

## Water

**Issue:** Water is a critical and many-faceted planning issue.

**Constraint:** The 1996 General Plan did not deal with the many facets of this issue. Nor has there historically been a great deal of coordination between the County and the water districts in planning and enforcement.

**Opportunities:** During the General Plan Update, the County can work cooperatively with the local water districts in coordinating planning for: wastewater treatment (including septic system usage, sewage treatment infrastructure, and storm water run-off), water supply (including surface water supply, groundwater management, reclaimed water, and water conservation), recreational water use, and flood control.

---

## Water, growth, future

---

By Colin Rigley

Posted: Friday, May 18, 2007 10:43 AM CDT

"We're trying to be visionary" Underhill said. Enterprise file photo.  
Calaveras County and the Calaveras County Water District hope to usher in a new era of cooperation between two entities that have been largely apart for 60 years.

As approved by the Board of Supervisors, the county and CCWD are preparing to form a joint committee to better "facilitate communication and to develop a close working relationship."

The committee, which does not yet have a formal structure, will be comprised of a mixture of county supervisors and CCWD board members. At this point it is likely that Supervisor Russ Thomas and CCWD board member Bob Dean will be on the committee and more members will join in the coming weeks. Dean and fellow water district Director Bertha Underhill were hesitant to comment on previous problems between the county and CCWD and instead expressed a desire to look toward the future.

"I don't want to dredge up any bad memories ?. (I want to) move forward in a more positive framework," Dean said.

"We're trying to be visionary," Underhill said.

Dean did say that "historically there hasn't been a lot of sync," and many years ago a lot of discussion and policy took place "behind closed doors." Underhill agreed that a lack of communication has been the driving force behind the formation of the new committee.

One of the problems resulting from the lack of communication was when planning processes between the county and CCWD collided. Underhill could not comment on specific instances, but said there had been issues where land-use permits were approved before discovering that there were water/wastewater issues on a property and vice versa.

"If we are able to discuss issues that have a lot of policy repercussions, ? we won't be reacting as much as we'll be meeting the growth of the county," Dean said.

Taking action will be the primary focus of the new committee. Dean said that the most important thing will be to have a conversation about mutually affecting issues and then draft policy to tackle them. The new committee will help to

"streamline the process of putting policy in place," he said.

"We really want to see a gathering of all tribes," Supervisor Steve Wilensky said.

"I think it's absolutely critical we get our infrastructure correct," Supervisor Tom Tryon said.

According to Dean, the initial committee action will center in on septics, surface water, water rights, relationship of water usage to the general plan, and n perhaps most importantly n ground water. Dean said that groundwater in the county will become more of a critical issue as growth continues.

Although the committee's central core will be supervisors and CCWD board members, both sides have expressed intent to bring in other parties as necessary.

"If this is to be a countywide committee, all players should be a part of that process," Supervisor Merita Callaway said.

The committee is being formed "out of a realization that there historically hasn't been a cozy connection (between the county and CCWD)," Supervisor Thomas said. Underhill said at the meeting that she had been seeking an avenue for communication since being elected as chair two years ago.

Amador County went through a similar, almost identical, process about 15 years ago with positive results. Amador Water Agency General Manager Jim Abercrombie said an agreement was reached between the Amador Water Agency and county government to tackle county planning issues as they relate to water usage and wastewater. Since that committee was created, Abercrombie said it allows both parties to show a "unified front," and helps avoid the miscommunications and misunderstandings that can arise between the two entities.

In Calaveras, Dean said that if no coordination took place to deal with increased growth, "it's just going to be a Chinese fire drill throughout the county."

Organizing a joint committee was just one of the items presented by CCWD to supervisors. Attached to the committee item was an additional request to provide a "safety net" that would protect people on low or fixed incomes from increasing rates. Underhill and Dean originally intended for the items to be separate and were surprised when they were "lumped together" on the Board of Supervisors' agenda.

Support for the joint committee was overwhelming among the supervisors, but the safety net was met with criticism and eventually removed from the resolution. Supervisor Tryon worried that the "welfare" program would subsidize people of lower income at the expense of others. Tryon, and other supervisors, noted that

such a program would be extremely controversial and likely illegal.

Dean said in a later interview that he was disappointed the two items were brought forward at the same time and that the safety net was subsequently dropped. He added that he hoped to address the issue again at a later time through the new joint committee, but did not want the issue to "become the driving force."

The CCWD will be holding a public rate hearing at 9 a.m. Wednesday, May 23, in the CCWD Board of Directors meeting room, 423 E. St. Charles St., San Andreas. At the hearing board members will discuss a proposal to increase monthly wastewater rates by \$4.50 each year until July 1, 2011, and to increase the monthly base water rate by \$3.50 each year.

Contact Colin Rigley at [crigley@calaverasenterprise.com](mailto:crigley@calaverasenterprise.com).

## **Sewer line reaches its limit in Angels**

By Craig Koscho

Tuesday, February 6, 2007 10:35 AM CST

New development projects in much of Angels Camp have come to a halt because a section of the sewer main has reached its capacity.

While there's no threat of imminent failure in the line, the situation has created an unofficial moratorium on the approval of projects that require environmental review, including negative declarations.

Declaring a sewer main has reached its capacity means it is at 50 percent full during dry weather flow conditions, city Engineer Gary Ghio said.

In some sections of the affected area, the flow is 60 percent, Ghio said.

The problem was discovered about 18 months ago when Stelte Construction Company submitted a project for cottage-type homes and duplexes in the Stelte Park subdivision.

"That's when Public Works raised the red flag," Ghio said.

The situation does not affect already approved uses, Ghio said, adding, as an example, that if someone wanted to build a fast-food restaurant on the vacant grassy parcel at Frog Jump Plaza, it would be allowed.

However, several pending proposals are on an indefinite hold until the full extent of the problem can be determined, and city officials figure out how best to pay for a solution.

The problem area is a 4,200-foot stretch of 10-inch pipe that begins at Booster Way by the Utica Power Authority office, runs down Highway 4 and across the land to a place called Sand Flat next to Finnegan Lane.

The main carries sewage from almost everything on the east side of Highway 49, up to Frog Jump Plaza and everything north of that, Ghio said, estimating it has an impact on about a third of the city.

The affected section of the line, parts of which are 40 to 50 years old, needs to be replaced with a 15-inch main, Ghio said.

And this may just be the beginning.

Survey work is scheduled to determine if the rest of the line, 12,000 feet back to the shopping center, is also at capacity

Replacing the currently identified stretch of line won't be an easy task.

In some areas the main runs under Highway 49. It also runs between homes and Angels Creek in the Annex, the older residential area in the city's southern end.

The creek runs at the bottom of some steep hills so just getting to the main would be a problem.

And the project would require considerable environmental study because of the line's proximity to the creek, Ghio said.

Because of all those issues, the pipe cannot be replaced in phases.

"It needs to be done all at once, or an alternate route found," Ghio said.

While no official cost estimates have been developed, Ghio said a very rough estimate to replace the stretch identified to date, would cost about \$1 million.

A standard replacement of the line is not the only option available.

One of the contributors to the problem is the Altaville Lift Station near Frog Jump Plaza that pumps sewage from that end of the city's lower areas into the sewer main.

If a new line could be run from the station to the sewage treatment plant, it would reduce flow through the old main and avert the need to replace it.

Or the city might also save a step by just laying a new, parallel line next to the old one.

Paying for the project depends somewhat on which of those methods are used.

Angels Camp officials could form a benefit basin, meaning customers in the area served by the main would chip in to pay for it.

If the line is replaced with a larger one, new customers can only be charged for the increased capacity, not for the entire replacement cost. However, existing customers also would have to foot part of the bill.

If a parallel line is used, that's a separate system for new customers and they would be charged the full price, but existing customers would not be charged.

It's also possible development might pay the upfront cost, avoiding the need for a benefit basin, although Shearer was not optimistic about that possibility.

In many cases, a large developer will pay for the upgrade, and then collect the fees as other new users hook up to it.

"In our case, there are no large developers that would be coming in to do a major

development,” Shearer said.

There are several smaller proposed projects that would have to rely on the main, and city officials have talked with those developers about banding together to cover the cost.

“While it’s still being talked about, I just see a great deal of difficulty with the timing of that and the magnitude of the financing,” Shearer said.

Those projects include the Stelte Park addition; a development being considered by Ron Davis for Stockton Road and Angel Oaks Road; and Angels Vista, which would offer single-family homes, townhouses and an assisted and independent senior living facility.

They’re all on hold.

The Stelte project was already making its way through the hearing process when the issue was discovered.

Paulette Stelte, who, along with husband Hugo operates the construction company, said they haven’t withdrawn the project, it’s just not moving along because of the sewer problem.

She’s encouraged the city is working to resolve the issue, but is not sure at this time how well a benefit basin or some other method of payment might work.

“It’s just such an unknown,” Stelte said. “There are so many variables.”

Angels Vista developer Brian Wilmot was optimistic something could be worked out between the city and the project officials.

The developers are fostering the study to determine what kind of flow volumes are involved and what’s needed to provide relief, Wilmot said.

Having the developers involved in the cost structure would move the project along faster than if it’s strictly a government program because then state and other agencies get involved in the matter “and that’s going to drag everything out,” Wilmot said.

As for how this will impact the pending projects, Wilmot doesn’t believe it will be too onerous.

It could slow his project down for some months, but “we don’t see it sitting behind the eight ball for years,” Wilmot said.

And, like Stelte, he believes city officials are eager to resolve the problem.

Contact Craig Koscho at [ckoscho@calaverasenterprise.com](mailto:ckoscho@calaverasenterprise.com).

## **No More Sewer Connections In Copperopolis**

Thursday, April 13, 2006 - 12:35 PM

Vanessa Turner

MML Calaveras Bureau

Copperopolis, CA -- Due to high water levels at a treatment pond, a moratorium is now in place for new sewer connections in Copperopolis.

The Calaveras County Water District passed the temporary new restriction Wednesday.

Interim General Manager Larry Diamond said the board adopted a constraint on approving any additional facilities agreements until July 1.

Because of recent storms, the Copper Cove treated wastewater storage pond is at capacity. In July the board will reexamine the ponds and possibly lift the moratorium.

The ban on facilities agreements essentially means no new construction.

The moratorium affects the Copper Mill project, which is set to break ground April 22.

The Copper Cove system serves a few thousand customers.

To solve the problem the district is looking to expand the pond and is waiting to hear back from the state to see if it can dispose of the treated wastewater on the Saddle Creek Golf Course.

Written by [vanessa.turner@mlode.com](mailto:vanessa.turner@mlode.com).



## **CCWD may limit Copper sewer hookups**

***Published: April 11, 2006***

By SUNNY LOCKWOOD

The Calaveras County Water District Board of Directors tomorrow will discuss imposing a sewage connection moratorium on the Copper Cove wastewater system.

The system, which has 1,533 sewer connections in the Copper Cove subdivision near Copperopolis, has reached capacity, Board President Bertha Underhill said.

"We'll discuss suspending new wastewater services until the storage pond for the system can be enlarged," she said.

District Interim General Manager Larry Diamond said heavy storms have filled the system with rain water.

"It's been getting in through various parts of the system," he said, "and unless that's taken care of, we don't have capacity left. The primary storage pond for the area is more than full."

Diamond said the system's primary holding pond is considered at full capacity when it holds 205 acre-feet. An acre-foot equals 325,851 gallons.

"We have far more than that now," he said. "So we are well beyond capacity."

Diamond said the district has been running its spray irrigation system despite the rain, to try and keep the storage pond from spilling. Generally, spray irrigation is used only during the dry season, so that the treated effluent will be soaked up by the dry ground.

"We have no choice at this point," he said.

Diamond said the board will discuss limiting new connections in Copper Cove as it has in the Forest Meadows subdivision on Highway 4 and in the community of Vallecito. According to Diamond, CCWD doesn't allow any new homes in those communities to hook up to the district's sewage system because there is no capacity for new hookups.

"The board will discuss the same thing for Copper," he said.

Underhill said the board will also discuss suspending the hydrant meter program. That program allows developers to wet down dust during the summer using potable water. She said the board will make treated effluent available for wetting down sites instead.

"This will aid in lowering the effluent in the pond," she said. "We're discussing an emergency in that we cannot take any more sewage into the system there."

Contact Sunny Lockwood at [slockwood@uniondemocrat.com](mailto:slockwood@uniondemocrat.com) or at 736-1234.

## **Grand jury advises district to clean up**

By Craig Koscho

Posted: Friday, March 16, 2007 12:30 PM CDT

The Murphys Sanitary District is criticized in an interim grand jury report for its handling of a November sewer spill that sent raw sewage into Angels Creek.

The spill occurred over the Thanksgiving weekend and was first noticed the following Monday morning.

About 150,000 gallons of sewage was spilled, although it's not known how much made its way into the creek.

The grand jury report, issued Thursday, says the Murphys Sanitary District failed to notify the proper regulatory agencies, the press or the public when the spill occurred.

While the district did contact the city of Angels Camp, which uses the creek water for its domestic supply; and the state Regional Water Quality Control Board; it failed to notify the state Office of Emergency Services, as required by law.

According to the grand jury report, district officials mistakenly called the federal Environmental Protection Agency instead of OES.

As a result, OES, which distributes the information to all state and local agencies, was never able to get the word out, according to the report.

District General Manager Ray Honan said the field supervisor on duty at the time apparently had an old number for OES and so left a message with the wrong department.

The grand jury report says the OES still has not been notified about the incident. The district did eventually get the correct number, but Honan did not know when that happened.

The spill occurred in the district's collection system at a pump station on Murphys Grade Road, not at the treatment plant.

When the station was checked Sunday, everything was fine. But on Monday morning the field operator found readings showing that a normal flow of sewage was not coming through the facility.

"That threw up a quick red flag," Honan said.

Crews found a blockage in the line up from the plant that resulted in the spill.

Since the district processes 150,000 gallons a day, that was the figure - the worst case scenario - that was used in the incident report, Honan said. That does not mean that much flowed into the creek.

"Did some get into the creek? Yes," Honan said. "How much is undetermined."

The grand jury's report also singled out the county's Environmental Health Department for criticism.

The Murphys Sanitary District contacted the department early Monday morning before any employees arrived, leaving a voice message, according to the report.

But no one followed through on that message, states the report.

Department Director Brian Moss said it's possible the sanitary district did contact his office, but they don't have a record of it since they never received anything in writing.

More importantly, any sanitary district needs to go through the correct channels, in this case being to notify state OES, Moss said.

"It is the responsibility of the sanitary district ... to follow the proper notification procedures," he said.

As for public notices, Honan said sanitary districts were not required to issue those at the time of the spill, but would follow any instructions issued by the local Environmental Health office after it was notified.

Now, though, districts are responsible for posting public notices and contacting the media, and Murphys is working on a comprehensive maintenance management plan that will be presented to the state May 1, Honan said.

The grand jury report also states the Environmental Health Department's answering machine should advise after-hours callers to dial 911 to report emergency spills.

Moss disagrees with that, adding it's not necessary as long as state OES is contacted.

"Then everybody is notified that needs to be notified," Moss said.

Contact Craig Koscho at [ckoscho@calaverasenterprise.com](mailto:ckoscho@calaverasenterprise.com).

**Joyce Techel**

---

**From:** "Colleen Platt" <cplatt1@comcast.net>  
**To:** "Carol Barzee" <barz2@comcast.net>; "Joyce Techel" <jaytee@caltel.com>  
**Sent:** Friday, March 02, 2007 9:49 AM  
**Subject:** Vandals send sewage into creek

## Vandals send sewage into creek

By *Dana M. Nichols*  
 Record Staff Writer  
 March 02, 2007 6:00 AM

COPPEROPOLIS - The already struggling Copper Cove sewage treatment plant faces a new threat to its operations: vandals who apparently deliberately opened a sewer access cover and allowed stormwater to pour into the sewer. The vandals also threw straw wattles used for erosion control into the sewer.

The incident on Feb. 18 in the under-construction Copper Hills subdivision plugged a line and caused sewage to back up and spill out of another access hole in the neighboring La Cobre Mina subdivision, said Calaveras County Water District Director of Utilities Bill Perley. Perley said that because the raw sewage reached a creek that flows into Lake Tulloch, the water district will likely face a fine from state water pollution authorities.

