

# Annual Report for the Santa Clara and San Benito Counties Watershed Programs

June 2005

This Report provides a summary of the work that has been done between September 2003 and May 2005 by the farmers and ranchers of Santa Clara and San Benito Counties with the support of the Farm Bureaus in each county and the Agricultural Water Quality Alliance. Financial support has been provided by the State and Regional Water Quality Control Boards, the Monterey Sanctuary Foundation, the taxpayers of California for their support of Propositions 13 and 50, the U.S. Department of Agriculture, and the Santa Clara Valley Water District. Technical support has been provided by the University of California Cooperative Extension, the Natural Resources Conservation Service, the Resource Conservation Districts, and University of California researchers.

| <b>County-Level Summary Statistics</b> |                    |               |                         |               |
|----------------------------------------|--------------------|---------------|-------------------------|---------------|
|                                        | Santa Clara County |               | San Benito County       |               |
| Top 5 Crops Grown in County (2003)     | 1. Nursery Crops   | \$103,979,000 | 1. Leaf Lettuce (mixed) | \$30,039,000  |
|                                        | 2. Mushrooms       | \$46,400,000  | 2. Nursery Stock        | \$29,792,000  |
|                                        | 3. Pepper, Bell    | \$10,383,000  | 3. Baby Lettuce (salad) | \$25,634,000  |
|                                        | 4. Cut Flowers     | \$9,479,000   | 4. Grapes (wine)        | \$21,827,000  |
|                                        | 5. Steers/Heifers  | \$6,674,000   | 5. Peppers (bell)       | \$18,144,000  |
|                                        | Total Gross Sales  | \$241,113,840 | Total Gross Sales       | \$238,767,000 |

|                                                                            | Santa Clara County                  | San Benito County                   |
|----------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Number of Farmers in the County                                            | 506                                 | 335                                 |
| # of farmers involved in Program                                           | 122                                 | 135                                 |
| % Participation (by operation)                                             | <b>24%</b>                          | <b>40%</b>                          |
| Total ag acreage* in the County                                            | 40,031                              | 113,390                             |
| Total ag acreage* involved in program                                      | 21,819                              | 61,264                              |
| % Participation (by acreage)                                               | <b>55%</b>                          | <b>54%</b>                          |
| Total # of operations attending a short course                             | <b>120</b>                          | <b>128</b>                          |
| Total # of participants attending a short course                           | 125                                 | 131                                 |
| Total # of draft water quality plans complete                              | <b>42</b>                           | <b>47</b>                           |
| Total # of plans near complete                                             | 78                                  | 81                                  |
| Growers with 5 or less acres (% of growers)<br>combined acres (% of total) | 138 growers (27%)<br>553 acres (1%) | 41 growers (12%)<br>159 acres (.1%) |

\* **Notes:** The numbers above are based on our database of growers. It does not include the 29,788 acres owned by the MPOSD because they have taken it out of production or growers/ ranchers who are not in the Ag commissioner database. Acreages are likely to be understated because we don't have all of the ranchers' acreage available. The large number of growers with 5 or less acres who are generally not active in classes or watershed groups impacts the % participation numbers, especially in Santa Clara County.

|                                                                      | Llagas               | Uvas                 | Pacheco              | San Juan         | San Benito           | Tres Pinos       |
|----------------------------------------------------------------------|----------------------|----------------------|----------------------|------------------|----------------------|------------------|
| # of Farmers in the Watershed                                        | 212                  | 70                   | 140                  | 29               | 70                   | 53               |
| # of farmers involved in Program                                     | 51                   | 31                   | 65                   | 23               | 35                   | 18               |
| % Participation (by operation)                                       | 24%                  | 44%                  | 46%                  | 79%              | 50%                  | 34               |
| Total ag acreage* in the watershed                                   | 23,850               | 7,037                | 28,858               | 10,852           | 23,995               | 28,412           |
| Total ag acreage* involved in program                                | 16,831               | 6,650                | 14,701               | 10,252           | 18,575               | 8,705            |
| % Participation (by acreage)                                         | 71%                  | 95%                  | 51%                  | 94%              | 77%                  | 31%              |
| Total # of operations attending a short course                       | 53                   | 27                   | 53                   | 23               | 33                   | 16               |
| Total # of participants attending a short course                     | 56                   | 31                   | 53                   | 28               | 37                   | 19               |
| Total # of draft water quality plans complete                        | 20                   | 11                   | 24                   | 9                | 6                    | 10               |
| Total # of plans near complete                                       | 33                   | 16                   | 29                   | 14               | 27                   | 6                |
| Growers with ≤5 acres (% of growers) / with ≤10 acres (% of growers) | 42 (20%)<br>75 (35%) | 13 (19%)<br>15 (21%) | 21 (16%)<br>27 (19%) | 0 (0%)<br>1 (3%) | 11 (16%)<br>17 (24%) | 3 (6%)<br>4 (8%) |

