



Biosolids Communications

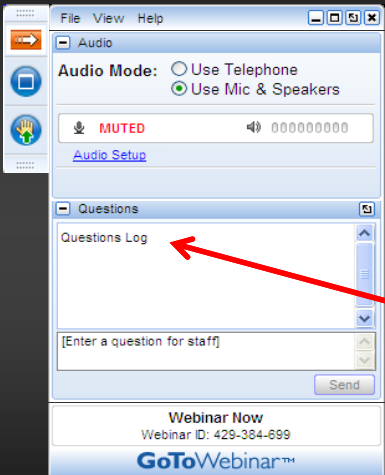
September 6, 2017



Water Environment Federation
the water quality people®



How to Participate Today



- **Audio Modes**
 - Listen using Mic & Speakers
 - Or, select "Use Telephone" and dial the conference (please remember long distance phone charges apply).
- Submit your questions using the Questions pane.
- A recording will be available for replay shortly after this webcast.

Agenda

- The Opportunities and Challenges
- Resources
- Chris Peot - DC Water
- Allison Fore & Dominick Brose - Chicago Metropolitan Water Reclamation District
- Kevin Litwiller - Lystek International
- Question and Answer



Biosolids are a positive story



- Biosolids are a highly treated wastewater byproduct and contain valuable nutrients, organic matter, and energy.
- Biosolids are a safe and innovative product that lowers costs for consumers, conserves natural resources, improves the environment, and supports agriculture.
- Utilities across the country have been safely recycling biosolids for decades, leading to more sustainable and resilient communities.



THE OPPORTUNITY

for more proactive, positive messaging campaigns to highlight the many benefits of biosolids.



Water Environment Federation
the water quality people

Successful campaigns

- 1 Highlight the proven benefits of biosolids for environment, economy, communities, etc.
- 2 Utilize a variety of external validators such as scientists, agriculture, NGOs, etc.
- 3 Use social media, earned media coverage, and web content.



Water Environment Federation
the water quality people

Awareness



Expected documentary: *Biosludged*

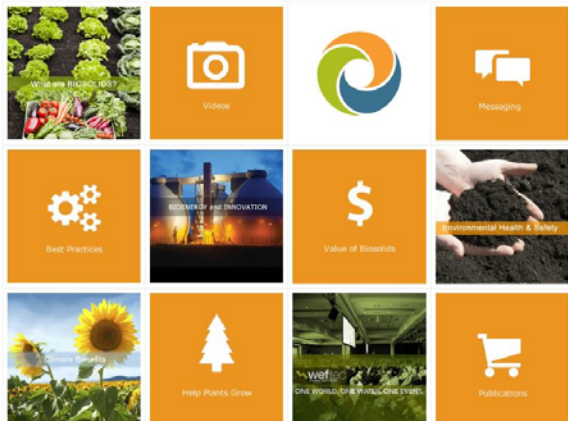


Responding to *biosludged* (and critics)

| | |
|----------|--|
| Notify | Notify communications staff/departments of the documentary. |
| Prepare | Prepare a response strategy that relies on science, track record, benefits, etc. |
| Focus on | Focus on positives of biosolids, not criticizing the documentary. |
| Identify | Identify external validators who can provide positive, fact-based perspective. |



BIOSOLIDS RESOURCES



Resources
biosolidsresource.org



Resources

Biosolids

Biosolids are the nutrient-rich organic materials resulting from the treatment of domestic waste at a wastewater treatment facility. Through biosolids management, solid residue from wastewater treatment is processed to reduce or eliminate pathogens and minimize odors, forming a safe, beneficial agricultural product. Biosolids are carefully monitored and must be used in accordance with regulatory requirements. See, [biosolids resources](#) for additional information.

INVOLVEMENT OPPORTUNITIES NATIONAL BIOSOLIDS PARTNERSHIP TECHNICAL RESOURCES BIOSOLIDS EVENTS

wef.org/biosolids



Residuals and Biosolids Committee

The WEF Residuals and Biosolids Committee shall develop, recommend, and assist in conducting programs to provide information regarding management options, regulatory compliance and current practices for residuals and biosolids



CHAIR: Christopher Peot, DC Water, cpeot@dcwasa.com

STAFF LIAISON: Patrick Dube, WEF, pdube@wef.org



Today's Speakers

Chris Peot
Director of Resource Recovery



Allison Fore
Public & Intergovernmental Affairs Officer
&
Dominick Brose
Environmental Soil Scientist



Kevin Litwiller
Director of Marketing & Business Development



Travis Loop, tloop@wef.org
www.biosolidsresources.org





Introduction to Bloom®

WEF Webinar on Biosolids Communication

District of Columbia Water And Sewer Authority





NUTRIENTS and CARBON RECYCLING

FARMING

Provide carbon and nutrients valued at \$300.00 per acre.

SILVICULTURE

Increase yield and improve water quality.

RECLAMATION

Bring unused or under-used lands and structures back online.

URBAN RESTORATION

Reduce runoff and increase rainfall.

dc water is life BLUE PLAINS ADVANCED WASTEWATER TREATMENT PLANT: A RESOURCE RECOVERY FACILITY

water • nutrients • carbon • energy



dcwater.com/biosolids

GREEN ENERGY BIORENEWABLES

POWER FROM THE PEOPLE



THERMAL HYDROLYSIS PROCESS (THP) AND DIGESTION FACILITY



DC Water will be the first in North America to use thermal hydrolysis for wastewater treatment. When completed, this facility will be the largest plant of its kind in the world.

GREEN BENEFITS:

- Produce combined heat and power, generating 13 MW of electricity
- Save DC Water \$10 million annually cutting grid demand by a third (DC Water is the largest consumer of electricity in the District)
- Reduce carbon emissions by approximately 50,000 metric tons of CO₂e per year
- Reduce trucking by 1.7 million miles per year
- Save \$10 million in biosolids trucking costs
- Produce Class A biosolids to grow trees, sequester carbon and reduce runoff

Nutrient Rebate Research Projects

\$2/ton rebated through biosolids contracts; obligated to spend on research

Virginia Tech

- Drought resistance study
- Greenhouse gas balance
- Wintertime N uptake
- P land base analysis
- Blended soil products development



University of Maryland

- Beneficial soil microbes
- Wye poplar plantation surface application
- Mine reclamation with poplars



USDA + University of Maryland

- Triclosan, trichlorocarbon
- PBDEs



The Value in Biosolids

Organic Matter

- Food for soil microbes
- Builds soil tilth
 - Erosion resistance
 - Water-holding capacity
- Ability to retain nutrients

Nutrients

Macro-Nutrients

- Nitrogen (~1.5%)
- Phosphorus (~2%)
- Calcium

Micro-Nutrients

- Zinc
- Copper
- Molybdenum

Drought resistance

- More root & shoot growth
- Improved yields

Energy

For Energy Recovery

- Energy in the chemical bonds of organic matter
- 9,300,000 Btu/metric ton of biosolids available through anaerobic digestion

Beneficial

- Improved nutrient uptake
- Disease resistance

Slide adapted from Northern Tilth

Agriculture



Silviculture



Anaerobic Digestion / Thermal Hydrolysis



Bloom Soil Amendment Product



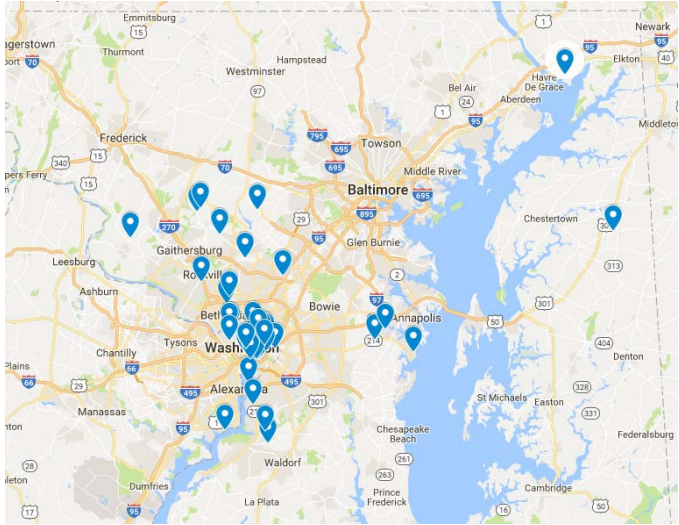
Commercial distribution

2016: ~1,300 cubic yards
2017: ~9,600 cubic yards

Nurseries
Landscapers
Soil blenders
Gardens
Highways

\$7.50/cy - Cured

Permitted and regulated by DDOE and MDE



Community Gardens



80+ community gardens & tree plantings (700+ tons)



