

You are
Invited!

**SPECIAL
GUEST
SPEAKERS**

Members and guests are invited to attend our monthly Luncheon Board Meetings held the second Wednesday of each month, 11:00 a.m. to 1:30 p.m. in Los Angeles.



An informational and exciting day trip tour of an impressive, massive electric generation installation is scheduled in October.

TO JOIN US

Contact any Board Member

Or Go To

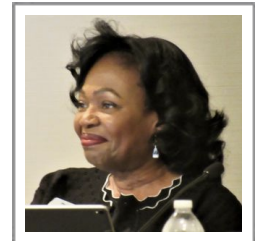
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CONGRATULATIONS

To Associates Member
PHYLLIS!



MISO Board Selects Currie as New Chair

June 24, 2018 By Amanda Durish Cook

Midcontinent Independent System Operator

INDIANAPOLIS — *MISO's* Board of Directors last week appointed Director Phyllis E. Currie its chair, replacing current Chairman Michael Curran.

The board voted unanimously to appoint Currie at its June 21 meeting after discussing her credentials and nomination in closed session a day earlier. As a rule, MISO considers all personnel-related matters to be confidential.

Currie is the second woman and first African-American woman to chair MISO's board since it was established in 1998. Former Director Judy Walsh was the first woman to chair the board during her tenure from January 2016 to December 2017.

"I hope that I will perform in a manner that will bring continued pride in the MISO community," Currie said upon accepting the position during a June 21 board meeting.

"I will be immediately instructing you on the Philadelphia sense of humor, and you can have my watch," Curran joked.

Currie is one of three directors whose three-year term concludes at the end of this year. Along with Mark Johnson, she will be up for re-election for a second term. Curran will reach MISO's three, three-year term limit at the end of 2018 and is not able to seek re-election.

Director Baljit Dail reported that the RTO's Nominating Committee will begin vetting and interviewing candidates for the board starting in August.



Speakers, Guests & Members

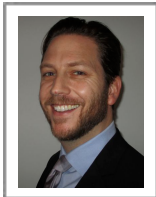


Bill Carnahan

CPA Clean Power Alliance, Special Assistant to the Executive Director who was the interim Executive Director for the LA County Community Choice Aggregation District (now called the Los Angeles Community Choice Energy [LACCE]). His topic: "An Overview of the Community Choice Aggregation Efforts in LA

County".

California law allows local governments to control the source and the price of the electricity consumed by their residents and businesses using a Community Choice Aggregation program.



Jason L. Rondou

Manager of Strategic Development & Programs; Power Planning & Development Division, Los Angeles Department of Water and Power.

Jason has worked for LADWP and the City of Los Angeles for 15 years, most recently responsible for the Power System Planning Division's Strategic Development & Programs section, where he oversees the Distributed Energy Resource Program Office as well as the Energy Imbalance Market Implementation Project.

Before joining the Planning Division Jason also spent time in the Integrated Support Services division's Project Management and Controls group, supporting General and Electrical Construction.

Previously, Jason worked for the Los Angeles Department of Transportation on advanced transportation initiatives. Jason holds a BSEE from Loyola Marymount University, a Master of Public Administration from USC, and an MBA from UCLA. Jason is also the former Chair of the Los Angeles IEEE Power & Energy Society and is a California licensed professional traffic engineer and electrical engineer. Prior to this role he was the supervisor of the Solar Program Development group. Rondou was also part of the newly-formed Demand Response development group.



Brandon J. Goshi

Manager of Water Policy and Strategy, The Metropolitan Water District of Southern California



Masih Akhbari Ph.D, PE

Senior-Level Water Resources Engineer, Los Angeles Department of Water and Power.

Welcome



Rod Fishburn,

Member



Thomas Soulanille,

Member

2018-19 Board Of Directors

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Rex Atwell

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College Students Battle To Control the Power Grid in Energy Department Challenge

By [Jack Corrigan](#),

Staff Correspondent - April 10, 2018



Power Articles

Submitted by *Thomas J. McCarthy*



Agency officials hope the competition will draw more young tech talent to the government and energy industry.

If America’s critical infrastructure came under attack, cybersecurity specialists could be the first—and possibly last—line of protection against a nationwide crisis.

Over the weekend, the Energy Department put the next generation of cyber defenders through a trial run.

The agency on Saturday brought together 25 teams of college students to participate in the third Cyber Defense Challenge. Each team built its own infrastructure network and then defended that network against simulated online attacks launched by energy industry cyber experts.

