

On Common Ground:

*From conflict to co-management of
food safety and environment*

Sustainable Ag Expo 2010
Monterey, CA



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A history of conservation through collaboration

Watersheds flowing into the Monterey Bay National Marine Sanctuary



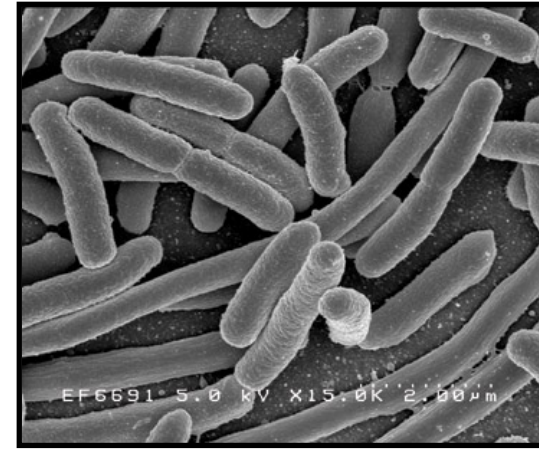
AWQA
Agriculture Water Quality Alliance

The bottom section of the slide features a blue background with the AWQA logo and name at the top. Below the name are five logos of partner organizations: Resource Conservation District (a green leaf icon), UCCE University of California Cooperative Extension (the UCCE logo), NRCS Natural Resources Conservation Service (a blue water drop icon), National Marine Sanctuaries Monterey Bay (a white bird icon), and Central Coast Agricultural Water Quality Coalition (a circular logo with a sun and water).

