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MWRD's 8th Annual Sustainability Summit

We held our 8th annual Sustainability Summit on October 21. Despite the pandemic, we were able to virtually share ideas and ongoing efforts for

sustainable landscaping in the Chicago area. We heard about pollinator projects, landscaping with goats and sheep grazing at MWRD plants, and fish diversity in our rivers. We gave a presentation about incorporating biosolids into your landscaping projects, whether they be city parks or front yards. We also presented awards



for outstanding projects that utilized biosolids or contributed to stormwater management. Please check out the recording of the Summit on the MWRD website to learn about these stories and more! <u>https://bit.ly/2K7FwXc</u>

Our Community is Growing with EQ Biosolids



Before: Children's garden during establishment with biosolids.

After: Children's garden lush with vegetation.

The 2020 winner of the Biosolids Beneficial Reuse award went to Julie Roth of the Natural Learners Co-op for revitalizing a children's garden in Berwyn using EQ biosolids. Through Julie's leadership and the incredible volunteer efforts of children and their moms, this garden became both a classroom and retreat for the local community. The Natural Learners Co-op spent many hours prepping beds, incorporating EQ Compost into the depleted existing soil, and planting seeds that would soon thrill with color and flavor. The EQ Compost enriched the soil and contributed to this lush garden and was tended by the Natural Learners throughout the growing season. The co-op and community were not disappointed when the harvest arrived!



The excitement of seeing the harvest.



This garden is all about children learning to grow!

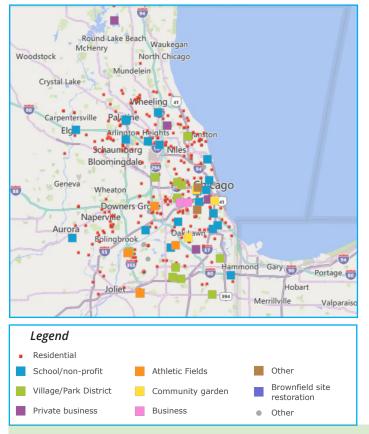
Metropolitan Water Reclamation District of Greater Chicago

How is EQ Compost created?

The MWRD's Exceptional Quality (EQ) Compost is a sustainable and environmentally beneficial product derived from the water reclamation process. The MWRD partners with the City of Chicago and other organizations by collecting woodchips from routine tree trimming programs and blending with MWRD biosolids in open windrow machines. Woodchips, grass clippings and leaves are used as a bulking agent. The process raises the temperature of the biosolids and bulking agent mixture which destroys pathogens. EQ Compost can be blended with topsoil and potting soil for establishing plants or used as a mulch around already established plants. EQ Compost supplies organic matter and improves the structure and porosity of soils which allows plants to more effectively utilize nutrients. Biosolids have been used to improve soil quality at popular destinations like Maggie Daley Park and the 606 Trail and on golf courses and athletic fields at both public parks and schools in the Chicago area for more than 20 years.

The Rundown: Who is using our EQ materials and how?

MWRD biosolids/compost users in the Chicago area



ESC COMPOST Solution

Where did biosolids go in 2020?

We distributed about 20,000 dry tons of EQ biosolids in 2020. In fact, we had so much interest in our EQ compost that we received over 300 orders for delivery and continuously had to refill our Bring-Your-Own-Bucket piles at our plants. Where did it all go? To a neighborhood near you!

Test your EQ!

- 1. True or false: The virus that causes COVID-19 is inactivated in wastewater, eliminating risk of spread through biosolids.
- 2. Which local parks have been established using biosolids? *Choose all that apply.*
 - A. Maggie Daley Park
 - B. Soldier Field
 - C. The 606 Trail
 - D. Ping Tom Memorial Park

- 3. Which is a use that does NOT follow best management practices when using EQ biosolids?
 - A. Spreading in a garden
 - B. Topdressing turfgrass
 - C. Establishing turfgrass
 - D. Spreading on frozen soil

Answers on back page.

Sustainable

Landscapers' CORNER

Shane Edwards, Twin Oaks Landscaping



Costco site in Plainfield with biosolids and seeding.

If you did some early holiday shopping at the new Costco in Plainfield, maybe you saw the vibrant green fields as you drove along the boulevard and into the parking lot. After seeing great success with establishing turfgrass using biosolids at places like Maggie Daley Park, Shane Edwards of Twin Oaks Landscaping decided to improve growing conditions on this construction site. This fall, Twin Oaks Landscaping used 113 semi-truck loads of EQ biosolids to create an excellent seeding bed for this turfgrass. Without biosolids or fertile topsoil, the grass seed would have been spread onto the exposed clay subsoil. Seeding onto clay limits the ability for the roots to penetrate the soil and thrive. With the addition of organic matter-rich biosolids, a fertile seeding bed with protective organic matter allowed the seeds to germinate and produce a lush covering, providing an attractive landscape while protecting the underlying soil from erosion and preventing damage to our environment.

