Forest Carbon Report: Arizona

**Carbon Definitions**
- **Carbon pool**: a component of the forest that can gain or lose carbon over time.
- **Carbon storage**: the amount of carbon retained in a forest and/or carbon pool.
- **Carbon sequestration**: the process by which trees and plants use carbon dioxide and photosynthesis to store carbon as biomass.
- **Units**: Forest carbon is typically expressed in US tons per acre or metric tons (1 metric ton = 1.10 US tons).

**Quick Facts on Forest Carbon**
- Arizona has 10.9 million acres of forests and is 15% forested.
- Arizona forest carbon stocks have decreased by 2% from 1990 to 2019.
- Average carbon density in aboveground trees across Arizona forests is 8.4 US tons per acre.
- In Arizona, forests, urban trees, and harvested wood products:
  - Remove a minimal amount of all CO₂ emissions in the state after taking into account forest mortality. (Across the US, this value is 14%.)
  - Store the equivalent of 22 years of all CO₂ emissions produced in the state.

**Sources**
- Forest ecosystem carbon stocks obtained from USDA Forest Service Resource Update FS-027, "Greenhouse gas emissions and removals from forest land, woodlands, and urban trees in the United States, 1990-2018".
- Total forest area and land area for each state obtained from USDA Forest Service Gen. Tech. Rep. WO-97, "Forest Resources of the United States, 2017: a technical document supporting the Forest Service 2020 RPA Assessment".
- Values of carbon by ownership and forest type obtained from USDA Forest Service, Forest Inventory and Analysis Program using the EVALIDator web-application, version 1.8.0.0, years 2007-2019 (Accessed 31 Aug 2020).