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Short Courses offered to date:

| Location      | Date          | Focus                 | Attending                |
|---------------|---------------|-----------------------|--------------------------|
| Gilroy        | July 2005     | Rangeland             | Registration in progress |
| Gilroy        | June 2005     | Nursery and all other | 16                       |
| Saratoga      | May 2005      | Vineyards             | 31                       |
| Gilroy        | April 2005    | Row crops, orchards   | 34                       |
| Hollister     | January 2005  | Row crops, orchards   | 50                       |
| Gilroy        | October 2004  | Row crops, orchards   | 52                       |
| Aromas        | March 2004    | Rangeland             | 28                       |
| Gilroy        | January 2004  | Row crops, orchards   | 37                       |
| Hollister     | January 2003  | Row crops, orchards   | 13                       |
| Hollister     | January 2003  | Rangeland             | 9                        |
| Morgan Hill   | November 2002 | Row crops             | 13                       |
| Total Classes | 9             |                       | Total attending 283      |

We also held 24 workshops on completing NOIs and/or Farm Plans, two monitoring workshops, and one workshop on streambed erosion during this time period.

There was a significant amount of press coverage during the time period. Articles on the program appeared in the Gilroy Dispatch, the San Jose Mercury, the San Benito Pinnacle and Freelance as well as papers in Monterey, Salinas, Santa Cruz and San Luis Obispo. Four of those articles are attached below:

### **Farmers unite to monitor runoff -- Nonprofit will help them reach state-mandated requirements**

David Sneed,

The San Luis Obispo Tribune Sun, Mar. 20, 2005

Central Coast farmers have formed a nonprofit group to help them meet new state water pollution requirements. Called Central Coast Water Quality Preservation Inc., the group will conduct a cooperative monitoring program of water discharges from irrigated land. The monitoring is required by rules adopted by the Regional Water Quality Control Board in July. The group received its nonprofit status at the first of the year. A 13-person board of directors is being formed with 11 seats already filled. Kevin Merrill with Mesa Vineyard Management of Templeton is president. Participation in the nonprofit is open to any farmer in the state's Central Coast water region, which runs from northern Ventura County to southern Santa Cruz County. The number of growers participating in the cooperative has not been determined, but is already more than 50 percent in all counties, which exceeds expectations, Merrill said. Monitoring began in the last week of January. Water samples are collected and sent to a laboratory for analysis and the results given to water officials.

State water officials now require farmers who irrigate to complete 15 hours of training and develop a water quality management plan that reduces runoff polluted with fertilizers, pesticides and sediment. Under the new requirements, farmers must test their runoff. They may do their own monitoring or form cooperative monitoring programs such as Central Coast Water Quality Preservation. Costs of monitoring vary greatly, but can cost an individual farmer several thousand dollars annually. Assemblyman Sam Blakeslee, R-San Luis Obispo, has introduced legislation that would reduce the frequency that farmers must be monitored from annually to every two years and would lower the fees. [http://ad.doubleclick.net/jump/sanluisobispotribune.living/community;kw=center6;c2=community;c3=community\\_homepage;pos=center6;group=rectangle;ord=1111427038080?>](http://ad.doubleclick.net/jump/sanluisobispotribune.living/community;kw=center6;c2=community;c3=community_homepage;pos=center6;group=rectangle;ord=1111427038080?>)

### **New water law has farmers scrambling**

Tuesday, December 21, 2004

By Matt King, Gilroy Dispatch

Gilroy - With just two weeks left to conform with new water quality requirements, farmers are scrambling to file all the necessary paperwork and figure out how to bring their farms into compliance.

"My phones have been ringing off the hook," said Mary Ellen Dick, a water quality coordinator with the Six County Agriculture Coalition. "Everyone is saying 'oh my, we have to get this done.'"

In July, the Central Coast Regional Water Quality Control Board adopted new rules - called a conditional waiver - governing discharge of fertilizers, pesticides, dirt and sediment, and other waste products from irrigated land. Farmers have until the end of 2007 to meet all of the new standards, but they must file a notice of intent to comply by Jan. 1. Farmers not enrolled might face fines of up to \$1,000 a day.

Fortunately, Dick said, most area farmers are already more or less in compliance.

"In general, I've found that farmers already have at least half of the necessary practices in place," she said. "If they don't, it's because they haven't heard about them."

Tim Chiala of George Chiala Farms in Morgan Hill said Friday that most of the environmental standards mirror good business sense.

"A lot of what needs to be in the waiver, we already do," Chiala said. "Most farmers don't do blanket fertilizing. Spraying pesticides is our biggest expense after labor, so we only use what the fields need."

Still, he said, the time and expense to prove compliance is unwelcome.

