

# STORMWATER...

## WHY WE DO WHAT WE DO!

CASQA 2019 FIFTEENTH  
ANNUAL CONFERENCE

October 7–9, 2019

Monterey Conference Center  
Monterey, CA

Program

[WWW.CASQA.ORG](http://WWW.CASQA.ORG)







# TRASH TRAVELS

## 💧 The Journey Begins With You!

We all have a role. Prevent trash, pet waste and other pollutants from entering local waterways. Help protect the environment.

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- Cups and cans
- Plastic shopping bags
- Cigarette butts
- Pet waste
- Plastic and glass bottles
- Construction materials (boards, metals, concrete, etc.)
- Paints and oils
- Pesticides



*Reduce. Reuse. Recycle.*





# Welcome to the 2019 CASQA Conference



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## Get the Conference App

(available in iTunes and Google Play)



Personalize your conference experience with our CASQA Annual Conference mobile app for Apple iOS or Android.

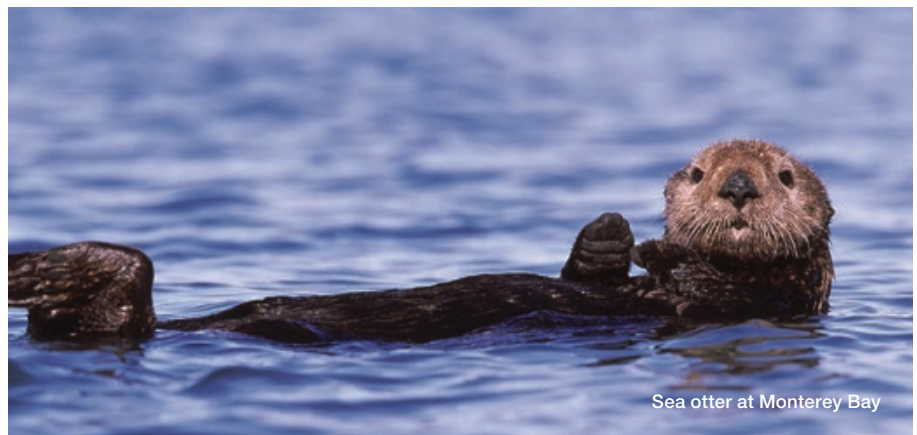
- Bookmark presentations and events in the conference agenda, which can be exported to the native calendar on your smartphone or digital tablet.
- Preview program agendas, abstracts, and speaker bios.
- Find meeting rooms, exhibitor info, and event locations via interactive maps.
- Message other attendees directly, easily access individual message threads, and share contact info to stay connected after the conference.

**“You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make.”**

JANE GOODALL

**Looking back** over the last 30 years, it was in 1989 that a few early champions of California’s stormwater community banded together to form the California Stormwater Quality Task Force. The Task Force quickly emerged as the cutting-edge statewide stormwater collaborative organization, bringing together stormwater professionals to help members achieve the goals of the Clean Water Act while improving the efficiency and effectiveness of stormwater management. As the stormwater regulatory arm reach broadened, so did the needs of the California stormwater community. To help meet these growing needs, the Task Force organized and formed the California Stormwater Quality Association (CASQA) in 2002. CASQA continues to be a leader in stormwater and is committed to seeing stormwater managed as a vital component of California’s water resources, to support human and ecological needs, to protect water quality, and to restore our waterways.

**Looking forward** into the next thirty years and beyond, it is vital to not only be stewards of our waters, but to also be mentors for the next generation that will continue to protect and enhance our waterways for future generations. As an organization, CASQA will foster sustainable solutions to our water quality challenges, incorporating the best science and technologies to promote the health and viability of our natural waters.



Sea otter at Monterey Bay

### Networking Opportunities

The 2019 CASQA Conference offers a host of networking opportunities with fellow stormwater professionals, which are included with your full registration. See the agenda listings for times and locations for the following events:

**Sunday** – Welcome Event

**Monday** – Networking Event at the Monterey Bay Aquarium

**Tuesday** – Exhibitor Reception

**Wednesday** – Exhibitor Prize Drawing

**Daily** – Lunches



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## STORMWATER FILTERS

...is very proud to sponsor **the Washington Stormwater Center (WSC)** — an internationally recognized premier Washington State University research laboratory that specializes in understanding the health concerns of aquatic species living in urban stormwater environments. Visit us in the **Gullywasher Suite** and say hello!

