



What is Bloom™?

Bloom is a soil conditioner made from high quality Class A biosolids. Bloom provides essential plant nutrients, including nitrogen and phosphorous. It is dark and earthy in color because it's loaded with carbon, which is great for your soil. By using Bloom you can look forward to greater yield and better drought resistance. Bloom is ideal for improving and establishing lawns, remediating poor soils, planting trees and shrubs, and establishing flower and vegetable gardens.

DC Water produces Bloom at its Blue Plains Advanced Wastewater Treatment Plant using an advanced process that uses high heat, pressure and biology to produce a soil amendment similar to compost. Bloom meets all U.S. Environmental Protection Agency (EPA) standards for use in homes and gardens.

Are there environmental benefits to using Bloom™ as a soil amendment?

There are multiple benefits for using Bloom. Applying biosolids to the land helps capture carbon and prevents it from being released to the atmosphere. Using Bloom also reduces demand for commercial petroleum-based fertilizers and the energy used to manufacture it. Currently, most biosolids produced at Blue Plains are exported and applied to farms outside of the District of Columbia as a soil enhancement. Using biosolids locally reduces emissions and the carbon footprint created by hauling this valuable product far from its source.

Oversight from EPA means that biosolids-based soil amendments are more regulated and studied than other fertilizer alternatives.



What does Bloom™ smell like?

DC Water digested biosolids have low odors, described as earthy or musty. After it is applied and mixed with soil, odors are even further reduced.

Bloom™ is a Class A biosolids product

Class A biosolids contain essentially no pathogens and contain very low levels of metals. At DC Water, we actually go beyond these standards to produce EPA-certified Exceptional Quality biosolids, their highest rating.

bloomsoil.com

facts about BLOOM continued

Are there toxins of concern in biosolids?

Due to federal regulations, biosolids are far more regulated and studied than other soil amendments on the market. Our final product does have low concentrations of heavy metals. However, their presence is similar to the amount found in typical soils and far below the levels found to pose a risk to human health. Many of the metals found in biosolids are also present at higher concentrations in popular multi-vitamins and consumer products that we use every day. In addition, heavy metals typically enter the water system from industrial sources (only around 3% of total flow to Blue Plains). DC Water has an aggressive pre-treatment program that requires these users to remove these compounds before they reach Blue Plains.

The National Academy of Sciences has reviewed current practices, public health concerns and regulator standards, and has concluded that "the use of these materials in the production of crops for human consumption when practiced in accordance with existing federal guidelines and regulations, presents negligible risk to the consumer, to crop production and to the environment." Oversight from EPA means that biosolids-based soil amendments are more regulated and studied than other fertilizer alternatives.

Unfortunately, pharmaceuticals, anti-microbials and other trace organic compounds are persistent and found nearly everywhere in modern society. Many of these chemicals are found in bagged fertilizer products available at your local garden store. Biosolids contain these compounds at very low levels. For instance, the amount of PBDEs (a class of flame retardants) is several thousand times higher in household dust than in biosolids. Another family of compounds are antibacterials like triclosan, which are used in antimicrobial soaps and hand sanitizers. DC Water monitors and has invested in research related to these compounds. However, triclosan can be found at much higher levels in products we use every day. Fact: A healthy adult would have to eat **38** cups of our biosolids per year to reach the U.S. Food and Drug Administration's (FDA) recommended daily value of

copper.

Fact: There are 4,000 parts per million of tricolosan present in a single use of common toothpaste. DC Water's biosolids contain only 15-20 parts per million of triclosan.

Do other cities use biosolids soil amendments?

Yes. Cities like Milwaukee, Seattle, Tacoma, Austin, Houston, Boston, and Baltimore use and sell their high quality biosolids soil amendment products.

Where can I learn more about the science of biosolids? Resources and links to biosolids research can be found on our website at dcwater.com/education/biosolids.cfm

If you are interested in learning more about using our product, please contact Bill Brower at Bill.Brower@dcwater.com **Bloom™** is a DC Water product. Sales help reduce operating costs and the carbon footprint of DC Water's Blue Plains resource recovery facility.

Blue Drop markets Bloom in cooperation with DC Water.



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