



July 2011 SEWER LEAKS  
A Publication of Los Angeles Basin Section of the CWEA

In This Issue:

- CWEA and AAEE Joint Breakfast - Perspective -----
- LABS Hosts a Table at the Tech Day Outreach Fair -----
- City of Malibu's Legacy Park and Stormwater Treatment Facility Tour -----



Santa Ana River Basin Section (SARBS)  
Southern California Alliance of POTW's



# 20th Collections Training Seminar

Summer 2011

Location:

**Huntington Beach Public Library**  
7111 Talbert Avenue  
Huntington Beach, CA 92648

Driving Directions:

405 (North or South)

From the 405, take the Beach Blvd exit south towards Huntington Beach. Travel south on Beach about 2 miles and turn right onto Talbert Ave. Stay in the left lane, and pass Gothard Street. Talbert dead-ends into the Library parking lot. Use the left driveway to enter the parking area.

22 (East or West)

Exit at Beach Blvd and head south towards Huntington Beach. Travel south about 5 miles and turn right onto Talbert Ave. Stay in the left lane, and pass Gothard Street. Talbert dead-ends into the Library parking lot. Use the left driveway to enter the parking area.

Questions or Comments:

Ralph Palomares, ETWD | (949) 837-7050 x.104 | [Rpalomares@etwd.com](mailto:Rpalomares@etwd.com)

Thursday, July 21<sup>st</sup>, 2011

7:30 a.m. Check-In /  
8:00 a.m. - 3:30 p.m. Sessions

Topics and Activities:

- Gimmicks and gadgets contest
  - Bring your ideas to win \$\$
- Photo contest 8x10 color or black and white
  - "Best graphics" Collections related
- Best hawaiian shirt contest
- 7 sessions = 7 contact points
- Math training

# Ocean-Water Desalination Demonstration Facility Tour

Details

- Cost: Free, Space Limited
- Date: August 11<sup>th</sup> 2011; Tour 6pm, Happy Hour 7pm
- Location: 1021 N. Harbor Dr. Redondo Beach, CA
- Parking Limited, Carpool Desirable



*"If we could produce fresh water from salt water at a low cost, that would indeed be a great service to humanity, and would dwarf any other scientific accomplishments." - JFK*

Sponsors:

- West Basin Municipal Water District
- International Desalination Association (IDA)
- California Water Environment Association (CWEA)
- CWEA Santa Ana River Basin Section (SARBS)
- CWEA Los Angeles Basin Section (LABS)

RSVP: Nicole You

E-Mail: [Nicole.you@lacity.org](mailto:Nicole.you@lacity.org)

Phone: 323-342-6265



## CWEA and AAEE Joint Breakfast - Perspective

By Wendy Wert

At this year's annual conference in Ontario, the California Water Environment Association (CWEA) and the American Academy of Environmental Engineers (AAEE) hosted a joint breakfast to recognize exceptional achievement in the field of Environmental Engineering. CWEA's Engineering Research (E&R) Committee Chair Pavitra Prabhakar initiated the proceedings by acknowledging the 2011 E&R award recipients. Mike Selna continued with an introduction to AAEE, which explained that the mission of the organization is to improve the practice, elevate the standards and advance the cause of environmental engineers. The keynote speaker for the event Mike Stenstrom then presented a technology discussion titled *Toward Long SRT of Activated Sludge Processes: Benefits in Energy Saving, Effluent Quality, and Stability*.

