



## Project phasing: Soil treatments

The success of a planting project depends on the health and structure of the soil. If you have less than ideal soil conditions, what treatment best fits your needs?

### Fertilizers

Most native transplants are best *not* fertilized. Weeds tend to gain more than natives from fertilizer. Also, fertilized plants put on vigorous top growth in the spring that is susceptible to drought stress and disease. Unfertilized plants will have more conservative top growth and more root growth (roots extend further to find nutrients)—exactly what you want for low maintenance! If adding nutrients is really important, use slow-release tablets or pellets or, as we recommend, an organic mulch (see below).

### Amendments

We have found that amendements are difficult and expensive to apply effectively. To significantly improve the soil, *several* inches of materials must be added and *tilled in over the entire planting site*, not just the planting hole. This improves the soil in a way that encourages the roots to spread out

The amendment material must be completely composted; otherwise, the material will shrink as it breaks down (imagine roots exposed) and nitrogen will be tied up (unavailable to the plants you intended to feed). The amendment also must be well mixed into the soil since lumps can create serious drainage problems. Note: make sure that you use compost certified free of herbicides and other harmful chemicals.

### Mulches/Top dressing

All mulches help retain soil moisture and improve soil conditions. You can select your mulch material to enhance specific functions: to improve soil structure and nutrients, choose an organic mulch; for weed suppression, choose a thick layer of bark, wood chips, or a manufactured weed barrier; for reduced surface erosion, choose a thinner layer of coarse material (straw or wood product) or a manufactured erosion control fabric.

As with amendements, mulch is best applied to the *whole planting site*, not individual plants. At the least, apply mulch two feet beyond planted root balls. If soil is compacted, till the site first and then spread mulch on top—this treatment works as well as tilling in an amendment, but requires much less material. Mulches are our favorite way to go.

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