Planting Plan for West Spring Creek Downstream of Phillips Channel Stabilization

November 3, 2026

Presented to:

Southeast Metro Stormwater Authority
7437 S Fairplay St
Centennial, CO 80112

Prepared by:

CORVUS
Environmental Consulting

GENERAL NOTES

- The contractor will supply all plants in sufficient quantity to complete the work shown on the plan. All plant material should meet the specifications of the American Standards for Nursery Stock (latest edition) as set forth by the American Association of Nurserymen.
- The contractor will provide submittals for live plant material, each seed mix, mulch, and tackifier prior to purchase and vendor distribution for approval by the ecologist.
- Submittals for live plant material will include the scientific names of each species, including variety and subspecies (as applicable).
- Submittals for seed mixes will include the scientific names of each species (including variety and subspecies), lot number, test date, purity and germination percentage, crop seed percentage, inert matter percentage, weed seed percentage, and noxious weeds by name and number per pound. All seed species substitutions will be submitted to and approved by the ecologist.
- All populations of Colorado list A and B noxious weeds found in or within 100 feet of the project area will be treated with the appropriate herbicide(s) prior to and throughout the duration of construction. Always follow all label recommendations, precautions, and restrictions when using any herbicide. Herbicides should be applied only by responsible, licensed applicators.
- After the site has been staked, but prior to clearing, grubbing, and earthwork activities, the contractor, engineer, and ecologist will walk the site to evaluate and locate existing plant material to be protected, and identify plant material that may be salvaged within the designated limits of construction.
- Zone A (Wetland), Zone B (Riparian), and Zone C are depicted in the attached figure. Exact planting locations will be based on final grading.
- A phased approach will be followed when seeding, installing plant material, and mulching. Seeding, plug installation, and mulching will be conducted in Phase 1, and live plant material and cuttings will be planted in Phase 2.
- All best management practices (BMPs) will be selected, installed, implemented, and maintained according to appropriate engineering, hydrologic, and pollution control practices.
- Chemicals such as soil stabilizers, dust palliatives, herbicides, growth inhibitors, fertilizers, deicing salts, etc., will be used in accordance with the manufacturer's recommended application rates, frequency, and instructions. These chemicals will not be used, stored, or stockpiled within 50 horizontal feet of the creek or other aquatic habitats, such as wetlands.
- Construction equipment, fuels, lubricants, and other petroleum distillates will not be stored or stockpiled within 50 horizontal feet of the creek or other aquatic habitats. Equipment fueling and servicing will occur only within approved designated areas.
- The contractor will follow all irrigation requirements as detailed in the grading, drainage, erosion, and sediment control (GESC) plan (if available).

MIGRATORY BIRD TREATY ACT COMPLIANCE

- Work should be conducted outside of the migratory bird nesting season, to the maximum extent practical. In Colorado, the bird nesting season for non-raptor species is approximately April 1 - August 31; however, raptors may begin nesting as early as February 1. Prioritizing vegetation

trimming and/or clearing outside of the nesting season can greatly reduce the risk of project delays during the nesting season.

- If work is to be conducted during the bird nesting season, a qualified biologist should conduct a bird nest survey no more than 7 calendar days before the initiation of any vegetation removal or ground-disturbing activities. If work does not take place within or halts for longer than 7 days, a new survey should be conducted.
- Nesting surveys for non-raptor species should include the project limits and up to a 50-foot buffer around the project limits. Nesting surveys for raptors should include areas up to a half-mile buffer around the project limits.
- If active non-raptor nests are observed, no work buffers (normally 50 feet for non-raptors) should be established around each active nest. If active raptor nests occur within a half-mile of the project limits, then CPW "Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors" guidelines should be followed (CPW, 2020). No work buffers may be adjusted by the biologist based on site conditions, bird species, and the extent of the impact.
- As raptors are known to begin nest building prior to the official start of nesting season and may reuse nests year to year, it is highly recommended that a raptor survey be conducted during the winter months (before leaf out) prior to construction kick-off to determine the location of potential nests and to understand potential construction constraints.
- It is recommended that inactive nests (non-raptor and raptor nests, with the exception of eagle nests) be removed from the project area and no work buffers, to the extent practical, to limit use by nesting birds during project activities.