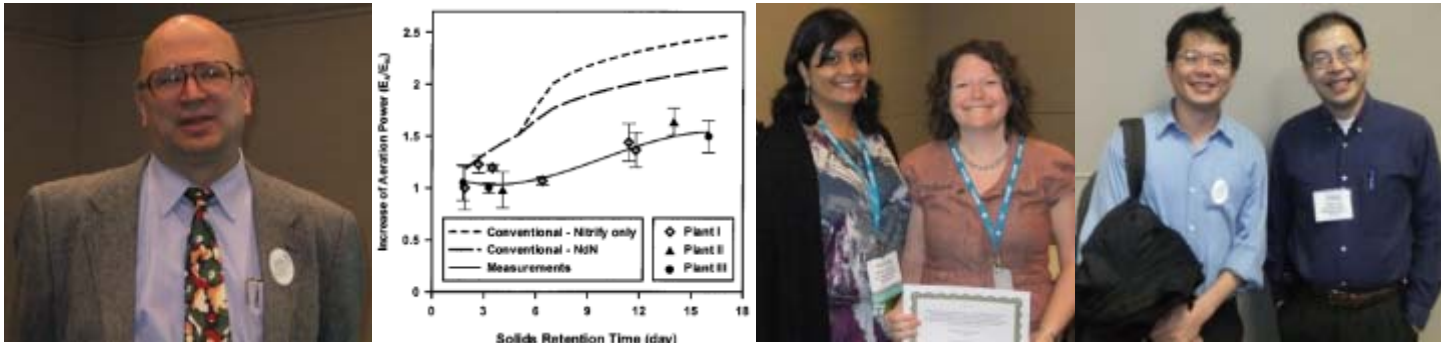


Mike Selna (lt), Phil Ackman, Pavitra Prabhakar, Toby Weissert, and Debra Bogdanoff (ctr), Jenny Reina (rt).

AAEE certified Michael K. Stenstrom on May 11, 1989. He is a BCEE (Board Certified Environmental Engineer). Special expertise includes WW-Chemical and Physical Treatment Process for Water & Wastewater - Gas Transfer and WW - Biological Treatment Processes - Activated Sludge. Michael K. Stenstrom is a Distinguished Professor in the Civil Environmental Engineering Department at the University of California, Los Angeles (UCLA). His research and teaching are in the environmental engineering area with emphasis on biological treatment methods and applications of computing technologies to environmental engineering research. Over the past 15 years he has performed research to characterize stormwater and minimize its impacts on the environment. Recently Dr. Stenstrom was awarded the prestigious position of editor in chief of Water Environment and Technology, WEF's peer reviewed technical journal.

Dr. Stenstrom initiated his discussion by recognizing contributors Diego Rosso for comments and discussion, Sheng-Chieh Wang for literature review, Shao-Yuan Leu, a Postdoctoral fellow, and Licheng Chan a Ph.D. candidate when the research work was performed, whose dedication and talent have led to progress on this program. Then Dr. Stenstrom provided an overview of their on-going research. The activated sludge process (ASP) is the most common method of secondary municipal wastewater treatment, and the solids retention time (SRT) is the key control parameter. Normally operating at long SRT is considered only for nitrification, but there are additional benefits of high SRT operation. Dr. Stenstrom presented experimental and literary evidence to demonstrate three major additional benefits of long SRT operation: increased oxygen transfer efficiency; improved biomass particle size distribution, which results in more efficient clarification with fewer effluent particles and suspended solids; and enhanced

removal of many emerging contaminants such as pharmaceuticals, personal care products, and endocrine disrupting compounds. Dr. Stenstrom also presented experimental results from a number of treatment plants, showing increasing oxygen transfer efficiency and particles size with increasing SRT, and evidence documenting improved removal of emerging contaminants and biodegradable organic carbon. A long-term survey of three treatment plants concludes that operating at higher SRT is not as energy intensive as conventionally assumed.



Featured Speaker Michael K. Stenstrom (lf) Figure showing ratio of aeration power per volume wastewater treated at different operation conditions versus the initial power consumption at low SRT (ctr lf) Pavitra Prabhakar and SFPUC Award Recipient Karri Ving (ctr rt) Dr. Ben Leu of UCLA and Zhena Taina at the Joint AAEE CWEA E&R Breakfast (rt).

