CO-MANAGEMENT OF FOOD SAFETY AND CONSERVATION PRACTICES

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CO-MANAGEMENT

A landscape-scale approach to conserving soil, water, air, wildlife and other natural resources while simultaneously minimizing microbiological hazards associated with food production.
Is there a Conflict between Food Safety and Conservation Practices?

Food Safety and conservation of natural resources on the farm must be co-managed. An integrated approach that provides real value to both food safety and environmental stewardship can ensure a sustainable future, both economically and environmentally.

A clear distinction needs to be made between effective, science-based food safety practices versus practices without a scientific basis or scientifically proven benefit toward enhancing food safety required by Handlers, Buyers and/or Third-Party Auditors to gain a competitive advantage or minimize liability.
Potential sources of water quality impairment

Potential sources of pathogen contamination

Potential sources of water quality impairment:
- Upland land uses
  - Farm roads
  - Cropland
  - Waterways
- Off-farm detection

Potential sources of pathogen contamination:
- Upland water runoff
  - Cropland
  - Farm roads
- Imported amendments
  - Crop detection
- Irrigation water
  - Crop detection
- Animal intrusion
  - Flood waters
- Dust
  - Crop detection
- Irrigation water
- Flood waters
- Waterways
- Off-farm detection

Co-Management Landscape Perspective
PRACTICES USED TO CONTROL WILDLIFE INTRUSION INTO PRODUCTION FIELDS

• Native and Non-Native Vegetation Removal
• Bare Ground Buffers
• Trapping
• Poison Baiting
• Depredation
• Fencing
• Removal of sediment basins, tailwater ponds, etc.
• Other
CONSERVATION PRACTICES TO PROTECT NATURAL RESOURCES

- Fencing
- Filter strips
- Grassed waterways
- Hedgerows
- Streambank protection
- Sediment basins
- Tailwater systems
- Windbreaks
5. Evaluate natural resource and food safety impact of industry food safety advice: Bare Ground Buffers

- Increase in soil erosion & sedimentation.
- Degrade water quality & aquatic habitat.
- Reduced food and cover for some rodents.
- No affect on movement of pigs, deer, or squirrels from rangeland.
- Eliminates pathogen reduction benefits of vegetation as a filter.
Grower and/or Landowner Considerations

- **Economic Viability**
  - Cost Reduction
  - Crop Rotation
  - Crop Yield and Quality

- **Legal Liability**
  - Compliance with Industry and Regulatory Requirements
    - Food Safety
    - Endangered or Threatened Species and Critical Habitat
  - Neighbor Issues

- **Resource Conservation**
  - Erosion Control
  - Organic or Low-Input Pest Management
  - Reduction of Inputs
  - Tradition
  - Water Conservation
  - Water Quality
  - Wildlife Habitat
BUYER REQUIREMENTS: In an effort to comply with Handler and Buyer requirements, many Growers have taken steps to remove on-farm conservation practices. These actions may have provided little, if any, food safety benefits, but may have had negative impacts on natural resources. In some cases, their actions may have actually increased food safety risks.

MULTIPLE FOOD SAFETY STANDARDS AND AUDITS: Each varies in scope and concentration. Some significantly exceed the requirements of the LGMA Metrics. These food safety standards are confusing, costly both in time and money and may provide little or no value in terms of enhancing food safety. Example: Buffers.

INDUSTRY, STATE AND FEDERAL FOOD SAFETY REGULATIONS AND/OR GUIDELINES: Pending State and Federal Food Safety Regulations, Commodity Specific Guidelines, etc.

COMPLIANCE WITH ENVIRONMENTAL REGULATIONS: Growers and Landowners are liable for compliance with the Federal and State Endangered Species Acts, Regional Irrigated “Ag Waivers,” the Federal Clean Water Act, etc.
LGMA Commodity Specific Guidelines for the Production and Harvest of Lettuce and Leafy Greens (Metrics) have been adopted by the industry.

- Does not require the removal of habitat, filter strips, sediment basins, reservoirs, vegetation or wildlife from the field or adjacent lands.
- Pest control devices/rodent traps and fencing are not a requirement.
- A risk-based approach is prescribed.
- Handlers and Growers have flexibility to make the best decision possible based on the unique condition of the individual ranch where crops are being produced.
PRACTICING CO-MANAGEMENT

• Know your wildlife and domestic animal risks and responsibilities
• If you don’t know, ask someone who does:
  – Experienced food safety professionals
  – Center for Produce Safety
  – Local industry associations
  – Natural Resources Conservation Service
  – Produce Marketing Association
  – Resource Conservation District
  – United Fresh
  – University Cooperative Extension/Other Researchers
  – Western Growers Association
PRACTICING CO-MANAGEMENT

Actions for Food Safety and Environmental Protection

Carefully assess your environmental benefits and risks:
• Think before taking action.
• Review your GAP programs.
• Consult with professional advisors (on-going).
• Create a plan to maximize benefits and minimize risks.
• Communicate with your handlers, buyers and Third-party auditors.
• Stay informed about developments in food safety and natural resource protection.
PRACTICING CO-MANAGEMENT

**Resources**

- Food Safety Considerations for Conservation Planners downloadable from [http://www.rcdmonterey.org](http://www.rcdmonterey.org)

- Appendix Z – AZ and CA LGMA Metrics
  - [http://www.caleafygreens.ca.gov/](http://www.caleafygreens.ca.gov/) (Members-Resources)
  - [http://www.azlgma.gov/userfiles/Appendix%20Z.pdf](http://www.azlgma.gov/userfiles/Appendix%20Z.pdf)

- ‘Safe and Sustainable’ report
  - [http://www.producesafetyproject.org/reports?id=0007](http://www.producesafetyproject.org/reports?id=0007)

- Center for Produce Safety (CPS)
  - [http://cps.ucdavis.edu/](http://cps.ucdavis.edu/)
Co-Management

Questions?

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