Digester launch event



 **mayor_bowser**
Washington, Distric... [FOLLOW](#)

49 likes

mayor_bowser Yesterday, DC became the first city in the nation to employ thermal hydrolysis technology with the largest facility in the world. This project will allow DC Water to provide clean, green renewable power by collecting sewage for production of electric power & recoverable heat. This 'green gold' will reduce greenhouse gas emissions & save taxpayers money. Turning #pooptopower is just another way we

[Log in to like or comment.](#)



Maryland State Highway Administration: Topsoil blend



DDOT Urban Forestry Administration & Casey Trees:



First bagged product sales



Presence vs Toxicity

| | Biosolids | Other |
|----------------------------|----------------------|--|
| Lead | 30 ppm ¹ | 50-400 ppm: naturally occurring in soils ³ 100 ppm: recommended limit for gardening ⁴ |
| Triclosan (anti-microbial) | 235 ppb ² | 3,000,000 ppb: Colgate toothpaste |
| PBDEs (flame retardant) | 200 ppb ² | 500,000: household dust |

1: parts per million = one drop in the fuel tank of a car
 2: parts per billion = pinch of salt in ten tons of potato chips
 3: [EPA](#)
 4: [Univ. of Minnesota Extension](#)



Metropolitan Water Reclamation District of Greater Chicago



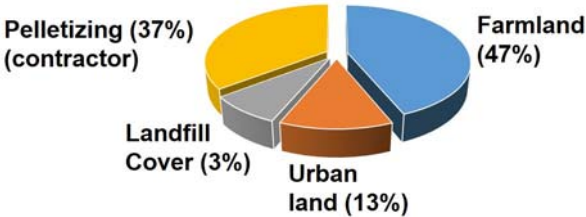
Dominic Brose, Environmental Soil Scientist
Allison Fore, Public and Intergovernmental Affairs Officer
 Sept. 6, 2017

Targeted Stakeholder Outreach

- **Biosolids Programs:**
 - **Farmland**
Stakeholders include:
 - Farmers
 - Neighbors (near and around application sites)
 - Elected officials, public health officials, extension agents
 - **Public sites (urbanland)**
Stakeholders include:
 - Golf courses and their customers
 - Village and park managers and their constituents
 - Homeowners and neighbors
 - Elected officials, public health officials



2016 Biosolids Utilization total 100,000 dry tons



Targeted Stakeholder Outreach

- Public Sites Typical Concerns and Questions:
 - Are biosolids safe?
I read online biosolids contain pathogens, drugs, metals, toxic chemicals, etc.
 - Can kids play in a park after biosolids application?
 - Can biosolids be used in a home garden?
 - How do biosolids work as a fertilizer?
What's in them?
 - How are they made?



Targeted Stakeholder Outreach

- Stakeholder outreach based on principles outlined in WERF's *Conducting Effective Community Outreach and Dialogue on Biosolids Land Application* (2011):
 - Building relationships
 - Creating opportunities
 - Exploring new proposals or ideas
 - Identifying opportunities for improvement
 - Working together to solve problems



Targeted Stakeholder Outreach

- Proactive approach:
 - Application site visits
 - Consult on topsoil / turf needs
 - Stakeholder / community meetings
 - End user survey
 - Promotional / educational materials
 - Internal and external documents
 - Research
 - Internal and external findings and results
 - Exhibiting at tradeshow / conferences



Media Advisories



Metropolitan Water Reclamation District of Greater Chicago

Press Release

Adrian Piro
Public and Environmental Affairs Chief
312.751.6633
adrian.piro@mwrdd.org
100 East Lake Street, Chicago, Illinois 60601

For immediate release
August 1, 2016

MWRD seeks applicants for Sustainable Landscaping and Biosolids User awards Applications due September 2, 2016

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) is accepting applications for its 2016 Sustainable Landscaping and Biosolids Beneficial Reuse Awards until September 2.

The awards will recognize the activities and innovations of individuals and organizations in Cook County such as park districts, villages, schools, golf courses, and athletic clubs in two separate categories: sustainable landscaping and beneficial use of biosolids. Biosolids are a product of the MWRD's water treatment process and are a sustainable alternative to chemical fertilizers.

The beneficial use of biosolids may be demonstrated through any one or a combination of the following:

- Continuous commitment to maximize and improve the cost-effectiveness of using biosolids.
- Promotion such as, but not limited to, referrals and field demonstrations.
- Educational efforts on the environmental/economic benefits of using biosolids.

Qualifications for the Sustainable Landscaping award will be demonstrated through the innovative use of green infrastructure, capital investment, and how an individual or organization promotes green landscaping to educate the community.

The goal is to present an award to an individual or community that integrates sustainable practices in the environment that manages stormwater.

Green infrastructure includes:

- Rainwater Harvesting, i.e. through rain barrels
- Rain Gardens
- Native Landscaping
- Stormwater Trees
- Pervious Pavement
- Blue-Skies
- Green Roofs
- Greenways
- Wetlands
- Green Alleys, Streets, and Parking Lots

Activities completed after January 1, 2011 are eligible for an award, and an individual or organization is eligible once every five years. There is no formal application form. Documentation should include figures, illustrations, narrative, and photos to help further explain the efforts. The evaluation process may include a site visit.

Submit application packages to Trust@paward.org or mail to:
Gangdong Tian
Monitoring & Research Department
Metropolitan Water Reclamation District of Greater Chicago
6001 W. Parkway Road
Chicago, IL 60644

Awards will be presented at the MWRD's fourth annual Sustainability Summit later this year. For more information about the biosolids program, awards or Sustainability Summit, contact (312) 751-6633.

###

Recovering Resources. Transforming Water

Established in 1955, the MWRD (www.mwrdd.org) is an award-winning, special purpose government agency responsible for wastewater treatment and stormwater management in Cook County Illinois.



Metropolitan Water Reclamation District of Greater Chicago

Press Release

Adrian Piro
Public and Environmental Affairs Chief
312.751.6633
adrian.piro@mwrdd.org
100 East Lake Street, Chicago, Illinois 60601

For immediate release
August 11, 2017

MWRD seeks applicants for Sustainable Landscaping and Biosolids User awards Applications due September 15, 2017

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) is accepting applications from Cook County individuals, organizations and businesses for its 2016 Sustainable Landscaping and Biosolids Beneficial Reuse Awards until September 15.

The awards recognize the activities and innovations from entities such as park districts, villages, schools, golf courses, and athletic clubs in two separate categories: sustainable landscaping and beneficial use of biosolids. Biosolids are a product of the MWRD's water treatment process and are a sustainable alternative to chemical fertilizers.

The beneficial use of biosolids may be demonstrated through any one or a combination of the following:

- Continuous commitment to maximize the use of biosolids to improve the cost-effectiveness of landscape management.
- Promotion such as, but not limited to, referrals and field demonstrations of biosolids.
- Educational efforts on the environmental/economic benefits of using biosolids.

Qualifications for the Sustainable Landscaping award will be demonstrated through the innovative use of green infrastructure, capital investment, and how an individual or organization promotes green landscaping to educate the community. The goal is to present an award to an individual or community that integrates sustainable practices in the environment that manages stormwater.

Awards will be presented at the MWRD's 6th Sustainability Summit to be held at the Stickney Water Reclamation Plant on October 23. For more information about the biosolids program, awards or Sustainability Summit, contact (312) 751-6633.

###

Recovering Resources. Transforming Water

Established in 1955, the MWRD (www.mwrdd.org) is an award-winning, special purpose government agency responsible for wastewater treatment and stormwater management in Cook County Illinois.

Save the Date Cards 2015 and 2016



Public enthusiasm and support for environmental sustainability is growing every day, and responsive local governments are developing programs that utilize local resources, save money, and improve the environment. Join us at our third annual Sustainability Summit.

