

**CELEBRATING ACCOMPLISHMENTS,
INNOVATIONS, AND ACHIEVEMENTS
IN BIOSOLIDS...**

**...AND THE ORDINARY HEROES
THAT MAKE THEM POSSIBLE.**

September 11-13, 2016
Semiahmoo • Blaine, WA

ORDINARY EXTRAORDINARY PEOPLE THINGS

presented by



**NORTHWEST
BIOSOLIDS**

Unearthing Sustainable Solutions

SUNDAY

Pre-Conference

5:00 PM	Annual Meeting
5:30 PM	Annual Membership Meeting
7:00 PM	SOCIAL HOUR

MONDAY

Opening Session

Moderator: Rebecca Singer, King County, WA

8:30 AM	NW Biosolids Welcome
9:15 AM	From Offensive Tackle to Belt Filter Press Professional
10:00 AM	BREAK
10:30 AM	Blazing a Trail in Understanding Organics
11:15 AM	LUNCH

Contaminants

Moderator: Kate Kurtz, King County, WA

12:15 PM	Ebola and Antibiotics: Are They a Hazard in Sewage and Biosolids?
12:50 PM	Emerging Contaminants Summit 2016: Current State of Research, Regulations and Talking Points
1:25 PM	Carbamazepine in the Environment
2:15 PM	BREAK

Outreach

Moderator: Dan Eberhardt, City of Tacoma, WA

2:45 PM	Harvest Time: Understanding What Farmers Need to Know to Grow a Successful Crop
3:15 PM	Know What You Don't Know: Using Social Media and Market Research to Inform Loop Communication Strategies
3:45 PM	The Elephant (and Other Savanna Animals) in the Room: Who Is Hearing Your Message and Why?

Post-session Activities

4:45 PM	FUN RUN/WALK
5:30 PM	SOCIAL HOUR
6:30 PM	DINNER

TUESDAY

Project Spotlight

Moderator: Rebecca Singer, King County, WA

8:30 AM	Biosolids Project Spotlight Series
9:30 AM	BREAK

Science

Moderator: Jake Finlinson, King County, WA

10:00 AM	Is Land-applying Municipal Biosolids a Sustainable Strategy?
10:30 AM	Switchgrass Based Ethanol with Biosolids
11:00 AM	Bench-scale to Bulldozers: A Science-based Discussion on the Evolution of Biosolids Use in Mine Reclamation
11:30 AM	LUNCH

Growing with Biosolids

Moderator: Mike Van Ham, SYLVIS Environmental

12:30 PM	Show Me the Green! Smart Vegetation Investments and Their End Use Returns
1:00 PM	Building Soil with Class B Biosolids at Twenty Mile South Farm
1:30 PM	Tipping the Scales at TAGRO
2:00 PM	Biosolids Have What Trees Need
2:30 PM	BREAK

Application Techniques

Moderator: Melissa Newell, Pierce County

2:45 PM	Growing Crops with Biosolids: How Much to Apply?
3:10 PM	Changing Application Techniques
3:35 PM	The What's, Where's and How's of Biosolids Application Rates for Agronomic Crops
4:15 PM	Raffle
4:30 PM	CONFERENCE ADJOURNS

Sunday

Northwest Biosolids Annual Membership Meeting

5:00 PM

Don't miss this prime opportunity to learn about biosolids projects and events from attendees around the room. Participants come away with updates straight from biosolids agencies, subscriber companies, university researchers and regulators. A state of the organization review will also be provided by committee co-chairs, board members and staff.

BioFest Social Hour

7:00 PM

The BioFest Social Hour has something for everyone. Enjoy meeting other BioFest attendees, meet the vendors in our exposition roundtable and learn about the biosolids-related products and services available in the Pacific Northwest. View the posters for current biosolids research and agency projects.

Light hors d'oeuvres will be served.



Monday

Opening Session

Rebecca Singer
King County, WA

NW Biosolids Welcome

8:30 AM

From Offensive Tackle to Belt Filter Press Professional

9:15 AM

Richmond Webb | Environmental Machines & Services (TX)

Rebecca Singer will interview Richmond Webb about his journey from the NFL to the biosolids field. There will be a brief period for questions following the presentation.



Richmond Webb

RICHMOND WEBB is a former offensive tackle with the Miami Dolphins and Cincinnati Bengals. He now owns and operates a biosolids dewatering business in Texas. After playing thirteen seasons in the NFL—including seven consecutive Pro Bowls—he is now fighting a different type of battle and is a hero in his own right.

