

Exhibit C: Lower Steel Creek Restoration Project Site Preparation and Planting Details

C-1. Site Preparation Details

7.7 acres will undergo site preparation for between June 1 and August 31, 2023; and June 1 and August 31, 2024.

Beginning June 2023, all noxious weeds within the project area (i.e., Himalayan blackberry (HBB), reed canary grass, English ivy, English holly, cotoneaster, etc.) will be removed mechanically (i.e., mowing, weed whacking) by the contractor as a condition of this bid. It is imperative to retain any existing native vegetation in these areas. The contractor will also use cut stump herbicide application to treat English ivy, English holly, and cotoneaster. . (See Figure 1 for Steel Creek: Planting and Noxious Weeds Treatment Areas map)

Site preparation beginning in June 2024 will include mechanical removal of noxious weeds. Herbicide application at this time will be the decision of the CoqWA Riparian Habitat Project Manager. Noxious weeds will be burned in a burn pile on site. Additionally, at the decision of CoqWA Riparian Habitat Project Manager, the contractor will fell dead/dying red alder trees between June and Aug of 2024. These trees will be left in the riparian area or burned in a burn pile, depending on the success of previous herbicide treatments and mechanical removal of English ivy

C-2. Planting Details

A total of 7.7 riparian acres will be enhanced along 0.2 miles of stream. Local nursery stock will be acquired prior to outsourcing and delivery to the site will be the responsibility of the contractor. Tree protection materials will be sourced, delivered, and installed by the contractor. All planting sites will have site-specific planting plans that take into consideration terrain, existing riparian composition, animal activity, flood-prone conditions, soil saturation/drainage and desired outcomes. (See Figure 1 for Steel Creek: Planting and Noxious Weeds Treatment Areas map)

Site 1: 5.1 riparian acres will be enhanced with native trees and shrubs, based on CREP planting plan. The contractor will plant 1,277 native bareroot trees and shrubs at approximately 250 stems per acre. Browse by elk is highly likely in this area. 255 western redcedar trees are to be protected with 12” diameter, 4’ tall 14-gauge (or greater) galvanized steel, 2”x4” welded wire tree cages and secured with 2 - 1”x2”x5’ or 2”x2”x5’ wooden stakes per cage. Additionally, 200 - 4’ Vexar tubes and bamboo stakes will be used to protect other highly palatable plant species. (See attached Natural Resources Conservation Service - Conservation Practice Job Sheet (391-OR-JS) for “Riparian Forest Buffer Specification Sheet” detailing Buffer Prescription, Tree/Shrub Requirements, and Additional Planting Information)

Site 2: 2.6 riparian acres will be enhanced with native trees and shrubs. The contractor will plant 650 native bareroot trees and shrubs at approximately 250 stems per acre. All plantings will be protected by 4’ Vexar tubing and secured with a bamboo stake. (See Table 1 for more information on species quantity, sourcing, and spacing)