MWRD: How did you hear about EQ biosolids at the MWRD?

Shane: We used them at Maggie Daley Park and we had great success with them on that site.

MWRD: Why did you choose to use EQ biosolids at the Costco site?

Shane: We had a hard task in front of us, which was to get maintainable turf on just clay filled open space (no topsoil was spread just clay). When seeing the results at Maggie I knew that in order to get the germination all parties were trying to achieve we needed to utilize EQ biosolids.

MWRD: How big is the Costco Blvd. site?

Shane: We spread EQ biosolids on roughly 32 acres worth of open fields.

MWRD: What is the landscaping goal for the site?

Shane: To get the client the best germination we could on clay spread open fields and to get quick germination for stormwater pollution prevention purposes.



This month we are highlighting Shane Edwards. Shane is a project manager at Twin Oaks Landscaping, Inc. He has contributed to projects large and small throughout the Chicago region, including establishment of Maggie Daley Park in downtown Chicago.

Shane Edwards



October, site cleared and ready for biosolids.



November, grass establishment underway.

MWRD: We can see some great benefits of biosolids at the Costco Blvd. site. At what other locations have you used EQ biosolids?

Shane: Besides at Maggie Daley Park , we have used them at MWRD's Stickney Plant, Veeck Park in Hinsdale and several other parks and park districts as well.

MWRD: What benefits did you see from using biosolids at Costco and other projects?

Shane: When incorporating biosolids into newly graded areas for seed we are seeing growth rates as if it was in the second year of a seeding you can see. Also when we apply biosolids as a topdressing application with new seed we see overall improvement in turf health within 3 months with proper watering as well.

MWRD: Do you use both air-dried EQ and EQ compost for landscaping? *(continued on back page)*

Sustainable Landscapers Corner, cont.

Shane: Yes, we have used both.

MWRD: Why do you choose to use EQ biosolids in your other projects?

Shane: Sustainability and it allows us to get the client the best results that we can offer with the knowledge and contacts we have as a company. Efficacy and cost play a roll as well.

MWRD: What are some of the typical projects (not specific to biosolids use) Twin Oaks works on and what is the region that your company covers?

Shane: Twin Oaks Landscaping is a construction and maintenance based company. All of our construction sites are throughout the Midwest and our maintenance company is within the Chicagoland area. For our construction sites we do normal ground level landscape installations all the way to complex green roofs 60 stories up.

MWRD: What are the smallest and largest projects that you utilized biosolids in?

Shane: The smallest size job was simple turf repair after the plowing season. For this we used a mixed topsoil that had sand and topsoil mixed into. The largest size job was Maggie Daley in which we used around 5,000 tons of materials.

MWRD: Do you have any advice for potential biosolids users?

Shane: If you use biosolids as a topdressing material make sure you calibrate it correctly and make sure you apply when there is appropriate moisture levels. The best results happen in the fall applications and mid spring. I would tend to not install during summer heat without an irrigation system.

Answers

- 1. True. COVID-19 virus is unlikely to survive the trip to the wastewater treatment plant due to its unstable nature outside a host. Our EQ biosolids processing is designed to eliminate pathogens, including virus.
- 2. A, C and D. Incredible parks including Maggie Daley Park, the 606 Trail, and Ping Tom Memorial Park were all established using EQ biosolids to improve plant growth.
- 3. D. Keep in mind that EQ biosolids help improve soil conditions, but best management practices should be followed. Do not apply biosolids over snow-covered or frozen ground, as this can lead to run-off into local waterways.

Do this, not that!

As we get into some harsh winter weather, take a look at your garden beds. Make sure you are not leaving any soil bare. Soil requires protection, just like our skin. If we leave it bare, it can dry out, become compacted or eroded, and deprived of food for soil microbes.



Bad. Soil should not be left exposed.



Better. Covering soil with mulch, leaves, or grass clippings can protect it from harsh winter conditions and provides organic matter for soil microbes.



Best. Planting a cover crop or allowing cold-tolerant plants to remain in beds over winter will keep soil healthy, provide protection, and sequester more carbon.

Plan ahead!

Now is a very good time to make a plan for including EQ products in your spring and summer turf management. Availability is dependent upon how wet our spring is, but compost will likely become available in April followed by air-dried material in late May. Contact us now to get on the list for 2021 material.

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