Ecological Condition of the Lower 48 States
TNC’s Mission

…to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.
The objectives of this analysis are to calculate ecological departure inside and outside of various landscape classes and ownerships.
Ecological Departure

reference condition  current condition
Ecological Departure cont…

Standard 5-Box Model

- A) Early, post-replacement
- B) Mid-closed
- C) Mid-open
- D) Late-open
- E) Late-closed

Succession ▶ Disturbance
## Ecological Departure

(aka fire regime condition class)

<table>
<thead>
<tr>
<th>Class</th>
<th>Departure</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0-33%</td>
<td>Low</td>
</tr>
<tr>
<td>2</td>
<td>34-66%</td>
<td>Moderate</td>
</tr>
<tr>
<td>3</td>
<td>67-100%</td>
<td>High</td>
</tr>
</tbody>
</table>

1924 → 1999

![Photograph of landscape in 1924](image1)

![Photograph of landscape in 1999](image2)
Data & Methods

Departure

Ownership
States
TNC Divisions
TNC Portfolio Sites
Ecoregions
Fire Regime Groups
Dominate Cover Lifeform
Data & Methods
Explore vegetation departure for BIG areas:

- Regions
- States

Compare departure between agencies for the country or particular states

Learn about historic fire regimes by state, agency, TNC portfolio sites, departure level

Let’s try it!
Zumwalt Preserve ~ 33,000 Acres

Middle Rockies Blue Mountains Ecoregion ~ 50 million Acres

Greater than \( \frac{1}{2} \) million Acres as a rule of thumb
Where to get the Calculator -

Google: Landfire Vegetation Departure Calculator

OR go to -

http://www.tncfire.org/AssessingVegetationConditions.htm
Take Home Messages

• Ecological conditions across the L48 are highly departed

• This tool is useful for evaluating program and policy decisions at the state, regional and national level.
Results
Results
Results
Take Home Messages
Ecological Departure
Results

The bar chart shows the distribution of acres across different fire regime condition classes for 'Other' and 'TNC_Portalto'. The classes are:

- **Fire Regime Condition Class I**
- **Fire Regime Condition Class II**
- **Fire Regime Condition Class III**

The chart indicates a higher percentage of acres in the 'TNC_Portalto' category compared to 'Other' for all three fire regime condition classes.