The Central Contra Costa Sanitary District (CCCSD) Board of Directors named James M. Kelly as the new General Manager in August 2006.

Kelly replaced Charles W. Batts, Jr., who retired on August 17th.

“I’m following in the footsteps of some very excellent general managers,” Kelly said after being selected. “I hope to keep the District functioning at the same high level of performance and customer service, always being mindful of the importance of our mission: to protect public health and the environment.”

Kelly began his career at CCCSD in 1984 as the Planning Division Manager, and had been Director of Operations since 2001.

In addition to his District responsibilities, Kelly remains an active member of several water-quality organizations, including the WaterReuse Association, WaterReuse Research Foundation, Bay Area Clean Water Agencies, California Association of Sanitation Agencies and the Water Environment Federation.

He holds a Bachelors Degree in Civil Engineering and a Masters Degree in Sanitary Engineering, both from Oklahoma State University.

Kelly began his new duties as General Manager on August 18th.

Local Businesses Commended for Pollution Prevention Activities

We believe local businesses that take extraordinary steps to protect the water environment deserve special recognition. That’s why we created our Pollution Prevention Awards program.

(continued on page 5)
What Lies Beneath?

Sewer pipes! Millions of gallons of wastewater travel from all over central Contra Costa County to our treatment plant in Martinez every day, flowing through more than 1,500 miles of sewer pipes beneath our feet. Those pipes vary in size from four inches to eight-and-a-half feet in diameter, and some of them have been in the ground for more than 60 years.

Cracks, corrosion, grease, debris, root intrusions and other problems can develop inside the pipes over time and potentially cause blockages, leaks and overflows. Our goal is to prevent that from happening.

But how do we know what’s going on inside the pipes beneath the ground? We watch TV!

Since the late 1940s, our crews have been using specially designed cameras to obtain closed-circuit television (CCTV) footage of the insides of sewer pipes. They “watch TV” to inspect pipes that have experienced failures (to determine what went wrong), and pipes that are newly constructed, repaired or cleaned (for quality control purposes).

What About the Pipes on Your Property?

CCSD is responsible for the public sewers, but property owners are responsible for the private lateral sewer line that connects their house or building to the public sewers. If your lateral sewer line is very old or you have trees growing near your pipe which could result in root intrusions—or if you have noticed backups or slow draining in your plumbing—you may want to consider hiring a professional sewer-cleaning contractor to perform a video inspection and cleaning of your lateral.

Also, during our routine video inspections of the public collection system, if we notice significant roots within a private lateral where it connects to the public sewer main, we will notify the property owner so he or she can take appropriate action to inspect and clean the lateral to prevent blockages.

Sewer Inspections Use High-Tech Tools

Special Access-Related Needs?

We’re reviewing our policies and practices to ensure that the disabled community continues to receive meaningful access to sewer programs and services. Soon, we’ll have more information about this on our website. In the meantime, we’d like your input. If there are special access-related needs that you think we should consider during our review, please contact our Americans with Disabilities Act (ADA) Coordinator and Secretary of the District, Elaine R. Boehme, at eboehme@centralcsd.ca.us or (925) 228-9500.

But there was never a comprehensive effort to video and inspect all of our pipes until a massive multi-year capital project was initiated in 2001. This project is ensuring every inch of our 1,500-mile collection system is videoed and inspected. The inspection data from this CCTV effort—including footage of approximately one million feet of pipe videoed per year—is fed into a computer database and analyzed. In addition to alerting us of potential problem areas, we use the data to develop and prioritize our maintenance, repair, and construction projects within the collection system.

The entire project will cost about $8 million by the time it’s completed, but it’s driving a $25 million/year sewer renovation project.

“Data is helping us to better manage our assets, to be proactive and plan ahead for our renovation programs,” said Associate Engineer Tom Godsey, project manager. “Up until 2004, we would replace a pipe after there was a problem. Now we’re identifying potential problems and taking care of them ahead of time.”

What kinds of problems are we finding?

In addition to expected sightings such as root intrusions, grease and evidence of corrosion, cracks and wear-and-tear, there are occasional surprises. “We’re finding illegal connections,” said Godsey. “For instance, where someone has run a line from their hot tub directly into the sewer. We’ve seen conduits, such as for internet connections, run through our pipes. We’ve seen frogs, lizards, rats, and even a super hero… I believe it was a ‘Mr. Incredible’ action figure,” he said.