10:00 AM BREAK

Blazing a Trail in Understanding Organics

10:30 AM

Andrew Carpenter | Northern Tilth (ME)

Hear how Andrew has kept his vision through the series of crises that has been biosolids management in New England—from trace metals to C:N ratios, nitrate leaching, VOCs, development of NEBRA, dioxin, GHG emissions, and now pharmaceuticals and phosphorus availability. Andrew has worked through concerns, always with the big-picture in mind—returning biosolids to the soil builds soil health in a natural, sustainable manner that is good for the planet.



Andrew Carpenter

ANDREW CARPENTER is the lead consultant at Northern Tilth. He specializes in customizing nutrient management plans and conducting research that has included work on reducing phosphorus availability through the use of water treatment residuals and collaborating on the BEAM Model to calculate the carbon footprint of biosolids treatment and end use options. Andrew led the North East Biosolids & Residuals Association for the past few years as their President. Andrew's master's work was on land application of paper mill residuals from Wesleyan College. During his college career, he met Shelagh Connelly, President of Resource Management Inc., where he worked prior to starting Northern Tilth.

11:15 AM LUNCH

Ebola and Antibiotics

Are they a hazard in sewage and biosolids?

12:15 PM

Dr. Ian Pepper | University of Arizona (AZ)

Recently two issues related to sewage and biosolids have been raised as potential hazards: the Ebola virus and the presence of antibiotics. Ebola manifested itself as a hazard following several Ebola infected individuals arriving in the U.S. following the 2014 outbreak in West Africa. Questions that were frequently asked included: what is the fate of the virus in sewage and during wastewater treatment; and what risks were there to wastewater personnel? Antibiotics introduced into sewage through variety of mechanisms pose different potential risks to human health. Specifically, concern has centered on the potential for the development of "environmental antibiotic resistance" and specific antibiotic resistant bacteria including resistance to ciprofloxacin. In this presentation, the true risks from these potential hazards in sewage and subsequently in biosolids will be discussed.



Ian Pepper

DR. IAN PEPPER is a Professor at the University of Arizona, Director of the University of Arizona National Science Foundation Water & Environmental Technology Center (WET), and Co-Director of the new Water and Energy Sustainable Technology Center (aka WEST). Dr. Pepper is an environmental microbiologist whose research has focused on the fate and transport of pathogens in air, water, soils and wastes. More recently he has developed the University of Arizona Real-Time Sensor Laboratory. He is a member of six National Academy of Science Committees, and is a Fellow of the American Association for the Advancement of Science, the American Academy of Microbiology, the Soil Science Society of America, and the American Society of Agronomy. He is also a Board Certified Environmental Scientist within the American Academy of Environmental Engineers and Scientists. He is the author or co-author of eight textbooks, 40 book chapters, and over 160 peer-review journal articles.

Emerging Contaminants Summit 2016

Current state of research, regulations & talking points

12:50 PM

Rebecca Singer | King County Wastewater Treatment Division (WA)

This year, RemTech (Remediation Technologies) sponsored the first Emerging Contaminants Summit in Denver CO. This summit focused on contaminants, such as pharmaceuticals, 1,4-Dioxane, PFAS/PFOA and microbeads, found in drinking water, ground water, treated wastewater effluent and biosolids. This presentation is a summary of the Summit, which includes, the current state of research, federal regulations and communication strategies.



Rebecca Singer

REBECCA SINGER is the new Biosolids Supervisor for King County's Loop Biosolids Program. Prior to that she was the Statewide Biosolids Coordinator for Washington. As statewide coordinator, Rebecca worked with other Ecology programs, local health departments, utilities, elected officials, and the public to develop and maintain an effective biosolids management program for the state, and was responsible for developing regulations, permits, guidance documents and policy recommendations. Rebecca developed her expertise and practical management approach to soils, biosolids, and reclaimed water through her B.S. in Environmental Science and M.S. in Environmental and Forest Sciences from the University of Washington, plus several years' experience as a research and teaching assistant. Rebecca has been active in NW Biosolids for the past 6 years and is currently co-chair of the Research & Demonstration Committee.

Carbamazepine in the Environment

1:25 PM

Sally Brown | University of Washington (WA)

Carbamazepine is an anti-seizure medication that is found in significant concentrations in biosolids and wastewater effluents. It is highly persistent and has been shown to accumulate in the edible portions of plant tissue. Because of these two factors, it is critical to understand the behavior of this compound in biosolids and reclaimed waters. A review of peer review information on this compound will be presented, along with a plain-speak, real world translation courtesy of Andrew Carpenter from Northern Tilth.



