

# Biosolids Resource Recovery Monthly Report

**NUTRIENTS and CARBON RECYCLING**

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

**SILVICULTURE**  
  
Increases yield and improves sustainability.

**RECLAMATION**  
  
Restoring meads 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



**GREEN ENERGY BIORENEWABLES**

**POWER FROM THE PEOPLE**

**THERMAL HYDROLYSIS PROCESS (THP) AND DIGESTION FACILITY**

**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 CO<sub>2</sub>e 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.

[dcwater.com/biosolids](http://dcwater.com/biosolids)

**GREEN ENERGY BIORENEWABLES**

**POWER FROM THE PEOPLE**

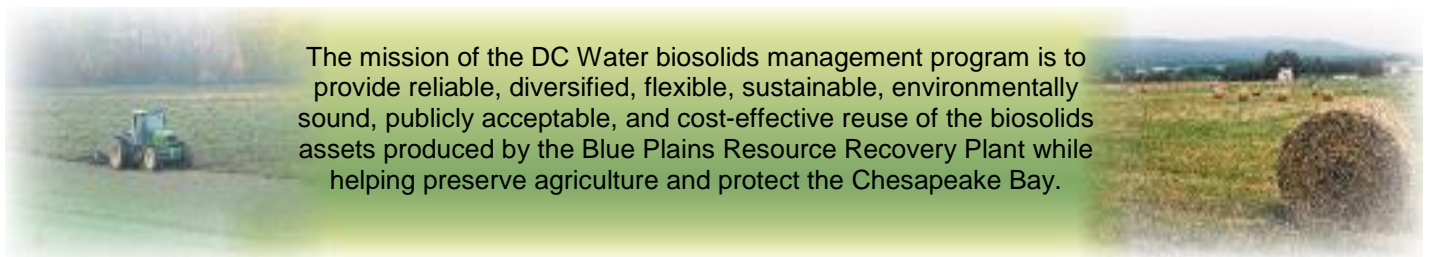
**THERMAL HYDROLYSIS PROCESS (THP) AND DIGESTION FACILITY**

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.

## DC Water

Resource Recovery Division  
 5000 Overlook Avenue SW  
 Washington, DC 20032  
 202-787-4329; 202-787-4226 (fax)  
[cpeot@dcwater.com](mailto:cpeot@dcwater.com)

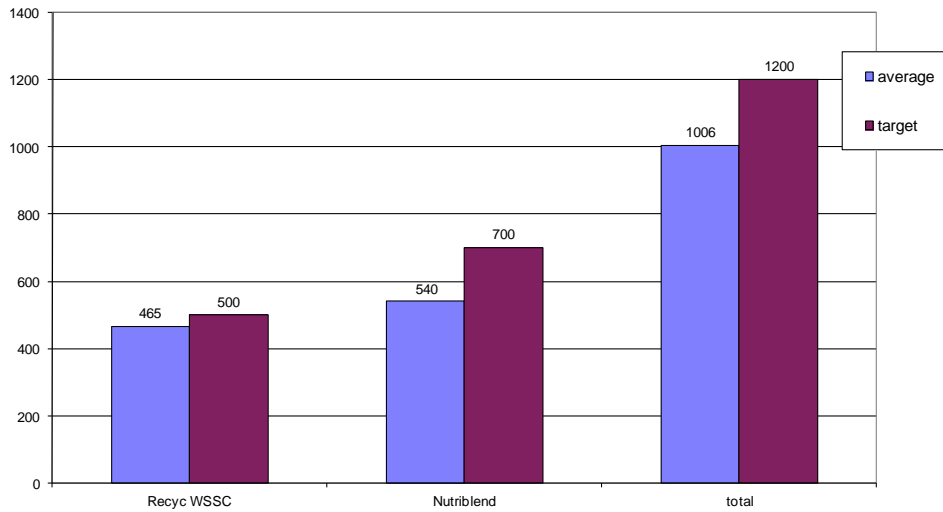
The mission of the DC Water biosolids management program is to provide reliable, diversified, flexible, sustainable, environmentally sound, publicly acceptable, and cost-effective reuse of the biosolids assets produced by the Blue Plains Resource Recovery Plant while helping preserve agriculture and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



