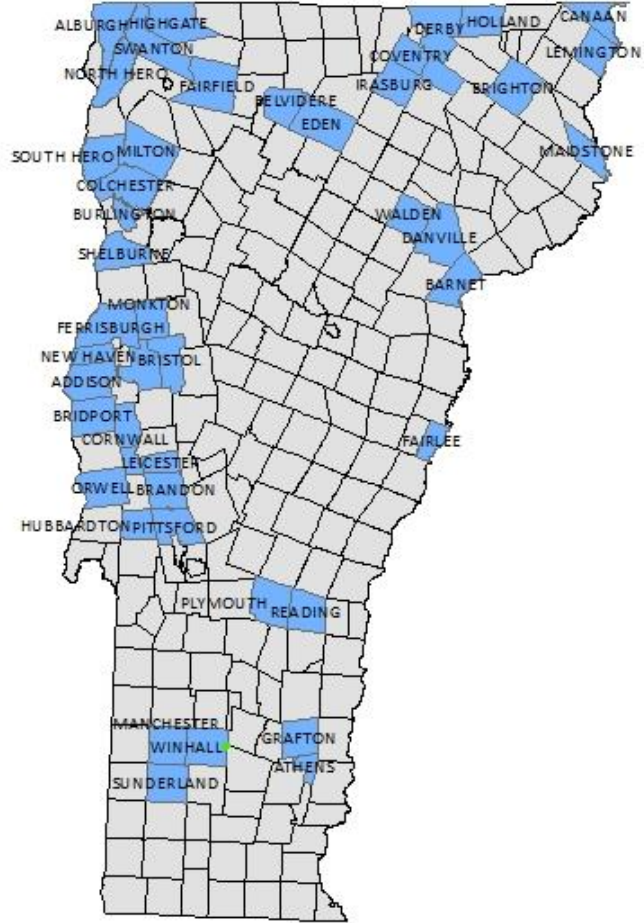


**Long-tailed Duck
2001 VT Stamp Image**



The Vermont Duck Stamp

1986-2016



LEGEND

- Town Boundary
- Towns with completed Duck Stamp Projects

Duck Stamp Funded Projects in the works:

- Canaan, Johnson Farm, WMA
- Charleston, Clyde River
- Sunderland, Kesick Swamp, WMA



Available at www.vtfishandwildlife.com

EPA Wetland Funds - Lake Champlain Basin Program

Expand and Accelerate Wetland Conservation and Restoration in Vermont's Lake Champlain Basin

Outputs

- Completion of 3-5 wetland acquisition projects, a minimum of 40% restored.
- Hydrologically restore 100 acres.

Benefits

- Improving functions and values of existing, degraded wetland acres, such as surface water nutrient retention, stormwater retention, filtration, and gradual discharge, groundwater recharge, reduced soil erosion, floodwater attenuation, and habitat for diverse communities of wildlife, fish, and plants.
- Increasing the benefits these projects have on the landscape including enhancement of wildlife habitat, public access, flood protection, and wildlife-based recreation.

Timeframe

Year one - four: October 1, 2019 – September 30, 2023 \$7.2 Million

EPA Wetland Funds –LCBP- DEC

Accomplishments

- Nine projects closed or under contract, all at various stages of restoration
- 2,015 acres acquired
- 1,323 acres restorable (66%)
- \$2.9 Million of EPA funds spent on acquisition.
- \$1.15 Million in partnering funds for acquisition.
- \$500,000 estimated to be spent on restoration.

Process

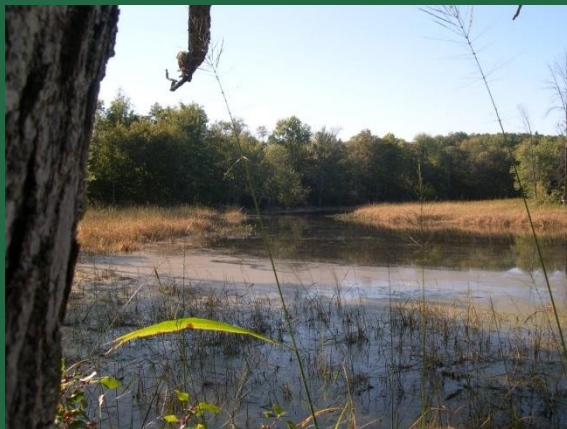
1. Landowner Contacts (cold call letter, partner contacts, real estate listings)
2. Review by Wetlands Steering Committee
3. Acquisition Process
4. Restoration Survey and Plan
5. Review by District Stewardship Team
6. Permits
7. Implementation
8. Follow up

