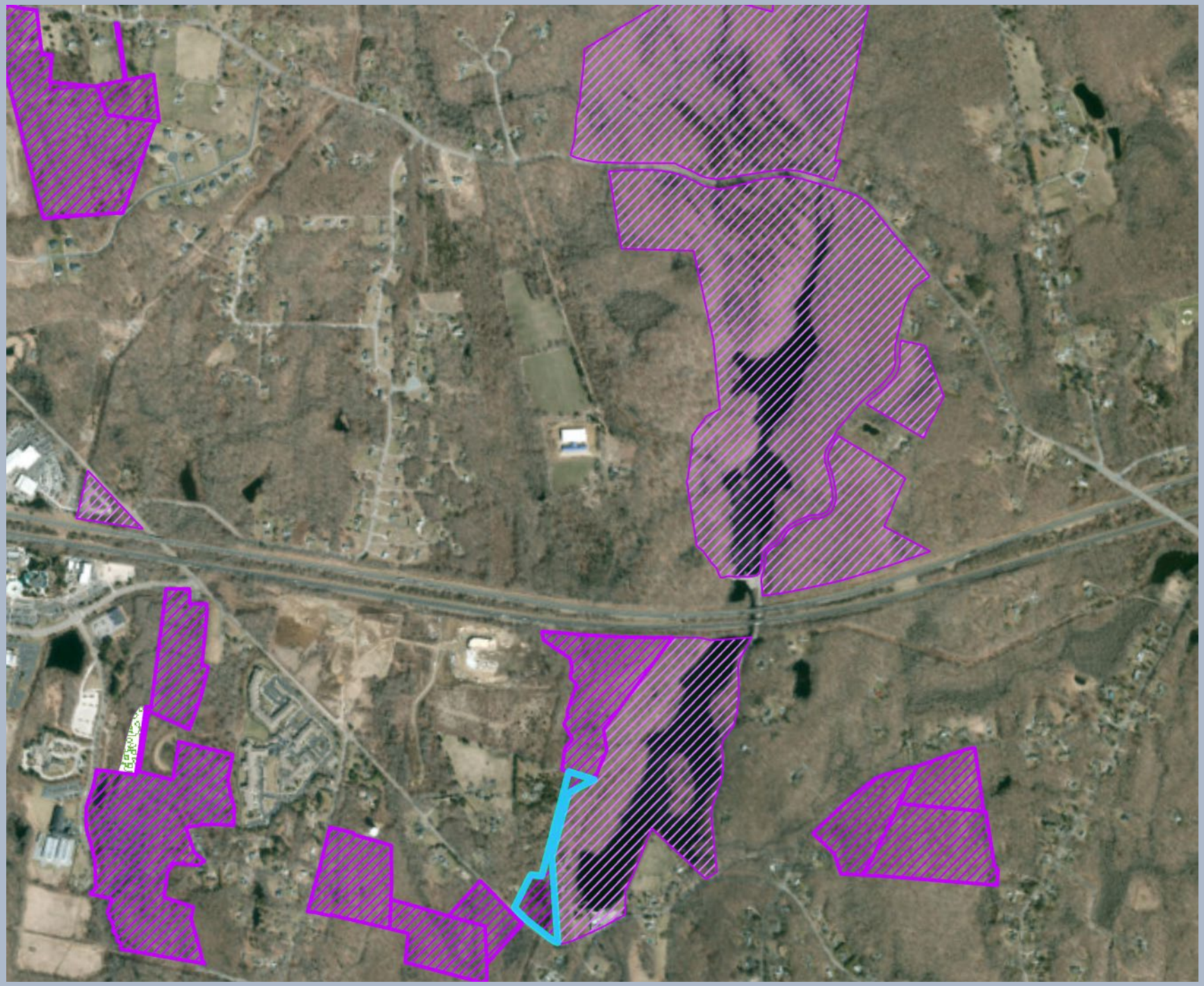
A Small-Scale Atlantic White Cedar Restoration Project in Stonington, CT