The competition aimed to arm students with real-world cyber skills and educate the next wave of tech talent on the growing threats to the nation’s critical infrastructure.

“Competition breeds excellence. When America’s cyber experts are challenging one another on the virtual battlefield, we all win,” said Energy Secretary Rick Perry in a video message kicking off the competition. “There is perhaps nothing more essential to America’s national and economic security than its energy supply.”

The competition was hosted at three of the department’s nationwide facilities: Pacific Northwest National Laboratory in Washington state, Oak Ridge National Laboratory in Tennessee and Argonne National Laboratory in Illinois. Teams were scored based on how well they defended against cyber attacks and kept their public websites and services up and running throughout the competition.

University of Central Florida, Oregon State University and University of Memphis each won at their respective sites, but Lewis University finished as the nationwide champ.

Through the competition, the department wanted participants to pick up not just real-world cyber skills, but an interest public service as well, said Devon Streit,

the agency’s deputy assistant secretary of infrastructure security and energy restoration, who spearheaded the program.

Get the latest federal technology news delivered to your inbox.

The government has for years struggled to attract young tech employees, and as the federal [IT workforce rapidly ages](#) and online threats mount, closing the talent gap is becoming ever more crucial. While she admits most STEM students will find more lucrative careers at a tech company than a national lab, Streit told *Nextgov* she thinks competitions like this can get students excited about working in government.

“The attraction that I feel deeply to public service is not something that hits every 20-year-old in college—it’s something you have to be exposed to,” Streit said. Her broader goal is to increase the visibility of the government’s cybersecurity efforts and begin building “a pipeline of people who will protect our infrastructure,” she told *Nextgov*.

And that pipeline doesn’t necessarily lead to federal agencies, at least in the energy sector, she said. The vast majority of America’s oil, gas and electricity infrastructure is owned and operated by private companies, and while those groups work closely with Energy Department, much of the responsibility for securing energy infrastructure falls on their shoulders.

“All of us recognize in the event of large cyber incidents, we’re going to be calling on all the same people,” Streit said. “It’s important to give students the broadest possible horizon of what they can do with these skills.”

The most recent competition was the first to take place across multiple locations, Streit said, and “you can expect it to be even bigger” next time around. While there’s no set date for the next contest, she guessed it will likely take place in fall or winter of this year. ❖❖

BOOK REVIEW

by
Abraham Hoffman, Ph.D.



WESTLANDS: *A Water Story*,
by Randi Lynn Beach (photography),
Tomas Holyoke (introductory essay), and Yiyun Li (contributor).
Albuquerque: University of New Mexico Press, 2017.
113 pp. Map, Illustrations. Hardcover, \$39.95.

This oversize (10 x 12”) book is a photographic essay of the Westlands region of central California, roughly from Fresno to the San Francisco Bay area and including the Delta Mendota Canal and the Madera Canal. Thomas Holyoke, political science professor at California State University, Fresno, and Yiyun Li, prize-winning novelist and short story writer, contributed brief essays that highlight the problems of water and agriculture in the western San Joaquin Valley. But it is the more than fifty photographs taken by Randi Lynn Beach that vividly depict what has been happening to the Westlands region.

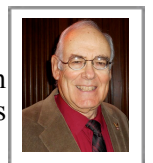
Beach approaches Westlands rather differently from the discussions in the media about environmentalists seeking to preserve endangered fish and bird species as opposed to wealthy farmers getting subsidies and hogging cheap, available water. That water makes possible such cash crops as walnuts, almonds, pistachios, garlic, and vegetables that are exported to other nations as well as American consumers. The problem, the current elephant in the room, is the state’s prolonged drought (forget about that exceptional 2017 wet year). Water for farms or water for birds and fish? Environmentalists want the amount of water for farms to be reduced so as to preserve the wetlands where birds and fish thrive. But that reduction would disrupt the communities of the Westlands area and the people who live and work there.

Beach’s photographs, many in color, show farm workers harvesting crops; dry land and dead almond trees; and farmer’s markets. Some photographs have ironic captions: “Almond orchards in Coalinga,” p. 84, shows dead trees across a dirt road from an almond trees orchard, with the dead wood dominating the

photograph. “A former vegetable cooler full of dolls in Dos Palos,” p. 90, depicts discarded dolls inside a vegetable bin. The photo demands answers while provoking questions. Who put the dolls there, why aren’t vegetables in the bin, what on earth was going on in Dos Palos in the market where this was taken? Another set of photos, pp. 60-61, shows two scenes of almonds, one ready to be picked, the other of dead almonds.

