

Riparian Forest Buffer

Virginia Conservation Practice Job Sheet

391



Definition

An area predominantly trees and/or shrubs located adjacent to and up-gradient from watercourses or water bodies.

Criteria

Refer to VA Forestry Technical Note #3, “Tree and Shrub Establishment Guidelines” for specific information on determining planting techniques and appropriate species.

Position and design the riparian forest buffer appropriately to achieve sufficient width, length, vertical structure/density and connectivity to accomplish the intended purpose(s).

Dominant vegetation will consist of existing, naturally regenerated, or seeded/planted trees and shrubs suited to the soil and hydrology of the site and the intended purpose(s).

The vegetation will extend a minimum width to achieve the purpose(s). Measurement shall begin at and perpendicular to the normal water line, bank-full elevation, or the top of the bank as determined locally.

Excessive sheet-rill and concentrated-flow erosion will be controlled in the areas immediately adjacent and up-gradient of the buffer site.

Necessary site preparation and planting shall be done at a time and manner to insure survival and growth of selected species for achieving the intended purpose(s).

Volunteer species that exist onsite within the seed-bank will establish themselves. The establishment of these species is encouraged to promote a diverse and fully functional buffer.

Exclude livestock as necessary to achieve the intended purpose. Refer to the VA Practice Standard *Prescribed Grazing, Code 528* and/or VA Practice Standard *Access Control, Code 472*, as applicable.

The minimum width is 35 feet measured horizontally on a line perpendicular to the water body beginning at the normal water line, bank-full elevation, or the top of the bank as determined locally.

Extend the buffer width in high nutrient, sediment, and animal waste application areas, where the contributing area is not adequately treated or where an additional level of protection is needed.

Establish plant communities that address the target aquatic and terrestrial wildlife needs and have multiple values such as habitat, nutrient uptake and shading.

Select plants that have higher rates of carbon sequestration in soils and plant biomass and are adapted to the site to assure strong health and vigor. Plant the appropriate stocking rate for the site.

Producer _____ Farm # _____ Tract # _____

Field Office _____ Contract # _____

Producer’s Purpose

- | | |
|---|---|
| <input type="checkbox"/> Create shade to lower water temperatures | <input type="checkbox"/> Create/improve habitat, source of detritus |
| <input type="checkbox"/> Reduce excess amounts of sediment | <input type="checkbox"/> Reduce pesticide drift |
| <input type="checkbox"/> Increase carbon storage | |

Practice Specifications

Site Preparation

Planting Stock

- Planting Stock Natural Regeneration (If yes, show seed source on attached sketch.)
 Bare Rooted Seedling
 Direct Seeding
 Cuttings (Usually for bioengineering projects.)

Field #					
Acres					
Area Not Plantable					
Plantable Acres					
# trees					
Existing Land Use					
Competing Vegetation					
Invasive Species					
Natural Regen.					
Soils Type					
Soil Drainage					
Aspect & Slope					
Potential Damage					
Planned Species					
Planting Spacing					
# Trees per acre					
Planting Dates					

Are tubes and mats required? Yes No (If yes, please specify.)

Operation and Maintenance

- Ensure livestock cannot access the area.
- The site should be inspected twice a year for the first 3 years and once a year after that.
- Invasive species should be located and controlled. It is more economical and effective if they are treated with herbicide when they are first detected. Check with the Virginia Cooperative Extension Service for the best herbicide to control your problem species.
- Mowing is allowed outside the nesting season to control invasive species or control natural seedlings but not encouraged. The nesting season is from April 15 to August 15. Controlling vegetation with glyphosate, or other recommended herbicide, within 3' of the tree is desirable.
- Check to see if there is a live seedling. For future reference, it is helpful to mark shelters which do not have a live tree. They may re-sprout the second year.
- Straighten any leaning tree shelters and ensure the shelter is still 2-3 inches in the ground (if present).
- Replace any broken or rotten stakes or missing ties. Landowners can expect to replace 10 percent or more of the stakes in the first three years.
- Remove wasp nest inside the tree shelter. Nest can get large enough to block the growing seedling.
- Grass or weeds inside the shelter should be removed during the first 3 years. Do not pull up the clump of grass, since that can pull up the tree or damage tree roots. Raise the shelter, leave the soil in place and cut off the weeds or grass at ground level, then replace the shelter and seat it 2 to 3 inches deep.
- When the tree is within six inches of the top of the shelter the bird net should be pulled down on the tree shelter so as not to impede the growth of the tree.
- Shelters should be cut off when the tree is 2 to 3 inches in diameter at the top of the shelter. Shelters must be rigid plastic with a perforated line that will split off with normal stem growth. Shelters should be checked to ensure no mold or fungus is growing on the bark inside the shelter.

