

San Benito Agricultural Watershed Plan Annual Report

June 2005

The San Benito Watershed Working Group, in cooperation with the San Benito County Farm Bureau's Agricultural Water Quality Program, prepared the following watershed plan.

Description of the San Benito Watershed

The San Benito Watershed starts at the very southern end of San Benito County. It runs north, merging with Clear Creek before it is captured by the Hernandez Reservoir where its releases are managed by the San Benito Water District. North of the Hernandez Reservoir, the river is fed by McCoy Creek, James Creek, Rock Springs Creek, the South Fork of Willow Creek, White Creek, Stone Creek, Pescadero Creek (which is fed by Thompson, Harlan and Jamieson Creeks), and Sulphur Creek. Tres Pinos Creek, its largest tributary, joins the San Benito River just south of the town of Hollister at Southside Road. The river then runs through Hollister and along the east side of San Juan Bautista until it meets the Pajaro between Betabel Road and Highway 129. Grazing on private and Bureau of Land Management land dominate the top of the watershed. Hollister contributes urban runoff, suburban residential areas and the discharge and groundwater seepage from the poorly functioning sewage treatment plant. The treatment plant is under Regional Board supervision due to problems with its discharge. It currently is under Regional Board restrictions including a hook-up moratorium.

The lower watershed of the San Benito is a mixture of agricultural (primarily orchards, nurseries/greenhouses, vineyards and row crops), rural residential, residential (San Juan Bautista), and, at the very bottom, a high school and agricultural processing plants. In the past, in high flow events, the San Benito River has also overflowed into Bull Creek to join with the San Juan Creek before joining the Pajaro River. The upper watershed is intermittently dry in the summer but the lower portion runs all year. However, after the introduction of the San Felipe Pipeline in June 1987, more and more growers upstream of the area have used the imported water instead of pumping groundwater, resulting in excessively high groundwater in the area.

Anticipated changes to the watershed include continued pressure for rural and suburban residential development, resulting in increased impervious surface and may have impacts on the amount of runoff carried by the watershed.

The watershed has been identified as having critical habitat for steelhead and red-legged frogs.

The San Benito River is a tributary to the Pajaro River on the Central Coast of California. the San Benito River, Clear Creek, the Hernandez Reservoir and the Pajaro river are currently listed as an impaired waterbodies by the State of California as designate for the U.S. EPA under provisions of the federal Clean Water Act. The San Benito is listed for sediments/siltation and fecal coliform; Clear Creek and Hernandez are listed for mercury; and the Pajaro is listed for

nutrients, fecal coliform and sedimentation/siltation. The state is required by law to set Total Maximum Daily Loads (TMDLs) for the amount of each of the listed pollutants the river can handle on a daily (or annual) basis. The TMDL for Mercury on Clear Creek and the Hernandez Reservoir was completed and approved by the EPA on June 21, 2004. Both the nutrient and sediment TMDLs are underway. The Nutrient TMDL was supposed to be released in May 2005 but the Central Coast Regional Board (Regional Board) now says that it will be delayed for at least one year as a state task force discusses how to set water quality standards for nutrients and bio-stimulation (there are currently only standards for nitrates). The Sediment TMDL, which was also supposed to be released in May 2005, is currently waiting for Technical Peer Review and legal review. The Regional Board staff is hoping to have that document ready for public discussion in the fall.

Goals of the San Benito Watershed Working Group

We have identified 70 active growers in the San Benito Watershed. They farm more than 23,995 acres (note that we only have acreage that is registered by the Ag Commissioner for pesticide or organic and self reported acres, we do not have all of the ranch and non-pesticide using acreage so actual farmed acreage in the watershed is greater than 23,995) which are spread out across the length of the county. Of those 70 growers, 25 (50%) are active in the watershed workgroup. The 35 growers who are active cultivate 18,575 acres – which is 77% of the identified acreage in the watershed. Note that, in this watershed, the growers close to Hollister generally have small, irrigated acreages while growers south of Hollister generally have larger ranches or vineyards. We identified 11 growers with 5 or fewer acres and 17 growers with 10 or less acres. Only 5 of these small growers are participating in the water quality program at this time.