The production of this book is excellent, but it seems odd that the photo captions do not appear in the photos, instead being at the back of the book, pp. 108-109. Unless one notices “List of Photographs” on the Contents page, leafing through the book elicits surprise, some puzzlement, and downright mystery before arriving at the list. The captions themselves provide minimal explanations. The “reader” (how does one “read” photographic essays?) requires a second tour through the book and a growing realization that the pictures document Westlands life—the people who work in the fields, what the fields look like, what they look like when abandoned, the somewhat grim expressions of people whose livelihood in Firebaugh, Coalinga, and other Westlands communities depend on an agricultural economy. It’s this sense of comprehension that takes the reader beyond the controversy of environmentalists versus farms to an understanding that howsoever agriculture has come to the Westlands, people’s roots as well as crops run deep there. ❖

Abraham Hoffman
teaches history at Los
Angeles Valley College.



Reviews of other books can be viewed in all previous Newsletters.

Go to www.waterandpower.org Check Newsletters, then check the Table of Contents.

MYSTERY HISTORY

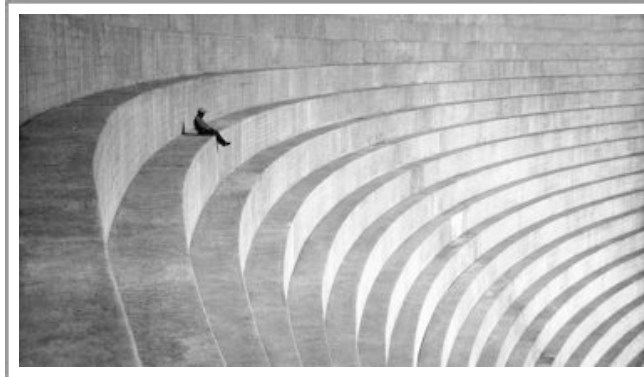


By Jack Feldman



View showing a steam shovel on a hillside overlooking rolling hills and newly carved winding roads. Also in the background (on the right) can be seen a dam and reservoir designed and built by William Mulholland.

Close-up view showing a man sitting on the vast, elegantly curved wall of the dam holding up the water reservoir seen in the previous image. Both the dam and reservoir were designated Los Angeles Historic-Cultural Monuments in 1989.



What is the name of the reservoir?

- a) St. Francis Reservoir
- b) Encino Reservoir
- c) Hollywood Reservoir
- d) Sawtelle Reservoir
- e) Silver Lake Reservoir

When was it built?

- A) 1907 - 1908
- B) 1911 - 1912
- C) 1917 - 1918
- D) 1923 - 1924
- E) 1932 - 1933

Answers at http://waterandpower.org/museum/Mystery_History.html

We invite your comments, inquiries, and suggestions.
Go to comments@waterandpower.org

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To insure the adequate seating and meals are prepared, notify us one week prior at comments@waterandpower.org

Join our **14,280** web visitors, researchers, historians, from home and abroad. Check out our website.

Website Statistics

June 10, 2018 - July 9, 2018

22,906 Page Views

- 764 Page Views/Day

- Average time on each page viewed: 3 Minutes 27 Seconds

- 14,280 Visitors

- 476 Visitors/Day

- Visitors from 117 countries including

United States	9,436
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Canada	304
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United Kingdom	294
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France	157
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Australia	120
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Netherlands	82
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India	79
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Poland	55
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Sweden	53
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Italy	44
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Russia	42
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Japan	41
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Spain	40
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Brazil	34
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Mexico	26
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Norway	26
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South Korea	25
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Chile	18
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Philippines	18
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Denmark	17
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New Zealand	17
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Singapore	15
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Austria	13
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Finland	13
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Ukraine	13
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Thailand	12
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Hong Kong	10
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Israel	10
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Turkey	10
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Argentina	9
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Czechia,	9
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Hungary, South Africa, Pakistan, Taiwan, **and 73 more!**

Senate Committee Advances CAISO Regionalization Bill

June 19, 2018 By Jason Fordney



Submitted by Thomas J. McCarthy



SACRAMENTO, Calif. — California Senate committee advanced a bill Tuesday [June 19] that would allow CAISO¹ to be transformed into a Western RTO,² a major change in the electricity market that has been met with heavy opposition.

Sponsored by Assembly Member Chris Holden (D), [AB813](#) garnered the six necessary votes in the Senate Energy, Utility and Communications Committee to move on to the Judiciary Committee for review. The state Assembly approved the bill on June 1, and with Gov. Jerry Brown a strong supporter of regionalization, the bill is likely to get his signature if approved on the Senate floor.

