

# **PISCATAWAY BIOENERGY PROJECT**

## Community Briefing

April 10, 2019

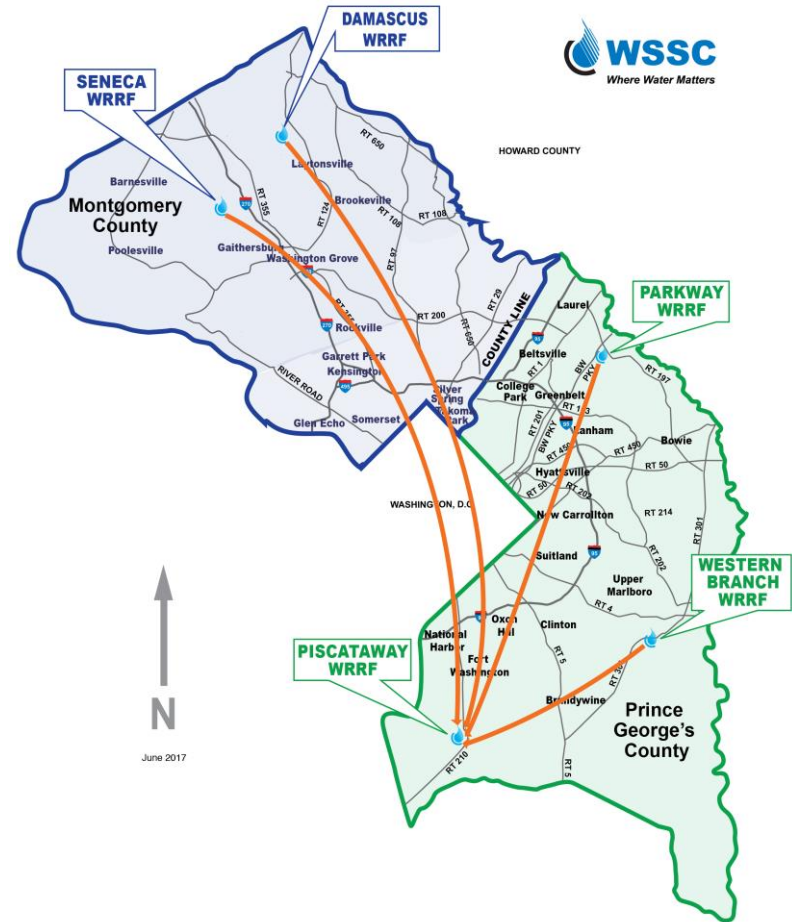
# PROJECT BENEFITS

- ▶ Sustainable: Transforms sewage into renewable natural gas to help run the plant.
- ▶ Green Energy: Reduces WSSC greenhouse gas emissions by 15%.
- ▶ Water Quality: Protects the Chesapeake Bay by reducing nitrogen and greenhouse gas emissions.
- ▶ Cost Savings: Saves customers more than \$3 million per year by reducing operating costs.



# REGIONAL SUSTAINABILITY

- ▶ With this innovative project, Piscataway will be able to produce Class A biosolids.
- ▶ Biosolids from four WSSC water resource recovery facilities will be treated at Piscataway.
- ▶ WSSC joins a growing list of water/wastewater utilities nationwide adopting bio-energy.