The San Benito Watershed Working Group is an association of agricultural landowners, managers and operators within the watershed, who have organized to address agricultural non point source pollution concerns. The agricultural landowners in the San Benito Creek watershed want to proactively address water quality problems in a way that is practical and feasible for agriculture. Established in March 2005, the San Benito Watershed Working Group is the last of the San Benito County watersheds to formally meet as a working group – primarily because the amount of land covered. The San Benito River stretches over 100 miles from headwaters to the Pajaro. Individual growers from this watershed have been attending meetings for the Tres Pinos and/or San Juan watersheds in the past years and have attended the Short Courses and completed farm/ranch plans. As a watershed-working group, the agricultural landowners are developing this watershed plan to submit to the Central Coast Regional Water Quality Control Board for consideration.

It is the goal of the San Benito Watershed Working Group to improve water quality by voluntarily implementing farming practices that successfully reduce sedimentation and agricultural non point source pollution. The Watershed Working Group seeks to achieve and sustain environmental improvements while maintaining the economic viability of the agriculture. While the Working Group has not had time to develop an overall plan for protecting water quality in the Pajaro watershed, the Group agreed on the following items as their next steps:

Watershed Working Group Action Items

1. Compliance with Water Quality regulations: The focus of the past year has primarily been on completing Notice of Intents, Short Courses, and Farm Plans. Growers began to develop individual, confidential Farm/Ranch Water Quality Plans, or Vineyard self assessments; attended short courses or Central Coast Vineyard team's Program; submitted their Notice of Intent to the Regional Water Quality Control Board; and developed and implemented "self monitoring" to track progress.

Status: 37 growers (33 ranches), representing 74% of the agricultural production in the watershed, attended the short course, 6 have completed their Farm/Ranch Water Quality Plans, and all 33 ranches are active in the watershed-working group.

2. Perpetuate or implement management practices (farming practices) that reduce or mitigate sediment and non point source pollution sources. Monitor success by completing inventory of existing and further commitments for water quality management practices and compile into an annual watershed report to the Regional Board. (August 2003, annually thereafter)

Status: This is the first Annual Report on this watershed. 23 growers responded to our survey on implementation of management practices. The growers who completed the survey reported that they are cultivating 10,404 acres. Their primary crops are orchards, cattle, row crops, vineyards, and nurseries. The growers reported implementing or planning to implement the following practices. Note that most growers did not report on the number of acres protected and/or were confused by the question so we will not be asking it on future surveys.

A. Vegetative controls

- a. Annual grassing – 0 growers, NA acres
- b. Cover Crops – 7 growers, 195 acres
- c. Critical area planting – 0 growers, NA acres
- d. Field border strips – 1 growers, NA acres
- e. Filter strips – 0 growers, NA acres
- f. Grassed/vegetated waterways – 1 growers, NA acres
- g. Hedgerows – 0 grower, NA acres
- h. Mulching – 2 growers, NA acres
- i. Seeding Furrow bottoms – 0 growers, NA acres
- j. Windbreaks – 1 growers, NA acres

B. Field management:

- a. Crop rotation – 1 growers, NA acres
- b. Move roads/rows – 0 growers, NA acres
- c. Repair of potential erosion sites – 0 growers, NA acres
- d. Row arrangement – 1 growers, NA acres
- e. Slope management – 0 growers, NA acres
- f. Tailwater Recovery / Reuse – 0 growers, NA acres
- g. Underground outlets – 1 growers, NA acres
- h. Water conservation -- 6 growers, 75 acres
- i. Water/sediment control – 0 growers, NA acres
- j. Unspecified sediment management - 4 growers, NA acres

- C. Animal Management
 - a. Animal Feed out of waterway – 0 grower, NA acres
 - b. Animal Access to water - 0 growers, NA acres
 - c. Grazing Management – 0 growers, NA acres
 - D. Pest Management
 - a. Integrated pest management – 2 growers, NA acres
 - b. Beneficial insects – 1 growers, NA acres
 - E. Monitoring
 - a. Monitoring – 1 growers, NA acres
 - b. Pre-sidedress soil testing – 3 growers, NA acres
3. Lowering the groundwater table at the lower end of the watershed and improving the quality of the water pumped from wells.

Status: The San Benito Water District is working on a plan to improve the County’s groundwater. The Group will follow progress and participate as appropriate as well as implementing any water quality measures that are identified as they complete their Water Quality plans.

4. Continue to hold demonstration/educational events and pilot project meetings as needed.

Status: Members of the Working Group have participated in short courses, monitoring workshops, farm tours, harvest festivals and other training/educational events.

