

California Bioresources Alliance 2022 Bios

In order of appearance

DAY 1: WED, NOVEMBER 9TH

SESSION 1: BIORESOURCES FEEDSTOCKS 1

Dan Noble



Dan Noble is a Founder of Noble Bioresources, Inc. (NBI; NobleBioresourcesInc.com), a majority owned subsidiary of Noble Resources Group, LLC. NBI is a bioproducts market & industry development firm, based in California. He is also Executive Director of the Association of Compost Producers (ACP) (healthysoil.org; the US Composting Council California State Chapter) since 2002 and has over 40 years of science & business-based environmental education, market research, publishing, strategic consulting, enterprise, and association management experience.

Mike McCullough



Michael McCullough is a Professor of Agribusiness at California Polytechnic State University and Senior Economist at ERA Economics. He teaches courses focused on data analysis, research methods, and applied economics. Dr. McCullough received a Ph.D. in Economics and a MS in Statistics from Washington State University. His research interests deal with California production agriculture including the regulatory environment currently faced by producers, as well as the economics and policy of beer and wine. Current research projects span from an assessment of regulatory costs on specialty crops to the effects of climate change and water policy on rural communities.

Meghan Ibach



Meghan Ibach is the Product and Zero Waste Specialist for the southwest, including Southern California. For years her passion has been supporting local food systems, and most recently she ran sustainability for a dining program at a university. After seeing the sheer volume of food waste, recycling and trash generated from the main dining hall, waste diversion became her thing. She's spent the last 5 plus years understanding the full cycle of consumption and finding creative solutions to end our linear model of living. Now working for Eco Products, she's excited to network with composters and communities to discover creative solutions to keep as much useful material out of the landfill as possible.

Jenny Slepian



Jenny Slepian is a Product and Zero Waste Specialist with Eco-Products. She has a Masters in Sustainability and Environmental Management from Harvard University, a Masters in Regional and Resource Planning from University of Otago (New Zealand), and a BA in Geology from Bowdoin College. Jenny helps Eco-Products customers in the Pacific Northwest and Northern California implement zero waste strategies, connect with composters and composting technology, and ensure they comply with local and statewide legislation. Recently, Jenny was a Governor appointee to Oregon's Truth in Labelling Taskforce. Prior to joining Eco-Products, Jenny was a Sustainability Analyst for the City of Lake Oswego.

Mary Lindemuth



Mary Lindemuth has more than a decade of solid waste industry experience. She implemented Sunnyvale's first commercial organics recycling program in 2011. Her responsibilities include education, outreach, and monitoring of Sunnyvale's commercial sector for regulatory compliance, as well as championing zero waste programs. The City's liaison to the California Green Business program and the California Product Stewardship Council, she also serves on the California Organics Recycling Council, a technical council of the California Resource Recovery Association.

SESSION 2: BIORESOURCES FEEDSTOCKS 2

Kevin Eslinger



Kevin Eslinger specializes in "cows and cars" at the California Air Resources Board (15 years) as well as during his environmental studies within transportation and animal science graduate programs at UC Davis. Beyond transportation greenhouse gases and livestock, he manages several grants, including the California Clean Biomass Collaborative (facilitated by Cal Poly San Luis Obispo) which is tasked with the near elimination of agricultural burning in the San Joaquin Valley by 2025.

Erin Levine



Erin Levine is the Resource Recovery Manager at World Centric. Erin has been involved with resource recovery for 18 years and in the last decade has focused specifically on the sales and marketing of finished compost. She has supported commercial compost facilities throughout the West Coast and has worked closely with the end users of compost, particularly the agricultural industry. Erin is a Certified Composting Professional through the US Composting Council and a Certified Compost Programs Manager through the Solid Waste Authority of North America.

