

Land Change Report

Sample — Seven-Mile Island WMA (TVA), north-east end, Florence, AL · center 34.77250, -87.71600 · 1,152 acres analyzed · generated October 17, 2026

Summary

	Areas	Acres	Hectares	% of property
Vegetation loss	0	0.0	0.0	0.0%
Vegetation gain	9	95.0	38.5	8.2%

Compared cloud-free imagery from **2025-06-01 to 2025-08-31** (6 satellite passes) with the **same season one year later**, 2026-06-01 to 2026-08-31 (7 passes). Comparing the same season avoids flagging normal seasonal green-up or dry-down as change.

Before / after



Red outlines: vegetation loss (e.g. clearing, grading, harvest or tillage). Green outlines: vegetation gain (e.g. planting, regrowth). Numbers match the table on page 2.

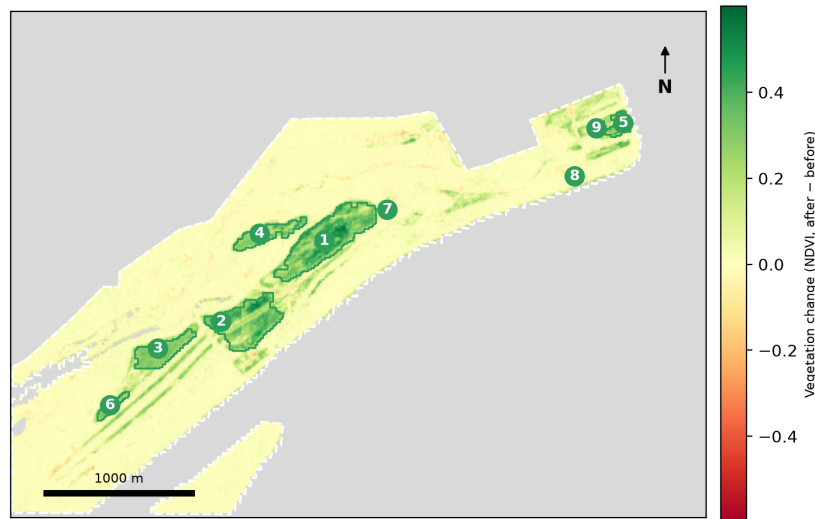
Key findings

The largest change is **area #1: about 37 acres of vegetation gain** (average NDVI change +0.34), centered near 34.77394, -87.71872. Here bare or sparse ground became much greener — typical of planting or regrowth. 8 smaller areas totaling 58 acres also changed. The remaining **92% of the property showed no significant change**.



Explore the interactive map (swipe before/after, click any area):
<https://acreandatlas.com/samples/seven-mile-island/>

Where the change is



Largest changes

#	Type	Acres	Change	Location (lat, lon)
1	Gain	36.8	+0.34	34.77394, -87.71872
2	Gain	24.5	+0.33	34.76896, -87.72633
3	Gain	12.5	+0.28	34.76723, -87.73107
4	Gain	9.8	+0.27	34.77440, -87.72348
5	Gain	4.3	+0.32	34.78142, -87.69616
6	Gain	3.4	+0.29	34.76366, -87.73470
7	Gain	1.4	+0.26	34.77596, -87.71388
8	Gain	1.1	+0.26	34.77811, -87.69980
9	Gain	1.0	+0.27	34.78110, -87.69818

How to read this

The satellite measures how green and dense vegetation is (NDVI, -1 to +1). “Change” is the average shift inside each outlined area; -0.3 or lower usually means vegetation was removed or cut back, +0.3 or higher means new or much denser growth. On farmland, crop rotation and harvest timing can cause real but expected changes — the imagery shows *that* something changed and where, not *why*.

Method & data

Open-source intelligence, augmented with GeoAI: built only from free, public data anyone can check (satellite imagery and public boundary files); our GeoAI pipeline removes clouds, matches seasons and outlines what changed, so the result is repeatable. Copernicus Sentinel-2 Level-2A surface reflectance, 10 m resolution (ESA; accessed via Element 84 Earth Search on AWS). Clouds, shadows and haze removed per pixel using the Sentinel-2 scene classification layer, widened 50 m around clouds and shadows to catch soft edges; per-pixel median of all usable passes in each window. Change = NDVI after – before; areas with change ≤ -0.20 or $\geq +0.20$ kept, speckle removed, and only areas of at least 1 acre reported. Outlines are approximate (± 10 m). Not a survey or a legal boundary determination. Analysis limited to the property boundary (1,164 acres; source: USGS PAD-US 4.1, Seven-mile Island Wildlife Management Area, managed by TVA). Open water (12 acres, water index > 0 in either window) excluded so rivers and ponds aren't counted as vegetation change.

Prepared by Acre & Atlas (acreandatlas.com). Contains modified Copernicus Sentinel data 2025–2026.