

THE MAIN LINE



Major Plant Upgrade Underway

After careful planning and a thorough engineering analysis, the District is embarking on a project to replace two digester structures within the wastewater treatment facility. The existing digester tanks were constructed over 50 years ago - one in 1950 and one in 1961 - and have reached the end of their useful service life. These concrete structures are the only significant components in the plant that were not replaced during the major upgrade project completed in the mid 1990's.

New concrete tanks, designed to meet current structural and seismic standards, will be constructed in the same basic location as the old digesters. The tanks will be configured to achieve optimal treatment efficiency, with concurrent installation of new, state-of-the-art aeration blowers. A sophisticated computerized control system will achieve the highest level of treatment using the least possible amount of energy. Electrical costs for the digestion process are expected to be cut in half when the new system comes on line.

This major capital project, expected to cost around \$4.5 million, will be funded through the issuance of revenue bonds. While the District generally avoids incurring long term debt - we have not had a new bond issued since 1993 - in this case it makes sense to spread the costs out to future users who will benefit from this upgrade over the next 30 years. Borrowing costs are currently at all-time lows, so the timing is right to get this critical project done.

The District is concurrently refinancing its existing bond debt, which totals about \$11.3 million. On November 15, we executed a very successful municipal bond offering taking advantage of historic low rates, which will achieve a savings of about \$260,000 per year through 2025. This savings will more than pay for the annual debt service on the \$4.5M in new bonds issued for the digester project, which will be about \$240,000. Great news! District ratepayers will get this new infrastructure without any impact to the existing sewer service rate structure.



What the Heck is a Digester Anyway?

The District uses aerobic digestion in its treatment process. A digester is simply a tank where conditions for biological degradation of solids are optimized. Solids from the settling tanks in the facility are pumped to the digesters where they are treated for up to 30 days.

The digestion process destroys pathogens and reduces the overall material volume. Air is injected into the digesters and other factors are controlled to keep the "bugs" hungry and happy. Following treatment, the solids are dewatered and hauled to a composting facility where they are converted into a beneficial soil amendment.

Other wastewater treatment plants, typically larger facilities, use anaerobic digesters to treat solids. This biological process, which happens in the absence of air, results in the generation of methane which can be used as a fuel for power generation or heating. For our small community, aerobic digestion is a more economical and stable process, with lower potential for odor generation.





Your Green District:

ENERGY SAVINGS AND COOL LIGHTING

As part of the District's ongoing efforts to reduce our carbon footprint, we recently completed a major lighting upgrade and energy efficiency project at the wastewater treatment facility and administration office. Over 230 lighting fixtures were replaced or retrofitted District-wide. The new, high efficiency lighting is expected to reduce energy consumption by over 120,000 kilowatt hours per year.

The improvements include the latest technologies available for industrial lighting controls. In many

locations throughout the plant, low level ambient lighting is provided until infrared sensors pick up to the presence of a heat source – generally one of the plant operators. Then a bank of bright yet efficient fluorescent fixtures kicks on, providing ample light to perform maintenance and inspection tasks. In other areas, timers and other control mechanisms are used to turn off lights when not in use. Exterior lights at the treatment plant were replaced with LED fixtures that use just a fraction of the energy consumed by the old incandescent bulbs.



This energy efficiency project was partially funded through a Southern California Edison rebate program. The District expects to achieve annual energy cost savings in excess of \$10,000, plus additional savings from longer bulb life and lower lamp replacement costs. The new fixtures emit less heat and keep cooling cost down as well. On top of all that, we have cleaner and brighter lighting at all of our facilities.

More Efficiency Projects On The Way



Later this year, the District will be replacing the two main air compressors that supply high pressure air to operate valves and certain pumps within the treatment plant. The new compressors are highly efficient and electricity use for this process will drop significantly. We have worked closely with SCE on this project as well, and an energy savings rebate program will pay for about half of the \$25,000 project cost.

The District's single biggest energy draw, and most significant operating expense, comes from powering the aeration blowers at the treatment plant. The blowers supply air to the biologic processes. Over the past year, we have been monitoring major advances in blower technology.

We are now in the planning stages on a project that will involve installation of new high speed turbo blowers, combined with sophisticated monitoring and control systems to optimize air flow rates. This project has the potential to cut energy use at the plant nearly in half and save in excess of \$40,000 per year. Stay tuned for updates on this green project that will help both the environment and your pocketbook.



S2s Projects Get Kudos

The South Coast Beach Communities Septic to Sewer Project was named Project of the Year for 2012 in the small project category by the American Public Works Association, Central Coast Chapter. The local chapter of the American Planning Association also presented the District with the 2012 Award of Merit for project excellence.



Septic To Sewer Projects On Track

For the better part of a decade, the District has been working with homeowners in the Rincon Point, Sandyland Cove and Sand Point Road neighborhoods on a project to eliminate on-site septic systems in favor of public sewer service. We are happy to report that these projects are finally coming to fruition.

