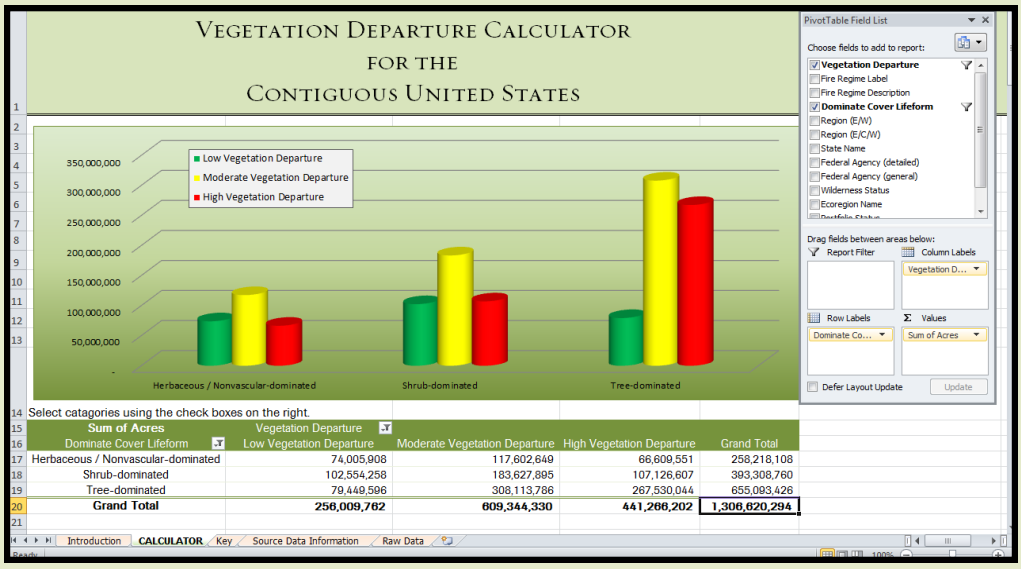
LANDFIRE's Vegetation Departure Calculator

Putting ecological condition in context

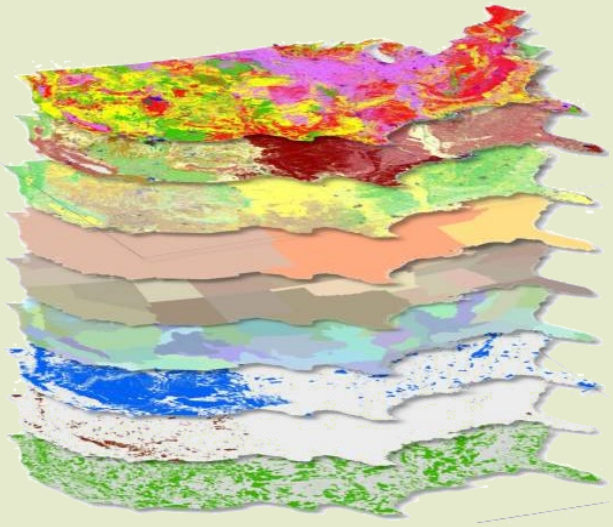
Vegetation departure is a powerful metric that summarizes the difference between current and reference vegetation conditions. The Vegetation Departure Calculator puts the power of this metric into your hands. With this easy-to-use tool you can summarize and display vegetation conditions anywhere in the contiguous United States. Use fire regimes, ownerships, political boundaries and other factors to understand conditions at scale and in context.