One of the most compelling results for longer SRT, presented by Dr. Stenstrom, was the change of aeration power in treating  $10^3\text{m}^3$  wastewater (compared to initial power consumption) from three tested wastewater treatment plants, under different operation phases. The Figure above shows the calculated power consumption as the two dashed lines. The calculated increase, using constant aeration efficiency and conventionally accepted kinetic and stoichiometric parameters suggest the increase would be as much as 100% for a nitrification denitrification (NdN) process and 150% for nitrification only. However, the measured results from the three treatment plants, shown as the solid trend line, illustrate the increase in aeration power from conventional to NdN mode is approximately 50%.

The bottom-line, reported Dr. Stenstrom, is that power consumption did not increase as greatly with increasing SRT as expected. The maximum power increase was approximately 41% (Plant I) to 50% (Plant III) higher than low SRT operation. Since solids treatment accounts for more than 20% of total energy consumption, and sludge production is less at higher SRT, the total energy consumption of overall wastewater treatment for NdN process ranges from 1 to 1.3 time the energy consumption of the conventional treatment process. The results differ from “conventional wisdom” and the value is also lower than proposed in Metcalf and Eddy (2003).

Dr. Stenstrom concluded by summarizing the benefits of increasing SRT of the activated sludge process, in addition to the need for ammonia removal. Increasing SRT improves several aspects of plant operation but the most significant observation from the research presented is energy consumption. It has generally been assumed that increasing SRT from low to high and providing nitrification will more than double aeration energy consumption. The experimental observations presented suggest only 30 to 50% increase, based on site-specific conditions. This energy can be more than offset by energy savings associated with the reduced biosolids production.

## LABS Hosts a Table at the Tech Day Outreach Fair

On Saturday May 14th about 100 high school students participated in the Tech Day outreach fair hosted by the Los Angeles African American Engineers and Professional Employees Association. The event was held inside the beautiful new Galen Center at USC.



LABS helped sponsor the event and hosted a table with mock demonstrations of the wastewater treatment process. LABS Director Basil Hewitt, President Wendy Wert and VP Alec Mackie described the wastewater treatment process to students, the importance of taking care of water and all the great careers available in the wastewater industry.

The students showed they knew their stuff. Some asked about the UV disinfection process – a newer technology in the water and wastewater industry. Several already

knew 75% of the Earth's surface is water and less than 1% is available for drinking water, so it's important to use water wisely. Others were fascinated by the microscope and watching the microorganisms turn pollution into cleaner water.

The wastewater industry will need plenty of new treatment plant operators, engineers and managers in the coming years. A great resource for students and young professionals interested in a water/wastewater career is WEF's new website [www.WorkForWater.org](http://www.WorkForWater.org).



Thanks to Los Angeles African American Engineers and Professional Employees Association for organizing yet another fantastic tech day (they've been hosting these events for over 10 years) and LABS looks forward to next year's student outreach event.



MALIBU LEGACY PARK PROJECT  
FULFILL A DREAM, LEAVE A LEGACY



Malibu • July 28th • 5PM Tour • 6PM Dinner • 7PM Presentation

# City of Malibu's Legacy Park and Stormwater Treatment Facility

It's an environmental learning experience for children of all ages. It's home to five coastal habitats and SoCal's only coastal prairie. It's an oasis. It's an environmental cleaning machine for the ocean.

**It's the heart of Malibu. It's one smart park.**

The Legacy Park Project, the centerpiece of the City of Malibu's \$50 million dollar commitment to clean water, is a cutting-edge concept with

far-reaching civic, educational, and environmental benefits for residents, visitors, and the generations to come.

Employing state-of-the-art technology, it is a central park that will work as an environmental cleaning machine, reducing pollution impacts in Malibu Creek, Malibu Lagoon, and the world-famous Surfrider Beach, and will provide a living learning center for five coastal habitats.