Perley said in a report to water district directors Wednesday that it probably required the use of heavy equipment to open the cover and cause the damage he saw. "I don't think this was a kid," Perley said.

The Copper Cove wastewater treatment plant has been struggling since last winter, when broken home-to-sewer connection lines and access holes opened deliberately on construction sites allowed millions of gallons of rain runoff to enter the sewage system, overwhelming the plant's capacity. The district sprayed treated wastewater on a nearby golf course through the fall and into the winter in an effort to reduce the levels in plant's ponds. Perley said pond levels are about 4 1/2 feet below their legal capacity.

District officials since last year have been working with county and state authorities to crack down on building contractors and others who illegally open sewer access covers or who damage sewer connection lines so as to allow rainwater to gain entry. The full ponds at the plant also pose a crisis for builders, who face the prospect that new connections may be restricted until the capacity problem is resolved. "Every time it rains, we just get creamed at the plant down there," Perley said.

District board member Jeff Davidson suggested the agency post signs near construction sites warning builders not to use the sewers to drain storm runoff.

"A lot of these guys, they really may not know" the difference between a storm drain and a sewer, Davidson said.

Perley said the Calaveras County Sheriff's Department is investigating the matter and promised to increase patrols around construction sites near Lake Tulloch. He also said the CCWD will take steps to make it more difficult to open the cover on the vandalized access hole. "We're going to bolt it down," Perley said.

Contact reporter Dana M. Nichols at (209) 754-9534 or [dnichols@recordnet.com](mailto:dnichols@recordnet.com).

---

No virus found in this incoming message.  
 Checked by AVG Free Edition.

Version: 7.5.446 / Virus Database: 268.18.6/708 - Release Date: 3/2/2007 4:19 PM

3/27/2007

## Contractor fined for muddy water

By *The Record*

February 27, 2007 6:00 AM

COPPEROPOLIS — Copperopolis contractor John Lemke will pay a \$25,000 fine for allowing muddy water to flow into a tributary of Black Creek from a construction site in the Bridlewood subdivision.

The Central Valley Regional Water Quality Control board notified Lemke of the fine in a letter the board issued on Feb. 21. The letter said that Regional Board inspectors on Jan. 4 saw "sediment laden storm water discharge" from the site flowing into waterways that lead to Lake Tulloch and the Stanislaus River, which provides drinking and irrigation water to towns and farms downstream.

Inspectors said the construction site lacked erosion-control measures that could have prevented or greatly reduced the discharges. Board staff estimated that Lemke saved at least \$3,700 by failing to install measures such as netting, straw, and portable berms on the 1.25 acre construction site.

The letter gave Lemke 30 days to either appeal or pay the fine. Lemke said Monday he will pay the fine.

# PUBLIC WORKS CALAVERAS COUNTY

MEMORANDUM

SERVICES

Transit  
Land Division  
Roads and Bridges  
Transportation Planning  
Integrated Waste Management

Rob Houghton, P.E., Director

February 16, 2007

TO: Board of Supervisors

FROM: Rob Houghton

SUBJECT: Study Session Regarding Storm Water Pollution Regulation

## ISSUE STATEMENT

As an operator of storm water conveyance structures that discharge to waters of the US, the County is now obligated, under federal NPDES<sup>1</sup> Phase II regulations, to comply with the State's General Permit for storm water discharges.<sup>2</sup> The objective of that permit is to eliminate, to the maximum extent practical, the discharge of pollutants to storm water. By letter dated December 27, 2006 (attached as Exhibit A), the California Regional Water Quality Control Board (Water Board) gave Calaveras County 180 days to file a notice of intent to comply with the terms of the General Permit. At this time, Public Works is seeking Board guidance with regard to the compliance strategy outlined herein.

## REGULATORY BACKGROUND

Within the context of the federal storm water quality regulation, roads, roadside drainage systems, streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains that are owned or operated by municipalities are referred to as "municipal separate storm water sewer systems" ("MS4s") or "storm water system" for our purposes. Storm water runoff can contain a variety of pollutants of concern including sediment, nutrients, pathogens, petroleum hydrocarbons, pesticides and herbicides, and trash. Such systems are regulated under the authority of the Clean Water Act with the intent of eliminating the discharge of pollutants to storm water.

The Water Board has found that community development causes two important changes.<sup>3</sup> First, naturally-vegetated soil can both absorb rainwater and remove pollutants providing an effective purification process. To the extent that development converts naturally-vegetated ground cover to impervious surfaces such as paved highways, streets, rooftops, and parking lots, the natural purification capacity of the land is diminished. Second, development

<sup>1</sup> National Pollutant Discharge Elimination System was originally promulgated by the U.S. EPA in 1972 as part of the Clean Water Act, modified in 1987 to include storm water discharges, and modified again in 1999 to expand its scope.

<sup>2</sup> State Water Resources Control Board, Water Quality Order No. 2003-0005-DWQ, National Pollutant Discharge Elimination System General Permit No. CAS00004, Storm Water Discharges from Small Municipal Separate Storm Sewer Systems.

<sup>3</sup> *ibid.*



intensifies pollutant sources. As population density increases, it generates proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, trash, etc. which can be washed into the storm water system. As a result of these two changes, the runoff leaving a developed area may be significantly greater in volume, velocity and pollutant load than before development.

Based on such findings, the Water Board typically regulates storm water systems when the population served by those systems reaches 100,000. However, under Phase II implementation, this threshold may be lowered at the discretion of the State in consideration of several factors such as high population growth rates, sensitive water bodies, sensitive species, or a history of storm water quality issues. In its recent letter, the Water Board cited these conditions as compelling reasons to accelerate implementation of the permit standards in Calaveras County. In particular, the Water Board singled out numerous enforcement actions that it had taken against developers of several large residential subdivisions for the release of sediment to adjoining waterways in violation of their Water Board-issued permits. In consideration of these factors, the Water Board has given Calaveras County until June 25, 2007, to file a notice of intent to comply with the terms of the General Permit, to submit a Storm Water Management Plan, and to pay applicable fees each of which are discussed in the sections that follow.

The County's role in this Phase II permitting scheme is complicated by the fact that the County will need to regulate private facilities in order to protect the public facilities and comply with the General Permit. Accordingly, our compliance strategy must consider regulating those discharges from private sources into our storm water system as much as controlling discharges from our own facilities or operations. Please note that the remainder of our discussion will focus on our role as a regulator of discharges into our storm water system. This focus is not intended to diminish the significance of implementing best management practices at our own facilities; rather, it is recognition of the challenges that we face in developing and implementing a new regulatory framework.

### ***GENERAL PERMIT REQUIREMENTS AND COMPLIANCE STRATEGY***

***General Permit Requirements.*** Under the General Permit, the County is obligated to achieve the following three goals:

1. Develop and implement a Storm Water Management Plan, which lays out a five-year plan for achieving the objectives of the Clean Water Act, namely to eliminate, to the maximum extent practical, the discharge of pollutants to storm water. The typical approach to achieving compliance is through source control and best management practices. To meet General Permit standards, the Storm Water Management Plan must identify best management practices (BMPs), measurable goals, and timetables for implementing the following minimum control measures, which are briefly discussed in the paragraphs that follow:
  - a. Construction site storm water runoff control
  - b. Post-construction storm water management

- c. Pollution prevention
  - d. Illicit discharge detection and elimination
  - e. Public education and participation
2. Reduce discharge of pollutants to the maximum extent practical
  3. Report on progress annually

**Current Status.** The Water Board has given the County until June 25, 2007, to submit a Storm Water Management Plan and to demonstrate how we will comply with the terms of the General Permit. At the study session, we will present a detailed project plan to achieve the above-cited goals.

**Compliance Strategy.** As will be shown on the project plan, Public Works will be developing a Storm Water Management Plan that meets General Permit requirements by outlining a five-year plan for reducing the discharge of pollutants to the maximum extent practical. Based on discussions with Water Board staff, their immediate interest is for us to implement key elements (such as grading and erosion control ordinance) of the Plan by the next rain season. As shown in the project plan, we anticipate having a draft Plan submitted to the Water Board by June 25, 2007. The Storm Water Management Plan will address each of the minimum control measures as described in the following sections.

#### **CONSTRUCTION SITE STORM WATER RUNOFF CONTROL**

**General Permit Requirement.** To comply with the General Permit standards, the County would be obligated to develop, implement, and enforce a program to reduce pollutants in storm water runoff from construction activities. The program would include the development and implementation of an erosion and sediment control ordinance that would require the implementation of appropriate erosion and sediment control BMPs at all construction sites. To be effective, the program would need to include procedures and sanctions to ensure compliance.

**Current Status.** Under the existing regulatory framework, any person disturbing more than one acre of soil must file a notice with the Water Board stating their intent to comply with the *General Permit for Storm Water Discharges Associated with Construction Activity*. Although the Water Board is responsible for enforcement of permit conditions, this is largely a “self-monitoring” program that relies on public outreach and the cooperation of developers and contractors. Water Board enforcement is typically triggered by complaints. Based on information provided by the Water Board, they have issued a dozen notices of noncompliance or violation and two administrative civil liabilities. Additionally, it is participating in two joint enforcement actions with the California Department of Fish and Game. All actions were taken against private developers of large residential subdivisions (50+ units).

Although Calaveras County does not have a local grading ordinance, we have adopted *California Building Code (CBC), Appendix Chapter 33 Excavation and Grading* as our controlling



regulations. Pursuant to the California Building Code, the local Building Official is the designated enforcement authority over grading issues. However, by informal inter-departmental agreement, Public Works has traditionally taken the regulatory lead on grading associated with commercial or subdivision development, while Building has retained authority for grading associated with single family residential construction. Under the CBC provisions, developers are obligated to submit and implement erosion control plans. However, as the CBC is silent on the scope and detail of those plans, the level of effort varies widely from project to project.

**Compliance Strategy.** Based on discussions with the Water Board, storm water quality issues associated with site development were the single most significant controllable factors that triggered accelerated implementation of the Phase II NPDES requirements. Accordingly, it is the focus of our compliance strategy. We are recommending adoption and implementation of a local ordinance prior to the next rain season. In anticipation of eventual Phase II NPDES implementation, staff has been working on a local *Grading, Drainage, and Erosion Control Ordinance* and completion within that timeframe seems realistic. Noting that implementation of a local ordinance, in the form of plan reviews and site inspections, can be readily integrated into our existing duties, deployment can be achieved with a modest expansion of our resources.

#### **POST-CONSTRUCTION STORM WATER MANAGEMENT**

**General Permit Requirements.** To comply with the General Permit standards, long-term post-construction BMPs that protect water quality and control runoff flow would be incorporated into new development projects. Post-construction programs are most effective when they stress low impact design, source controls, and treatment controls; and ensure long-term operation and maintenance of BMPs. Within five years, the County would be obligated to adopt an ordinance to ensure implementation of the design standards outlined in the General Permit and summarized in Exhibit A. To comply with the General Permit, all discretionary development projects that fall into one of the following categories would be subject to these design standards.

- Single-family hillside residences
- Commercial developments exceeding 100,000 square feet
- Automotive repair shops
- Retail gasoline outlets
- Restaurants
- Home subdivisions with 10 or more housing units
- Parking lots 5,000 square feet or more or with 25 or more parking spaces.

**Current Status.** Calaveras County does not have local post-construction design standards that are intended to protect storm water quality.

**Compliance Strategy.** To comply with the General Permit, the County would be obligated to adopt ordinances that meet the design standards outlined in Exhibit B. In developing the Storm Water Management Plan, we will coordinate with the Community Development Agency to review the adequacy of existing ordinances to effectively regulate such post-

construction land use practices. Based on that review, the Community Development Agency may recommend modifying existing ordinances. The scope and timetable for developing and implementing any recommended ordinances will be outlined in the Plan.

### **POLLUTION PREVENTION**

**General Permit Requirements.** To comply with the General Permit standards, the County would be obligated to develop and implement an operation and maintenance program that would prevent or reduce pollutant runoff from municipal operations such as road and drainage system maintenance, park and open space maintenance, fleet maintenance, building maintenance, new construction and land disturbances, and storm water system maintenance.

**Current Status.** While in practice, Public Works implements a variety of BMPs to prevent or reduce pollutant runoff from our operations, we have no formal written policies in that regard.

**Compliance Strategy.** As part of the Storm Water Management Plan, we will propose a scope and timetable for the development and phased implementation of BMPs for municipal operations. The scope will focus on those municipal operations that are related to roads, roadside drainage systems, vegetation management (herbicide spraying), and road maintenance yards. Efforts to implement appropriate BMPs will be phased over several years in consideration of pollutant sources and proximity to sensitive receptors. Issues to be addressed include unpaved roads, material stockpiles, waste handling, high ADT roads, direct discharges, etc. These strategies will also be required of contractors working within County rights of way through our encroachment permit process.

Several County facilities, namely our landfills and airport, currently operate under existing *General Permits for Storm Water Discharges Associated with Industrial Activities*. Consistent with the terms of these permits, we are obligated to eliminate pollutant discharges to storm water. We will review and consider including other public facilities, such as solid waste transfer stations and road maintenance yards, in that permitting program.

Public Works will coordinate with other public entities responsible for municipal operations such as the County Administrative Office, water districts, and community service districts to develop and implement BMPs applicable to their operations or, where appropriate, recommend placing their facilities in the industrial permit tier.

### **ILLICIT DISCHARGE DETECTION AND ELIMINATION**

**General Permit Requirements.** To comply with the General Permit standards, the County would be obligated to develop, implement, and enforce a program to detect and eliminate illicit discharges into the storm water system. Key elements of that program would include:

- 1) Develop a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the U.S. that receive discharges from those outfalls;
- 2) Effectively prohibit, through ordinance, non-storm water discharges into the storm water system and implement appropriate enforcement procedures and actions;

- 3) Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the system that are not authorized by a separate NPDES permit; and
- 4) Inform public employees, businesses, and the general public of the hazards that are generally associated with illegal discharges and improper disposal of waste.

**Current Status.** Not realizing the consequences, many property owners use storm drains or our roadside drainage system for the disposal of used oil, washdown water from gas stations and auto repair shops, litter, trash, and other debris.

**Compliance Strategy.** In developing the Storm Water Management Plan, we will coordinate with the County Environmental Health Agency to review the adequacy of existing ordinances to effectively regulate such practices. Based on that review, the Environmental Health Agency may recommend modifying existing ordinances. The scope and timetable for developing and implementing any recommended ordinances will be outlined in the Plan.

#### **PUBLIC EDUCATION AND PARTICIPATION**

**General Permit Requirements.** To comply with the General Permit standards, the County must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities regarding the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

**Current Status.** The last several years, Public Works has hosted an annual workshop to inform developers, engineers and contractors about current laws and policies affecting construction site storm water management.

**Compliance Strategy.** Adoption of the Storm Water Management Plan includes a public hearing process. As part of the Storm Water Management Plan, we will identify those activities that will be undertaken to inform the public and solicit their participation.

#### **REPORTING**

To comply with the General Permit standards, the County must submit annual reports to the Water Board. The report must summarize the activities performed throughout the reporting period and must include among other things an assessment of the appropriateness and effectiveness of the identified BMPs; status of the identified measurable goals; and a summary of the storm water activities the County plans to undertake during the next reporting cycle.

#### **COMPLIANCE ALTERNATIVES**

In proposing the compliance strategy above, we have reviewed and considered the following available alternatives:

- 1) **No action.** The no action alternative is self-explanatory. Choosing the no action alternative would result in violations of the federal Clean Water Act and California Porter Cologne Act. Such violations would expose the County to significant fines and other penalties.
- 2) **Challenge designation as small MS4.** The County's designation as a small MS4 subject to the General Permit conditions was a determination by the executive officer of the Central Valley Branch of the California Regional Water Quality Control Board without the benefit of a public hearing or Water Board action. Our protest could challenge either procedural or substantive issues.
- 3) **Individual NPDES permit.** Rather than file a notice of intent to comply with the General Permit, we have the option of filing an application to secure individual NPDES permit. This approach is significantly more costly and time-consuming while offer no known advantages.

