



The Waterfront

Raising Forebay Dam

Forebay is an off-stream reservoir located in Pollock Pines. The El Dorado Canal is the water source for Forebay, which serves EID's consumptive demand and hydroelectric power production at the El Dorado Powerhouse down the hill.

The 89-year-old dam, however, does not meet modern dam safety engineering standards. The proposed remediation project will increase public safety by providing further protection of downstream residents, life, and property.

The dam will require buttressing and a modest raising to meet the requirements of the California Department of Water Resources—Division of Safety of Dams and the Federal Energy Regulatory Commission. The plan developed by staff and GEI Consultants also significantly improves drinking water reliability, improves hydroelectric income, and minimizes capital expenditures. The further optimization of hydropower generation using existing water supplies to Forebay will greatly help to defray the capital costs associated with the project. During the Board meeting presentation on January 24, EID General Manager Jim Abercrombie noted that the upgrade would increase emergency water storage from eight hours to six days and optimize hydroelectric operations—which is very significant for all EID customers. The Board approved design and environmental analysis that will be completed sometime in 2013, with construction to begin in 2014.



EID Employees Earn Awards

John Chavers, collections supervisor, recently accepted on behalf of his team the Collection System of the Year award from the Sacramento Area Section of the California Water Environment Association (CWEA). This award recognizes EID's demonstrated commitment to excellence in the areas of regulatory compliance, administrative procedures, maintenance, safety and training programs, and emergency procedures.

"EID's collection team has been recognized seven times. It's great to have such committed team members and a bonus to be honored with this state-wide recognition from our peers," said Chavers.

In addition to the team awards, several individuals were recognized for their dedicated and outstanding work. **Jayzack Leonard**, senior construction and maintenance worker, was recognized as Collection Person of the Year. **Sarah Lowrey**, electrical and instrumentation technician, was chosen as the Electrical and Instrumentation Person of the Year.

"Without such amazing crew and supervisor dedication this would not be possible. The entire staff is well qualified and trained and they respond quickly day or night. EID is fortunate to have them," said recycled/wastewater operations manager, **Vickie Caulfield**.

CWEA, a not-for-profit association of professionals in the wastewater industry, trains and certifies wastewater professionals and promotes sound policies at the state and local levels.

District employees were also awarded H.R. LaBounty Safety Awards from the Association of California Water Agencies Joint



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2011 Wastewater Treatment Plant Tours Set

Ever wondered what happens after you flush the toilet? You can find out by joining a tour of the El Dorado Hills **wastewater** treatment plant. Four tours are set for the second Thursday in April, May, June, and July beginning at 9:30 a.m. and ending at 11:30 a.m. Keep an eye on our website for information about reserving your spot on a tour. Tours of the El Dorado Hills **water** treatment plant will be available in August and September. Look for those dates in the next newsletter and online.



Jim Abercrombie

Message from the General Manager

Upon joining the District 18 months ago a lot has happened. I pledged to you that I would manage EID's operations through four basic principles: public and employee safety first, openness and respect for the individual, excellent customer service, and fiscal responsibility. It's time for a brief update on the major challenges and successes at the District over the past year and a half and how the basic principles have guided us.

As you are aware, about a year ago we had to increase rates in order to continue to provide safe, reliable services to all customers and to address the significant reduction in new connection fees. First and foremost, EID did not escape the effects of the economic downturn—it brought about a new reality which we had to immediately address. As we committed to you in the rate hearings last year, we created a more conservative business model. It reduces our reliance on the collection of new connection fees to meet debt service, and it provides a more predictable revenue stream.

An important piece of the model is the establishment of a “pay as you go” system for paying for smaller capital projects through rates. Through careful planning and by holding the line on expenses, we are improving our ability to pay for smaller capital projects without the need for new bond financing. There may still be projects that require new bond financing, but the pay as you go system helps ensure we have the necessary financial resources to maintain safe and reliable services and without significant rate changes. We should also see more opportunities to pay down debt in years where we have additional funds available.

We have also reduced costs by improving our safety program. That has led to a safer workplace and a reduction in workers' compensation costs. We continue to look for additional opportunities to reorganize the District's staff for better efficiency and a healthier bottom line.

Service reliability remains our top priority. We have made significant headway in the improvement in reliability in our infrastructure, as evidenced by upgrades to the Mother Lode Forcemain and Coach Lane sewer systems, the Pleasant Oak water main, and El Dorado Hills water treatment plant. The Project 184 water delivery system got a boost from long-planned reconstruction of dilapidated sections, and as described in the front page article, will be reinforcing Forebay Dam. These improvements illustrate what we are doing to protect the safety of lives and property as well as maintaining the reliability of our services.