Featured dinner speakers:

**Bob Brager**, Public Works Director  
**Elizabeth Shavelson**, Public Works Analyst  
City of Malibu

**Steve Clary**, Principal  
RMC Water & Environment

**Pay at the door: \$35 CWEA members / \$40 Non-members / \$20 students and retirees**

## Tour:

**Stormwater Treatment Facility**  
(salmon colored building):  
Legacy Park  
23500 Civic Center Way  
Malibu 90265

(a map will be sent to registered attendees shortly before the event)

## Dinner:

**Guido's Malibu** (walk next door)  
3874 Cross Creek Road, Malibu  
Choose one and send with RSVP:  
1. Pollo Giudea (chicken/artichokes)  
2. Salmon in garlic/tarragon sauce  
3. Meat lasagne  
4. Vegetarian pasta  
Dessert: spumoni ice cream

## RSVP:

By July 22nd with meal choice to:  
[alecm@jwce.com](mailto:alecm@jwce.com) or call Alec Mackie  
at (714) 428-4614.





# 2011 LABS SPONSORS

Help sponsor LABS  
for only \$120/year.  
Contact John Biggs  
213-271-2300  
jbiggs@brwnald.com



[www.aecom.com](http://www.aecom.com)

**David Prasifka, P.E.**  
Operations Manager, Water  
515 S. Flower St., 3rd Floor  
Los Angeles, CA 90071  
(213) 593-8070  
david.prasifka@aecom.com

Moyno Durco Caster

Worthington



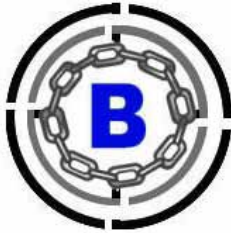
Allis-Chalmers

Goulds Galigher

### Bay Area Process

14365 Meadow Dr.  
Grass Valley, CA 95945  
**Marc Cuniberti, President**  
Ph: (530) 272-2298  
Fax: (530) 272-2753  
Toll Free (800) 326-4039  
bayareaprocess@att.net  
Website: [www.RUECKCO.com](http://www.RUECKCO.com)

**Pumps • Parts • Systems • Repairs • Rentals**



[www.biocope.com](http://www.biocope.com)

**BioCOPE, Inc.**  
23711 Hix Drive Canyon, TX 79015  
Ph: 800-900-6201  
Fax: 888-473-4948  
[www.biocope.com](http://www.biocope.com)



[www.bv.com](http://www.bv.com)

**James H. Clark, P.E.**  
Vice President  
800 Wilshire Blvd. #600  
Los Angeles, CA 90017  
ph: 213-312-3300  
Fax: 213-312-3399  
clarkjh@bv.com



[www.coombshopkins.com](http://www.coombshopkins.com)

**R. Bruce Zimmerman, President**  
5411 Avenida Encinas, Suite 250  
Carlsbad, CA 92008  
ph: (760) 931-0555  
cell: (714) 745-0678  
bruce@coombshopkins.com

Supplier of Pumps and Process Equipment



[www.cortechpumps.com](http://www.cortechpumps.com)

**Gabriel Zink**  
Sales Engineer  
22785 Savi Ranch Parkway  
Yorba Linda, CA 92887  
gabriel@cortechpumps.com  
Phone: 714-779-0911  
Mobile: 714 904-7487



**We're Your Sensor Guys!**  
(818) 772-8720 Fax (818) 772-2477  
email: [sales@sensorguys.com](mailto:sales@sensorguys.com)  
[www.sensorguys.com](http://www.sensorguys.com)



**Noel K. Esten - Senior Sales Engineer**  
2398 California Avenue Signal Hill, CA 90755  
888-997-9465 • Mobile (562) 480-4919 [www.enventcorporation.com](http://www.enventcorporation.com)  
**ODOR CONTROL • VAPOR & WATER FILTRATION • G.A.C.**



[www.goldenbellproducts.com](http://www.goldenbellproducts.com)