Wildlife Management Areas Focus Areas

**22 Wildlife Management Areas
With Significant Wetlands**



Mud Creek WMA



Lower Lamoille River WMA



Rock River WMA

Wetland Conservation



Examples of Wetland Projects



**Pomainville WMA
Pittsford**



**Lower Otter Creek WMA
Ferrisburg**



**Halfmoon Cove WMA
Colchester**



**Clyde River Access Area
Brighton**



**Johns River
Derby**



**Rock River WMA
Highgate**

South Bay Marshes (Magoon & Guyette), Coventry Started in 1991



Kesick Swamp WMA, Sunderland Multiple Parcels, 1992 - 1995



Beaver Management Program 1995 - 2017

Projects
257

Acres Protected
2,902 ac.





Culvert Fences



Wetland Restoration



Dead Creek WMA















Water Quality Benefits

- Nutrient removal and transformation, phytoplankton use inorganics to make food
- Sediment removal, silt adheres to stalks of water plants and settles avoiding downstream sedimentation and building a rich blanket of organic matter
- Carbon sequestration
- Groundwater recharge and discharge
- Remove toxicants and pesticides: bacteria consume organic contaminants

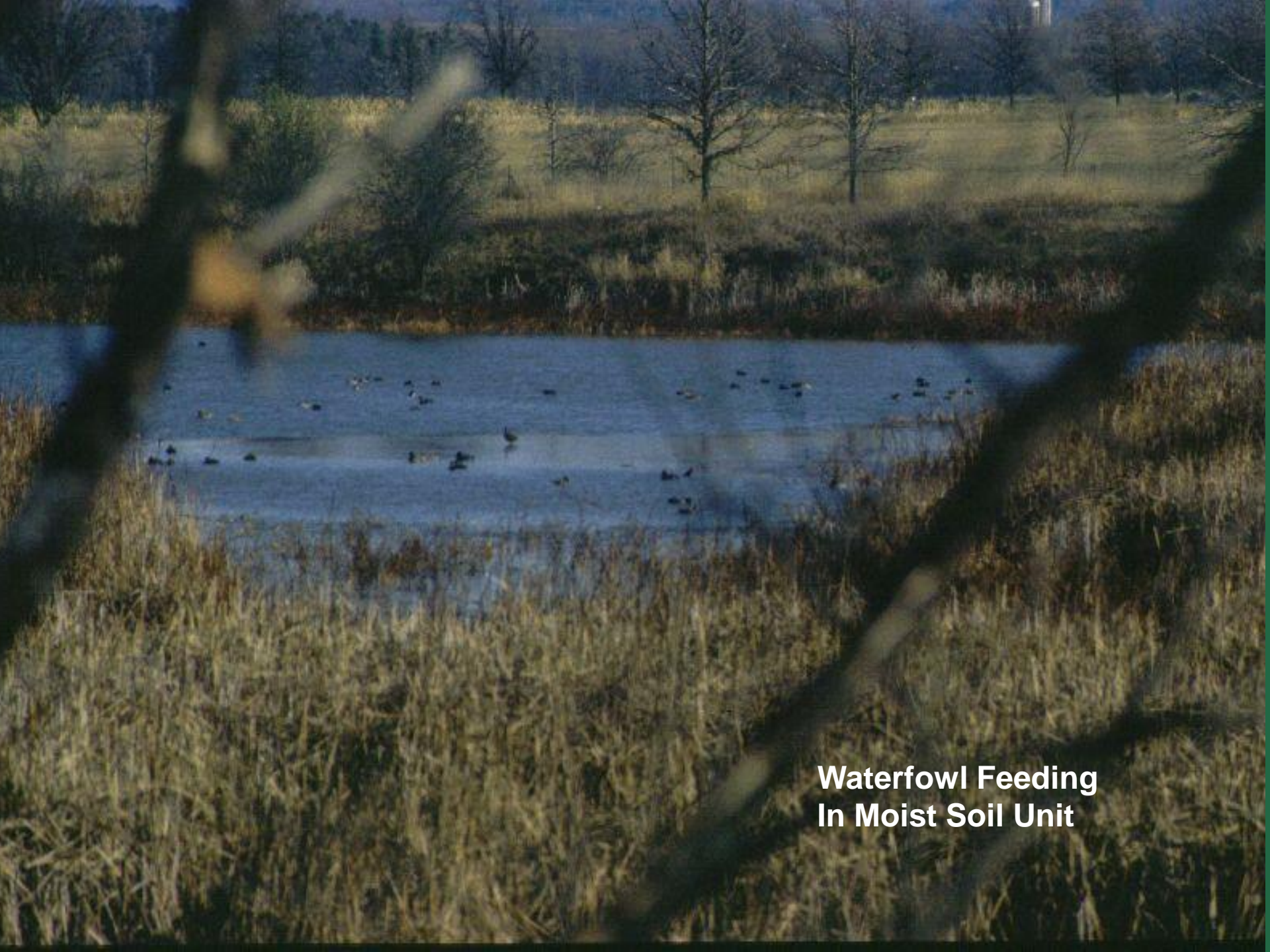


Wildlife Benefits

- Food Production, highly productive
- Shelter
- Clean Water
- Space
- Refuging areas
- Breeding and Nursery Areas







