**alliance practice worksheet**

MINNESOTA

riparian forest buffer (391)

*The conditions and specifications below are adapted from the Natural Resources Conservation Service. Producers who are installing these practices under the Alliance will use the conditions and implementation guides below but are exempt from NRCS verification and certification. Completing the Purposes and Practice Specifications on this document is sufficient to self-verify practice installation and completion.*

# Farm Info

|  |  |
| --- | --- |
| Name | Click or tap here to enter text. |
| County | Click or tap here to enter text. |
| Alliance Contract Number | Click or tap here to enter text. |
| Field Number(s) | Click or tap here to enter text. |
| Tract Number(s) | Click or tap here to enter text. |
| Practice Area | Click or tap here to enter text. |

# PRACTICE: riparian forest buffer (391)

**DEFINITION:**An area predominantly covered by trees and/or shrubs located adjacent to and up-gradient from a watercourse or water body.

**CONDITIONS WHERE PRACTICE APPLIES:** Apply riparian forest buffers on areas adjacent to permanent or intermittent streams, lakes, ponds, and wetlands where channels and streambanks are sufficiently stable

See[*https://efotg.sc.egov.usda.gov/api/CPSFile/32972/391\_MN\_CPS\_Riparian\_Forest\_Buffer\_2021*](https://efotg.sc.egov.usda.gov/api/CPSFile/32972/391_MN_CPS_Riparian_Forest_Buffer_2021) to access the NRCS Conservation Practice Standard.

**NOTE:** *Riparian Forest Buffer has a practice lifespan of 15 years, according to NRCS. Therefore, enrollment is only possible for year one (establishment/planting) of this practice.*

**AT A MINIMUM, PRODUCERS WILL PROVIDE A RECORD OF THE FOLLOWING:**

Prepare plans and specifications that describe requirements for applying the practice to achieve its intended purpose and obtain any required permits. At a minimum, provide—

* Conservation plan map.
* Map showing the location of plantings and/or natural regeneration areas.
* Establishment method by species or vegetation type.
* Number and spacing of trees/shrubs per acre by vegetation type.
* Timing of planting relative to seasonal factors, plant physiology, disease, insects, and wildlife impacts.
* Methods of plant protection used during plant establishment.
* CPA-52 Environmental Evaluation Worksheet
  + Please contact your State Implementer for assistance completing the CPA-52.

# GENERAL CRITERIA APPLICABLE TO ALL PURPOSES

* Position and design the riparian forest buffer to achieve enough width, length, vertical structure/density, and connectivity to accomplish the intended purpose(s). Minimal width of 35 feet.
* Design for dominant vegetation that consists of existing, naturally regenerated, or seeded/planted trees and shrubs suited to the soil and hydrology of the site and the intended purpose(s).
* Extend the vegetation to the minimum width needed to achieve the intended purpose(s). Width of buffer refers to one side of the watercourse. Begin measurement at and perpendicular to the normal water line, bank-full elevation, or the top of the bank as determined locally.
* Control excessive sheet, rill, and concentrated flow erosion through the riparian forest buffer site and in the areas immediately adjacent and up-gradient of the buffer site.
* Use tree and shrub species that are native and noninvasive. Substitution with improved locally adapted species, or with species suited for a specific purpose, is allowed. For plantings and seeding, use only viable, high quality, and adapted plant materials. Where available, use the ecological site description to guide restoration to an appropriate vegetative community phase.
* Select plant species that are adapted to site and hydrologic conditions and provide the structural and functional diversity preferred by fish and wildlife species likely to benefit from the installation of the practice, provided the intended purpose is not compromised.
* Favor tree and shrub species that have multiple values, such as those suited for timber, nuts, fruit, florals, browse, nesting, and aesthetics, provided the intended purpose is not compromised.
* Periodic removal of some forest products such as high value trees and medicinal herbs, nuts, and fruits is permitted provided the intended purpose is not compromised by the loss of vegetation or harvesting disturbance. Refer to criteria in NRCS Conservation Practice Standards (CPSs) Forest Stand Improvement (Code 666) and/or Multi-Story Cropping (Code 379).
* Perform necessary site preparation and planting at a time and manner that ensures the survival and growth of species selected for achieving the intended purpose(s). Refer to criteria in NRCS CPSs Tree and Shrub Site Preparation (Code 490) and/or Tree and Shrub Establishment (Code 612) as applicable.
* Control or exclude livestock as necessary to achieve the intended purpose. Refer to criteria in NRCS CPSs Access Control (Code 472) and/or use Prescribed Grazing (Code 528) as applicable.
* Control or exclude harmful plant and animal pests present on the site as necessary to achieve and maintain the intended purpose. If pesticides are to be applied, refer to Windows Pesticide Screening Tool (WIN-PST) Criteria in NRCS CPS Pest Management Conservation System (Code 595) and comply with applicable State and local laws and product labels. Refer to criteria in NRCS CPSs Brush Management (Code 314) and/or Herbaceous Weed Treatment (Code 315) as applicable.
* For stabilization of stream banks or shorelines, use NRCS CPSs Streambank and Shoreline Protection (Code 580) and/or Critical Area Planting (Code 342).
* Stream type and site hydrology will determine buffer design and layout to ensure purpose is achieved.
* Use plant species adapted to the projected duration of site saturation and inundation.
* Design tree and shrub stem densities to assure the established riparian forest buffer is predominantly covered by trees and/or shrubs by the end of the practice lifespan.

