

**How do you protect water quality and stay profitable?** Growing high quality ornamental flowers and plants requires large amounts of water, fertilizer, and pesticides. These high inputs increase the potential for both surface and ground water pollution. How do you avoid pollution and still grow high-quality, profitable crops? The easiest way is to implement management practices that protect against runoff and leaching of fertilizers, pesticides, and other agricultural chemicals.

**The purpose of this tour** is to see management practices that flower and nursery growers have implemented that have significantly contributed to the protection of the environment, including water quality. At each stop, University of California (UC) farm advisors, extension specialists, and staff researchers will discuss results from various projects.

**Topics will include** use of an IPM program that incorporates biological control to reduce pesticide runoff, use of treatments for pathogen control in recycled water, use of PAM to mitigate sediment and pesticide runoff, use of a grassed waterway and plants in drainage ditches to reduce nutrient and pesticide runoff, and irrigation retrofitting to improve distribution uniformity and reduce runoff.

**A water quality manual is available** to each participant who completes the survey. This limited edition is a valuable resource with nearly 200 pages of information, and includes numerous color photos of practices that growers have implemented to protect water quality.

**Continuing Education Units** have been requested and **Conditional Waiver credit** has been approved (6 hours for nurseries in Region 3 of the Water Quality Control Board; 7 hours for nurseries in Region 4 of the Water Quality Control Board) for this event. Conditional Waiver credit has also been awarded for the survey portion of the day. Registration fees include bus transportation, box lunch, refreshments, and a CORF binder of handouts.

#### **Tour Sites:**

- 1) **Grolink and Topstar Floral:** Grolink is a supplier of rooted and unrooted chrysanthemum and other cuttings. Topstar produces lisianthus, belladonna delphinium, lilies, veronica, as well as other cut flowers. The two nurseries have cooperated on a project to capture runoff water with a series of four detention basins.
- 2) **Sun Valley Group, Oxnard Division:** produces lilies, irises, gerberas, Matsumoto asters, delphinium and other seasonal crops. They installed a recycling system for their gerbera hydroponics system, using heat sterilization. Between 30-40% of the drip irrigation used in the greenhouses drains into troughs that is collected, heat sterilized, blended with RO water, and reused on the gerberas. As part of the Gerbera Pest Management Alliance, they have adopted an IPM program that uses reduced-risk pesticides and incorporates biological control.
- 3) **Bordier's Nursery, Somis:** Bordier's grows more than 1,800 varieties of plants, including ornamental shrubbery, perennial color, garden roses and Christmas products such as poinsettias, rosemary and container grown Christmas trees. The Somis site is a 200-acre facility. In addition to a large and very sophisticated recycling basin to capture and reuse the majority of their runoff, they also installed a grassed waterway and a constructed wetland to treat runoff before discharge in cases when they need to release runoff. The entire facility is graveled to slow runoff, decrease sediment carried by runoff, and limit erosion. They also use polyacrylamide (PAM) to decrease sediment carried by runoff.
- 4) **Plants Plus Nursery:** This nursery grows ground covers, bedding plants, and other plants on eight acres. They constructed a retention basin for recycling, installed low volume micro-sprinklers in a shadehouse, and constructed a concrete mixing pad for soil and fertilizers. This nursery has also been a good example of the use of passive water conservation efforts such as placing plants in drainage ditches and positioning succulents in drier areas of the nursery. Being a small nursery, this cooperater is an example to other small growers of a recycling system and other management practices that can be achieved with limited funding.

CORF wishes to thank our Tour sponsors: **UC Cooperative Extension, CCFC, CAFG&S, Syngenta, OHP, Inc., Romeo Packing Company, Target Specialty Products, Western Farm Service and Farm Credit West.**

*(If you would like more information on being a CORF sponsor, please contact the office at 831-479-9724)*



All CORF Programs are ADA Compliant. Should you need assistance, please contact the CORF office 5 days prior to the program.

**Grower Tour: Management Practices to Protect Water  
 Quality in Greenhouses and Nurseries  
 Ventura – June 6, 2007**

7:45 am – 9:00 am (Survey)  
 9:00 am – 4:00 pm (Tour)

**Registration Fees:** Prices listed are per person. Early registration rates apply up to 5 days before the seminar. **Late Registration:** Late and at-door registration will be accepted only if space is available and meals cannot be guaranteed. A confirmation will be faxed to registrants whose registration is received up to 5 days prior to the seminar. **Refund Policy:** For refund requests received 5 days prior to the event, registration fees will be refunded minus a \$10 processing fee. Refund requests must be received in writing (fax & email is acceptable). **For more information please call the CORF office at 831/479-9724. (FAX: 831/603-4092 email: [jwills@ccfc.org](mailto:jwills@ccfc.org)) Please copy this form for additional attendees.**

Name #1	Daytime Phone	
Company	Fax	
Address	City	State, Zip
Email address		

If possible, provide us with your fax & email address so that we may send you important meeting information.

**Please register me for the following education program:**

*Grower Tour: Management Practices to Protect Water Quality*

	Early	Late	
Ventura, June 6.....	\$75	\$100	\$ _____
<b>Total registration (fees enclosed)</b>			\$ _____

**Payment by Check:** Mail this form and your registration fees, made payable to CORF, to  
**CORF, 820 Bay Avenue, Suite 109, Capitola, CA 95010**

**Credit card payment:** Mail your registration to the CORF address above or fax in your registration to **831-603-4092**

**Payment by Credit Card:** Please charge my  VISA  Master Card

Card # \_\_\_\_\_ Exp. date \_\_\_\_\_

Cardholder Name \_\_\_\_\_ Signature \_\_\_\_\_

**CORF Grower Tour: Management Practices to Protect Water Quality**

**Itinerary and Speakers**

**7:45–8:50 Completing the survey.** If you have not already filled out the survey, *Checklist for Assessing and Mitigating Runoff in Greenhouses and Nurseries*, come before the tour during this time slot and you will receive a free manual. (1 hour of Conditional Waiver Credit has been awarded for this portion of the day!)

**9:00–BUS LEAVES UCCE OFFICE**

**9:15–9:50 GroLink/Topstar:** *UCCE, Ventura staff and Michelle Manigold* (Water Resource Engineering Associates Civil Engineer)

**10:15–12:05 Sun Valley Group, Oxnard:** *Gerrit Vanderkooy* (Sun Valley Group, Production Manager); *Michael Parrella* (UC Riverside, Entomology Assoc Dean and Professor); *Don Merhaut* (UC Riverside, Botany and Plant Sciences CE Nursery Specialist); *Julie Newman* (UCCE, Ventura County Farm Advisor).

**12:35–2:10 Bordier's:** *Gene Arthur* (Bordiers, Production Manager); *John Kabashima* (UC Cooperative Extension, Orange County Director and Farm Advisor); *Brooks Engelhardt* (Natural Resources Conservation District Conservationist); *UCCE Ventura Staff*

**2:25–3:30 Plants Plus:** *Ben Faber* (UCCE Ventura Farm Advisor), *UCCE Ventura Staff*, *John Stevens* (Power One Electric Electrical Contractor); *Eric Green* (Hydroscape Sales Rep)