5. Develop water quality projects (demonstration & research) on farms with technical assistance from RCD, NRCS, and UCCE.

Status: None to date

Grower Profile: Julie and Nancy Vigna, The Vigna Family Ranch

The Vigna family started farming 90 acres in Hollister in the late 60’s. Since then, their father has passed, so the two daughters, Julie and Nancy, along with their mother, have taken over the farm operations. In the past, they have grown hay for sale but it is getting harder for them to find reliable people to come and cut the hay when it is ready to be harvested. The physical labor of the ranch is hard for all the women in the family so, this year, they are planning on running some cattle on the land and then sell the cattle at the local auction at the end of the season.

The Vignas heard about the Short Course when the San Benito Water District sent out a friendly reminder to all the growers who are getting San Felipe water. They signed up and took the Short Course last fall. They say that what they learned, and the contacts they made, are invaluable.

One of the water quality issues on their property was a culvert, built by the City of Hollister, which was draining the runoff from John Smith Drive onto their property. The culvert was built when there were not yet many houses on the road. Since then, a new sub-division was built and

the runoff from all the houses drains to that culvert and there is another farmer farming across the street. The culvert was not built to handle the water flow and nothing was done to improve the situation when the new development was put in.



Undersized aging culvert onto Vigna Farm June 2005

The Vigna Ranch has a natural ephemeral creek that flows through it and this culvert drains water to that creek. As the impervious surfaces in the drainage area, and the resultant flows, have increased, the creek is getting more water and, rather than draining, the water has been ponding and is wet more of the year. As a result, they haven't been able to plant that area until later and later in the year.



Ephemeral streambed running through Vigna Farm June 2005

When they attended the Short Course, they learned about the importance of monitoring with water that was running onto their property and some options to deal with it. After the class, they contacted the city and other agencies and they have gotten a written letter from the city of Hollister saying that soon the road and culvert will be fixed. They were very happy about the outcome and that so much of their rangeland will not be lost.

Another practice they learned was grassing their waterways to reduce sediment and pollutants that may flow off the land. They tried it this winter by throwing some seed down in the dry creek bed during the winter. After they did it, they realized it was not “weed free” seed and they

were not happy with the results - but they have learned what they need to do and will be working on it for next year.

Julie and Nancy say that they have also become much more conscious of the water coming onto and leaving their property since they have taken the Short Course. Overall, they all think the Short Course was worth their time and are glad they took it.

Existing and Ongoing Water Quality Data Collection

The following programs are collecting data on the watershed. This data will be analyzed as baseline data over the winter and then, in conjunction with the data collected through this program, will be used to compare trends and identify potential issues.

- **Six County Cooperative Monitoring:** The vast majority of the growers in this watershed have indicated on their Notice of Intent that they plan to join the Preservation Inc. Cooperative Monitoring Program. They are awaiting details as to how to sign up.
- **USGS:** USGS is monitoring at 4 sites along the San Benito River and its tributaries – at Clear Creek, Willow Creek, Tres Pinos and at Highway 156. The data is available at: http://waterdata.usgs.gov/nwis/current?huc_cd=18060002&index_pmcode_00065=3&index_pmcode_00060=4&index_pmcode_00062=5&index_pmcode_72020=6&sort_key=site_no&group_key=county_cd&sitefile_output_format=html_table
- **NRCS:** monthly water quality monitoring at four locations along San Benito Creek. Parameters measured include: Nitrate-N, Orthophosphate as PO₄, Ammonia-N, Water Temperature, pH, Electrical Conductivity and Turbidity (NTU). The result of the local NRCS monitoring is attached in an excel document.
- **RWQCB CCAMP:** There are 5 monitoring stations established on San Benito River. They are located Y Road (just before the San Benito enters the Pajaro), above and below the Hernandez Reservoir, at Willow Creek and at an unknown tributary. These sites were monitored in 1998/99 and will be monitored again in 2005. The data can be viewed at: <http://www.ccamp.org/ca0/3/305/305BySiteProj.htm>
- **Ag Commissioner/County Planning:** general description of groundwater quality and quantity can be found within the County's General Plan.
- **UC Davis Researchers:** UCCE is working with growers in this area but no specific site information is available.
- **San Benito Water District Groundwater/Surface Water Testing:** groundwater test wells are located throughout San Benito County.