No registration fee!

- Learn about free and low-cost resources available for your community.
- Meet speakers from industry experts and community leaders.
- Discover how green infrastructure can help improve water quality and prevent flooding.
- Meet elected officials.
- Learn how households can improve your turf quality and reduce your carbon footprint.

2015 SUSTAINABILITY SUMMIT
 Tuesday, November 10, 2015
 9 a.m. — 4:00 p.m. (Registration opens at 8 a.m.)
 Katherine Legge Memorial Lodge
 3901 South County Line Road
 #Madison Illinois

Complimentary refreshments and parking
 Hosted by the Metropolitan Water Reclamation District of Greater Chicago
 For more information go to RSVP, call 312-751-6433 or email publicaffairs@metwrd.org.

Public enthusiasm and support for environmental sustainability is growing every day, and responsive local governments are developing programs that utilize local resources, save money, and improve the environment. Join us at our fourth annual Sustainability Summit.

No registration fee!

- Learn about free and low-cost resources available for your community.
- Meet speakers from industry experts and community leaders.
- Discover how green infrastructure can help improve water quality and prevent flooding.
- Learn how households can improve your turf quality and reduce your carbon footprint!

2016 SUSTAINABILITY SUMMIT
 Friday, October 7, 2016
 9 a.m. — 1:00 p.m. (Registration opens at 8 a.m.)
 Maggie Daley Park
 337 East Randolph Street
 Chicago, Illinois

Complimentary refreshments
 Hosted by the Metropolitan Water Reclamation District of Greater Chicago
 For more information go to RSVP, call 312-751-6433 or email publicaffairs@metwrd.org.

Invitation 2015



Public enthusiasm and support for environmental sustainability is growing every day, and responsive local governments are developing programs that utilize local resources, save money, and improve the environment.

Join us November 10 at our third annual Sustainability Summit.


- Learn about free and low-cost resources available for your community.
- Meet speakers from industry experts and community leaders.
- Discover how green infrastructure can help improve water quality and prevent flooding.
- Meet elected officials.
- Learn how households can improve your turf quality and reduce your carbon footprint.

2015 Sustainability Summit Registration
 November 10, 2015
 9 a.m. — 1:00 p.m. (Registration opens at 8 a.m.)
 Katherine Legge Memorial Lodge
 3901 South County Line Road
 #Madison Illinois

Complimentary refreshments and parking
 Hosted by the Metropolitan Water Reclamation District of Greater Chicago
 To register, mail the registration card, call 312-751-6433, or email publicaffairs@metwrd.org
 RSVP by November 4, 2015.



Program 2015



**Metropolitan Water Reclamation District of Greater Chicago
Board of Commissioners**

Marygina T. Sprossendo
President

Barbara J. McGowan
Vice President

Frank Aulis
Chairman of Finance

Michael A. Alvarez
Vice President

Timothy Bradford
Cynthia M. Santos

Debra Shaw
David J. Walsh

David St. Pierre
Executive Director

Facebook
Twitter

Recycled on recycled paper from responsible sources

THIRD ANNUAL SUSTAINABILITY SUMMIT

Recovering Resources to Become the City of the Future

Friday, November 10, 2015
9 a.m. - 5 p.m.
Katherine Legge Memorial Lodge
3045 South County Line Road, Rosemont, Illinois

8:30 Check-in

Refreshments

9:00 Welcoming Remarks
Marygina T. Sprossendo, President of the MWRD Board of Commissioners

PANEL 1

Recovering Resources, Transforming Water

State of the District
David St. Pierre, Executive Director

Phosphorus Recovery/Reuse
Dr. Catherine A. O'Connor, Director of Engineering

Water Reuse and American Water
Robert J. Fogelinko, Supervising Civil Engineer

Food to Energy at the Calumet and Stickney WSPs
Thomas G. Harnett, Assistant Director of Engineering

Break

PANEL 2

Stormwater Management

Stormwater Management Phase 2 Updates
Jill Weaver, Senior Civil Engineer

Climate Resilience Initiatives - An Overview and Update
Amy Spangalis, Assistant Director of Maintenance Operations
Using Green Infrastructure for Managing Stormwater in Chicago
Jared Stankovic, 3rd District Urban, Chicago Urban

BENEFICIAL USES OF #120SLDS

Storm Regulations Revisited: PG Benefits: How It Benefits You!
Dr. Catherine Harnett, Supervising Environmental Soil Scientist

Benefits from Perspective
Dina Fawcett, Director, Parks and Recreation, Village of Rosemont

Analysis Presentation: Benefits User and Sustainable Landscaping
Dr. Thomas Spangalis, Director of Monitoring and Research Board of Commissioners

Wrap Up

>Please visit the MWRD State Treasurer's Cash Table to see if you or your community have had an Engineer Table.

CASH

Invitation 2016



**Metropolitan Water Reclamation District of Greater Chicago
Board of Commissioners**

Marygina T. Sprossendo
President

Barbara J. McGowan
Vice President

Frank Aulis
Chairman of Finance

Michael A. Alvarez
Vice President

Timothy Bradford
Cynthia M. Santos

Debra Shaw
David J. Walsh

David St. Pierre
Executive Director




Office of Public Affairs
Metropolitan Water Reclamation District of Greater Chicago
3045 South County Line Road, Rosemont, Illinois 60018

You are invited to a meeting of local and district officials to discuss sustainability resources, research and partnership opportunities within Cook County.

SUSTAINABILITY 2016 SUMMIT

Friday, October 7, 2016
9 a.m. - 5 p.m. (Registration opens at 8 a.m.)
Mistletoe Dairy Park
737 East Randolph Street
Chicago, Illinois

Complimentary refreshments
Hosted by the Metropolitan Water Reclamation District of Greater Chicago

To register: email the registration card, call 312.251.6839 or email publicaffairs@mwrd.org

RSVP by September 30, 2016
Limited seating available


2016 Sustainability Summit Registration

Name (Last, First, Middle Initial)
Title
Organization
Mailing Address
Email Address
Telephone Number(s)
Send this card by email, call 312.251.6839 or email publicaffairs@mwrd.org to register.
If you have any questions, please call 312.251.6839.



Water Environment Federation
the water quality people

Program 2016



**Metropolitan Water Reclamation District of Greater Chicago
Board of Commissioners**

Margaret T. Saporito, President
Michael A. Hagan, Treasurer
Sarkis J. Wilkoski, Chairman
Frank J. Kelly, Commissioner
David M. Jones, Commissioner
David M. Hagan, Commissioner


2016

**SUSTAINABILITY
2016
SUMMIT**

Metropolitan Water Reclamation District of Greater Chicago

2016

2016



SPEAKER PROFILES

Dr. Bernard Brink, Executive Director of the MWRD
Dr. Brink is the Executive Director of the Metropolitan Water Reclamation District of Greater Chicago. He has over 30 years of experience in the water utility industry, including his role as Executive Director of the Metropolitan Water Reclamation District of Greater Chicago from 2008 to 2012. He is a past President of the American Water Works Association and a past Chairman of the Board of Directors of the Metropolitan Water Reclamation District of Greater Chicago.

Dr. Kelly Kasper, Senior Vice President of the MWRD
Dr. Kasper is the Senior Vice President of the Metropolitan Water Reclamation District of Greater Chicago. He has over 20 years of experience in the water utility industry, including his role as Senior Vice President of the Metropolitan Water Reclamation District of Greater Chicago from 2008 to 2012. He is a past President of the American Water Works Association and a past Chairman of the Board of Directors of the Metropolitan Water Reclamation District of Greater Chicago.

Dr. Mark Walsh, President of the MWRD
Dr. Walsh is the President of the Metropolitan Water Reclamation District of Greater Chicago. He has over 20 years of experience in the water utility industry, including his role as President of the Metropolitan Water Reclamation District of Greater Chicago from 2008 to 2012. He is a past President of the American Water Works Association and a past Chairman of the Board of Directors of the Metropolitan Water Reclamation District of Greater Chicago.

