



Biosolids Reuse Monthly Report

NUTRIENTS and CARBON RECYCLING

FARMING

Provides carbon and nutrients valued at \$300.00 per acre.

SILVICULTURE

Increases yield and improves undergrowth.

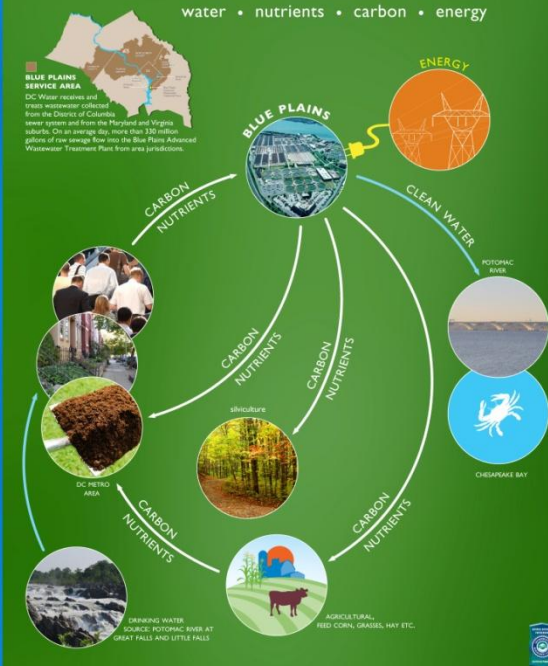
RECLAMATION

Restoring miles to their natural state and providing wildlife habitats.

URBAN RESTORATION

Grow trees and reduce runoff.


dc water is life BLUE PLAINS ADVANCED WASTEWATER TREATMENT PLANT: **A RESOURCE RECOVERY FACILITY**


water • nutrients • carbon • energy



dcwater.com/biosolids

GREEN ENERGY BIORENEWABLES

POWER FROM THE PEOPLE


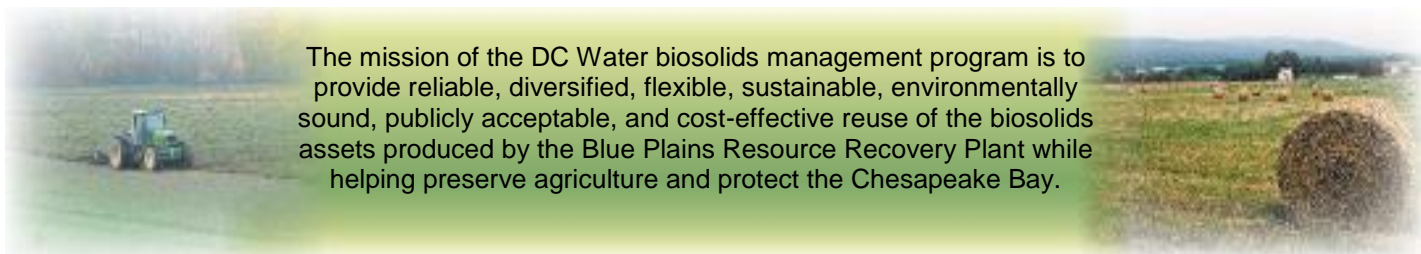
THERMAL HYDROLYSIS PROCESS (THP) AND DIGESTION FACILITY

DC Water will be the first in North America to use thermal hydrolysis for wastewater treatment. When completed, this facility will be the largest plant of its kind in the world.

GREEN BENEFITS:

- Produce combined heat and power, generating 13 MW of electricity
- Save DC Water \$10 million annually cutting grid demand by a third (DC Water is the largest consumer of electricity in the District)
- Reduce carbon emissions by approximately 50,000 metric tons of CO₂e per year.
- Reduce trucking by 1.7 million miles per year.
- Save \$10 million in biosolids trucking costs
- Produce Class A biosolids to grow trees, sequester carbon and reduce runoff.

