

Compost consists of decomposed organic material of plant or animal origin. Yard trimmings, animal manure, mushroom growth medium, and/or biosolids make up most commercially available products. Adding organic matter to disturbed soil is a good idea for a number of reasons (see our info sheet on *Restoring Compacted Soil*).

Types of products

Bulk compost is not always easy to obtain. Often, simple availability determines the type of compost used for any given project. As demand increases and more jurisdictions require it, supply should also increase. Educate suppliers by requesting certain products. In Sound Native Plants' experience, composted yard waste and composted horse manure are two of the most beneficial products. Both are lightweight, easy to spread, break down quickly and are likely to contain less chemicals or pesticides than other products.

Composted steer or chicken manure has more nitrogen and phosphorous than horse manure. Do not use uncomposted or partially composted animal manure; the high levels of nitrogen and other nutrients can chemically burn vegetation, favor exotic invasives over native plants, and leach off site. While composted manure has higher saline content than other products, salinity accumulation is generally not a problem in places with high annual rainfall. Mushroom compost usually contains wheat straw and animal manure, and may contain fungicides, insecticides and other chemicals, if the producer is not certified organic. Biosolids are byproducts of municipal wastewater treatment that usually contain traces of many household chemical compounds; the health impacts of accumulated chemical compounds from application of biosolids are unknown.

The Low Impact Development Technical Guidance Manual for Puget Sound suggests that any good compost should exhibit five characteristics: earthy smell that is not sour, brown to black color, mixed particle sizes, stable temperature/does not get hot when re-wetted, and crumbly texture. The WA Department of Ecology keeps a list of permitted compost producers on its Composting web page (www.ecy.wa.gov/programs/swfa/organics/soil.html).

Types of applications: Amending vs. mulching

Compost can be applied as either an amendment (tilled into the soil) or as mulch (top-dressing). Mulching with compost is easier, less costly, and likely to require less machinery on site. Apply compost mulch with a blower to cause the least impact. Compost can be blown onto slopes to control surface erosion. Apply a uniform, 1/2–2" layer of compost (also called a "compost blanket") along with a seed mix. The compost protects the soil surface, slows surface flow and improves establishment of the seed mix. See the EPA's Best Management Practices for compost blankets (water.epa.gov/polwaste/npdes/swbmp/Compost-Blankets.cfm).

Amending with compost may have more immediate effects on the soil infiltration and fertility. For this reason, some jurisdictions require compost amendments to some disturbed areas on construction sites. Compost can be spread on the compacted site and tilled into the area during the decompaction process. If an area has not been compacted, mulching is preferable to amending, because tilling can damage existing soil structure and can injure roots of vegetation. Also, tilled-in compost provides less erosion control than compost mulch.

Compost vs. arborist wood chip mulch

If soil has not been heavily disturbed, and if revegetation is the main project goal, mulch with arborist wood chips. To increase infiltration and biofiltration of stormwater: amend with compost if the site has been compacted and slope stability is not an issue; for an undisturbed area, mulch with compost. Because compost has a finer texture than wood chips, weed seeds may germinate in an uncovered layer of mulched compost. Try a light (1–2") layer of compost covered with a light (1–2") layer of arborist wood chips. Compost will break down more quickly than arborist wood chips, and provides less weed suppression. For more on the pros and cons of different mulch types, download our *Mulches* information sheet, available on the Sound Native Plants website.