In our second customer survey, customers told us they are very satisfied with our services, but are concerned about the overall costs, especially for wastewater collections and treatment. We have addressed these concerns by opening our wastewater and water treatment plants for public tours so our customers can appreciate the cost and complexity of our treatment processes. We will continue to conduct more tours this year, and you're more than welcome to attend. We have also shown in previous newsletters that our wastewater rates are at the lower end of the range for other utilities that, like EID, are required to treat wastewater to tertiary levels.

Over the next few months we will finalize the cost-of-service study that we committed to last year. The purpose is to ensure that our rate structure is appropriate for all levels of services that the District provides. And we will hold public workshops to discuss the capital needs of replacing aging infrastructure. I look forward to sharing the results of the study and workshops, meeting new challenges, and keeping our commitments to you in the months and years ahead.

The News—Briefly

Cost-of-Service Study Update

EID General Manager Abercrombie and Greg Clumpner, Senior Financial Manager with HDR Engineering, updated the Board on the Cost-of-Service study committee work at the January 24, 2011 meeting.

Outcomes from the committee's January 14, 2011, meeting included discussion of overhead allocation reconsiderations, Canadian method, revenue requirements draft model review, debt service coverage goals, recycled water, and next steps.

The Committee agreed to a final review of the overhead and debt service allocations in its February 25, 2011 meeting.

AWARDS, *continued from page 1*

Powers Insurance Authority for the collaborative efforts to improve workplace safety at EID's Deer Creek wastewater treatment Plant. Senior layout and fabrication welders **Casey Steel** and **Buddy Tanner**, along with senior plant mechanic **Jim Sadler** and plant operations and maintenance supervisor **Jason Lawrence**, were all recognized and awarded for their innovative improvements to workplace safety.

During a routine plant safety inspection, a potential fall hazard was identified at the facility. The crew worked together to design, fabricate, and implement a portable railing system. This in-house staff ingenuity saved the District approximately \$7,000 in costs from purchasing a similar system from another company.

“Our employees make safety a priority and are fiscally responsible. Their dedication makes my job a little easier—they are truly good public employees,” said EID's safety/security officer Ron Kilburg.

Questions and Answers about Wastewater

From left: EID employees Vickie Caulfield, wastewater/recycled water operations manager; Elizabeth Wells, wastewater/recycled water engineering manager; and Mary Lynn Carlton, communications and community relations director, recently sat down for the following Q & A.



What is secondary and tertiary wastewater treatment? There are several phases of wastewater treatment. In **preliminary treatment**, screening and grit removal occurs. **Primary treatment** includes the processes of sedimentation and floatation. **Secondary treatment**—also known as conventional secondary treatment—includes biological, chemical, and physical processes for the removal of suspended and dissolved solids prior to disinfection. **Tertiary treatment** is a more costly form of advanced wastewater treatment that produces a high level of wastewater quality by filtering the wastewater just prior to disinfection. It helps remove the finer particles that conventional secondary processes cannot remove. At our El Dorado Hills wastewater facility, our tertiary system also includes the removal of algae.

What is biological nutrient removal (BNR)? BNR is an advanced secondary wastewater treatment that removes nutrients (nitrogen and phosphorus) from the waste stream. Excess quantities of nitrogen and phosphorus can be toxic to aquatic organisms and this is of concern since our wastewater is released back into streams. This treatment requires a large amount of oxygen in the process and uses a large amount of power. Because of the high power requirements, the costs associated with BNR are expensive.

What is disinfection? Disinfection of wastewater is a regulatory requirement. The District uses an ultra-violet (UV) light system for disinfection. UV light inactivates the DNA of bacteria to prevent further growth and reproduction of disease-causing pathogens. The cost of UV can be higher than the costs of chemical disinfection depending on the utilities' power costs. Parts and maintenance required for UV disinfection are estimated at \$300,000 annually, not including the labor.

Who sets the rules as to what contaminants are required to be removed from any particular wastewater treatment plant? Those rules are set by the State Regional Water Quality Control Boards, but governed by federal law. There are nine regional boards in California. EID is in region five, also known as the Central Valley Regional Water Quality Control Board. It is bound by the Sacramento-San Joaquin Basin Plan, which contains the water quality objectives for protection of beneficial uses for those waters. This is a requirement of the federal Clean Water Act.

What are some of the benefits of the District's recycled water program? There are several benefits, the foremost being that the recycled water that we produce is a drought-proof water supply that our customers can use for non-potable purposes. We produce about 1,200 million gallons of recycled water annually. Currently,

about 4,000 customers use this recycled water to irrigate their front and back yards, commercial landscapes, street medians, and a golf course. Water recycling is a key element of our water portfolio, as it helps to provide sustainable water supplies that will help us meet future planning. In addition, the treatment requirements for wastewater and recycled water are essentially the same. At our El Dorado Hills reclamation facility, we recycle 100 percent for five to six months and eliminate all effluent discharge. By eliminating effluent discharge to the stream, we save about \$12,000 per month in laboratory testing costs.

