Windy City Biosolids
Spring 2026

# Green Your Grass and Boost Your Landscaping Projects with Sustainable EQ Biosolids

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) produces Exceptional Quality (EQ) biosolids, an organic soil amendment derived from the natural wastewater treatment process. EQ biosolids meet strict U.S. EPA Part 503 standards, enabling their safe use in urban environments. Applying biosolids helps restore soil health, making EQ biosolids an ideal soil amendment for turf growth, landscaping, and green infrastructure projects.

It is time to start thinking about taking advantage of EQ biosolids locally for greening your grass or enhancing your landscaping projects this year. For more than 20 years, EQ biosolids have been successfully used for topdressing turfgrass in parks, athletic fields, and golf courses; and amending soils for seeding bed preparation across the Chicago metropolitan areas. In addition, EQ biosolids have been applied on brownfield restoration and construction sites. Using EQ biosolids saves money and reduces carbon footprint, contributing to MWRD's Resource Recovery Initiative.

## *Urban land restoration in Athens Park, Lemont*

**(Left) Athens Park, a 12-acre site with limestone underneath and crushed stones before the project in 2024. (Right) The green and lush turf was established in May 2025.**

In 2024, MWRD partnered with the Village of Lemont and Lemont Park District to restore Athens Park, a 12-acre site with rocky and compacted soil. To address these challenging conditions, 2,500 cubic yards of EQ biosolids were blended with market topsoil to create planting beds for 8 acres of turf. By spring 2025, the park had been transformed: lush green grass and vibrant landscapes replaced barren ground. The new community space now includes a playground, dog park, wetlands, pollinator garden, and gathering areas. The successful use of EQ biosolids at Athens Park demonstrates their value in urban land restoration and community development projects.

## *EQ Biosolids Use on Golf Course*

EQ biosolids have been another source of organic materials like compost, which many golf courses use to reduce reliance on chemical fertilizers and to promote environmental sustainability. The biosolids are typically applied as topdressing on fairways to strengthen turfgrass, improve drainage, and reduce soil compaction.

North Shore Country Club has been using EQ biosolids for fairway topdressing for more than 20 years. “EQ biosolids feed soil and help soil microbes thrive,” said Dan Dinelli, Superintendent of North Shore Country Club. He compares soil to the human body: it needs a healthy balance of “good” microbes. Many people assume that the best way to maintain a lawn or athletic field is by adding fertilizer to plants. Instead, Dinelli focuses on feeding the soil rather than the plants to allow the soil to continuously supply nutrients to the plant. Healthy soil supports robust turfgrass that is more resistant to drought and other stresses.

A fairway at North Shore Country Club topdressed with EQ biosolids.

## *EQ Biosolids for Green Infrastructure*

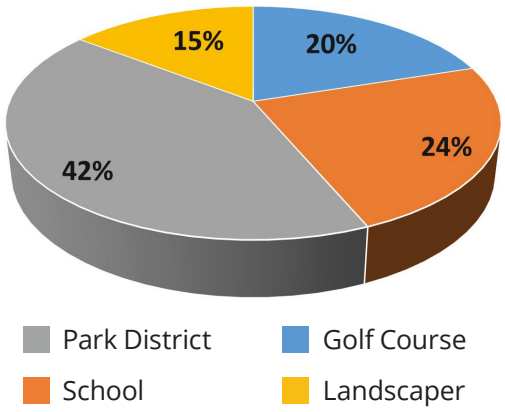
A rain garden at the Village of Franklin Park used composted EQ biosolids in the soil mix to enhance infiltration and support healthy plant growth.

EQ biosolids aren’t just for parks and golf courses, they are great materials for green infrastructure stormwater management projects too. Green infrastructure systems designed to manage Chicago’s stormwater can benefit from EQ biosolids in several ways:

- Rain Gardens: EQ biosolids can be part of the soil mix for rain gardens that capture runoff from streets and rooftops, helping water soak into the ground instead of flooding streets. EQ biosolids help trap contaminants found in stormwater, reducing their impact on the environment.
- Retention Ponds and Bioswales: EQ biosolids accelerate plant growth by improving soil health. A recent MWRD greenhouse study shows that composted biosolids are an effective and sustainable amendment as part of bioretention soil media, promoting infiltration while minimizing the leaching of some organic pollutants.

By improving infiltration and supporting vegetation, thereby reducing runoff, EQ biosolids make green infrastructure projects more effective and sustainable. EQ biosolids also support long-term soil productivity and microbial activity, strengthening the resilience and ecological function of green infrastructure installations over time.