Steve Kaffka



Dr. Stephen Kaffka is Professor of extension and specialist in the Dept. of Plant Sciences at the UC Davis, and director of the California Biomass Collaborative. He has advised several state agencies on biomass energy and sustainability issues in CA, including the CEC and the ARB. He has also participated on several national and international bioenergy studies, including a National Research Council's committee producing the recent report: The Renewable Fuel Standard, Potential Economic and Environmental Effects of US Fuel Policy. Current biomass energy crop research includes winter annual oilseed crops like canola, camelina and castor, sweet sorghum, and sugar beets, and several manure management projects related to the state's Short Lived Climate Solutions plan and its Dairy Digester Research and Education Program and Alternative Manure Management Program. Current work focuses on alternative winter forage crops for dairy producers and manure nutrient recovery and reuse technologies and policies.

Abdolhossein Edalati



Abdolhossein (Hossein) Edalati is a PhD student in the Department of Biological and Agricultural Engineering at UC Davis. He is advised by Professor Ruihong Zhang. His research focus has been waste management and recouping value in food waste and agricultural residues by recycling them back on the farm. His projects include: producing concentrated biofertilizers from anaerobic digester effluent, studying the efficiency of solid-liquid manure separator technologies on CA Dairies and quantifying the resulting methane potential reduction from dairy manure lagoons, and most recently this project on recycling dairy manure and almond stick and twig waste as organic soil amendments of CA Almond Orchards.

SESSION 3: SITING AND TREATMENT 1

Lauren Fondahl



Lauren Fondahl is Biosolids Coordinator for US EPA Region 9, which covers Arizona, California, Hawaii, Nevada, the Pacific Island territories, and Tribal nations within these areas. Her tasks include tracking biosolids compliance by POTWs, other treatment facilities, domestic septage facilities, and land appliers; as well as compliance assistance, guidance on EPA's biosolids requirements, and biosolids language in NPDES permits. She coordinates with EPA HQ and EPA's Pathogen Equivalency Committee on interpretation of EPA's biosolids standards in 40 CFR 503.

Jason Dow



Jason Dow is the General Manager of the Central Marin Sanitation Agency (CMSA), a regional wastewater agency in San Rafael. Mr. Dow has been with CMSA for almost 30 years, in varying engineering positions, and as the manager for the past 20 years. Since 2009, he has worked with Agency staff to develop and implement a food-to-energy program with the local solid waste company and later expanded that into a broader organic waste receiving and energy delivery programs. Mr. Dow has a B.S. in Civil Engineering from U.C. Berkeley, an M.S. in Environmental Engineering from San Francisco State, and is a Registered Civil Engineer in California. Jason can be contacted at 415-459-1455, ext. 145 or jdow@cmsa.us.

Roberta Franco



Roberta B Franco works as a Sr. Environmental Scientist at the CA Dept. of Food and Ag. (CDFA). In her current role, Roberta oversees 5 programs that have the goal of reducing methane emissions from CA ag. operations, with a focus on dairy and livestock facilities. These programs are the Dairy Digester Research and Development Program (DDRDP); Alternative Manure Management Program (AMMP); California Livestock Methane Measurement, Mitigation, and Thriving Environments Research Program (CLIM3ATE-RP); CDFA Short-Lived Climate Pollutant (SB 1383); and CDFA Organic Waste Composting (AB 1981). She has a Ph.D. in Horticulture and Agronomy from UC Davis, an M.S. in Animal Biology from UC Davis, and a B.S. in Agronomic Engineering from the Univ. of São Paulo, Brazil.

Cassandra Farrant



Cassandra is head of environmental credit at Amp Americas. She has over 15-year experience in air quality and greenhouse gas emission consulting, with extensive experience with the CARB's Climate programs, such as Low Carbon Fuel Standard, Cap & Trade, Mandatory Reporting, Landfill Methane Rule, and Offset Program. At Amp she oversees credit compliance and reporting, new project development, and policy.

