Quick Facts...

Water trees, shrubs and lawns during prolonged dry fall and winter periods to prevent root damage that affects the health of the entire plant.

Water only when air and soil temperatures are above freezing.

Established large trees have a root spread equal to or greater than the height of the tree. Make sure that the entire root system is watered.

Dry air, low soil moisture and fluctuating temperatures are fall and winter characteristics in many areas of Colorado. During extended periods, particularly October through February when there may be little or no snow cover, trees, shrubs and lawn grasses can be damaged if they do not receive supplemental water.

The result of long, dry periods during fall and winter is injury or death of plant root systems. Affected plants may appear perfectly normal and resume growth in the spring using stored food energy, only to weaken or die in late spring or early summer when the stored energy runs out. Weakened plants also may be subject to insect and disease problems later.

Plants Requiring Late-Season Watering

Most woody plants with shallow root systems require supplemental watering during extended dry fall and winter periods. This group includes shade trees such as European white and paper birches, Norway and soft (or silver) maples, and lindens (basswood). Also included are evergreen trees such as Colorado blue spruce.

Evergreen shrubs, particularly those growing near a house, may suffer root-system damage during dry spells. Included are Pfitzer, "Tammy" and other junipers, Manhattan euonymus and Oregon grape-holly.

Lawn grasses also are prone to winter damage. Newly established lawns, whether seed or sod, are especially susceptible to damage in dry fall and winter weather. Susceptibility increases for lawns with south or west exposures.

Watering Guidelines

Water only when air temperatures are above freezing and the soil is not frozen. Apply water early in the day so it will have time to soak in before possible freezing occurs during the night. If water freezes around the base of a tree or shrub, it can damage the bark. Heavy coatings of ice on turfgrasses can cause suffocation or result in matting of the grass.

Monitor weather conditions and water during extended dry periods — four to six weeks without snow cover.
Newly Planted vs. Established Trees

When watering woody plants planted in the last two seasons, the most important area to water is the distance from a point halfway between the plant and the outer stretch of the branches to approximately 1 foot beyond the "drip line" or branch extremities. The majority of absorbing roots are in this area. (See fact sheet 7.226, *Care of Young Transplanted Trees*.)

Water trees that are two or more years old with a lawn sprinkler to ensure coverage of all the root area. Roots extend out radially at least as far as the tree is tall.

For shallow-rooted trees, such as birch, a sufficient amount of water may be applied with sprinklers. Lawn areas also will benefit at the same time.