Issue Background

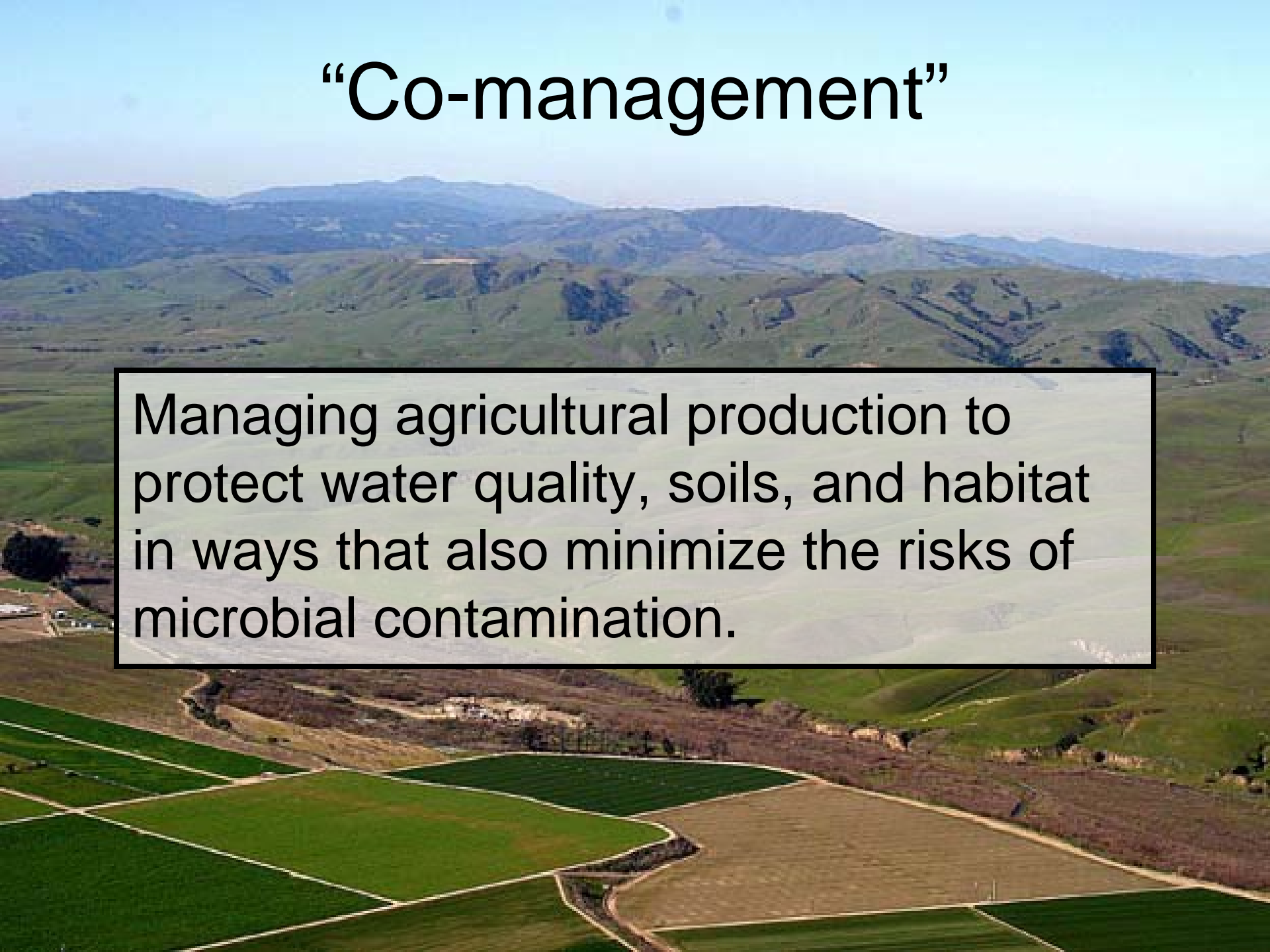
2007 RCD MC Grower Survey results

- 91% have adopted one or more conservation practice
- Facing pressure from buyers and auditors to eliminate wildlife, vegetation, and water bodies near crops in the interest of food safety
- Pressure has lead to action, 32% of leafy greens growers reported removing non-crop vegetation
- Growers caught in middle



“Co-management”

Managing agricultural production to protect water quality, soils, and habitat in ways that also minimize the risks of microbial contamination.



Challenges to Co-management

Managing in a world of uncertainty...

How will an action affect levels of food safety risk?

How will an action affect the environment?

...all while maintaining an economically viable operation, adhering to regulations, and meeting buyer requirements.

The Farm, Food Safety & Conservation Network

The FFSCN is a Central Coast region working group whose purpose is to facilitate the coordination of related organizations to support the agricultural industry's efforts to reduce food safety risks through methods which also minimize or avoid impacts to water quality, wildlife and habitat through education, training, research, communication and outreach.



An aerial photograph of a landscape. In the foreground, there's a brown, tilled field on the left and a dense green forest on the right. A winding river or stream flows through the center, surrounded by more greenery. In the background, there are rolling hills and some distant buildings under a clear sky.

Guiding Principles

- We are honest about our viewpoints.
- We respect the right of individuals to have their own viewpoints, beliefs and values.
- We listen to one another with the intent of finding what we have in common.
- We keep our statements as brief and clear as possible. No one person will dominate the exchange.
- We do not use anger or other intense emotions to intimidate or change peoples' positions.
- We avoid exploiting or manipulating information for individual purposes, or to mislead and misinform.

Accomplished with collaboration: Research

RESEARCH ARTICLE

Food safety and environmental quality impose conflicting demands on Central Coast growers

by Melanie Bennett and Diana Stuart

Growers of fresh produce on the Central Coast of California currently face conflicting demands regarding measures to protect food safety and those to protect environmental quality. To explore the extent of conflicting pressures and identify the range of possible impacts on the environment, we conducted a survey of Central Coast irrigated-row-crop growers during spring 2007. The results indicate that growers are experiencing a clear conflict, and some are practicing to protect the environment have resulted in the rejection of crops by buyers. In addition, some growers are being encouraged to or actively removing conservation practices for water quality, and most growers are taking action to discourage or eliminate wildlife from and adjacent to croplands. These actions could affect large areas of land on the Central Coast and, as indicated by growers, they are likely to increase over time.

The Central Coast of California supports unique biodiversity and some of the most productive agricultural lands in the United States. The Salinas Valley in Monterey County, often referred to as the "Salad Bowl of America," produces the majority of the nation's lettuce. Since the 1970s, food safety has become increasingly important, especially with respect to outbreaks of *E. coli* O157:H7 associated with leafy greens, lettuce, escarole, endive, spring mix, spinach, cabbage, kale, arugula and chard (see www.caleadygreens.ca.gov/). Simultaneously, growers on the Central Coast face increasing demands to protect the environment and have taken a proactive approach to improve environmental quality. An important aspect of these efforts is the adoption of conservation practices, which aim to improve and protect water quality, prevent soil erosion, and protect wildlife. However, some food and safety requirements — or field-level interpretations of these requirements intended to improve water quality and enhance natural habitat.

