RIPARIAN SITES

A riparian site with a streambank restoration planted mainly in *Salix* (Willow) species.

RIPARIAN SITES ARE USUALLY adjacent to rivers and waterways with soils often containing clay, high amounts of organic matter, and/or saturated sand. Examples: River and streambanks or damp floodplains of rivers and streams.

BEFORE

Bowman's Creek re-setting and rehabilitation project in northeastern Pennsylvania. Credit: Adam Nordfors

AFTER

HABITAT:
Varies from partial shade to full sun; subject to flooding; generally populated with riparian and floodplain species.

FERTILITY:
Due to the potential for water contamination, lime and fertilizer are not recommended. When topsoil has been depleted or removed, we recommend the addition of organic matter (straw, compost, mulch, leaf litter, etc.). Check soil pH and select species adapted to that pH.

SEEDING METHOD:
Hand seed, broadcast seed, or hydroseed.

SITE PREPARATION

Eradicate existing vegetation by having a licensed spray technician apply an approved herbicide, such as glyphosate (Rodeo®), triclopyr (Garlon® 3A), or a similar aquatic herbicide formulation, to control such undesirable vegetation as multiflora rose, honeysuckle, and woody species. CAUTION: Some persistent species, such as purple loosestrife, phragmites, Japanese knotweed, or reed canarygrass, may require multiple applications of glyphosate or triclopyr. Perennial weeds not addressed before establishment will be difficult to remove later. Before seeding, excess dead vegetation should be removed, turned under, or burned if conditions permit. Newly constructed riparian sites should be seeded as soon after construction as possible.

GROWING SEASON MAINTENANCE

FIRST GROWING SEASON

- Whenever canopy height (overall vegetation) reaches 18"-24", trim the meadow to 8" using a brush hog mower or string trimmer. Trimming reduces competition by fast-growing weeds for sunlight, water, and nutrients needed by slower growing perennial natives. A lawn mower is not recommended as the mower height will be too low and native seedlings will be killed.
- If bioengineering materials were used on the site, mowing should be above the new growth of these materials. Trimming should cease by mid-September.
- Problem weeds should be hand pulled or spot sprayed with an approved herbicide, such as Roundup®, Rodeo®, or Garlon®3A. Be vigilant in controlling invasive vines, such as bindweed, mile-a-minute, and Japanese hops. These are more easily pulled early than after two to three months of growth. Be equally vigilant in the control of other invasive species, such as autumn olive and Japanese knotweed.

ERNMX-178 Riparian Buffer Mix along a small stream corridor.

SECOND & SUBSEQUENT GROWING SEASONS

- Prior to new spring growth reaching 2" (e.g., shortly after forsythia or redbud blooms), trim any remaining material from the previous year close to the ground (approximately 2"). This will allow the soil to warm more quickly, stimulating emergence and growth of native seedlings and reducing the likelihood of shrub invasion.
- If bioengineering materials were used on the site or seed of shrubs/trees were part of the mix, the site should not be trimmed after the establishment year.
- Problem weeds should be hand pulled or spot sprayed with an approved herbicide, such as Rodeo® or Garlon® 3A. Be vigilant in controlling vines or spiny plants if they were not part of the mix. These are more easily pulled early than after two to three months of growth. Examples include bindweed, blackberry, multiflora rose, mile-a-minute, and Japanese hops. Be equally vigilant in the control of other invasive species, such as autumn olive and Japanese knotweed.

SPECIAL CIRCUMSTANCES - SECOND GROWING SEASON

- If there is a heavy infestation of ragweed or foxtail in the second growing season, trim the meadow to 8". Trimming should cease by mid-September.

GENERAL MAINTENANCE

- Grassy weeds or persistent perennials can re-establish in these soils. Monitor and control weeds by hand pulling or spot spraying.

RIPARIAN SITES SEED MIXES

ERNMX-154	Floodplain Mix
ERNMX-178	Riparian Buffer Mix

THESE MIXES ARE GOOD FOR VEGETATING RIPARIAN CORRIDORS OR FLOODPLAINS AND PROVIDE FOOD AND/OR COVER FOR INSECTS, BIRDS, AND ANIMALS. VISIT *ERNSTSEED.COM* FOR MORE OPTIONS.

Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.