David M. Hagan, Treasurer of the MWRD
David Hagan is the Treasurer of the Metropolitan Water Reclamation District of Greater Chicago. He has over 20 years of experience in the water utility industry, including his role as Treasurer of the Metropolitan Water Reclamation District of Greater Chicago from 2008 to 2012. He is a past President of the American Water Works Association and a past Chairman of the Board of Directors of the Metropolitan Water Reclamation District of Greater Chicago.

Margaret T. Saporito, President of the MWRD
Margaret Saporito is the President of the Metropolitan Water Reclamation District of Greater Chicago. She has over 20 years of experience in the water utility industry, including her role as President of the Metropolitan Water Reclamation District of Greater Chicago from 2008 to 2012. She is a past President of the American Water Works Association and a past Chairman of the Board of Directors of the Metropolitan Water Reclamation District of Greater Chicago.

Dr. Gwendolyn Tuck, Sustainability Coordinator of the MWRD
Dr. Tuck is the Sustainability Coordinator of the Metropolitan Water Reclamation District of Greater Chicago. She has over 20 years of experience in the water utility industry, including her role as Sustainability Coordinator of the Metropolitan Water Reclamation District of Greater Chicago from 2008 to 2012. She is a past President of the American Water Works Association and a past Chairman of the Board of Directors of the Metropolitan Water Reclamation District of Greater Chicago.

FOURTH ANNUAL SUSTAINABILITY SUMMIT
Revealing Resources to Reclaim the Ability of the Future

Friday, October 7, 2016
9:00 a.m. - 5:00 p.m.
Maggie Daley Park
333 East Randolph Street, 7th floor, Waukegan

Networking Network
Margaret T. Saporito, President, MWRD Board of Commissioners

State of the District
David M. Hagan, Treasurer

Stormwater Management Update
Joe Kasper, Senior Vice President

An Overview of Maggie Daley Park
Michelle Shavell, Project Manager, Chicago Park District

Benefits of Biosolids/Composted Biosolids
Kathy Kasper, Senior Vice President

The MWRD's Sustainable Composted Biosolids Use Program in Chicago
Gwendolyn Tuck, Sustainability Coordinator

Rivada Water and Sustainability Landscaping Awards Presentation
MWRD Board of Commissioners

Tour of Maggie Daley Park

Surveys 2015 & 2016



Thank you for participating in the Metropolitan Water Reclamation District of Greater Chicago's third annual Sustainability Summit.

The Summit is designed to offer an opportunity for community leaders, elected officials, public administrators, and land managers to network and learn about available sustainable and financial resources. It is our hope that you walk away with some ideas for accessing resources and partnerships that can help you in your work.

In order to provide you with suitable programming at future events, please complete this survey.

Section 1 Please select all topics you found interesting and helpful:

- How the MWRD will recover phosphorus
- The stability of water reuse
- Reducing leachate by converting food to energy
- Stormwater Management Phase 2 Updates
- An overview of the chlorine reduction program
- Using green infrastructure for managing stormwater in Chicago
- Biosolids: A renewable local resource
- Finding lost or forgotten funds through the Illinois State Treasurer's Office

Section 2 Please provide brief responses:

How did you hear about the 2015 Sustainability Summit?

Does your community use biosolids? If not, would you be interested in scheduling a consultation with a soil scientist? (list name and contact info, if interested)


Will you consider applying for a Biosolids User or Green Landscaping Award next year?

What other topics would be interesting?

Any other comments? (feel free to use the back if needed)

Section 3 Stay in touch!

- Call the Office of Public Affairs at 312-751-6633. We would be happy to arrange a speaker or participate in a community outreach event.
- Visit our webpage at www.mwr.org.
- Like us on Facebook at www.facebook.com/MetropolitanWaterReclamationDistrict and follow us on Twitter at @MWRDGC.



Thank you for participating in the Metropolitan Water Reclamation District of Greater Chicago's fourth annual Sustainability Summit.

The Summit is designed to offer an opportunity for community leaders, elected officials, public administrators and land managers to network and learn about available sustainable and financial resources. It is our hope that you walk away with some ideas for accessing resources and partnerships that can help you in your work.

In order to provide you with suitable programming at future events, please complete this survey.

Section 1 Please select all topics you found interesting and helpful:

- Stormwater Management Updates
- Benefits of Biosolids / Composted Biosolids
- State of the District
- The MWRD's Sustainable Composted Biosolids Use Program in Chicago

Section 2 Please provide brief responses:

How did you hear about the 2016 Sustainability Summit?

Does your community use biosolids? If not, would you be interested in scheduling a consultation with a soil scientist? (list name and contact info, if interested)


Will you consider applying for a Biosolids User or Green Landscaping Award next year?

What other topics would be interesting?

Any other comments? (feel free to use the back if needed)

Section 3 Stay in touch!

- Call the Office of Public Affairs at 312-751-6633. We would be happy to arrange a speaker or participate in a community outreach event.
- Visit our webpage at www.mwr.org.
- Like us on Facebook at www.facebook.com/MetropolitanWaterReclamationDistrict and follow us on Twitter at @MWRDGC.



the water quality people

21

Press Release 2015



Metropolitan Water Reclamation District of Greater Chicago

Press Release

For immediate release
November 20, 2015

Sustainability efforts unearthed at MWRD's annual summit



Metropolitan Water Reclamation District of Greater Chicago (MWRD) President, Matthew J. ...

Reservoir Plan to reduce flooding and improve area water quality.

"The annual Sustainability Summit gives our many area partners a chance to learn how we are developing initiatives in sustainability and learning how they can bring their ideas, skills and best management practices back to their own organizations and communities," said MWRD President Matthew Symonakis. "By bringing these like-minded groups together, collaborating and searching for answers, we are all working to make the world a better place to live for future generations."

Municipal leaders and environmental experts gathered to discuss and learn about best practices in sustainability, stormwater management, green infrastructure and renewable resources in water treatment through the Metropolitan Water Reclamation District of Greater Chicago's (MWRD) third annual Sustainability Summit.

This year's Sustainability Summit entitled "Reclaiming the Ability of the Future," held at the Katherine Legge Mansard Lodge in Evanston, brought together more than 75 experts to learn from the MWRD and its many local partners about the latest efforts to transform water and restore resources. The MWRD is striving to become energy neutral by 2023, while working toward the completion of the acclaimed Trestle and

The event allowed for a series of panels that centered on stormwater recovery, water quality and on-site, sustainable energy stormwater management, effective reductions on city streets and recent developments in the study and accessibility of biosolids. The MWRD worked with the Illinois Environmental Protection Agency, Illinois Department of Agriculture and several environmental groups to develop legislation that was signed earlier this year by Gov. Bruce Rauner to amend the Illinois Environmental Protection Act to create a new definition of exceptional-quality biosolids and make this recovered resource more accessible. The law establishes the MWRD's biosolids program, which has been heavily sought after by farmers, golf course managers, landscapers, municipalities, park districts and homeowners. The MWRD (continued)



Metropolitan Water Reclamation District of Greater Chicago

Press Release

For immediate release
November 23, 2015

Sustainability efforts unearthed at MWRD's annual summit (continued)

is currently expanding the use of biosolids by making them with woodchips provided by the city of Chicago.

Awards were also given for exceptional biosolids use and stormwater management efforts. Biosolids award winners include: Twin Oaks Landscaping, which developed the grounds at Maggie Daley Park using biosolids, and the Oak Lawn Park District and Waukegan Baseball of Oak Lawn for the beneficial use of biosolids on park grounds. The Chicago Department of Transportation (CDOT) was honored for its work incorporating green infrastructure into the Breaux Gateway project to better manage stormwater. CDOT modified the Breaux Gateway in the 47th Ward by using a concrete diaphragm, which intercepts stormwater flow and directs it into a pump-out station stormwater tunnel from the street into a planted swale. The plants and soil absorb the stormwater and keep it from entering the sewer system and local businesses. CDOT also replaced asphalt with green space to absorb stormwater, used plants to clean the stormwater of pollutants and



For the work on the Breaux Gateway project and the Metropolitan Water Reclamation District of Greater Chicago (MWRD), award winners were honored by MWRD President Matthew Symonakis (second from right) and MWRD Chairman of Finance, Frank Arls (third from right) at the third annual Sustainability Summit. (Clockwise from top left): MWRD President, Matthew Symonakis; MWRD Chairman of Finance, Frank Arls; MWRD Vice President, Steve ...

employed a more and gravel for easy to reduce erosion and filter out debris and sediment.