Connecticut Association of Wetland Scientists
Annual Conference
March 9, 2023

Tobias Glaza
Director of Stewardship
Avalonia Land Conservancy
Les Mehrhoff Plant Biodiversity Grant Report



White Cedar Swamp /Deans Mill Wildlife Corridor

- Atlantic White Cedar Swamp is small, 2-acre, part of larger preserve, & larger greenway
- Critical Habitat type with high conservation value
- Important part of wildlife corridor and nesting/den habitat
- Donor family wanted to see it preserved

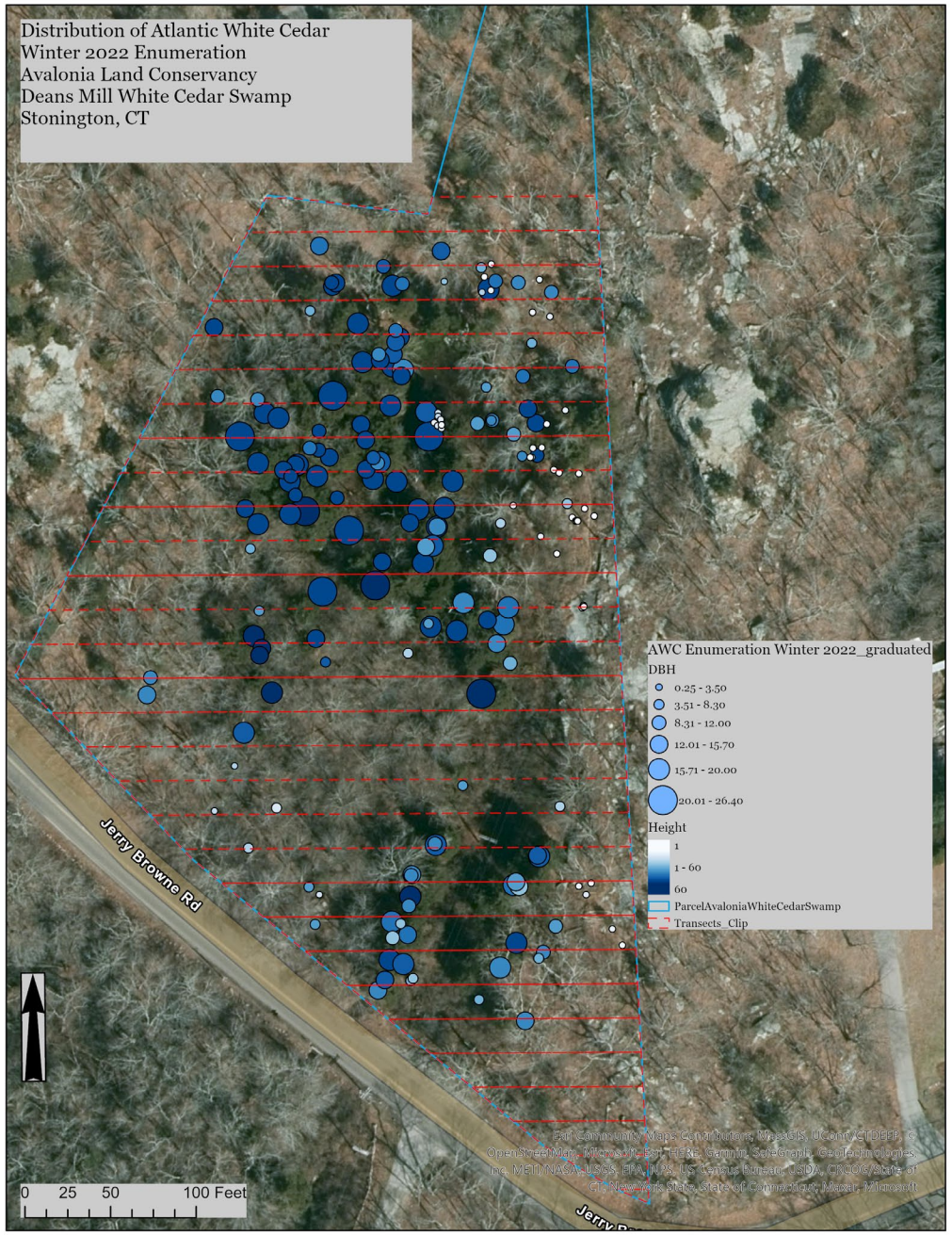
Limited natural regeneration of Cedar due to…