TOPSOIL STOCKPILING

- Topsoil shall be protected during construction to retain its structure, avoid compaction, preserve soil microbes, and prevent erosion/contamination.
- The ecologist will be on site to oversee and review topsoil stockpiling activities. The depth to stockpile will be determined by the ecologist based on site conditions.
- Where feasible, stockpile topsoil from wetlands separately from non-wetlands. To preserve soil microbes, piles/windrows will be uncompacted with soil mounds no wider than 10 feet and no higher than 6 feet, if space onsite allows. If stockpile space is limited, stockpiles will be stored in windrows of the smallest size feasible for the allotted area, but no higher than 10 feet. Smaller piles should be prioritized for more shallow topsoil layers, as microbial activity is higher close to the soil surface
- If possible, avoid stockpiling during the hottest months of the year, as piles can compost and kill beneficial microbiomes and existing seeds/propagules.
- Stockpiles will be clearly labeled with a placard for the duration of construction to identify them as either "Wetland Topsoil," "Topsoil," or "Subgrade."
- All topsoil stockpiled during the growing season for longer than 2-3 months will be seeded with a sterile cover crop (such as QuickGuard (sterile Triticale hybrid)), at a rate of 10 lbs. per acre. If stockpiles are to remain for longer than a year, native seed should be used.
- Test all topsoil stockpiles for standard nutrient tests and texture and provide test results to the ecologist for review prior to final placement. Soil amendments may be adjusted based on these test results.

- Prior to topsoil placement, the top foot of in-place subgrade material will be mixed with the subgrade stockpile to distribute living organisms.
- At least 6 inches of suitable topsoil should be present in all habitat zones prior to implementing revegetation efforts.

SEEDBED PREPARATION

- The ecologist will oversee and inspect all seedbed preparation activities.
- Do not work when soils are frozen, snow-covered, wet, or have reached the soil plasticity limit.
- Before topsoil is placed, the subsoil in all work areas (other than the immediate channel banks) will be decompacted and loosened to a depth of 12 inches. Access roads and staging areas will be decompacted and loosened to a depth of 18 inches.
- The contractor will decompact subsoil and place topsoil in a manner that precludes having to continuously drive over the final soil placement.
- Before seeding, use a soil penetrometer to ensure that the topsoil layer is not compacted - in general, penetrometer readings less than 200 pounds per square inch (psi) in the top 4-6 inches are appropriate.
- All finished grades will be left rough and natural with soil clods no greater than 2 inches in diameter and no smooth surfaces or straight edges. Clods greater than 2 inches should be further broken up using an appropriate tilling method (discing, harrowing, etc.).
- All superficial rocks and roots greater than 3 inches in diameter should be removed from the seedbed to ensure uniform seed application and to prevent the bridging of the erosion control blanket.

SOIL AMENDMENTS

- One week before seeding, incorporate Menefee humate in the top 2-4 inches of soil in all non-wetland areas at a rate of 250 pounds per acre (preferred). Alternatively, apply topically while seeding.
- One week before seeding, incorporate Biosol Forte no deeper than 2-4 inches in all non-wetland areas at a rate of 300 pounds per acre (preferred). Alternatively, apply topically while seeding.
- Broadcast and mix MycoApply Endo into the top 2-4 inches of soil at a rate of 20 pounds per acre in all areas (including wetlands). If drill seeding, apply 2 pounds per acre.
- Specifications of soil amendments are subject to change based on soil fertility test results. The ecologist will advise of any updates to soil amendment recommendations in a separate document after soil samples have been collected and the analysis has been completed.