SESSION 4: SITING AND TREATMENT 2

Chuck White



Chuck has 25 years of regulatory and environmental consulting experience, providing clients integrated, strategic advice on complex issues related to environmental policy. With a strong analytic background in the waste industry, government affairs and several professional trade associations, Chuck can advise on a range of matters, including solid waste, hazardous waste, air quality and water quality public policy issues. As the former director of regulatory affairs with Waste Management in Sacramento for over 20 years, he gained an intimate understanding of how federal and state government regulations can impact key stakeholders in the environmental industry, having represented the interests of the waste management industry before federal, state, and local agencies. He is a registered professional civil engineer with the state of California and has served in several advisory roles pertaining to the development of public waste policies, permitting, remediation and enforcement.

Josiah Hunt



Josiah Hunt graduated from UH Hilo in 2004 with a Bachelor of Science in Agroecology and Environmental Quality. Since 2008 he has helped to pioneer methods for biochar production, processing, and application in farming systems using organic and biological approaches. He is founder and CEO of Pacific Biochar.

Michelle Applegate



Michelle Moorman Applegate is the Sr. Director of Public Policy at Project Canary, responsible for leading the Company's state govt affairs activities, and developing, leading, and executing legislative and regulatory strategy. Before joining Project Canary, Ms. Applegate spent nearly 20 years working in the energy industry with various utilities spanning power generation, regulation, and renewable energy, as well as natural gas transmission, distribution, and transportation. In her roles, Ms. Applegate has championed change in electric and natural gas regulation, engineering, pipeline integrity, and operations with an emphasis in strategic planning. Ms. Applegate earned her degrees in metallurgical and material science engineering and economics from the Colorado School of Mines.

Steve Wirtel



Steve is Executive Vice President of Business Development for Kore Infrastructure. Steve is a Registered Professional Engineer with over 30 years of progressive expertise in water treatment and solid waste management. Mr. Wirtel was Senior Vice President for Ostara Nutrient Recovery Technologies, an owner at Carollo Engineers, and Executive Vice President with U.S. Filter responsible for \$400 million in annual sales. Steve received a B.S. in Civil Engineering and an M.S. in Environmental Engineering from the University of Illinois at Urbana-Champaign.

DAY 2: THU, NOVEMBER 10TH

SESSION 5: BIORESOURCES PRODUCTS 1

Lauren Fondahl



Lauren Fondahl is Biosolids Coordinator for US EPA Region 9, which covers Arizona, California, Hawaii, Nevada, the Pacific Island territories, and Tribal nations within these areas. Her tasks include tracking biosolids compliance by POTWs, other treatment facilities, domestic septage facilities, and land appliers; as well as compliance assistance, guidance on EPA's biosolids requirements, and biosolids language in NPDES permits. She coordinates with EPA HQ and EPA's Pathogen Equivalency Committee on interpretation of EPA's biosolids standards in 40 CFR 503.

Bob Ford



A Regional Business Development Manager, Robert Ford leads in Synagro's strategy development and execution to achieve successful outcomes in business, financials, and compost sales, while exceeding customer expectations, in sustaining and growing Synagro's West Region business unit. Synagro's West Region includes the Arizona Soils Composting Facility, Central Valley Composting Facility, South Kern Compost Manufacturing Facility, Nursery Products Composting Facility and recently acquired Liberty Compost Facility including sourcing organics for Beneficial Use under SB1383 at all facilities. Mr. Ford has 25 years of diverse experience in research, sales, and international business management and marketing.

Sally Brown



Sally Brown is a Research Professor at the University of Washington College of the Environment. She is a member of the USDA Committee on Urban and Innovative Agriculture. She co-edited two books on urban agriculture. She is also a long-time columnist for Biocycle Connect.

