

FROM WASTE(WATER) TO RESOURCE

CREATING BIOSOLIDS FOR REUSE



BEYOND THE FLUSH: WHERE DOES THE WATER GO?

When you flush your toilet, do you think about where that water goes? Underneath and throughout Lincoln are more than 1,000 miles of wastewater pipe lines and 15 pumping stations that keep the wastewater flowing to two municipal water resource recovery facilities: the Theresa Street Water Resource Recovery Facility and the Northeast Water Resource Recovery Facility.



Theresa Street Water Resource Recovery Facility



Northeast Water Resource Recovery Facility

CREATING BIOSOLIDS: WET TO DRY

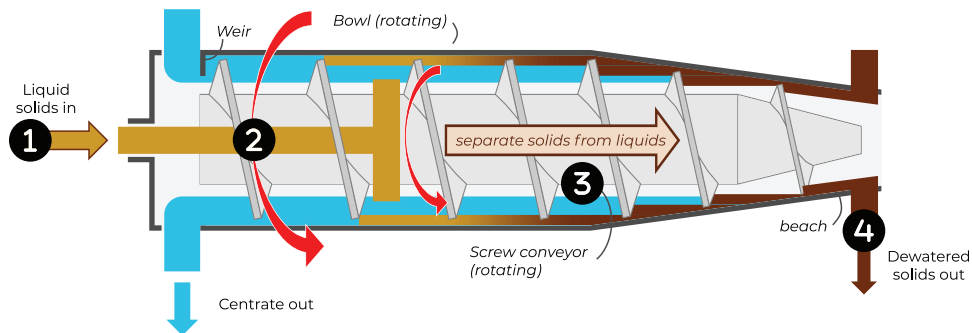
Biosolids are created through the wastewater treatment process. Both the Northeast and Theresa Street Water Resource Recovery facilities have the capabilities to utilize recovered liquid biosolids for beneficial use and turn the product into a dry, nutrient-rich matter that is used as a soil-like fertilizer on crops.

1 FEED & MIX

Liquid 2-3% solids are fed into a centrifuge. A polymer coagulant (thickening agent) is added.

2 SPIN, SPIN, SPIN

The centrifuge spins like a washing machine in a spin cycle. The high speed rotation separates the solids and liquid materials.



3 SCRAPE & SEPARATE

The scroll conveyor inside the bowl scrapes the solids off the inner bowl wall. The solids are moved in the direction of the centrifuge's solids discharge area.

4 DRY & READY FOR USE

The longer the solids spin, the drier the solids become. The separated solids, now at more than 20% solid, are conveyed out to trucks for distribution to be spread on ag land as a substitute for fertilizer.

BIOSOLIDS: A WIN-WIN-WIN



This soil-like, nutrient-rich matter can be put on crops year-round instead of just during the growing season.



Biosolids offer agriculture producers a fertilizer filled with healthy nutrients that is more environmentally friendly than synthetic fertilizers.



This project gives the City another way to reuse resources recovered from the community's wastewater.

For more information, go to lincoln.ne.gov/biosolids. For more information to purchase the biosolids, agriculture producers and landowners can contact David Smith, Biosolids Coordinator at 402-441-6378 or email him at dsmith@lincoln.ne.gov.