

### PRESIDENT'S MESSAGE

On behalf of the Board of Directors, I would like to extend our sincere wish for a very Happy New Year to you and your family!

The past year was a challenge to our Southern California region due to the ongoing drought. For five straight years, the western United States has experienced a historic shortage of rainfall. The threat to our water resources has never been greater. Despite the severity of the drought, the good news is that 2015 was a success for WRD and for the people we serve.

Through the hard work of WRD's Board of Directors and its dedicated professional staff, our planning efforts are finally materializing and taking shape into the form of Los Angeles County's most important water project in decades – the Groundwater Reliability Improvement Project or GRIP. As you have read in previous newsletters as well as this one, GRIP is one more solution toward completely drought-proofing our region's groundwater supply.

GRIP marks the key project of WRD's Water Independence Now program, the suite of individual projects that together will eliminate the need for increasingly expensive imported water. The four million plus residents throughout WRD's service area, which includes 43 cities, deserve to have a local reliable source of water that they can depend on in times of drought or disruptions from natural disaster. That's what GRIP will provide.

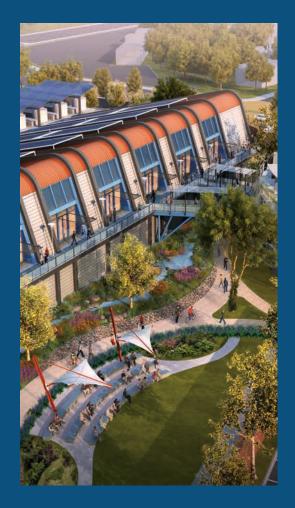
GRIP will secure the long term safety and reliability of our groundwater resources which makes up 40% of the local supply of drinking water through development of an advanced water treatment facility. No longer will our region depend on imported water from Northern California or the Colorado River to refill our groundwater basins. We will take already highly-treated recycled water and purify it into nearly distilled quality water and use it for groundwater replenishment.

Deconstruction of existing structures on the GRIP site will commence in the coming months, followed by the start of construction in Summer/Fall 2016. Residents can look forward to an operating advanced water treatment facility in 2018.

While the future holds many challenges toward meeting water demands, WRD's Board of Directors is committed to meeting your water needs both now and in the future.

## **GRIP AND WATER INDEPENDENCE**

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#### PROTECT YOUR GROUNDWATER DAY

As the unsung hero of the water world, Groundwater rarely gets the recognition it deserves. To help spread the word and educate the public about the importance of this crucial natural resource, the National Groundwater Association created Protect Your Groundwater Day, which is observed nationwide.

Every year in September WRD visits a local school to celebrate with students, and to foster a respect and appreciation for our nation's groundwater, "The Treasure Beneath Our Feet!"



We invite school districts, schools, and educators to get involved in groundwater education!



Please contact Monica Serrano at (562) 275-4324 or mserrano@wrd.org for more information.



# **SARD** WATER REPLENISHMENT DISTRICT OF SOUTHERN CALIFORNIA

WINTER **NEWSLETTER** 

**JANUARY 2016** 

## 21ST CENTURY WATER TREATMENT FACILITY

**COMING TO YOU IN 2018** 









#### **BOARD OF DIRECTORS**













WATER SCIENCE

On Thursday, November 19, 2015, WRD partnered with Paramount Unified

School District and Harry Wirtz School to bring families together and share

the love of groundwater. Students and their families were invited to be a part of the event which featured groundwater learning activities such as the

water cycle, aguifers, water pollution, aqueducts, and water conservation.

**FAMILY DAY** 







www.wrd.org 4040 Paramount Boulevard

Lakewood, California 90712





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## IN THE NEWS



"This project builds on this idea that we can tap into our local water *supply and rethink how we can bring* water to our communities. I want to thank WRD and the Board for having the foresight to develop programs like GRIP that allow our communities and our state to become more water independent."



Speaker-Elect **Anthony Rendon** State Assembly District 63

Speaker-Elect Anthony Rendon speaking at the GRIP design unveiling, Tuesday, November 3rd, 2015.



#### WRD UNVEILS DESIGN OF ADVANCED WATER TREATMENT FACILITY

Design of Pico Rivera Facility is a Hit with Community

On November 3, 2015, the WRD Board of Directors and special guest California Assemblymember and Speaker-Elect Anthony Rendon unveiled the architectural design for the Groundwater Reliability Improvement Project in the City of Pico Rivera.



When complete, this new water treatment facility will create 3.26 billion gallons of water per year to replenish the groundwater basins, which will eliminate our need to import water from the environmentally sensitive northern California Bay Delta and the Colorado River, both hundreds of miles away. This local water source will help to drought-proof our region and provide self-sufficiency and water independence to more than 10% of the State's population.

Assemblymember Rendon, along with Assemblymember Ed Chau. praised the project and the increased use of recycled water as a responsible way to meet the current and future water needs of the millions of residents in the region.

Val Zavala, Vice President of News and Public Affairs at KCET, the nation's largest independent public television station, and anchor of KCET's weekly award-winning newsmagazine, "SoCal Connected," acted as Master of Ceremonies.

#### **CRITICAL WATER LINK NEARS COMPLETION**

Will Expand the Use of Recycled Water

As WRD increases its use of local water supplies to replenish the Central and West Coast Groundwater Basins, it must also increase the operational flexibility to deliver that water to the Montebello Forebay Spreading Grounds in Pico Rivera, where it can fill the large surface ponds and naturally percolate through the soil to replenish the groundwater aquifers.