As specified in the Water Board's letter, we are obligated to seek coverage for only selected areas of the County: Arnold, Burson, Copperopolis, Murphys, Rancho Calaveras, San Andreas, and Valley Springs. While not limiting coverage in the SWMP, we may wish to consider phased implementation that targets these communities initially and later includes other areas of the County. No particular advantage was found with this approach. Quite the contrary, implementing different regulations in different parts of the County would only add to the confusion and difficulty of change.

### ***FISCAL IMPACTS, WORKLOAD AND STAFFING***

While Public Works' organizational structure is designed to readily absorb the responsibilities of General Permit compliance, it will demand a significant level of effort that was not considered in our FY2006/07 budget or department workplan. Once again, focusing on the regulator responsibilities, compliance consists of two distinct phases of work and skill sets:

- **Plan and ordinance development** is a relatively short-term project (less than one year) requiring staff comprised of planners, analysts and engineers. We are recommending a limited term, extra-hire position at the deputy director level to lead this effort.
- **Implementation** of the adopted Storm Water Management Plan and associated ordinances through oversight, project review, education, monitoring and if necessary enforcement. This effort will continue indefinitely and will rely on engineers and inspectors. We currently rely on contract engineering services for these assignments and, at least for the short-term, the reliance will continue.

The estimated cost to development the program is summarized in Table 1. To meet the Water Board deadlines and accommodate the added workload, immediate adjustments to budgets and staffing are necessary. In this regard, we are prepared to fill a limited-term, part-time

staff position that will be funded by unexpended allocations associated with vacancies within Public Works. Additional funding requests and recommendations will be included in our preliminary budget for FY2007/08. As the compliance effort will continue indefinitely, appropriate adjustments will need to be incorporated into future budgets.

TABLE 1. Estimated Regulatory Costs for FY2006/07 and 2007/08

Task/Item	Expenses			Revenue Source
	FY2006/07	FY2007/08	Total	
Storm Water Management Plan	\$16,120		\$16,120	Development services
Grading and Erosion Control Ordinance	\$23,800		\$23,800	Permit fees
Public Outreach		\$14,960	\$14,960	Development services
Engineering		\$43,200	\$43,200	Developer reimbursement
Public Works Inspector		\$25,945	\$25,945	Developer reimbursement
<b>Total</b>	<b>\$39,920</b>	<b>\$84,105</b>	<b>\$124,025</b>	

While development of the Storm Water Management Plan will include a financing element, it is anticipated that funding for this new regulatory program would be self-supporting relying on permit fees and developer reimbursements. Accordingly, we are not anticipating any impact on the General Fund. However, it is important to note that certain public facilities would be subject to the proposed regulations and that as operators of those public facilities we would incur additional costs to implement the necessary source control measures and BMPs. The costs for compliance at our various public facilities will be reviewed and estimated during the development of the Storm Water Management Plan and any subsequent ordinance development.

### **OTHER DEPARTMENTS AND AGENCIES**

Successful compliance with the General Permit requires a joint effort of all County land use agencies including Community Development and Environmental Management. To this point, we have actively collaborated with those agencies to evaluate and consider the best application of our collective resources and regulatory authority. Continued integration of our efforts will be facilitated through a working committee comprised of representatives from the County land use agencies in addition to the County Administrative Office and Calaveras County Water District. In particular, a concerted effort will be exerted to coordinate with the General Plan update. It is noted that the proposed action is categorically exempt under CEQA.

Attachments: Exhibit A. RWQCB letter dated December 27, 2006  
Exhibit B. Post-Closure Land Use Design Standards

**EXHIBIT A**

**CALIFORNIA REGIONAL WATER QUALITY  
CONTROL BOARD LETTER DATED DECEMBER  
27, 2007**



Linda S. Adams  
Secretary for  
Environmental  
Protection

## California Regional Water Quality Control Board Central Valley Region



Arnold  
Schwarzenegger  
Governor

Sacramento Main Office  
11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114  
Phone (916) 464-3291 • FAX (916) 464-4645  
<http://www.waterboards.ca.gov/centralvalley>

27 December 2006

CERTIFIED MAIL  
7005 3110 0001 1181 7666

Rob Houghton, Public Works Department Head  
Public Works Department  
891 Mountain Ranch Road  
San Andreas, CA 95249

**NOTIFICATION OF DESIGNATION UNDER NATIONAL POLLUTANT DISCHARGE  
ELIMINATION SYSTEM (NPDES) GENERAL PERMIT NO. CAS000004 (GENERAL  
PERMIT), WASTE DISCHARGE REQUIREMENTS FOR STORM WATER FROM SMALL  
MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)**

Calaveras County operates a small municipal separate storm sewer system (MS4). A "MS4" is a conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) designed or used for collecting or conveying storm water; (ii) which is not a combined sewer; and (iii) which is not part of a Publicly Owned Treatment Works (POTW). [See Title 40, Code of Federal Regulations (40 CFR) §122.26(b)(8).] The State Water Resources Control Board (State Water Board) adopted a General Permit for the discharge of storm water from small MS4s. The General Permit contains factors to be considered for designating small MS4s to be regulated. The factors include small MS4s that have a high growth potential, discharge to a sensitive water body or are a significant contributor of pollutants to waters of the U.S. We have considered the factors and are designating Calaveras County as a "Regulated Small MS4" based on the following:

**Factor 1:** If an area anticipates a growth rate of more than 25 percent over a 10-year period ending prior to the end of the first permit term; it has a high growth potential.

The Calaveras County General Plan states that:

*"The unincorporated county can anticipate an annual growth rate of approximately 2.7% for the planning period between 2001 and 2009". Projecting the nine-year annual growth rate into a ten-year period results in a 27% growth. This meets the high growth criteria.*

**Factor 2:** Sensitive water bodies or receiving waters, which require priority protection. Sensitive water bodies include those listed as providing or known to provide habitat for threatened or endangered species. Throughout Calaveras County, the rivers, creeks and

*California Environmental Protection Agency*

wetlands habitat support a diverse number of endangered species including vernal pool fairy shrimp, vernal pool tadpole shrimp, Central valley steelhead, winter run Chinook salmon, California tiger salamander, California red-legged frog, giant garter snake, and bald eagle.

**Factor 3:** Significant contributor of pollutants to waters of the U.S. Calaveras County lacks adequate oversight of storm water best management practices at construction sites. Many construction sites in the county have been found to contribute pollutants to waters of the U.S.

During the last few years, Regional Water Board staff has observed significant storm water management problems within the County. Staff has issued at least 4 Notices of Non-Compliance (NONCs), 8 Notices of Violation (NOVs), 2 Administrative Civil Liabilities (ACLs) and are participating in two joint enforcement actions with the Department of Fish and Game. These enforcement actions, as well as the other storm water management problems observed during Regional Water Board staff inspections on sites that did not require formal enforcement, demonstrate the County lacked an effective construction oversight program.

Calaveras County is required to obtain coverage under the General Permit for the discharge of storm water as a Regulated Small MS4. By **25 June 2007** (180 days from the date of this letter), Calaveras County must submit to the Regional Water Board, the three required elements: 1) a Notice of Intent (NOI); 2) a complete Storm Water Management Plan (SWMP) designed to reduce the discharge of pollutants through your MS4s to the Maximum Extent Practicable (MEP) (one hard copy and one electronic copy in Word or PDF format); and 3) the appropriate fee. Enclosed is a copy of the General Permit for Storm Water Discharges From Small MS4s.

We request that the SWMP cover the following areas: the City of San Andreas; the area in and around Arnold; the area in and around Murphys; the area in and around Valley Springs and Burson; the area in and around Copperopolis; and the area in and around Rancho Calaveras.

After the application package is determined to be complete and meets the MEP standard, it will be posted on the State Water Board's website at [http://www.waterboards.ca.gov/stormwtr/sm\\_municipal\\_swmp.html](http://www.waterboards.ca.gov/stormwtr/sm_municipal_swmp.html). This will initiate a 60-day public review period. During this 60-day period, a member of the public may request a copy of the SWMP and request that the Regional Water Board hold a public hearing. If a public hearing is requested, the Regional Water Board may hold a hearing. If no hearing is requested by the end of the 60 days, the applicant is automatically covered under the General Permit.

Alternatively, you may apply for coverage under an individual permit or become a co-permittee of an existing Medium or Large MS4 permit. For these options, you must comply with the application requirements of 40 CFR Sections 122.33(b)(2) and 122.33(b)(3), respectively. To become a co-permittee of an existing Medium or Large permit, the existing MS4 permit must be reopened to add Calaveras County to the permit.



Discharge of pollutants to the waters of the State without filing a Report of Waste Discharge is a violation of the California Water Code (CWC) as specified under Section 13376. If you have any questions regarding the filing of your Report of Waste Discharge / NOI, please contact Rich Muhl at (916) 464-4749 or by email at [rmuhl@waterboards.ca.gov](mailto:rmuhl@waterboards.ca.gov). You can also find information on the State Water Board's website at [www.waterboards.ca.gov/stormwtr/index.html](http://www.waterboards.ca.gov/stormwtr/index.html).



PAMELA CREEDON  
Executive Officer

Enclosure: General Permit

cc: Bill Hereth, State Water Resources Control Board, Storm Water Unit, Sacramento  
Tim Mcsorley, Calaveras County Community Development, San Andreas  
William Jennings, CALSPA, Stockton

**EXHIBIT B**  
**DESIGN STANDARDS**

## ***DESIGN STANDARDS***

### ***SECTION 1 MINIMUM CONTROL MEASURES***

#### **1.1 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL**

To comply with the General Permit standards, the County must develop, implement, and enforce a program to reduce pollutants in storm water runoff from construction activities.

The program must include the development and implementation of, at a minimum:

- 1) An erosion and sediment control ordinance that includes the following provisions:
  - a. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;
  - b. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality; and
  - c. Sanctions or any other effective mechanism to ensure compliance.
- 2) Procedures for site plan review which incorporate consideration of potential water quality impacts;
- 3) Procedures for receipt and consideration of information submitted by the public; and
- 4) Procedures for site inspection and enforcement of control measures.

#### **1.2 POST-CONSTRUCTION STORM WATER MANAGEMENT**

To comply with the General Permit standards, the County must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects by ensuring that controls are in place that would prevent or minimize water quality impacts, including the following:

- 1) Develop and implement strategies, which include a combination of structural and/or non-structural BMPs appropriate for your community;
- 2) Use an ordinance or other regulatory mechanism to address postconstruction runoff from new development and redevelopment projects
- 3) the requirements must at least include the design standards; and
- 4) Ensure adequate long-term operation and maintenance of BMPs.

Within five years, the County must adopt an ordinance to ensure implementation of the Design Standards included herein. All discretionary development and redevelopment projects that fall into one of the following categories are subject to these Design Standards.

- Single-family hillside residences
- Commercial developments exceeding 100,000 square feet
- Automotive repair shops
- Retail gasoline outlets
- Restaurants
- Home subdivisions with 10 or more housing units
- Parking lots 5,000 square feet or more or with 25 or more parking spaces

### 1.3 POLLUTION PREVENTION

To comply with the General Permit standards, the County must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations such as park and open space maintenance, fleet building maintenance, new construction and land disturbances, and storm water system maintenance.

### 1.4 ILLICIT DISCHARGE DETECTION AND ELIMINATION

To comply with the General Permit standards, the County must develop, implement, and enforce a program to detect and eliminate illicit discharges (as defined at 40 CFR §122.26(b)(2)) into the storm water system:

- 1) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the U.S. that receive discharges from those outfalls;
- 2) Effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the MS4 and implement appropriate enforcement procedures and actions;
- 3) Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to the system that are not authorized by a separate NPDES permit;
- 4) Inform public employees, businesses, and the general public of the hazards that are generally associated with illegal discharges and improper disposal of waste; and

### 1.5 PUBLIC EDUCATION AND PARTICIPATION

To comply with the General Permit standards, the County must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

## **SECTION 2 REPORTING**

To comply with the General Permit standards, the County must submit annual reports to the Water Board. The report shall summarize the activities performed throughout the reporting period and must include:

- 1) The status of compliance with permit conditions;
- 2) An assessment of the appropriateness and effectiveness of the identified BMPs;
- 3) Status of the identified measurable goals;
- 4) Results of information collected and analyzed, including monitoring data, if any, during the reporting period;
- 5) A summary of the storm water activities the County plans to undertake during the next reporting cycle;
- 6) Any proposed change(s) to SWMP along with a justification of why the change(s) are necessary; and
- 7) A change in the person or persons implementing and coordinating SWMP.

## **SECTION 3 MANDATORY DESIGN STANDARDS**

Within five years, the County must adopt an ordinance to ensure implementation of the Design Standards included herein. All discretionary development and redevelopment projects that fall into one of the following categories are subject to these Design Standards.

- Single-family hillside residences
- Commercial developments exceeding 100,000 square feet
- Automotive repair shops
- Retail gasoline outlets
- Restaurants
- Home subdivisions with 10 or more housing units
- Parking lots 5,000 square feet or more or with 25 or more parking spaces

### **3.1 DESIGN STANDARDS APPLICABLE TO ALL CATEGORIES**

#### **3.1.1 Peak Storm Water Runoff Discharge Rates.**

Post-development peak storm water runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion.

#### **3.1.2 Conserve Natural Areas.**

If applicable, the following items are required and must be implemented in the site layout during the subdivision design and approval process, consistent with applicable General Plan and Local Area Plan policies:

- 1) Concentrate or cluster Development on portions of a site while leaving the remaining land in a natural undisturbed condition.
- 2) Limit clearing and grading of native vegetation at a site to the minimum amount needed to build lots, allow access, and provide fire protection.
- 3) Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.
- 4) Promote natural vegetation by using parking lot islands and other landscaped areas.
- 5) Preserve riparian areas and wetlands.

#### **3.1.3 Minimize Storm Water Pollutants of Concern.**

Storm water runoff from a site has the potential to contribute oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the storm water conveyance system. The development must be designed so as to minimize, to the maximum extent practicable, the introduction of pollutants of concern that may result in significant impacts, generated from site runoff of directly connected impervious areas (DCIA), to the storm water conveyance system as approved by the building official. Pollutants of concern consist of any pollutants that exhibit one or more of the following characteristics: current loadings or historic deposits of the pollutant are impacting the beneficial uses of a receiving water, elevated levels of the pollutant are found in sediments of a receiving water and/or have the potential to bioaccumulate in organisms therein, or the detectable inputs of the pollutant are at concentrations or loads considered potentially toxic to humans and/or flora and fauna.

### 3.1.4 Protect Slopes and Channels.

Project plans must include BMPs consistent with local codes, ordinances, or other regulatory mechanism and the Design Standards to decrease the potential of slopes and/or channels from eroding and impacting storm water runoff:

- 1) Convey runoff safely from the tops of slopes and stabilize disturbed slopes.
- 2) Utilize natural drainage systems to the maximum extent practicable.
- 3) Stabilize permanent channel crossings.
- 4) Vegetate slopes with native or drought tolerant vegetation, as appropriate.
- 5) Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion.

### 3.1.5 Provide Storm Drain System Stenciling and Signage.

Storm drain stencils are highly visible source controls that are typically placed directly adjacent to storm drain inlets. The stencil contains a brief statement that prohibits the dumping of improper materials into the storm water conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. All storm drain inlets and catch basins within the project area must be stenciled with prohibitive language (such as: "NO DUMPING - DRAINS TO OCEAN") and/or graphical icons to discourage illegal dumping. Signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, must be posted at public access points along channels and creeks within the project area. Legibility of stencils and signs must be maintained.

### 3.1.6 Properly Design Outdoor Material Storage Areas

Outdoor material storage areas refer to storage areas or storage facilities solely for the storage of materials. Improper storage of materials outdoors may provide an opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the storm water conveyance system. Where proposed project plans include outdoor areas for storage of materials that may contribute pollutants to the storm water conveyance system, the following Structural or Treatment BMPs are required:

- 1) Materials with the potential to contaminate storm water must be:
  - a. placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system;
  - b. protected by secondary containment structures such as berms, dikes, or curbs.
- 2) The storage area must be paved and sufficiently impervious to contain leaks and spills.
- 3) The storage area must have a roof or awning to minimize collection of storm water within the secondary containment area.