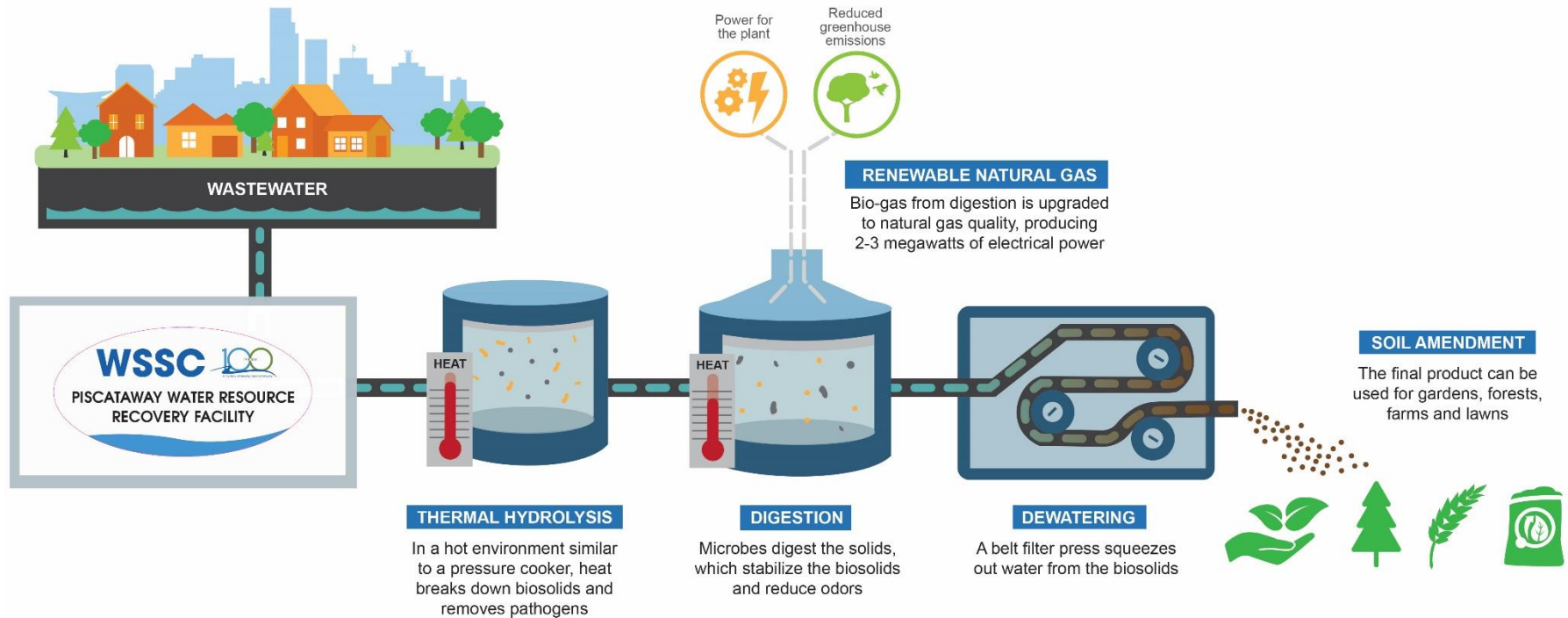
# WHAT ARE CLASS A BIOSOLIDS?

- ▶ Class A Biosolids are soil amendments – a product that’s added to soil to help gardens, forests, farms and lawns.
- ▶ Class A biosolids are safe and strictly regulated.
- ▶ Class A biosolids can be used by everyone from home gardeners to large-scale forest and park managers.
- ▶ WSSC is considering several options for our Class A biosolids, including making it available for sale to private individuals - like DC Water’s Bloom.



