



Ramblings

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GARDEN GROVE KIWANIS RAMBLINGS, PUBLISHED WEEKLY

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Visit to the Orange County Water District's Site...

GG Kiwanis Club Takes a Field Trip

If you showed up to the **Clubhouse** after 6:30 pm tonight, then you were greeted with a locked door and no lights on. The meeting was held tonight at the **Orange County Water District's (OCWD)** facilities in **Fountain Valley**. Some **Club** members meet up at the **Clubhouse** before 6:30 pm and carpoled it over to the site while other members just showed up directly at **OCWD**. Those attending the meeting/tour this evening were: **Shelly Singer, Jack Wallin, Don Nielsen, Jerry Kelly, Gary Sunda, Will Swanstrom, Rick Glasby, Tony Lombardi, Craig Howard, Josh Lindsay, Brent Hayes, Efrain Davalos, Robin Marcario and Gerry Newkirk**. Upon arriving, we were greeted by **Philip Anthony**, **OCWD** Board President (and fellow **Kiwanian**). **Phil** represents part of **Garden Grove** while Board member **Kay Barr** represents the other part. Everyone was issued a hardhat and then we started a tour of the **Ground Water Replenishment** facilities, which take up the bulk of the site. **Phil** and Project Engineer **Shivaji Deshmukh** led the tour and answered everyone's questions about the facility and project.



The OCWD's Ground Water Replenishment system is the largest of its kind in the world.

First off, we toured the Microfiltration units where the water pumped through low-pressure membrane filters which removes any solids, bacteria, protozoa and any viruses attached to these constituents. We also saw the computerized control center that automatically controls the entire process. Next we toured the Reverse Osmosis building. Reverse osmosis is a high-pressure (150-200 psi) process that forces water through a reverse osmosis membrane. The membrane separates out minerals and pollutants, including salts, viruses, pesticides and other materials, but allows water molecules to pass through (many bottled water companies use reverse osmosis because of its proven purifying capability). There were 2250 reverse osmosis filters and all of the associated plumbing and pumps housed in this building. Finally we saw the Ultraviolet (UV) Light and Hydrogen Peroxide Treatment area where the water is exposed to ultraviolet light (just like the instruments in medical and dental offices) to provide disinfection. This ultraviolet light combined with hydrogen peroxide creates an advanced oxidation reaction that eliminates any remaining compounds in the water by breaking them down in harmless compounds like carbon dioxide and water. This multiple barrier process creates an ultra-pure quality water. Right now they are testing all of the systems and are expecting to be online and processing 70 million gallons of water a day by the end of this year.

Why are they doing all of this? Projections indicate that future demands for water will far outweigh our current supply (mostly groundwater and purchased imported water). The **Ground Water Replenishment** system is an innovative way to create a new source of very high quality water for **Orange County** residents. The system (which is scheduled to go on line at the end of this year) will take highly treated waste water from the next door **OC Sanitation District** plant (that is currently discharged into the ocean) and treat it through advanced techniques, including microfiltration, reverse osmosis and ultraviolet disinfection. After the advanced water purification processes, roughly half of the water will be injected into the ground along the coast to maintain a sea-water intrusion barrier to keep the **Pacific Ocean** out of our groundwater basin. The other half will be pumped through pipes up the **Santa Ana River** channel and deposited into recharge lakes in Anaheim where it will percolate into the groundwater basin along the same natural filtering path rainwater takes through the ground. Water from the **Groundwater Replenishment System** will be so pure that it will help soften **Orange County's** drinking water, by reducing minerals in our water that cause corrosion and scaling of plumbing fixtures, etc.

Announcements

After the tour, we meet in the **OCWD's** Board Room and **President Don** conducted his last official meeting. He basically told everyone to enjoy their dinner that our server **Helen** had brought over from **Jay's Catering** and had set up for us in Board Room. He also had **Jerry Kelly** come up and update us on the "**Ray Beaudoin Memorial**" drawing that is coming up on Oct. 13th. **Jerry** said that there were only about 15 tickets left and asked if everyone can bring in the money and ticket stubs to turn in at next weeks meeting.

Coming Soon

Oct. 4 Speaker from Community Action Partnership of OC
Thought For The Week

"We never know the worth of water till the well is dry." ~ Thomas Fuller