Summary points for succession class changes, past to present

* Succession classes, as developed by the LANDFIRE program, represent ecosystem-specific structural/developmental stage. They are largely defined by canopy cover and height, and dominant species. For a northern hardwoods-hemlock ecosystem, the succession class definitions are similar to this table (they may vary from region to region):
  + Early1:ALL: quaking aspen and paper birch, trees 0-5M tall, 0-100% canopy cover
  + Early2:ALL: yellow and paper birches, sugar maple, white pine, and basswood, trees 5-10M tall, 0-100% canopy cover
  + Mid1:CLS: sugar maple, hemlock, yellow birch, white pine and basswood, trees 10-25M tall, 80-100% canopy cover
  + Mid2:CLS: quaking aspen, paper birch, sugar maple and basswood, trees 10-25M, 70-100% canopy cover
  + Late1:CLS: sugar maple, hemlock, yellow birch, white pine and basswood, trees 25-50M tall, 70-100% canopy cover

In addition to describing succession classes, LANDFIRE modeled expected past amounts of each based on natural disturbance regimes, and maps present amounts (plus uncharacteristic native (UN) and uncharacteristic exotics (UE)) for quantification. With this information we can explore changes. Below we will explore characteristic changes for 3 dominant and illustrative ecosystems, 1) Northern Hardwoods-Hemlock, 2) Beech-Maple Forest and 3) Dry-Mesic Oak Forest and Woodland.

* Northern Hardwoods-Hemlock covered ~12M acres of the assessment area historically.
  + Historically, most of this type was dominated by the Late 1:CLS class, the late succession stage characterized by older trees including white pines which are the tallest trees of the region. Most if not all of this class is missing from the landscape today.
  + Today the area that was mapped as this type historically is dominated by the Mid2:CLS class, which are the ‘middle-aged’ northern hardwood species (e.g., sugar maple and hemlock). Additionally, ~20% of this area has been converted to agricultural land use.
  + We also see ~10% of this type mapped as Uncharacteristic Native on the landscape presently. Largely, this represents areas within the northern hardwoods-hemlock where tree canopy for trees > 10M has been reduced to levels below 70%