In response to grower concerns over contradictory guidelines and requirements for food safety and environmental protection, the Resource Conservation District (RCD) of Monterey County conducted a mail survey of 600 irrigated row-crop growers throughout the Central Coast. The purpose was to better understand the impacts of conflicting demands on growers, and to provide information to aid attempts to reconcile the goals of food safety and environmental protection.

While the Central Coast houses many natural resources, according to the Central Coast Regional Water Quality Control Board (CCRWCQCB), it also has some of the most polluted waters in California. The Pajaro River and Elkhorn Slough are listed as impaired for sediment and nutrients under California's 2002 Section 303(d) of the 1972 Clean Water Act. The Salinas River is 303(d)-listed as impaired for sediment, nutrients, pesticides and pathogens. In 2003, the 20-year-old St. Agricultural Waiver of Nonpoint Source Discharge ended, meaning that growns are no longer exempt from water quality concerns.



Growers of leafy greens and vegetables must balance the need to improve water quality and wildlife habitat in and around farms, with concerns about food safety.



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Facilitating solutions to our global food safety challenges

WIFSS & WCFS @ work

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section links: Research | Conferences and Meetings | Coming Events

RESEARCH

NRCES Projects

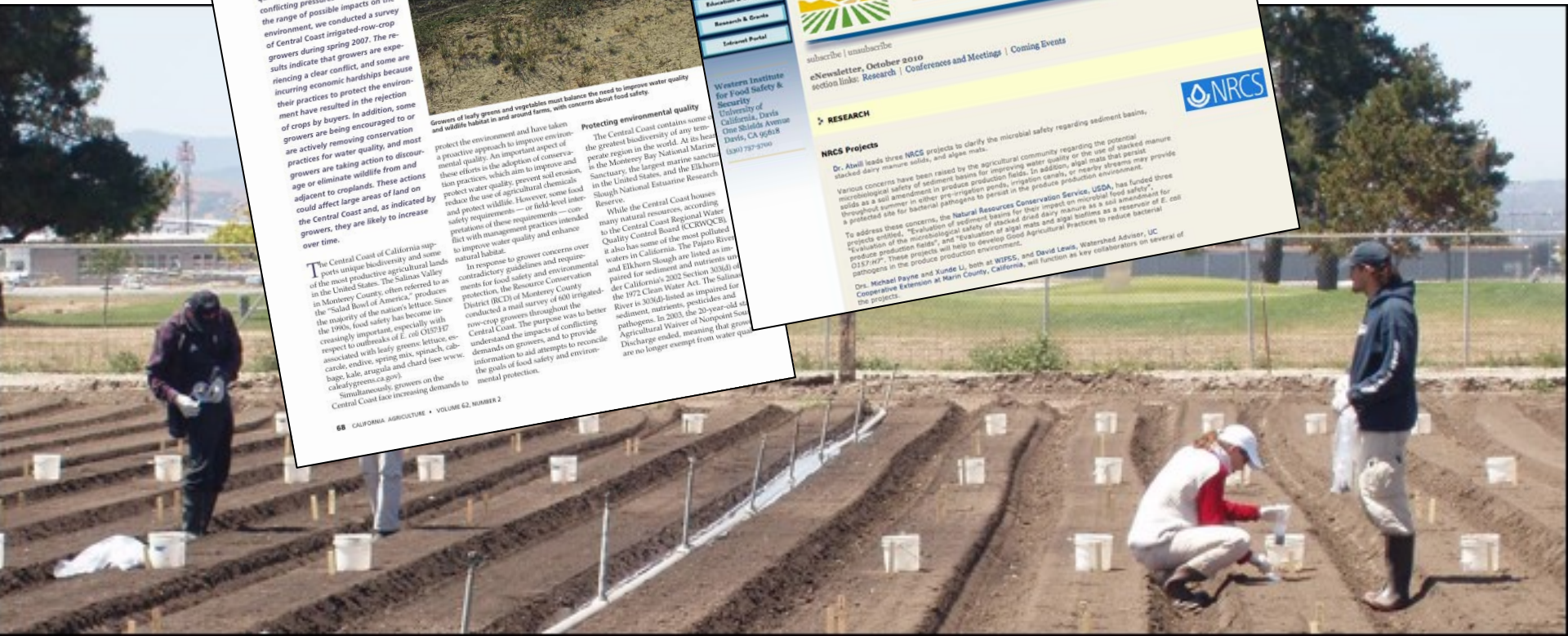
Dr. Abell leads three NRCES projects to clarify the microbial safety regarding sediment basins, stacked dairy manure solids, and algae mats.