Figure 1: Steel Creek: Planting and Noxious Weeds Treatment Areas map

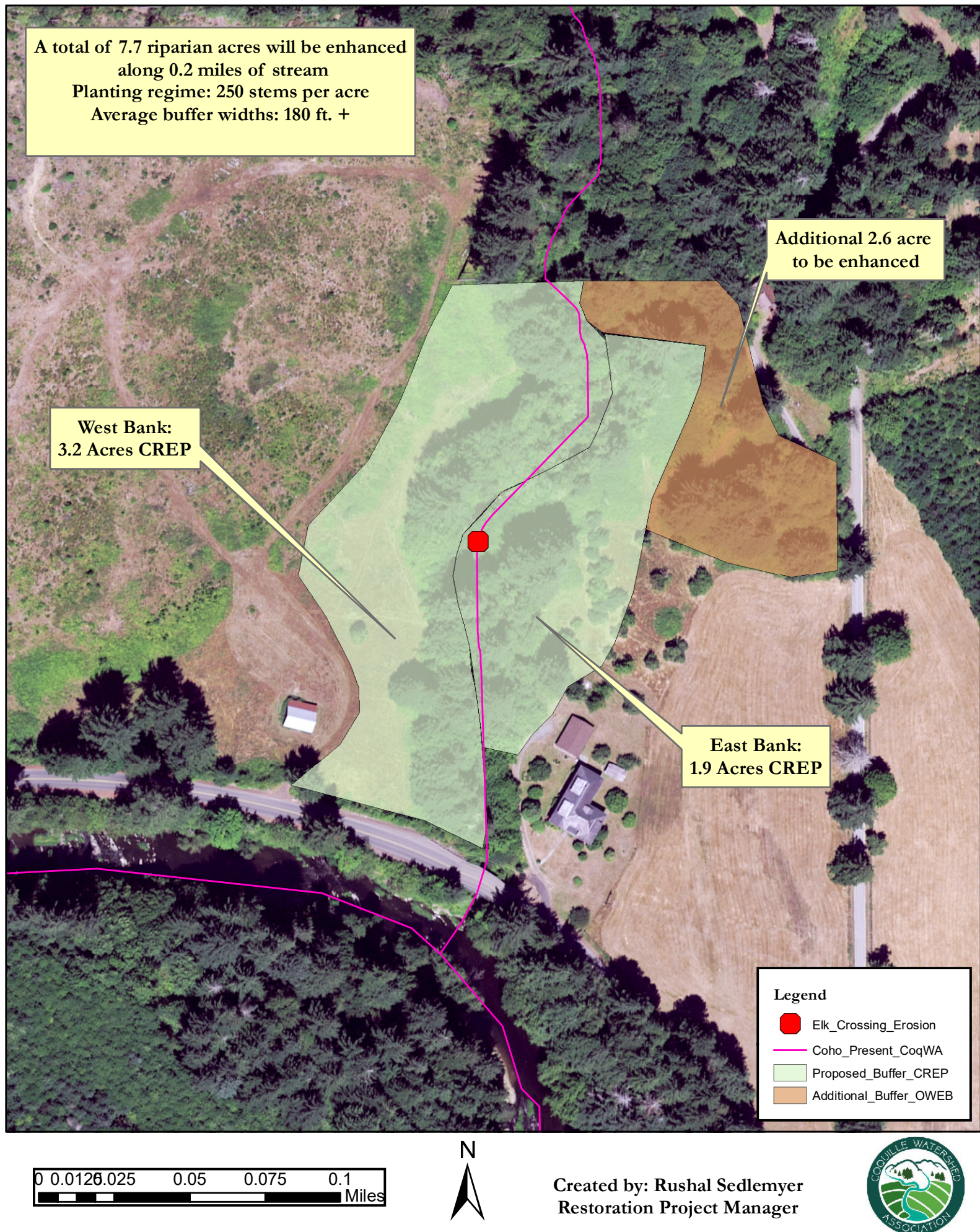


Table 1: Lower Steel Creek Planting Prescription including plant species, sourcing, spacing, and quantities. Note: Plant species may vary depending on availability, site conditions and landowner preference.

Planting Prescription for Steel Creek on OWEB Acres			
Prescribed plants per acre (2.6 acres):		~250 stems per acre	
Site Competition:		Moderate – High	
Percent Protected:		100%	
Species	Stock Source	Spacing	Amount
Western Red Cedar	Local nursery stock	12' x 12'	150
Western Hemlock	Local nursery stock	12' x 12'	50
Big Leaf Maple	Local nursery stock	12' x 12'	50
Beaked Hazelnut	Local nursery stock	6' x 6'	70
Red Elderberry	Local nursery stock	6' x 6'	80
Evergreen Huckleberry	Local nursery stock	6' x 6'	70
Red Flowering Current	Local nursery stock	6' x 6'	60
Native Rhododendron	Local nursery stock	6' x 6'	60
Chokecherry	Local nursery stock	6' x 6'	60
Total			650

NRCS - CREP Tree and Shrub Requirements. Taken from NRCS Riparian Forest Buffer Specification Sheet (391 OR- Specification).

