

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF SEPT 19-20, 2019

Prepared on August 26, 2019

ITEM NUMBER: 5

SUBJECT: Food Safety and Riparian Habitat Management Workshop

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ACTION: Information / Discussion

KEY INFORMATION

Environmental protection: Riparian vegetation plays an important role in protecting water quality and aquatic life beneficial uses of surface water.

Food safety concern: Riparian vegetation may attract wildlife, which can be carriers of pathogens.

Co-Management: Growers face challenges when co-managing food safety and environmental protection, such as maintaining riparian vegetation.

SUMMARY

This informational item is a workshop consisting of speakers with expertise and experience associated with farm field-level agricultural food safety implementation and the environmental benefits of riparian vegetation. The speakers will discuss strategies and potential challenges of required environmental protection while co-managing food safety risks at the farm field level.

At the May 2019 Central Coast Water Board meeting, the Water Board requested that staff develop a workshop focusing on food safety issues as these relate to the development of conceptual riparian habitat management water quality protection requirements for Ag Order 4.0; this agenda item is a response to that request.

Riparian vegetation helps reduce nonpoint source runoff pollutant loading and plays a vital role in protecting water quality and aquatic life beneficial uses of surface water. However, a thriving aquatic ecosystem, with its necessary riparian vegetation, has the

potential to attract terrestrial wildlife that can harbor and transport pathogens into areas where food is grown for human consumption.

Several food-borne pathogen outbreaks have sickened, and in some cases resulted in consumer fatalities, over the past approximately 15 years. The federal government, industry, and the food supply chain have responded with food safety measures to minimize the risk of future outbreaks. The U.S. Food and Drug Administration (FDA) has identified and continues to develop and update rules regarding the known routes of contamination, including agricultural water, soil amendments, animals, worker health and hygiene, and equipment and buildings¹.

The FDA promulgated regulations in 2015 to implement the Food Safety Modernization Act. Related to riparian vegetation, the preamble to the rulemaking, *Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption*,² discusses whether the rule requires farms to destroy animal habitat, clear farm borders around outdoor growing areas or drainage, or could be interpreted to conflict with other federal and state programs to establish buffer zones or other natural vegetation buffer strips intended to improve water quality, protect endangered species, and enhance wildlife habitat.

While food safety regulations don't require farms to take measures to destroy habitat, implementation and associated risk-management decisions have resulted in attempts at "zero-risk" strategies, focused on the removal of all vegetation within a non-scientifically defined buffer area surrounding farm fields to preclude the potential presence of wildlife related vectors. These non-vegetated food safety buffers are often created adjacent to riparian corridors. This approach conflicts with established science documenting the environmental and water quality benefits of riparian vegetation. Moreover, both strategies – non-vegetated food safety buffers and vegetated environmental buffers (riparian vegetation) – often require taking arable land out of production, thus reducing potential agricultural benefit and associated revenue. This puts growers in a difficult situation, pitting them between market-based, food safety rules and environmental protection requirements.

This workshop is not intended to solve this complex issue. It is merely intended to provide context on this issue's complexity to inform the Water Board's consideration of riparian habitat management requirements as it relates to the co-management of food safety and environmental protection.

WORKSHOP PARTICIPANTS

The following participants are scheduled to speak at the workshop.

¹ Final Qualitative Assessment of Risk to Public Health from On-Farm Contamination of Produce: <https://www.fda.gov/media/116766/download>

² Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption, 80 Federal Register 74,353 (Nov. 27 2015): <https://www.federalregister.gov/documents/2015/11/27/2015-28159/standards-for-the-growing-harvesting-packing-and-holding-of-produce-for-human-consumption>

Brian Dugas, Terra Verde Environmental Consulting. Mr. Dugas works in the environmental consulting industry with an emphasis on biological resources. He has experience working with sensitive species, including steelhead trout habitat. Mr. Dugas will discuss the role of riparian vegetation in protecting water quality and aquatic life related beneficial uses.

Jo Ann Baumgartner, Wild Farm Alliance. Ms. Baumgartner has authored publications on co-managing food safety and conservation. She will discuss co-management of food safety and environmental protection strategies.

Dr. Daniel Karp, UC Davis. Dr. Karp is an assistant professor in the Department of Wildlife, Fish, and Conservation Biology. He has written and co-authored published research on the co-management of food safety and environmental protection.

Lianna Kelly, Markon. Ms. Kelly is the Food Safety Director for Markon, a purchasing cooperative in the food service industry. Ms. Kelly will discuss Markon's role in the industry, their clientele, and the potential impact of regulatory requirements on food safety issues.

Steve Patton, California Department of Food and Agriculture (CDFA). Mr. Patton leads the Inspections and Compliance Branch at CDFA. He will discuss food safety requirements, how they are implemented and CDFA's role in compliance and auditing.

Robin Forgey, Costco. Ms. Forgey is the Director of Food Safety and Quality Assurance for Costco. Ms. Forgey will discuss the Costco approach to food safety, the Global Food Safety Initiative (GFSI), metrics used by Costco producers, and the impact of food borne outbreaks on the retail industry.

Jynel Gularte, Rincon Farms, and Colby Pereira, Costa Family Farms. Ms. Gularte and Ms. Pereira both manage food safety requirements for their respective farming operations. They will discuss their first-hand experience regarding the interactions between growers, auditors, buyers and regulators pertaining to food safety, how non-crop vegetation at the farm field level is viewed, and the tension they have experienced when co-managing food safety and environmental protection.

Dr. Patrick Baur, UC Berkeley. Dr. Baur is a postdoctoral research fellow in the Department of Environmental Science, Policy & Management. His research focuses on competing concerns for food safety, environmental protection and economic viability. Dr. Baur will discuss the consequences of these competing concerns and resulting pressures on diverse growers across California.

Greg Komar, Leafy Greens Management Agreement (LGMA). Mr. Komar is the Technical Director for LGMA. LGMA is a group whose members produce, ship and sell lettuce, spinach and other leafy greens. Certified members commit themselves to LGMA food safety practices and mandatory audits. Mr. Komar will give a historic perspective of LGMA, its metrics, audits and co-managing food safety and environmental protection.

Jacob Guth, California Certified Organic Farmers (CCOF). Mr. Guth is the Director of Food Safety for CCOF and has professional experience as a food safety auditor. Mr. Guth will discuss food safety metrics used by organic growers, and co-management of food safety and environmental protection.