Oak Lawn was also honored for its participation in the MWRD's free rain barrel program. In only a few months since starting in the program this summer, the village ordered and received more than 4,000 rain barrels for its residents, the most of any participating community. In less than six months, the MWRD has distributed more than 20,000 free rain barrels among 59 communities and a dozen non-governmental organizations.

Recovering Resources, Transforming Water

Established in 1889, the MWRD is currently engaged in an award-winning, joint public-private partnership to improve stormwater and wastewater management in Cook County, Illinois.

Press Release 2016



Metropolitan Water Reclamation District of Greater Chicago

Press Release

For immediate release
October 14, 2016

MWRD's 4th Annual Sustainability Summit honors green landscaping, biosolids users



Chicago Park District Project Manager, Mike ...



Steve ...

Experimental biosolids, expert recommendations and extensive field government developing programs that utilize local resources, use money and improve the environment were praised for their sustainable response at the Metropolitan Water Reclamation District of Greater Chicago (MWRD)'s 4th Annual Sustainability Summit.

Held at the Maggie Daley Park in Chicago on Oct. 14, the Summit is an opportunity to engage and educate those pursuing residential and environmental advocacy with the best results and information to increase money and stormwater management. The event is also an opportunity to highlight some of the best work taking place at the county that promotes a sustainable environment and speaks to the MWRD's mission to research resources, lead research and water quality improvements.

"We congratulate our award winners for their dedication to providing our environment and investing in their sustainable resources and programs that make their fields and facilities distribution to their future generations," said President Matthew Symonakis. "We are happy to partner with municipalities of Cook County to help advance our common water recovery projects, and it is fulfilling to see our best work that has come as a result of these partnerships."

MWRD biosolids are a high-quality product of the water treatment process that can be recycled and turned into a valuable resource for plants. An ideal biosolids look like dark, fine-textured soil and are a sustainable alternative to chemical fertilizers. Composted biosolids can be used as soil compost and soil amendment in both school and public parks. The MWRD produces the biosolids as part of the water treatment process.

Other award winners included:

For their landscaping work, the City of Des Plaines Public Works and Engineering Department was honored for a project that replaced deteriorating public utility work with new porous concrete pavement. This biosolids as green (continued)

MWRD's 4th Annual Sustainability Summit honors (continued)



For their landscaping work, the City of Des Plaines Public Works and Engineering Department was honored for a project that replaced deteriorating public utility work with new porous concrete pavement. This biosolids as green (continued)



For their landscaping work, the City of Des Plaines Public Works and Engineering Department was honored for a project that replaced deteriorating public utility work with new porous concrete pavement. This biosolids as green (continued)

For the Village of Skokie, the Chicago and Metropolitan combined biosolids program awards for their landscaping projects, which recently made improvements of deep water permeable pavements, leading to enhanced in-streetwater runoff and improvement of water quality. In Chicago completed a parking lot reconstruction project with installing permeable concrete pavement that led to a 10% increase in water infiltration, drainage and protection to stormwater. Milwaukee was recognized for the implementation of the garden that has led to improved stormwater management in the village.

The Elmhurst Chicago Recharge Association (ECRA) was recognized with a certificate of appreciation for the organization's work as a facilitator for rain barrels. Partnering with the MWRD, the ECRA has helped distribute more than 5,000 MWRD rain barrels to area homeowners.

"The City of Des Plaines is proud to partner with the District in order to make sustainable practices more accessible to today's construction world," said Jim DeLillo, Des Plaines Assistant Director of Public Works and Engineering.

"In managing stormwater runoff and reducing associated maintenance, it takes many partners like these municipalities and organizations that we share as members of the Sustainability Summit," said MWRD Chairman of Finance Frank Arls. "Let's best encourage our partners to continue their efforts for sustainability, to help share on the long-term value of protecting our planet and continue the growth of our agency that make our communities a better place to live."

Participants at the Summit also heard about best and latest stormwater practices to share and heard announcements from future monthly events. They were also given a tour of Maggie Daley Park by Chicago Park District Project Manager, Mike ...



For their landscaping work, the City of Des Plaines Public Works and Engineering Department was honored for a project that replaced deteriorating public utility work with new porous concrete pavement. This biosolids as green (continued)



For their landscaping work, the City of Des Plaines Public Works and Engineering Department was honored for a project that replaced deteriorating public utility work with new porous concrete pavement. This biosolids as green (continued)

Recovering Resources, Transforming Water

Established in 1889, the MWRD is currently engaged in an award-winning, joint public-private partnership to improve stormwater and wastewater management in Cook County, Illinois.

Press release, media and social media August 2017

Metropolitan Water Reclamation District of Greater Chicago
Press Release

MWRD biosolids compost help energize Ford Heights field of dreams

The MWRD provided 100 tons of C-100 composted biosolids to help energize the field of dreams in Ford Heights, Illinois. The compost was used to improve the soil on the field, which is used for youth baseball. The project was a joint effort between MWRD and the Ford Heights Community Center. The compost was delivered to the field in several large bags. The project was a success and the field is now in better shape for the upcoming season.

DAILY Southtown
Column: In struggling Ford Heights, new youth baseball field offers hope

The field is a symbol of hope for the community. The new field is a testament to the power of community and the power of compost. The field is a place where children can learn the game of baseball and where they can have fun. The field is a place where the community can come together and support each other. The field is a place where the future is bright.

A Facebook post from the Ford Heights Community Center showing a group photo of the youth baseball team. The team is posing on the field, wearing their yellow and black uniforms. The photo is a group shot of about 20 people, including players and coaches. The post is a celebration of the team's success and the support they received from the community.

Water Environment Federation
 the water quality people

News Articles

From the community: The Village of Skokie Receives an Honorable Mention at the MWRD's 4th Annual Sustainability Summit

The Village of Skokie was recognized for its commitment to sustainability and environmental stewardship. The award was presented at the MWRD's 4th Annual Sustainability Summit, which was held in a grand ballroom. The award was presented to the Village Mayor and other community leaders. The award was a testament to the Village's dedication to making a positive impact on the environment.

FROM SEWAGE SLUDGE TO PLANT LANDS

How Chicago is transforming wastewater treatment plant sludge into plant lands. The process involves composting the sludge and using it to improve the soil. This process is a sustainable way to manage wastewater treatment plant sludge and it is a great example of how we can turn waste into a resource. The process is a testament to the power of innovation and the power of community.

HOMEWOOD - FLOITSBORO CHRONICLE

Community leaders meet to address local issues. The meeting was held in a community center and was attended by a large number of people. The meeting was a success and the community leaders agreed to work together to address the issues. The meeting was a testament to the power of community and the power of leadership.

Water Environment Federation
 the water quality people

News coverage and articles

"Evolving From Controlled Biosolids Distribution To Revenue-Generating Compost," *Water Online Magazine Guest Column*

<https://www.wateronline.com/doc/evolving-from-controlled-biosolids-distribution-to-revenue-generating-compost-0001>

Guest Column | January 25, 2017



Evolving From Controlled Biosolids Distribution To Revenue-Generating Compost

By Allison Fore

Chicago continues its long tradition of innovative biosolids management by introducing a new model for sustainability and community service.

Since the Metropolitan Water Reclamation District of Greater Chicago (MWRD) was created in 1889, it has worked to clean and protect the local waterways by treating wastewater and managing stormwater. Much can change in 127 years, and the evolution of the MWRD's work with solids generated by the wastewater treatment process offers a prime example of that change. The MWRD serves an equivalent population of 10.35 million people in an 883-square-mile area, covering nearly all of Cook County, IL, which includes Chicago and 128 suburban communities. To meet the demands of the vast amount of waste generated by the region, the MWRD owns and operates seven water reclamation plants and 22 pumping stations. The MWRD treats an average of 1.4 billion gallons of wastewater each day, with the capacity to treat over two billion gallons per day.



40 Years Of Successful Biosolids Use

For the past four decades, the MWRD has successfully used biosolids to reclaim land, support

YOU MAY ALSO LIKE...



