

# Old Town Hill Salt Marsh Restoration

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THE TRUSTEES OF RESERVATIONS

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CATEGORY: RESEARCH AND MANAGEMENT PROJECT



# Why: To restore marsh hydrology to prevent subsidence and restore natural marsh accretion.

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What question(s) are you asking? WHY is this project needed?

- Is ditch remediation a viable technique for restoring salt marsh at the landscape scale?
- Will ditch remediation reverse marsh subsidence and restore the marshes natural accretion to keep pace with sea level rise?
- Will ditch remediation maintain and restore habitat (high marsh) for obligate wildlife, specifically salt marsh sparrows in the face of rising sea levels?

# What: Ditch Remediation

## What are the goals of this project?

Restore marsh-sustaining hydrology to a heavily ditched site using ditch remediation in order to:

- reverse trends of marsh subsidence
- re-establish and retain high marsh habitat
- support obligate marsh species (saltmarsh sparrow)
- allow marsh to keep pace with SLR more effectively

## What are you measuring?

- Ditch elevation, ditch vegetation (% cover), and hydrology (data loggers)
- Marsh breeding birds and mosquitoes
- Marsh plain elevation and sediment accretion

## What is your desired ultimate outcome?

- short-term: restored hydrology
- long-term: a healthy marsh with obligate species and natural accretion rates that keep pace with SLR

# Where are you working

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Show a map outlining your project area/where you are working (e.g. survey sites, one large area, statewide, regional)

- Old Town Hill Reservation in Newbury, MA

What is your unit of measure? (e.g., acres of saltmarsh surveyed or number of samples taken)

- 85 acres of salt marsh
- 138 ditches to be treated with a total linear foot treatment length of 29,729

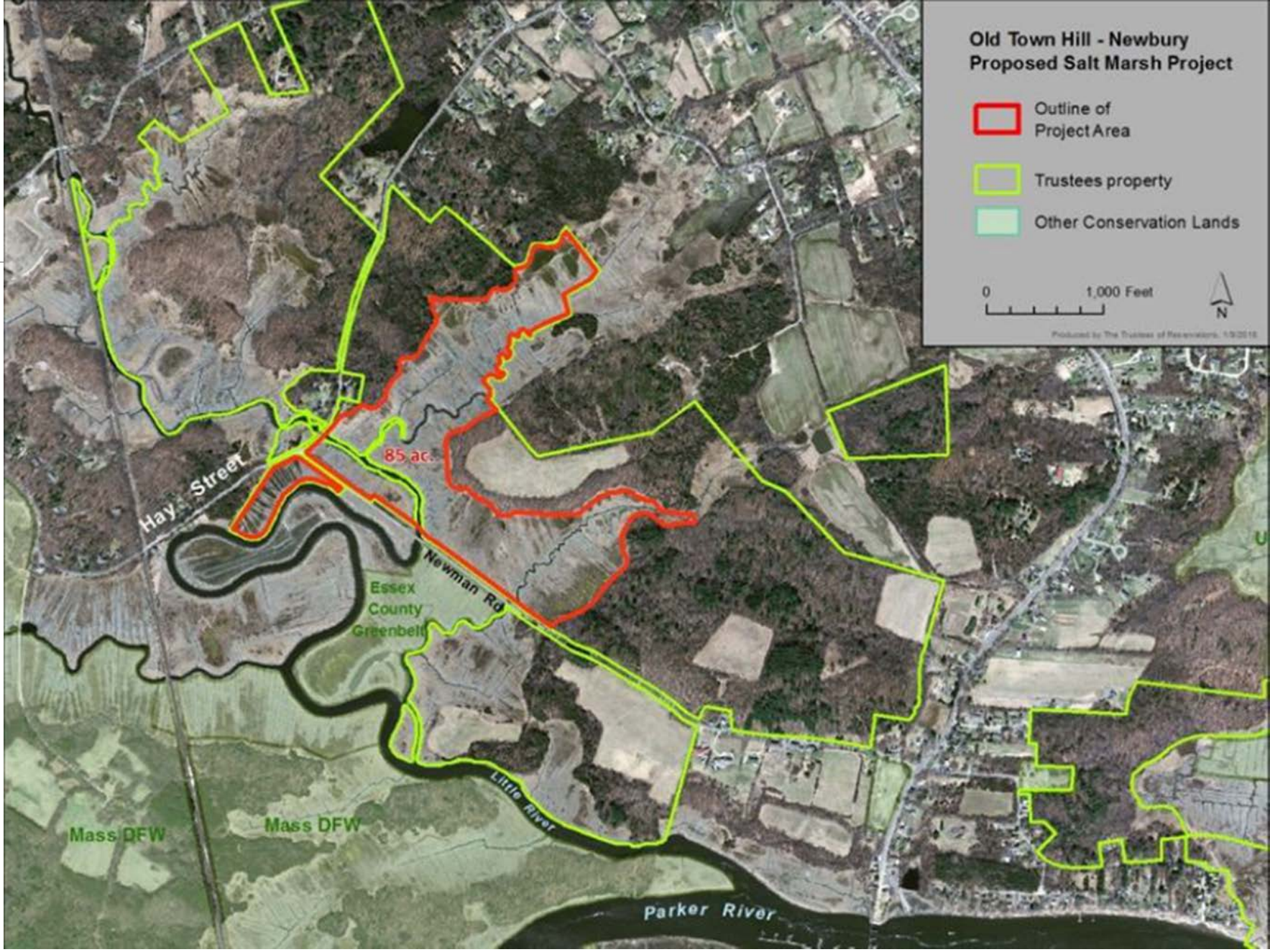
# Old Town Hill - Newbury Proposed Salt Marsh Project