- Herbivory
- Lack of openings/gaps
  w/ notable exception of maintained ROW, however new growth consistently cutback and chemically treated

Previous restoration efforts included..

- Transplanting of AWC from ROW – decreased vigor and increased lateral growth
- Selected girdling/release cutting of hardwood competitors
- Handful of plantings by agreement with Eversource

Low survivance of cedar and overall impact of mgmt. efforts minimal



AVALONIA

Comprehensive field work affirmed/revealed…

- Classified as typical Atlantic white cedar-eastern hemlock- yellow birch community with sweet pepper bush, highbush blueberry, green briar and sphagnum in mid to lower strata
- Stand skewed mature
- Little natural regen.
- Significant red maple penetration
- Areas most suitable for clearing and planting

For more detail see *Prelude to Restoration* Storymap https://storymaps.arcgis.com/stories/573b6940e2f74d95be649be31afcd419

Confluence of opportunities:

Award of Les Mehrhoff Plant Biodiversity Grant allowing for purchase and transport of 44 AWC seedlings from Earthtones Native Plant Nursery

Home

PROJECT Deans Mill White Cedar Swamp Restoration

Search HELP

DETAILS CONTACTS & COMMUNICATIONS

EDITING GOAL - RESEARCH NURSERIES AND PURCHASE ATLANTIC WHITE CEDAR SEEDLINGS

GOAL TIMELINE

Name: Research nurseries and purch...
Type: General
Status: Completed
Status Comment: No Data
Scope: No Data
Target Record: Deans Mill White Cedar Swamp
Geographic Unit: No data
Timeline: Apr 1, 22 - May 15, 22

Budget
$2,107.44/$1,500.00 (-$607.44)
140%

Tasks
1/1
100%

BUDGET

BUDGET ($1,500.00)

ITEM	CATEGORY	QUANT.	UNIT	UNIT COST	AMOUNT	ACTUAL
Truck rental	Purchase Price	1	Count	240	$240.00	$1,507.44 / $1,500.0
3 gallon AWC seedlings	Purchase Price	15	Count	40.5	$607.50	$1,507.44 / $1,500.0
1 gallon AWC seedlings	Purchase Price	29	Count	22.5	$652.50	$1,507.44 / $1,500.0

Work items contain **$600.00** of UNBUDGETED EXPENSES

FUNDING EXPECTATIONS ($1,500.00 / $1,500.00)

SOURCE	AGREEMENT	AGREEMENT AMOUNT	EXPECTED
CT Association of Wetland Scientists	Les Mehrhoff Biodiversity Grant	$1,500.00	$1,500

TASKS

Seedlings

NAME	OWNER	STATUS	TIMELINE
Purchase AWC Seedlings	Tobias Glaza	COMPLETED	Apr 1, 22 - May 15, 22

WORK & EXPENSES

WORK

DATE	CATEGORY	TYPE	DESCRIPTION	HOURS	EXPENSES
5/6/2022	General	Habitat Restoration	Travel to Woodbury, Ct (Earthtones Native Plant Nursery) with rental truck to purchase AWC seedlings	12	$1,507.44

Followed, soon after, by the decommissioning and removal of the electrical transmission lines and poles in ROW

Collaboration between Eversource, DPNC, and Avalonia (as primary beneficiary!)

