OPENING PLENARY THINK TANK
Mt. St. Helens Ballroom

9:00 AM – 10:15 AM

Catalyzing Symbiotic Connections:
Food, Soil, Compost, Energy
Moderator: Nora Goldstein, BioCycle

Stephen Jones
The Bread Lab, Washington State University

Ned Foley
Two Particular Acres

Sally Brown
School of Environmental and Forest Sciences, University of Washington

Rhys Roth
Center for Sustainable Infrastructure

Coffee • Grand Ballroom • 10:15 AM–11:00 AM

TRACK 1
Washington Room

11:00 AM – 12:15 PM

Food And Soil Connections
Moderator: Carla Castagnero, AgRecycle

Stephen Jones, Plant Breeding, Nutrition … And The Soils
Ned Foley, Who Grows Your Pint? The Compost Connection
Why Farms Love Compost
Nathan Fleming, Dirt Hugger

Food Waste: Attitudes, Behaviors And Public Engagement
Moderator: Ashley Zanolli, Emerging Possibility LLC

Household Food Waste Management Strategies And Attitudes
Angel Arroyo-Rodriguez, Ohio Environmental Protection Agency
Understanding Household Level Food Waste
Laura Moreno, University of California, Berkeley
Working With Cities To Measure And Tackle Wasted Food
Darby Hoover, Natural Resources Defense Council

Buffet Lunch • Grand Ballroom • 12:15 PM–1:45 PM

TRACK 2
Clark Room

1:45 PM – 3:30 PM

Policies, Regulations To Accelerate Organics Recycling
Moderator: Chris Voell, Danish Trade Council, North America

Denmark’s Integrated Organics Recycling And Biogas Strategy
Thomas Young Hwan Westring Jensen, Danish Energy Agency

Catalyzing Dairy Digester Industry In California
Casey Walsh Cady, California Department of Food & Agriculture

Renewable Natural Gas Developments In Washington State
Peter Moulton, Washington State Department of Commerce
Jim Jensen, Washington State University (WSU) Energy Program

Uncovering The Complexities Of Food Donation System
Moderator: Ashley Zanolli, Emerging Possibility LLC

Environmental, economic and nutritional trade-offs between different pathways to rescue and redistribute food
Opportunities and barriers in prepared food donation
Coordinating resources and working cooperatively
Stakeholder interviews and life cycle assessment

Panelists:
Holly Stirnkorb, Metro Portland
Sanne Stienstra and Peter Canepa, Oregon Department of Environmental Quality
Katie Pearmine, Oregon Food Bank

Refreshments • Grand Ballroom • 3:30 PM–4:15 PM

4:15 PM – 6:00 PM

Organics Recycling Infrastructure, Collection In California
Moderator: Nora Goldstein, BioCycle

2018 Processing Infrastructure Assessment

Organics Collection — Evaluating Options For Provision, Payment And Compliance
Carrie Baxter, R3 Consulting Group, Inc.

Key Elements Of Organics Recycling Project Feasibility Studies
Cindy Liles, Clements Environmental Corp.

Laying Groundwork For Food Scraps Separation Policy
Moderator: Darby Hoover, NRDC

Policy Development, Food Generating Business Tonnage Estimates
Jennifer Erickson, Metro Portland

Food Scraps Program Evaluation System
Al Mowbray, Metro Portland

Applying The Food Waste Estimator Tool
Lorenzo Macaluso, Center for EcoTechnology

Stephen Jones
The Bread Lab, Washington State University

Ned Foley
Two Particular Acres

Sally Brown
School of Environmental and Forest Sciences, University of Washington

Rhys Roth
Center for Sustainable Infrastructure
# BioCycle West Coast 19 Conference

**BIOCYCLE WEST COAST19**

**CATALYZING ORGANICS RECYCLING**

**APRIL 1, 2, 3, 4, 2019 • PORTLAND, OREGON**

## Tuesday, April 2, 2019

### Coffee • Grand Ballroom • 10:15 AM – 11:00 AM

<table>
<thead>
<tr>
<th>TRACK 3</th>
<th>TRACK 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clackamas Room</td>
<td>Multnomah Room</td>
</tr>
</tbody>
</table>

### 11:00 AM – 12:15 PM

**AD Of Municipal Organics**
- **Moderator:** Craig Coker, BioCycle
- Decentralized Network Of Anaerobic Digesters
- Serves Large Municipalities
  - Paolo Carollo, Entsorga Group
- San Luis Obispo AD Facility — California Case Study
  - Thomas Gratz, Hitachi Zosen Inova USA, LLC
- Facilitating Food Waste Digestion, Nutrient Recovery
  - Poul Rasmussen, Renew Energy