**Murrill Adams**  
1200 N. Jefferson, Unit M  
Anaheim, CA 92807  
Phone: (714) 630-3861  
Fax: (714) 630-4807  
Toll Free: (866) 462-3577  
info@goldenbellproducts.com



**Marjorie Boone**  
Office: (714) 245-9440 x104  
Fax: (714) 245-9443  
PO Box 25704  
Anaheim, CA 92825  
mboone@joshuacasey.com

**Environmental, Health & Safety • Training & Consultation • HR**



Industrial and Municipal Water and Waste Treatment Systems  
6739 So. Washington Ave./PO Box 469/Whittier, CA 90608-0469  
(562) 945-3425 Fax (562) 693-5257  
**Patrick F. Kennedy pfk@calencon.com**



[www.cec-h2o.com](http://www.cec-h2o.com)

WATER  
AND WASTEWATER  
ENGINEERED SYSTEMS  
SEWAGE LIFT STATIONS  
SELF PRIMING / SUBMERSIBLE

**Represented by:**  
**California Environmental Controls**  
562-945-3425



Engineering Excellence  
in Water & Envirostructure

[www.lee-ro.com](http://www.lee-ro.com)

**Dhiru Patel, P.E.**  
Vice President  
1199 S. Fullerton Rd.  
City of Industry, CA 91748  
ph: 626-912-3391, x209  
fax: 626-912-2015  
dhiru-p@lee-ro.com



[www.marcabcoinc.com](http://www.marcabcoinc.com)

**Kris Brooks**  
155 Balboa St. Suite D-9  
San Marcos, CA 92069  
ph: 760-510-8030  
fax: 760-510-8031



[www.miscowater.com](http://www.miscowater.com)

**Chris McCampbell**  
27101 Burbank, Suite B  
Foothill Ranch, CA 92610  
(949) 458-5555  
(949) 458-5500 Fax  
cmccampbell@miscowater.com

Muffin Monster®  
Auger Monster®  
Honey Monster® septage receiving  
Finescreen Monster®  
Bandscreen Monster®  
Drumscreen Monster®  
Screenings Washer Monster®  
Represented by Misco Water



[www.jwce.com](http://www.jwce.com)



[www.mwhglobal.com](http://www.mwhglobal.com) • [Pei-Chin.Low@mwhglobal.com](mailto:Pei-Chin.Low@mwhglobal.com)

**Pei-Chin Low, P.E.**  
Supervising Engineer  
618 Michilinda Ave. Ste. 200  
Arcadia, California 91007  
ph: 626-568-6999  
Fax: 626-568-6102



[www.plumbersdepotinc.com](http://www.plumbersdepotinc.com) • [jose.martin@plumbersdepotinc.com](mailto:jose.martin@plumbersdepotinc.com)

**Jose Martin**  
President  
3921 West 139th Street  
Hawthorne, CA 90250  
ph: (310) 355-1700  
fax: (310) 355-1711



[www.rainforrent.com](http://www.rainforrent.com)

**Anthony Gaddie**  
Branch Manager  
1301 E Spring St  
Long Beach, CA 90806  
ph: 562-595-7760  
cell: 562-254-0800  
agaddie@rainforrent.com



[www.rmewater.com](http://www.rmewater.com)

2400 Broadway Ste. 300  
Santa Monica, CA 90404  
310-566-6460 ph  
310-566-6461 fax

*Innovative Solutions for  
Water and the Environment*



Lic. 686371

**Steven Stump**  
17631 Metzler Lane  
Huntington Beach, CA 92647

ph: 714-847-1317  
fax: 714-847-6907  
[www.ssmechanical.biz](http://www.ssmechanical.biz)



[www.sancon.com](http://www.sancon.com)

**Chuck Parsons**  
5841 Engineer Dr.  
Huntington Bch., CA 92649  
chuck@sancon.com  
ph: 714-891-2323  
ph: 800-726-2664  
fax: 714-891-2524  
cell: 714-231-3630  
Contr. Lic. 731797