Settling on most suitable location for clearing and planting

Clearing the Canopy…

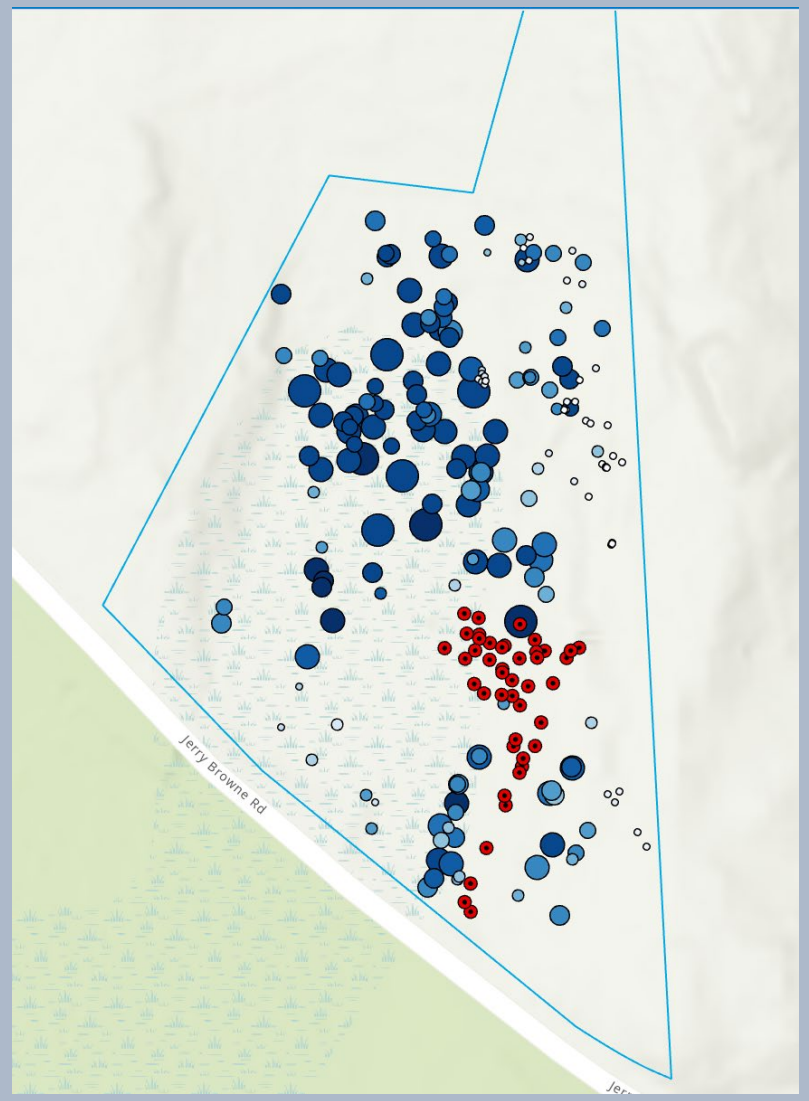
Creating the gap was largest investment of time and energy

Clearing the Understory…….

Allowing for as much sunlight as possible for minimally shade tolerant Atlantic white cedars

Planting over several days in June/July 2022- Volunteer event

- Using existing hummocks
- Repurposed fencing for deer exclosures
- GIS Layer with relevant attributes



Continued monitoring (2023 and beyond)…….

- repositioning/replanting based on persistent soil saturation and plant condition
- No deer browse
- Plenty of wildlife activity
- Potential model for future restoration efforts

Acknowledgments:

Thanks to the Connecticut Association of Wetland Scientists, in particular those who handle the Les Mehrhoff Plant Biodiversity Grant, funding from which help to offset some of the costs of this project.

Thanks also to Eversource for their efforts/involvement in removal of transmission lines through the cedar swamp and to the Denison Pequotsepos Nature Center for allowing their fields to be used as a staging ground.