Proponents say the law would help the state export excess renewable energy and create a more efficient regional market, lowering costs.

“This is an opportunity for California to expand our good policies across state borders and to expand upon that,” Holden told the committee. The recently amended bill was carried over from last year’s session. (See [Calif. Energy Bills Move Forward, but Big Ones Stall.](#))

The bill creates a Western States Committee with three representatives from each state with a participating transmission owner, which would provide input on ISO matters that affect more than one state. Left open is the question of whether state voting power would be weighted by electricity load. It also specifically prohibits the creation of a capacity market.

But memories of California’s 2000/01 electricity crisis remain strong in the state, and many interests have expressed concerns about increased oversight of the market by the federal government. CAISO is already regulated by [FERC](#),⁴ but some worry California would lose control of clean energy goals to the federal government and other states.

Committee member Robert Hertzberg (D) said that he “generally likes the notion of regionalization” but added that “I am very unhappy as to how this bill has preceded.” He said he had many concerns about repeating the mistakes of the electricity crisis and negatively affecting the economy by moving jobs out of the state.

“There is an underlying issue that is legitimate with respect to California jobs,” Hertzberg said. “I am deeply concerned across the board.”

The bill has a long list of opponents, including labor groups worried about exporting energy-related jobs to other states and environmental groups, such as Sierra Club and Earthjustice, who say the changes will make California subject to imports of fossil-sourced generation. More than 12 California cities, the Port of Oakland, Sacramento Municipal Utility District, the Utility Reform Network and other groups oppose regionalization.

Former FERC³ Chairman Jon Wellinghoff addressed the committee, attempting to ease fears about the agency’s oversight. Wellinghoff said FERC acts independently, pointing out the commission dispensed with the Department of Energy’s “resilience” order and the Trump administration’s recent request to declare a national security emergency to subsidize coal and nuclear generation. (See [FERC: No Emergency on Grid.](#))

“They are really going after [PJM](#)⁴... where most of these coal plants reside,” he said of the Trump administration’s effort to bolster coal.

While the regionalization debate continues, CAISO has proposed bringing its day-ahead energy market to the Western Energy Imbalance Market. That measure would allow more energy trading across the region but does not create a new RTO with new multi-state management as is envisioned by AB 813. (See [CAISO Day-ahead Could be Tailored for the West.](#)) ❖

1. CAISO -- California Independent System Operator
 2. RTO -- Regional Transmission Organization
 3. FERC -- Federal Energy Regulatory Commission
 4. PJM -- PJM Interconnection LLC (PJM) is a regional transmission organization (RTO) in the United States. It is part of the Eastern Interconnection grid operating an electric transmission system serving all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia."



PUC Approves Utility EV Infrastructure Programs

June 3, 2018 By Jason Fordney

California regulators last week authorized the state’s investor-owned utilities [IOU] to recover **\$738 million** for electric vehicle charging infrastructure to help meet the state’s greenhouse gas reduction goals.




The California Public Utilities Commission’s Thursday *order* stemmed from its 2016 directive ordering the IOUs to propose projects that would advance the electrification of transportation. During the proceeding, the state’s Office of Ratepayer Advocates and The Utility Reform Network negotiated aspects of the program, originally proposed at \$1 billion by the utilities.

“The only way to get to a largely carbon-free California is by substantially electrifying the state’s vast transportation system,” Commissioner Carla Peterman said. “The decision made today aims to balance costs with benefits for all ratepayers, considers impacts on competition, and directs significant portions of the utility programs to disadvantaged communities often hit hardest by traffic and air pollution.”

The Natural Resources Defense Council supported the CPUC’s decision, saying it “marks the nation’s single largest investment by the electric industry to eat away at Big Oil’s longtime monopoly over transportation fuels.”



Each IOU had its own package approved by the commission.

- San Diego Gas & Electric: A \$137 million rebate program for 60,000 Level 2 home-based charging stations, and an EV-only variable hourly energy rate. 
- Pacific Gas and Electric: \$22 million for a “Direct Current Fast Charging Make-Ready Program” supporting 234 fast-charging stations at 52 sites. Also approved was make-ready infrastructure at a minimum of 700 sites to support the electrification of at least 6,500 medium- or heavy-duty vehicles. 
- Southern California Edison: \$343 million to install the make-ready 



infrastructure at a minimum of 870 sites to support the electrification of at least 8,490 medium- or heavy-duty vehicles, and three new time-of-use rates for commercial customers with electric vehicles.