**Waterfowl Feeding
In Moist Soil Unit**





Human Benefits

*Outreach and Educations Sites

*Quite Places

*Flood Abatement/Velocity Reduction

*Drinking Water

*Erosion Control

*Aesthetics

*Recreation

*Financial Savings

*Soil Formation



Education and Outreach





Flood Abatement - Sediment Trapping - Quiet Places



\$\$ Economics \$\$

Viewing

Tourism

Hunting

Fishing

Carbon Storage

Commercial Fisheries

Property Values

Drinking Water

Water Sports

Flood Abatement

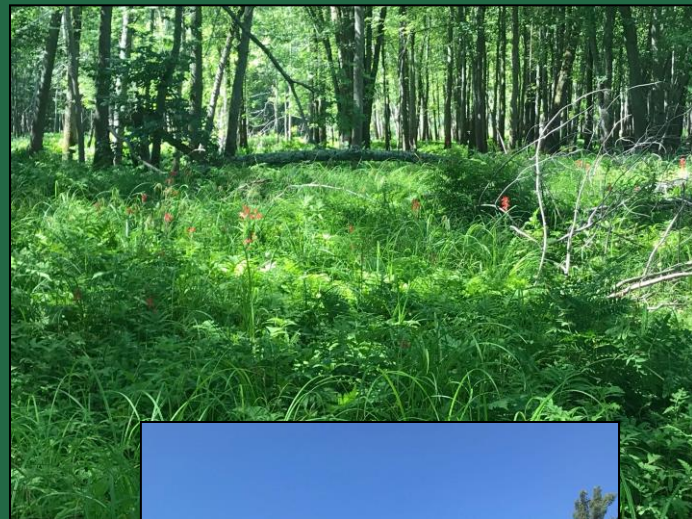
Savings: insurance/property

Quiet Spaces

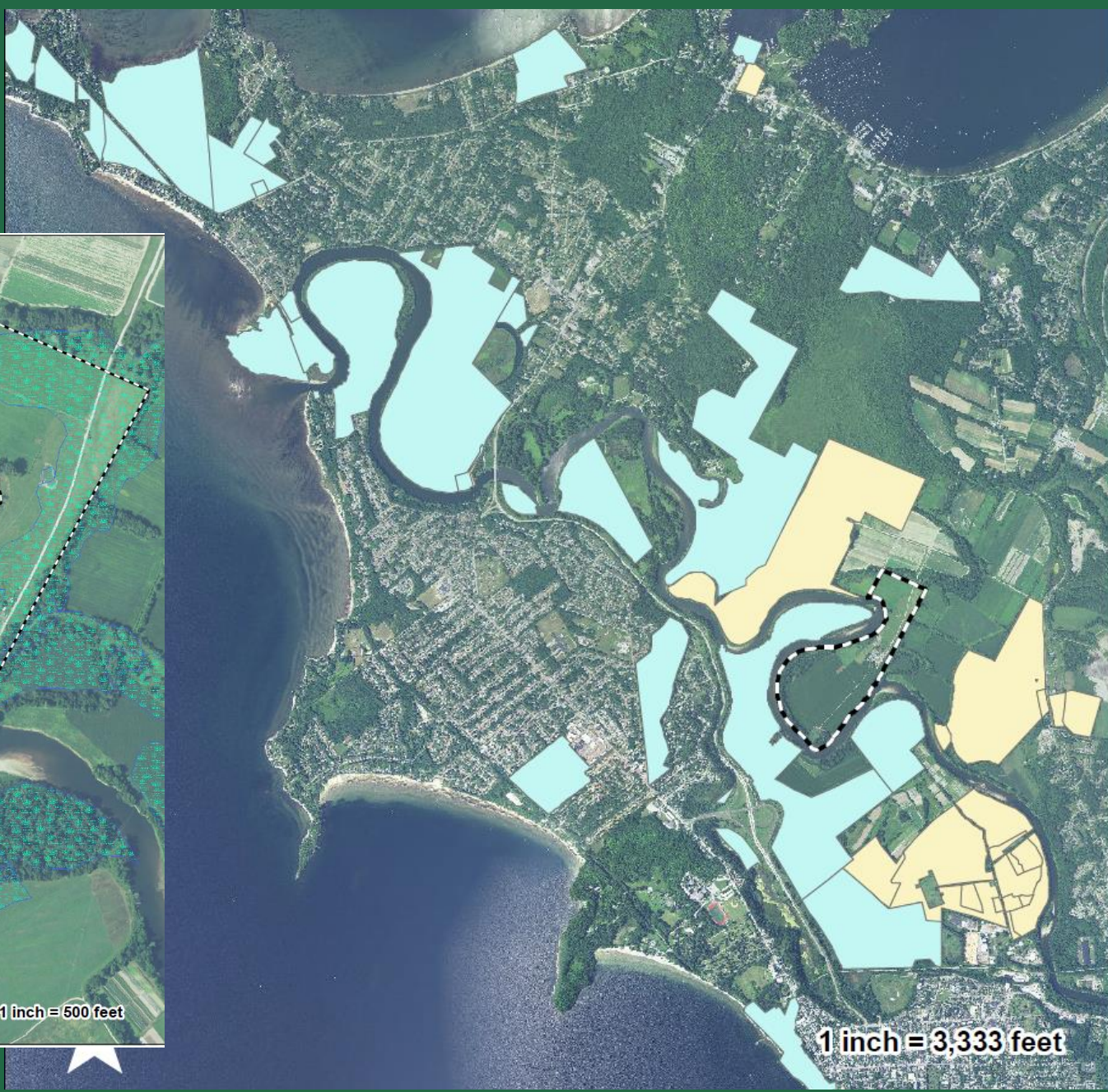
Contractors Hired

Financial Savings of T&E