**Optimizing Food Waste Separation**
- **Moderator:** Rhodes Yepsen, Biodegradable Products Institute
- Best Practices For Front-Of-House Collection
  - Kate Bailey, Eco-Cycle
- Tapping The Enthusiasm: Food Scraps Separation In The Cafeteria
  - Nick Isbister, City of Gresham (OR)
- Bin Labeling, Color Coding And Collection Terminology — A National View
  - Kayla Walsh, Minnesota Pollution Control Agency

### Buffet Lunch • Grand Ballroom • 12:15 PM – 1:45 PM

### 1:45 PM – 3:30 PM

**Codigestion At Water Resource Recovery Facilities (WRRFs)**
- **Moderator:** Craig Coker, BioCycle
- LCA And Cost Analysis To Evaluate WWTP To WRRF Upgrade
  - Ben Morelli, Eastern Research Group, Inc.
- Codigestion Of Biosolids To Energy Enhancement Project
  - Rick Sapir, Hawkins Delafield & Wood LLP
- Digester Start Up Commissioning And Training
  - Dave Baran, Quasar Energy Group
- D3 vs. D5 RINs — A Codigestion Conundrum
  - Greg Kester, California Association of Sanitation Agencies

**Behavior Change Strategies To Catalyze Organics Recycling**
- **Table Talk Instructors:** Jennifer Tabanico and Kaitlin Phelps, Action Research
- Interactive session explores behavior change tools and their applicability to organics diversion
- How to go beyond knowledge and awareness to create effective behavior change in your audience
- Best practices for using strategies such as social norms, prompts, and commitments
- Examples of strategies in practice
- Small group exercises to discuss how your programs can use behavioral strategies

### Refreshments • Grand Ballroom • 3:30 PM – 4:15 PM

### 4:15 PM – 6:00 PM

**Composting, Compost Utilization**
- **Moderator:** Bob Barrows, Oregon Department of Environmental Quality
- Achieving 0.5% Contamination In Compost
  - Tracie Bills, SCS Engineers
- Composting Liquid Dissolved Air Flotation Sludges
  - Craig Coker, Coker Composting & Consulting
- Registering Compost For Sale On West Coast
- Compost Operations Maintenance
  - Ted Dirkx, Vermeer Corporation

**TABLE TALK**

**Advancing Renewable Natural Gas Deployment**
- **Moderator:** Jim Jensen, WSU Energy Program
- State clean fuel credit valuations, pricing
- Building consensus on pipeline injection standards
- Evaluating Renewable Portfolio Standards for RNG
- Physical and contractual pathways to RNG end users
- **Panelists:**
  - Brad Pleima, EcoEngineers
  - Dan Avery, Oregon Department of Energy
  - Tim Olson, California Energy Commission
  - Peter Moulton, Washington State Department of Commerce

**Note:** All speaker biographies are available on website: bit.ly/bcwc19bio
Food Scraps Management — On-Site And Innovative
Moderator: Nora Goldstein, BioCycle

Food Cycle Drop-Off In San Diego County
Jessica Toth, Solana Center for Environmental Innovation

Compost Education And Organics Collection
At Stanford University
Julie Muir, PSSI/Stanford Recycling

Testing Feasibility Of Microdigester At Food Bank
Katie Chapman, Jacobs
Donovan James, Oregon Food Bank

Yard Trimmings, Composting Emissions Management
Moderator: Lorenzo Macaluso, Center for EcoTechnology

Mulching Leaves In Place To Improve Turf And Soil Health
Jean Bonhotal, Cornell University

Upgrading Facilities When Developments Encroach
Tamara Thomas, Terre-Source LLC

Testing Technologies For VOCs, Ammonia And Odor Emissions
CE Schmidt, Environmental Consultant
Tom Card, Environmental Management Consultant

TABLE TALK
Managing Organics In The PFAS Age
Moderator: Maile Lono-Batura, Northwest Biosolids

- What are PFAS, pathways of exposure, uncertainty factors
- Detection in biosolids, composts, soils, paper food packaging
- PFAS policies and bans
- Assessment of alternative products

Panelists:
Ned Beecher, North East Biosolids & Residuals Association
Rhodes Yepsen, Biodegradable Products Institute
Peter Severtson, Washington State Department of Ecology
Rooney Kim Lazcano, Purdue University

