

Composting Enhances Soil and Protects Watersheds

Healthy soils are essential for protecting watersheds. Compost is the best way to add organic matter—which is vital—to soils.

When added to soil, compost can filter out urban stormwater pollutants by an astounding **60-95%**



IT'S ALL ABOUT THE SOIL

COMPOST improves biological, chemical, and physical characteristics of soil.

Protects against soil desertification and soil erosion

Enhances plant disease suppression

Increases resilience to floods and droughts

Increases soil fertility

Reduces need for chemicals

Converts nitrogen into a more stable and less mobile form and phosphorous into a less soluble form

Increases microbial activity

Improves water retention

Improves soil structure

Improves ability to store nutrients (such as cation exchange capacity)

Adds humus, keeping soil particles stuck together

Compost serves as a filter and sponge. It immobilizes and degrades pollutants, improving water quality.

Compost helps reduce stormwater runoff because it can hold **~5x its weight** in water.

SOURCES:

- Bobby Bell and Brenda Platt, *Building Healthy Soils with Compost to Protect Watersheds*, Institute for Local Self-Reliance (ILSR), June 2014.
- Brenda Platt, Nora Goldstein, Craig Coker, and Sally Brown, *The State of Composting in the U.S.: What, Why, Where, & How*, Institute for Local Self-Reliance (ILSR), June 2015.
- "Why Build Healthy Soil?" Washington Organic Recycling Council (WORC) Soils for Salmon Project, accessed April 2016.
- United States Composting Council (USCC), "Specify and Use COMPOST for LEED & Sustainable Sites Projects: A Natural Connection"
- "Soil Health Key Points," Natural Resources Conservation Service, USDA, February 2013.
- "Increasing Soil Organic Matter with Compost," *Compost: The Sustainable Solution*, US Composting Council, July 2014.
- "Strive for 5%," US Composting Council's campaign to promote 5% organic matter in soils, US Composting Council.