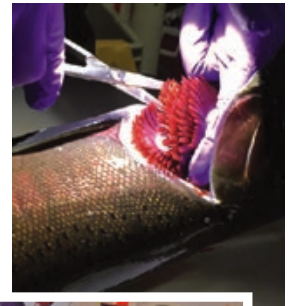
The WSC presentation at the Gullywasher Suite will be to educate the attendees in an actual multi-day demonstration of how aquatic organisms growing in urban streams are effected by polluted stormwater runoff. A laboratory microscope with a large display, along with an educated WSC researcher, will continue to show those effects throughout the conference.

In addition, several poster displays of the WSC graduate students' programs will be shown. And, as a diminutive addition, Gullywasher will display its stormwater art work.



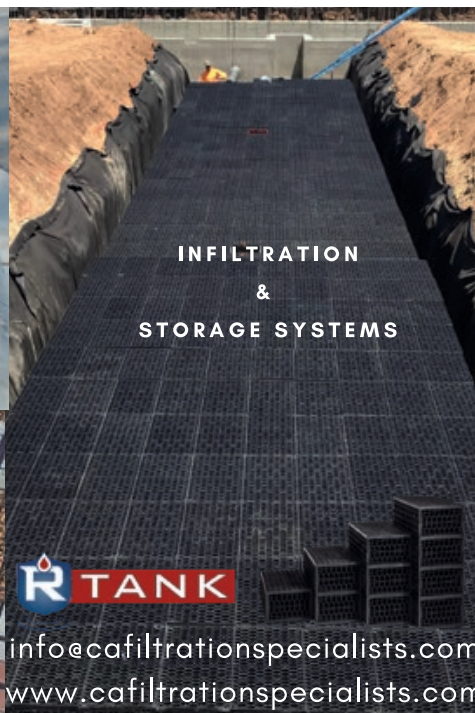
*(Gullywasher completely acknowledges that WSC's participation at its CASQA suite in no way gives any form of approval whatsoever of the Gullywasher processes! WSC participation is purely meant to be a means to educate the attendees of how important stormwater quality is.)*

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# Monterey Conference Center and Area Information

## Monterey Conference Center

Situated in the heart of Monterey's downtown and waterfront area, the Monterey Conference Center and two adjacent hotels are the location for the 2019 CASQA Annual Conference.

Monterey Conference Center  
One Portola Plaza, Monterey, CA



Courtesy of Monterey Conference Center

## Area Information

Situated on California's Central Coast, the Monterey Peninsula has many exceptional areas to explore if you are extending your stay at the conference or have family or friends with you who are not attending the conference. The Peninsula is home to world class golf courses and the scenic 17-Mile Drive in Pebble Beach, including the iconic Lone Cypress tree, a species native only to this region. You can browse the art galleries of nearby Carmel-by-the-Sea and the shops along Monterey's Cannery Row, its history described in the books of Nobel and Pulitzer Prize winning author John Steinbeck. You can explore the shoreline in a kayak available near the Conference Center. You can walk the stunning trails of Point Lobos State Reserve, a geologic wonder along the Pacific Ocean near Carmel, with rocks dating back over 60 million years to the Paleocene age. Farther inland, you can explore the rare talus caves and towering rock spires of Pinnacles National Park formed 23 million years ago when multiple volcanoes erupted. The Monterey Bay Aquarium offers wonderful exhibits of regional marine habitats, but save your visit for the Monday night Networking Event which will be held there.

A photograph of several seals playing in the water, splashing and swimming. The image is used as a background for a sustainability message.