# HOW ARE CLASS A BIOSOLIDS CREATED?

## THE BIO-ENERGY PRODUCTION PROCESS



# CONSTRUCTION TIMELINE



Total Cost: \$200-250 million

# CONSTRUCTION IMPACTS

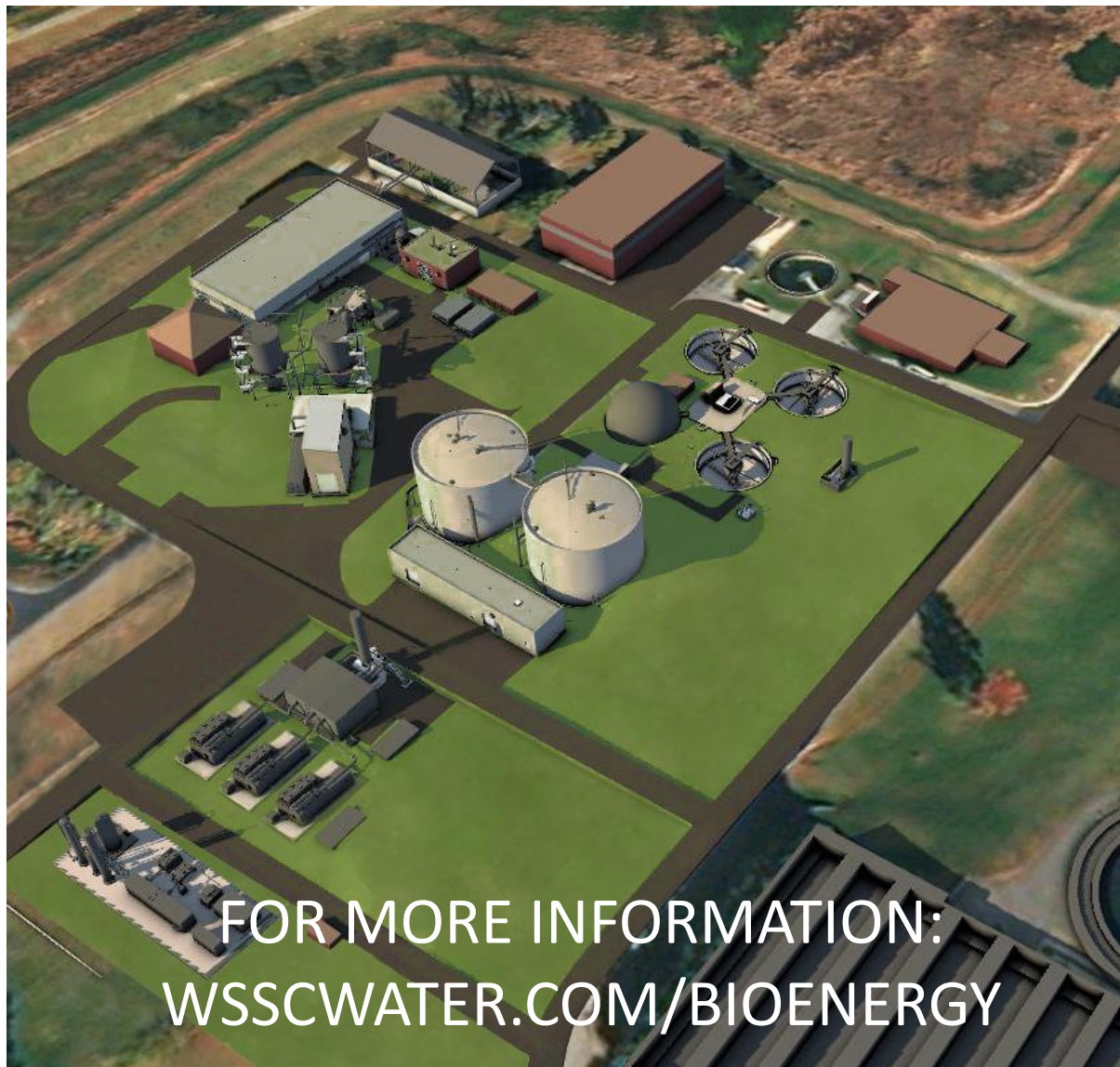
- ▶ All construction will take place within the plant boundaries.
- ▶ Site activity: 6:00 a.m. – 5:00 p.m., Monday-Friday
- ▶ No significant increase in noise or odor.
- ▶ A new construction entrance is ¼-mile from the WSSC entrance on Farmington Road.
- ▶ School bus routing will be unchanged.
- ▶ Several trees on WSSC property along Farmington Road will need to be removed – a replanting plan is being developed.



# CONSTRUCTION MAP







FOR MORE INFORMATION:  
[WSSCWATER.COM/BIOENERGY](http://WSSCWATER.COM/BIOENERGY)

Construction of the innovative Piscataway Bioenergy Project will enhance operations, save money and transform sewage into renewable energy. The cutting-edge project includes the addition of biosolids processing facilities, which will enable WSSC to produce Class A biosolids for use as a soil amendment to help gardens, forests, farms and lawns. This new facility will treat biosolids from four WSSC water resource recovery facilities.