The CCTV project is expected to be complete by 2009. The end results will be more efficient maintenance, repair and construction planning of our collection system; improved management of the District’s assets and resources; and more reliable service for our customers.

Global Awareness Ensures Better Service

Central Contra Costa Sanitary District has been recognized by the US Environmental Protection Agency as one of the best wastewater treatment plants in the nation. One of the keys to our being an innovative, high-performance organization is our awareness of worldwide trends and technologies that may impact our industry, our services or our customers.

For example, we know that China will be spending $125 billion over the next 5-10 years to dramatically expand and improve its drinking water and wastewater treatment capabilities, its water recycling programs, and its water conservation efforts. These activities—as well as mammoth preparations for the 2008 Summer Olympics in Beijing—are creating a huge demand for raw materials (construction of the massive Three Gorges Dam required 36 billion cubic yards of concrete!) and are driving up worldwide construction costs.

This will have a direct impact on our budget as we plan and construct new pipelines and facilities.

On the other hand, China’s great need for advanced water technologies may drive innovation, increase competition, and decrease costs associated with water treatment processes used by Central San.

With today’s global economy, China’s demand for resources impacts us all.

By being aware of the latest market and industry trends in China and other areas throughout the world, CCCSD ensures that we remain on the cutting edge and continue to provide the best service and value for our customers.

Please Don’t Dump Medications Down the Drain

While medications such as ibuprofen, acetaminophen and antibiotics can help people, these same chemical substances can be hazardous to fish and wildlife. Many medical waste pollutants interfere with growth, development, and reproduction capabilities of aquatic organisms.

Recent studies have found traces of these chemicals in area waters. Medications enter waterways from different sources, including wastewater treatment plants. (Wastewater treatment plants are designed to remove biological waste, not pharmacuticals.)

Rather than dumping unwanted drugs down the toilet or sink, leave them in their original containers and tightly seal the safety caps. Then place the bottles in a paper bag, wrap the bag in layers of newspaper and place in the garbage.

It may be a bit of extra effort on your part, but the fish and frogs will thank you!
Pollution Prevention Week Never Ends

Each year, the Central Contra Costa Sanitary District Board of Directors adopts a formal Resolution encouraging pollution prevention and recognizing National Pollution Prevention Week (the third week of September). You can view this Resolution on our web site at this link: http://www.centralsan.org/aboutcentralsan/news.htm

At CCCSD, Pollution Prevention Week never ends. Because our mission is to protect public health and the environment, our policy is to encourage and promote pollution prevention practices, technologies and education—every day, in a variety of ways. These efforts are successful because of your participation and support. Thank you!

Help Us Improve Our Web Site

In 1997, we launched our web site, www.CentralSan.org. We will soon be updating and redesigning the site to make it even more useful for our customers. Here are some of the improvements we’re planning:

• easier navigation and enhanced usability (including accessibility by people with disabilities);
• online employment applications;
• online Source Control permit forms;
• more in-depth information about Central San’s services and activities, including construction projects, sewer permit requirements, household hazardous waste collection, and student education programs.

Our web site’s content will be updated on a regular basis and modified whenever appropriate to reflect the changing needs of our customers. We welcome your suggestions about the kind of content you’d like to see on our new website. Please email your comments to us at blowe@centralsan.dst.ca.us.

Thank you in advance for your help. We’ll let you know in a future issue when our “new and improved” web site will be ready.

Get Free Home Improvement Products

(And Help the Environment at the Same Time)

Would you like free paint, household cleaners or garden products? All you have to do is visit the Reuse Room at our Household Hazardous Waste Collection Facility, 4797 Imhoff Place in Martinez.

Our goal is to encourage the Reuse, Recycle and Reduce philosophy. When people bring in their household hazardous waste for disposal, we separate the usable items and stock them in our Reuse Room.

Unused or leftover paints, stains, cleaners, garden products, automotive products, pool chemicals, and other reusable products are often stocked and are free for the taking. The items and quantities vary depending on what people bring to the facility, but our shelves are seldom bare!

This not only allows you to save money by picking up free items, but also reduces the amount of pollutants that are sent off for disposal or recycling.