391 OR-Specification

Natural Resources Conservation Service, Oregon

March 2019

RIPARIAN FOREST BUFFER SPECIFICATION SHEET

Client	CONFIDENTIAL	Farm/Tract	Pending
Location	28w 11w sec 12 –Steel Creek	County/ SWCD	Coos/Coos
Planner	B. Grant	Date	10/12/2021
Project Size	5.1 acres	Topo Map	Dora

DESIGN APPROVAL:

Practice Code	PRACTICE	LEAD DISCIPLINE	CONTROLLING FACTOR	UNITS	JOB CLASS				
					I	II	III	IV	V
391	Riparian Forest Buffer	BCSD For	Planting complexity and site sensitivity	Type of planting stock, potential seedling mortality rating, and harvest equipment operability ratings from Soil Survey.	Container stock; potential seedling mortality low; harvest equipment operability well suited	Bare-root stock or cuttings; potential seedling mortality moderate; harvest equipment operability moderately suited	Direct seeding or natural regeneration ; any seedling mortality rating, any harvest equip. operability rating	AI I	AI I
This practice is classified as Job Class (check one):						X			

Design Approved by:/s/_____

Date: _____

Job title:_____

Natural Resources Conservation Service

RIPARIAN FOREST BUFFER SPECIFICATION SHEET

Client: CONFIDENTIAL

Date: 10/12/2021

Practice Purpose (check one or more that apply)			
<input checked="" type="checkbox"/>	Create shade to lower/maintain water temp.	<input type="checkbox"/>	Reduce pesticide drift into a water body
<input type="checkbox"/>	Provide detritus and large woody debris	<input checked="" type="checkbox"/>	Restore riparian plant community
<input type="checkbox"/>	Increase carbon storage in plants/soil	<input type="checkbox"/>	Other:
<input type="checkbox"/>	Reduce Excess Sediment, O.M., Nutrients, Pesticides in surface runoff and Other Chemicals in Shallow Groundwater Flow		

Buffer Prescription
Describe the treatment needed for each side. When different treatments are needed on each side, identify by widths, areas, or location and describe each treatment. Right and left sides are determined by looking upstream
Type of Planting Stock: Bare root seedlings for those species available (Conifers, BLM, others are usually available as bare-root), or containers where there is no bare-root option.
Soil Type: 10B Chismore silt loam 3-7% slope, 17B Eilertson silt loam 0-7% slope,
Seedling Mortality Rating (from soil survey): 10B and 17B low,
Harvest Equipment Operability Rating (from soil survey): 10B and 17B moderate,
Right Side Treatment*: Site prep to remove large blackberry crowns, English ivy, Scotch broom. Plant with moisture conserving scalps 200-250 stems per acre from listed plants to restore riparian functionality. Control noxious weeds and maintain livestock exclusion for duration of CREP contract. Width minimum 35', widening to follow contour as mapped.
Left Side Treatment*: Site prep to remove large blackberry crowns, English ivy, Scotch broom. Plant with moisture conserving scalps 200-250 stems per acre from listed plants to restore riparian functionality. Control noxious weeds and maintain livestock exclusion for duration of CREP contract. Width minimum 35', widening to follow contour as mapped.
*minimum width is 35 feet if excess sediment, nutrients, pesticides are in surface waters and excess nutrients and other chemicals are in shallow ground water flow.
Buffer length (ft): 700 ft
Additional Information: Conservation Reserve Enhancement Program enrollment under consideration for approximately 700' bilateral buffer. Mapped with landowner and Coquille Watershed Association staff. Buffer width will vary but will not be less than 35 feet on either side. O&M requires continued annual maintenance of noxious weeds (ivy, Scotch broom, blackberry). Do not disturb native vegetation unless required for safety or to replace with more desired restoration seedlings. Allow snags to stand for wildlife habitat use unless they pose a hazard to life or infrastructure. Allow downed wood to rot in place on forest floor to maximum feasible extent to provide shelter for herps and other wildlife.