## PROJECT TIMELINE



### CONSTRUCTION HOURS

Site Activity:  
6:00 a.m. - 5:00 p.m.

Active Construction:  
7:00 a.m. - 4:00 p.m.  
Monday - Friday.  
Weekend work is not expected,  
but may infrequently occur.



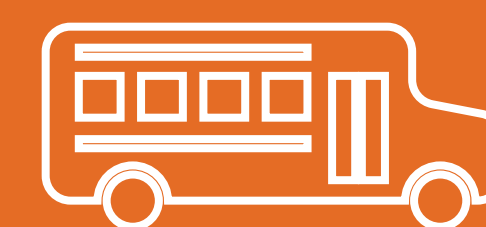
### NOISE & ODOR

Noise and odor levels will be comparable to current operations - no significant increase in either.



### TRAFFIC

The construction entrance for the project will be ¼-mile from the main WSSC entrance on Farmington Road. You will notice increased traffic during construction start times (6:00 a.m.) and when crews leave the site for the day (5:00 p.m.).



### BUS

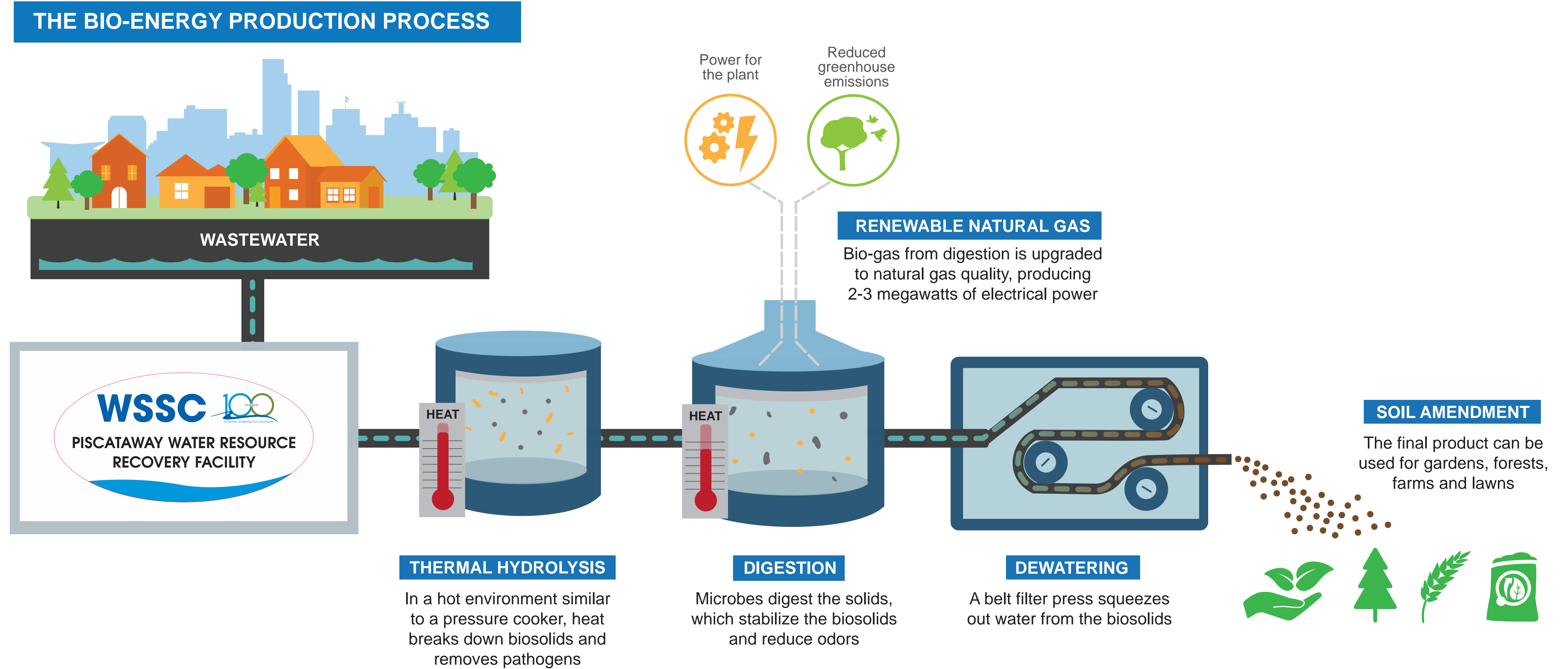
School bus routing will not be affected by the project.



