#### EL DORADO IRRIGATION DISTRICT

# The Waterfront

#### **Operating the Wastewater Systems: The Unexpected Can Add to Costs**

Some of you may have read that during their May 24 meeting, the EID board of directors voted yes on an agreement negotiated with the California Sportfishing Protection Alliance (CSPA). The agreement settles a lawsuit that CSPA filed in January against the district for alleged violations—sewer spills—of the federal Clean Water Act.

"It was not an easy pill to swallow," says EID's general counsel Tom Cumpston. "It cost the district about a quarter of a million dollars, the equivalent of about 15 dollars per wastewater customer. And it basically showed that no matter how good a sewer program is, if an agency is sued under the Clean Water Act, the agency will lose."

"No matter how good a sewer program is, if an agency is sued under the Clean Water Act, the agency will lose." — Tom Cumpston In an EID news release, Cumpston explained that the Clean Water Act sets a performance standard "of zero sewage spills, which is impossible to meet. You can spend hundreds of millions of dollars trying to do so and still fall short. I would bet my house there is not a single agency in this state that runs a sewer program and hasn't had any spills."

As required by state law, the district reports all spills in its sewer systems, which include 561 miles of sewage collection pipes and 64 lift stations in hilly terrain. Plaintiffs used the reported spills in the lawsuit. "We

sell the rope at ten cents a page in the form of Public Records Act requests," Cumpston said. "The plaintiff's attorneys tie that rope into a noose at five hundred to six hundred dollars an hour. And then we pay money to take the noose off our neck.

"Don't get me wrong. Citizen suit provisions in the Clean Water Act exist for a good reason because there are agencies that need to clean up their acts. But what we are seeing is a cottage industry of professional plaintiffs and attorneys specializing in this sort of lawsuit and reaching settlements with districts around the state."

Elizabeth Wells, the district's wastewater manager for engineering, reported to the board that lawsuits filed by CSPA against the cities of Stockton and Richmond found approximately 40 spills per 100 miles of pipe in Stockton and about 58 spills per 100 miles of pipe in Richmond. She said that in comparison, EID averaged 11 spills per 100 miles in the Deer Creek and El Dorado Hills systems combined in 2008, and 10 per 100 miles in 2009. So far this year, EID is averaging just over one spill per 100 miles. Wastewater operators generally expect a top-performing system to have an annual spill rate of about 5 per 100 miles.

Wells pointed out that the overwhelming majority of spills in the district's systems are what the state calls "category 2" spills. That means they are less than 1000 gallons and do not enter surface waters. "In fact, from 2004 to the present, 53 percent of spills in the El Dorado Hills system were less than 10 gallons, as were 47 percent of spills in the older Deer Creek system," Wells said.

Most spills are caused when pipes become clogged, primarily with roots and grease. To help eliminate the causes of spills, the district has initiated an aggressive maintenance program that includes an additional truck capable of vacuuming and flushing the pipes. The district has also eliminated 24-hour manned shifts at the Deer Creek wastewater treatment plant to free up personnel for the maintenance work. The goal is to clean the 2.1 million feet of gravity-fed pipes on a five-year rotation—or 423,000 feet each year.

Customers can help too. Just follow the tips posted on our household waste web page by clicking on the "Don't F.O.G. Your Drain" icon. And if you would like to learn more about EID's wastewater treatment systems and processes, join one of the four tours the district is sponsoring at the El Dorado Hills wastewater treatment plant. The tours include the district's 3.3-acre solar power generation facility located at the plant. See the sidebar on this page for details.



#### Wastewater Treatment Plant Tours— Sign Up Now!

Want to learn more about how wastewater is treated and about the geographic and regulatory challenges EID faces? You can also visit EID's successful solar photovoltaic project. Just sign up to join one of four tours at the EI Dorado Hills wastewater treatment plant. Each tour is scheduled for 10:00 am to 12:00 pm and is limited to 25 people.

Please contact James Murphy at jmurphy@ eid.org or 530-642-4408 to enroll. After you sign up, we'll send you the details for your tour, including directions to the plant.

2010 tour dates:

Wednesday, July 28 Thursday, August 26 Thursday, September 23 Friday, October 8





## Message from the General Manager

The infrastructure/ regulatory/cost nexus—and why EID isn't like Folsom

Water and wastewater utilities across the country must replace aging infrastructure periodically. And it costs a lot—an estimated \$1 trillion in the United States over the next 20 years, according to the April 2010 American Water Works Association Journal. EID has about \$840 million worth of assets in the ground. As you can imagine, the replacement cost is much more than that historical worth.