*Enjoy* YOUR VISIT RESPONSIBLY

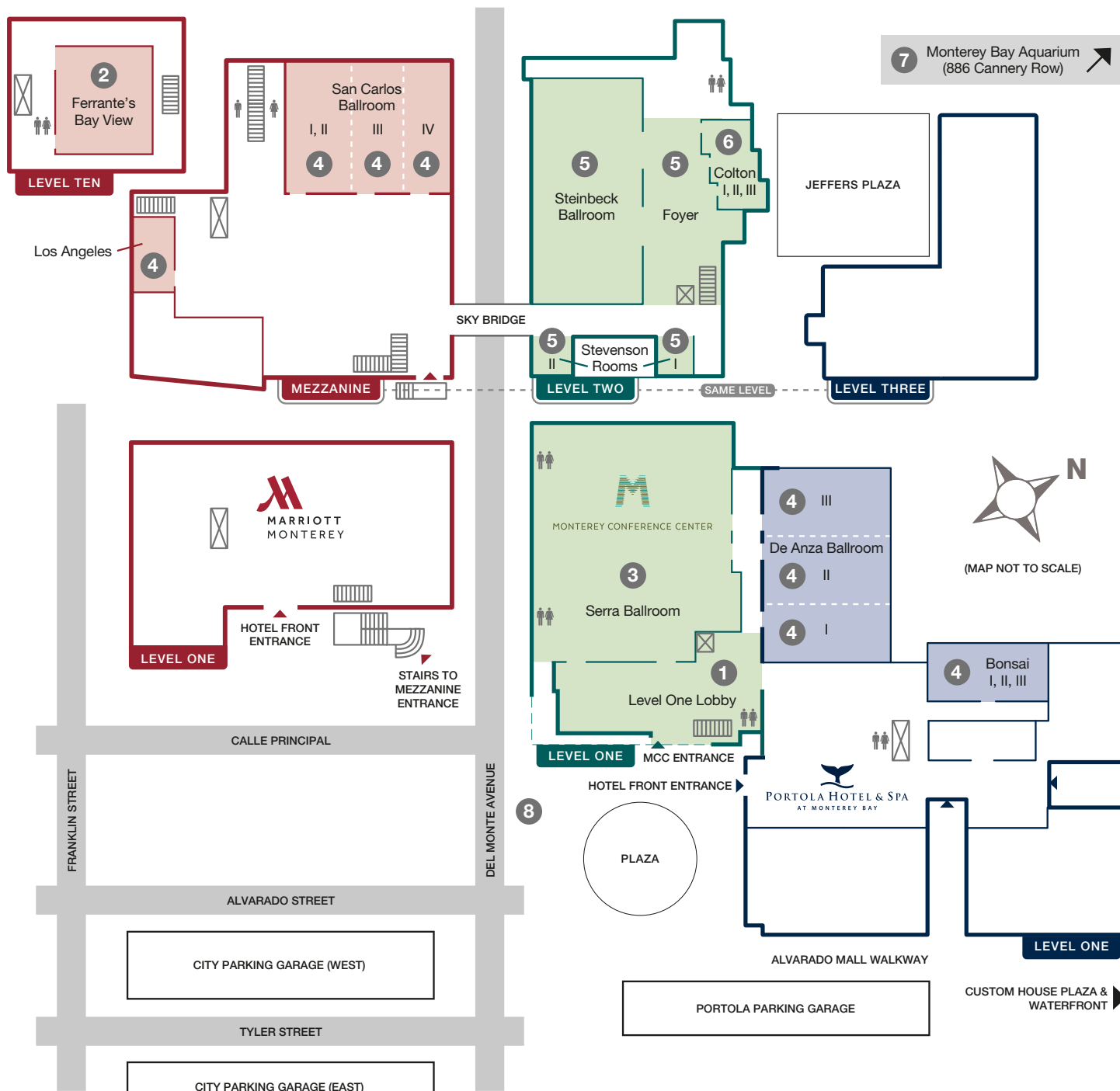
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Help us preserve the beauty of Monterey County for future generations by ensuring your visit is *low impact*. Protect our Monterey Bay and local waterways by disposing of trash, recyclables, cigarette butts, and pet waste in proper receptacles. Our extensive community *thanks you!*

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# Conference Map



- Monterey Conference Center (MCC)
- Monterey Marriott
- Portola Hotel and Spa at Monterey Bay

**Parking available in city parking structures 1 block from the MCC:**  
**Downtown West:** Between Tyler, Franklin and Del Monte; Hourly parking with an attendant; First hour free, then \$0.50 per 20 minutes up to max. \$10 per day (special exceptions may apply).  
**Downtown East:** On Washington and Tyler between Franklin and Del Monte; Gate-operated entrances; Flat fee \$7 per day.

1. Conference Services; Registration Desk; Monday Morning Break
2. Welcome Event: Sunday Evening
3. Plenary Session on Monday Morning; Awards Presentations; Lunches
4. Priming the Pump – Letting Ideas Flow; Training Workshops; Technical Program
5. Exhibits; Exhibitor Reception; Breaks on Monday Afternoon, Tuesday and Wednesday
6. Poster Presentations; Podcast Recording Sessions
7. Networking Event: Monday Evening (offsite: 1.5 miles away)
8. Bus Pick-Up / Drop-Off – Field Tour and Networking Event