Ned Beecher



From 1998 to June 2022, Ned Beecher was Executive Director, then Special Projects Manager, of NEBRA, tracking research, legislation, and regulations, and providing information to members and the public, authoring articles and papers, and making presentations on biosolids management around North America. He has focused much of his work since January 2017, on PFAS, and most recently, on leading the National Biosolids Data Project (<https://www.biosolidsdata.org>). He received the New England Water Environment Association (NEWEA) Biosolids Management Award in 2015 and the Elizabeth A. Cutone Leadership Award in 2020. He has an MS in Resource Management from Antioch University and a BA in Geology from Amherst College. He has two adult children and lives and gardens (using biosolids) with his wife, Chris Clyne, MS, APRN (ret.), in Tamworth, New Hampshire.

Brian Vagg



For as long as I can remember, I have been fascinated with natural systems. It started with growing up on a homestead and culminated into starting a Soil Biology Consulting business. I have worked in the high-tech industry for most of my adult life. I decided to make the transition from corporate life to running a business focused on helping farmers transition from conventional to biological farming. I am exceptionally well positioned to take what I learned from the high-tech industry and apply it to the agricultural industry. My goal is to help accelerate and drive biological farming into the mainstream.

SESSION 6: SB 1383 UPDATE

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Chuck has 25 years of regulatory and environmental consulting experience, providing clients integrated, strategic advice on complex issues related to environmental policy. With a strong analytic background in the waste industry, government affairs and several professional trade associations, Chuck can advise on a range of matters, including solid waste, hazardous waste, air quality and water quality public policy issues. As the former director of regulatory affairs with Waste Management in Sacramento for over 20 years, he gained an intimate understanding of how federal and state government regulations can impact key stakeholders in the environmental industry, having represented the interests of the waste management industry before federal, state, and local agencies. He is a registered professional civil engineer with the state of CA and has served in several advisory roles pertaining to the development of public waste policies, permitting, remediation and enforcement.

Andrew Parrish



Andrew Parrish has worked for CalRecycle for ten years. Andrew is a Senior Environmental Scientist in the Local Assistance and Market Development Branch, where he is the subject matter expert for SB 1383 procurement and reporting requirements. He also led the redesign of the Electronic Annual Report to accommodate SB 1383 reporting requirements for jurisdictions and focuses on the implementation of state laws such as mandatory commercial recycling, mandatory commercial organics recycling, short-lived climate pollutants, and state agency recycling. Previously, Andrew worked in the Statewide Technical and Analytical Resources Branch where he helped draft the SB 1335 regulations and served as a subject matter expert on plastics. Prior to that, Andrew worked as a CalRecycle liaison for rural jurisdictions and state agencies in the Sacramento area and in CalRecycle's Jurisdiction Compliance Unit. Andrew is a graduate from UC Davis.

Kevin Barnes



Kevin Barnes has managed solid waste and recycling systems for over 40 years. He grew up in a family trash company, merged it with a corporate waste firm, and later managed two city waste depts. During his 25 years as the Solid Waste Director for the City of Bakersfield, he built and operated the largest public composting facility in California. The facility is known for its efficiency and many advanced projects, including electrification, automation, and water conservation. In 2012, Kevin assembled a team of compost industry professionals to create a solution for the challenge of VOC emission rules in the central valley. He is now retired from public service and provides consulting services.

Chad White



Chad White is the project manager for the Marin Biomass Project. In this role he is responsible for day-to-day management of a grant agreement with the Governor's Office of Planning and Research that is part of the [Woody Feedstock Aggregation Pilot Program](#). He is also a technical contributor to the program based on his work in environmental management and regional planning related to SB 1383. Chad has worked as a sustainability strategist for boutique firms in the private and nonprofit sector and as a consulting engineer for private- and public-sector clients. He holds a PhD in environmental science and management from the University of California, Berkeley, and a BS in chemical engineering from the University of Michigan.

