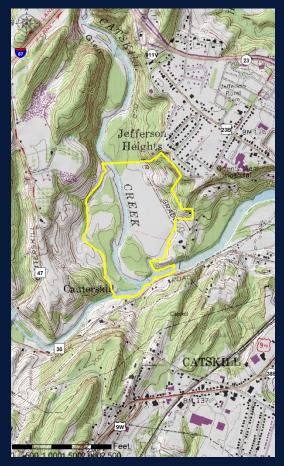




MAWIGNACK PRESERVE (Town of Catskill, Greene County)





MAWIGNACK PRESERVE

Restoration goals:

- Flood resilience
- Habitat



Trail Map

Loop Trail (1 mile)

Informational Kiosk

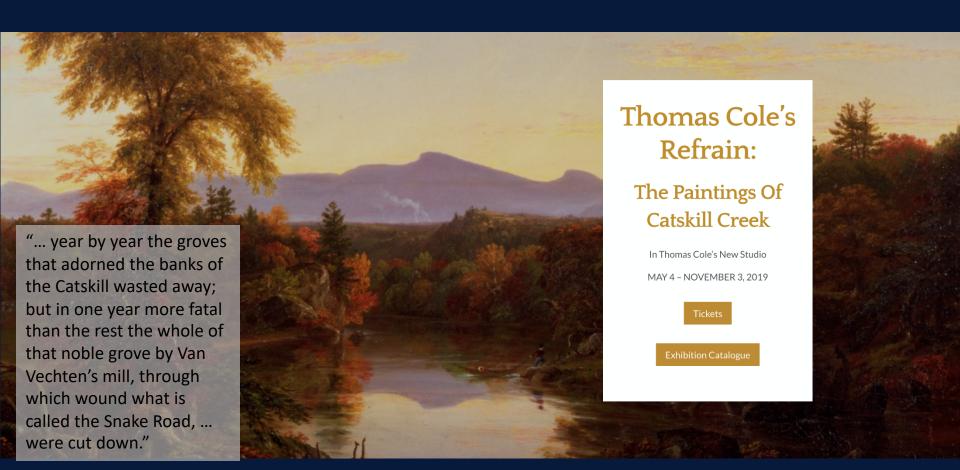
Property Boundary

Parking Area

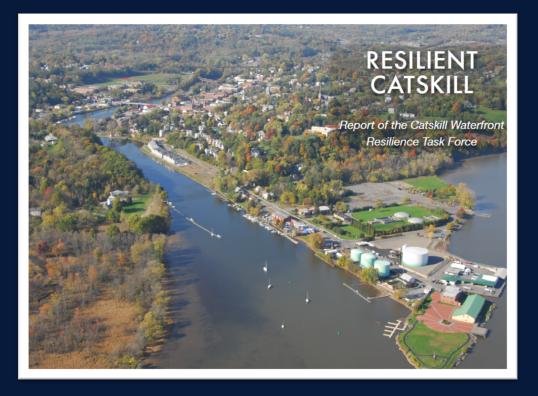
Wet Areas



Thomas Cole – The Hudson River School



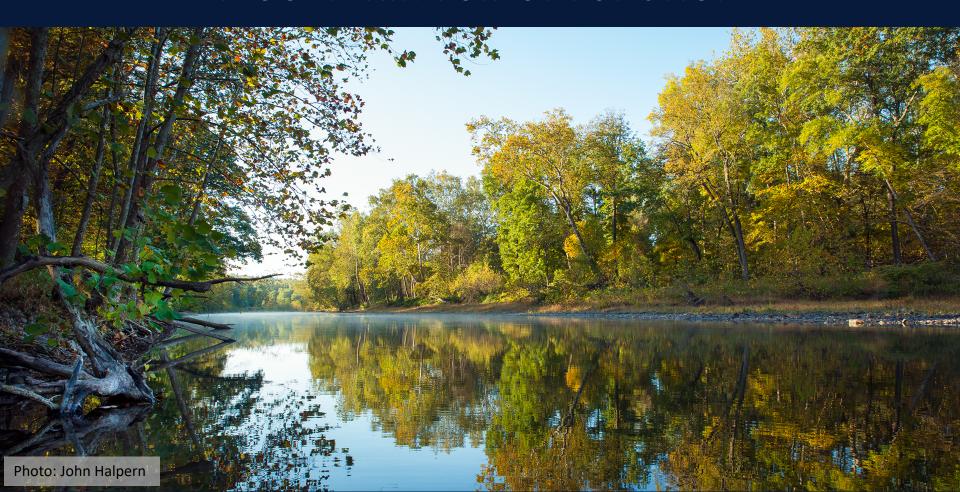
Catskill Waterfront Resilience Task Force 2014