Natural Resources Conservation Service

RIPARIAN FOREST BUFFER SPECIFICATION SHEET

SITE PREPARATION shall be completed PRIOR to seedling establishment. Follow 490-Tree/Shrub Site Preparation job/specification worksheet for site preparation requirements.

Additional Information: Follow ODF-prescribed spraying and hand/weed-whacker clearing to kill ivy, holly, Scotch broom, and Himalayan (Armenian) blackberry. Continue to hand-clear or spray yearly until restoration seedlings are free to grow and begin to shade out the problem weeds.

Tree/Shrub Requirements				
Tree Species*	Location to Plant ¹	Ave. Tree Spacing	Trees/Ac	No. of Trees/ Stock Type ²
BLM	Big Leaf Maple, full sun to light shade, moist soils. Grows very large so consider view-shed	12'	14/ac	75/BR
WRC	W Redcedar, shady to part sun. Slow growing and very susceptible to browse. Use heavy duty tree protectors due to elk damage	12'	58/ac	300/BR
WH	Interplant with WRC, less susceptible to browse, slow growing understory very tall at maturity	12	10/ac	50/BR
				/
				/
				/
Shrub Species*	Location to Plant ¹	Ave Shrub Spacing	Shrubs/Acre	No. of Shrubs/ Stock Type ²
Bk H	Beaked hazelnut, <i>Corylus cornuta</i> , moist with light shade. 12-24 ft tall and important to wildlife	6'	0-30	<142/BR or Co
R Eld	Red elderberry, <i>Sambucus racemosa</i> moist w sun to light shade, 12-20 ft tall and important to pollinators	6'	0-30	<142/BR or Co
Ev Huck	Evergreen Huckleberry, <i>Vaccinium Ovatum</i> moist w sun to light shade, 6-8 feet tall and good wildlife browse	6'	0-30	<142/BR or Co
RFC	Red-flowering currant, <i>Ribes sanguineum</i> , moist to dry-well-drained. 6-8 ft tall, vivid flowers great for pollinators	6'	0-30	<142/BR or Co
W Rh	Rhododendron (native) full sun to lightest shade, moist to dry. Non-hybrid may be difficult to locate but excellent pollinator choice, 8-10 ft tall and very attractive	6'	0-30	<142/BR or Co
BitC	Bitter cherry, <i>Prunus emarginata</i> , Dry to wet soils, shade to full sun. 20-30 ft tall flowers great for pollinators	6'	0-30	<142/BR or Co
1 – Describe location where plants will be planted (i.e. at bank edge, 0-15 feet from bank, etc.)				
2 -- ba-bareroot, pl-plug, co-containerized, cu-cutting				

Natural Resources Conservation Service

RIPARIAN FOREST BUFFER SPECIFICATION SHEET**Additional Planting Information:**

Plant 250 stems per acre (total of 1227 stems), focusing on bare areas where patches of noxious weeds have been removed. This will bring total stems in the riparian area to an average of 450-500 stems per acre, consistent with native conditions.

From the lists above, plant 75 Big Leaf Maple, 300 Western redcedar, 50 Western hemlock trees. Plant a total of 852 shrubs, adjusting the proportion of each based on availability at time of order. The above species have been selected based on surrounding native vegetation and habitat requirements in an area dominated by commercial Douglasfir plantations. **Other adapted native species may be substituted after consultation with ODF, NRCS, or CREP Tech.** Non-native species added to riparian must be non-invasive and consistent with the goal of restoring riparian function and wildlife habitat.

Add 300 heavy-duty tree protectors around western redcedar and a selection of other susceptible seedlings. The browse damage on this project is likely to exceed 50% before trees are old enough to withstand elk and deer damage.

Add up to 200 regular Vexar Tube style animal damage control tubes on other species.

Scalp for moisture conservation:

Scalp to mineral soils a 3' diameter minimum around each seedling. By removing grass, duff, and other sources of competition for moisture the planted seedling will have maximum access to water. This will be especially important due to recent weather pattern changes resulting in severe drought. Planting as early as possible in the November-March planting season will also maximize plant survival.

