ABSTRACT

Coordinated management of water quality and food safety on-farm management practices was the focus of a conference held in San Luis Obispo, California in April 2007. Conference presentations, discussions, farm visits, and working groups used existing technical guidance to frame research and organizational objectives. These conference products were summarized for inclusion in iterative on-line questionnaires, with conference attendees participating as respondents. This process, called a Delphi process, produced general research priorities in coordinated management, and placed high priority on the creation of an organizational structure to support co-management of food safety and water quality.

Conference participants, who self identified as having either food safety or water quality as their primary area of focus, prioritized research objectives under theme areas. In general, water quality respondents shared greater consensus on research priorities that did food safety respondents. There were general research objectives which approached consensus by the whole group. These research objectives were:

• persistence and fate of pathogen in the crop and in conservation practices;
• pathways by which pathogens move through the crop production system; and
• Solicitation of ideas for short- and long-term action items to promote coordinated management generated actions that were not specifically related to research objectives.

Instead, respondents brought forward actions intended to inform influential private industries outside of the sphere of influence of the water quality and food safety research and regulatory communities. These included produce retailers, trade associations, third-party certification suppliers, and insurance companies.

Conference participants and Delphi respondents were not able to identify an existing forum for gathering and disseminating coordinated management information. Respondents placed their highest priority on the formation of a Coordinating Council, and identified those entities that ought to play specific roles within the Council. California's Department of Food and Agriculture, the University of California's Cooperative Extension and Western Institute for Food Safety and Security, California Department of Health Services, Regional Water Quality Control Boards, County Agricultural Commissioners, and Western Grower's Association were among those most frequently named. Respondent's highest priority short-term action called for follow-through on the San Luis Obispo conference by improving and formalizing links between different entities. The specific mission and tasks associated with a Coordinating Council did not achieve the same level of consensus.

Two technical guidance documents, one emphasizing on-farm management of food safety and one stressing water quality practices, are already in use by a majority of leafy greens growers on California's Central Coast. Used together, these technical guidance documents can be used to develop an initial framework for the evaluation and development of coordinated management practices that protect both human health and the environment.
This final report and accompanying materials are published online at the identification of environmental conditions that promote pathogen survival and proliferation. http://groups.ucanr.org/wqfsconf/.