



Pure News

Welcome to Pure News, a newsletter about Pure Water San Diego, the City of San Diego's 20-year program to address the need for a safe, secure and sustainable local water supply.

City Council Approves Point Loma Permit Application

The City's Public Utilities Department continues to gain momentum for its goal of securing a cost-effective integrated water and wastewater solution for San Diego. On Tuesday, November 18, 2014, the San Diego City Council voted unanimously to approve the advancement of Pure Water San Diego, which includes the City's submittal of an application to renew the modified permit for the Point Loma Wastewater Treatment Plant. The Council decision authorizes Mayor Faulconer to enter into a Cooperative Agreement with San Diego Coastkeeper, the Surfrider Foundation San Diego County Chapter, the Coastal Environmental Rights Foundation, and the San Diego Audubon Society in support of the permit and Pure Water San Diego.

The decision follows two other recent Council decisions that have advanced the Pure Water program: the adoption of the Demonstration Project final report in April 2013 and the April 2014 approval of a formal resolution supporting the Pure Water program's water purification facility plans.



San Diego Mayor Kevin Faulconer held a news conference on November 13, 2014 at the City's Advanced Water Purification Facility to show his support for the Pure Water San Diego program. Members of the Pure Water Working Group and the City's Public Utilities Department participated in the news conference.

2014: A Year in Review

2014 has been a milestone year for the Pure Water San Diego outreach program, which includes presentations, participation in community events, facility tours, informational materials, social media and media coverage. Here are some of the program accomplishments from this year.

Tours

One of the best ways to learn about the water purification technology that will be used to provide San Diego with a safe and reliable local drinking water supply is by participating in a free tour of the City's demonstration one-million gallon per day Advanced Water Purification Facility.

In 2014, **124** tours of the Advanced Water Purification Facility were given to more than **2,000** people. This is a new annual record for the Pure Water tour program! Tours were provided to groups including Girl Scout troops, elected officials, contractors, neighborhood councils, water industry professionals and school classes ranging from elementary to postdoctoral.

(Continued on page 4)

Learn More About...Point Loma Wastewater Treatment Plant

The Point Loma Wastewater Treatment Plant (Point Loma) treats the majority of the San Diego region's wastewater, approximately 155 million gallons per day. Wastewater is cleaned to a level known as chemically enhanced advanced primary and is then discharged to the ocean via a very long, deep outfall pipe designed specifically to maximize the diffusion of the effluent.

Since 1995, the U.S. Environmental Protection Agency (EPA) has granted San Diego modified National Pollution Discharge Elimination System (NPDES) permits from secondary treatment requirements due to the City's expansive industrial source control, advanced primary treatment, deep ocean outfall, and its ocean monitoring program, which is one of the most comprehensive and robust monitoring programs in the country. Combined, these programs and treatment processes continue to provide environmental protections for ocean water quality and biology. The City has consistently surpassed regulatory requirements for the



Point Loma Wastewater Treatment Plant

plant's operation. Because of all these measures, the EPA and the San Diego Water Board have agreed that Point Loma's process fully protects the ocean and have granted San Diego permits for the past twenty years.

All treatment plants that have discharges must apply for a permit every five years. The City's next permit application for the Point Loma Wastewater Treatment Plant is due in January 2015. With the Pure Water San Diego program, more wastewater will be diverted from Point Loma for recycling at the City's reclamation plants, which will reduce the amount of wastewater processed at Point Loma and discharged to the ocean. Reducing Point Loma's discharge levels, combined with the advanced primary treatment process, will enable the plant to produce water that has decreased levels of total suspended solids (TSS) and Biochemical Oxygen Demand (BOD) and a lower acidity (pH), the three wastewater constituents that define secondary treatment. This reduction will allow San Diego to achieve what is referred to as "secondary equivalency."

Learn more about the specifics of secondary equivalency [here](#).



North City Water Reclamation Plant

A diverse group of stakeholders, as well as local environmental groups, the City and its partners, the Metro Participating Agencies, have worked together for the past 16 months to reach consensus on a strategy to submit the permit renewal application and to obtain approval of secondary equivalency. Simply upgrading Point Loma to secondary treatment would cost approximately \$1.8 billion, require overcoming severe space constraints at the existing plant, produce no new water and would not result in any additional environmental protections. With the comprehensive water recycling strategy provided by Pure Water San Diego, flows to Point Loma would eventually be

reduced by 50 percent and San Diego would produce a local drinking water supply equal to one third of its future drinking water needs by 2035.

