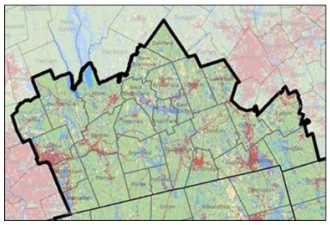
Climate-smart forestry practices and NRCS Practices Crosswalk

(Part 1, focusing on carbon, with Part 2 detailing additional practices focuses on resilience)

1. **Avoid forest loss:** Reduce or eliminate conversion of forest to non-forest use since forestlands contain more carbon than most other land uses.
    a. **Healthy Forests Reserve Program*** (permanent easements, 30-year contracts and 10-year cost-share agreements)
        i. *This is only available for a small part of Massachusetts (see map), as part of the Southern New England Heritage Forest RCPP. The Assistant State Conservationist for Programs in MA did not anticipate much funding to be available (nationwide funding total is only ~$8 million).



    b. **CAP 106- Forest Management Plan**

2. **Delay harvest:** Wait longer between harvests to grow larger trees that are more likely to be used in long-lived wood products.
    a. **CAP 106- Forest Management Plan**

3. **Plant trees along streets and in yards:** Plant trees in urban and residential areas to add carbon stock as trees grow, and provide many local benefits to air quality, stormwater management, and human health and well-being.
    a. **N/A**
    b. **CSP practice PDFs can be found here.**

4. **Reforestation:** Through seeding, stocking or passive reforestation, create forest with a diversity of tree species in an area that used to be but is not currently forest.
    a. **Tree/Shrub Establishment**
    b. **Riparian Forest Buffer**
    c. **Tree/Shrub Site Preparation** (a properly prepared site is a precondition for other practices)
    d. **CSP E612B** - Planting for high carbon sequestration rate

5. **Create regeneration with complexity:** When forests are undergoing harvests, retain a minimum number of large-diameter live trees, snags (see NEFF's Exemplary Forestry standards), and live-but-dying trees (future snags), and limit gap creation to 20% of the parcel.
    a. **CAP 106- Forest Management Plan**
    b. **Forest Stand Improvement**
    c. **Woody Residue Treatment** (offers options for treating slash/debris after management)
    d. **CSP E666F** - Reduce forest stand density to create open stand structure
    e. **CSP E666H** - Increase on-site carbon storage
    f. **CSP E666I** - Crop tree management for mast production
    g. **CSP E666K -** Creating structural diversity with patch openings
    h. **CSP E666L** - Forest Stand Improvement to rehabilitate degraded hardwood stands

6. **Retain more carbon in a thinning:** Limit the removal of trees in thinnings to retain large-diameter live trees, snags, and species diversity. Remove no more than ~25% of the basal area in portions of the stand that are harvested.
    a. **CAP 106- Forest Management Plan**
    b. **Forest Stand Improvement**
    c. **CSP E666H** - Increase on-site carbon storage

7. **Establish reserves:** Avoid timber harvesting, with exceptions for invasive removals or novel outbreaks of forest pests and pathogens. Reserves can be established on all or a portion of a forest. Preference given to sites with high carbon density and low vulnerability to climate change impacts.
    a. **CAP 106- Forest Management Plan**
    b. **Healthy Forests Reserve Program*** (see above map and statement—limited geography and not likely to have much funding available).

8. **Protect regeneration from deer browse:** Reduce over-browsing and protect regeneration from animal damage. Practices may include use of tree shelters or exclusion fencing.
    a. **Tree/Shrub Establishment and Riparian Forest buffer** practices include cost share for tree shelters—but this is ONLY available for plantings, NOT natural regeneration.

9. **Remove invasive vegetation:** Remove heavy infestations of invasive plants that compete with regeneration, either pre- or post-harvest, or both. May include the use of herbicides and/or mechanical cutting of invasive plants, and treatment over several years.
    a. **Brush Management**
    b. **Herbaceous Weed Treatment**
    c. **CSP E315A --** Herbaceous weed treatment to create desired plant communities consistent with the ecological site

    d. *Probably not relevant here*—but NRCS does offer **Prescribed Burning** and **Prescribed Grazing** as invasive species control practices.

Plant trees to increase stocking was not included in this crosswalk.