MWRD Soil Enriches South Side Community Garden Projects
The Metropolitan Water Reclamation District of Greater Chicago (MWRD) has formed a new partnership with an urban gardening organization that will foster sustainable farming practices that will soon lead to a bountiful harvest.

Name That Biosolid: The MWRD Opens Up Naming Contest To Public

The Milwaukee Metropolitan Sewerage District in Wisconsin markets their biosolids as "Mikorganite." DC Water in Washington, DC recently launched "Bloom."

Flushed Resource Restores Ecosystem

very city has abandoned industrial sites. Encouraging life to return to these barren areas is a challenge.

MWRD's 4th Annual Sustainability Summit Honors Green Landscaping, Biosolids Users

Experienced landscapers, expert environmentalists and responsive local governments developing programs that utilize local resources, save money and improve the environment were praised for their sustainable measures at the Metropolitan Water Reclamation District of Greater Chicago's (MWRD's) 4th Annual Sustainability Summit.

environment
ration
quality people

Biosolids in the News

Sampling of articles generated through earned media

Chicago Tribune

<http://www.chicagotribune.com/suburbs/daily-southtown/news/ct-sta-flooding-meeting-st-1019-20161017-story.html>

Homewood Flossmoor Chronicle

<http://www.hfchronicle.com/article/2016/oct/03/ecological-work-coyote-run-golf-course-wins-award-h-f-park-district>

Millennium Reserve Monthly

<http://us9.campaign-archive2.com/?u=52c09c80aae494a01311c8614&id=ff1ab21f57&e=d46ccac95b>

Chicago Tribune

<http://www.chicagotribune.com/suburbs/skokie/community/chi-ugc-article-the-village-of-skokie-receives-an-honorable-m-2016-10-19-story.html>

Montreal Gazette

15_1208_Biosolids_Green_Spaces_Montreal_Gazette.pdf

Water Environment
Federation
the water quality people



For more information

| | |
|--|--|
| Dominic Brose | Allison Fore |
| Brosed@mwrdr.org | forea@mwrdr.org |
| 708-588-3134 | 312-751-6626 |



Lystek
Nothing wasted.
Everything to gain.

Communicating a Biosolids Management Program
Consistency & Transparency
Kevin Litwiller - Director, Marketing & Business Development

Who is Lystek?

- Established provider of end-to-end management solutions for biosolids & organics
- Founded in 2000 at the University of Waterloo, Ontario – locations in USA & Canada
 - Proprietary technology - protected by numerous US and CDN patents.
- Experienced management team – expertise in microbiology, wastewater engineering, regulatory affairs, agronomy, business development & marketing/communications
- Converting organic materials into products with a range of uses including;
 - Anaerobic Digester (AD) optimization, carbon source for BNR systems, etc.
 - Agriculture, sod farming, horticulture, soil revitalization, etc.

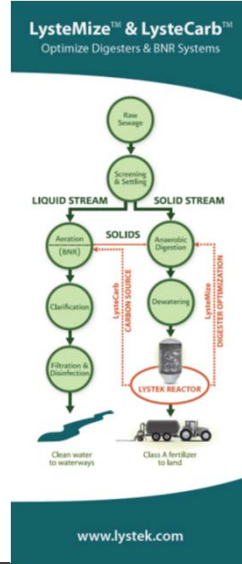


What does the technology do?

- Low temperature, low pressure Thermal Hydrolysis Process (Lystek THP)
- Produces a biofertilizer product (**LysteGro**) that meets/exceeds stringent, federal regulations – in the USA (US EPA, Class A EQ) & Canada (CFIA registered)
- Optimizes AD (digester) systems (**LysteMize**):
 - Reduces biosolids generation by 25% (or more)
 - Increases biogas yields by 40% (or more)
- Has also been deployed as a cost effective alternative to AD systems
- Can also produce an alternative source of carbon (**LysteCarb**) for BNR systems



Overview



Communications Challenges



Regional OMRC's – Details

- Numerous projects – two of which are large scale, regional, facilities for the reception & processing of biosolids & organics
- First - in a (Canadian) Township's zoned "Eco Industrial Park " – heart of a rural, farming community - population base of approx. 7,000 residents
- Second – in partnership with the Fairfield Suisun Sewer District (FSSD)– located on site (within City limits – population of approx. 150,000) - serves Bay Area
- Both initiatives - fully supported by local council & majority of the community
- Each capable of diverting 150,000 tons of biosolids/organics from landfills annually
- Providing services to generators within a radius of approx. 90-100 miles (150 km's)
- Extensive biofilter system for treating/managing air emissions/odors
- Fully lined & covered storage reservoirs for finished biofertilizer product

Key Issues/Community Concerns?

- Truck traffic and noise – safety?
- Odors – quality of life?
- Pathogens, metals – health & safety?
- Environmental impacts?
- Proximity to town?
- Jobs & other economic benefits?
- Why in our community?
- First Nations – environment, unresolved land claims



Public understanding & acceptance is key – can be a polarizing subject!

How to achieve community buy in?

UNDERSTANDING THE COMMUNITY IS KEY!

- Historical situation – what's the back story/history of biosolids in the area?
- What is the demographic make up of the community?
 - Rural (agriculture) vs. more urban – or mix?
 - What is the general education level/awareness?
 - What are their general values/beliefs?
- What are the economic drivers in the community?
- What are the other, existing sensitivities – i.e. environmental, political, etc.?

How to achieve community buy in?

UNDERSTANDING THE COMMUNITY IS KEY!

- Who are the key, community influencers/leaders – formal and informal?
- What can you learn from the above to help you formulate an engagement plan?
- **UNDERSTAND GOING IN THAT:**
 - **IT IS CRITICAL TO BE CONSISTENT & TRANSPARENT**
 - **IT WILL TAKE BOTH TIME & MONEY TO "SUCCEED"**
 - **NO MATTER HOW WELL PREPARED, THERE WILL STILL BE SURPRISES**
(i.e. MEDIA SAVVY "NIMBY's", FIRST NATIONS INTERESTS)
 - **NO MATTER WHAT YOU DO, IT IS UNLIKELY YOU WILL EVER ACHIEVE 100% "BUY IN" or SUPPORT – RECOGNIZE & ACCEPT THIS!**

Development of Key Messages

WHY SHOULD THE COMMUNITY WELCOME OR TRUST YOU?

- Who are you (people)? What have you done previously (expertise)? How does this align with the community's goals and values? **Explain.**
- What value will you provide the to the community? Reliability in uncertain market? Environmental sustainability? Job creation? Tax revenues? **Explain.**
- Does your solution meet/exceed regulatory guidelines and/or requirements? (local, state/provincial, federal, etc.) Is it safe and proven? **Explain.**
- Develop messages & open dialogue with simple, easy to understand language.
- Speak factually but avoid using big words, being too "scientific" or using too much "techno speak". ***If you cannot be understood, you will never be trusted!***

Ensure your messages are consistent, transparent & sincere!



Key Messages – A “Good News” Story

- It's about eliminating “waste” and leveraging advanced science and technology to produce innovative, diversified, safe and sustainable products/solutions, such as:
 - Biogas for “green” energy
 - Reductions in GHG's
 - Safer & more cost effective sources of carbon
 - Biofertilizer products that are proven to rebuild soils with vital organic matter, retain water & maximize the inherent value of macro & micro nutrients
- Alignment with local imperatives such as the Healthy Soils Initiative (California)
- Passionate and experienced professionals who are committed to taking action!

It's about Resource Recovery & the Circular Economy – Nothing wasted!



Example – Circular Economy



Formulating & executing your plan

LEARN/UNDERSTAND HOW TODAY'S MEDIA ENVIRONMENT WORKS

Being media "savvy" is critical!!