-  Outline of Project Area
-  Trustees property
-  Other Conservation Lands

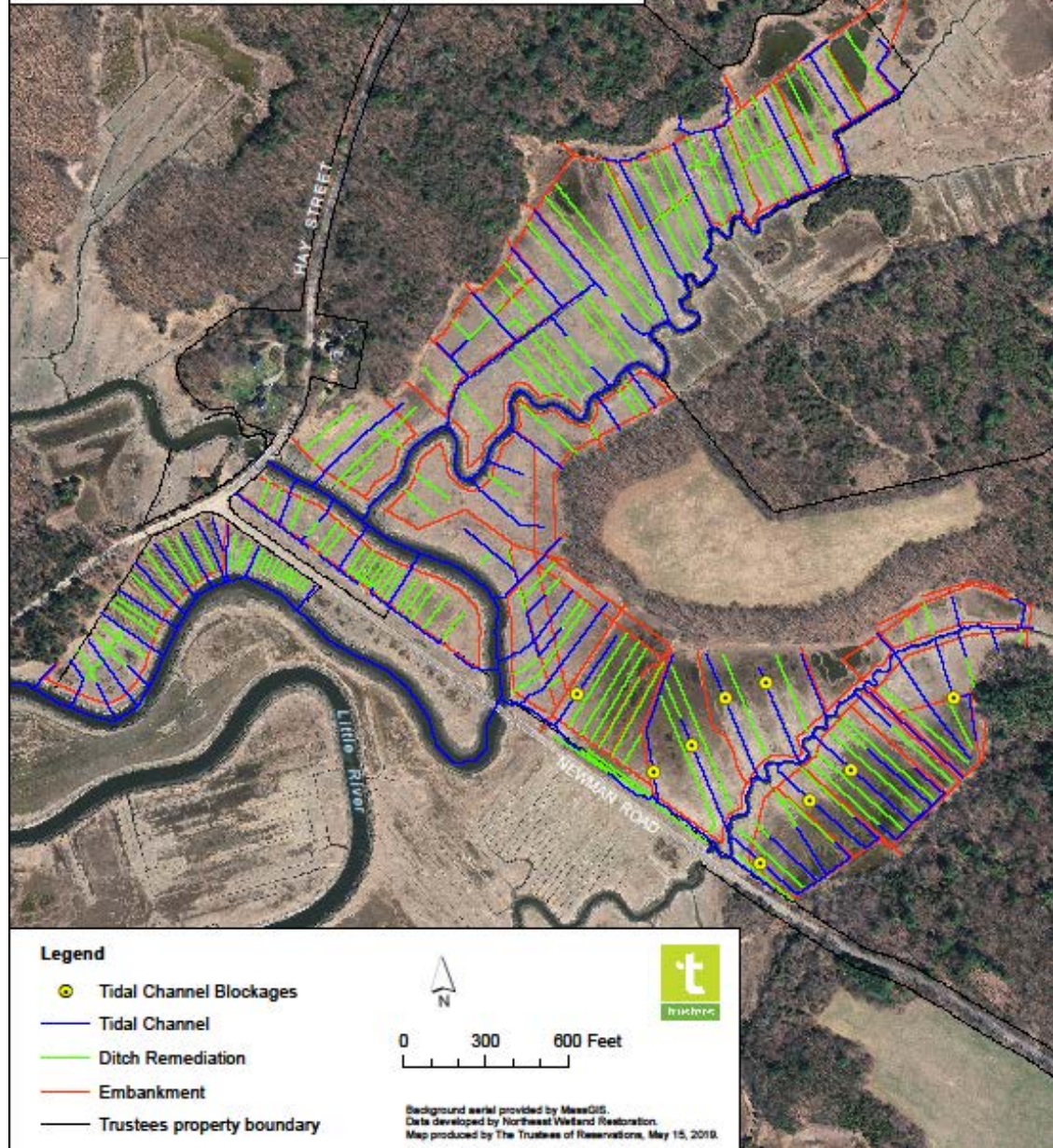
0 1,000 Feet



Produced by The Trustees of Reservations, 1/3/2018



# Old Town Hill, Newbury - Salt Marsh Restoration



# Who is doing the work and When are you doing it?

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Project lead: The Trustees

Project partners: DER, USFWS, UNH-Jackson Laboratory, Northeast Wetland Restoration, UMass

Start & End dates of the project: 2018 - 2023

If applicable, **briefly** describe the context of this project as a follow-on to a series of previous projects or any next steps following this project

The inspiration for this project came from work completed by USFWS, UNH-Jackson Lab, and Northeast Wetland Restoration

# How

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How is your work being funded (if you're comfortable sharing)

- We're just curious about state vs. federal vs. private funding for saltmarsh work (and how we can think about a coordinated funding strategy moving forward)

Currently the project is being funded through grants from MassBays, DER, and USFWS

How is your work being communicated to your target audience(s)?

Stakeholder meetings

Media

Regional Meetings and Conferences

Published



# Findings – take home message(s)

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Big take home message to date – tell us the impact that your project is having on filling a research gap to better understand saltmarsh dynamics/conservation practices and resiliency

- Learned a lot, especially land use history
- Restoration NOI not easy!
- Funders do not like to pay for monitoring