DC Water

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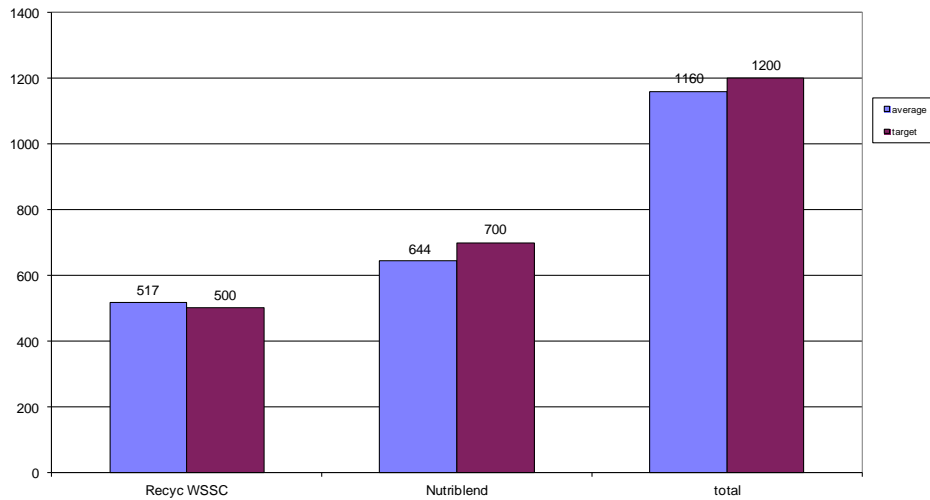


The mission of the DC Water biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective reuse of the biosolids assets produced by the Blue Plains Resource Recovery Plant while helping preserve agriculture and protect the Chesapeake Bay.

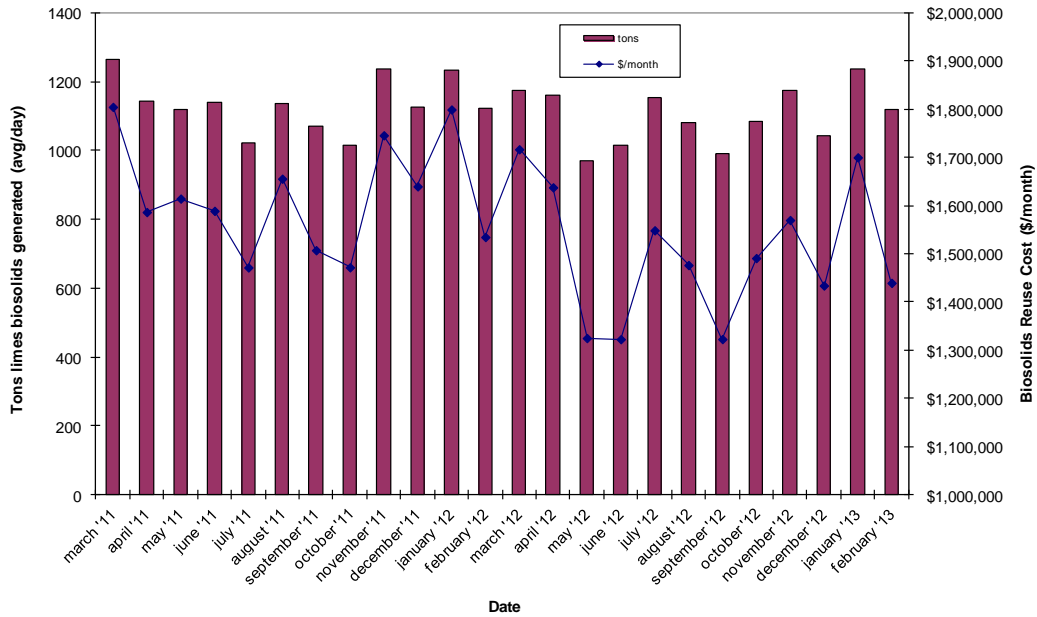
February 2013 Biosolids Division Report

In February, biosolids hauling averaged 1160 wet tons per day. The graph below shows the hauling by contractor for the month of February. Average % solids for the unlimed cake was 25.4%. Average lime dose for the month was 23.3%. Nutriblend took 329.35 tons of biosolids to the Spottsylvania County compost facility. At the end of February the Cumberland County storage pad had 19,132 tons (~25,000 tons capacity), Ragsdale Pad had 3,093 tons, Harrison Pad had 1,585 tons, Wilmar Pad had 2,151 tons, and the Cedarville lagoon had 14,162 tons (~30,000 tons capacity).