### 3.1.7 Properly Design Trash Storage Areas

A trash storage area refers to an area where a trash receptacle or receptacles (dumpsters) are located for use as a repository for solid wastes. Loose trash and debris can be easily transported by the forces of water or wind into nearby storm drain inlets, channels, and/or

creeks. All trash container areas must meet the following Structural or Treatment Control BMP requirements (individual single family residences are exempt from these requirements):

- 1) Trash container areas must have drainage from adjoining roofs and pavement diverted around the area(s).
- 2) Trash container areas must be screened or walled to prevent off-site transport of trash.

### **3.1.8 Provide Proof of Ongoing BMP Maintenance.**

As part of project review, if a project applicant has included or is required to include, Structural or Treatment Control BMPs in project plans, the County shall require that the applicant provide verification of maintenance provisions through legal agreements.

For all properties, the verification will include the developer's signed statement, as part of the project application, accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred and, where applicable, a signed agreement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all Structural or Treatment Control BMPs at least once a year and retain proof of inspection. Printed educational materials will be required to accompany the first deed transfer to highlight the existence of the requirement and to provide information on what storm water management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed, and assistance that the County can provide. The transfer of this information shall also be required with any subsequent sale of the property.

### **3.1.9 Design Standards for Structural or Treatment Control BMPs.**

The County shall require that post-construction treatment control BMPs incorporate, at a minimum, either a volumetric- or flow-based treatment control design standard, or both, as identified below to mitigate (infiltrate, filter or treat) storm water runoff.

#### **3.1.9.1 Volumetric Treatment Control BMP**

- 1) The 85th percentile 24-hour runoff event determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87, (1998); or
- 2) The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (2003); or
- 3) The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for "treatment" that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.

#### **3.1.9.2 Flow Based Treatment Control BMP**

- 1) The flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the area; or
- 2) The flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above.

## 3.2 PROVISIONS APPLICABLE TO INDIVIDUAL PRIORITY PROJECT CATEGORIES

### 3.2.1 Commercial Developments Exceeding 100,000 Square Feet

3.2.1.1 Properly Design Loading/Unloading Dock Areas. Loading/unloading dock areas have the potential for material spills to be quickly transported to the storm water conveyance system. To minimize this potential, the following design criteria are required:

- 1) Cover loading dock areas or design drainage to minimize run-on and runoff of storm water.
- 2) Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

3.2.1.2 Properly Design Repair/Maintenance Bays. Oil and grease, solvents, car battery acid, coolant and gasoline from the repair/maintenance bays can negatively impact storm water if allowed to come into contact with storm water runoff. Therefore, design plans for repair bays must include the following:

- 1) Repair/maintenance bays must be indoors or designed in such a way that doesn't allow storm water runoff or contact with storm water runoff.
- 2) Design a repair/maintenance bay drainage system to capture all washwater, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit.

3.2.1.3 Properly Design Vehicle/Equipment Wash Areas. The activity of vehicle/equipment washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for washing/steam cleaning of vehicles and equipment. The area in the site design must be:

- 1) Self-contained and/ or covered, equipped with a clarifier, or other pretreatment facility, and
- 2) Properly connected to a sanitary sewer or other appropriately permitted disposal facility.

### 3.2.2 Restaurants

3.2.2.1 Properly Design Equipment/Accessory Wash Areas. The activity of outdoor equipment/accessory washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for the washing/steam cleaning of equipment and accessories. This area must be:

- 1) Self-contained, equipped with a grease trap, and properly connected to a sanitary sewer.
- 2) If the wash area is to be located outdoors, it must be covered, paved, have secondary containment, and be connected to the sanitary sewer or other appropriately permitted disposal facility.



### 3.2.3 Retail Gasoline Outlets

Fueling areas have the potential to contribute oil and grease, solvents, car battery acid, coolant and gasoline to the storm water conveyance system. The project plans must include the following BMPs:

- 1) The fuel dispensing area must be covered with an overhanging roof structure or canopy. The canopy's minimum dimensions must be equal to or greater than the area within the grade break. The canopy must not drain onto the fuel dispensing area, and the canopy downspouts must be routed to prevent drainage across the fueling area.
- 2) The fuel dispensing area must be paved with Portland cement concrete (or equivalent smooth impervious surface), and the use of asphalt concrete shall be prohibited.
- 3) The fuel dispensing area must have a 2% to 4% slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents runoff of storm water to the extent practicable.
- 4) At a minimum, the concrete fuel dispensing area must extend 6.5 feet from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot, whichever is less.

### 3.2.4 Automotive Repair Shops

3.2.4.1 Properly Design Fueling Area. Fueling areas have the potential to contribute oil and grease, solvents, car battery acid, coolant and gasoline to the storm water conveyance system. Therefore, design plans, which include fueling areas, must contain the following BMPs:

- 1) The fuel dispensing area must be covered with an overhanging roof structure or canopy. The canopy's minimum dimensions must be equal to or greater than the area within the grade break. The canopy must not drain onto the fuel dispensing area, and the canopy downspouts must be routed to prevent drainage across the fueling area.
- 2) The fuel dispensing area must be paved with Portland cement concrete (or equivalent smooth impervious surface), and the use of asphalt concrete shall be prohibited.
- 3) The fuel dispensing area must have a 2% to 4% slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents runoff of storm water to the extent practicable.
- 4) At a minimum, the concrete fuel dispensing area must extend 6.5 feet from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot, whichever is less.

3.2.4.2 Properly Design Repair/Maintenance Bays. Oil and grease, solvents, car battery acid, coolant and gasoline from the repair/maintenance bays can negatively impact storm water if allowed to come into contact with storm water runoff. Therefore, design plans for repair bays must include the following:

- 1) Repair/maintenance bays must be indoors or designed in such a way that doesn't allow storm water run-on or contact with storm water runoff.

- 2) Design a repair/maintenance bay drainage system to capture all wash-water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit.
- 3.2.4.3 Properly Design Vehicle/Equipment Wash Areas. The activity of vehicle/equipment washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for washing/steam cleaning of vehicles and equipment. This area must be self-contained and/or covered, equipped with a clarifier, or other pretreatment facility, and properly connected to a sanitary sewer or other appropriately permitted disposal facility.
- 3.2.4.4 Properly Design Loading/Unloading Dock Areas. Loading/unloading dock areas have the potential for material spills to be quickly transported to the storm water conveyance system. To minimize this potential, the following design criteria are required:
- 1) Cover loading dock areas or design drainage to minimize run-on and runoff of storm water.
  - 2) Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

### 3.2.5 Parking Lots

- 3.2.5.1 Properly Design Parking Area. Parking lots contain pollutants such as heavy metals, oil and grease, and polycyclic aromatic hydrocarbons that are deposited on parking lot surfaces by motor-vehicles. These pollutants are directly transported to surface waters. To minimize the offsite transport of pollutants, the following design criteria are required:
- 1) Reduce impervious land coverage of parking areas.
  - 2) Infiltrate or treat runoff.
- 3.2.5.2 Properly Design To Limit Oil Contamination and Perform Maintenance. Parking lots may accumulate oil, grease, and water insoluble hydrocarbons from vehicle drippings and engine system leaks:
- 1) Treat to remove oil and petroleum hydrocarbons at parking lots that are heavily used (e.g. fast food outlets, lots with 25 or more parking spaces, sports event parking lots, shopping malls, grocery stores, discount warehouse stores).
  - 2) Ensure adequate operation and maintenance of treatment systems particularly sludge and oil removal, and system fouling and plugging prevention control.

## **More water quality monitoring urged**

**Published: February 12, 2007**

By CHRIS NICHOLS

The Union Democrat

Tuolumne County could begin monitoring the impacts of storm and construction-site runoff on county watersheds under a plan up for adoption by the Board of Supervisors on Tuesday.

The Tuolumne County Water Quality Plan was recently completed by a county consultant, and cost upward of \$263,000, including \$183,000 in state grants.

The plan outlines goals for public education and water-pollution monitoring throughout the county.

State and federal grants would pay for the plan's execution, the cost of which is yet to be determined. As of now, it has no funding, Deputy Public Works Director Mark Houghton said.

Houghton said the plan would be an important step in protecting the county's lakes, rivers and creeks.

It would also likely keep the county from facing costly and time-consuming state oversight, as has occurred in Calaveras County.

"It's a good, proactive thing," Houghton said. "But it'd sure be good to have some money for it."

The Central Valley Regional Water Quality Control Board ordered Calaveras County in December to produce a storm-water control plan within six months or face fines.

The board noted construction-site runoff was a significant source of water pollution in that county.

Tuolumne County Natural Resources Analyst Steve Boyack said county building inspectors have imposed strict measures on contractors to prevent such pollution in Tuolumne County.

He noted that the Board of Supervisors when considering the plan Tuesday could also vote to strengthen existing county erosion-control and grading rules.

While there might not be funding to fully implement the plan right away, county officials said they have teams of trained volunteers who have already started testing water throughout the county.

Along with testing, the plan calls for public education on water quality issues — such as stormwater pollution. That education is already taking place throughout the county, said Amy Augustine, a planning consultant who coordinated the plan for the county.

She noted that water quality experts have volunteered their time and trained teachers and students at local schools how to monitor water.

The citizens monitoring program, which Augustine leads, costs about \$5,000 annually, she said.

Boyack added that the county's newly formed Resource Conservation District could eventually provide oversight of the plan, though it does not have any funding to contribute at this time.

The county's RCD helps secure grant money for local environmental projects. It includes citizens appointed by the county Board of Supervisors.

Boyack noted that he's "pretty confident" the county will secure state and federal grants to fund the plan.

Supervisor Mark Thornton said Friday he had not fully reviewed the water quality plan.

He said, however, he supports further study of the county's water quality. He noted that past reports have shown pollution, derived from construction sites or other sources, has been a problem in some cases.

He added the county needs to further investigate whether such pollution is the result of "innocent mistakes" on the part of contractors or a larger pattern of ignoring erosion-control rules.

Interim Chief Building Official Lane Manuel said no one in the building community has yet asked about the water quality plan.

He noted the county already has strict rules regarding runoff at construction sites.

"We're doing our best," Manuel said. "We haven't had any heavy duty, high-profile projects that required fines in the last couple years."

Contact Chris Nichols at [cnichols@uniondemocrat.com](mailto:cnichols@uniondemocrat.com) or 588-4531.

## **Calaveras ordered to create stormwater plan**

By Dana M. Nichols  
Record Staff Writer  
January 29, 2007 6:00 AM

SAN ANDREAS - Drive along Latrobe Road in El Dorado County, where bulldozers are clearing the way for development, and you will see a patchwork of woven mats, loose straw, netting and artificial berms arranged to keep rain from washing the loose dirt into creeks and rivers.

You won't see that as often in Calaveras County. And that is why the county is in trouble with state water-pollution cops.

The Central Valley Regional Water Quality Control Board has ordered Calaveras County to come up with a stormwater control plan within six months or face fines. Builders are the biggest culprits, and county building inspectors have not forced them to curb pollution from runoff, the regional board said.

A Dec. 27 letter from the board said inspections of construction sites in Calaveras County by board staff had revealed that "the county lacked an effective construction oversight program."

The letter also said storm runoff from Calaveras County construction sites is a significant source of water pollution. The board gave the county until June 25 to come up with a plan.

County Public Works Director Rob Houghton, to whom the letter was addressed, bristled at the state's suggestion that county employees should have been policing stormwater pollution.

"It's their program," Houghton said of the state board. "What they were saying is that they weren't able to administer it at their level, so they are asking us to step in and administer it on their behalf.

"The way it was previously structured, the burden was on the discharger, which is a euphemism for the contractor or the property owner."

Houghton said Calaveras County is nearing the 50,000-population level at which such local-government-run stormwater control programs are mandatory anyway.

"We've been working on a grading ordinance in anticipation of this happening," Houghton said. "We knew this was coming. I think it got here a year sooner than we expected."

Houghton said county staff will hold a study session Feb. 20 with the county Board of Supervisors on stormwater issues. Direction supervisors give then will provide the basis for responding to the state letter.

Bill Marshall, chief engineer for the water-quality board's stormwater division, said the December letter is only his agency's latest effort to encourage Calaveras County to crack down on construction-site pollution. He said county officials have not responded either to the December letter or to earlier communications.

And he said private-sector builders in the county also have been unresponsive in some cases.

"We've had a couple of fines that we've issued down there," Marshall said. "Sometimes you issue some fines, and all the developers kind of straighten out. ... But in the case of Calaveras County, it has been business as usual."

The Copperopolis area in particular has been under scrutiny for its storm runoff practices in the past few months. Calaveras County Water District has put several builders - at the La Cobre Mina and Copper Hills subdivisions - on notice that it, too, objected to failures to manage storm runoff properly.

But a representative of at least one major developer that has been inspected by the regional board staff said the developer is going to great lengths to comply fully with state-required runoff control measures.

Artificial berms, erosion-control netting and straw are visible where bulldozers have been working on the Copperopolis Town Square development, just off Highway 4 at Little John Road.

"If you come out and look at our project, we've got the stuff all over the place," said Paul Stein, vice president of land planning for Castle & Cooke Calaveras Inc., the developer behind the project. "We try to make sure that we are complying 100 percent."

Marshall said all cities and counties in the region with populations of more than 100,000 already have stormwater plans, and most smaller local governments in San Joaquin County also have put a stop to the worst abuses at construction sites.

Ripon, for example, has less than one-third the population as Calaveras County but has a stormwater pollution prevention program in place.

"It was not real costly, but (it required) a quarter of an employee. That's a fair amount of time," said Matt Machado, a spokesman for Ripon's engineering department.

Contact reporter Dana M. Nichols at (209) 754-9534 or [dnichols@recordnet.com](mailto:dnichols@recordnet.com).

## **CCWD says sewer violations a drain**

***Published: January 11, 2007***

By ABBE SMITH

The Union Democrat

For the second time in two months, mud from a Copperopolis construction site was swept into the Calaveras County Water District sewer system during a rain storm.

The recurring problem, which clogs the system and is expensive to fix, has prompted the district to consider tightening its policy on fining developers who violate CCWD ordinances.

CCWD's struggle with sewer violations on construction sites comes as development in the area mushrooms.

The most recent problem was at the DeNova Homes Copper Hills project off O'Byrnes Ferry Road, where an inspector last week discovered a cut pipe where storm water entered the sewer system.

CCWD officials have photographs of what they say is an intentionally severed line on the Copper Hills construction site. The pipe connects a home on the site to the CCWD sewer line. When it was allegedly cut, mud and water from last week's rain storm infiltrated the system.

The motive for cutting a pipe or lifting a manhole to drain a construction site after a rain storm is simple, according to CCWD General Manager Dave Andres.

"It's so muddy that they can't work on the site," he said during a break at Wednesday's board meeting.

A representative from Copper Hills did not return phone calls Wednesday.

At last month's CCWD meeting, Andres said it can cost as much as \$4,000 or \$5,000 to clean up mud clogging the district's sewer system. He said the task requires a three-member crew working four to five days and a truck with a six-inch nozzle to pump out the mud.

Those are the kinds of costs that can be collected by CCWD through fines, according to Jennifer Harder, a San Francisco attorney who advises the district.

She said any CCWD ordinance violation is a criminal misdemeanor and can be handled by the District Attorney's office. However, CCWD can also impose administrative penalties or fines on developers who violate code.

The key, Harder told directors Wednesday, is to be specific in district policy about what kind of behavior leads to what kinds of consequences.



Basically, the district is entitled to recover repair costs from developers or contractors.

"When people intentionally do it, that's when we want to be on them," Director Jeff Davidson said.

Director Ed Rich said repair costs are now passed down to the ratepayer.

An extreme example of costs a violation could bring would be if a construction site illegally discharged mud into the sewer system, causing the sewer storage pond to rise significantly. A heavy rain storm could cause that storage pond to spill and thus result in costly fines imposed on the district by the state Regional Water Quality Control Board.

That state agency keeps track of individual developers as well.

The Black Creek Estates project, just south of Copper Cove Drive, received a "notice of violation" from the state water agency after mud from the construction site clogged the CCWD sewer system early last month.

Chris Fain, project manager for underground work at Black Creek, has admitted that mud from his site entered the system through an open manhole, but he said the problem was fixed within 24 hours of the spill.

Andres said CCWD is starting to be more aggressive about inspecting construction sites.

