CWEA’s One Day Engineering & Research Workshop
The Impact of Climate Change on California Wastewater Facilities

Climate change has had a major impact on planning and decision making for California utilities in recent years. The most often discussed element of climate change for California has been drought. As stringent water conservation measures have been implemented wastewater facilities have seen significant changes in influent quality. In some cases, conservation has had the impact of reducing the amount of recycled water production. This has resulted in a search for new sources of non-potable water. It has also resulted in changing management of both groundwater recharge and season storage of recycled water. More utilities are evaluating eliminating the non-beneficial discharge of effluent. This has include a new focus on potential future of direct potable reuse.

Climate change extends well beyond drought to the impact of rising sea levels on existing facilities. In addition, utilities are considering ways to protect facilities from increasingly severe storm events. In the broader context, wastewater utilities are trying to be part of the solution to long term climate change through the management of greenhouse gas emissions. This one day engineering workshop will provide managers, senior operations staff and engineers with a view of different approaches to addressing the impact of climate change on wastewater facilities in California.

Date: Thursday, March 17, 2016
Where: Los Angeles County Sanitation District located at 1955 Workman Mill Road Whittier, CA 90607
Time: 7:30 AM – 4:00 PM

Earn up to 6.9 CWEA Contact Hours toward all technical certifications.
The Impact of Climate Change on California Wastewater Facilities
Thursday March 17, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 – 8:20 am</td>
<td>Registration</td>
</tr>
<tr>
<td>8:20 – 8:30 am</td>
<td>Welcome</td>
</tr>
<tr>
<td>8:30 – 9:20 am</td>
<td>Changing Quality of Wastewater Due to Water Conservation And Other Factors. Steve McDonald, Carollo Engineers</td>
</tr>
<tr>
<td>9:20 – 10:30 am</td>
<td>Preparing for the Impacts of Sea Level Change, David Wood, AECOM</td>
</tr>
<tr>
<td>10:30 – 10:45 am</td>
<td>Break</td>
</tr>
<tr>
<td>10:45 – 11:35 am</td>
<td>Optimizing the Use of Non-Potable Water Supplies, Don Bunts, Santa Margarita Water District</td>
</tr>
<tr>
<td>11:35 – 12:00 pm</td>
<td>Protecting Vulnerable Utilities form Major Storm Events Along Waterways, Patti Sexton TetraTech</td>
</tr>
<tr>
<td>Noon – 1:15 pm</td>
<td>Lunch Provided By CWEA</td>
</tr>
<tr>
<td>1:15 – 2:05 pm</td>
<td>Orange County Water District’s Evolving Groundwater Recharge Plan, Adam Hutchinson, Orange County Water District</td>
</tr>
<tr>
<td>2:05 – 2:55 pm</td>
<td>Managing Greenhouse Gas Emissions, Sarah Deslauriers, Carollo Engineers</td>
</tr>
<tr>
<td>2:55 – 3:10 pm</td>
<td>Break</td>
</tr>
<tr>
<td>3:10 – 4:00 pm</td>
<td>A Transition from Indirect to Direct Potable Reuse in California, Shane Trussell, Trussell Technologies</td>
</tr>
</tbody>
</table>

Registration Form

Name: ____________________________ Title: ____________________________

Agency / Company: __________________________________________________________

Address: ________________________________________________________________

City: ____________________________ State: ____________________________ Zip: __________

Phone Number: ____________ Fax Number: ____________ Participants e-mail: ____________

Emergency Contact: ____________ Emergency Phone: ____________

☐ CWEA Member  ☐ WEF Member  ☐ CA-NV AWWA Member (must have current membership for member rates)

Special Services: __ Please check here if you require accommodations to participate. Attach a written description of your needs.

Full Time Students attend free, with proof of current enrollment of 9 units or more.

Early Bird Deadline 3/3/2016

$165 Early Bird Member Rate

$247 Early Bird Non-Member

Regular Registration after 3/3/2016

$185 Member Rate

$267 Non-Member Rate

Name of Account Holder: __________________________________________

Credit Card #: ____________________________ Exp date: ____________ Billing zip: __________

Payment method (check one):  ☐ Check (payable to “CWEA 2016 E&R Specialty Workshop”)  ☐ MasterCard

☐ Visa   ☐ AMEX   ☐ Discover   ☐ Purchase Order (must be attached)

Full payment or purchase order is required to process registrations. If you have to cancel...Written cancellation notice is required and must be received at least 30 days prior to the workshop date. A 25% service fee shall be retained on all cancellations. No refunds shall be given for cancellations made less than 30 days prior to the workshop.

CWEA E&R Specialty Workshop
7677 Oakport Street, Suite 600, Oakland, CA  94621

Registration Questions: 510.382.7800 x 125 or sbell@cwea.org

FAX: 510.382.7810