## Submission to UF Water Institute Symposium

**Title:** The Water Education Alliance for Horticulture
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**Abstract:**

Declining water availability and quality are critical issues for the horticulture industry. Regulations on water supply and runoff encourage recycling of irrigation water, but recycling increases the risk of transmitting waterborne plant pathogens, and can thereby threaten the economic viability of nurseries and greenhouses. Many growers lack knowledge of available technologies to treat recycled water, and education is needed to enable growers to confidently adopt this water conserving practice.

The Water Education Alliance for Horticulture is a new UF-led university/industry alliance that focuses on water management for the nursery and greenhouse industry. The Alliance aims to train growers through outreach educational materials including active learning experiences. Considerable research on water disinfestation has been undertaken in the fields of human health, wastewater management, food safety, and others, but the information generated has yet to reach most growers in the horticulture industry. Our program will package this information in user-friendly formats, helping growers make decisions regarding the types of water treatment needed to facilitate water recycling, and monitoring practices needed to ensure treatments are effective.

Specific projects to be undertaken by the Alliance in 2008 include a 12-part series in the national GMPro trade magazine, an interactive website, and workshops held throughout Florida and in other states. These materials will cover water treatment technologies (e.g. filtration, chemicals, etc.), best management practices to avoid pathogen spread (e.g. greenhouse sanitation), and water quality monitoring (e.g. oxidation-reduction potential, pH, and active ingredient concentration).

By providing growers with information and active learning experiences on water treatment options for pathogen control, the Alliance will help them achieve success in water recycling while maintaining economic viability. The Alliance will play a role in sustainable water management by facilitating efficient and safe use of water and disinfesting chemicals. We encourage other faculty and organizations to participate in this Alliance.

**Keywords:** education and outreach, horticulture, water recycling, water treatment
**Challenge:** Population growth and land use change impacts to water resource sustainability
**Issue:** Water availability and allocation