"Part of it is our problem in that we haven't been diligent in monitoring their activity," he said.

In addition to ordering more inspections, directors Wednesday sent a newly revised sewer regulation ordinance to the engineering committee for review. The revision includes guidelines for enforcement of violations and specific prohibited activities, including damaging any part of a public sewer. Andres said he expects the new ordinance to go before the board in February.

For now, he said the district is focusing on beefing up inspections. Also, CCWD officials monitoring the system sometimes can tell when a violation is occurring. CCWD operations and maintenance superintendent Bill Perley said a rapid influx of water into the system is one clue.

"I've got a pretty good guess that not everybody flushed the toilet at the same time," he said.

Contact Abbe Smith at [asmith@uniondemocrat.com](mailto:asmith@uniondemocrat.com) or 736-0916.

# Calaveras cracking down on illegal runoff

By **Dana M. Nichols**

Record Staff Writer

January 11, 2007 6:00 AM

SAN ANDREAS - State and local officials are cracking down on Calaveras County developers who allow mud and rain runoff to flow illegally into creeks, lakes or sewers. Calaveras County Water District officials said that this month and last, they put developers in the Copperopolis area on notice on three separate occasions that they were illegally discharging stormwater into district sewers. And state water pollution enforcers last Thursday issued a letter notifying developers of the La Cobre Mina project near Copperopolis that they had failed to take necessary steps to keep December rains from washing sediment from construction sites into nearby waterways.

Water district officials say they are particularly worried about the problem in the Copperopolis area. Last winter, leaks of rainwater into district sewers contributed to overflowing ponds at the Copper Cove wastewater treatment plant.

"We had discharges into waterways, into lakes," said Calaveras County Water District General Manager David Andres.

The water district board is worried enough about the problem that it held an initial discussion Wednesday of whether to draft an ordinance that would impose fines on builders who allow rainwater to flow or leak into sewers.

At the very least, board members said, they'd like builders to pay the district the cost of repairing damage to district sewage treatment equipment and state fines imposed on the district as a result of the illegal flows into sewers.

"When somebody pulls one of those manholes off just to get the street not to flood, that's intentional," Director Jeff Davidson said.

Director Ed Rich, who represents the Copperopolis area, said the water district is in the middle of an effort to educate builders in the area on the rules involving drains and sewers.

"There are a couple of projects in my area that have been notoriously sloppy," he said.

Chris Fain, development manager for La Cobre Mina, said that is not the case with his development. An access hole cover that was left open there in December was an accident, he said.

Richard Muhl, an environmental scientist for the Central Valley Regional Water Quality Control Board, said La Cobre Mina officials have responded to the notice of violation by agreeing to correct the problems, but he added that he hasn't yet inspected the site.

Water District officials say that the Copper Hills development being built by DeNova Homes has repeatedly violated district rules.

DeNova Homes representatives did not immediately respond Wednesday to telephone calls asking for comment.

Contact reporter Dana M. Nichols at (209) 754-9534 or [dnichols@recordnet.com](mailto:dnichols@recordnet.com).

## **Copper sewer system muddied**

***Published: December 14, 2006***

By ABBE SMITH

The Union Democrat

A Copper Cove sewer storage pond lost a half foot of storage this weekend when a rain storm washed mud from nearby construction sites into the sewer system.

Bill Perley, operations and maintenance superintendent for the Calaveras County Water District, told directors at Wednesday's district board meeting that the problem of mud clogging the system is costly and could be disastrous if another heavy storm strikes.

"This has been driving us crazy for a couple of years," he told the board.

In addition to the storage pond losing capacity, Perley said two pump stations and a long pipeline are full of mud.

In the past, the district has tried to combat the problem by putting inflatable plugs in the sewer line to block storm water runoff from construction sites. Some developers or contractors — it's not always easy to tell who — remove the plugs and uncover manholes to illegally get rid of the muddy runoff, Perley said.

He was alerted to the problem after a huge amount of mud flowed into the Copper Cove Water Treatment Plant this weekend. He said he has samples and pictures of the mud and was able to follow the path of the mud to a couple of developments in Copperopolis. Though he can't say for sure where the mud is coming from, Perley named two developments he believes are responsible — Copper Hills, along O'Byrnes Ferry Road, and Black Creek, just south of Copper Cove Drive.

Chris Fain, project manager for underground work at Black Creek, admitted this morning that some of the mud was coming from his project.

"This is a very unusual slip," he said.

Fain said a Sutter Creek-based contractor doing grading at the site was contacted earlier this week by CCWD and they found mud entering the sewer system at one of the manholes. Fain said the contractor is a very responsible company and the mistake was fixed as soon as it was discovered.

Eric Barstad, one of the developers of the 500-acre Black Creek subdivision, said this morning that his company will cover the cost for CCWD to clean the sewer system.

Barstad emphasized that his builders and contractors follow strict storm water runoff management plans and have "an enormous amount of erosion control" under way.

Barstad cited a thick binder he has that's put out by the state Regional Water Control Board with 100 pages of requirements to prevent storm water pollution. He said he takes the task very seriously.

Methods of protection include using hydro-seeding to plant grass on hillsides and wrapping tubes of netting stuffed with straw around storm drains. The tubes, called waddles, act as filters to keep dirt out of the system. Barstad said Black Creek uses them all.

A representative from Copper Hills, being built by Bay Area-based DeNova Homes, did not return phone calls Wednesday.

CCWD General Manager Dave Andres said when mud clogs the district's sewer system it can cost as much as \$4,000 or \$5,000 to clean up. He said the task requires a three-member crew working four to five days. A truck with a six-inch nozzle is used to pump the mud out of the system.

"Our crews need to be doing other things," he said.

Perley told directors that any developer or contractor who pops a manhole or removes a plug to get rid of runoff is making matters worse for both sides.

"They're killing themselves because they're taking away all the storage capacity," he said.

The directors questioned why more was not done to fine the developers who clog the CCWD system.

"We need to have some enforcement on these issues," Director Jeff Davidson said.

Part of the problem, Andres said, is figuring out who actually caused the violation — contractors, property owners or any other entity involved.

Contact Abbe Smith at [asmith@uniondemocrat.com](mailto:asmith@uniondemocrat.com) or 736-0916.

## **Plumbing checks may be required**

Lode homeowners would have to pay for inspections

By Dana M. Nichols

Record Staff Writer

November 02, 2006 6:00 AM

SAN ANDREAS - Homeowners here sometime in the next year may join others in communities around the state who have an extra reason to write out checks to plumbers.

The Calaveras County Water District may become the first entity in the immediate region to require periodic inspections of the private pipes that deliver sewage from homes into public sewer lines. Contrary to what people might think, local officials are more worried about what might leak into the private pipes than what may leak out of them.

"This past winter, we noticed a lot of inflows coming into our systems," said Steve Hutchings, an engineer for the district.

The CCWD and other utility districts in California say they have found that half or more of the liquid pouring into their sewers during wet weather is rain rather than sewage. That is not a problem in places like Stockton, where sewage treatment plants have adequate capacity and where the city has a permit to discharge treated wastewater into rivers.

"Currently, we don't have a program in place to inspect these private laterals," said Bob Granberg, deputy director of water resources for Stockton. Stockton does not have any plan to create an inspection program.

In Calaveras County, however, utilities are generally required to discharge their treated wastewater onto land. They usually do it as irrigation for golf courses and pastures. They also use devices called turbomisters to speed evaporation. That either sharply limits how much water they can discharge or forces the utilities to spend tens of millions of dollars to buy extra land.

Last winter, treatment plants in Copperopolis, Valley Springs and elsewhere in Calaveras County filled to their limits.

Meanwhile, the state Water Resources Control Board in May adopted a new policy cracking down on sewage spills from utilities and requiring virtually all of the state's utilities to draft plans for reducing such spills, including those from ponds holding treated wastewater.

Utilities already perform routine maintenance, including the use of television cameras, on their lines and so are able to calculate how much of the rainwater is leaking into their lines from private lines. CCWD officials said that without the extra water coming from private lines, their plants would not have been overwhelmed last winter.

The final draft of the state policy does not require inspections of private sewage lines coming from homes. But such a measure was considered in earlier drafts. And experts familiar with state pollution policies say it is likely that some day, virtually all California homeowners will have to pay for periodic inspections of their home sewer lines.

"I think that people are realizing there aren't a whole lot of options here in dealing with these issues," said Roberta Larson, counsel to the California Association of Sanitary Agencies.

Larson said her agency opposed the proposal to force cities, counties and local sanitary districts to require such inspections because of a headache created for utility districts by the fact that the line between public and private pipes is drawn differently in virtually every district. In some cases, private lines extend all the way to the street. In other districts, the public utility is in charge once the line leaves a house. Mandating local districts that do not have the authority of the state to inspect lines on private property that they do not directly control may not always work, Larson said.

But she said her group is involved in early discussions on whether to ask the state Legislature to draft such a law.

Faced with rising costs to expand treatment plants, some local agencies are not waiting. The cities of Alameda and Albany have had inspection ordinances for more than a decade. Some Southern California cities have long had such measures to reduce the risk of sewage spills on beaches.

Most such ordinances require homeowners to pay for the inspections and any necessary repair work. Most ordinances require inspections at the time houses are sold. Some, like the measure being considered by the Calaveras County Water District, would require periodic inspections, possibly every five years.

Larson said the Truckee Sanitary District decided simply to go ahead and do the inspections and repairs itself.

The Stege Sanitary District, which serves up 40,000 customers in El Cerrito, Kensington and part of Richmond, a year ago adopted an ordinance requiring sewer line inspections and repairs when homes are sold.

As in Calaveras County and elsewhere in the state, real estate professionals objected that the requirement adopted in the Stege Sanitary District could hang up the sale of homes, said Doug Humphrey, general manager of the district. But Humphrey said he believes that the way the policy has worked should reassure real estate professionals.

"We are a sanitary district, and we can't really stop a transaction like that from occurring," Humphrey said. If no inspection is completed when a house sells, then district officials will find that out afterward and can ask the property owner to comply with the requirement, he said. "And then can give three- to six-month extensions. Our intent is not to mess up the real estate transactions."

A number of real estate professionals showed up to object to the proposed CCWD policy when it was discussed at a meeting on Oct. 10, Hutchings said. The initial CCWD proposal called for both inspections at the time of sale and periodic inspections, possibly every five years.

Hutchings estimated that the cost to hire a plumber to perform the inspection might be roughly \$200. He said the district would provide lists of plumbers with the necessary television equipment to inspect sewer lines. Homeowners with broken lines also would have to pay whatever it cost to make necessary repairs.

That is why the Stege Sanitary District decided to only require such inspections when a home is sold. That is a time when people either have the

money or could finance the repairs along with the rest of the transaction on the home, Humphrey said. He said from 2.5 percent to 3 percent of the homes in his district are sold each year.

Hutchings said CCWD staffers will revise the proposal and come back for another hearing on it sometime next year.

Contact Mother Lode reporter Dana M. Nichols at (209) 754-9534 or [dnichols@recordnet.com](mailto:dnichols@recordnet.com)



# Calaveras Water District Eyes Reservoir Expansion

Monday, April 30, 2007 - 12:30 PM

Vanessa Turner

MML Calaveras Bureau

San Andreas, CA -- The Calaveras County Water District in partnership with two other water agencies is looking at expanding a high alpine reservoir for help during dry years.

District Manager David Andres says the district is working with the Amador Water Agency and East Bay Municipal Utilities District to expand Bear River Reservoir on Highway 88.

The agencies will work together on a feasibility study to raise the dam 10 feet in order to capture additional water.

Andres says the project could net up to 20,000 to 25,000 acre-feet of water, which would then be released during the summer time.

The district would work with EBMUD to take water from one of its facilities down stream for use in the Valley Springs area.

Andres also says it is unknown how this would affect a private campground that currently exists along the reservoir's shore.

Written by [vanessa.turner@mlode.com](mailto:vanessa.turner@mlode.com).

---

## CCWD joins water study

---

By Craig Koscho

Posted: Monday, April 16, 2007 10:33 AM CDT

A study of water issues in the Valley Springs and Wallace areas was endorsed by Calaveras County Water District directors Wednesday morning.

They voted 5-0 to join the Valley Springs Utility District in the study, and possibly a couple of other agencies as well.

CCWD General Manager David Andres said he had contacted the Wallace Community Services District about joining the effort, and would be doing the same with the San Andreas-based Calaveras Public Utility District. If all four agencies participate, the study would review water needs in the Valley Springs, Wallace and Toyon areas.

The Valley Springs Utility District is already working with CCWD on providing more water for some of its projects (see related story).

CPUD is looking at the possibility of providing water to the Toyon area, Andres said.

And many homes in the Wallace area have little if any water because they are on failing wells.

The \$50,000 cost of the study would be split proportionally among the participating agencies, which would make up the expenditure later.

"New developers will be paying the cost of this study," Andres said.

"Most of (the large developers) are willing to fund this as part of their own overhead," Andres said.

Director Jeff Davidson said the study cannot just focus on the large developers.

As an example, he noted that VSPUD can't accept any new customers, even someone with just one lot.

Director Ed Rich suggested changing the language of the resolution so that instead of developers, property owners who would be served would reimburse the cost.

The district doesn't want to appear to be doing this for specific developers, Rich said. The area should be viewed as a basin for anyone who needs service, he said.

Discussion at times overlapped with VSPUD's efforts to purchase CCWD water from New Hogan Reservoir for the Ponte Ranch project and its current customers (see related story).

Davidson said the study should reveal what impact future service would have on current customers.

VSPUD, has just one well to serve about 275 customers and its sewage treatment plant is old and has come under close state scrutiny the past 12 months.

The district may be too small and struggling to meet all the present and future needs of the area, and it might make more economic sense to have all of them as CCWD customers, Davidson said.

The study is scheduled to begin June 1, Andres said, and the participants could get a first draft report by September.

Contact Craig Koscho at [ckoscho@calaverasenterprise.com](mailto:ckoscho@calaverasenterprise.com).

## **PRESS RELEASE**

May 25, 2007

From: Calaveras County Water District

Contact: Pat Emerson, 209 754-3543, ext. 41

### **For Immediate Release.**

Many California utility agencies are implementing aggressive conservation plans this year. Calaveras County Water District is hoping more customers will take on voluntary water conservation efforts this summer. The state is well behind in average rainfall this year. "It's not rainfall, but system design capacity that is the main culprit affecting water availability to our customers," said CCWD General Manager David Andres.

Staying within the design capacity of water system facilities – a maximum usage of 1,500 gallons per household per day –can help delay the need for new or expanded facilities. Last summer's heat-wave usage in Rancho Calaveras averaged over 1,700 gallons per day, but a request for voluntary conservation efforts showed an immediate reduction in water use. "Recharging the system takes time. One goal of conservation is to keep water use at a more level rate," said Bill Perley, CCWD utilities director.

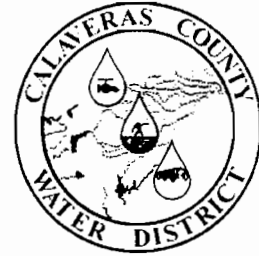
CCWD is strongly urging all customers to engage involuntary conservation by watering outdoors only between 6 p.m. and 10 a.m. Odd address are asked to water on Tues, Thurs, and Saturday. Even address are asked to water on Monday, Wednesday, and Friday. Water conservation efforts help level peak usage by spreading water use over a wider range of time.

CCWD has added links in the Water Conservation area of its website, [ccwd.org](http://ccwd.org), and urges all customers to explore options that can vary from appliances to plantings. For example, aerators, available for a few dollars, can reduce water use at faucets by as much as 60% while still providing a strong stream. Growing plants suited to the area can save more than 50% of the water normally used to care for landscape. Customer Service Supervisor Doug Wilson remarked that conserving water is an exercise in changing water use habits. Ratepayers have choices to make in helping to control their water bills.

# # #

# FOR IMMEDIATE RELEASE

July 24, 2006



From: David Andres, General Manager  
Calaveras County Water District  
Box 846 San Andreas CA 95249  
(209) 754-3543

Re: **Emergency Declaration**

Due to the recent high temperatures and very high outdoor water use, delivery of water to a portion of the Rancho Calaveras subdivision in CCWD's Jenny Lind service area has been strained. Neither the Jenny Lind School nor any commercial area has been affected and outages have resulted.