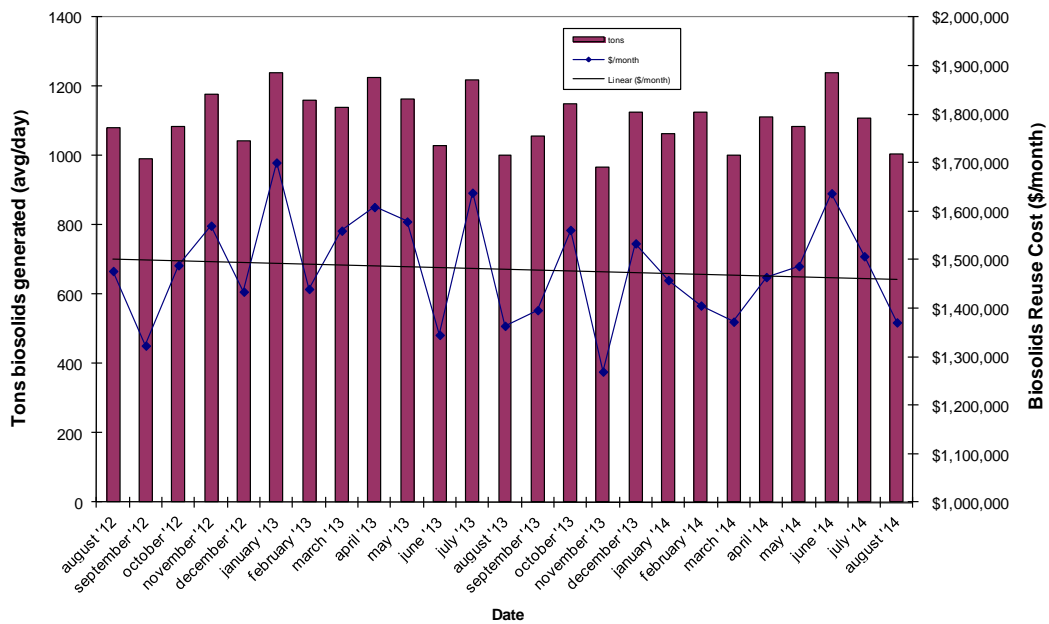
## August 2014 Resource Recovery Report

In August, biosolids hauling averaged 1006 wet tons per day. The graph below shows the hauling by contractor for the month of August. Average % solids for the unlimed cake was 27.0%. Average lime dose for the month was 25.6%. At the end of August the Cumberland County storage pad had approximately 12,000 tons (~25,000 tons capacity), and the Cedarville lagoon had approximately 0 tons of Blue Plains biosolids (~30,000 tons capacity).

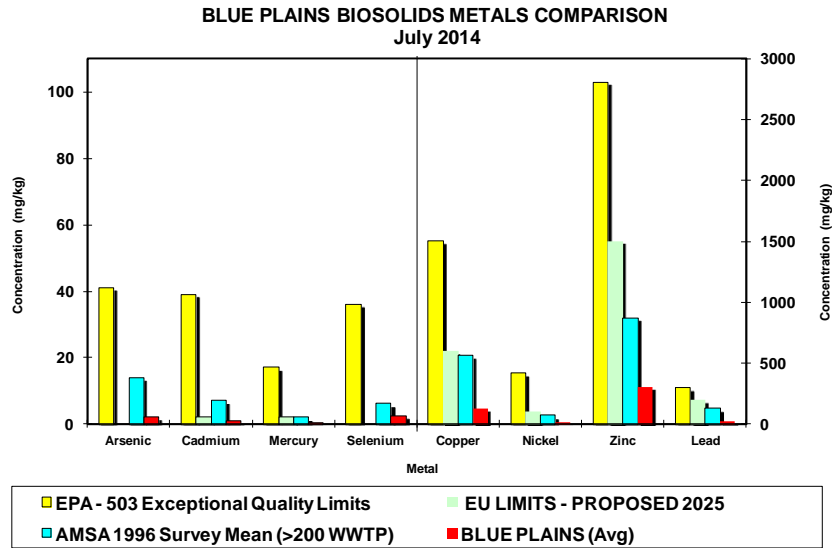
Average Daily Hauling by Contractor for August 2014



Average Daily Biosolids Production and Reuse Cost



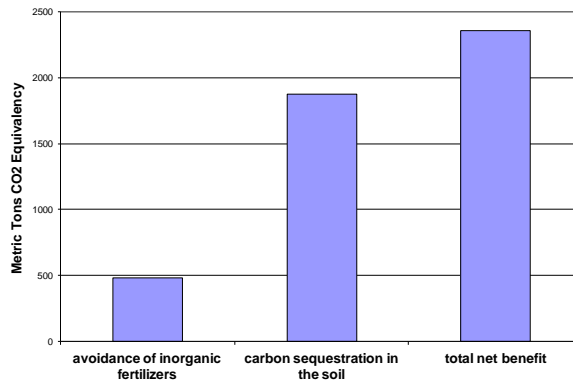
The graphs below show the EPA regulated heavy metals in the Blue Plains biosolids for the month of July 2014. As can be seen in the graphs, the Blue Plains levels are considerably below the regulated exceptional quality limits, the national average levels surveyed in 1996, and the European Union (EU) 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 in July coming directly from the plant and from storage facilities equaled 35,861 tons. Taking into account the fuel required to transport biosolids to the field, the net benefit of the land applied material is 2360 metric tons CO<sub>2</sub> equivalent avoided emissions. This is equivalent to taking 4,807,210 car miles off the road in the month of July (assumes 20 mpg, 19.4 lb CO<sub>2</sub> equivalent emissions/gallon gas – EPA estimate). The cumulative total avoided carbon emission since January, 2006 is 130,939 metric tons CO<sub>2</sub> equivalent.

**DCWater Biosolids Recycling Program  
Greenhouse Gas Balance Benefits  
July 2014 Totals**



## August Highlights

### Mid Atlantic Biosolids Technical Seminar

Staff presented at the Advanced Biosolids Stabilization Symposium in Alexandria VA, on plans for the use of the blended digested materials in the service area and progress thus far using our current Class A compost for initial outreach. The meeting was coordinated by the Mid-Atlantic Biosolids Association and was well attended by professionals in our field.

### DDOE Carbon Tracking Meeting

Staff met with DDOE staff to discuss progress toward carbon footprint reduction in the District. Staff agreed to share updated version of the current DC Water carbon footprint model. Staff will present the results of this dynamic model in an upcoming GM's report, and will strive to report on this topic monthly.

### Solar Power Project

Staff participated in the evaluation of the solar team qualifications received as a response to the Blue Plains solar power RFQ. 10 teams responded, and the evaluation group reduced the pool to 4 teams, from whom we will request full proposals. These proposals will be requested in the next month, and we will evaluate them and award the work to one so that construction can begin in early 2015.

## Map of Blue Plains Biosolids Applications and Agricultural \$'s for July 2014