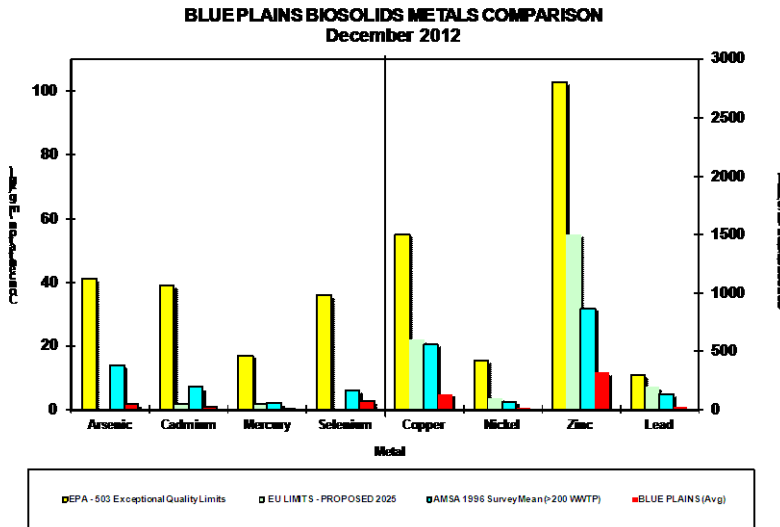
Average Daily Hauling by Contractor for February 2013



Average Daily Biosolids Production and Reuse Cost



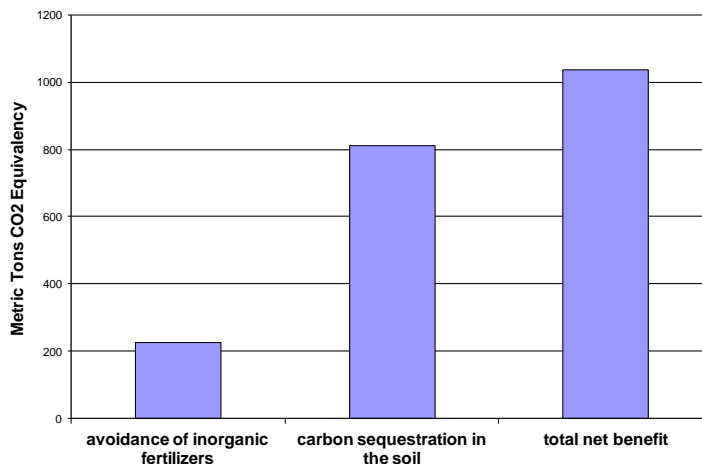
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of December 2012. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the national average levels surveyed in 1996, and the European Union (EU) limits. The EU limits are more conservative than the USEPA limits, and Blue Plains biosolids metals content is lower than the EU standards as well.



Environmental Benefits

The quantity land applied coming directly from the plant and from storage facilities equaled 19,114 tons. Taking into account the fuel required to transport biosolids to the field, the net benefit of the land applied material is 1037 metric tons CO₂ equivalent avoided emissions. This is equivalent to taking 2,403,341 car miles off the road in the month of January (assumes 20 mpg, 19.4 lb CO₂ equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since December, 2006 is 114,149 metric tons CO₂ equivalent.

DCWater Biosolids Recycling Program
Greenhouse Gas Balance Benefits
January 2013 Totals



February Highlights

Staff attended the Water Energy Exchange (WEX) conference as a plenary speaker this month, presenting information on DC Water's current and future biosolids program, including the new thermal hydrolysis and digestion system, biosolids effect on crop drought resistance and yield, and the true value of the product we produce.

Staff attended a biosolids stakeholders meeting at the offices of the Water Environment Federation (WEF), during which WEF outlined its plans for moving forward in light of EPA ending its funding of the National Biosolids Partnership (NBP). WEF, at the urging of members, is going to help emphasize the value of biosolids, and help affect the paradigm shift of public perception from that of biosolids waste to biosolids product. The current industry paradigm is to pay someone to give it away for free to farmers, who later testify as to its monetary and agricultural value. WEF will help emphasize this value to regulators, members, and the public.

Staff attended a public meeting at the Stafford County Airport to discuss a permit to apply biosolids at the airport to help buffer pH and maintain vegetative cover. 10 years ago, DC Water applied lime stabilized biosolids (pH 12) to the airport to restore soils that had pH around 2.5, due to high pyrite (sulfur) concentrations. There is a small community to the north of the airport with whom we worked with last time, after they expressed some concerns. VA DEQ send notification letters to the neighbors inviting them to the meeting, and concern was low, as evidenced by the low turnout at the meeting.

Map of Blue Plains Biosolids Applications and Agricultural \$'s for January 2013