Sum of Acres	Vegetation Departure			
Dominate Cover Lifeform	Low Vegetation Departure	Moderate Vegetation Departure	High Vegetation Departure	Grand Total
Herbaceous / Nonvascular-dominated	74,005,908	117,602,649	66,609,551	258,218,108
Shrub-dominated	102,554,258	183,627,895	107,126,607	393,308,760
Tree-dominated	79,449,596	308,113,786	267,530,044	655,093,426
Grand Total	**256,009,762**	**609,344,330**	**441,266,202**	**1,306,620,294**

Use the Calculator's user-friendly pivot table interface to explore vegetation departure by

- LANDFIRE Fire Regime Group
- LANDFIRE Dominant Cover Lifeform
- Region
- State
- Ecoregion
- Federal Agency Ownership
- Wilderness Status
- The Nature Conservancy Portfolio Status



Get it: Scan the quick response code here or go to: http://www.conservationgateway.org/topic/landfire.

Know it: Read the background information and how-to instructions that come with the Calculator download.

Calculate it: Use the Calculator's simple pivot table interface to select variables and stratify results instantly.

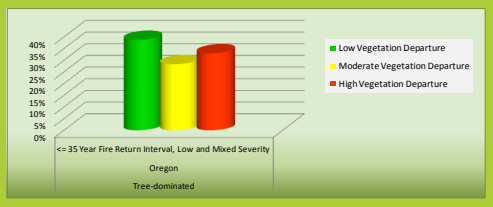
The Nature Conservancy's LANDFIRE team helps real people apply LANDFIRE products to solve real world problems.

Contact us: landfire@tnc.org

Learn more: www.landfire.gov ~ www.conservationgateway.org/topic/landfire

The Nature Conservancy
Protecting nature. Preserving life.™

Calculating the Condition of Oregon's Fire-Adapted Forests and Woodlands



The Oregon chapter of The Nature Conservancy used an early version of the Calculator to evaluate the scope of restoration needed to restore Oregon's fire-adapted forests and woodlands. Querying the Calculator by

- State
- Lifeform
- Fire Regime
- Federal Agency Ownership
- Vegetation Departure

they estimated that over the next 20-25 years the annual rate of treatment needed on public lands to address uncharacteristic fuel loads, restore fire as a natural process and reduce fire risk in the Wildland Urban Interface (WUI) was three to four times greater than current agency treatment rates. Their estimates called attention to restoration needs outside the WUI and highlighted the need for a statewide strategy that would take a comprehensive approach to the problem.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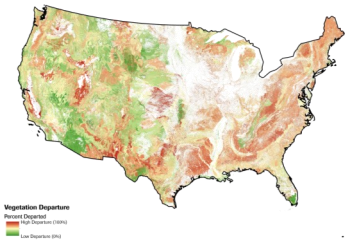
"This tool allowed us to more efficiently quantify ecologically departed stands across a user-selected landscape. The ease of pivot tables allowed us to focus in on specific fire regimes and specific ownership within one standard dataset. This tool provides validation of resources allocated to restoration activities at broad scales." -Amy Waltz, Ecological Restoration Institute



Vegetation departure, also called fire regime condition class, is an index that quantifies the difference between current and reference vegetation conditions on land that has not been converted to agricultural or urban land use. It measures the change in vegetation height, cover and type and divides departure into 3 classes:

- Low (0-33% departed),
- Moderate (34-66% departed), and
- High (67-100% departed).

LANDFIRE creates geospatial layers and data products that depict the nation's major ecosystems, wildlife habitats, vegetation characteristics, landscape features and wildland fire behavior, effects, and regimes. These data layers traverse jurisdictional land boundaries and provide the public free data products for numerous applications, including wildland fire management and landscape conservation.

Fast Facts from LANDFIRE's Vegetation Departure Calculator

24% of all land in the conterminous U.S. has been converted to **agricultural uses**.

73% of **federal lands** are moderately to highly departed from reference conditions.

7 of the 10 most departed **states** are east of the Mississippi River.

The level of high departure on unconverted lands varies by ecosystem: **forest** (41%), **shrubland** (27%) and **grassland** (26%).

More than 100 million acres of **forest** land in the **east** is highly departed; 91% of those forests are in private or state **ownership.**

13% of **western shrublands** that historically experienced **frequent fires** are in good condition.