Restoration

Rock River WMA – Derosia, 124 acres



Intervale WMA Fitzgerald, 124 acres



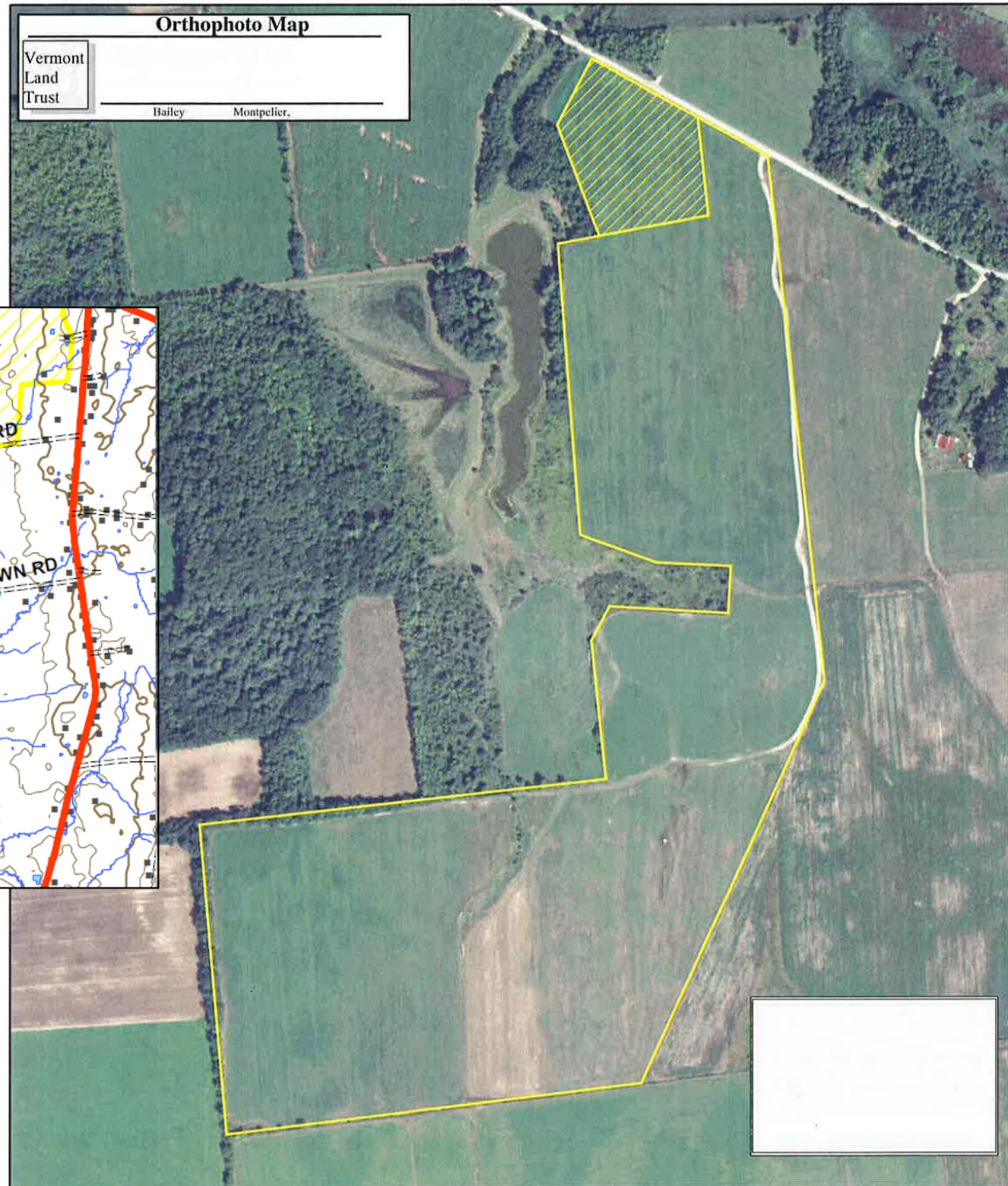
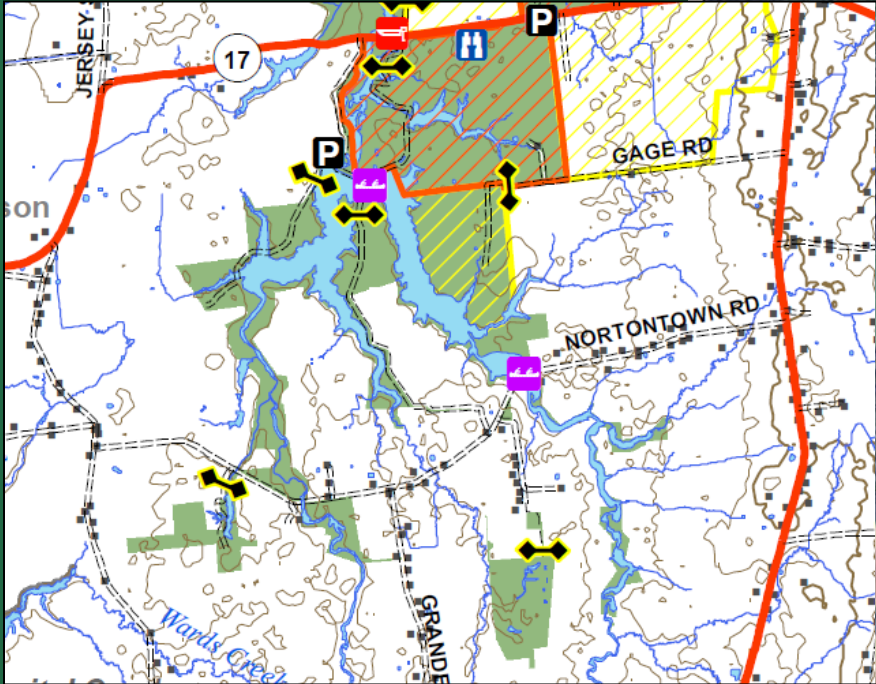


Intervale WMA – Senesac, 142 acres



Ethan Allen
Vermont

Dead Creek WMA Connor Farm 98 acres





Partners in Wetland Conservation



Questions?