Various concerns have been raised by the agricultural community regarding the potential microbiological safety of sediment basins for improving water quality or the use of stacked manure solids as a soil amendment in produce production fields. In addition, algae mats that persist throughout summer in either pre-irrigation ponds, irrigation canals, or nearby streams may provide a protected site for bacterial pathogens to persist in the produce production environment.

To address these concerns, the Natural Resources Conservation Service, USDA, has funded three projects entitled, "Evaluation of sediment basins for their impact on microbial food safety," "Evaluation of the microbiological safety of stacked dairy manure as a soil amendment for produce production fields," and "Evaluation of algae mats and algae biofilms as a reservoir of *E. coli* O157:H7." These projects will help to develop Good Agricultural Practices to reduce bacterial pathogens in the produce production environment.

Dr. Michael Payne and Xunde Li, both at WIFSS, and David Lewis, Watershed Advisor, UC Cooperative Extension at Marin County, California, will function as key collaborators on several of the projects.

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Accomplished with collaboration: Outreach and Education



<http://www.hartnell.edu/agriculture/>

Accomplished with collaboration: Technical tools and trainings

FOOD SAFETY CONSIDERATIONS FOR CONSERVATION PLANNERS:
A FIELD GUIDE FOR PRACTITIONERS
JULY 2009

Resource Conservation District of Monterey County
744 La Guardia Street, Building A
Salinas, CA 93905
831-424-1036 ext.3



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*Conserving and improving natural resources, integrating the demand for environmental quality with the needs of agricultural and urban users.
♻️ Printed on Recycled Paper