Over the weekend of July 22-23, two separate power surges knocked out the pumps that fill Tank B serving the affected area. This one-million gallon tank has been operating at 1.7 million gallons a day of outflow to customers during the recent heat wave, which is the maximum amount of water that can be pumped to the tank. Despite the public's response to CCWD's door-to-door conservation request, the combined problems of usage and power resulted in a water outage for some customers.

CCWD has switched pumps and other systems to backup generator to eliminate power issues. However water is not coming into the system fast enough to meet demand. The need to fill Tank B is necessary to stay ahead of demand. As a result, the CCWD Board has declared a water emergency for its Jenny Lind water service area.

**Until further notice, CCWD is asking its customers in the area of the Rancho Calaveras subdivision to suspend outdoor watering.**

Some additional customers may see their water shut-off today, as staff work to fill the service tank and monitor pump operation. It is estimated, with conservative use by customers, that Tank B will take 13.5 hours to completely fill.

For those still without water,

bottled water will be available for pickup in the parking lot of Good Samaritan Church, at the corner of Baldwin and Highway 26 and at the Jenny Lind Fire Department.

There is also a water tap available at the Jenny Lind water plant on Silver Rapids Rd. for filling containers.

Persons unable to travel can call **CCWD customer service at 754-3543** to schedule a delivery.

Two water trucks will also be available to make deliveries for stock watering; contact Customer Service (754-3543).

7/24/06

Free showers are available at the Family Fitness Center near Hwy. 26 and Hogan Dam Rd. Sign in so CCWD can pick up the charge.

These delivery measures are in place until the emergency situation ceases. It is anticipated that water service will be restored to all users within 48 hours.

According to operations and maintenance superintendent Bill Perley, water is flowing into the affected service zone at a rate of 1.7 million gallons per day; usage is at least that high. If all outdoor watering is suspended, water levels in the local storage tank should return to normal in less than a day. When that occurs, it is anticipated that a modified conservation plan will be implemented severely limiting outdoor water use.

## **District officials land in hot water with dried-out residents**

Article published Aug 10, 2006

SAN ANDREAS - Residents of the Valley Springs housing tract where taps went dry during a heat wave in July packed a meeting Wednesday where Calaveras County Water District officials weighed how to keep water flowing. Before it was over, district officials apologized for the problem and for poor communication during the emergency, and the district board voted unanimously to make fixes to pipes and other equipment to prevent a repeat next summer.

Jeff Davidson, the director representing the Jenny Lind and Rancho Calaveras areas, said district staffers have worked heroically to keep the 40-year-old system running.

"In this instance, we failed," Davidson said.

Officials said they were hit July 22 and 23 by a perfect storm of problems: a prolonged heat wave that triggered record water use, electrical surges that destroyed the control systems for pumps, and a bottleneck that limits the amount of water that can be pumped to a tank that serves 900 homes on the southwest side of the Rancho Calaveras subdivision.

Hoses and taps went dry even while temperatures soared well over 100 degrees.

Tempers flared Wednesday as officials described their efforts to communicate with customers during the emergency.

Bill Perley, superintendent of operations and maintenance, triggered a round of objections from the audience when he said his staff had gone door to door to some homes July 22 to ask residents to conserve water and then "hit everybody on Sunday," July 23.

"We didn't even see a truck," one man, who could not be identified, shouted from the back of the room.

District officials said the emergency taught them that their automated phone system, which then could make only one call at a time, was inadequate. Also, district records had no phone numbers or old numbers from out of the area for many customers.

Pat Emerson, the district's customer service manager, said telephoning to alert residents to the need to suspend outdoor watering at the peak of the emergency got off to a slow start. "Some of that time was spent figuring out who to notify and not panicking everybody in Valley Springs," Emerson said.

Once water was flowing again July 24, the district failed to make a second round of calls saying the water conservation measures were now voluntary, rather than mandatory. Residents repeatedly interrupted district General Manager David Andres when he described the measures as voluntary, telling him signs in their neighborhoods say otherwise.

"The signs are still posted," said Vincent Brown, who said he needs to water fruit trees on 5 acres he owns on Anderson Street.

Andres repeatedly reassured residents that conservation measures are voluntary. "We're not going to send a sheriff out there to turn you off," Andres said. Andres asked the board to keep the voluntary conservation rules in place until Sept. 30.

Some residents said they would like to see conservation rules enforced.

"There's a lot of water wasters around. We need water police," said Lyle Bradt, a resident of the area.

Andres also said at the beginning of the discussion that records show average water use has climbed over the years. During the heat wave in July, water use in the 900-home area that went dry peaked at 1,780 gallons per home per day, well over the 1,500-gallon peak for which the system was designed.

Directors voted unanimously to take a variety of actions to head off any repeat of the problem, including replacing a narrow section of pipe that limits the amount of water that can be pumped into the area and launching a program to teach residents how to control water use.

Davidson warned that some conservation is necessary to avoid the cost of immediately upgrading system capacity.

Already, fire officials want \$20 million in upgrades to ensure adequate fire-hydrant pressure, Davidson said. The same upgrades would make it possible to pump more water to houses. But the lack of money to do it immediately means even those changes will be spread over coming decades as lines are replaced.

Contact reporter Dana M. Nichols at (209) 754-9534 or [dnichols@recordnet.com](mailto:dnichols@recordnet.com)



## **Calaveras County residents without water (11:45 a.m.)**

The Record

Published Monday, Jul 24, 2006

About 2,000 residents of the sprawling Rancho Calaveras subdivision near Valley Springs are without water after a heat-related failure of Calaveras County Water District equipment.

Calaveras County sheriff's deputies were going door to door Monday to advise people about the situation and look for any elderly residents who need water delivered.

The outage started Sunday. The water district expected it to be fully functioning by tonight.

For the full report by staff writer Dana Nichols, read Tuesday's Record.

# ***Is CCWD's infrastructure adequate to supply water to residents of Rancho Calaveras in a heat wave??***

***Read quotes from newspapers and CCWD...you decide.***

[insert photo and link to page with quotes and links]

## **Outdoor watering banned in Calaveras neighborhood**

**"The tank serving 900 homes [in Rancho Calaveras near Jenny Lind] went dry Sunday night after demand for water exceeded the approximately 1.7 million gallons a day the water district can pump into the tank."**

District staffers said they had been struggling for the past month to pump enough water from the Jenny Lind Water Treatment Plant on Silver Rapids Road to the tank that serves the western part of Rancho Calaveras."

Link to: Stockton Record article July 25, 2006

## **Water District Declares Emergency**

**"A power surge over the weekend knocked out the water pump to residents in the Rancho Calaveras subdivision.**

**The district says it has switched pumps but water is not coming into the system fast enough to meet demand."**

Link to: MyMotherLode.com article July 24, 2006

## **Valley Springs subdivision loses water**

**"Water service was restored last night to 900 homes south of Valley Springs, a day after a Calaveras County Water District water tank went dry because a power surge knocked out a district pump.**

**The homes at the Rancho Calaveras subdivision lost water about 9 p.m. Sunday. The outage affected about 2,000 people.**

**That service was restored starting at 9 p.m. yesterday. All customers had water by about midnight, said Bill Perley, CCWD's operations and maintenance superintendent."**

**"The outage combined with high water usage in the area drained the million-gallon tank dry, he said. Perley said he did not think this was the first time the subdivision had lost water."**

Link to Union Democrat article July 25, 2006

## **Public Notice Regarding Water Shortage**

**“Due to the recent high temperatures and very high outdoor water use, delivery of water to a portion of Rancho Calaveras in CCWD’s Jenny Lind service area has been strained.**

**Problems continue with bringing in as much water as is required to meet the high water demand. As a result, the CCWD Board has declared a water emergency for its Jenny Lind water service area.”**

**“Until further notice, CCWD is asking its customers in the area of the Rancho Calaveras subdivision to suspend outdoor watering.”**

Link to: CCWD Public Notice, July 24, 2006

## **Emergency Declaration**

**“This one-million gallon tank has been operating at 1.7 million gallons a day of outflow to customers during the recent heat wave, which is the maximum amount of water that can be pumped to the tank.”**

**“CCWD has switched pumps and other systems to backup generator to eliminate power issues. However water is not coming into the system fast enough to meet demand.”**

**“According to operations and maintenance superintendent Bill Perley, water is flowing into the affected service zone at a rate of 1.7 million gallons per day; usage is at least that high. If all outdoor watering is suspended, water levels in the local storage tank should return to normal in less than a day. When that occurs, it is anticipated that a modified conservation plan will be implemented severely limiting outdoor water use.”**

Link to: CCWD Emergency Declaration, July 24, 2006

# There is Not Enough Water

## No Water Rights to New Hogan Lake.

CCWD does not have any water rights to New Hogan Lake. The US Bureau of Reclamation (USBR) holds water rights to New Hogan. SEWD (Stockton East Water District) in partnership with CCWD contracts with the USBR for an average of 84,100 acre-feet (af) per year from New Hogan. According to Kevin Kauffman, GM of SEWD, during an average year CCWD's share of water from New Hogan is approximately 31,000 af. Currently, CCWD uses about 3,500 to 4,000 af per year. One acre-foot is about 326,000 gallons, or enough water to supply two typical families for a year, which means that 4,000 af would serve approximately 8,000 households with water for one year. SEWD, depending on their demand, will use either part or all of CCWD's unused portion of water. According to CCWD staff, SEWD is the Water Master for Hogan (the responsible party for delivering water to CCWD).

## Our Main Source of Water is New Hogan Lake

For the vast majority of us living in Rancho Calaveras and La Contenta, our main source of water comes from New Hogan. We do have a back-up water source—Valley Springs Public Utility District; however, "The district has been down to one well for many months and at one point relied on the Calaveras County Water District to provide back-up water supply" (The Valley Springs News, Fri. Dec. 2, 2005). During California's last big multi-year drought, a six year period between 1987-92, Hogan, which has a storage capacity of 317,000 af, was below the USBR contract of 84,100 af for 65 months out of 72. In fact, there were a total of seven months during this time when the level of Hogan was in the 15,000 af range. In November 1988, Hogan at its lowest point contained only 14,933 af. This low level between 15,000-68 af is considered Dead Pool storage. This water can be used, but it is not preferable because there are problems of water quality; and the treatment plant has to work harder to treat Dead Pool water due to large amounts of sediment. Since SEWD is the Water Master for Hogan, they decide on Dam operations. They have a larger customer base than CCWD. Who do you think will take the lion's share of the available water during drought periods?

## **We Need to Plan For Drought**

Certainly, California is not always in a drought situation, but they do occur periodically, and planning for drought situations must be a priority when planning for any future development in the Valley Springs and surrounding areas. CCWD's own website states, ". . .the Golden State is prone to frequent bouts [of] drought. . ." Currently, two bills, SB 610 and SB 221, require proof of available water supply for proposed developments. For developments of 500 units (homes) or more a WSA (water supply assessment) must be prepared in order to identify if a water district can meet adequate supply during a drought. The majority of proposed developments in the area are well under 500 units, but cumulatively they add up to more than that!

## **Proposal for Wallace Developments to Divert Hogan Water**

Another important consideration is all of the proposed development in the Wallace area: "When all possible developments for that area are tabulated, it could come to 1,000 new homes at final build-out" (Calaveras Enterprise, "Relief on tap for area's thirsty water agencies?" Nov. 15). There is no doubt that the people in the Wallace and Burson areas need water, especially the people that are currently hauling in their own water. There is presently a water project being discussed by local water agencies on how to do that. I'm concerned, however, with Phase II of the water project which "calls for running a line from CCWD's Jenny Lind Water Treatment Plant to the Camanche facility." That is potentially a lot of thirsty customers using water from Hogan, especially during a drought period.

## **There is Not Enough Water**

The populations of Rancho Calaveras and La Contenta have increased dramatically since the last drought. With the current population, do we have enough water to supply us in the next drought situation? Do we have enough water to supply future population growth in the Valley Springs area? Do we want Hogan water being diverted to Wallace for future developments and thirsty developers? This is another important and complex topic that is relevant to the current development issue facing us all, and we need to think about it and voice our opinion!

## **Additional Information**

Note: You can go to the following website

<http://cdec.water.ca.gov/selectQuery.html>, type in NHG in the Station ID box, click Get Data, and access New Hogan reservoir storage amounts monthly since 1963. You can also access data on Camanche Reservoir (CMN). In late 1988 storage levels were at an all time low of just under 10,000 af.

This letter appears on the [myvalleysprings.com](http://myvalleysprings.com) web site in the "Did you know?" section.

## **County eyes water supplies, pollution**

***Published: April 6, 2007***

By KATY BRANDENBURG

The Union Democrat

When Brian Moss, director of Calaveras County's Environmental Management Agency, makes public presentations about groundwater, as he has recently, he starts by referencing the gold the county was known for in the 1800s.

"What is the gold in California today?" he asks.

Many know the answer and shout out, "Water!"

Geographic Information System technology has enabled the county since 2000 to track and identify groundwater sources, and possible threats to it, as part of the Local Agency Groundwater Protection Program. Using data already gathered since 1994 — plus latitude, longitude and topographical mapping — GIS and computer design software create a visual representation of the county's geology, including the location of public and private wells, septic tanks, mine sites, dump sites, underground storage tanks (usually gas stations) and underground water sources.

"We're building a database, that's the key," Moss said. "That's what makes GIS the wonderful tool that it is."

The majority of the groundwater protection program is funded by a grant from the U.S. Environmental Protection Agency. The county has mapped 1,900 wells within three to five feet of the exact location. Records from the state Department of Water Resources listed 4,500 more well locations, but without the same degree of accuracy.

Calaveras County gets much of its drinking water from small public water systems and individual wells, and on-site septic systems are common in areas where wells are found. Tracking data from and continuing to monitor those areas is very important, Moss said.

For example, prior to 1999, the Mountain Ranch School noticed elevated levels of coliform bacteria, associated with animal or human waste, in its well. The well was very old, so the school drilled a new one and sealed it in concrete to prevent surface water from contaminating it. The bacteria problem continued, and environmental health employees began looking for a pattern in bacteria levels over a period of time. They discovered the levels were highest in the winter and rainier months, and they decreased in the summer, when the ground was drier.

GIS maps of the area revealed a geologic formation of limestone and dolomite rock, which allowed water from flooded streams to trickle straight through cracks into the groundwater without being naturally filtered first, as usually happens with denser types of rock and soil.

Another small public well in Mountain Ranch had the same seasonal problem, Moss said. Both well owners worked with the Department of Environmental Health to run the water through an extra filtration system to make sure people were not being exposed to the bacteria. The department recommends but does not require owners of private wells to conduct water quality tests at least once a year.

The limestone area in Mountain Ranch only covers a limited area west of the town, Moss said. Well owners in that area would want to do their yearly test in the winter or rainy season.

Other areas of the county are affected by minerals or metals, such as Salt Springs Valley, Copperopolis and the area around Penn Mine near Valley Springs. High mineral and salt levels in the soil, as well as metals, including copper, pose risks to groundwater. Areas around flooded copper mine shafts tend to have very acidic water, Moss said.

Using the GIS data, the department can calculate the potential depth and yield of a new well and choose a good location by looking at maps of the surrounding area. The goal is to continue building a database that will eventually encompass all potential and known groundwater sources in the entire county — and can be used for planning future developments and extending water service to areas that need it.

"The more data we have, the more accurate we can be as far as water availability and quality," Moss said. "Sometimes the state even asks us for information."

Contact Katy Brandenburg at [kbrandenburg@uniondemocrat.com](mailto:kbrandenburg@uniondemocrat.com) or 736-0916.



## **Ground water report raises some concerns**

***Published: October 6, 2004***

By SUNNY LOCKWOOD

A comprehensive report on Calaveras County's ground water quality, quantity and availability shows that the area of the county being developed the most is also the area with the least ground water.

According to the Calaveras County Local Agency Ground Water Protection Program Final Report, the region of the county where the potential of finding ground water ranges from zero to low includes Copperopolis, the Calaveras County side of Tulloch Reservoir and the area around Valley Springs — all areas of major residential development.

"The county will use this report for future land use and development as well as identification of ground water resources," said Brian Moss, director of the county's Environmental Health Department, which produced the report.

