Water Quality Program Updates

California Strawberry Commission
The Strawberry Certification Program

Project:
• January 2017 - June 2020 (3 yrs.)
• $613,244 from State Waterboard through Region 3

Goal:
• Develop a pilot certification program for strawberries focused on implementation of BMPs that address water quality.
• Open to growers in Santa Maria, Salinas & Watsonville
Goal: Establish a voluntary certification program for strawberry growers to comply with water quality regulations.

Approach: Define and implement best practices for irrigation, nutrient, and pesticide management.

Result: Recognize & reward strawberry operations that use effective irrigation, nutrient, and pest management BMPs to improve water quality.
Project Timeline

Phase 1 - Planning/Development Phase
May 2017 – Apr. 2019

Phase 2 – Pilot Testing On-Farm
Apr. 2019 – July 2020

Phase 3 – Full Program Implementation
Aug. 2020 – June 2021

Pause in program requested by Region 3 Waterboard staff
Team Strengths

In house Research and Education Programs

• 11 full-time staff (2 PhDs, 2 PCAs, 3 bilingual staff)
• Partnership with Strawberry Center at Cal Poly, SLO
• Staff based in each production region
• Full integration of research and training programs
• Up to 90% of the industry participates in training programs
Implementing Change

The California Strawberry Commission affects change in the industry through our in-house research and training program.
Success Story Examples

Water Management

Pesticide Management

Water Quality Certification Program (?)
Water Management

**Goal:** Train irrigators and ranch managers to implement irrigation best management practices (BMPs).

**Approach:** Conduct hands-on training for farm employees on essential irrigation management skills.

**Result:** Conducted all-day training workshops that educated over 700 irrigators in the industry.
Bug Vacuum Optimization

**Goal:** Reduce insecticide use for lygus bug control.

**Approach:** Optimize performance of the bug vacuum.

**Result:** Increased vacuum performance by 4-fold and most growers have adopted this management method.
Sprayer Calibration Program

**Goal:** Improve performance of spray equipment in the strawberry industry and minimize non-target effects on water quality.

**Approach:** Develop and deliver on-farm training for proper calibration and maintenance of spray equipment.

**Results:** In 2018, we have trained and calibrated over 50% of the industry.
Hands-on Training
Further Improvements

Vacuum Improvements

Spray Rig Design
Modeling Current Uptake of Lygus Bugs
Suction Under Original Bug Vacuum
Focus on four Variables

Ø Nozzle Type
Ø Position
Ø Pressure
Ø Solution
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CSC Strawberry Certification Program

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Approach: Define and implement best practices for irrigation, nutrient, and pesticide management.

Result: ?