EID also complies with federal and state regulations to ensure the reliable delivery of clean drinking water and the safe collection, treatment, and disposal of wastewater. The regulations are not static. Compliance costs increase as science evolves and measurements change from parts per million to parts per billion. The additional costs cover retrofits, updates, and other improvements to treatment and delivery facilities.

As the Journal article states, "If a utility chooses to ignore the problem or to continue to defer capital replacement projects to avoid basic rate increases, the investment gap will widen significantly, and the costs of the projects will increase, creating a larger future liability for ratepayers."

So if all or most utilities face this dilemma, why is it that our rates, especially for wastewater services, are higher than, say, the City of Folsom's rates? Aren't we like them?

Yes and no.

Yes because the number of wastewater connections for each utility is similar; Folsom has 21,050, and EID has 20,652.

No because our customers are spread over a wider area in more hilly terrain; Folsom's system requires 267 miles of pipeline, while we need more than twice that amount—561 miles of pipes and force mains. And no because while Folsom has 9 lift stations, we have more than seven times that many, or 64, to operate and maintain.

Those are big differences when it comes to costs. But there's an even more important reason we're not like Folsom. That city sends its wastewater to the Sacramento regional plant where it is treated to what the state calls "secondary" standards and then is dumped into the Sacramento River. EID is required to treat wastewater to the higher "tertiary" standard, and that costs much, much more.

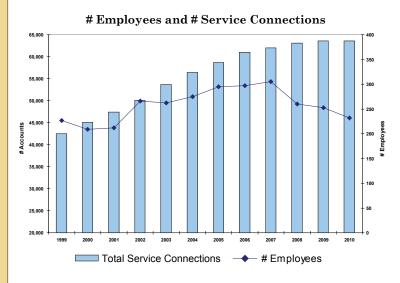
We cannot avoid the necessity of replacing our facilities in the future. Nor will we abrogate our responsibility to comply with regulations. What we can do is plan carefully and with cost efficiency in mind to keep our rates reasonable.

That's our commitment to our customers.

## The News—Briefly

#### Cost Containment

One way EID continues to hold down costs is through reductions in personnel expenses. As the chart below shows, the district has fewer employees this year than in 1999, even though the number of services rose more than 52% during that time period.



### "Delta woes tied to sewage" *The Sacramento Bee* (5-18-10) What does this headline have to do with EID?

The headline leads to a report that implies wastewater discharges to the Sacramento River are at least equal to—or perhaps surpass—water diversions as the leading cause of fish declines in the Sacramento-San Joaquin Delta. If that's true and if Sacramento continues to dodge an estimated \$1 billion to upgrade its sewage treatment system, then there's a chance foothill communities and counties will be asked to send more water downstream to counter-balance the dirty water Sacramento sends into the Delta.

El Dorado County is a foothill county, and EID serves approximately two-thirds of county residents. The communities and customers we serve would definitely feel the impacts of such a policy.

#### Discover Your Watershed

There's still time to join a watershed tour. Three sets of tours were planned for June, July, and August. The June tours focused on the lower reaches of the watershed in El Dorado Hills and Shingle Springs. The July tours move to the middle watershed in Apple Hill and Pollock Pines, and the August tours take place in the upper watershed from Sly Park Recreation Area to Silver Lake. Contact Melissa Marquez at **Melissa.Marquez@ca.usda.gov** to find out about tour times and availability.

## Meet Ponderosa High's Carl Gwyn: Connecting the Dots Between Theory and Real Life

Ask the EID employees who recently spent time with Carl Gwyn to describe this Ponderosa High School teacher, and they're likely to use the words "insatiably curious" and "enthusiastic!" One exclaimed, "If he'd been my chemistry teacher, I would have been much more interested in that subject!"

Carl, who co-chairs the science department at Ponderosa in addition to his teaching duties, spent a week's worth of time at the end of the school year as an extern at EID. He and the district participate in the Career Technical Partnership program run by Folsom Lake College-El Dorado Center.

Carl says he seeks to apply chemistry to the real world. "I'm trying to connect the dots between theory and the practical, and what I learned during my time at EID will help greatly in devising a lesson plan to do exactly that."

