



Land Change Report

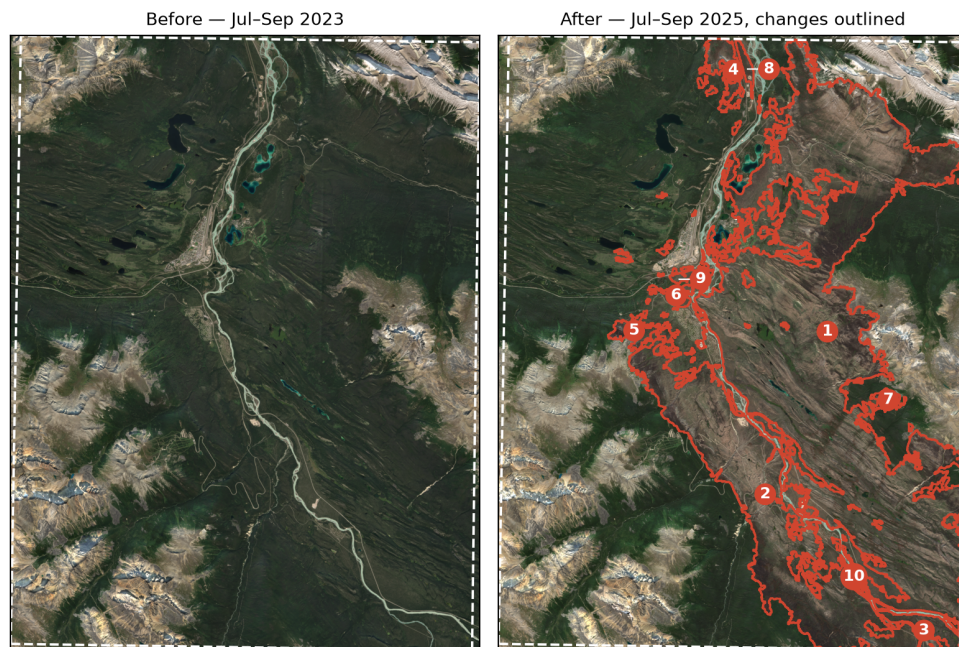
Sample — Jasper National Park, Alberta, Canada (2024 wildfire) · center 52.84000, -118.05000 · 129,815 acres analyzed · generated October 17, 2026

Summary

	Areas	Acres	Hectares	% of property
Vegetation loss	80	37,685.5	15,250.8	29.0%
Vegetation gain	0	0.0	0.0	0.0%

Compared cloud-free imagery from **2023-07-01 to 2023-09-15** (8 satellite passes) with the **same season two years later**, 2025-07-01 to 2025-09-15 (12 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

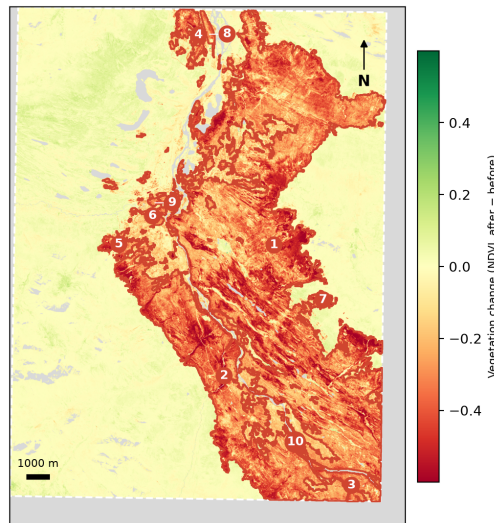
The largest change is **area #1: about 25,356 acres of vegetation loss** (average NDVI change -0.36), centered near 52.84544, -117.97760. Here vegetated ground became bare or much thinner — typical of clearing, grading, harvest or tillage. 79 smaller areas totaling 12,330 acres also changed. The remaining **71% of the property showed no significant change**.



Explore the interactive map (swipe before/after, click any area):

<https://acreandatlas.com/samples/jasper-wildfire/>

Where the change is



Largest changes

#	Type	Acres	Change	Location (lat, lon)
1	Loss	25356.0	-0.36	52.84544, -117.97760
2	Loss	8950.7	-0.36	52.78070, -118.02804
3	Loss	596.7	-0.32	52.72769, -117.92513
4	Loss	546.5	-0.35	52.94756, -118.05283
5	Loss	438.5	-0.36	52.84444, -118.11507
6	Loss	201.7	-0.30	52.85864, -118.08840
7	Loss	182.1	-0.39	52.81844, -117.94865
8	Loss	153.4	-0.32	52.94822, -118.04361
9	Loss	117.0	-0.31	52.86513, -118.08604
10	Loss	76.6	-0.28	52.74863, -117.96958

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 5 acres reported. Outlines are approximate (± 10 m). Not a survey or a legal boundary determination. Analysis limited to the property boundary (133,325 acres; source: Jasper National Park of Canada legislative boundary, NRCAN CLSS. Contains information licensed under the Open Government Licence – Canada). Open water (3,508 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 2023–2025.