Sally Brown

SALLY BROWN is a research associate professor at the School of Environmental and Forest Sciences at the University of Washington. She received her MS and PhD from the University of Maryland working with Dr. Rufus Chaney on long-term metal availability in biosolids amended soils. Dr. Brown is a Fellow in the Soil Science Society of America and was a two term member of the National Academy of Science Committee on Soil Science. She has been awarded the Clean Water Act Research Prize from US EPA for her work on biosolids. She writes a monthly column for BioCycle Magazine.

2:15 PM BREAK

Harvest Time

Understanding what farmers need to know to grow a successful crop.

2:45 PM

Dave Ruud | Boulder Park, Inc. (WA)

Learn the key points to communicate when talking with the farm community about biosolids, drawing on your direct experience and spotlighting what has and has not worked.



Dave Ruud

DAVE RUUD is a fourth generation cattle rancher living on his family's original homestead in Douglas County, Washington near Waterville. The ranch was homesteaded by his great-grandfather, Ole Ruud, in 1883. He was born and raised in Waterville and graduated from Waterville High School in 1980. He attended the University of Pacific and graduated from the University of Washington in 1984 with a degree in political science. After college he began cattle ranching and working on neighboring farms. He is married with three children. He has been the Operations Manager for Boulder Park Inc. since 1995. It is the largest biosolids land application project in Washington State serving over thirty publicly owned treatment works and managing well over one hundred thousand wet tons of biosolids annually.

Outreach

Dan Eberhardt
City of Tacoma, WA

Know What You Don't Know

Using Social Media and Market Research to Inform Loop® Communication Strategies

3:15 PM

Ashley Mihle | King County Wastewater Treatment Division (WA)

As scientists and communicators, we often make assumptions about the public's opinions, beliefs, and interests. We use these assumptions to guide our decision making and communication strategies, but are these assumptions correct? In 2015-16, King County used social media and market research to test these assumptions.

In the face of legislative challenges and in an effort to ensure the Loop® brand is relevant and accessible to target audiences, King County conducted both social media research and market research. This research resulted in a snapshot of general biosolids perceptions, support, and salience within King County as well as a better understanding of how target audiences relate to Loop brand messaging. The King County Biosolids team wanted to know what they don't know so they could better focus their communication tactics, align Loop brand messaging with specific audiences, and increase support for Loop®.



Ashley Mihle

ASHLEY MIHLE joined the King County Biosolids team last year after completing a dual masters at the University of Washington. She holds a MPA from the Evans School of Public Policy and Governance and a MS from the School of Environmental and Forest Sciences. Ashley was a market research project manager in her former career and is passionate about using data to inform community engagement strategies and effectively communicate science to the public. Originally from Houston, TX Ashley loves living in the Pacific Northwest and like most Seattlites, she spends most of her spare time outdoors hiking, biking, kayaking and camping.

The Elephant (and Other Savanna Animals) in the Room

Who Is Hearing Your Message and Why?

3:45 PM

Erika Kinno | King County Wastewater Treatment Division (WA)

People often ask what communication techniques and topics are of interest to legislators, and how to gain their support. This is a difficult question. In our democracy, no two legislators are the same and anyone can get elected. In addition, we rarely talk to legislators alone—we also talk to their staff, Governor or state agency staff, local elected officials, citizen advocacy groups, and businesses, whether these stakeholders are actually in the room or not. This presentation will provide a framework for approaching meetings with any combination of stakeholders—physically present or not—in a way that will help you accomplish your goals more strategically and convey your messages more effectively.



Erika Kinno

ERIKA BERGMAN KINNO is a Communications Specialist for King County Wastewater Treatment Division's Biosolids and Recycled Water Programs. Prior to this position, she served as an Aide to King County Council Chair Larry Phillips for 14 years. Erika works to find new customers for wastewater products, and to share the facts and good news about biosolids and recycled water with the public, advocacy groups, and decision makers at all levels of government. Originally from Seattle, Erika is fluent in Japanese and lived in Japan for five years. While there, she earned a MS in International Agricultural and Environmental Science from Tokyo University of Agriculture and Technology. She also holds a BS in Environmental Policy and Assessment from Western Washington University. In her free time she enjoys making food and crafting art from resources that would be otherwise wasted, and spending time with her 9 year-old daughter.