# How MWRD EQ biosolids are produced




*Users by category in 2025 for air-dried EQ biosolids. Each category represents its share of the total number of users participating in EQ biosolids utilization programs.*

The MWRD produces EQ biosolids through processes in compliance with U.S. EPA Part 503 standards. Sludge from wastewater treatment is first stabilized through anaerobic digestion. The digestion also reduces pathogens and odors. In our production of air-dried biosolids, the material is then stored in a lagoon for about a year for further stabilization and reducing pathogens. Finally, the biosolids are dried on concrete beds. Before distribution, the product undergoes testing to ensure they meet U.S. EPA Part 503 standards for EQ biosolids. EQ biosolids improve soil structure, enhance water infiltration, and increase organic matter content, helping plants utilize nutrients more effectively. For more than 20 years, they have been used to enrich soil at many parks, school athletic fields, golf courses, nurseries, and large landscaping areas across the Chicago area, including Maggie Daley Park and the 606 Trail.

In 2025, air-dried EQ biosolids were mainly applied to parks, school athletic fields, golf courses, and various landscaping projects. These applications improved soil health and reduced maintenance costs, which supports sustainable landscaping across the Chicago region.

# How to use biosolids in urban soils

The application methods for EQ biosolids should be tailored for specific purposes. Over the past 20 years, we have developed and validated a range of application methods. Each method is designed to meet specific project goals.

EQ biosolids prepared for incorporation into topsoil at a brownfield site (on the left) and applied as a topdressing in a grass area (on the right).

| Category | Application Method |
|---|---|
| Golf Courses | **Topdressing:** Spread EQ biosolids of 0.25-0.5 inches on fairways and rough.<br>**Divot Repair:** Mix EQ biosolids with sand and grass seed.<br>**New Greens:** Replace part of sand by EQ biosolids in summer grass management. |
| Parks & Athletic Fields | **Topdressing:** Spread EQ biosolids of 0.25-0.5 inches on turf.<br>**Flowering Beds:** Incorporate EQ biosolids into in-situ or imported topsoil at a 1:2 or 1:3 ratio in preparing planting beds for better organic matter and moisture retention. |
| Construction Sites | **Post-Construction Seeding:** Blend EQ biosolids with topsoil at a 1:2 or 1:3 ratio and spread it to create ideal start growing conditions for turfgrass and landscaping. |
| Green Infrastructure | **Stormwater Features:** Include EQ biosolids in soil mixes for bioswales and rain gardens to enhance infiltration and plant growth. |
| Brownfield Restoration | **Soil Amendment:** Incorporate 3-6 inches EQ biosolids into in-situ topsoil or blend EQ biosolids with imported topsoil at a 1:1 or 1:2 ratio to restore soil health. |

# Quiz on EQ biosolids application in urban environments

**Question 1: What is the main purpose of using EQ biosolids in urban soils?**

A. Increase soil compaction
B. Improve soil health and structure
C. Raise soil pH above 8.0
D. Remove organic matter

**Question 2: How do EQ biosolids improve stormwater infiltration in urban environments?**

A. By creating impermeable surfaces
B. By increasing soil compaction
C. By improving soil structure and porosity
D. By reducing organic matter

**Question 3: How do EQ biosolids help capture contaminants in urban stormwater or soils?**

A. By creating impermeable layers that block water movement
B. By binding pollutants such as heavy metals and nutrients through organic matter
C. By increasing soil compaction to trap contaminants
D. By removing all organic matter from the soil

**Question 4: Why are EQ biosolids beneficial for restoring ecosystem function on urban brownfields?**

A. They suppress soil biological activity
B. They lower organic matter to near-zero levels
C. They reconstruct nutrient cycles, soil productivity, and microbial diversity
D. They prevent all plant growth

***Question 1 Answer:*** *B. EQ biosolids add stable organic matter, improve soil structure, and enhance nutrient availability, making urban soils healthier and more sustainable.*

***Question 2 Answer:*** *C. EQ biosolids add organic matter that loosens compacted soils, allowing better infiltration of stormwater.*

***Question 3 Answer:*** *B. EQ biosolids contain stable organic matter that can absorb and bind contaminants like heavy metals, phosphorus, and organic pollutants, reducing their mobility and improving water quality in stormwater management systems.*

***Question 4 Answer:*** *C. EQ Biosolids help reestablish functional soil processes, such as nutrient cycling, biological activity, and plant growth, which are essential for ecosystem restoration.*

## How to get EQ biosolids

Now is the ideal time to plan for incorporating EQ biosolids into your upcoming spring and summer projects. Using EQ biosolids saves money, reduces carbon footprint, and supports MWRD's Resource Recovery Initiative. Our soil scientists are ready to assist with planning for the use of biosolids in your project.

MWRD EQ biosolids are generally available from May to November 2026, however, you can always contact us throughout the year. Contact us today to reserve your material and secure your spot on the delivery list.


For more information on the use of EQ biosolids or to include them in your projects, please visit our website at mwrd.org/biosolids or contact:

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