**PLANNED LAYOUT, ATTACH MAP:**

**Water body/course type:** Choose an item

**Watercourse name:** Click or tap here to enter text.

Minimum buffer widths = shortest allowable width for designed buffer purpose. Maximum buffer widths = widest width needed for designed buffer purpose. Locate both Min. and Max. width areas on planned location map.

**Cover Average Width (in feet):** Click or tap here to enter text. **Minimum:** Click or tap here to enter text. **Maximum:** Click or tap here to enter text.

**Specify left and/or right side of stream (**from the perspective of looking downstream; for water bodies, such as lakes and ponds, check both). **Left Right**

**Cover Length (in feet)**

**Left:** Click or tap here to enter text. **Right:** Click or tap here to enter text. **Ponds and lakes (continuous):** Click or tap here to enter text.

**Total Acres:** Click or tap here to enter text.

**SOILS INFORMATION**

Record results from Web Soil Survey (WSS): Suitability and Limitation Categories: Site- Preparation-Surface, Site-Preparation-Deep, Soil Rutting Hazard and/or Erosion Hazard for off-road or off-trail).

OR

Attach WSS Reports.

|  |  |  |
| --- | --- | --- |
| **Soil Map Unit (SMU) or Symbol (MUSYM)** | **Suitability and Limitations Category** | **Rating** |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

**METHOD OF SITE PREPARATION**

Chemical/Mechanical (Follow the criteria in the standard Tree & Shrub site Preparation (490)) – Attach Job Sheet and note WINPST ratings are required when chemical site preparation is used.

Prescribed Burning (Follow the criteria in the standard Prescribed Burning (338) – Attach Job Sheet and burn plan.

Biological – Grazing (Follow the criteria in the standard Prescribed Grazing (528) – Attach Job Sheet and grazing plan.

**PLANT SELECTION – SPECIES, STOCK TYPE AND PLANTING RATES**

Document the origin of the seed/seedling source from the tag attached to the plant or seed bag. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Used MN-ECS-002, or CTSG/WS:** Click or tap here to enter text.

Select the desired Conservation Tree/Shrub Group and Windbreak Suitability (CTSG/WS) type. For a more detailed selection, see the CTSG spreadsheet for the sub-zones at eFOTG section II >> “Soils – Statewide Official Data & County Reports” >> “Conservation Tree & Shrub List”.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Species/Cultivar by row number | Size: Caliper & height and/or nursery age | Kind of Stock1 | Distance between plants within row (in feet) | Distance between adjacent rows (ft)2 | Total number of plants for row |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

1 Bare-root, Container (includes potted, and B&B, Cutting (including whips, poles, and stakes)) Plug, Potted (include size, caliper, height, and age as applicable.

2 Adjusted for width of maintenance equipment for mature plants.

# Operation and Maintenance requirements

Limiting access or damage from vehicles, equipment, livestock, and wildlife, during tree planting and until riparian buffer establishment to protect new plants and minimize erosion, compaction, and other site impacts.

Inspecting the site at an appropriate time following planting to determine whether the survival rate for tree and shrubs meets practice and client objectives.

Replacing dead trees or shrubs and controlling undesirable vegetative competition until the buffer is or will progress to a fully functional condition.

Controlling undesirable plant species that may include but not be limited to those on the Federal or State invasive species and noxious week list.

Inspecting the trees, shrubs, and site periodically, and protecting the plantings and site from adverse impacts of insects, diseases, competing vegetation, fire, livestock, excessive vehicular and pedestrian traffic, wildlife, concentrated flows, nonfunctioning tree shelters and/or weed barriers, etc.

Applying fertilizers, pesticides, and other chemicals used to maintain buffer function in a way that will not impact water quality.

|  |
| --- |
| Notes:  Click or tap here to enter text. |

# PRODUCER SELF-CERTIFICATION

By signing below, I certify that I have reviewed all required documentation and have implemented the practice and met all criteria and requirements as defined in the Natural Resources Conservation Service **RIPARIAN FOREST BUFFER (391)** standard and specifications for the identified acres or animal units.

Further, I agree that:

I am not currently receiving a payment for this conservation practice on these fields and acres or are within the practice lifespan from another USDA Conservation Program, another USDA Partnership for Climate-Smart Commodities grant partner, or a state cost-share program.

I will retain all practice documentation to support this certification for up to 12 months following practice adoption and will provide this documentation to the Alliance if selected for a spot check. *(Up to 10% of enrolled Alliance participants will be randomly selected for spot checks).*

|  |  |
| --- | --- |
| ***Participant Name:*** | Click or tap here to enter text. |

|  |  |
| --- | --- |
| ***Participant Signature:*** | Click or tap here to enter text. |

|  |  |
| --- | --- |
| ***Date:*** | Click or tap to enter a date. |