Submit all receipts to Farm Service Agency for the following planting budget items:

1. Plants and labor,
2. animal damage control tubes and structures, and
3. moisture control scalping.

For separate Conservation Plan and budget items, see also the Implementation Requirements sheets for:

1. Site preparation
2. Fences
3. Access Control
4. Brush management (after 2 years, for weed control)
5. Upland Wildlife Habitat Control (mid-contract)

Chemical Use: If chemicals are planned to control competing vegetation, at any time, the chemical(s) will be evaluated with the WIN-PST program. A rating of intermediate or higher will require mitigation through the use of the Pest Management specification. Attach the hazard ratings to the specification worksheet.

RIPARIAN FOREST BUFFER SPECIFICATION SHEET**SEEDLING AND PLANTING INFORMATION**

Select seedlings from the appropriate seed zone and elevation or a geographic area of similar climate within an elevation of 500 feet higher or lower and within 100 miles north to 100 miles south of the planting site. Stock for introduced species must be from a proven, adapted source.

SEEDLING INSPECTION: While at the nursery or before accepting delivered seedlings, check that seedlings match what's specified on the order. This information should be printed on the container. Open several packages at random. While protecting exposed seedlings from drying, check for the following signs of damage:

- Dry roots
- White tip roots
- Swollen or burst buds
- Presence of mold on needles or stems
- Presence of sour odors
- Physical damage to seedlings
- Seedlings frozen in a solid block of ice
- Ripped or crushed bags or boxes exposed to circulating air

Remove a few seedlings from each opened package and strip areas of bark along the roots and stem with a fingernail or knife edge to reveal the woody tissues. The cambium layer of the stem must be green and moist with a light-colored sapwood beneath. Moist and consistently light-colored woody tissue should be found along the stripped root.

DO NOT ACCEPT DAMAGED SEEDLINGS: The seedlings must be alive, dormant, and disease free. Immediately contact the nursery staff for further instructions.

TEMPORARY STORAGE INSTRUCTIONS: Bareroot seedlings and cuttings may be stored for up to 7 - 10 days at temperatures from 36 to 45 degrees F. If snow is available storage can be provided by constructing a cavity for the packaged seedlings (on a north facing slope or under shade if possible). If planting has to be delayed or cold storage is not available, unpack bareroot seedlings and "heel in": 1) Dig a V-shaped trench in a moist, shady place; 2) Break bundles and spread seedlings out evenly, 3 or 4 thick, in an upright position to a depth equal to the root collar; 3) Fill in with loose soil, and water; 4) Complete filling in soil and pack firmly. Store container plants in a cool area. Unrooted cuttings and whips can be soaked in cold water (lower 1/3 to 1/2 is sufficient) for 48 hours prior to planting to enhance root formation.

SITE PREPARATION: Clear the planting area to mineral soil. Size of clearing must be large on sites with heavy grass or herbaceous cover. Follow specific instructions on the 490-Tree/Shrub Site Preparation job/specification worksheet.

CARE AT PLANTING TIME: Keep seedlings roots moist at all times after removal from shipping packages or heel-in trench. At the field site store seedlings in the shade or under a reflective space blanket. Do not use canvas to protect seedlings from solar heating. Use suitable container (bucket, bag, or planting tray) for carrying the trees during the planting operation. Keep wet material around roots to prevent their damage through exposure. Never carry a handful of trees exposed to the sun and wind. Take one tree at a time from the container and plant it immediately. Trim excessively long roots with a sharp hatchet, machete, shears, or scissors. Do not tear or rip roots.

TIMING OF PLANTING: Avoid planting on hot, windy days. Planting site must be free of snow and the soil frost-free. Do not carry more seedlings than can be planted in 1 hour (warm, windy, dry day) to 2 hours (calm, humid day). Utilize debris and stumps to provide shade for newly planted seedlings wherever possible.

