



CONSERVATION ENHANCEMENT ACTIVITY

E612132Z- Colorado

**CONSERVATION
STEWARDSHIP
PROGRAM**

Establishing tree/shrub species to restore native plant communities

Conservation Practice 612: Tree/Shrub Establishment

APPLICABLE LAND USE: Forest; Range; Associated Ag Land

RESOURCE CONCERN ADDRESSED: Degraded Plant Condition

ENHANCEMENT LIFE SPAN: 15 YEARS

Enhancement Description:

Establish trees and/or shrubs to restore elements of plant diversity that have been lost through past diseases or improper management. For example, disease-resistant varieties of elm and chestnut can be established to restore the ecological functions of American elm and American chestnut. At the stand level, past forest management may have eliminated certain native tree species. Restoring stand-level diversity and function addresses a wide array of resource concerns and strengthens ongoing management activities. This enhancement improves a forest that is already in good condition by increasing plant diversity, and improving health and vigor through adding plants with resistance to disease, pests, or other local hazards. Additional benefits include contributing to carbon storage, and providing diversity in wildlife habitat and food sources.

Criteria:

States will apply general criteria from the NRCS National Conservation Practice Standard (CPS) Tree/Shrub Establishment (Code 612) as listed below, and additional criteria as required by the NRCS State Office.

- Trees/shrubs selected for planting will be adapted to site conditions and suited for the restoration of stands where past impacts of disease and/or pests has reduced species diversity.



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- No trees on the Federal or state noxious weeds list, or trees known to be aggressive and/or potentially invasive in the local area, shall be planted.
- A minimum of three different species of trees and/or shrubs should be planted. An exception is in situations where a lost species is being restored to a fully-stocked forest stand (i.e., American elm, American chestnut).
- Trees/shrubs selected must be of good quality. Only viable, high-quality and adapted planting stock or seed will be used.
- Proper planting dates and care in handling and planting the trees/shrubs will ensure an acceptable rate of survival.
- Selection of planting technique and timing will be appropriate for the site and soil conditions.
- Planting density will be adequate to accomplish the long-term goal for the property.
- Survival surveys must be conducted to determine if targeted goals are met.
- A precondition for tree/shrub establishment is appropriately prepared sites. Refer to criteria in NRCS CPS Tree/Shrub Site Preparation (Code 490).
- Refer to criteria in NRCS CPS Integrated Pest Management (Code 595) to assist with site-specific strategies for pest prevention, pest avoidance, pest monitoring, and pest suppression. Protect plantings from competition from invasive plants and other environmental stressors.
- Each site will be evaluated to determine if mulching, supplemental water or other treatments (e.g., tree protection devices, shade cards, weed mats) will be needed to assure adequate survival and growth.
- The enhancement will comply with all applicable federal, state, and local laws and regulations, and with States' Forestry Best Management Practices for Water Quality.



Documentation and Implementation Requirements

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Participant will:

- Prior to implementation, prepare the planned acres for tree or shrub establishment. Refer to NRCS CPS Tree/Shrub Site Preparation (Code 490). (NRCS will provide technical assistance, as needed.)
- Prior to implementation, select a combination of at least three native tree and shrub species that will increase plant and stand diversity and use plants with established resistance to known disease, pests, or other local hazards. (NRCS will provide technical assistance, as needed.)

Species	Note specific species characteristic(s)

- Prior to implementation, select planting technique, arrangement and spacing design, and timing appropriate for the site and soil conditions. (NRCS will provide technical assistance, as needed.)

Planting Date	
Planting Technique	
Arrangement and Spacing	

- During implementation, use forms of erosion control as needed for the site. (NRCS will provide technical assistance, as needed.)
- During implementation, notify NRCS of any planned changes to verify changes meet NRCS enhancement criteria.
- During implementation, protect the planting from plant and animal pests and fire.
- During implementation, maintain all erosion control needed for the site.

NRCS will:

- Prior to implementation, verify the land use planned for this enhancement.
- Prior to implementation, provide and explain NRCS Conservation Practice Standard Tree/Shrub Site Preparation (Code 490) as it relates to implementing this enhancement. Verify the enhancement is planned for acres that have been appropriately prepared for tree/shrub establishment.



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- Prior to implementation, provide and explain NRCS Conservation Practice Standard Tree/Shrub Establishment (Code 612) as it relates to implementing this enhancement.
- Prior to implementation, provide and explain NRCS Conservation Practice Standard Integrated Pest Management (Code 595) as it relates to implementing this enhancement.
- Prior to implementation, verify no plants on the Federal or state noxious weeds list are included.
- As needed, prior to implementation, NRCS will provide technical assistance:
 - Planning site preparation meeting NRCS Conservation Practice Standard Tree/Shrub Site Preparation (490).
 - Selecting a combination of native and disease resistant tree and shrub species.
 - Selecting planting techniques, arrangement and spacing design, and timing appropriate for the site and soil conditions.
 - Planning the use of additional erosion control, as needed for the site.
 - Preparing specifications for applying this enhancement for each site using approved specification sheets, job sheets, technical notes, and narrative statements in the conservation plan, or other acceptable documentation.
- During implementation, evaluate any planned changes to verify they meet the enhancement criteria.
- After implementation, verify the planned native trees and shrub species were established to specifications developed for the site.
- After implementation, verify the planting is protected from pests and fire.
- After implementation, verify all erosion control needed for the site is functioning and is maintained to specifications developed for the site.



NRCS Documentation Review:

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

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Participant Name _____ Contract Number _____

Total Amount Applied _____ Fiscal Year Completed _____

NRCS Technical Adequacy Signature Date



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