JENSEN DETENTION RESERVOIR

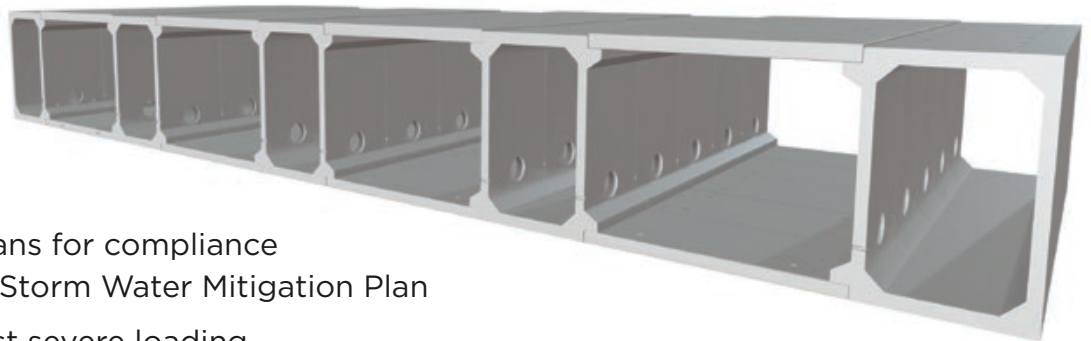
# Accelerate stormwater detention



Lakewood, California - 4.5 Million Gallon JDR at Mayfair Park

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The 2019 conference will follow the 11 tracks listed below over 3 days to include conversational sessions, training workshops, technical presentations, panels, forums, and roundtable discussions.

View the 2019 Conference Agenda at [www.casqa.org/events/annual-conference/agenda](http://www.casqa.org/events/annual-conference/agenda). The online conference agenda provides an up-to-date hourly view of the program and speakers. (See the agenda on pages 16–29.)

## Priming the Pump – Letting Ideas Flow

New for 2019, attendees will have the opportunity to join topical conversational sessions on Monday, October 7, 2019 from 10:30 a.m. to 12:00 p.m. These sessions will be facilitator-led but focused on participant-driven conversations. Each of the seven sessions, Fire Recovery and Water Quality, Funding, Future of Water, Green Infrastructure, Homelessness and Water Quality, Stormwater Use, and Trash, will have multiple simultaneous conversation breakouts. The sessions will be part of the tracks indicated on this page with a **P**.

## Training Workshop Program

The Training Workshop Program includes 3-hour afternoon training workshops on Monday, October 7 from 1:30 p.m. to 5:00 p.m., following 7 of the tracks indicated to the right with a **W**. Also included is an offsite field tour.

**Field Tour:** Monterey and Beyond (limited number of participants)

The field tour will visit water quality-related sites in adjacent areas to Monterey.

## Technical Program

The Technical Program comprises conference thematic technical presentations, panels, forums, and roundtable discussions on Tuesday, October 8 and Wednesday, October 9 in the 11 tracks indicated with a **T**.

## Tracks

### Construction and Post-Fire Response: **P W T**

This track will focus on proven strategies to resolve construction issues, innovative BMPs and controls, challenges and solutions to site management and cost controls, resolving monitoring and sampling issues, and dealing with the challenges of linear utilities and overhead best management programs. Additionally, this track will explore innovative post-wildfire response.

### Funding and Finance: **P W T**

This track will address stormwater program and infrastructure funding and financing, including asset management, its role in full stormwater program integration, and different funding and financing mechanisms that may be available to the regulated community.

### Industrial: **W T**

This track will highlight all things industrial, such as pollutant source assessments, exceedance response action levels, monitoring, Total Maximum Daily Loads (TMDLs), and Clean Water Act citizen lawsuits.

### Legislation, Policy, Permitting, Legal: **T**

This track will provide a forum for updates from regulators, discussions of future policy and legislative initiatives, examples of innovative ways that regulatory obligations can be met, and updates from legal experts.

### Monitoring, Science, and Data Management: **W T**

This track will highlight innovations in monitoring, data collection tracking, stormwater geographic information systems (GIS) and emerging science and technologies related to pollutants of concern and advances in watershed planning and modeling.

### Municipal Program Implementation: **P T**

This track will focus on the challenges and solutions to implementing a municipal stormwater program for both Phase I and Phase II agencies and cover emerging issues for municipalities such as post-fire stormwater management response and transient encampments.

### Outreach and Education: **W T**

This track will share experiences creating and implementing innovative stormwater outreach campaigns, building community to foster a sense of stewardship, using social media as an outreach tool, reaching school-age children with programs in/out of the classroom, and measuring effectiveness.

