**Clean WaterR3: Integrating Research and Extension to Help Specialty Crop Growers Reduce, Remediate, and Recycle Water**

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**Why Clean WaterR3?**
- Access to high quality water for irrigation is increasingly limited
- Growers reluctant to use recycled water because of contaminants (diseases, salts & pesticides) that could limit plant growth

Our transdisciplinary, SCRI-funded team of researchers and grower partners (from across the US) are working to encourage recycling and reuse of remediated irrigation runoff by:
- Developing online grower decision support tools
  - Integrate socioeconomic & biological data to enhance decision making resources
  - Case-studies with treatment technologies
- Research and select runoff treatment technologies to manage contaminants

**Grower Input & Collaboration:**
- 11 collaborating growers
- 9 advisory board members
- On-farm trials & evaluation of treatment technology efficacy
- Online tool evaluation
- Economic assessment validation
- Research planning

**Grower focused website for outputs:** cleanwater3.org

**Trans-disciplinary research to increase water recycling:**
- Outreach & data delivery the focus
- Grower interviews (25+) for sociological assessment
- Economic components ground cost of change (yes/no) in practice
- Biological components combine to reduce and remediate pollutants
- Model development integrates biological & socio-economic data into simple, interactive, online tools

**Reduce - Remediate - Recycle:**
Biology & modeling to create predictive tools

**Manage Irrigation:**
- Reduce nutrients, pesticides & diseases in runoff

**Treatment Technologies:**
- Remediate diseases & agrichemicals in irrigation runoff water

**Lab and on-farm evaluation of treatment technologies**
Filter socks: sediment & phosphorus management

**Recycled runoff:**
Clean water for irrigating container crops

**Reducing nutrient, pesticide, and disease loads leaving production areas (A) can enhance efficacy of treatment technologies (B) and ultimately support use of recycle water (C) by growers. These information combine in model-based (D)“decision support tools” to aid in grower use of recycle water.**

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“Clean WaterR3 - Reduce, Remediate, Recycle - Enhancing Alternative Water Resources Availability and Use to Increase Profitability in Specialty Crops”

This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number 2014-51181-22372.