Table 1: Soil Amendments Summary

Product	Rate	Location
MycoApply Endo	Broadcast - 20 lbs/acre Drill - 2 lbs/acre	All Zones
BioSol Forte	300 lbs/acre	Non-wetlands (Zones B and C)
Menefee humate	250 lbs/acre	Non-wetlands (Zones B and C)

SEEDING

- No construction equipment will be allowed in the project area after seeding.
- All seed bags brought onsite will be tagged and labeled. Seed bag tags will have the following information: project name, total pounds, scientific names, and seeding rate for each species.
- The contractor will stake the seeding limits and obtain approval from the ecologist prior to seeding.
- Seeding will be conducted in Phase 1 of the revegetation process.
- Seeding will only be performed between September 15 and when the ground freezes, or between when the ground thaws and April 1, unless otherwise approved by the ecologist. Seeding will not take place when the ground is frozen, muddy, or snow-covered.
- All areas in Zone A will be seeded with the Wetland Seed Mix (Table 2), Zone B will be seeded with the Riparian Mix (Table 3), and Zone C will be seeded with the Upland Seed Mix (Table 4). **Tables are shown at the end of the document.**
- **Seed should be drill-seeded whenever possible in upland and riparian zones** to a depth of 1/8 to 1/4 inch (1/2 inch in sandier soils). Only equipment with low-pressure ground contact will be utilized. **Wetlands should be broadcast and not drill-seeded** unless otherwise approved by the ecologist.
    - Seed will be drilled at a half rate in one direction, then at a half rate perpendicular to the first direction. On slopes, the direction of the second application will be in the direction of the contour.
        - If the drill seeder is equipped with separate hoppers, seed mixes should be bagged according to the specified 'Seed Type' (large, small, or fluffy) and placed in the appropriate seed box to ensure installation at the proper depth and rate.
    - Broadcast or hydroseeding with tackifier may be substituted on slopes greater than 3:1 or on other areas not practical to drill seed.
    - If broadcast seeding, rake seed along contours into the top 1/4 to 1/2 inch of topsoil, and roll the seed bed to ensure sufficient seed-to-soil contact.
    - **Specified seeding rates are intended for broadcast or hydro seeding. For drill seeding, half the indicated PLS rate.**
- Adjacent seed mixes should overlap by approximately three horizontal feet.
- The seeded areas will be irrigated based on details provided in the GESC.
- If dormant seeding, irrigation of seeded areas should begin the following growing season. If seeding in spring, irrigation should begin as soon as the seed is installed.
- Beginning in April during the first growing season, seeded areas will be watered twice a day (early morning and late evening) to maintain soil moisture to approximately 2 inches. Beginning in mid-June, irrigation will be reduced to one application every other day (either in the early morning or late evening) to maintain soil moisture to approximately 6 inches. Beginning in mid-July, irrigation will be reduced to one application per week (either in early morning or late evening) to maintain soil moisture to approximately 6 inches. Beginning in mid-August, irrigation will be reduced to one application every other week (either in early morning or late evening) to maintain a soil moisture to approximately 6 inches. Beginning in mid-September, irrigation will be cut off to allow plants to harden for the winter.
    - In finer textured soils, a cycle/soak technique (short water durations, multiple applications) may be necessary to ensure proper infiltration.

  - Adjustments to the irrigation schedule may be necessary depending on environmental conditions (ambient temperatures, precipitation events, etc.) and will be advised by the ecologist.
- Recommended seed vendors:

Granite Seed	Pawnee Buttes Seed	Arkansas Valley Seed
490 East 76th Ave, Unit A	605 25th St.	4333 Hwy. 66
Denver, CO 80229	Greeley, CO 80632	Longmont, CO 80504
(720) 496-0600	(800) 782-5947	(877) 907-3337
www.graniteseed.com	www.pawneebuttesseed.com	www.avseeds.com

MULCH

- All mulch will be certified weed-free. Mulch in stages of decomposition will not be accepted.
- Mulch will be installed no longer than 24 hours after seed application.
- After seeding, areas that lack erosion control blankets and have less than 30% grade will have crimped straw mulch installed at a rate of 3,000 pounds per acre.
- After seeding, all areas that lack erosion control blanket and where it is too steep to feasibly crimp straw mulch will have hydromulch (wood cellulose fibers mixed with water) installed at a rate of 2,500 pounds per acre in conjunction with an organic psyllium-derived tackifier at a rate of 150 pounds per acre.

