



CONSERVATION ENHANCEMENT ACTIVITY

E612B

CONSERVATION STEWARDSHIP PROGRAM

Planting for high carbon sequestration rate

Conservation Practice 612: TREE/SHRUB ESTABLISHMENT

APPLICABLE LAND USE: Crop (Annual & Mixed); Crop (Perennial), Pasture, Range, Forest, Associated Ag Land, Farmstead

RESOURCE CONCERN: Air

ENHANCEMENT LIFE SPAN: 15 years

Enhancement Description

Plant tree species and use stocking levels for higher growth to increase the rate of carbon sequestration (capture). Use species with a longer life span as well as relatively fast growth, and species suitable for durable manufactured products. Increase stocking levels in forests that are not fully stocked. Implement afforestation on appropriate open lands.

Criteria

- States will apply general criteria from the NRCS National Conservation Practice Standard Tree/Shrub Establishment (Code 612) as listed below, and additional criteria as required by the NRCS State Office.
- Trees and shrubs will be selected for their rate of growth and suitability for use in durable manufactured products as well as their adaptability to site conditions. Refer to state lists.
- Trees and shrubs will be planted on selected areas within any land use.
- Trees and shrubs will be planted in areas with adequate sunlight. If plantings are used to supplement stocking within existing forested acreages, plant trees where light conditions are suitable. Planting rates will follow State NRCS Conservation Practice Standard Tree/Shrub Establishment (Code 612).

E612B - Planting for high carbon sequestration rate	August 2019	Page 1
---	-------------	----------



CONSERVATION STEWARDSHIP PROGRAM

- No plants on the Federal or state noxious weeds list, or plants known to be aggressive and/or potentially invasive in the local area, shall be planted.
- Planting or seeding rates will be adequate to accomplish the planned purpose for the site.
- Planting dates, and care in handling and planting of the seed, cuttings or seedlings will ensure that planted materials have an acceptable rate of survival for the intended purpose.
- Only viable, high-quality and adapted planting stock or seed will be used.
- A precondition for tree/shrub establishment is appropriately prepared sites. Refer to criteria in NRCS Conservation Practice Standard Tree/Shrub Site Preparation (Code 490).
- Selection of planting technique and timing will be appropriate for the site and soil conditions.
- Refer to criteria in NRCS Conservation Practice Standard 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.
- 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 Air and Water Quality.



CONSERVATION STEWARDSHIP PROGRAM

Documentation and Implementation Requirements

Participant will:

- Prior to implementation, prepare the planned acres for tree or shrub establishment. Refer to NRCS Conservation Practice Standard Tree/Shrub Site Preparation (490). (NRCS will provide technical assistance, as needed.)
- Prior to implementation, select a combination of trees and shrubs for a longer life span as well as relatively fast growth, and suitability for production of durable manufactured products, and their adaptability to site conditions. (NRCS will provide technical assistance, as needed.)

Species	Note selected species characteristic(s)

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

TASK	Species	Species	Species
Planting Date			
Planting Technique			
Arrangement and Spacing			

- During implementation, install and maintain erosion control measures as needed for the site. (NRCS will provide technical assistance, as needed.)
- During implementation, protect plantings from competition from invasive plants.
- During implementation, protect the planting from plant and animal pests and fire.
- During implementation, notify NRCS in writing of any planned changes to verify changes meet NRCS enhancement criteria.

NRCS will:

- Prior to implementation, provide and explain NRCS Conservation Practice Standard Tree/Shrub Site Preparation (Code 490) as it relates to implementing this enhancement.



CONSERVATION STEWARDSHIP PROGRAM

Verify the enhancement is planned for acres that have been appropriately prepared for tree/shrub establishment.

- 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 (Code 490).
 - Selecting a combination of tree and shrub species to establish stocking levels that meet enhancement criteria.
 - 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 state implementation requirements, national technical notes, appropriate state 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 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.

**CONSERVATION
STEWARDSHIP
PROGRAM**

Participant Name _____ Contract Number _____

Total Amount Applied _____ Fiscal Year Completed _____

NRCS Technical Adequacy Signature Date





**IOWA SUPPLEMENT TO
CONSERVATION ENHANCEMENT ACTIVITY**

**CONSERVATION
STEWARDSHIP
PROGRAM**

E612B

Planting for high carbon sequestration rate

Additional Criteria for Iowa

- This enhancement must be implemented following a Forest Management Plan developed and/or recently updated by an Iowa Department of Natural Resources (IDNR) Forester or certified TSP.
- High carbon sequestering trees and shrubs will be determined by the IDNR Forester or certified TSP and included in the Forest Management Plan.