As an example, Carl pointed to his experience at Sly Park Recreation Area, where EID environmental analyst Dena McCann explained the recently completed, two-year restoration of Hazel Meadow. "That is an extraordinary project, and talk about real world impact!" he enthused. "Dena showed me how EID takes proactive steps toward good stewardship of its resources—in this case, restoration of a habitat that directly affects the main drinking water supply for EID customers. And it's an incredibly beautiful place to boot."

Carl also heard from water operations manager Dana Strahan, who walked him through the processes involved in treating and delivering drinking water—from high in the Sierra to the customers' taps. At the El Dorado Hills wastewater treatment plant, wastewater operations manager Vickie Caulfield described the complicated stages of wastewater treatment to the finished product: tertiary-treated water suitable for discharge to local creeks and as recycled water for landscape irrigation. He learned more about the recycled water system and its many benefits from environmental compliance technician Doug Venable.

Dana and Vickie helped develop the courses—and now teach them—for the Folsom Lake College-El Dorado Center's water and wastewater management certification curriculum. In late May, while Carl was sitting in on Dana's introductory course, he met one of his former students, who was taking the class. "What a great capstone to this experience!" he exclaimed. "Part of my responsibility is to develop a career awareness lesson plan focusing on one of the jobs I observed. EID's program at the college is the perfect avenue into this field."

The externship program is a county-wide career technical education partnership funded by a grant from the California Department of Education.

To learn more about the requirements to earn a certificate in water or wastewater management, head over to the Folsom Lake College website at www.flc.losrios.edu.

The certificate programs are designed to meet key competency areas for students interested in entering into the field of water or wastewater management, and to enhance the existing abilities of an individual already employed in the field.









From top: (1) Vickie Caulfield explains the educational requirements for operators at the El Dorado Hills wastewater treatment plant. (2) Carl (left) and wastewater treatment operator Kant Lee observe dewatered biosolids on the belt press. (3) Hazel Meadow, in Sly Park Recreation Area, is a model restoration project. (4) Dana Strahan shows Carl the program that allows operators to control many elements of the water treatment process.



#### Summer Recreation and New Caples Boat Launch

Whether it's a wedding on the shores of Jenkinson Lake with a reception at Sly Park's event center, a camping trip with friends and family, or that great fishing story yet-to-be told, there's recreation for everyone at Sly Park Recreation Area.

The event center has two separate meeting rooms for workshops, retreats, family reunions, and any celebration you can imagine. The kitchen includes utensils, plates, pots and pans, a stove, refrigerator, and microwave.

Go the EID website and click on the Recreation link to get more information about the place voted No. 1 Recreation Facility by *Mountain Democrat* readers.

Attention anglers and boaters: On June 26, the new Caples Lake boat launch opened for public use. Take a trip up to this gem along Highway 88 in the Sierra for a beautiful day on the lake.

#### Book Your Vacation Almost 2 Years in Advance

When you book your next event or camping trip online, be sure to go to use our online reservations system. Go to the EID's Recreation page and look for the "Click for Online Reservations" icon. Now you can reserve your



camping trip or event almost two years in advance. And remember, when you buy an annual day-use permit, it's good for not only Jenkinson Lake in Sly Park, but Silver and Caples lakes as well. That's one permit for three lakes!

#### Go Paperless and Sign Up for Online View and Pay

Since the program began, nearly 5000 users have requested to go paperless. That's a significant number, but we can do better. Partner with us to reduce paper billing costs by signing up for online billing today. Online billing gives you a new way to control your payment. What can you expect? You'll be able to:

- Pay your bill with a Visa or MasterCard.
- · Choose to completely automate by signing up for recurring payments
- Receive email notification when your statement is available.
- View your three most recent statements at any time—the current statement and the two prior statements. When you initially sign up, only the current statement will be available, but once you've been in the system for a while, you will see all three.
- Receive information from EID—including the *Waterfront* newsletter, the annual water quality report, and other important notifications.

#### Summer Water Tips for Lawn Irrigation

- Water before 10 am to prevent evaporation, which occurs during the hottest part of the day. Morning is better than evening, when the dampness encourages growth of fungus.
- Water only when grass shows signs of wilt. Grass that springs back when stepped on does not need water.



- Water long enough to soak the roots. A light sprinkling evaporates quickly and encourages shallow root systems.
- Don't let the sprinkler run any longer than necessary. In just one hour, 600 gallons can be wasted.

# **2**Regular Board Meetings

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	25	22	22	26	24	28	26	23	27	25		

Board meetings generally occur on the second and fourth Monday of each month. The first October meeting takes place on a Tuesday.

The Waterfront is a publication of EID's Communications Department.

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