Table 2: Mulch Recommendations

Product	Rate	Location
Crimped straw mulch	3,000 lbs/acre	Non-blanketed areas in upland/riparian <30% grade
Hydromulch	2,500 lbs/acre	Non-blanketed areas on slopes where crimped straw mulch is not feasible
Organic psyllium-derived tackifier	150 lbs/acre	Non-blanketed areas on slopes steeper than 4:1

Table 3: Zone A (Wetland) Seed Mix

Scientific Name	Common Name	Variety	NWPL[1] Indicator	Growth Season / Bloom Period	Growth Form	Seed Type	% in Mix	LBS PLS[2]/AC[3]	Seeds per Sq. ft.
Graminoids									
Carex nebrascensis	Nebraska sedge	CO Native / VNS	OBL	Cool	Sod	Small	10	1.5	19
Distichlis spicata	Inland saltgrass	CO Ecotype / VNS	FACW	Warm	Sod	Small	8	1.3	15
Eleocharis palustris	Creeping spikerush	CO Ecotype / VNS	OBL	Cool	Sod	Small	8	1.1	15
Elymus canadensis	Canada wildrye	Co Ecotype / Mandan	FAC	Cool	Bunch	Large	10	7.2	19
Juncus balticus	Baltic rush/Arctic rush	CO Ecotype / VNS	FACW	Cool	Sod	Small	10	0.1	19
Juncus torreyi	Torrey's rush	CO Ecotype / VNS	FACW	Cool	Sod	Small	5	0.0	10
Panicum virgatum	Switchgrass	CO Ecotype / VNS	FACW	Warm	Bunch/Sod	Small	10	2.1	19
Schoenoplectus pungens	3-square bulrush	CO Ecotype / VNS	OBL	Cool	Sod	Small	6	2.3	11
Schoenoplectus tabernaemontani	Softstem bulrush	CO Ecotype / VNS	OBL	Cool	Sod	Small	10	1.5	19
Spartina pectinata	Prairie cordgrass	CO Ecotype / VNS	OBL	Warm	Sod	Large	8	3.4	15
Forbs									
Asclepias incarnata	Swamp milkweed	CO Ecotype / VNS	OBL	July - August	Perennial Forb	Large	5	6.1	10
Helianthus nuttallii	Nuttall's sunflower	CO Ecotype / VNS	FACW	July - September	Perennial Forb	Large	5	1.9	10
Iris missouriensis	Rocky mountain Iris	CO Ecotype / VNS	FACW	May - September	Perennial Forb	Large	5	19.7	10
						Total	**100**	**48**	**190**

[1]NWPL = National Wetland Plant List

[2]LBS PLS = Pounds of Pure Live Seed, calculated as *Pounds of Seed x (Purity x Germination Rate)*

[3]LBS PLS/acre = Specified for broadcast seeding. Half this rate if drill seeding.

Table 4: Zone B (Riparian) Seed Mix

Scientific Name	Common Name	Variety	NWPL[1] Indicator	Growth Season / Bloom Period	Growth Form	Seed Type	% in Mix	LBS PLS[2]/AC[3]	Seeds per Sq. ft.
Graminoids									
Carex praegracilis	Meadow sedge	CO Ecotype / VNS	FACW	Cool	Sod	Small	8	0.9	13
Deschampsia cespitosa	Tufted hairgrass	CO Ecotype / VNS	FACW	Cool	Bunch	Small	8	0.4	13
Elymus canadensis	Canada wildrye	CO Ecotype / Mandan	FAC	Cool	Bunch	Large	10	6.2	17
Elymus lanceolatus ssp. Psammophilus	Streambank wheatgrass	CO Ecotype / Sodar	FACU	Cool	Sod	Large	8	3.7	13
Hordeum jubatum	Foxtail barley	CO Ecotype / VNS	FAC	Cool	Bunch	Fluffy	8	2.3	13
Juncus balticus	Baltic rush/Arctic rush	CO Ecotype / VNS	FACW	Cool	Sod	Small	8	0.1	13
Panicum virgatum	Switchgrass	CO Ecotype/ Nebraska 28	FACW	Warm	Bunch/Sod	Small	8	1.5	13
Pascopyrum smithii	Western wheatgrass	CO Ecotype / Flintlock	FACU	Cool	Sod	Large	8	5.2	13
Sorghastrum nutans	Yellow indiangrass	CO Ecotype / Holt	FACU	Warm	Bunch/Sod	Fluffy	5	2.1	8
Sporobolus airoides	Alkali sacaton	CO Ecotype / VNS	FAC	Warm	Bunch	Small	10	0.4	17
Forbs									
Achillea millefolium var. occidentalis	Western yarrow	CO Ecotype / VNS	FACU	June - August	Perennial Forb	Small	5	0.1	8
Asclepias speciosa	Showy milkweed	CO Ecotype / VNS	FAC	June - July	Perennial Forb	Large	5	5.0	8
Gaillardia aristata	Blanketflower	CO Ecotype / VNS	FAC	May - September	Perennial Forb	Fluffy	5	2.7	8
Ratibida columnifera	Prairie coneflower	CO Ecotype / VNS	-	June - September	Perennial Forb	Small	4	0.4	7
						Total	**100**	**31**	**165**