"I wonder what they're going to make us do next," he said. "Are we going to need permits to irrigate? It's scary to see what's to come."

Under the old waiver, which was instituted in 1983 and expired last year, farmers were required to meet certain water quality regulations, but there was no formal registration and there were no monitoring systems in place. It was essentially an honor system.

Alison Jones, an environmental scientist with the Regional Board, said that her organization's testing of the state's watershed show high levels of nitrates, pesticides, fertilizers and sediment in surface water. Lower Salinas and the Pajaro River watershed are two particularly contaminated areas.

"We don't hold agriculture fully responsible, but the data show severe impacts to the state's water," Jones said. "When we look for toxicity, we find it associated with agriculture."

The new waiver requires growers to complete 15 hours of water quality education, develop a water quality plan for their farms that address management of nutrients, pesticides, irrigation and erosion control. Plans need to have detailed maps showing slopes, ditches, rivers and creeks and other areas with runoff potential, and the practices used to control erosion.

Farmers in compliance need to make a progress report at the midway point of the five-year waiver cycle. Those not in compliance must report annually. Monitoring is the responsibility of the grower, and could cost farmers between \$3,000 and \$5,000 a year. The Regional Board is going to allow a cooperative monitoring system, which farmers can elect to join when filing their notice of intent. For at least the first year, the system will be free to farmers.

Chiala said he's using rocks and mulch to combat erosion along roadside ditches at his property and documenting his effort with photographs.

"We already do 90 percent drip irrigation so we don't have a lot of runoff," Chiala said. "We have just a few problem areas along the roadside."

The five-week course is offered by the UC Cooperative Extension for \$175. The next session begins January 4, 2005, in Hollister. Classes are also offered for ranchers, but they are not mandatory.

Controlling runoff is best accomplished through drip irrigation, the use of drainage tiles, special care of riparian areas - or land on either side of a river - and year-round use of land, which Dick called "counter-intuitive."

"The idea has always been that if you clear your field in the fall, it will be ready to go in the spring," Dick said. "But studies have shown that winter crops will suck water out of the ground and prevent dirt from running off in the spring."

Jeannie Lopez of Uesugi Farms in Gilroy agreed that most farmers already use the prescribed techniques.

"We do so much drip irrigation that we don't have runoff unless we have a break," she said. "We've been getting ready for this for two years, so even though it's been an ordeal, we're ready to rock and roll."

Growers say that the toughest part of the process was the Regional Board's tardy release of notification forms. The policy change was made in July, but the paperwork wasn't made available until Dec. 3.

"Most of the flurry is because the forms did not come early," Dick said. It was just hurry up and wait."

Upcoming classes

Classes to help farmers meet new discharge requirements:

- Writing a Farm Plan

Hollister: Tuesday, Dec. 28, 1 to 3:30pm; Morgan Hill: Thursday, Dec. 30, 1 to 3:30pm

- Filing Notice of Intent

Gilroy: Wednesday, Dec. 29, 10am to noon; Morgan Hill: Thursday, Dec. 30, 10am to noon.

- The next 15-hour Irrigated Agricultural Water short course begins Jan. 4, 2005, in Hollister. For more information about that and other classes, call the Santa Clara County Farm Bureau at (408) 776-1684.

## **Local farm group eyes grants**

**Wednesday, September 01, 2004**

By Katie Niekerk, Gilroy Dispatch

Gilroy - Farmers and ranchers wanting to learn more about protecting water quality on their land soon might see additional opportunities to do just that.

Watsonville-based Agri-Culture Inc. applied in May for a \$25,000 grant from the Santa Clara Valley Water District. If awarded the monies, the organization will add more class dates to its Agricultural Water Quality Program, a short-course that helps farmers design an individualized water quality protection plan for their farms and watersheds. The water district will announce grant recipients next week.

During the five-day, 15-hour series of classes, farmers and ranchers in San Benito and Santa Clara counties receive a wealth of information on topics including irrigation efficiency, fertilization techniques and permit regulations. The ultimate goal is for each participant to walk out of the classroom with a thoroughly specific plan complete with photos and ideas for future planning.

"Our goal with the grant is to get 75 percent of farmers to complete their plans," said MaryEllen Dick, program manager. "The grant would be so beneficial, because this is hard work for the farmers to create these plans. The last thing they need is to spend 15 hours in a classroom when it's harvest season, but they're working with us really well because they know this is important. They're eager."

The short courses are followed up by workshops that provide extra help to farmers whose water plans might change over time. For example, farmers installing a field-by-field drip irrigation system need to continually update their water plans to reflect which fields have been irrigated.

The grant also would lower the per-course fee from \$175 to about \$60, Dick said. Since its inception, the program has received support from Regional Water Quality Board grants that have helped keep course fees down. The most recent of those grants expired in March.