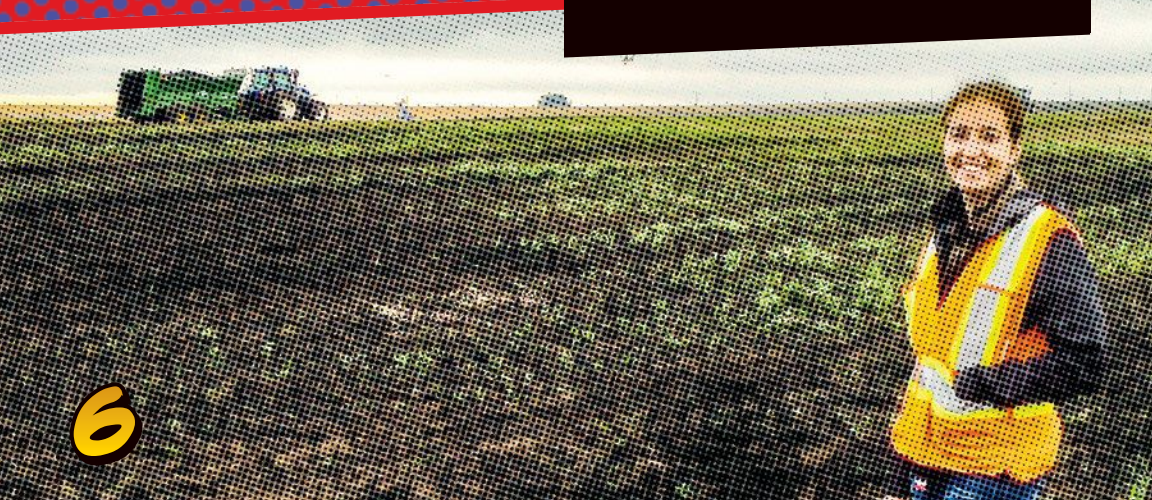
Heroes AMONG US!

NATASHA HARCKHAM serves as a "senior biosolids analyst" for the City of Calgary. This is an everyday title for an extraordinary role. Natasha's efforts drive one of Canada's most successful biosolids fertilization programs, which spans slurry injection and dewatered demonstrations.

Natasha Harckham



Natasha's extreme attention to detail and constant drive for excellence and transparency in Calgary's biosolids programs ensure that over 20,000 dry tonnes of Calgary's finest are applied to lands using the best practices available. She works tirelessly behind the scenes making things happen. Natasha's everyday commitment to excellence in operations, communication, to precision in all aspects of the delivery of Calgary's biosolids programs lead an ordinary land fertilization program to an extraordinary level of support and success.





Lesley Dampier

LESLEY DAMPIER works as a program manager for SYLVIS. Lesley's role in biosolids management in BC is as simple as it is complex. She oversees all of SYLVIS's BC biosolids management. This is extraordinary in that it involves overseeing numerous project managers, multiple sites, tens of thousands of bulk tonnes of biosolids used annually in projects that span the diversity of biosolids use itself—from reclamation to fertilization, from biosolids growing media to composts. Project Managers oversee the projects—Lesley works tirelessly behind the scenes to remove hurdles, guide and make project managers look good. It is not uncommon to get a barrage of e-mail replies to questions—putting out fires and kick starting new initiatives between 10 PM and midnight after she puts her kids to bed, returns from kick boxing and relaxing with a gin and tonic.



Lesley's ability to organize, compartmentalize, and keep projects and teams on track, lead to extraordinary biosolids management for a dozen BC municipalities. Everyday behind the scenes at SYLVIS for almost a decade—never in the spotlight, and to my knowledge, never been to a Biofest.

Tuesday

Biosolids Project Spotlight Series

8:30 AM

Rebecca Singer | King County Wastewater Treatment Division(WA)

Hear about successful biosolids projects from around the region.

9:30 AM BREAK

Science

Jake Finlinson
King County, WA

Is Land-applying Municipal Biosolids a Sustainable Strategy?

10:00 AM

Lynda McCarthy | Ryerson University (ON, Canada)

The prominent Great Lakes ecotoxicologists Cairns and Mount once stated that “no instrument has yet been devised that will measure toxicity and while chemical concentrations can be measured with an instrument, only *living* organisms can be used to measure toxicity”. Additionally, chemical analyses of potentially stressed aquatic and terrestrial systems are slow, expensive, and limited to the chemicals that standards have been developed for. With that caveat forming the fundamental foundation for three decades of scientific study, Dr. McCarthy’s research team has accessed, followed, and provided refinement for protocols in aquatic ecotoxicology experiments and subsequent terrestrial bioassays. The ensuing extensive knowledge base is helping to inform a CWN-funded biosolids bioassessment study that attempts to answer the over-arching question: *Is the practice of land-applying biosolids a sustainable strategy?* Dr. McCarthy will discuss her ecotoxicological experiments alongside a historical perspective of Great Lakes environmental science.