“Over the last 50 years, wastewater treatment has become much more sophisticated, including biological systems for removing organic materials, and improved filter technology and disinfection methods. These modern systems are costly to build and operate, adding to the overall cost of wastewater treatment.”

Why is my sewer bill higher than my water bill? Sewer charges are higher than water costs for a number of reasons. Wastewater is especially costly to transport in the varied topography of our service area. The District operates and maintains 64 pump stations to get wastewater to one of our treatment plants. Another big factor is the cost of treating wastewater to meet increasingly stringent environmental regulations over the past few decades.

At the turn of the twentieth century, wastewater treatment might have only included screening out large objects and then discharging to the nearest creek. Over the last 50 years, wastewater treatment has become much more sophisticated, including biological systems for removing organic materials, and improved filter technology and disinfection methods. These modern systems are costly to build and operate, adding to the overall cost of wastewater treatment.

Do you have a question about EID services? E-mail your question to communications@eid.org for possible inclusion in a future edition of the *Waterfront*.

Or, send a letter addressed:

**Communications and Community Relations
El Dorado Irrigation District
2890 Mosquito Road
Placerville, CA 95667**

An Event Center for All Occasions at Sly Park Recreation Area

You've got a birthday or anniversary party to plan. Maybe it's a business meeting or retreat. Or maybe it's a family reunion, wedding, or memorial service to celebrate a loved one's life. Whatever your occasion, you'd like to find a place with a beautiful setting that feels just right and won't bust your budget. EID's event center at Sly Park Recreation Area may be just the place.

The event center is situated on a pine-filled acre along the south-western edge of Sly Park's Jenkinson Lake—the perfect setting for your next event! Outside the facility there is plenty of room for up to 100 guests. There's a barbecue area as well as picnic tables and a large deck overlooking the lake. Inside, the house can hold up to 50 people. There is one large room and a smaller room, as well as a full kitchen with utensils, large coffee pots, a stove, refrigerator, and microwave.

Reservations can be made up to 14 months in advance. Just go the recreation web pages on the EID site at www.eid.org.

COUPON
\$25
OFF
event center
RESERVATION
exp. 12/31/11

Money matters: The event center is \$250 for a full day's rental. Non-profit organizations pay \$200. Deposit is \$100. Reservation fee is \$8. Full refunds (except reservation fee) are available for cancellations up to 30 days prior to reservation date. Cancellations less than 30 days are assessed an additional \$50.

Location: Sly Park Recreation Area—once again voted "Best Recreation Facility" in 2010 by readers of the *Mountain Democrat* newspaper—is located eleven miles east of Placerville in Pollock Pines.



Attention: If your home or building was constructed prior to 1992, and the plumbing fixtures have not yet been replaced, you can save water every day by installing new low-flow showerheads and bathroom faucet aerators. As a required California best management practice, EID offers these complimentary fixtures, plus toilet tank dams or bags to reduce flush volume. Visit www.eid.org or contact water efficiency at 530-642-4126 or officeofwaterefficiency@eid.org to request this assistance.

It's a No-Drainer—Pesticides and Fertilizers

Common chemicals used around the home can harm the public sewer system if they are improperly disposed down household sinks and drains. Remember:

- Purchase the least toxic option and always use the least amount required. Seek alternatives when possible.
- The only legal way to dispose of unused pesticides in California is through a household hazardous waste collection site. To find the nearest site, go to the El Dorado County Household Hazardous Materials website at www.edcgov.us/HazardousMaterials/
- Don't pour pesticides into sinks or toilets, or throw them into the trash.

Small quantities of pesticides can accumulate and affect on the proper operations of the wastewater treatment plants and their ability to meet federal and state regulations.

For more, go to EID's Industrial Pretreatment and Pollution Prevention web page.



We can now send you important messages about your services by e-mail.

Check the box on your bill's payment coupon, give us a call, or e-mail us at

billing@eid.org. All we need is your account number, service address, and a working e-mail address. We can send you information about rates, planned maintenance in your area, and reminders about pertinent information that may affect you.

Your e-mail address will **never** be shared with third parties and you may unsubscribe at any time.

2011 REGULAR BOARD MEETINGS

January	February	March	April	May	June	July	August	September	October	November	December
10	cancelled	14	11	—	13	—	8	—	11 (T)	14	12
24	28	28	25	23	27	25	22	26	24	—	—

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 and Community Relations Department.

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