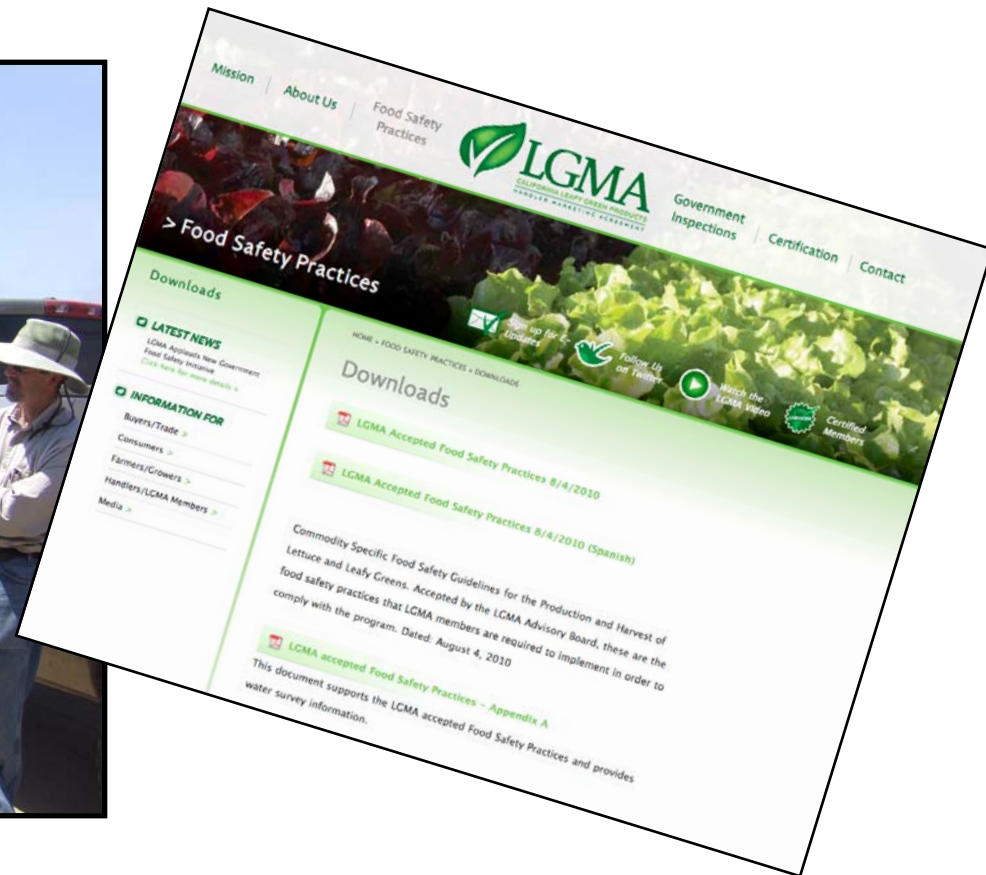


Available at: <http://www.rcdmonterey.org/>

Accomplished with collaboration: Informing Policy



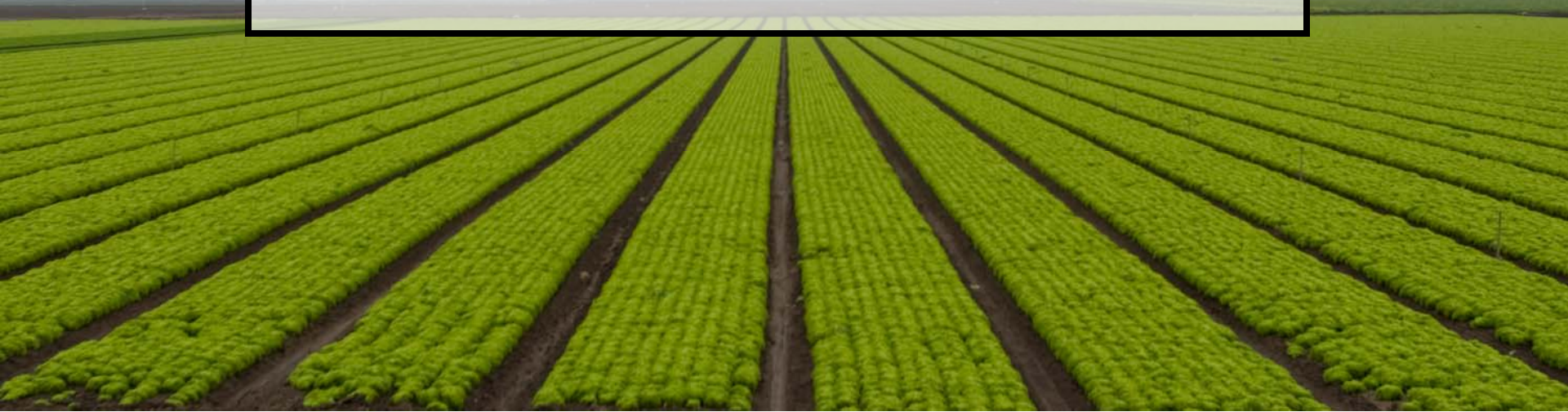
Growers and technical service partners inform federal food safety policymakers on co-management. (*Monterey County, 2010*)



www.caleafygreens.ca.go

Challenges to Collaboration

- Uncertainty
- Diverse interests
- Staying current
- Competitive industry
- Shifting regulations and political climate



A Vision for the Future

- Science-based decisions (*research*)
- Producer, buyer, auditor, advisor knowledge (*training and tools*)
- Policy that promotes co-management (*communication*)
- Consumer awareness (*education*)



The Farm, Food Safety, & Conservation Network

Food Safety and Water Quality Co-management Forum

SAVE THE DATE!

December 8, 2010 9:00 am to 4:00 pm

Watsonville Civic Plaza Community Room 275 Main St. Watsonville

The all-day forum will include panels and presenters covering:

- Grower Perspectives on Co-management
- State of the Science
- Advances in Co-management Education and Outreach
- Liability
- Policy and Legislative Updates

Contact Information

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