Lynda McCarthy

LYNDA MCCARTHY is a Professor in the Department of Chemistry and Biology at Ryerson University. Her research includes aquatic ecotoxicology, Great Lakes pollution and remediation, and examining the impact on organisms from land-applied pulp mill and municipal biosolids. She received her BSc from Queen's University and her PhD from the University of Waterloo and she was a federal government scientist with the Department of Fisheries and Oceans for many years at the Canada Centre for Inland Waters (CCIW). In the past decade, she has received over \$1.8 million for her research from funding sources such as the Natural Sciences and Engineering Research Council or NSERC and the National Centres for Excellence's Canadian Water Network. At Ryerson University, Dr. McCarthy is a founding member of Ryerson Urban Water (RUW), a collective of multidisciplinary experts working towards ensuring sustainable urban water. And lastly, she is active in attempting to help the experts move the environmental dialogue forward through the education of youth in the grade school and high school systems. Her motto is: *from the classroom to the boardroom to the legislature.*

Switchgrass Based Ethanol with Biosolids

10:30 AM

Sally Brown | University of Washington (WA)

Ethanol has been touted as a climate friendly alternative to fossil fuels. Ethanol can be produced from a range of crops with Switchgrass based ethanol being one of the least carbon intensive. We tested fertilizing with biosolids or co-cropping switchgrass and alfalfa to see if we could further reduce the carbon intensity of the fuel. Co-planting with alfalfa reduced yield as well as ethanol potential of the crop. Biosolids fertilized switchgrass had the same yield and ethanol potential as conventionally fertilized switchgrass. The carbon intensity of the biosolids fertilized fuel was about 10% lower because of the benefits of using recycled nutrients.

Bench-scale to Bulldozers

A science-based discussion on the evolution of biosolids use in mine reclamation

11:00 AM

Mark Teshima | SYLVIS Environmental (BC, Canada)

Mine reclamation is one of the longest running and most trusted forms of beneficial biosolids use. Used for over fifty years, from Pennsylvania to Coastal British Columbia, mine reclamation (e.g. disturbed areas resulting from base metal, coal and aggregate extraction) has accommodated hundreds of thousands of tonnes of residuals, systematically developing topsoil where there is none. It has developed into a viable biosolids management option for many Pacific Northwest biosolids generators. Mine reclamation can offer a high-capacity, long-term solution that maximizes the benefits intrinsic to biosolids, making it attractive and cost-effective. The development of mine reclamation into a feasible beneficial use option is the result of years of research to demonstrate that biosolids use is environmentally protective and supports the achievement of reclamation goals.



Mark Teshima

MARK TESHIMA is a Professional Chemist with over 12 years of residuals management experience. Mark has a Bachelor of Science in Environmental Chemistry from Thompson Rivers University and a Master of Science in Bioresource and Food Engineering from the Faculty of Agricultural, Life and Environmental Science at the University of Alberta. Mark has been with SYLVIS since 2004, gaining extensive experience in biosolids management including academic and applied research, residuals management options evaluations, policy development, and the design and implementation of beneficial use programs within myriad end use scenarios.

11:30 AM LUNCH

Show Me the Green!

**Smart vegetation investments
and their end use returns**

12:30 PM

John Lavery | SYLVIS Environmental (BC, Canada)

**Growing
with Biosolids**

Mike Van Ham
SYLVIS Environmental

On the road to becoming a “Green Millionaire”, Biosolids Beneficial Use Investors must carefully identify what Green Stock they will seed to get their returns. The right vegetation investment will achieve great returns in the form of achieved land use goals, and maybe even provide a high yield on the Carbon Credit Market.

What kind of Green to invest in is a serious question. The final investment decision may be at the discretion of the land owner, a qualified professional, or mandated by the government as part of reclamation bond requirements! Vegetation stock selection, combined with the investors final land use vision and goals will influence an entire cornucopia of decisions about site preparation, biosolids application rates, and post-application management, which ultimately impact, among other factors, management costs—the other important green in the discussion!



John Lavery

JOHN LAVERY is the Business Development & Special Projects Manager at SYLVIS. John has over 15 years of experience in residuals management, and applies his wealth of knowledge in managing the SYLVIS team. Throughout his career, he has undertaken work for, or collaborated with, governments, municipalities, and private industry in Canada, the United States, New Zealand, France, Australia and Chile.