The Reuse Room is open:

Tuesday – Saturday, 9 a.m. – 3:30 p.m. Please call 1-800-646-1431 for more information. (Please note we cannot provide inventory information over the phone.)

Keep Grease Out of Sewers

Fats, oils and grease are major causes of sewer clogs. Here are three steps you can take to help keep sewer pipes clog-free:

• Keep fats, oil, grease and greasy foods out of the sink and garbage disposal.
• Pour cooled grease into sealable, disposable containers. Freeze it, then place it in the trash.
• Bring large quantities (such as from deep-fat fryers) to the Household Hazardous Waste Collection Facility for disposal (residents only).
More than 35,000 Tons of Pollutants Kept Out of the Environment Last Year!

Here at the Central Contra Costa Sanitary District, our mission is “To protect public health and the environment.” Two primary ways we do that are: (1) preventing pollutants from entering the environment; and (2) removing pollutants from the wastewater we treat. Here’s a brief report on some of the pollutants we kept out of the environment last year:

Our treatment plant removed 35,098 tons of the following major pollutants from 17.5 billion gallons of wastewater in 2005:

- **Nitrogen and Phosphorus Compounds**: 1,254 tons. Harmful effects: these compounds promote algae blooms which harm aquatic life by depleting oxygen in the water and by decreasing light penetration needed by photosynthetic organisms. These pollutants also promote unwanted weeds.

- **Suspended Solids**: 13,556 tons. Harmful effects: the accumulation of sediments and solids in water have significant negative impact on the environment, including:
  - a decrease in visibility and increase in turbidity (cloudiness) for aquatic organisms, making it difficult for these organisms to capture prey;
  - a decrease in light availability for photosynthetic organisms;
  - clogging of gills in fish and other aquatic species;
  - reduction in spawning of fish and general survival;
  - increase in the transportation of heavy metals, phosphorous and other pollutants through waterways as they attach to the sediment particles and harm water quality.

- **Metals**: 4,327 tons. Harmful effects: metals have toxic effects on aquatic plants and animals and can bio-accumulate in aquatic species such as mussels, which can then have a dangerous impact all the way through the food chain. These metals are toxic to aquatic life and accumulate in the sediments of streams, lakes, and estuaries as well as in fish tissue.

- **Organic Material**: 13,119 tons. Harmful effects: when organic matter (such as leaves, grass, and tree branches) is broken down by bacteria, it depletes oxygen in the water. Reduced oxygen has a detrimental effect on aquatic life, including fish, bugs and plants.

- **Oil/Grease**: 2,842 tons. Harmful effects: an accumulation of oil and grease forms a film over water which spreads and makes oxygen transfer difficult. It can also be toxic for aquatic animals and plants. One gallon of oil can contaminate one million gallons of water.

- **Cyanide-containing wastes (such as some jewelry-plating mixtures)**: 15 pounds. Harmful effects: exposure to cyanide compounds can cause various health effects, depending upon the quantity and duration of exposure. Potassium cyanide and sodium cyanide are particularly hazardous. Environmental effects from the release of cyanide into water bodies depend upon the compound. Insoluble compounds may accumulate in soils and sediments, and may be toxic to some crab species.

- **Tributyltin (TBT)-containing wastes (such as some wood preservatives)**: 1,978 pounds. Harmful effects: TBT is extremely hazardous to ecosystems. Even in small concentrations, TBT compounds are highly toxic to many species of aquatic organisms, including mussels, clams, oysters, and lobsters. Human consumption of fish contaminated with TBT can suppress the immune system. Contact with TBT-containing products can cause severe irritation to the skin and eyes.

- **Paint & paint products**: 367,200 pounds. Harmful effects: some solvent-based paints are considered a carcinogen and may cause reproductive problems or birth defects if the vapors are inhaled or absorbed through the skin. Solvents are ozone precursors and increase smog in the atmosphere, and are toxic pollutants to water. Water-based paints are less harmful to people and the environment than solvent-based paints.

- **Pesticides**: 61,500 pounds. Harmful effects: all pesticides must be toxic, or poisonous, to be effective against the pests they are intended to control. Because pesticides are toxic, they are also potentially hazardous to humans and animals. Harmful effects depend on the toxicity of the pesticide and the amount of exposure. Pesticides polluting water can harm aquatic life at the base of the food chain.