Make-ready infrastructure includes service connection and supply infrastructure to support EV charging. It is composed of the electrical infrastructure from the distribution circuit to the stub of the EV charging station and can include equipment on the utility side, such as a transformer, or on the customer side, such as electrical paneling or wiring of the meter, the CPUC said.

The commission modified some of the budgets and terms of the program. For example, it rejected SDG&E’s proposal to include existing EV customers in its program. TURN had argued that existing EV customers would be free riders, pointing to a survey that indicated 76% of California EV drivers have income of \$100,000 or more. The commission included provisions for disadvantaged communities, setting rebates and adoption targets for EVs in those areas.



California’s Clean Energy and Pollution Reduction Act of 2015 set new greenhouse gas reduction goals and directed the CPUC to work with other agencies to advance the electrification of transportation.

The CPUC began the proceeding in July 2017 and conducted 11 days of hearings last fall. Other parties included environmental groups, the California Transit Association, Union of Concerned Scientists, EV infrastructure companies and consumer groups.

The decision came just after the California Energy Commission issued a report saying the state will need between 229,000 and 279,000 EV chargers at locations other than single-family homes by 2025 to meet the state’s goals for adoption of zero-emission vehicles.



(See [California to Require Sharp EV Charger Growth by 2025.](#)) ❖

San Fernando Groundwater Basin Remediation Program



By Gerald A. Gewe



The Water System of the Los Angeles Department of Water and Power has embarked upon the largest groundwater clean-up program in its history.

The overall purpose of the San Fernando Groundwater Basin Remediation Program is to restore and protect the full use of the San Fernando Groundwater Basin as a source of water consistent with LADWP's long-term water rights and historic groundwater use.

This includes:

- Remediation of the basin and maintaining the beneficial uses

- Providing remediation and treatment consistent with the regulatory requirements

- Restoring the historical capacity of the well fields

- Providing operational flexibility for the water system

Cleaning up the San Fernando (SF) Groundwater Basin is essential in recovering the Water System's ability to maximize the amount of water that is put back in the ground. This is an important step in developing our local water supplies and reducing our reliance on imported water.

In early 2015, the LADWP completed the San Fernando Basin (SFB) Groundwater System Improvement Study (GSIS), which was a 6-year study characterizing the groundwater basin contamination in the SFB. Twenty-five new monitoring wells were drilled in support of the groundwater study. These new wells, along with a network of more than 70 existing wells, were used to characterize the basin's groundwater quality and develop a complex of comprehensive groundwater remediation facilities for removing contamination from the city's major well fields in the San Fernando Basin.

Construction on the first facility, the North Hollywood West Remediation Facility, a wellhead treatment facility, for the North Hollywood Wellfield began in September 2017.

Currently the Water System, with the assistance of an outside consultant, is preparing the Remedial Investigation/ Feasibility Studies for Centralized

Treatment Facilities in North Hollywood and Tujunga along with preliminary design for the facilities. Detailed planning on the 4th and final facility, a wellhead treatment facility for the Pollack Wellfield, is currently on hold while right of way issues are being resolved.

The North Hollywood West Wellhead Treatment will incorporate Hydrogen Peroxide and Ultra Violet Advanced Oxidation processes to remove the containments from the water and allow it to meet drinking water standards. It is being built using LADWP Construction forces. Operation of the facility is scheduled for December 2019.

The release of the Remedial Investigation/ Feasibility Study and the CEQA Documents for the Tujunga Central Facility is scheduled for July of 2018, while the release of documents on the Tujunga Central Facility is scheduled a month later. Public hearings will follow the release of these documents.

The Department is proposing to award a contract for a Progressive Design Build entity to construct these facilities following the approval of the CEQA documents. In this process a designer and builder will be working together with the Water System to design and construct this "State of the art" facility in a timely and cost effective manner. It is anticipated that construction on these central facilities will begin in January, 2019 and they will be operational in 2021.

It is estimated that the construction of the facilities in this program will cost about \$600 million. This makes it one of the most expensive programs in the history of the LADWP Water System. However, the savings in reduced costs in purchasing imported water from the Metropolitan Water District will make this investment very cost effective. To further reduce the costs to the ratepayers, the Water System has applied for \$241 million in Prop One funding from the State and will also be seeking funds from the parties that are responsible for causing the groundwater basin to become polluted.

For further information regarding this program go to: www.ladwp.com/remediation