Funded by an \$75,000 Environmental Protection Agency grant and \$18,000 from county water well fees, the report reveals many findings about county ground water.

For example, there are 18 separate underground rivers associated with the Tertiary Calaveras River Channel. These rivers run from West Point and Mokelumne Hill through Sheep Ranch, San Andreas, Murphys and Angels Camp.

One of the underground system channels, the Central Hill Channel, was tapped to provide drinking water for Angels Camp residents after the 2001 Darby Fire destroyed flumes that normally deliver water to the city.

The report points out that 75 percent of homes and 20 percent of businesses in the county are served by on-site septic systems. The highest density of septic systems is within the Highway 4 corridor around Arnold, according to the report.

Using Geographic Information System technology, the program mapped septic systems and wells throughout the county. And the report contains color-coded maps showing where these systems are.

Moss said there are about 5,400 wells in the county and about 350 are added each year.

The report states that the East San Joaquin Ground Water Basin, under the northwest corner of the county, is losing water as more is drawn out each year than the basin can recoup from rivers, subsurface flows and rainfall.

Although the report did not specify how much water was being lost each year, Larry Diamond, grants manager for Calaveras County Water District, said a recent report from the Northeastern San Joaquin County Ground Water Banking Authority puts the amount at about 160,000 acre feet per year.

"That translates into billions of gallons a year," Diamond said, adding that the basin is refilled by rivers and subsurface flows from Calaveras and other surrounding counties.

Moss said his department monitors county ground water for bacteriological organisms and nitrates and said there was no difference between the San Joaquin Ground Water Basin water and the ground water found in Calaveras County wells.

According to his department's report, most county wells are in hard rock areas. Such well water is drawn from fractured rock and faults, the report states.

The report identified potential sources of contamination to county ground water as abandoned wells, abandoned mines, underground storage tanks, hazardous waste sites, on-site septic systems, failing septic systems and solid waste sites.

Moss said his department monitors such sites.

Referring to the 40-page report that summarizes four years' findings of the county's Ground Water Protection Program, Moss said, "I feel that we're just scratching the surface and we'd like to further enhance the program. Our department is proposing to use this report as a base for further study of ground water resources."

He said he'll seek more grant funds to continue the program and refine the report's findings.

The Calaveras County Local Agency Ground Water Protection Program Final Report is available at the County Library, 1299 Gold Hunter Road in San Andreas. It can also be seen online at the County of Calaveras home page, [www.co.calaveras.ca.us](http://www.co.calaveras.ca.us).

Contact Sunny Lockwood at [slockwood@uniondemocrat.com](mailto:slockwood@uniondemocrat.com).

## **Board gets water report**

***Published: September 8, 2004***

By SUNNY LOCKWOOD

While it's easy to watch sparkling waters tumble along the Mokelumne or Stanislaus rivers, checking out underground water is another story.

If you want to drill a well, where is the underground water most likely to be? If you want to put in a subdivision, where will you most likely find potable water?

For the past four years Calaveras County's Environmental Health Department has been studying underground water in the county, inventorying wells, noting naturally occurring contaminants, mapping underground rivers and, in short, developing a body of information that can be useful to planners, developers, home builders and others.

The comprehensive study is the first of its kind, according to Brian Moss, director of environmental health for the county. And it unearthed some unexpected findings.

"The thing that was unexpected was the tracking of salt water in the county," Moss said.

Although well drillers were aware of salt water, Moss said the study confirmed a sizable band of salt springs and salt water wells stretching from Copperopolis to Valley Springs.

"It's not that there is an underground salt sea, but the geology of this area contains different types of salts and when fresh water mixes with the geology, the salts dissolve and become part of the water," he said.

Yesterday Moss presented the Calaveras County Board of Supervisors with the 81-page "Calaveras County Local Agency Ground Water Protection Program Final Report."

Moss said the four-year study was important because "we want to know where the water is, what the quality of that water is and what the quantity is."

The study also examines the impacts of mining, underground storage tanks that leak, abandoned solid waste facilities that may leak and other sources of contamination on groundwater.

The report said 75 percent of single-family houses and 20 percent of private businesses in the county are on private wells and septic systems and that these systems may impair groundwater quality.

Moss said there are about 5,100 wells in the county and about 350 new wells are being added each year.

"But the overall indication of our study is that most of the water quality in Calaveras County is good and meets state minimum standards for domestic wells," he said.

According to the report, county groundwater comes from three sources — fractures in hard rock that capture and hold water, the 70-square-mile East San Joaquin ground water basin beneath the northwest corner of the county and the Tertiary Calaveras River System.

Eighteen separate underground channels are associated with the Tertiary system running from West Point and Mokelumne Hill through Mountain Ranch, San Andreas, Angels Camp and Murphys.

In 2001, when the Darby Fire cut off water supplies to Angels Camp, one of those channels came to the rescue. City fathers pumped 500,000 gallons a day out of an old mine shaft built over the Central Hill channel of the system.

"They pumped that mine shaft for a month or so and only drew down the water level about 40 feet," said Moss, "so that tells you there's a significant amount of water there."

Copies of the report are available at the Calaveras County Library in San Andreas.

The four-year study was funded by a \$75,000 grant from the federal Environmental Protection Agency and \$18,000 from well construction permit fees collected by the county, said Moss.

Contact Sunny Lockwood at [slockwood@uniondemocrat.com](mailto:slockwood@uniondemocrat.com).

## **County, CCWD to look at Cosgrove Creek flooding**

*By Craig Koscho*

*Monday, January 9, 2006 10:27 AM CST*

Residents in the Valley Springs and La Contenta areas may finally one day see an end to flooding along Cosgrove Creek.

Calaveras County supervisors endorsed a flood control effort Tuesday that has been spearheaded by the Calaveras County Water District.

While it's too early to identify a specific venture, whatever project is eventually chosen could cost up to \$5 million, CCWD Director Jeff Davidson told county supervisors.

The county board supported proceeding with a feasibility study, conducted in partnership with the Army Corps of Engineers and CCWD, that could cost \$500,000 to \$600,000.

The study would require a 50 percent local match of "in-kind" services such as staff time.

No hard cash would be required at this juncture, Davidson said, and in-kind work could even include previous studies or maps prepared for the area.

He added that county and water district staff members would meet to determine how the 50 percent match would be divided between the two entities.

Davidson noted how areas along the creek flood every three to four years.

Hogan Dam Road, the access road to the reservoir, flooded New Year's weekend, Davidson said, as did property in La Contenta along streets such as Grouse Drive.

Supervisor Bill Claudino, who represents Valley Springs, said he saw how Highway 26 flooded last weekend, with motorists hitting the water at highway speeds.

"It was horrible to look at," Claudino said.

CCWD got involved in the effort about three years ago when its lobbyist approached the Army Corps of Engineers about potential projects the two could jointly pursue.

Cosgrove Creek topped the list, Davidson said, because it also helped CCWD develop new sprayfields and a wetlands where it could discharge treated wastewater north of Hogan Dam Road.

Some broad-based projects have been discussed, Davidson said, such as using that 51-acre site as a holding basin for flood waters.

Hogan Dam Road, which already floods during heavy rains, could be raised and serve as a dam for heavy runoff, Davidson said. The stored water could then be released more slowly later.

The overall project also would address habitat restoration and could extend pedestrian and bike trails from La Contenta all the way down to the Valley Springs townsite, Davidson said.

Actual construction would require a 35 percent local match, Davidson said, and 5 percent of the total would have to be actual cash.

All five supervisors endorsed the feasibility plan and flood control effort, but they also raised concerns about adding more work to an already overburdened planning and public works staff.

"We don't have enough planning staff to do what's coming through the door," board Chairwoman Merita Callaway said.

Supervisor Tom Tryon also supported the effort, but added he was disappointed the county and developers allowed so much development in a recognized flood plain.

"I would very much like to have a study session on how the heck we got here," Tryon said.

Supervisor Steve Wilensky agreed with Tryon, saying it would have been cheaper for the county not to have allowed the building there in the first place.

Wilensky also acknowledged the added burden to county staff, but added it's come about because the county failed to adequately plan in the first place.

He supported Tryon's suggested study session to find out where other similar large problems might exist.

One of the areas that is particularly susceptible to Cosgrove flooding is along the lower portion of Grouse Drive in La Contenta.

Homeowner Diane White said Wednesday that creek water came up into her back yard last weekend.

"It came three inches from my garage," she said.

White and her husband Kevin have lived in the home for seven years, buying it four years ago.

While they experienced flooding prior to the purchase, Diane White said last weekend was different.

"This is the worst it's been since we moved in," she said, adding they also bought the house on the assumption plans were being developed to control the flooding.

Overgrown creek beds downstream of the flood areas have been identified as contributing to the inundations.

Clearing those obstacles and entanglements has gotten more complicated because of stricter environmental rules and reviews, County Administrative Officer Tom Mitchell said.

Even though the county and CCWD might have to come up with money for an actual project, local entities might be able to recoup those costs by forming a benefit basin or flood control district, Davidson said.

That would put the costs of the project on the residents and developers most affected by the

flooding.

Whatever the cost, Claudino said the county would probably not have another such opportunity to share the burden.

Mitchell said contributing to the feasibility study did not commit the board to participating in an actual project.

While acknowledging that, Davidson said the county shouldn't pursue the study without at least some inclination of proceeding with an actual project.

"It will not go forward without you," he said.

Contact Craig Koscho at [ckoscho@calaverasenterprise.com](mailto:ckoscho@calaverasenterprise.com).

## **Reclaimed water could be used on sports fields**

***Published: March 6, 2007***

By KATY BRANDENBURG

The Union Democrat

A new park on Hogan Dam Road in Valley Springs could benefit both the community and the Calaveras County Water District, if the county agrees to a partnership and can come up with funding.

But the proposed 15-acre park alone will not solve the future dilemma of where to discharge CCWD's wastewater.

Under a plan being discussed by county and water district officials, the park would be irrigated by CCWD's treated wastewater (also called reclaimed water), now mainly being used to water golf courses.

The Calaveras County Parks and Recreation Task Force will discuss park options at its meeting tonight, scheduled for 6:30 in San Andreas.

"Where you have compatible uses for treated (wastewater) such as spraying playing fields or parks, you have a potential win-win situation," said CCWD Assistant Manager Larry Diamond. "Playing field turfgrass is a much more effective way of getting rid of effluent than spraying a pasture."

Sod or turf absorbs four times more water than natural grassland, he said.

La Contenta, Saddle Creek and Forest Meadows golf courses currently have arrangements with CCWD to use reclaimed water for free to irrigate their grass. But as the county grows, officials are wondering if that will be enough.

"At this time there's not enough volume to go beyond the golf course — except for La Contenta, where we might have reached capacity," Diamond said. "That's what we're trying to decide right now; how much can they take? We don't want to kill the grass."

The water district has hired environmental consultants to analyze the capacity of the soil in terms of elevation, temperature, and other factors at their different sites.

Jeff Davidson and Ed Rich, two of CCWD's board members, have been thinking ahead of ways to use reclaimed water rather than wasting it on an empty sprayfield. At a recent board meeting, Rich proposed using a percentage of the district's property tax income to extend "purple pipes," (for reclaimed water only, separate from potable water pipes) to areas like Salt Springs, where it could be used for agriculture, or new developments, where separate lines could be hooked up to hydrants, and reclaimed water used to fight fires.



CCWD Operation Supervisor Fred Burnett said the cost of installing separate pipes can be up to \$100 per foot, depending on where workers must dig.

CCWD owns between 15 and 18 acres of land off Hogan Dam Road in Valley Springs, which is now empty pasture, classified as spray field.

It would be the perfect place for a recreational park, according to Davidson, with baseball, soccer and football fields.

"It's a beautiful place. It's flat, centrally located... And there's no regulated facility to host tournaments right now," he said.

Davidson said he has been working with the county for the past several years to create a park, but it comes back to funding. Though CCWD would be providing the land and the water, Valley Springs homeowners would still have to pay either a parcel tax or small recreation fee to afford the construction and maintenance of a park. Davidson believes community members would be willing to chip in.

"Everyone talks about preserving the quality of life, but the quality of life's not that great around here if you're a kid," Davidson said.

An alternate use for the spray field that CCWD may pursue is to get a discharge permit from the state and turn it into a wetland, which the treated wastewater would filter through before rejoining Cosgrove Creek and eventually the river. In the long-term, that might be a more sustainable option, Diamond said.

"People with recreation needs would really appreciate having a local park, it's certainly not discounted, but on this property it would not be adequate for the long-term needs of the community," he said.

As the area grows, CCWD would need to buy more land to spray wastewater on, unless an alternate solution were found.

"If the state permitted us to run the water through a wetland, a great deal of additional cost would be defrayed," Diamond said.

Contact Katy Brandenburg at [kbrandenburg@uniondemocrat.com](mailto:kbrandenburg@uniondemocrat.com) or 736-0916.

## **PRESS RELEASE**

May 25, 2007

From: Calaveras County Water District

Contact: Pat Emerson, 209 754-3543, ext. 41

### **For Immediate Release.**

Many California utility agencies are implementing aggressive conservation plans this year. Calaveras County Water District is hoping more customers will take on voluntary water conservation efforts this summer. The state is well behind in average rainfall this year. "It's not rainfall, but system design capacity that is the main culprit affecting water availability to our customers," said CCWD General Manager David Andres.

Staying within the design capacity of water system facilities – a maximum usage of 1,500 gallons per household per day – can help delay the need for new or expanded facilities. Last summer's heat-wave usage in Rancho Calaveras averaged over 1,700 gallons per day, but a request for voluntary conservation efforts showed an immediate reduction in water use. "Recharging the system takes time. One goal of conservation is to keep water use at a more level rate," said Bill Perley, CCWD utilities director.

CCWD is strongly urging all customers to engage involuntary conservation by watering outdoors only between 6 p.m. and 10 a.m. Odd address are asked to water on Tues, Thurs, and Saturday. Even address are asked to water on Monday, Wednesday, and Friday. Water conservation efforts help level peak usage by spreading water use over a wider range of time.

CCWD has added links in the Water Conservation area of its website, [ccwd.org](http://ccwd.org), and urges all customers to explore options that can vary from appliances to plantings. For example, aerators, available for a few dollars, can reduce water use at faucets by as much as 60% while still providing a strong stream. Growing plants suited to the area can save more than 50% of the water normally used to care for landscape. Customer Service Supervisor Doug Wilson remarked that conserving water is an exercise in changing water use habits. Ratepayers have choices to make in helping to control their water bills.

# # #

**Joyce Techel**

---

**From:** "Joyce Techel" <jaytee@caltel.com>  
**Sent:** Thursday, May 24, 2007 7:41 AM  
**Subject:** Calaveras County rate hike will hit heaviest water users hard--Tiered fees take effect July 1 in Calaveras County-FYI-JT

Calaveras County rate hike will hit heaviest water users hard  
Tiered fees take effect July 1 in Calaveras County

By Dana M. Nichols  
Record Staff Writer  
May 24, 2007 6:00 AM

SAN ANDREAS - Calaveras County Water District customers whose homes are surrounded by acres of irrigated landscaping may want to consider a horticultural makeover.

The district's directors Tuesday narrowly approved a tiered rate hike that on July 1 will almost double the marginal cost of each gallon of water for the heaviest users, those draining more than 1,500 gallons a day of drinking water from district pipes.

The vote for the new rate schedule, which also hikes base water rates and sewer service rates over the next five years, was 3-2, with Directors Charles Hebrard and Jeff Davidson opposed.

## Calaveras rate hikes

Beginning July 1, the Calaveras County Water District will charge higher rates for water and sewer service. The new rates also eliminate a surcharge for sewer service that now exists in the La Contenta area near Valley Springs. The district has about 12,500 water customers and 4,500 sewer customers. Some customers use both services.

Hebrard said he objected to the rate hike because he didn't know exactly what the extra dollars would be spent on. Davidson said he objected to charging more per gallon for customers who use more water than the maximum amount for which the system was designed.

"It's penalizing," Davidson said. "I don't think we've made any real effort to educate people about water conservation," he said.