The City's water recycling strategy and achievement of secondary equivalency involves increased reliance on the City's water reclamation plants. The North City Water Reclamation Plant (where the demonstration Advanced Water Purification Facility is located) and the South Bay Water Reclamation Plant have a capacity of 45 million gallons per day. At these plants, water is cleaned to tertiary level (often called "purple pipe" water) meaning it can be used for irrigation and industrial purposes. However, because irrigation use is seasonal and it is cost-prohibitive to expand the system, the current demand for recycled water is far less than the capacity of the plants.

(Continued on page 3)

Diverse Viewpoints Advance Pure Water San Diego

In May 2014, Mayor Kevin Faulconer convened the Pure Water Working Group (Working Group) to assist the City in evaluating an array of potable reuse implementation possibilities. The Working Group was asked to express their opinions on cost, schedule, outreach and regulatory strategies and technical aspects.

The Working Group consists of a diverse group of stakeholders including representatives from community planning groups, businesses, city council district offices and non-profit environmental organizations, as well as other community leaders. This was a forum for the City to gain input and feedback from stakeholders who represent broad community interests and are the Public Utilities Department's customers.

The objectives of the Working Group were to:

1. Provide feedback on Pure Water Program elements and strategy.
2. Become knowledgeable about the Point Loma Wastewater Treatment Plant permit history and process.
3. Provide input on legislative approaches to accomplish secondary equivalency for San Diego.
4. Review findings associated with Pure Water costs and associated impacts on rates.
5. Provide input to City of San Diego and other stakeholders, as appropriate.
6. Develop a document containing key recommendations/observations.



Pure Water Working Group

The Working Group accomplished these objectives over the course of eight meetings during 2014, which included tours of Alvarado Water Treatment Plant, the Point Loma Wastewater Treatment Plant and the Orange County Water District Groundwater Replenishment System between May and November 2014.

A final report is currently being developed that will detail the Working Group's input statements. The questions and input from the Working Group enable the City to advance a well-rounded, comprehensive potable reuse implementation plan.

The Pure Water Working Group members have agreed to meet periodically so they can continue to provide input into the City's development of the Pure Water program. Learn more about the Pure Water Working Group and view a list of the organizations with representation on the group [here](#).

Learn More About...Point Loma Wastewater Treatment Plant (*continued*)

With water purification, San Diego can reach capacity at its reclamation plants, since the recycled water would then be sent on to the water purification facilities to be purified and used as drinking water.

Approximately 100 million gallons per day (mgd) of wastewater will be diverted from Point Loma to three future advanced water purification facilities located at the North City and South Bay reclamation plants and a future Harbor Drive facility. The water produced at these facilities combined will generate 83 mgd of purified water that will be piped to the San Vicente and Otay Reservoirs. By implementing Pure Water San Diego and avoiding an unnecessary and costly expansion of the Point Loma Wastewater Treatment Plant, the City's ratepayers will realize a financial benefit over the life of the Pure Water San Diego program as well as increased local water independence.

2014: A Year in Review (continued)

During the tour, the water purification process is explained in detail and participants get an up-close look at the technology. To learn more about the tour program or register for an upcoming tour, visit www.purewatersd.org/tours or email purewatersd@sandiego.gov.



La Jolla Elementary students tour the Advanced Water Purification Facility.

Events

Water purification will impact San Diego's water supply long term, which is why City staff continued educating San Diegans at community events throughout San Diego during 2014.

More than **2,000** San Diegans visited the Pure Water San Diego booth at **24** community events in 2014. Booth visitors had the opportunity to speak to program engineers, view beakers containing recycled water, tap water and purified water, and participate in the "Water You Know?" quiz.

The City recently reached a milestone of educating **10,000** members of the public about the Water Purification Demonstration Project and Pure Water San Diego at local community events since October 2010. For a list of all the community events that the Pure Water team has participated in, click [here](#).

Awards

In 2014, the City of San Diego Public Utilities Department received the following three awards for the Water Purification Demonstration Project public outreach and education program:

- American Water Works Association Public Communications Achievement Award
- California WaterReuse Association Section Recycled Water Community Outreach/Public Education Program of the Year Award
- Public Relations Society of America San Diego/Imperial Counties Chapter Edward L. Bernays Silver Award of Merit for Public Affairs

Happy Holidays from the Pure Water team!
Thank you for a great year.

 @PureWaterSD



Get the latest online

Use your barcode-scanning app of choice to scan the quick response (QR) barcodes to the left and right.

Not receiving email updates from Pure Water San Diego? Sign up at www.purewatersd.org or email purewatersd@sandiego.gov.

 PureWaterSD



To schedule a presentation for your organization, visit www.purewatersd.org/presentations.

Visit www.purewatersd.org/tours to sign up for an AWP Facility tour.

