Grouping of ecoregions into units for analysis for the Oregon Carbon report

Forest Inventory and Analysis (FIA) uses the ecoregions as developed by McNab et al. (2007) and Cleland et al. (2007) based on the work by geographer Robert Bailey. There are 16 ecoregions in Oregon, many of which are primarily extend into surrounding states, and some of which cover only a small area in the state (Figure 1). We analyzed the amount of forest area by forest type and owner group in each ecoregion to assess which ecoregions should be grouped in order to have a reasonable sample size (i.e., with likelihood of a low enough sample error to have confidence in the estimates), and to ensure not releasing estimates that might allow the identification of individual private landowners.

Several groupings were examined and the adopted approach for the report is shown in Figure 2. The Modoc aligned well with the East Cascades in terms of the distribution of forest types, and being dominated by Ponderosa pine. The Blues foothills were primarily in western juniper forest type, and was grouped with the Basin & Range where the remaining juniper is found, and the large areas of nonforest in eastern Oregon found in other ecoregions (e.g., Columbia Basin and Owyhee Uplands). The small area in southern Cascades was intermediate between east and west Cascades in terms of the distribution of forest types, but fit best with the west Cascades.


Figure 1: Ecoregions of Oregon (Cleland et al. 2007, McNab et al. 2007).
Figure 2: grouped ecoregions for analysis