[1]NWPL = National Wetland Plant List

[2]LBS PLS = Pounds of Pure Live Seed, calculated as *Pounds of Seed x (Purity x Germination Rate)*

[3]LBS PLS/acre = Specified for broadcast seeding. Half this rate if drill seeding.

Table 5: Zone C (Upland) Seed Mix

Scientific Name	Common Name	Variety	NWPL[1] Indicator	Growth Season / Bloom Period	Growth Form	Seed Type	% in Mix	LBS PLS[2]/AC[3]	Seeds per Sq. ft.
Graminoids									
Andropogon gerardii	Big bluestem	CO Ecotype / Pawnee	FACU	Warm	Bunch/Sod	Fluffy	9	4.7	14
Bouteloua curtipendula	Sideoats grama	CO Ecotype / Vaughn	-	Warm	Bunch/Sod	Large	15	5.3	23
Bouteloua dactyloides	Buffalograss	CO Ecotype / Cody	UPL	Warm	Sod	Large	9	10.9	14
Bouteloua gracilis	Blue grama	CO Ecotype / Lovington	-	Warm	Bunch/Sod	Fluffy	15	1.2	23
Hesperostipa comata	Needle and thread grass	CO Ecotype / VNS	-	Cool	Bunch	Large	9	5.3	14
Nassella viridula	Green needlegrass	CO Ecotype / VNS	-	Cool	Bunch	Large	9	3.4	14
Pascopyrum smithii	Western wheatgrass	CO Ecotype / Arriba	FACU	Cool	Sod	Large	15	9.2	23
Schizachyrium scoparium	Little bluestem	CO Ecotype / VNS	FACU	Warm	Bunch	Fluffy	5	1.3	8
Forbs									
Artemisia frigida	Fringed sage	CO Ecotype / VNS	-	July - September	Perennial Forb	Small	2	0.1	3
Cleome serrulata	Rocky Mountain beeplant	CO Ecotype / VNS	-	June - August	Annual Forb	Large	2	2.1	3
Liatris punctata	Dotted gayfeather	CO Ecotype / VNS	-	August - October	Perennial Forb	Fluffy	3	2.0	5
Linum lewisii	Blue flax	CO Ecotype / VNS	-	May - July	Perennial Forb	Large	3	1.2	5
Shrubs									
Ericameria nauseosa	Rubber rabbitbrush	CO Ecotype / VNS	-	July - October	Shrub	Large	2	0.3	3
Krascheninnikovia lanata	Winterfat	CO Ecotype / VNS	-	April - August	Shrub	Large	2	1.1	3
						Total	**100**	**48.0**	**155**

[1]NWPL = National Wetland Plant List

[2]LBS PLS = Pounds of Pure Live Seed, calculated as *Pounds of Seed x (Purity x Germination Rate)*

[3]LBS PLS/acre = Specified for broadcast seeding. Half this rate if drill seeding.