In February of this year, 21 homes in the Sand Point Road community were connected to a new low pressure sewer system serving that neighborhood. A few months later, 39 homes in the Sandyland Cove community were connected to a similar low pressure system. All of the septic tanks were properly abandoned as part of these projects, ending community concerns about water quality impacts from leaking or failing septic tanks along those sand spits.

The low pressure sewer approach used to provide service to the beach areas requires a grinder pump and tank at each home to convey wastewater through small diameter, durable HDPE piping to the District's existing mains. This approach allowed for the bulk of the system

to be installed using a trenchless technology called horizontal directional drilling. Avoiding deep trenches in these sandy locations with very shallow groundwater, kept construction related impacts to an absolute minimum.

The Rincon Point septic to sewer conversion project is about to get underway. Getting sewers to this 72 home community is a great deal more challenging, due to its distant location and other engineering and environmental constraints. Delays associated with permitting and easement acquisition seem to be nearing an end point, and we anticipate putting the project out to bid in early 2013, with construction commencing early in the spring.

These new sewer projects are not funded by existing District ratepayers. The property owners bear the full cost of connection – Rincon Point owners paid in excess of \$80,000. They should be commended for making this commitment to the environment. We certainly appreciate their patience and perseverance through this long process.



DO YOUR PART To help our environment

Here's a few things you can do to help us protect water quality in Carpinteria

NO DRUGS DOWN THE DRAIN. Unused pharmaceuticals should be disposed of properly and not flushed down the drain. A locked dropbox located outside of Carpinteria City Hall is available 24/7 for disposal of unused medicines. Some local pharmacies also have programs for safe disposal of pharmaceuticals.

DISPOSE OF HAZARDOUS WASTE PROPERLY. Motor oil and other household hazardous wastes should never be poured down the drain or flushed into the toilet. Take unwanted materials to the City's Antifreeze, Oil, Batteries and Paint (ABOP) recycling facility at Carpinteria City Hall or to their annual Household Hazardous Waste Day held each April. The Community Hazardous Waste Collection Center at UCSB is another great option, and they are open every weekend.

PUT WIPES IN THE TRASH. Most so-called "flushable wipes" really aren't flushable. They don't break down in water, and instead wrap themselves around pump shafts and contribute to equipment failure, or they cause blockages in sewer laterals. Both can result in sewage overflows and impacts to water quality. Please put all "wipes" in the trash after use.

KEEP FOG OUT OF THE SEWER. Discharge of fats, oils and grease, or "FOG", is one of the main causes of sewer blockages and overflows – it congeals in your lateral and in District main sewers. Do your best to keep FOG out of the sewer by scraping plates and wiping out pots and pans with paper towels and putting them in the trash. Liquid grease should be collected in a disposable container and put into the trash as well.

Contact the District at 684-7214 or email at info@carpsan.com for additional information on these tips or other ways you can help.



New Team Members

Kim Garcia. Kim Garcia came on board as the District's Office Manager in late 2011 and has been working full speed to improve District administration ever since. Kim's background in human resources and business management make her an excellent fit. In addition to her role as HR manager for the agency, she is responsible for facilities oversight, Board administration and a ton of other critical tasks and functions. Kim is a native Carpinterian and she lives in town with her husband and three children.

Casey Balch. Casey Balch joined the District's operations group in April of this year. Casey rose to the top of a very competitive field to be selected as an Operator in Training, working in the wastewater treatment facility. A graduate of Carpinteria High School, he is leveraging his strong abilities and enthusiasm to make major contributions to the District. Casey lives in Carpinteria with his wife and young daughter.

Matt Oliver. The newest addition to the District team is Matt Oliver, the District's Collection System Supervisor. A native Carpinterian, Matt brings a wealth of experience managing complex public works and marine construction projects to his position. Although he just joined the team in early October, it is clear that his qualifications and his energy will help move the agency forward right away. Matt lives in Carpinteria with his wife and young son.

Thank You Director Horwitz!



After 17 years of dedicated service on the District Board of Directors, Patricia Horwitz is stepping down this December. We think she wants to extend those camping trips in Baja and not have to worry about being here every other Tuesday for a Board meeting. But it's more likely that she will take the opportunity to focus her volunteerism towards other worthwhile causes in Carpinteria.

Pat has lent her expertise in accounting to the agency all these years, having served as District Treasurer for at least a decade. She has also chaired or served as member of the Board Finance Committee for most of her tenure. Her leadership and guidance have been instrumental to the District's solid financial standing – she has worked hard to control operating costs, to maintain healthy reserve balances, and to fund important capital upgrades, with attention always on maintaining fair and reasonable rates for District customers.

We at the District greatly appreciate Pat's contributions and wish her the very best in the future. Our community is a better place because of her service.

BOARD OF DIRECTORS