Planner Certification

This Tree Shrub Establishment plan meets the requirements of NRCS Conservation Practice Standard 391.

Signature

Title

Date

Certification of Practice Completion

This Tree Shrub Establishment has been completed and maintained according to NRCS plans and specifications. (Indicate in Practice Specifications if there were any changes to the planned practice and acreage.)

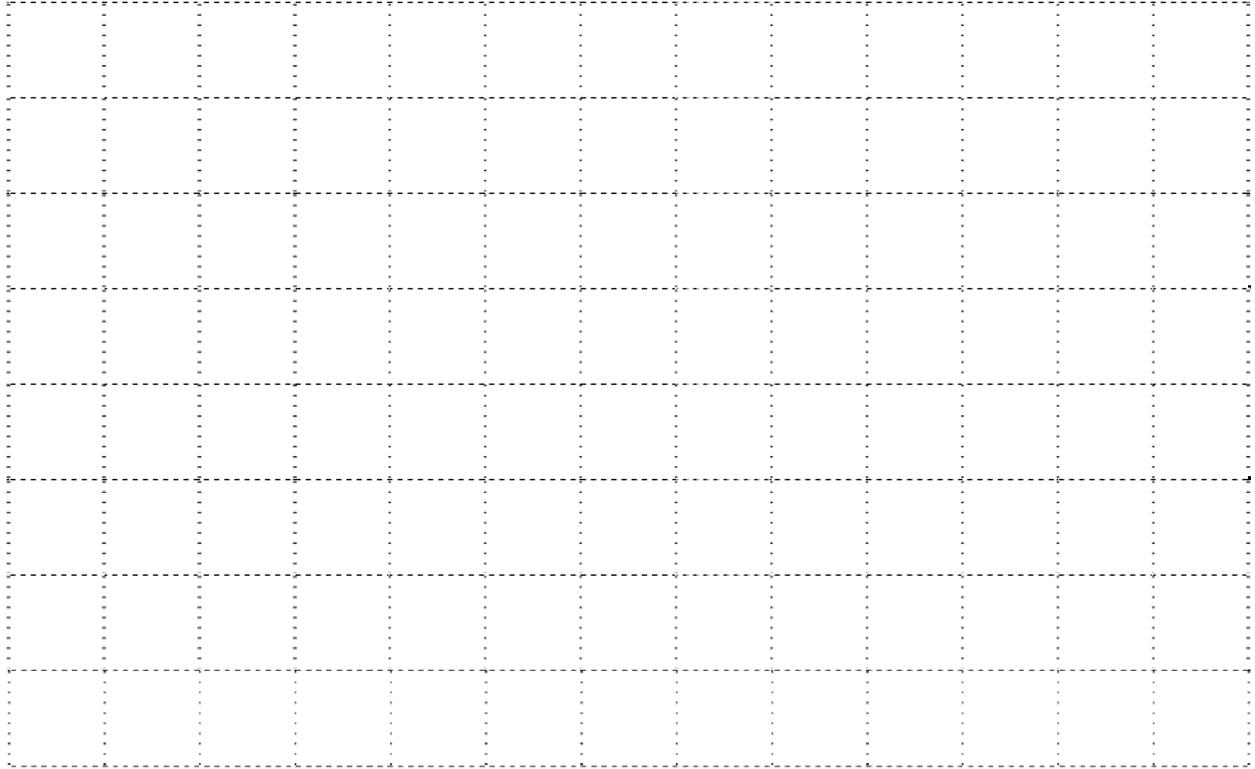
Signature

Title

Date

If needed, an aerial view or a side view of the practice can be shown below. Other relevant information, complementary practices and measures, and additional specifications may be included.

Scale 1"= ____ ft. (NA indicates sketch not to scale: grid size= 1/2 " by 1/2")



Additional Specifications and Notes:

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