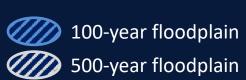


FLOODPLAIN FOREST FUNCTION



FLOODPLAIN FOREST FUNCTION

- Reduce flow velocity
- Reduce peak flows (flood magnitude)
- Reduce downstream siltation







Mawignack's 40-acre Meadow



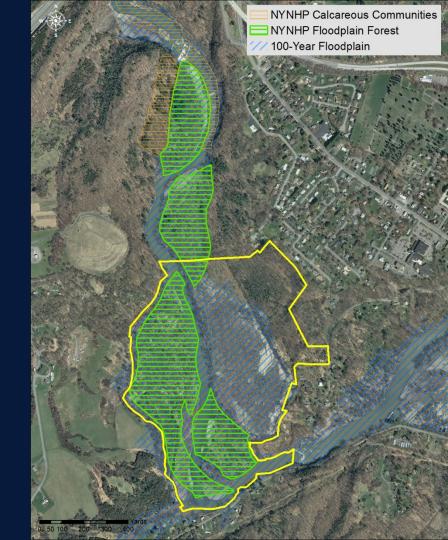
Mugwort (Artemisia vulgaris)





Floodplain Forests at Mawignack

From NY Natural Heritage Program







Floodplain Forest Community

- A variable community type
- Disturbance-adapted, rich in minerals/nutrients
- Can be very diverse
- Important wildlife corridors
- Reduces flooding and downstream siltation
- NYNHP S2S3 rank only a fraction of original extent remains, mostly small degraded patches

Floodplain Forest Community

Typical Species

- Sycamore
- Green ash
- Cottonwood
- Sliver maple
- American elm
- Box elder
- Hackberry
- Leatherwood
- May apple
- Ostrich fern
- Green dragon
- Goldenseal
- Sedges



Green dragon



Goldenseal

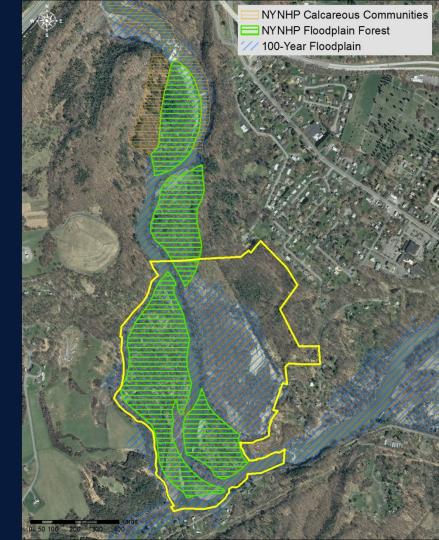


Red-headed woodpecker

Floodplain Forests at Mawignack

From NY Natural Heritage Program:

- Excellent/Good viability
- Intact hydrology, diverse species/forest types
- Possible old growth
- Locally abundant exotic species
- 40 ac meadow: "recoverable"



Floodplain Forests Restoration

Planting area:

Repeated mowing of mugwort (prep and maintenance)









Three day Hudson Valley SCA Corps project







Three day Hudson Valley SCA Corps project

150 trees and shrubs:

- Red maple
- Silver maple
- Sycamore
- Hackberry
- Flowering dogwood
- Spicebush
- Nannyberry
- Witchhazel



Mawignack floodplain planting: fencing installed







Mawignack floodplain planting

Before



After







Mawignack floodplain planting

Fall 2020:

Plant 30-50 disease resistant American Elms from The Nature Conservancy





CLIMATE CHANGE: Natural Climate Solutions

The Nature Conservancy

https://www.nature.org/enus/magazine/magazinearticles/carbon-capture/

The Green Path to a Stable Climate

We Must Cut 30 Gigatons A Year Of Carbon Emissions By 2030 If We Are to keep global temperature increases well below 2 degrees Celsius, (3.6 degrees Fahrenheit). Nature can reduce more than one-third of the emissions needed to hit this goal if countries invest in carbon-storing forests, grasslands, wetlands and farmlands.



Weighty Matters

A gigaton equals 1 billion metric tons —the equivalent of about 3,000 Empire State Buildings. Carbon figures below are in millions of metric tons. Of the 30 gigatons of excess carbon in the atmosphere each year, 11 gigatons could be removed using nature itself.

