

Estimating Conservation Status of Federal Lands

Effective conservation of US federal lands is critical to the success of The Conservancy's mission in North America. These lands represent some of the largest remaining contiguous blocks of habitat on the continent and are therefore prominently featured in The Conservancy's portfolio. We cannot automatically assume that these lands are "effectively conserved" but given their size and scope determining their conservation status is challenging. However, thanks to new data available from the LANDFIRE project (www.landfire.gov), there is now at least one measure of the ecological condition of these important places.

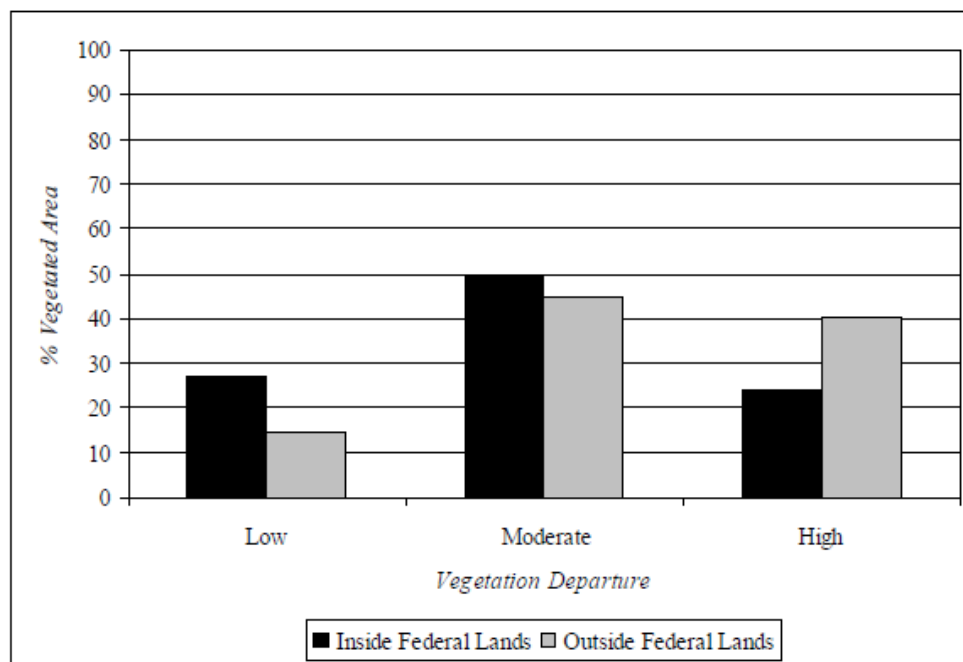


Figure. Vegetation departure inside and outside of federally-administered lands for vegetated areas (i.e. non-agriculture, urban, etc) in the conterminous US.

The TNC-LANDFIRE team analyzed LANDFIRE data for the conterminous US to determine the ecological condition of federal lands. The figure below displays a metric called Fire Regime Condition Class (www.frcc.gov) as mapped by the LANDFIRE project. We relabeled the metric and refer to it hereafter as Vegetation Departure to more accurately describe what it actually represents. Vegetation Departure is a measure of the difference between current vegetation structure and composition (as mapped from satellite imagery and plot data) and pre-European settlement reference conditions (as modeled using literature, local data and expert input). The resulting value is divided into three categories:

- Low Vegetation Departure (0-33% Departed)
- Moderate Vegetation Departure (34-66% Departed)
- High Vegetation Departure (67-100% Departed)

According to these data, federal lands are actually in slightly better shape than other vegetated lands (i.e. those that don't enjoy federal-level protection or any protection at all), and yet nearly 75% percent of federal lands are moderately- to highly-departed from reference conditions. We believe that this does not represent effective conservation at this time, even if current policies and programs provide the foundation for effective conservation.

So, what do these data tell us with regards to The Conservancy's mission? While it is true that "reference condition" does not necessarily equate to "desired future condition," the data presented here indicate that The Conservancy cannot assume that all is well on federal lands. To be successful in our mission we need to participate in federal land planning processes and empower our federal land management partners through implementation of tools like Fire Learning Networks (see www.tncfire.org). Participating in management on federal lands to move towards more effective conservation is key to the success of The Conservancy's mission in North America.