- First & foremost, invest in media training!
- Communication today is fast, global & permanent
- Need to get out "in front" & build trust quickly/efficiently
- Scientific facts/advancement is not always valued or appreciated
- Issues/challenges must be managed in a timely fashion
- Be prepared to take responsibility/be transparent

Formulating & executing your plan

GETTING THE MESSAGE OUT

Build a list of stakeholders & ensure the message is appropriate

Execute using a diverse range of communications approaches/channels, for example:

- Introductory letters to educate & inform the community about the initiative
- Establish & foster ongoing relationships with key community leaders
- Voluntary facilitation of a Public Advisory/Liaison Committee
- Public information centres (PICS) & presentations w/displays
- Reference & share information/research/references from credible, third party sources, (industry experts, customers, associations, educational institutions)
- Offer tours of any enabled sites (as practical)
- Get articles, endorsements & "good news" stories into the media!

Formulating & executing your plan

MORE IDEAS FOR GETTING THE MESSAGE OUT

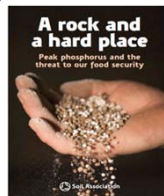
- Presentations to, and participation in, local Chambers of Commerce, etc.
- Create & distribute a community newsletter – hard copy & online (digital) formats
- Sponsorships of local sports teams, charities & community events
- Posting of Q & A's from the community on web site (& others), as appropriate
- Develop & distribute/share Case Studies, testimonials, etc.
- Educate/work with political stakeholders at all levels - local, state/provincial, federal
- Present/participate in local Council meetings
- Remain in full compliance with all regulatory framework & you can count on the "good word" & support from these critical, third party stakeholders

BE EMPATHETIC, CONSISTENT & TRANSPARENT AT ALL TIMES!

Examples

Third Party Studies/Papers

- *"The supply of phosphorus from mined phosphate rock could 'peak' as soon as 2033, - then this non-renewable resource will become increasingly scarce & expensive."*
- *"We are completely unprepared to deal with the shortages in phosphorus inputs, the drop in production and the hike in food prices that will follow."*
- *"In the longer term on a global scale, the majority of human excreta will need to be returned to a large proportion of agricultural soils to close the phosphorus loop."*
- *"We need to start thinking of human excreta as a resource, not a waste."*



UK Soil Association - 2010

Public Advisory Committee

Lystek Southgate PAC Meeting

Regulated Metal Information

Permanent chair named

Mr. Redmond will be the permanent chair of the Southgate Organic Materials Recovery Centre (OMARC) Public Advisory Committee (PAC) and, in a unanimous decision, Mr. Stephen G. Redmond, formerly an Environmental Management Specialist with the Ontario Ministry of Agriculture Food and Rural Affairs (OMAFRA) was elected as permanent chair.

Mr. Redmond recently left OMAFRA to pursue a full time interest in Redmond Agronomic Services, a professional Crop & Nutrient Management Consulting practice he has also operated since 1996.

Mr. Redmond is a recognized professional that understands the importance of the role of the Chair and the requirements for objectivity. He is well known in the local area as he was originally from Dundalk and has family that still resides in the community. As such, he has been addressing the various elements of the Lystek development very closely.

Here are some additional facts about Mr. Redmond that qualify him to act, as permanent Chair, for the PAC:

- Operated an agronomic consulting business since 1996
- BSc in Agriculture from University of Guelph
- Certified as a Crop Advisor in ON (CCA)
- Designated as a Professional Agriologist (P.Ag.) by the Ontario Institute of Agriologists
- Experience in monitoring construction of natural gas pipelines for farmers
- Experienced in sharing school courses, finance committees
- Currently a board member of Alisa Craig & Area Foodbank

As previously announced PAC meetings take place on the last Tuesday of each month from 7-9 PM at Lystek's Community Information Office at 40 Main St., Dundalk, Ontario.

For more information about this release and/or the PAC, please contact Kevin Llewellyn, Director of Business Development, at 1-888-551-6508 ext. 106 or kllwellyn@lystek.com



Stephen G. Redmond

Mr. Redmond is a recognized professional that understands the importance of the role of the Chair and the requirements for objectivity. He is well known in the local area as he was originally from Dundalk and has family that still resides in the community. As such, he has been addressing the various elements of the Lystek development very closely.

Here are some additional facts about Mr. Redmond that qualify him to act, as permanent Chair, for the PAC:

- Operated an agronomic consulting business since 1996
- BSc in Agriculture from University of Guelph
- Certified as a Crop Advisor in ON (CCA)
- Designated as a Professional Agriologist (P.Ag.) by the Ontario Institute of Agriologists
- Experience in monitoring construction of natural gas pipelines for farmers
- Experienced in sharing school courses, finance committees
- Currently a board member of Alisa Craig & Area Foodbank

As previously announced PAC meetings take place on the last Tuesday of each month from 7-9 PM at Lystek's Community Information Office at 40 Main St., Dundalk, Ontario.

For more information about this release and/or the PAC, please contact Kevin Llewellyn, Director of Business Development, at 1-888-551-6508 ext. 106 or kllwellyn@lystek.com



Press Release

FOR IMMEDIATE RELEASE
February 29, 2012

Public Advisory Committee elects former OMAFRA Environmental Management Specialist, Stephen G. Redmond as Permanent Chair

Dundalk, Ontario – Lystek advises that a vote was taken last night at the second meeting of the Southgate Organic Materials Recovery Centre (OMARC) Public Advisory Committee (PAC) and, in a unanimous decision, Mr. Stephen G. Redmond, formerly an Environmental Management Specialist with the Ontario Ministry of Agriculture Food and Rural Affairs (OMAFRA) was elected as permanent chair.

Mr. Redmond recently left OMAFRA to pursue a full time interest in Redmond Agronomic Services, a professional Crop & Nutrient Management Consulting practice he has also operated since 1996.

Mr. Redmond is a recognized professional that understands the importance of the role of the Chair and the requirements for objectivity. He is well known in the local area as he was originally from Dundalk and has family that still resides in the community. As such, he has been addressing the various elements of the Lystek development very closely.

- Here are some additional facts about Mr. Redmond that qualify him to act, as permanent Chair, for the PAC:
- Operated an agronomic consulting business since 1996
 - BSc in Agriculture from University of Guelph
 - Certified as a Crop Advisor in ON (CCA)
 - Designated as a Professional Agriologist (P.Ag.) by the Ontario Institute of Agriologists
 - Experience in monitoring construction of natural gas pipelines for farmers
 - Experienced in sharing school courses, finance committees
 - Currently a board member of Alisa Craig & Area Foodbank

As previously announced PAC meetings take place on the last Tuesday of each month from 7-9 PM at Lystek's Community Information Office at 40 Main St., Dundalk, Ontario.

For more information about this release and/or the PAC, please contact Kevin Llewellyn, Director of Business Development, at 1-888-551-6508 ext. 106 or kllwellyn@lystek.com



Newsletters



Welcome Note from the President

Welcome to our August newsletter! Over the past months, we have been working on a number of important projects. We are pleased to announce that we have successfully completed the first phase of our environmental assessment. This is a significant milestone in our journey towards a sustainable and responsible development. We will continue to work closely with the community and regulatory bodies to ensure that our project meets the highest standards of environmental protection.

Why is Lystek?

Lystek is a unique opportunity for the community. It offers a chance to improve the local economy and create jobs. We are committed to transparency and open communication throughout the entire process. We will provide regular updates and opportunities for public input. Our goal is to create a development that benefits everyone in the area.

Our ongoing projects

We are currently working on several key projects, including the finalization of our environmental assessment and the development of our business plan. We will be holding public meetings to discuss these projects and gather feedback. We encourage everyone to attend and share their thoughts.



Why Lystek? A Note from the President

It is my pleasure to share with you some of the reasons why we are excited about this project. Lystek is a unique opportunity for the community. It offers a chance to improve the local economy and create jobs. We are committed to transparency and open communication throughout the entire process. We will provide regular updates and opportunities for public input. Our goal is to create a development that benefits everyone in the area.

Public Advisory Committee - Update

The Public Advisory Committee (PAC) is an important part of our development process. We are pleased to announce that we have successfully completed the first phase of our environmental assessment. This is a significant milestone in our journey towards a sustainable and responsible development. We will continue to work closely with the community and regulatory bodies to ensure that our project meets the highest standards of environmental protection.



Case Studies

Reduce, Convert, Re-Use

Township of Centre Wellington, Ontario, Canada



Centre Wellington takes advantage of its wastewater plant upgrade to reduce costly storage problems and convert its "waste" into a nutrient-rich, valuable biofertilizer.

