

### What can Metrogro do for you?

Metrogro supplies nitrogen and phosphorus to meet crop needs as well as organic material to improve soil health. In addition to ensuring that field applications conform to WDNR standards, the Metrogro team works closely with farmers to meet their needs.

Partnerships with farmers are critical to Metrogro's success, and the team brings a shared respect for the land to the application process. Before application, equipment setup is carefully considered to minimize field compaction, and crews are careful to leave the fields in good condition for the next crop.

During application, Metrogro is injected into the soil, which has numerous benefits over land spreading. With injection, applications are precise, and there is reduced potential for erosion and runoff. This assures nutrients are taken up by the crop and not moving to other areas such as wells or surface water. Injection also reduces undesirable odors and is more visually appealing.



For farmers interested in receiving field applications of Metrogo, contact:

#### Ben Erdman

bene@madsewer.org 608-222-1201 ext. 256

For residents near Metrogro sites with home well testing questions, contact:

Carol Mielke carolm@madsewer.org 608-222-1201 ext. 287

A program of

Madison Metropolitan

Sewerage District

madsewer.org/metrogro





wastewater stream. Metrogro biosolids contain organic material and nutrients that are recycled to farmland as a valuable fertilizer.

Before any land application takes place, Metrogro biosolids undergo treatment

Metrogro biosolids undergo treatment to control pathogens such as bacteria and other organisms capable of transporting disease.

Metrogro biosolids represent a sustainable source of nutrients that support local agriculture.

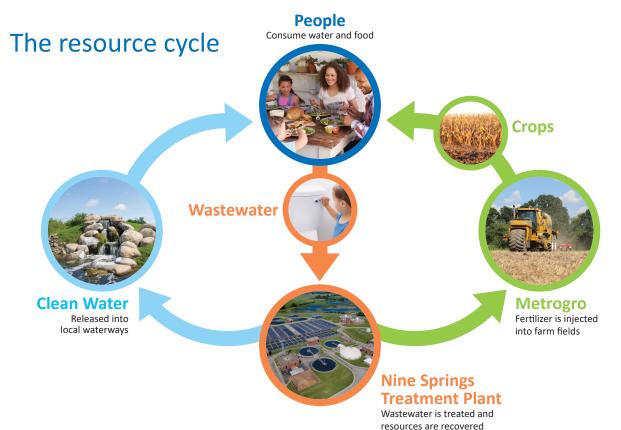


### Metrogro delivers quality results

Metrogro works in much the same way as other organic manure sources, delivering nitrogen to crops slowly throughout the growing season. This slow-release action means more nitrogen is used by the crop and less is lost to the environment.

## Upstream efforts yield benefits

Madison Metropolitan Sewerage
District takes pride in its efforts to
mitigate pollutants, such as metals,
before they reach the treatment plant.
As a result, the extremely low metals
content found in Metrogro outperforms
the concentration standards established
by the U.S. Environmental Protection
Agency (EPA) for exceptional quality
biosolids.



### The resource cycle

Biosolids are a nutrient-rich organic product generated during the wastewater treatment process at Madison Metropolitan Sewerage District's Nine Springs Wastewater Treatment Plant. The Metrogro process safely recycles this fertilizer as a local source of nutrients needed for crops such as corn and soybeans. As part of the resource cycle, the District's treatment process also produces clean water that is safely returned to the region's surface waters.

### Site evaluation

Before receiving a Metrogro application, fields are evaluated by Metrogro staff members who then submit pre-approval information to the Wisconsin Department of Natural Resources (WDNR). Soils are checked for depth to bedrock and shallow water. Fields are checked for distance to wetlands, streams, lakes, conduits to water and other characteristics. Application follows strict setbacks from these features as well as from homes, wells, schools and recreation areas.



# Monitoring and recordkeeping

Metrogro is applied to more than 5,000 acres each year. Every load is documented and reported via an annual spreading log that is sent to WDNR. Metrogro is sampled daily and analyzed for phosphorus, multiple forms of nitrogen, potassium, solids content, and 10 metals as part of the quality assurance process. Bacteria samples also are taken during the hauling season.

# Federal, state standards govern biosolids

The Metrogro program and our biosolids are heavily regulated by federal and state government agencies, including the U.S. Environmental Protection Agency and WDNR. These regulations are in place to protect communities and the environment, while also recovering valuable resources from the biosolids.