

LA JOLLA LIGHT

City engineers tell La Jollans about water purification



The city's water purification process is being studied at this plant. Courtesy: www.purewatersd.org

By Dave Schwab
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La Jollans got a peek at the future of water storage as city engineers clued them in on the Water Purification Demonstration Project aimed at creating a local sustainable water supply.

“We’re studying purifying wastewater to the equivalent of distilled water and using that to augment our local reservoir supplies,” Amy Dorman, senior city civil engineer with the city’s Public Utilities Department said at the Jan. 6 meeting of the La Jolla Community Planning Association. “One of the key drivers is that we import up to 90 percent of our water and we need to develop new local water supplies.”

Since most of San Diego’s imported water supply comes from Northern California via an aqueduct system and the Colorado River, Dorman noted that puts San Diego in a vulnerable position.

“We are precariously located at the end of the line,” she said. “Any interruption or failure along any of the waterways, and we’d feel the impact on our water supplies.”

The Water Purification Demonstration Project is the second phase of a process to evaluate ways for the city to increase its use of recycled water. Reservoir augmentation has been identified as the preferred option for developing recycled water sources. That would involve using advanced water purification technology on highly treated wastewater, sending the purified wastewater to blend with existing supplies in a reservoir, then treating the blended reservoir water again before distributing it as drinking water.

“Over the next two years, we’ll install 1-million-gallon-a-day wastewater treatment facility that will give us lots of water-quality data,” said Dorman, adding the water purification process employs multi-barriers, including numerous membrane filtration systems up to and including greatly magnified use of ultraviolet rays, to eliminate bacteria or other organic matter in water.

Dorman noted similar water purification filtration systems have been used successfully elsewhere in Orange County and in Virginia on the East Coast.