Building Soil with Class B Biosolids at Twenty Mile South Farm

1:00 PM

Ben Nydegger | City of Boise (ID)

This presentation will provide a brief history of the City of Boise's *grand experiment* into becoming one of the largest municipally owned biosolids farming operations in the country. The 4,225 acre Twenty Mile South Farm (TMSF) is completely owned and operated by the City of Boise, Idaho. The TMSF contains over 3,300 acres of irrigated cropland utilized to beneficially recycle biosolids and produce alfalfa, corn, and winter wheat as the main crops. These commodities are sold to local dairies and the wheat is sold to a local granary to help offset wastewater treatment costs and keep sewer rates low for our customers. This presentation will review crop management and selection in addition to the challenges faced at the TMSF, including how we manage phosphorus in soils.



Ben Nydegger

BEN NYDEGGER has served as the Biosolids Program Manager overseeing the Twenty Mile South Farm operation for the City of Boise since December, 2011. Ben has worked for the City of Boise for 14 years serving as an Environmental Analyst prior to joining the TMSF team. Ben has a B.S. in Environmental Health and a Biology Minor from Boise State University.

Tipping the Scales at TAGRO

1:30 PM

Dan Eberhardt | City of Tacoma TAGRO (WA)

Learn how the City of Tacoma's TAGRO program has transformed our biosolids management program into a profit making model, the growing pains of this transition and opportunities for the future.



Dan Eberhardt

DAN EBERHARDT has worked for the City of Tacoma since 1985 and has been involved with TAGRO since 1990. He has been involved in all aspects of the program from manufacturing, distribution, bagging and marketing. Currently he has risen to the rank of Biosolids Supervisor. For the last 12 years he has served on the Annual Conference Planning Committee.

Biosolids Have What Trees Need

2:00 PM

Brian Vrablick | King County Wastewater Treatment Division (WA)

Biosolids contain all the essential macro and micro-nutrients that plants need to live and thrive. Trees are no different than any other plant in that they need sunlight, water, and nutrients to grow. This discussion will detail the King County forestry project and how we help our partners grow trees faster. We will also discuss some of the challenges and opportunities within the program.



Brian Vrablick

BRIAN VRABLICK is the Biosolids Forestry Project Manager for the King County Wastewater Treatment Division. He has managed forests on both sides of the Cascade Mountains over the past 25 years for public and private entities. His first experience with biosolids was as the Tiger Mountain forester with the WA DNR in the mid-1990s when the first applications occurred on Tiger. He then moved to NE Washington and managed the Forest Stewardship Program in six counties for the DNR. He then joined a private consulting firm and opened an office for them north of Spokane, eventually managing three offices in three states. Most of the work involved timber harvesting and fire hazard reduction projects on private property and contract work on government properties. For three years prior to joining the county, Brian owned and operated Woodridge Forestry as a sole proprietor.

2:30 PM BREAK

Growing Crops with Biosolids

How much to apply?

Application Techniques

Melissa Newell
Pierce County, WA

2:45 PM

Peter Severtson | Washington State Department of Ecology (WA)

A discussion of agronomic rate calculations using science and judgment. I'll walk through the process of soil testing and how to read the analysis, a brief look at soils at the application site, evaluating the nutrient needs of the crop, and developing application rates.



Peter Severtson

PETER SEVERTSON is a Regional Coordinator for the Washington State Department of Ecology. He holds a MS in Soil Science from the University of Washington and is a Certified Soil Scientist with SSSA. When he isn't buried in his work, Peter works as a member of the Ski Patrol and exerceizes his passion for flying.

Changing Application Techniques

3:10 PM

Brian Campbell | Natural Selection Farms (WA)

This interactive presentation will cover the changing application techniques of spreading biosolids on various crops in different weather climates, with examples taken from my own experiences and what I have learned from them. I will go through the history of when we first started land applications on our own hop fields to where we now spread biosolids onto over a dozen crops with several farmers throughout Yakima, Benton, Klickitat and Kittitas counties.



Brian Campbell

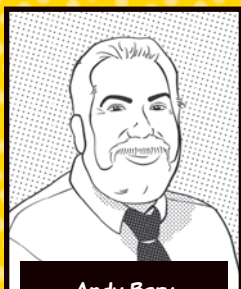
BRIAN CAMPBELL works with Natural Selection Farms, a third-generation family farming operation in Sunnyside, Washington. Their Beneficial Use Facility grew from their commitment to diverting precious nutrients away from landfills to make them available to our soils. NSF established the program to provide their farm with a comprehensive, cost effective nutrient program that would increase organic matter and balanced microbial activity, thus boosting the sustainability and productivity of our soils.