- **Copper and copper-containing wastes**: 3,051 pounds. Harmful effects: copper is found naturally in the environment, and may also be used in drinking water supplies to prevent algae growth. In large doses, however, copper may cause nausea, vomiting or abdominal pain as well as liver dysfunction, kidney damage, muscle pain or anemia in humans. Fish exposed to too much copper may suffer damage to the gills, liver and kidneys. Copper is also considered to be a potential neurotoxin in fish.

- **Lead**: 61,500 pounds. Harmful effects: lead poisoning can cause illness and in severe cases, even death. Children are particularly susceptible. Lead exposure can impair both physical and mental development in children, and lead to progressive mental deterioration and behavioral disorders. Lead appears to bio-accumulate in some shellfish and, to a lesser degree, in other fish. In fish, the lead uptake is localized in parts of the fish not commonly eaten by people. Thus, although humans may be safe from lead poisoning from eating aquatic animals that eat fish and shellfish may be at risk.

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**Pollutants Kept Out of the Environment In 2005**

- **Our treatment plant removed 35,098 tons of pollutants from 17.5 billion gallons of wastewater**

- **Our Household Hazardous Waste Collection Facility collected a total of 1,545,193 pounds (about 700 tons) of hazardous waste in 2005:**

  - **Mercury**: 96 pounds of elemental mercury and mercury-containing devices (including more than 36,000 feet of fluorescent lamps and 2,044 mercury thermometers); 51 pounds of mercury-containing compounds. Harmful effects: exposure to high concentrations of mercury vapor can harm the nervous system, digestive system, respiratory system, and kidneys. Ingestion of mercury is not as dangerous as inhaling the vapor, but may cause tremors, irritability, forgetfulness and fatigue. If mercury escapes into the environment, it can end up in streams, lakes, or estuaries, where it can be transformed into highly toxic methylmercury through microbial activity. Methylmercury accumulates in fish at levels that may harm the fish and anything that eats them.

  - **Copper and copper-containing wastes**: 61,500 pounds. Harmful effects: copper is found naturally in the environment, and may also be used in drinking water supplies to prevent algae growth. In large doses, however, copper may cause nausea, vomiting or abdominal pain as well as liver dysfunction, kidney damage, muscle pain or anemia in humans. Fish exposed to too much copper may suffer damage to the gills, liver and kidneys. Copper is also considered to be a potential neurotoxin in fish.
Our mission is to protect public health and the environment. We do this by collecting and treating wastewater, providing high-quality recycled water, and promoting pollution prevention.

Our treatment plant in Martinez collects and treats an average of 45 million gallons of wastewater every day. Some highly treated wastewater is recycled for irrigation use on golf courses and parks, and the rest is safely released into Suisun Bay. We also operate a Household Hazardous Waste Collection Facility that allows our customers to safely dispose of hazardous materials.

Where to Call...

General Information (925) 228-9500 or www.centralsan.org
Sewer overflows (925) 933-0955 or 933-0990
(When there’s an overflow in the street or a backup in your home, call this number and in most cases, a crew will be there within an hour.)
Treatment Plant InfoLine (Report Odors) (925) 335-7703
Household Hazardous Waste InfoLine (800) 646-1431
Sewer connection permits (925) 229-7371
To report illegal discharges into sewer system (925) 229-7288 (during business hours) (925) 229-7214 (after hours)
Job Hotline (925) 229-7109 or www.centralsan.org
Student Education Programs (925) 229-7310 or www.centralsan.org
Public InfoLine (925) 335-7702 or www.centralsan.org

Past issues of the “Pipeline” are available on our web site: http://www.centralsan.org/education/publications.html

CCCSD Pipeline is brought to you by:
Board of Directors
Mario M. Menesini, President
James A. Nejedly, President Pro Tem • Parke L. Boneysteele, Board Director
Barbara D. Hockett, Board Director • Gerald R. Lucey, Board Director

Board meetings are open to the public and are generally held on the 1st and 3rd Thursday of each month at 2 p.m. in the CCCSD Board Room, 5019 Imhoff Place, Martinez.

James M. Kelly, General Manager

Central Contra Costa Sanitary District
5019 Imhoff Place, Martinez, CA 94553