EROSION CONTROL BLANKET

- After seed application, secure areas slated for erosion control blanket installation with a natural fiber erosion control blanket, such as jute or coir, anchored with biodegradable staples or netting pegs. A smaller weave will provide more strength along the streambank.
- Erosion control blankets should be woven with natural, 100% biodegradable fibers, not photodegradable plastic netting.
- Roll out the erosion control blanket in the direction of the slope fall line and bury all ends a minimum of 4 inches deep. Upslope and downslope ends should be buried at least 6 inches deep. Firmly tamp down trenches after filling in.
- When erosion control blanket ends meet, overlap the up-slope piece onto the down-slope piece by at least 18 inches.
- Generally, secure edges and overlaps with staples or wood pegs at a minimum of 12-inch intervals and the remaining areas of each mat at 3-foot intervals.
- Consult the manufacturer's specifications (if available) for installation recommendations based on the site's slopes and soils.

PLUG INSTALLATION

- All areas will be planted with the plugs specified in Table 6.
- All plugs must be inspected for health, size, species, and quantity upon arrival onsite. Notify the ecologist at least three business days prior to delivery. Alternatively, local nursery inspection of plants may be arranged prior to delivery. Please notify the ecologist at least three business days prior to scheduled delivery.
- All plugs should be watered prior to transport and covered during transport. Once onsite, water the plugs and store them in a shaded location or in the channel if water levels allow.
- Plug delivery should be scheduled as soon as possible to installation. Installation should occur no more than 3 days after delivery.
- Plugs will only be installed in the spring between when the ground thaws and June 1, or in the fall between October 1 and when the ground freezes, unless approved by the ecologist.

Table 6: Zone A Plug Quantities

Scientific Name	Common Name	WMVC NWPL[1] Indicator	Size	Minimum Spacing (O.C.)[2]	Number of Trays (98 Count)	Quantity
Zone A						
Carex aquatilis	Water sedge	OBL	10 c.i.	18	6	588
Asclepias incarnata	Swamp milkweed	FACW	10 c.i.	18	4	392
Carex emoryii	Emory's sedge	OBL	10 c.i.	18	6	588
Carex nebrascensis	Nebraska sedge	OBL	10 c.i.	18	8	784
Eleocharis palustris	Common spikerush	OBL	10 c.i.	18	7	686
Juncus balticus	Baltic rush	FACW	10 c.i.	18	7	686
Muhlenbergia asperifolia	Alkali muhly	FACW	10 c.i.	18	8	784
Spartina pectinata	Prairie cordgrass	OBL	10 c.i.	18	8	784
				Total	**54**	**5,292**

[1]NWPL = National Wetland Plant List
[2]O.C. = On Center

Table 7: Zone C Plug Quantities

Scientific Name	Common Name	WMVC NWPL[1] Indicator	Size	Minimum Spacing (O.C.)[2]	Number of Trays (98 Count)	Quantity
Zone C						
Bouteloua gracilis	Blue grama	-	10 c.i.	18"	6	588
Bouteloua dactyloides	Buffalo grass	UPL	10 c.i.	18"	6	588
Koeleria macrantha	Prairie junegrass	-	10 c.i.	18"	6	588
Krascheninnikovia lanata	Winterfat	-	40 c.i.	18"	1 (20 count)	20
Pascopyrum smithii	Western wheatgrass	FACU	10 c.i.	18"	5	490
Sorghstrum nutans	Yellow indiangrass	UPL	10 c.i.	18"	6	588
Sporobolus cryptandrus	Sand dropseed	FACU	10 c.i.	18"	5	588
Yucca glauca	Plain's yucca	-	40 c.i.	18"	1 (20 count)	20
				Total	**34 -98 count 2 – 20 count**	**3,470**

[1]NWPL = National Wetland Plant List
[2]O.C. = On Center

LIVE PLANT MATERIAL INSTALLATION (EXCLUDING PLUGS)

