LANDFIRE Product Application Summary

Title: Idaho Forest Restoration Needs Assessment

Citation: Unpublished report: Haugo, R. and Welch, N. 2016. Idaho Forest Restoration Needs Assessment. The Nature Conservancy, Boise, ID.

Authors: Ryan Haugo, Nathan Welch

Application Location: 43,57,44.62N 115,44,31.84W

Objectives

This study evaluated where, how much, and what types of ecological restoration is needed to restore forests across Idaho to Natural Range of Variability reference conditions.

Project description

The Idaho forest Restoration Needs Assessment adapted the methodology of Haugo et al. 2015 to evaluate landscape scale forest restoration needs using LANDFIRE data inputs. LANDFIRE inputs were critical as they are the only consistent set of spatially explicit current conditions and historic reference conditions for forests in Idaho. Across 20 million acres of conifer forest in Idaho, we found that changes in current forest structure were needed on nearly 40% of all forested acres in order to restore historic reference conditions. This included 2.7 million acres of "Disturbance Only," 2.8 million acres of "Disturbance then Succession," and 2.7 million acres of "Succession Only" restoration needs.

LANDFIRE products used

We used LANDFIRE Refresh 2012 Biophysical Setting (BpS) raster, BpS state-transition models, Existing Vegetation Cover, Existing Vegetation Type. We created a custom BpS exemplar model – mapping unit crosswalk and followed the Blankenship et al. 2015 approach to estimate natural range of variability reference conditions.

Value of the work to the natural resource management/conservation community

This evaluation of forest restoration needs is intended to help conservationists, land managers, and stakeholders incorporate regional scale, multi-ownership context into local forest management and restoration decision making.

Online resources

Related information:
Haugo et al. 2015. A new approach to evaluate forest structure restoration needs across Oregon and Washington, USA. *Forest Ecology and Management* 335:37-50. http://dx.doi.org/10.1016/j.foreco.2014.09.014.

Lochsa River, Clearwater Basin, Idaho. Photo: Ryan Haugo