Initial setting: Cropland or unmanaged forest with potential for growing trees or shrubs that may or may not be dissected by streams. Field concerns are water and wind erosion and lack of diverse tree and understory products and habitat.

**Tree/Shrub Site Preparation (490)**

**Tree/Shrub Establishment (612)**

**Multi-Story Cropping (379)**

1. Wood fiber in established plants
   - D.1 (+) Initial wood fiber growth rate
   - D.2 (+) Carbon storage
   - D.3 (+) Infiltration of precipitation and soil storage
   - D.4 (+) Uptake of soil nutrients and trapping of waterborne sediment
   - I.2 (+) Denitrification of soil nitrates

2. Woody plant root systems, litter, and soil OM
   - I.1 (-) Later wood fiber growth rate
   - D.6 (+) Shade
   - D.5 (-) Sheet, rill, streambank erosion and sedimentation

3. Canopy cover and vertical vegetative structure from established plants
   - I.3 (-) Stream water temperature
   - D.7 (+) Arboreal, understory habitat; detritus and large woody debris
   - I.8 (+) Tree and understory production

4. Harvested wood fiber (manufactured wood products) and other tree/understory-related products
   - D.9 (-) Wind velocity
   - I.7 (-) Wind-borne sediment and sediment-attached pollutants
   - I.6 (-) Pesticide drift

4. Harvested wood fiber (manufactured wood products) and other tree/understory-related products
   - D.10 (-) Microclimate extremes
   - I.10 (+/-) Potential income
   - D.11 (-) Traditional cropland area

**Tree/Shrub Site Preparation (490)**

**Tree/Shrub Establishment (612)**

**Multi-Story Cropping (379)**

- **C.1 (-) Atmospheric CO2 and greenhouse effect**
- **C.2 (+) Quality of receiving waters**
- **C.3 (+) Aquatic health for humans, domestic and wild animals**
- **C.4 (+) Environmental quality**
- **C.5 (+) Air quality**
- **C.6 (+) Recreation business and support infrastructure**
- **C.7 (+) Tree and understory product business and support infrastructure**
- **C.9 (+) Soil quality**
- **C.8 (+) Income and income stability (individuals and community)**

**C.10 (+/-) Traditional crop production**

**Notes:**
Effects are qualified with a plus (+) or minus (-). These symbols indicate only an increase (+) or a decrease (-) in the effect upon the resource, not whether the effect is beneficial or adverse.

**Legend:**
- Mitigating practice
- Associated practice
- #. Created by practice
- D. Direct effect
- I. Indirect effect
- C. Cumulative effect
- Pathway