ABOUT
Centre Wellington is a township in southern central Ontario, with a population of 25,000. The township consists of 200 farms and 1000 homes and 1000 businesses, with a number of smaller communities, some with 100-200 residents.

CHALLENGES

- Wastewater production had exceeded the three wastewater treatment plants (WWTP) processing and storage capabilities.
- Limited space for the construction of on-site biofertilizer storage.
- Costs for year-round, off-site storage and disposal were considerable.
- Growing concerns about odor generation due to a new residential development within close proximity to the WWTP.

SOLUTION

- Adoption of advanced L'stek technology as part of the WWTP upgrade program.
- Production of "L'stek" a valuable, CFA-regulated, Class A quality liquid fertilizer product.

RESULTS

- Easy process for existing staff to operate.
- Reduced storage requirements.
- Reduction of off-site odor potential.
- Project completed on time and on budget.

[CASE STUDY] Nothing wasted. Everything to gain.

From "Waste" to Resource Recovery

City of North Burlington, Southwestern, Canada



The City of North Burlington is the first municipality in Western Canada to adopt and successfully implement L'stek's advanced, award-winning biofertilizer management solution.

ABOUT
Home to about 14,000 residents, North Burlington is a growing City located in west central Southwestern Ontario.

CHALLENGES

- Other issues, regulatory pressures & other challenges.

SOLUTION

- Implementation of a new environmental, sustainable, year-round, long-term biofertilizer management solution developed by L'stek.

RESULTS

- Biofertilizer derived from landfill and converted into a nutrient-rich, Class A quality fertilizer that can generate new revenue to offset costs.
- Exceeded City's requirements for a proven, year-round management program.
- No additional staff or special skills required.
- Project was completed on budget and ahead of schedule.

NOT AN IDEAL SITUATION
The City had been using a dump truck to collect and transport the biofertilizer to a landfill for disposal. The material was ultimately loaded into dump trucks via a discharge chute and transported to the City's landfill for disposal.

"This was far from ideal," admits Schultz. "The material took up valuable space and created problems for our landfill equipment and was a major source of odor" he adds.

Additional pressure for change also came from the Province's Waste Strategy Report, which mandated that North Burlington have a new biofertilizer management solution in place by November 1, 2015.

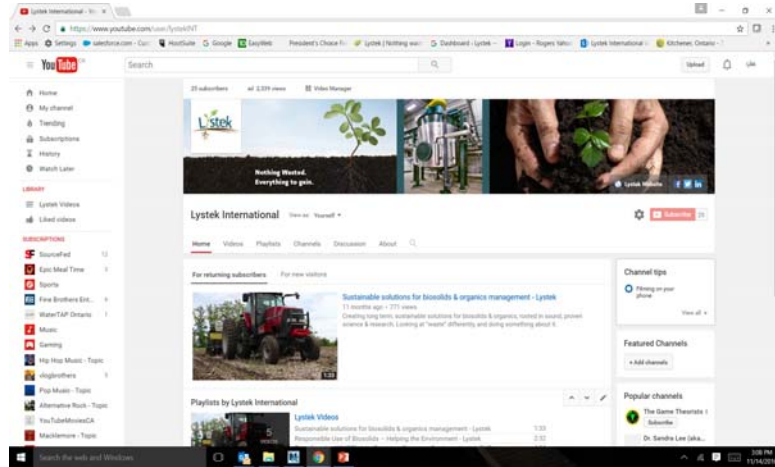
[CASE STUDY] Nothing wasted. Everything to gain.



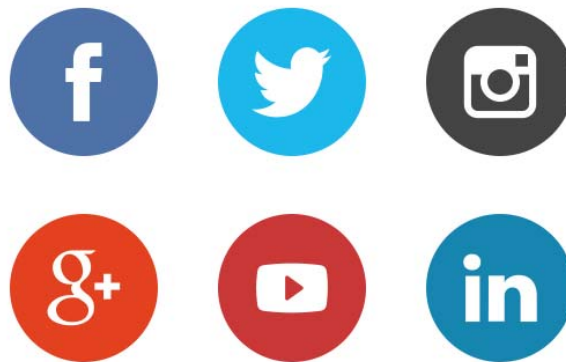
Tours, Open Houses, etc.



Educational Videos – You Tube



Social Media Channels



Media Releases



Media Release

FINAL

Over 100 Guests & Dignitaries Celebrate the Grand Opening of Lystek's First Biosolids Processing Center in the U.S.

Attention: Environmental, municipal, waste & recycling & business reporters/editors

October 27, 2016 - Cambridge ON. - For Immediate Release | Excitement was high at the Grand Opening of Lystek's new, 150,000 (U.S.) ton, state-of-the-art, Organic Material Recovery Center at the Fairfield Suisun Sewer District (Lystek OMRG-FSSD) in California on Friday, October 21st. Staff and management of Lystek and its parent company, the Tomlinson Group were joined by Greg Baatrup, GM of the FSSD and a variety of other distinguished guests including members of the FSSD board, a number of new and prospective customers, many of the primary project partners and sponsors of the event.

The celebration featured a ribbon cutting ceremony hosted by the Fairfield-Suisun Chamber of Commerce and a formal lunch program with welcome speeches by the Mayor of Fairfield, Harry Price, presentation of a Certificate of Recognition from Assembly member Jim Frazier and the California State Legislature as well as a keynote address by state Assembly member Bill Dodd.

In his address, Mr. Dodd referred to the partnership between Lystek International and the Fairfield-Suisun Sewer District as "the utility of the future" and said he is "just over the moon excited with what's happening." He also stated: "This is just (another) great example of what the power of creating partnerships is, partnerships between Suisun City and the City of Fairfield, the Sewer District, and Lystek. Let's just talk about public-private partnerships. We all know how important those are, because the government cannot do this stuff by itself. It never will be able to."

The event was also an opportunity to celebrate Lystek's new, four-year biosolids management agreement with Central Marin Sanitation Agency (CMSA) in addition to the base volume of 14,000 tons per year from the FSSD and previous commitments from other San Francisco Bay Area agencies. Everyone in attendance agreed that the opening of this ground-breaking facility is a major step forward in the progression toward reliable and sustainable, year-round organics management for the Bay Area.



Earned Media Coverage



Community Sponsorships

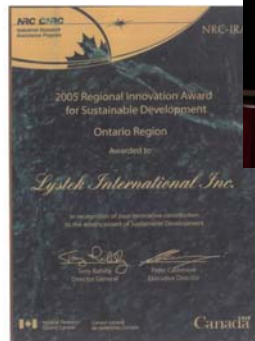


2011-12 Champions! Novice Storm Team Wins Regional Tournament


In case you haven't already heard, the Dundalk Novice Storm Hockey Team won the Kincardine Regional Silver Stick Tournament on December 30, 2011. Teams from all over this part of the province compete in this four-day tournament and the Dundalk team came out on top! The next step is an opportunity for these twelve local players to compete in the International Silver Stick Tournament in St. Clair Shores, Michigan on January 20-22, 2012. This is a once in a lifetime experience for these 8 year olds and Lystek is proud to have been chosen as the primary sponsor of the team for this event. Go Storm!



Awards/Recognitions





Thank You!



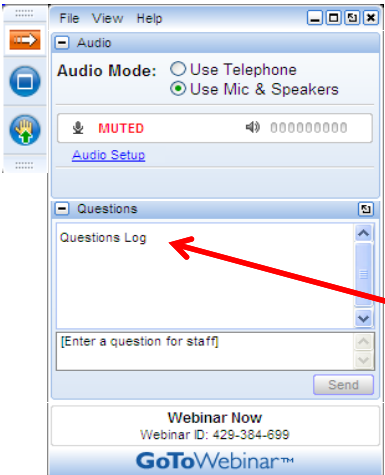
**Nothing wasted.
Everything to gain.**

t: 226-444-0186
e: info@lystek.com
w: www.lystek.com

s: 



Questions?



- **Audio Modes**
 - Listen using Mic & Speakers
 - Or, select "Use Telephone" and dial the conference (please remember long distance phone charges apply).
- **Submit your questions using the Questions pane.**
- **A recording will be available for replay shortly after this webcast.**

