



United States Department of Agriculture
Forest Service

Post-Harvest Recovery Prediction Tool

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A User-Interface to inform decision makers of the expected forest recovery magnitude and timeline following a proposed management activity

Key Issues: forest health, harvest planning and management, vegetation mapping

Goal

- **Develop a web-based tool that takes in EO data and management history and the specifications of a proposed harvest and predicts site resilience/vulnerability metrics (e.g. predicted time to recovery; predicted NDVI departure from base conditions)**

Three Methods of Estimating Recovery

1. If this same management disturbance had occurred 5 or 10 years ago, what would the site look like now? How does the forecasted post-harvest landscape compare to the current one?
2. Assess the recovery of a similar site to that of the proposed harvest area (Of nearby, previously harvested locations, which site has the most similar environmental conditions?)
3. Trend-based assessment: If we artificially reduce vegetation spectral response as a proxy for harvest, what does the trend line going into the future look like?

Data

- **Landsat**
- **MODIS**
- **SMAP**
- **ECOSTRESS**
- **Daymet**
- **NED**

Outcomes & Benefits

- **Time machine for land managers**
- **Allow decision makers to compare the impacts of different harvest methods on forest health**



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Thank you

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