Agri-Culture applied for the water district grant's maximum per-applicant amount. The remainder of the program's total \$45,000 will be matched by Agri-Culture if awarded the grant.

Dave Vanni, owner of Solis Winery, said the short course helped him realize a number of ideas both big and small that would help protect the quality of water flowing into a creek near his winery.

"We need know what's expected of us, and we were able to get that information," Vanni said. "There were so many little things you wouldn't normally think of that you can do to make it easier to comply with the law, and (the course) was inexpensive for as much time and material as we got."

Jeannie Lopez, office manager at Uesugi Farms, took the course in November 2002. She said she came away from the course with answers about water quality that she didn't know where to find elsewhere.

"Before going through the course, we had no information on what would be required from us as farmers and what necessary water permits we'd need," she said. "There's not a whole lot of places out there for us to get that information."

After a delay in the award process, originally scheduled for July, Dick said she's still crossing her fingers and excited to get more classes going. The next two courses, scheduled for October, will

take place irrespective of the grant decision, and Agri-Culture will use up-front money to fund them.

Launched in 2001, the program coordinates two irrigated agricultural courses and one range land class per year. Thirty-eight farmers attended the most recent short course held in March, Dick said.

The grant is part of the water district's Watershed Stewardship Grant, which awards up to \$300,000 to local nonprofit groups working to protect the county's watersheds. Agri-Culture Inc. is the only south county applicant, and this is its first year to apply for the grant.

Farmers from San Benito and Santa Clara counties are encouraged to join the Agricultural Water Quality Program.

## **A lesson in pesticides**

**Monday, August 30, 2004**

By Katie Niekerk, Gilroy Dispatch

Gilroy - People who spend their weekends gardening might have more in common with farmers than they thought, and the shared bond comes in the form of pesky little bugs - and the measures taken to wave them good-bye.

While pesticides sometimes get a bad wrap for their impacts on health and the environment, they're a necessary tool to help produce healthy crops, said Santa Clara County's Agricultural Commissioner Greg Van Wassenhove.

"We only use pesticides when we absolutely need to," he said. "And they're a valuable tool for farmers."

Agricultural pesticide use in California is tightly regulated by a comprehensive, statewide system of laws out of the state's Department of Pesticide Regulation. Each county's agricultural commissioner enforces those laws locally and updates them regularly to reflect any changes and new developments in pesticide technology.

A system of checks and balances among the state, the county and farmers helps ensure pesticides are being used efficiently and safely. Field inspectors hold regular spot checks to check farmers' pesticide application, storage, signage and disposal. Failure to comply can result in penalties ranging from written notice of violation to fines to legal action, and the county reports all findings to the state.

Farmers can apply pesticides to their own crops or hire a pest control operator to handle the job for them. Operators earn application licenses through the county after taking several classes on pesticide safety and passing an exam issued by the agricultural commissioner's office. Once a license is in their hands, operators undergo annual testing and must fulfill between 40 and 80 hours of educational requirements in order to retain their licenses.

Farmers who apply pesticides to their own crops also must satisfy similar educational requirements in order to gain application licenses, and they are required to supply their employees with all necessary information as well as supervise pesticide sprays.

Both commercial and private applicators wear safety gear such as coveralls, goggles and chemical resistant gloves while on the application site. Each time they apply pesticides, growers must report to the commissioner what chemicals were used and on which crops.

California farmers use a system called Integrated Pest Management, or IPM, to help manage harmful insects. IPM incorporates a combination of mechanical, biological and chemical controls that help farmers evaluate what pesticides are best suited for what crops and insects. Each pesticide goes through a federal review and two subsequent state reviews, which analyze the chemical's state and environmental impacts. California is the only state to perform two state reviews.

One facet of IPM involves beneficial insects such as lacewings, robber flies and ladybugs that prey on crop-damaging insects. Bats, owls and other nocturnal flyers also help California farmers by combating harmful winged insects such as moths.

Beneficial insects work especially well when trying to target a specific harmful insect because each insect has a specific enemy, said Deputy Agricultural Commissioner Kevin O'Day. If blanket pesticides don't eliminate the problem insect, a more pinpointed approach probably will do the trick. But care must be taken to ensure bringing the enemy insect to a new area won't introduce a new problem to that area's biological makeup, O'Day said.

Jeannie Lopez, office manager of Uesugi Farms, said most of her pesticide application is done through fertigation, or applying pesticides through the ground as opposed to a spray. Lopez attested to the county's strict regulation of pesticide, and she said such restrictions are becoming more necessary with residential development so close to farms.

Another farmer, Dave Vanni of Solis Winery, said public perception of pesticides is sometimes skewed.

"It's a double-edged sword. People tend to think pesticides can be harmful, but they help reduce blemishes on produce that people might not want to see in the grocery store," he said. "They're probably more beneficial than most people realize."