- All live plant material must be inspected for health, size, species, and quantity upon arrival onsite. Notify the ecologist at least three business days prior to delivery. Alternatively, a local nursery inspection of plants may be arranged prior to delivery. Please notify the ecologist at least three business days prior to scheduled delivery.
- All live plant material will be watered prior to transport and covered during transport. Once it arrives onsite, water the plant material and store it in a shaded location.
- Live plant material will be installed either in the spring (between when the ground thaws and June 1) or in the fall (between October 1 and when the ground freezes).
- The contractor will mark all planting locations for adjustment and approval by the ecologist prior to installation. Final planting locations will be field-fit by the ecologist.
- When installing live plant material, dig the pilot hole 1.5-to-2 times the width of the rootball.
- Pilot holes should be filled with water and allowed to drain prior to container installation. 'Water planting' allows for easier root establishment in moist soils in the first few days after planting and reduces transplant shock.
- Holes will be backfilled with native soil and tamped so no air pockets persist in the planting hole around rootballs.
- Once planted, all live plant material will be watered so that the entire rootball and surrounding are saturated. Water thoroughly on the day of planting.
- Tree and shrubs planted in Zones B and/or C will be deep planted when necessary and as container size allows to ensure placement of the rootball in the capillary fringe (moist soil) immediately above the water table. Trees and shrubs can be planted up to 1/3 to 1/2 of the above ground height.
- Create watering dishes for all live plant material. For 40-60 ci shrubs and 5-gallon trees, watering dishes will be 3 inches deep by 2 feet in diameter. For ball and burlap trees, watering dishes will be 4 inches deep by 6 feet in diameter.
- Trees and shrubs will be watered for the first growing season. The contractor will provide a work plan that details how water volume is measured or estimated to ensure each plant receives the specified quantity.
- Shrubs shall be watered two times a month at a rate of 5 gallons each watering event for the months of May, June, October, and November; four times a month at a rate of 5 gallons each watering event for the months of July, August, and September; and one time per month at rate of 5 gallons each watering event for the months of December through April.
- Trees shall be watered two times a month at a rate of 10 gallons for each diameter (diameter at breast height [DBH]) inch of the large tree for the months of May, June, September, and October; four times a month at a rate of 10 gallons for each diameter (DBH) inch of the large tree for the months of July and August; and one time per month at a rate of 10 gallons for each diameter (DBH) inch of the large tree for the months of October through April.
- Live plant material will be watered for approximately two years after installation, or until deemed 'established' by the ecologist.
- Recommended live plant material vendors:

Aquatic and Wetland Nursery
Phone: 303-442-4766 ext. "115"
Fort Lupton, CO 80621
heidi@aquaticandwetland.com
https://aquaticandwetlandnursery.com

Yarrow and Roots
Phone: 208-354-3691
Salida, CO 81201
yarrowandroots@gmail.com
www.yarrowandroots.com

Table 8: Live Plant Material Quantities

Scientific Name	Common Name	WMVC NWPL[1] Indicator	Size	Minimum Spacing (O.C.)[2]	Quantity
Zone B Trees					
Alnus incana	Gray alder	FACW	5-Gal	15'	12
Salix amygdaloides	Peachleaf willow	FACW	5-Gal	20'	15
Zone C Trees					
Pinus ponderosa	Ponderosa pine	-	10-Gal	12'	12
Juniperus scopulorum	Rocky Mountain juniper	-	10-Gal	3'	21
				Total Trees	**60**
Upper Zone A Shrubs					
Amorpha fruticosa	False indigo bush	FACW	1- Gal	8'	10
Lower Zone B Shrubs					
Ribes aureum	Golden currant	FAC	1- Gal	8'	8
Rosa woodsii	Wood's rose	FACU	1- Gal	8'	8
Upper Zone B Shrubs					
Rhus trilobata	Three-leaf sumac	-	1- Gal	8'	8
Prunus americana	American plum	FACU	1-Gal	8'	8
Prunus virginiana	Chokecherry	FACU	1-Gal	8'	8
Symphoricarpos occidentalis	Western snowberry	FAC	1-Gal	8'	7
Zone C Shrubs					
Atriplex canescens	Four-wing saltbush	UPL	1-Gal	8'	5
Ericameria nauseosa	Rubber rabbitbrush	UPL	1-Gal	8'	10
Krascheninnikovia lanata	Winterfat	-	1-Gal	5'	5
				Total Shrubs	**77**

[1]NWPL = National Wetland Plant List
[2]O.C. = On Center