[www.brownandcaldwell.com](http://www.brownandcaldwell.com)

**John Biggs, P.E.**  
801 S Figueroa St # 950  
Los Angeles, CA 90017  
ph: 213-271-2300  
fax: 213-271-2320  
jbiggs@brwnald.com



**California  
Water  
Environment  
Association**

Protecting Our Water Environment Through Education And Training



**THANK YOU SPONSORS!  
HELP SPONSOR LABS FOR  
ONLY \$120/YEAR**

Contact John Biggs, Corporate Director, 213-271-2300 [jbiggs@brwnald.com](mailto:jbiggs@brwnald.com)

## Sewer Leaks Editor

Matthew Copeland  
1955 Workman Mill Rd.  
Whittier, CA 90601

### LABS Board of Directors

President:	<a href="#">Wendy Wert</a>	(562) 908-4288 x-2128
Vice President:	<a href="#">Alec Mackie</a>	(714) 428-4614
Director-at-Large:	<a href="#">Basil Hewitt</a>	(562) 908-4288 x-2311
Director-Secretary:	<a href="#">Amanda Schmidt</a>	(310) 566-6460
Director-Corporate:	<a href="#">John Biggs</a>	(213) 271-2236
Director-Treasurer:	<a href="#">Ian Mackenzie</a>	(310) 648-6134
Past President:	<a href="#">Hala Titus</a>	(213) 312-3330

#### Address Changes

Please contact Marge Okabe at (310) 375-0448 or email  
[labsocfwea@hotmail.com](mailto:labsocfwea@hotmail.com)

### LABS Committee Chairs

Programs:	Alec Mackie	(714) 428-4614
Newsletter:	Matthew Copeland	(562) 908-4288 x-2180
Membership:	Marge Okabe	(310) 375-0448
WW Treatment & Reuse:	Mischelle Mische	(562) 908-4288 x-2488
Awards:	Hala Titus	(213) 312-3330
TCP:	John Mays	(818) 778-4138
Supergroup:	Dan Gary	(310) 830-2400 x-5316
P3S Representative:	Bill Garrett	(562) 699-7411 x-2907
Collection Systems:	Michael Flores	(310) 566-6460
Public Education	Michael Simpson	(323) 342-6047
Operator Certification:	Francisco Ramirez	(310) 648-5857
Webmaster:	Miluska Propersi	(310) 566-6460
Young Professionals:	Nicole You	(323) 342-6265
Outreach Coordinator:	Erika DeHollan	(562) 908-4288 x-2836

### CWEA Liaisons

CWEA Board Liason:	Debra Bogdanoff	(562) 908-4288 x-2734
--------------------	-----------------	-----------------------

### SPECIAL EVENTS CALENDAR

July 14 <sup>th</sup>	LA and SG Watershed Council 15 <sup>th</sup> Anniversary; Los Angeles, <a href="http://www.lasgrwc.org">www.lasgrwc.org</a>
July 21 <sup>st</sup>	SARBS 2011 Summer Collections Seminar; Huntington Beach, <a href="http://www.cwea.org/sarbs">www.cwea.org/sarbs</a>
July 28 <sup>th</sup>	Legacy Park and Stormwater Treatment Facility, Malibu, <a href="http://www.labsocfwea.com">www.labsocfwea.com</a>
Aug 11 <sup>th</sup>	West Basin Desal Demo Facility Tour; Redondo Beach, <a href="http://www.labsocfwea.com">www.labsocfwea.com</a>
Aug 28 <sup>th</sup>	Past Presidents; Getty Villa, Malibu, <a href="http://www.labsocfwea.com">www.labsocfwea.com</a>

### HAVE AN IDEA FOR LABS TRAINING?

Send your presentation, seminar or training ideas to [alecm@jwce.com](mailto:alecm@jwce.com) for consideration

<http://www.labsocfwea.com/>  
<http://www.cwea.org/>  
<http://www.wef.org/>