As part of its Groundwater Reliability Improvement Project, WRD is nearing completion of an effort to install turnout structures along the San Gabriel River in the City of Pico Rivera. These reinforced concrete bypasses are essentially large valves that connect to the Los Angeles County Sanitation Districts' recycled water delivery pipeline.

Once completed, the additional capacity to deliver recycled water to the spreading grounds will greatly enhance WRD's ability to replenish the groundwater basins, which means increased reliability and water independence for the entire region.

## WHAT'S HAPPENING



- *Formed in 1959*
- Serving 4.3 Million people
- 10% of the State's population
- 420 square mile service area
- 40% of the water supply

"This month we celebrate 56 years of service to the residents of south Los Angeles County. We are honored and humbled by the trust placed in us to restore, manage, and protect groundwater for the millions of people who rely on this vital resource each and every day."

- WRD Board President

#### **HAPPY BIRTHDAY WRD**

November 17, 2015, marks 56 years of service to the residents of south Los Angeles County

The first half of the 20th century was a time of unprecedented growth for southern California, the growth of science and technology, industry and agriculture, and people...lots and lots of people. Much of this growth can be attributed to the abundance of high quality Groundwater, which was unregulated and readily available in most areas.

By the early 1950's the Central and West Coast Groundwater Basins were in peril, because for decades we had been using up to twice as much groundwater than could be naturally replenished. Wells were running dry throughout the region, and seawater was contaminating the remaining freshwater in areas where the water table had fallen below sea level. After years of research, dedication, and hard work by concerned citizens and early water pioneers, the Water Replenishment District was formed in 1959 by a vote of the people. WRD was tasked with replenishing and maintaining the groundwater basins and also halting the perpetual creep of seawater intrusion.

In the early years, WRD relied on water imported from the northern California Bay Delta and the Colorado River, both hundreds of miles away, to replenish the Central and West Coast groundwater basins. However, soon after WRD began to create newer, more reliable ways to accomplish its goals of making south Los Angeles County self-reliant and drought-proof.



## Water Independence Now

Over a decade ago WRD embarked on its quest for self-reliance when it unveiled its Water Independence Now strategy. WIN is a suite of projects and programs designed to work together to completely eliminate the need to purchase water imported from the environmentally sensitive northern California Bay Delta and the Colorado River.

Water Independence Now will make south Los Angeles County independent, self-reliant, and less susceptible to shortages due to drought or disaster. WIN will also help to stabilize water rates and provide local control of this vital resource.



Groundwater Reliability

GRIP is the cornerstone of the WIN program, and will provide complete independence from imported water. At the center of GRIP will be a state-of-the-art advanced water treatment facility. Located in the City of Pico Rivera, the facility will produce 3.26 billion gallons of pure water annually.

Water from the GRIP will be released to the Montebello Forebay Spreading Basins where it will naturally replenish groundwater supplies in the Central and West Coast Groundwater Basins which are relied on by nearly ten-percent of California's residents.



Securing Our Water Future Today

Looking back at the history and forward to the future of WRD, it is filled with foresight & innovation. We are dedicated to ensuring that every single one of us has an adequate supply of clean, safe, affordable drinking water, now and for generations to come.

## **UPCOMING**

By the 1950's, groundwater was below sea level throughout much of the region. This caused seawater contamination of some of our fresh water aquifers.



A minimum of 80% of old building materials will be recycled or salvaged.







Recycling and reuse can keep materials out of our local landfills, and reduce the need to create new materials.

### **REMOVING SALT WATER FROM OUR AQUIFERS:** THE ROBERT W. GOLDSWORTHY DESALTER **EXPANSION PROJECT**

Recovering lost drinking water supplies in the South Bay

In the past, overpumping of groundwater caused the water table to fall below sea level in some areas, which allowed ocean water to move inland and contaminate fresh water aquifers. Through a series of wells installed along the coastline we began injecting fresh water to create a seawater barrier and prevent further sea water contamination.

While new seawater is kept out of the aquifers, we still must deal with the seawater that moved inland before the injection wells were installed. Rather than ignore the problem and rely on imported water to meet local water needs, WRD built a desalination facility to remove that salty water.

The first phase of WRD's Robert W. Goldsworthy Desalination Facility (Desalter) in the City of Torrance began operation in 2001. Since then it has been removing 2.3 million gallons per day (mgd) of salty (brackish) water from the West Coast Groundwater Basin. Brackish water is fresh water that has become contaminated with seawater. Once the salt is removed the fresh water becomes part of the city of Torrance's drinking

The Desalter, which was originally designed and constructed to easily accommodate expansion, will soon begin its second phase, increasing its capacity to 5 mgd. By mid-2017, the Desalter will be purifying nearly 2 billion gallons of local water per year.

By taking what was once an unusable local water source and turning it into clean, safe drinking water for the thirsty South Bay area, we further reduce the need for imported water sources to serve the region.

#### **DEMOLITION OF OLD BUILDINGS ON FUTURE GRIP SITE SET FOR JANUARY 2016**

80% of Buildings Materials to be Recycled

In January 2015, WRD purchased a 5.2-acre site in the City of Pico Rivera on which to build a large-scale advanced water treatment facility as a component of its Groundwater Reliability Improvement Project. The existing site includes three large buildings and an extensive parking lot.

Beginning in January 2016, all existing buildings and structures will be deconstructed to make way for the new AWTF. Throughout deconstruction, which will last about 90 days, the contractor will be required to recycle or salvage 80% of the building materials including concrete, brick and asphalt.

Once deconstruction is complete, the site will be left as a vacant field with installed hydromulch to prevent wind erosion, and a large detention basin to mitigate stormwater flows until construction begins in Summer/Fall, 2016.