The What's, Where's and How's of Biosolids Application Rates for Agronomic Crops

3:35 PM

Andy Bary | Washington State University-Puyallup (WA)

Get ready to for this hands-on presentation that will demonstrate real biosolids application rates. Biosolids application rates can sometimes be a mysterious item to understand and calculate. This workshop will cover the ins and outs of the calculations with a hands-on approach to the calculations. You will come away with a new appreciation of soil nitrogen mineralization, nitrogen availability from biosolids and crop nitrogen fertilizer rates.



Andy Bary

ANDY BARY has been with WSU-Puyallup for 26 years conducting research and educational programing in biosolids management, composting and compost usage.

Raffle

4:15 PM

NW Biosolids & Conference Exhibitors

4:30 PM ADJOURN

Poster Session

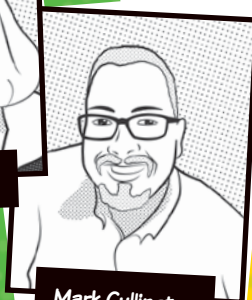
Posters will be on display during refreshment **BREAKS**, **BREAKFASTS**, and the **EVENING SOCIAL HOURS** on Sunday and Monday. Poster topics may include, but are not limited to, biosolids-related scientific studies and informational and educational subjects from large and small municipalities, consultants, and university students and faculty. Posters must be no larger than **6' x 4' (72" x 48")** and able to be free standing on an easel.

Reserve your poster spot by sending: Name(s) – presenter and authors, poster title and short description, and contact information to **REBECCA.SINGER@KINGCOUNTY.GOV**. Space is limited! Presentation slots during the Tuesday morning session will give preference to student projects in an effort to welcome new biosolids professionals. All posters submissions will be displayed during the conference.

CONFERENCE Committee



Sally Brown



Mark Cullington

Conference Co-Chairs

Sally Brown | University of Washington

Mark Cullington | Kennedy Jenks Consultants

Planning Committee

Dan Eberhardt | City of Tacoma

Jake Finlinson | King County

Roberta King | King County

Kate Kurtz | King County

Maile Lono-Batura | NW Biosolids

Janet McLoughlin | WSU Conference Management

Melissa Newell | Pierce County

Rebecca Singer | King County

Attendee INFORMATION

Lodging

Lodging is separate from your conference registration fee. Room rates at Semiahmoo range from **\$149 TO \$169**. Call the hotel directly to make your room reservation. Rooms must be reserved by **AUGUST 19** to receive the Annual Biosolids Management Conference group rate. It is recommended that you make your reservations early, as rooms fill quickly for this conference. When making your reservation, be sure to request the **NW BIOSOLIDS CONFERENCE** rate.

RESERVATION DEADLINE
AUGUST 19, 2016

<https://goo.gl/TiB1Xt>

Semiahmoo
9565 Semiahmoo Parkway
Blaine, WA 98230
855-917-3767 or 360-318-2000
www.semiahmoo.com

What to Wear

BIOFEST maintains a relaxed atmosphere. September weather in the Pacific Northwest is often warm and sunny, with the occasional cold rainy day. We suggest you pack casual, comfortable, versatile clothing. Don't forget appropriate clothing and shoes for the **FUN RUN/WALK** after sessions conclude Monday evening.

Vendor & Agency Exhibits

Vendor and agency exhibits will be featured at the Vendor Exposition on Sunday and Monday evenings and will remain on display throughout the conference in the ballroom.

EXHIBITOR DEADLINE
AUGUST 31, 2016

MEMBERS AND SUBSCRIBER MEMBERS of NW Biosolids may display products and equipment at a reduced rate of **\$100** (person staffing the exhibits must still pay for their conference registrations).

NON-MEMBERS will be charged an exhibitor fee of **\$550** in addition to the conference registration fees. If you are not yet a member and would like to become one and display at a reduced rate, please visit www.nwbiosolids.org/membership.htm to apply for membership.

Anyone interested in displaying products or equipment at the conference must complete the **VENDOR EXHIBIT REGISTRATION FORM** available online at cm.wsu.edu/biosolids2016. You may also call WSU Conference Management (Puyallup Office) at **253-445-4629** to register your exhibit.

Exhibit space will be assigned on a first- come, first-served basis. NW Biosolids member agencies and subscriber companies will be given first preference.

Sponsorship Opportunity

Would your company or organization like to support **BIOFEST 2016:**

ORDINARY PEOPLE, EXTRAORDINARY THINGS as a conference sponsor? Sponsorships available at **SUPPORTER (\$250)** and **SUSTAINER (\$550)** levels. Sponsor logos will be presented during

social hours, breakfasts, and on the main presentation screen during breaks and registration. Sponsors can now select specific breaks, beverages (Supporters), meals or sessions (Sustainers).