Natural Resources Conservation Service

RIPARIAN FOREST BUFFER SPECIFICATION SHEET**PLANTING METHODS:**

Bareroot Seedlings - Open a hole or slit deeper than the root size to be planted to accommodate the root system with all roots pointing down (no "J" or "L" shaped roots). Plant seedlings slightly deeper than they grew in the nursery (indicated by a change in bark characteristics) with roots naturally positioned. Do not twist or bunch roots. In slit planting, push the tree down to the bottom of the slit, then with a shaking motion, raise it gently back to the correct level. While holding the tree in an upright position, at the correct depth, bring loose, moist soil in around the root system. Do not let dry soil or surface litter fall into the hole. When the slit or hole is filled, pack the moist soil down firmly. No roots should be exposed or foliage covered.

Plugs - Plugs are easily planted due to their shape. Plugs are grown in cylindrical containers. Larger size plugs, i.e. 20 cubic inch, have larger root systems and grow quickly. Open a hole and place plug in hole at the same depth as grown in the container. Place moist soil around the plug and pack. Firm up soil completely around plug. An optional, slow release fertilizer can be placed in the bottom of the planting whole. Make sure that initially there is no contact between the fertilizer and seedling roots.

Un-rooted Cuttings - For un-rooted cuttings and whips open a hole or slit deep enough to allow cuttings to be inserted so at least 1/2 - 2/3 of the cutting length is below ground. Insert cutting vertically with buds pointing up, insuring that one to three bud remain above ground. Firm the soil around the cutting so good contact with the soil is obtained. An optional, slow release fertilizer can be placed in the bottom of the planting whole. Make sure that initially there is no contact between the fertilizer and seedling roots.

Containerized - Containerized plants are best planted in the spring, summer and fall. Dig a hole at least 50 percent wider than the container. Plant the root ball top at or just below natural ground level. Root-bound plants should have the root system slit and flared out over a mound of soil in the planting hole. Cut off any long roots before planting. If more than 20% of the root system is cut off, remove (proportionately) the same amount of leaf area. Refill hole with soil and pack well to remove air-pockets. If available, water plants. Prune off diseased or damaged branches, suckers, etc.

MOISTURE CONSERVATION: Control competing vegetation for a minimum of 2 years after planting, using one of the following methods.

Mechanical - Use a hoe, shovel, brush cutter or chainsaw to control all competing vegetation in the immediate area (3-foot minimum diameter) of the seedling. Repeat as necessary to minimize moisture competition.

Chemical - Apply herbicides according to label directions. The herbicide selected must be formulated and registered for use on **forestland**. Consult a local weed specialist for rates, timing and restrictions. Repeat as often as needed to control competing vegetation. Treat all vegetation within 1.5 ft of the seedling (3 ft. diameter). Run WIN-PST and attach hazard ratings for selected chemical (s).

Mulch - Spread mulch material (paper, plastic, geotextile, etc.) around the base of seedling for a minimum of 1.5 radius around the seedling. See Mulching Specification #484 and complete spec. sheet if using mulch.

SEEDLING PROTECTION - Where browsing pests damage seedlings, seedlings will be protected. Protection techniques will be commensurate with the pest causing damage. Acceptable methods include fencing, tree tubes, bud caps, repellants, and whole tree protectors.

Additional Specification Requirements and Operation and Maintenance: Control grasses and brushy weeds around each seedling every year until free to grow. At that stage, seedlings are likely to have root depth sufficient to reach ground water. Control noxious weeds for the duration of the CREP contract.

Herbicides recommended by ODF for control of ivy, holly, scotch broom, Himalayan blackberry, thistle, grasses will be screened using Win-PST. Consult with NRCS or CREP Tech before using other products for weed control. Spraying for grass control is most effective in spring. Spraying woody weeds is most effective in fall before dormancy.

DO NOT DISTURB established vegetation during primary nesting season, March 15-July 1 of each year. If late spring or early summer weed control is needed, consult with Farm Service Agency for a waiver.