The issue is all too real for the district. Last summer in Rancho Calaveras, system pipes

went dry for several days during a heat wave because homes were using more than 1,700 gallons per day each on average, far beyond the system's designed maximum capacity of 1,500 gallons per home per day. District officials said the crisis hit because residents in homes on large lots, many as much as 3 to 5 acres, using district water to irrigate landscaping.

Members of the board majority said they felt they had to take responsibility both for bringing district revenue in line with costs and for giving incentives for users not to overtax facilities that were designed to serve homes, rather than irrigated parks.

"The larger users, that is discretionary," said Director Ed Rich. "If you want to feed deer, you can feed deer," he said, referring to the likely fate of much irrigated landscaping in Calaveras County.

District General Manager David Andres said staffers calculated the rate hikes based on projections for the actual cost to run the district's water and sewer systems over the next five years. He said state law bars the district from charging any more than the actual cost.

In recent years, the district has fallen behind on maintenance and upgrades to meet regulatory standards in part because of its financial problems, district officials have said.

"We have historically not addressed the need for rate increases when they were obviously needed," Director Bob Dean said.

Terms for Hebrard and Davidson expire at the end of this year, and both will have to stand for re-election this summer if they wish to remain on the board.

The three board members whose terms expire in 2009 - Dean, Bertha Underhill and Rich - voted in favor of the rate hikes.

Regardless of income level, ratepayers accustomed to irrigating landscaping around their homes objected to the rate hikes during public hearings held around the district over several months. A half-dozen district ratepayers testified at Wednesday's hearing, with most opposing the hikes.

"This tiered system's going to drive our (monthly) water bills to \$700," said Scott Ennis of Valley Springs, who says he had been paying about \$350 a month to irrigate around his home in the summer.

Colleen Platt of Valley Springs, in contrast, said she supports the tiered rate structure

even though she too is a heavy user of district water to keep up her landscaping. "You can't make everybody happy all the time," Platt said.

Clyde Clapp, owner of several rental units in the Valley Springs area, said he's encouraging his fixed-income and working-class tenants to consider moving out of California. "You're really killing the poor people," Clapp said.

Although the minimum monthly water rate will rise over the next five years to \$39.50 a month, versus the present \$22 a month, the new structure also increases the amount of water included in that base rate to an average of 125 gallons a day, rather than the present 75 gallons a day.

District officials note that state law bars them from subsidizing rates for any class of customers. The district is, however, beginning talks with Calaveras County government officials on ways the county might be able to help soften the hardship utility rate hikes pose for poor families.

## **Calaveras rate hikes**

Beginning July 1, the Calaveras County Water District will charge higher rates for water and sewer service. The new rates also eliminate a surcharge for sewer service that now exists in the La Contenta area near Valley Springs. The district has about 12,500 water customers and 4,500 sewer customers. Some customers use both services.

### **Water**

Existing water rate: base rate of \$22 per month plus 0.114 cent per gallon for usage beyond 75 gallons per day. Examples: The owner of an average home that uses 750 gallons per day over a month would pay \$45 a month. A heavy irrigator using 1,700 gallons a day over a month would pay \$78.

The base monthly water rate will rise by \$3.50 each July 1 for the next five years.

New rate once the full increase is phased in on July 1, 2011: base rate of \$39.50 per month plus 0.134 cent per gallon for gallons from 125 to 750 gallons per day, 0.167 cent per gallon for 751 to 1,500 gallons per day, and 0.214 cent per gallon for more than 1,500 gallons per day. Examples: The owner of an average home that uses 750 gallons per day over a month would pay \$64.50. A heavy irrigator using 1,700 gallons a day over a month would pay \$114.

### **Sewer**

Existing sewer rate for a single family home: \$45 a month.

The monthly sewer rate will rise by \$4.50 each July 1 for the next five years.

New rate once the full increase is phased in on July 1, 2011: \$67.60.

Contact reporter Dana M. Nichols at (209) 754-9534 or [dnichols@recordnet.com](mailto:dnichols@recordnet.com).

## **Fecal bacteria found in Mokelumne swimming holes**

Dana M. Nichols

Record Staff Writer

Published Thursday, Sep 14, 2006

WEST POINT - Swimming holes near this town are contaminated with levels of fecal bacteria that violate state standards, but don't expect to see any warning signs, because Calaveras County has no program to warn swimmers of bacteria that could cause infections.

Tests conducted in August by biologist Terry Strange found levels of enterococcus bacteria more than 20 times higher than the level at which the California Department of Health Services recommends posting hazard warnings. The high levels were found in swimming holes located under bridges where Jurs Road and Highway 26 cross the middle fork of the Mokelumne River near West Point.

Strange is the coordinator of the Upper Mokelumne River Watershed Council and an employee of the Central Sierra Resource Conservation and Development District.

Strange said the council decided to conduct a six-week study after what appeared to be an increase in ear infections among swimmers in local rivers.

He said another four rounds of tests are planned in coming weeks.

Dr. Dean Kelaita, the county's public health officer, said he would meet with environmental health officials to review the data gathered by Strange and decide whether it merits a more formal investigation by the county.

Kelaita said that doctors in the area routinely tell him of any unusual outbreaks of disease.

"I have no reported information or evidence that there are illnesses to swimmers in that area," he said of the swimming holes around West Point.

Only one of the five locations tested in the first round did not violate the state standards for enterococcus bacteria. That site, the bridge where Highway 26 crosses the north fork of the Mokelumne River, came in at 60.9 bacteria per 100 milliliters of water, or just a hair under the 61 bacteria per 100 milliliters of water standard at which the state requests a warning. The highest enterococcus reading was at Jurs Road, where the count was 1,553.1 bacteria per 100 milliliters of water.

The initial tests also found levels of total coliform at all five sites that exceed state swimming standards. Total coliform is another way to measure the volume of bacteria in

water.

Strange said it is not possible at this point to say whether the bacteria are coming from the waste of wild animals, livestock or humans. But there are clues he hopes to investigate further very soon.

"Where we consistently find the high peak is below the older, 1970s housing development with houses on septic," he said, referring to homes along the middle fork of the Mokelumne River just upstream from Highway 26.

Brian Moss, director of the county's Environmental Health Agency, said county officials have no plans to warn swimmers of the high levels of bacteria.

"At this time, we do not have a freshwater bathing program," Moss said. "The only time we deal with freshwater issues is, say, when we have a sewage spill into a water body."

As for septic tanks, Moss said the county only investigates them when they fail. And he said that failure means that the septic tank is leaking sewage above ground. The county does not monitor waste that might be percolating below ground.

Enterococcus bacteria include a variety of species that live in the intestines of humans and animals. Many of these bacteria can cause infections. In recent years, doctors have found that many strains are resistant to antibiotics.

In 2004, the U.S. Environmental Protection Agency began encouraging states to use enterococcus bacteria - instead of E. coli - measurements to measure the safety of freshwater swimming holes. Scientists now say enterococcus is a better indicator of all the different diseases causing viruses and bacteria that might be in fresh water than is E. coli, which also lives in the human digestive tract.

Contact reporter Dana M. Nichols at (209) 754-9534 or [dnichols@recordnet.com](mailto:dnichols@recordnet.com)



## **Valley Springs evacuees mop up**

***Published: April 7, 2006***

By ABBE SMITH

Evacuated residents of the La Contenta subdivision in Valley Springs were allowed to return home last night after a partially eroded dam above their neighborhood was reinforced with concrete.

While lifting a mandatory evacuation order in effect since Tuesday, authorities yesterday afternoon warned that a storm forecast to arrive tonight could trigger another evacuation.

The threat of flooding from a dam collapse at Peachtree Pond spurred Tuesday's evacuation of about 100 homes around the La Contenta golf club.

Workers yesterday laid concrete to shore up the earthen Peachtree Dam, Calaveras County Sheriff's Lt. Jim Macedo said.

He added that some of the water in Peachtree Pond and the pond below it would be pumped out to prevent further pressure on the dam in case of more rain.

Heavy rains early this week caused severe flooding of county roads, state highways and more than a dozen homes in Valley Springs when Cosgrove Creek topped its banks.

The flooding prompted Calaveras County officials on Wednesday to declare a local state of disaster, a move that allows the county to apply for state and federal emergency funds.

Several La Contenta residents visited their water-damaged homes yesterday to mop up.

Some wondered why the county had done nothing earlier to prevent flooding along the creek, which appears on county flood plain maps.

"We lost everything," said Dave Redfern, who has lived on Grouse Drive for almost 20 years. "The county's been promising to fix the creek for years."

Redfern, who said he was not aware that his street was part of a mandatory evacuation related to dam danger, said the raging creek water tore down a fence in his backyard and filled his house with two feet of muddy water.

Mitch Rerutko, another La Contenta resident who watched his home and his yard fill with creek water, said the creek floods every winter.

"This could have been avoided. Why have they let this go?" he said.

Next door to Redfern on Grouse Drive, Martin Anderson watched as the flood waters lifted a 12-by-14-foot wood shed and moved it 100 feet across his yard Tuesday.

When he bought the house about six months ago, Martin was told the creek might flood his backyard, but he never expected it to enter the house.

"This is something I never dreamed I would experience," Mary Anderson, his wife, said. "You see Katrina. You see Rita. But you never think it can happen it to you."

Despite damage to their floors and new carpet, among other things, the Andersons were in good spirits as they cleaned up yesterday.

Redfern and Martin Anderson said they knew they lived in flood zones, and both have flood insurance.

Federal Emergency Management Agency maps show many of the homes along Cosgrove Creek sit in a 100-year flood zone.

That term can be misleading, said Henry Chau, a Sacramento-based specialist with FEMA's National Flood Insurance Program.

Residents in such a zone face a 1 percent flood chance every year. So it's not safe to assume after a big flood that another one will not strike for 100 years, Chau said.

"People don't understand that," he said.

Chau stressed the importance of people living in FEMA-identified flood zones buying flood insurance.

If a county signs on with FEMA's insurance program, developers and home buyers with properties that lie in 100-year flood zones can be required to buy flood insurance, Chau said.

Calaveras County adopted a plan to incorporate the FEMA flood plain maps and the national insurance program in 1990, Chau said.

Dan Nygren, at the county building department, is responsible for taking those maps and determining which homes lie in a flood plain.

He said the county, in accordance with the California Building Code, requires new homes being built in 100-year flood zones to be constructed above the high point of where a flood might reach. Those figures are available on the FEMA flood maps.

"We've taken some steps in the past year to be a little more proactive," Nygren said.

The county also is in the early stages of developing a plan to control Cosgrove Creek flooding.

"It's a small flood control project that we can do," said Mike Finan, of the U.S. Army Corps of Engineers, which is also involved in the project.

Contact Abbe Smith at [asmith@](mailto:asmith@)

[uniondemocrat.com](http://uniondemocrat.com) or 736-1234.

# Calaveras County awash in sewage-tainted water

## ADDITIONAL WEBSITES

Calaveras county

Dana M. Nichols  
Record Staff Writer

Published Saturday, Apr 8, 2006

**SAN ANDREAS** - Flooded Calaveras County residents should disinfect their wells and homes because raw sewage has mixed with the floodwaters that deluged the Valley Springs area earlier this week.

Meanwhile, the Calaveras County Water District declared a state of emergency and warned that sewage ponds close to overflowing could cause more trouble depending on rainfall from a new round of weekend storms.

"We are really weather-dependent," said Larry Diamond, interim manager for the CCWD.

Twenty Valley Springs homes flooded by Cosgrove Creek on Tuesday must be disinfected because the same flood washed through the San Andreas Public Utility District's raw sewage ponds just upstream.

"We're going to have to spray bleach or something," said Diane White, 38, whose home on Grouse Drive was among those flooded. "And I am going to take my kids and get their shots."

Contaminated water can carry a number of deadly diseases, including dysentery and tetanus. White said her children - ages 7, 9, 10, and 13 - would get shots for tetanus and tuberculosis.

White said she and her husband Kevin, 40, finished stripping the home's carpets on Friday and were preparing to start removing damaged drywall.

The family is staying in an RV loaned to them by friends.

"It looks like we will be out of the house for two months," White said.

CCWD officials also warned that scavengers who pick up flood-damaged furniture or carpeting could be exposed to disease as well.

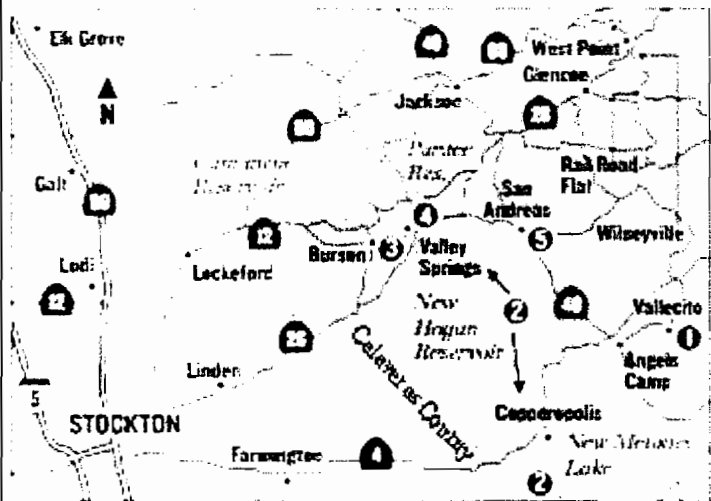
The Valley Springs Public Utility District sewage plant was back in full working order Friday, said Mike Fischer, general manager of the district. "You couldn't even tell," he said.

At least four sewage treatment plants operated by the Calaveras County Water District, in contrast, had not yet spilled but were in danger of doing so, overwhelmed by rainwater pouring into the system.

Plants in Copper Cove and Vallecito, in particular, were within inches of overflowing, CCWD officials said. The ponds held their waste only because of hastily erected boards used to extend the height of retaining walls.

## Storms pose sewage peril

Heavy rains in the past month have already washed sewage-tainted water through homes in Valley Springs and threaten to overflow treatment ponds in several other communities.



- 1 Vallecito sewage ponds were within inches of overflowing.
- 2 Emergency flash boards were installed to increase the holding capacity of ponds at sewage treatment plants run by the Calaveras County Water District near the La Contenta Golf Course and near Copper Cove on Lake Tulloch. The Copper Cove plant was within inches of overflowing.
- 3 CCWD is using trucks to remove sewage pond water from its treatment plant in Southworth Ranch near Burson.
- 4 Operations at the Valley Springs Public Utility District are back under control Friday after flooding at Cosgrove Creek on Tuesday washed raw sewage downstream into homes that were flooded.
- 5 The San Andreas Sanitary District on Tuesday spilled 5,000 gallons of sewage into San Andreas Creek.
- 6 The San Andreas Sanitary District on Tuesday spilled 5,000 gallons of sewage into San Andreas Creek.

Source: Various local districts, Calaveras County government

PHOTO: Dana M. Nichols

Officials said crews worked heroically to prevent sewage spills. CCWD Director Ed Rich, who represents Copperopolis and Copper Cove, said that when rising waters began to bend the emergency boards, district workers brought in truckloads of riprap and hand-placed the rocks to support the boards.

"It is still within an inch of the top. Hopefully, it will go down," Rich said of the ponds' height at an emergency meeting of CCWD directors Tuesday afternoon. The board voted unanimously to declare a state of emergency in the district, making it eligible for state and federal disaster funding should that become available.

Bill Perley, operations and maintenance superintendent for the CCWD, said the ponds are overflowing because of rain runoff that should not be entering the district's sewers in the first place. Some of it comes from sewer connection clean-out pipes that contractors on new home sites failed to cap. Other water comes when residents of subdivisions pull open utility hole covers and dump water into sewers that should go to creeks and storm drains.

"It's not from the old stuff, it's from the new stuff," Perley said of the county's housing tracts. "It's taken away all our storage capacity."

Perley said a crackdown by state pollution officials will soon require districts like the CCWD to seek out and fine people who flood the sewers by leaving clean-outs uncapped or by popping open utility hole covers.

But while families like the Whites disinfect their homes and get vaccinations, many are still mourning their losses. For the Whites, that loss was the family cat, Sydney.

"She got stuck under the house, and I could hear her meowing, and I couldn't get her," White said, describing the flood. "She was 13 years old. That's kind of hard on the family. We buried her yesterday."

Contact reporter Dana M. Nichols at (209) 754-9534 or [dnichols@recordnet.com](mailto:dnichols@recordnet.com)