SESSION 7: BIORESOURCES PRODUCTS 2

Tom McGrath



Tom McGrath, PMP has for more than 20 years successfully collaborating with diverse stakeholders, working with multi-media departments, break-through technologists, finance specialists, and academic researchers. Tom focuses on wise use of available resources to design sustainable opportunities today - both for communities and businesses. Tom is CEO of [VITALcleantech.com](#), CSO of BioProducts.Center, holds Zero Waste and Sustainable Mgmt Certification from the CA Resource Recovery Association and has presented to California business and government-sponsored forums on the topics of organic waste upcycling, including on LA City Sister City business trips and Cleantech Trade Summits to Sao Paulo, Brazil, Berlin, Germany, and throughout China.

Jim McNelly



Jim McNelly is a managing member of Renewable Carbon Management LLC. A professional in the bio-processing industry since 1975, Jim McNelly has been a pioneer and visionary in source separated organics composting, co-composting with wastewater biosolids, biosolids land application, in-situ evaporation of wastewater treatment solids, vermistabilization, value-added fertilizer conditioning, mixed waste composting, and containerized composting, biodestruction and biofiltration. After managing Procter and Gamble's diaper composting study, Jim founded the US Composting Council in 1989. As a Council volunteer, he has fostered the development of Best Management Practices in composting, compost operator training, testing methods for composting and compost and public and professional education promoting the value of organics recovery. The author of numerous state guidebooks and publications on composting, he has worked in dozens of states, provinces and countries, including extensive work in China which continues today.

Joe Maceda



Joe Maceda, Chief Designer of G & S Technologies commercializing ElectroChemical Reforming as well as Carbon Capture and Reuse solutions to produce inexpensive hydrogen and carbon mitigation. He also leads ZNC Farms technology, systems optimization, and build-out program. Previously, he was the founder of Gibbs Energy, LLC, a privately held business products and technology development firm dedicated to renewable energy technologies including anaerobic digestion where he managed a team that developed the biogas and bio- liquid platform for a major U.S. oil and gas company. His experience developing integrated solutions for energy and agriculture spans nearly 20 years. Some of the more notable achievements include the development of a liquid-phase, "step change" hydrogen generation carbon capture technology to reduce the cost of hydrogen by 50%. Prior to this, Joe was the founder and CEO of Ocean Power Corp., a developer of modular, renewably powered desalination systems listed on NASDAQ, and H Power Corporation, a developer of fuel cell technology which raised \$120M in an IPS on NASDAQ using a valuation of \$1B. Gibbs was also a two-time finalist in the Department of Energy's ARPAE competition seeking transformational technologies.

Clayton Turner



Clayton Turner is an entrepreneur and scientist in the technology, software, cannabis and hemp space. He is a founder of Rainier Distillers, Washington State Enterprises, Biosmart Research, HPLC Solutions, SearchandRescueDrone.com, PackWhere Electric Vehicle Modules, and was Visionary of Santa Fe Farms until January 2022, he is a co-founder of The Hemp Blockchain. Clayton has worked for a decade in ISO9000 medical cannabinoid isolation, carbon sequestration, engineering industrial systems, trichome extraction, fiber processing, carbon products, pyrolysis, and blockchain. Clayton has set up over 20 facilities in the hemp space. Clayton has led teams which include The Carbon Protocol Qualified Xprize team. He is the creator of the first 100% all hemp battery. Additionally, he has designed a drone system for preventing forest fires (preparing for the Fire Prevention XPrize) and holds the patent pending for APPARATUS AND SYSTEM FOR CONNECTION AND DISTRIBUTION OF SATELLITE BASED INTERNET SERVICES an aspect in a device for cleaning plastic from the oceans using drones, as well as fighting and preventing fires.

Tom Fang



Tom Fang is a Senior Engineer with the LA County Sanitation Districts. He's been with the Districts for 19 years serving in varying capacities, including energy recovery, biosolids management, engineering, and air quality. He is currently involved with developing RNG, CNG, and solar projects. Prior to the Districts, Tom worked for 11 years in private industry focusing on power plant NOx control. He holds BS and MS degrees in Mechanical Engineering from UC Berkeley and UC Irvine, respectively.

SESSION 8: QUESTION & ANSWER WITH PANELISTS

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