Changing The Conversation Around Wasted Food: Oregon Case Studies
Moderator: Bob Barrows, Oregon Department of Environmental Quality

- State strategies to prevent Wasting of Food
- Wasted Food Measurement Study
- Messaging, campaigns and industry engagement
- Funding to promote prevention, facilitate food rescue

Panelists:
Elaine Blatt and Julie Miller, Oregon Department of Environmental Quality
Shaunna Sutcliffe, City of Gresham (OR)

Compost And Urban Soils
Moderator: Craig Coker, BioCycle

Soil Amendment Ordinances, Compost
And Storm Water Management
David McDonald, Seattle Public Utilities

Carbon Accounting For Compost Use In Urban Regions
Sally Brown, University of Washington

Emerging Products In The Compost Marketplace

Compostable Foodservice Packaging
Moderator: Nora Goldstein, BioCycle

- Compostable foodservice packaging (CFSP) life cycle assessment
- Integration of CFSP in zero waste programs
- Composter perspectives: food only vs. inclusion — and why
- Influence of composting conditions, duration on CFSP

Panelists:
David Alaway, Oregon Department of Environmental Quality
Jack Hoeck, Revius
Rhodes Yepsen, Biodegradable Products Institute
Carla Castagno, AgRecycle

BioCycle Town Hall: Panic And Prosper — Leveraging The BioCycle Community At The Climate Crossroads
Moderators: Nora Goldstein, BioCycle and Louise Bruce, Team BioCycle
Biogas Conditioning
Moderator: Craig Coker, BioCycle
Biogas Upgrading Using Membrane Separation
At Small Facilities
Joshua Peppers, California Air Resources Board
Ammonia In Biogas And Flare NOx Emissions — Permitting Challenges
Joerg Blischke, Black & Veatch
Membrane and Desulfurization Integration: Is it Efficient?
Robert Lems, DMT Clear Gas Solutions

Sustainability Behind Bars In Washington State
Moderator: Sally Brown, University of Washington
Bringing Composting Education To Incarcerated Individuals
Video Overview, Monroe Correctional Complex
Margaret Burke, University Beyond Bars
Kelli Bush, Sustainability In Prisons Project, The Evergreen State University
Food Waste Management Innovations
Chuck Henry, Critical Practices LLC

Anaerobic Digestion — Current Research
Moderator: Craig Frear, Regenis
Resuscitating Digesters With pH Adjustment
Joshua Rapport, CleanWorld
Synergistic Impacts Of Codigesting Food Waste
Michael Keleman, InSinkErator
Biogas Production From Wastewater-Derived Micro-Algal Biomass
Göksel Demirer, Central Michigan University

Organics Recycling In The Circular Economy
Moderator: Nora Goldstein, BioCycle
Landfill Gas Management: Paradigm Shift In Era Of Organics Diversion
Donna Serrati, Region of Waterloo, Ontario
Industrial Symbiosis In Washington State — Aarhus University Case Study
Rhys Roth, Center for Sustainable Infrastructure
Industrial Symbiosis In Denmark — Louise Hansen, The Danish Trade Council
Inputs, Outputs In The Symbiosis Cycle Panel Discussion

Farm Digestion, Nutrient Recovery And Biorefineries
Moderator: David Cooley, US EPA AgSTAR
Farm AD In Oregon: Opportunities And Realities
Wym Matthews, Oregon Department of Agriculture
Tim Bielenberg, Oak Lea Dairy
Cost-Efficient Digestion For Small Dairy Farms
Ron Skinner, Skinner AgSolutions, Inc.
Garbage Can! Evolution Of A Biorefinery
Embrey Bronstad, Washington State University
Concentrating Digester Effluent To Maximize Nutrient Value
Keith Lampi, Fluid Technology Solutions, Inc.

Edible Food Recovery
Moderator: Angel Arroyo-Rodriguez, Ohio EPA
Consider An Apple Core: Impact of Edibility on Food Waste Measurement
Laura Morena, University of California, Berkeley
Los Angeles County Food Donation And Recovery Outreach
Jennifer King, Los Angeles County Public Works
Food Recovery Program Models For Local Jurisdictions
Monaliza Noor, HF&H Consultants LLC

BioCycle Town Hall: Panic And Prosper — Leveraging The BioCycle Community At The Climate Crossroads
Moderators: Nora Goldstein, BioCycle and Louise Bruce, Team BioCycle