### ENVIRONMENTAL

Several trees on WSSC property along Farmington Road will need to be removed to accommodate construction activities. A tree replanting plan is being developed.

WSSC will transform sewage into renewable energy at the Piscataway Water Resource Recovery Facility (formerly known as the Piscataway Wastewater Treatment Plant). Using cutting-edge "green" technology, the Piscataway Bioenergy Project will reduce WSSC's greenhouse gas emissions by 15 percent, while saving customers more than \$3 million per year.



## WHY BIO-ENERGY?



### SUSTAINABLE

Bioenergy production will enable WSSC to produce Class A biosolids with such high quality they can be used as a soil amendment to help gardens, forests, farms and lawns. This innovative project will reduce WSSC greenhouse gas emissions by 15% and help protect the Chesapeake Bay.



### SAFE

Bioenergy production is becoming increasingly popular among water/wastewater utilities nationwide. Class A biosolids are held to the strictest industry standards, regularly monitored, and safe enough to use as a soil amendment to help gardens, forests, farms and lawns.



### GREEN ENERGY

Using cutting-edge "green" technology, WSSC will transform sewage into renewable fuel and produce energy to help run the plant. This new process produces methane gas, which is captured and used as a fuel source to run generators that create electricity. This provides Piscataway with a reliable green power source and reduces dependence on fossil fuels.



### COST SAVINGS

WSSC is spending now in order to save going forward. Significant cost savings over the long term will come from reducing power consumption from fossil fuels and reducing disposal costs. Piscataway will become WSSC's showcase for achieving optimal value by investing in a green future.

# WHAT ARE CLASS A BIOSOLIDS?



Class A Biosolids are nutrient-rich organic materials resulting from the wastewater treatment process that can be used as a soil amendment to help gardens, forests, farms and lawns.

## WHO ELSE IS PRODUCING CLASS A BIOSOLIDS?



WSSC joins a growing list of water/wastewater utilities nationwide using bio-energy to create Class A biosolids. Within our own region, consumers can already buy DC Water's Bloom to use in their gardens.

## HOW CAN CLASS A BIOSOLIDS HELP GARDENS AND GREEN SPACES?

Biosolids are soil amendments – a product that's added to soil to improve its physical qualities. Class A biosolids can help plant and turf establishment and topsoil blending, and can even be used as a potting soil blend. Class A biosolids can be useful to everyone from home gardeners to large-scale forest and park managers.

## ARE CLASS A BIOSOLIDS SAFE?

Yes! The National Academy of Sciences concludes that “the use of [biosolids] 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.” The technical innovations and high heat process used by WSSC to remove pathogens transforms waste into sustainable and useful soil amendments.

## ARE THERE DIFFERENT TYPES OF BIOSOLIDS?

There are two types of biosolids: Class A and Class B. WSSC's Piscataway Water Resource Recovery Facility will be producing Class A biosolids. Class A biosolids are held to the strictest industry standards, regularly monitored, and safe enough to use as fertilizer in home gardens. They have virtually no pathogens and contain very low levels of metals.

## DO CLASS A BIOSOLIDS HAVE AN ODOR?

Like most soil conditioners (such as compost and fertilizers), biosolids have an earthy smell.

## SIGN ME UP!



## WHEN CAN I USE WSSC'S CLASS A BIOSOLIDS IN MY OWN GARDEN?

WSSC is still determining how our Class A biosolids will be used. Options we're considering include allowing it to be sold on the open market (as DC Water's Bloom is), private sale to another utility, or private sale/donation to garden and park organizations.