SPONSORSHIP DEADLINE
AUGUST 26, 2016

Continuing Education Units

Continuing Education Units (CEUs) will be offered for both **WASTEWATER** and **HEALTH CERTIFICATION**. If you plan to earn CEU's collect your CEU card(s) at the registration desk when you arrive. You must attend a full session block (AM or PM) to obtain credit and must get your card stamped at the registration desk following each session. CEUs will be applied for through Washington and Oregon award agencies. Contact WSU Conference Management at **253-445-4629** or **JANET.MCLOUGHLIN@WSU.EDU** for more information about academic credit.

Scholarships

NW BIOSOLIDS SCHOLARSHIPS covering the conference registration fee are available to biosolids professionals, students, regulators, and others requiring assistance. To apply, please visit the conference website at **CM.WSU.EDU/BIOSOLIDS2016** for an online application form.

SCHOLARSHIP DEADLINE
AUGUST 17, 2016

Registration

To enroll, complete and send the enclosed Conference Registration Form. Make your check, money order, or purchase order payable in U.S. funds drawn on a U.S. bank to: **WASHINGTON STATE UNIVERSITY**.

EARLY REGISTRATION ENDS
AUGUST 29, 2016

PACKAGE A (FULL CONFERENCE)

NW Biosolids Member	Early . . . \$455	Regular . . \$525
Non-member	Early . . . \$555	Regular . . \$625

Includes full conference registration fee, social hour on Sunday; breakfast, lunch, social hour, dinner and breaks on Monday; breakfast, lunch and breaks on Tuesday. Lodging is not included.

PACKAGE B/C (MONDAY ONLY/TUESDAY ONLY)

Early . . . \$335	Regular . . \$400
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Includes registration fee, lunch and breaks for a single day of attendance. Lodging is not included.

PACKAGE D (STUDENT/RETIRED PROFESSIONAL)

Early . . . \$335	Regular . . \$400
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Includes the same as Package A. Must be a full-time student at a high school or an accredited college/university. Lodging is not included.

Registration



Please complete the following information.

Duplicate as needed and use a separate form for each person attending

the conference. **EARLY REGISTRATION** must be postmarked, phoned, e-mailed or submitted online by **AUGUST 29, 2016.**

WSU CONFERENCE MANAGEMENT

PO Box 645222, Pullman, WA 99164-5222

253-445-4629 • janet.mcloughlin@wsu.edu

Online Registration: cm.wsu.edu/biosolids2016

REGISTRATIONS RECEIVED AFTER AUGUST 29 WILL BE CHARGED THE REGULAR REGISTRATION PRICE.

Substitutions are welcome. Eighty percent of the registration fee is refundable if written cancellation is received by **AUGUST 29.** Call WSU Conference Management (Puyallup) at **253-445-4629** about general conference questions, vendor and agency exhibits, posters, and special accommodations under the Americans with Disabilities Act.

CONTACT INFORMATION (PLEASE PRINT)

Name		
Title	Organization	
Mailing Address		
City	State/Province	ZIP/Postal code
Country	E-mail	
Daytime phone	Fax	
School (if student)	Student ID#	

☐ This is my first time attending the NW Biosolids Management Conference.

PACKAGE

Package A (Full conference) ☐ I am a NW Biosolids Member (-\$100)

Package B (Single day: Monday)

Package C (Single day: Tuesday)

Package D (Student)

☐ Special dietary requirements:

BY 8/29

☐ \$555

☐ \$335

☐ \$335

☐ \$335

AFTER 8/29

☐ \$625

☐ \$400

☐ \$400

☐ \$400

EXTRA MEAL TICKETS

☐ Breakfast (Monday) \$26.00 × (quantity)

☐ Lunch (Monday) \$26.00 × (quantity)

☐ Dinner (Monday) \$39.00 × (quantity)

☐ Special dietary requirements:

☐ Breakfast (Tuesday) \$26.00 × (quantity)

☐ Lunch (Tuesday) \$26.00 × (quantity)

TOTAL AMOUNT DUE \$

☐ Payment is included for the total amount listed above

(Make check payable to Washington State University in U.S. funds drawn on a U.S. bank)

☐ Bill my company, P.O. # Bill to the attention of:
Billing address:

☐ To register using a credit card, please register online at:

cm.wsu.edu/biosolids2016



NORTHWEST BIOSOLIDS

Unearthing Sustainable Solutions

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