Selecting a Lawn

Prepare the Soil Properly and Use Less Water

A well-drained soil promotes plant growth and saves water. Two soil types found on Colorado’s Front Range should be amended to improve irrigation effectiveness and your lawn’s ability to retain water.

Clay soils tend to hold moisture tightly, making it difficult for plants to access water when the soil water is depleted. Clay soils also have a low water infiltration rate, so water must be applied slowly to avoid ponding or runoff. Clay soils also drain slowly, so it is easy to saturate the soil and damage the lawn. Add organic matter (such as compost) to clay soils to improve drainage, reduce soil compaction, promote a deeper root zone and reduce irrigation frequency.

Sandy soils tend to hold very little moisture and drain quickly. Add organic matter to sandy soils to improve moisture retention in the root zone, promote a healthy lawn and reduce irrigation frequency.

Till 2 to 4 inches of high-quality compost (4 cu yds/1000 sq ft) about 12 inches deep to improve soil structure and moisture retention. The compost will also provide nutrients for the lawn. High-quality compost meets certain standards. Your community recycling center may have compost, or find a local compost source at the Composting Council website.

Choose the Right Lawn for a Particular Location and Use

The right grass in the proper location can reduce water use and maintenance. Consider the following when deciding on what type of grass to plant:

- The amount of sun and shade in the location you intend to plant grass or install sod
- The type of use for your new lawn (a children’s play area or a decorative landscape with little foot traffic, for example)

Lawn options for sunny areas with heavy foot traffic:
Bluegrass is a good choice for sunny, high-traffic areas. Bluegrasses are drought tolerant and capable of going dormant under drought stress and reviving when water is available again. Some Texas hybrid bluegrass varieties are more heat and drought tolerant than Kentucky bluegrass and will continue growing during hot weather.

Lawn options for shady areas with heavy foot traffic:
Fine fescue requires nearly 20 percent less water than Kentucky bluegrass. It is drought tolerant, germinates quickly and tolerates poor (rocky, sandy, clay) soil conditions.

Lawn options for sunny and shady areas with light foot traffic:
Buffalo and blue grama are native, warm season grasses that tolerate drought and infrequent irrigation. Both are good choices for low traffic areas. Tall fescue grass is less drought tolerant than bluegrass and lacks the capability of going dormant under drought stress. It relies more on its deep rooting to avoid drought conditions by accessing soil moisture deep in the soil profile. Tall fescue grows well in shady areas with low or moderate traffic.

See all of these grasses in the Conservation Gardens at Northern Water. In the Conservation Gardens illustration on this page, roll your cursor over the green shaded areas to learn more about these grasses, soils and soil amendments:

- Soil Revitalization Demonstration
- Soil Preparation Study
- Alternative Grass Mixes
- Line Source Irrigation
- Native Grasses
- Bluegrass Review
- Small Turf Lysimeters
- Tall Fescue Review
Minimize Turf with Lawn Alternatives

A 10-foot by 10-foot (100 square feet) section of bluegrass lawn in Colorado can consume up to 1,800 gallons of water annually. Replace portions of your lawn with alternatives such as low water use shrubs, groundcovers, plants, grasses, mulches, decorative rock, walkways or a patio.

Replacing even small areas of lawn with alternative materials can significantly reduce your water use and costs, provided that irrigation practices are modified for low water use plants and shrubs. Low to very low water use landscapes need about half (or less) the water turfgrass does. Visit the Selecting Plants page to learn more about replacing grass with low water use vegetation.

Some lawn areas are difficult to irrigate without waste because of location, shape, size or slope. On sloped areas use low water use ground cover that won’t require mowing. Place higher water use plants in low elevation areas and at the bottom of slopes. Or consider terracing and planting a slope with low maintenance and low water use vegetation. See the Selecting Plants page for information on low water use plants.

Use Native or Semiarid Climate Grasses

Colorado’s Front Range climate is semiarid with annual precipitation averaging 10 to 15 inches. Cool season lawns, such as bluegrass or tall fescue, require more water than supplied by the region’s natural precipitation. Up to 55 percent of Front Range residential water supplies are used outdoors, mostly to irrigate turf.

Some cool season grasses require less water than Kentucky bluegrass and have similar color and turf quality. Tall fescue needs approximately 10 percent less water than traditional Kentucky bluegrass if it has appropriate soil and a deep root zone. Fine fescue requires about 20 percent less water than Kentucky bluegrass. Studies indicate Texas hybrid bluegrass is more heat and drought tolerant than Kentucky bluegrass, and it may also need less water.

Warm season native grasses will save the most water when used for a lawn. These grasses green up later in the spring than cool season grasses and go dormant earlier in the fall, contributing to lower water use. Both provide high quality lawns with supplemental irrigation.

How does buffalo grass look and feel? How about fine or tall fescue? What climate will these grasses grow in and how much water do they use? Visit the Conservation Gardens at Northern Water to find answers, or roll your cursor over Native Grasses green shaded area in the Conservation Gardens illustration on this page.

Find More Information

See these websites for help preparing soil or selecting and planting a lawn.

Turfgrass Species/Variety Selection Guidelines (Colorado State University Cooperative Extension)
Compare bluegrasses and fescues and their growing conditions.

Hybrid Bluegrasses for Turf Use in Colorado (Colorado State University Cooperative Extension)
Learn about Texas hybrid bluegrasses and their growth characteristics.

Fine Fescues for Lawns (Colorado State University Cooperative Extension)
Learn about several types of fine fescues.

Buffalo Grass Lawns (Colorado State University Cooperative Extension)
Learn about planting a buffalo grass lawn.

Blue Grama for Low Maintenance Lawns (Colorado State University Cooperative Extension)
Use blue grama grasses for low-maintenance lawns.