### Stormwater Infrastructure and Natural Waterways: **P W T**

This track will highlight examples of physical infrastructure for improving stormwater runoff quality, protection of natural channels from hydromodification, prevention of flood impacts to property, recharge of groundwater supplies, and rainwater harvesting and focus on pilot studies, design lessons learned, operation and maintenance challenges/solutions, and adaptability after installation.

### Sustainability: **P T**

This track will look at sustainable practices, legal requirements, opportunities for collaboration, and programs that connect stormwater and other environmental sectors. Important topics such as water supply, water rights, groundwater recharge, Sustainable Groundwater Management Act (SGMA) planning, energy, watershed management, resiliency planning, and climate change will be discussed.

### Total Maximum Daily Loads

#### Development and Implementation: **T**

This track will highlight the science that goes into developing TMDLs, the challenges of complying with TMDL-based requirements, and ways in which different parties to a TMDL can come together on implementation.

### Trash: **P W T**

This track will incorporate topics relevant to the Trash Amendments, such as full trash capture BMP implementation, monitoring methods, reporting, and demonstrating compliance under Track 2. Related topics will include source identification, effective and sustainable solutions, data comparability, micro-debris, and relationships between trash and other potential pollutants.



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- CleanWay Environmental Partners, Inc. . . . . 51
- CloudCompli . . . . . 58
- Contech Engineered Solutions . . . . . 41
- Downstream Services, Inc. . . . . 12/13
- Jensen Precast . . . . . 11
- StormTrap . . . . . 31

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- CBI Systems, Ltd. . . . . 33
- Clear Creek Systems, Inc. . . . . 2
- Coanda, Inc. . . . . 15
- DeepRoot . . . . . 14
- Earthsavers . . . . . 40
- EnviroCert International, Inc. . . . . 52
- Frog Creek Partners . . . . . 7
- G2 Construction, Inc. . . . . 5
- Hydra TMDL Systems, Inc. . . . . 6
- Hydro International . . . . . 18
- LSC Environmental Products, LLC. . . . . 30
- Monterey Regional Stormwater Management Program (Host Program Sponsor) . . . . . 4
- Mosquito and Vector Control Association of CA . . . . . 8

- Oldcastle Infrastructure . . . . . 20
- PACE Advanced Water Engineering. . . . . 42
- PAT-CHEM LABORATORIES . . . . . 16
- Porous Technologies, LLC. . . . . 32
- Soil Retention . . . . . 22
- Storm Water Inspection & Maintenance Services, Inc. . . . . 3
- StormwaterRx LLC. . . . . 50

### Regular Exhibitors

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- Aquatic Informatics Inc. . . . . 34
- AquaShield Inc. . . . . 57
- CIF Composites, Inc. . . . . 49
- Clear Water Services, LLC . . . . . 39
- CULTEC, Inc. . . . . 26
- ERTEC Environmental Systems. . . . . 46
- Filtrexx . . . . . 27
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- RJR Engineering . . . . . 48
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- StormWater - Endeavor Business Media . . . . . 28
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- WaterTectonics. . . . . 44
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# Congratulations to the 2019 CASQA Awardees

The CASQA annual awards recognize outstanding projects, activities, and people in the stormwater management profession. To learn more about CASQA's 2019 awardees, look for the blue ribbons in the conference program.

Photos and illustrations courtesy of the respective awardees

## OUTSTANDING INDUSTRIAL STORMWATER BMP IMPLEMENTATION PROJECT

### Marine Terminal Stormwater Biofiltration Treatment System

*Port of Port Angeles*

The Port of Port Angeles (Port), situated on the Port Angeles Harbor on Washington State's Olympic Peninsula, is a distribution hub for Pacific Northwest forest products across the globe. The Port operates and manages four deep-water marine terminals supporting the numerous local economy wood products and freight transportation enterprises. Washington's waters are home to the endangered Southern Resident Orca Whale and threatened salmon species, with Pacific Northwest marine facilities subject to the most stringent stormwater quality limits in the nation. To address these concerns the Port developed a strategy identifying an effective low-impact, vegetated, biofiltration treatment approach, that was flexible enough to evolve with changing site uses and future regulations. Applying a judicious feasibility evaluation, bench-scale and pilot-scale testing, the Port designed and constructed an innovative three-stage natural treatment system that immediately met their water quality goals that continues to improve over time.



Clockwise, from top left:  
Three-celled biofiltration system;  
ground view of biofiltration  
system; aerial view of terminal

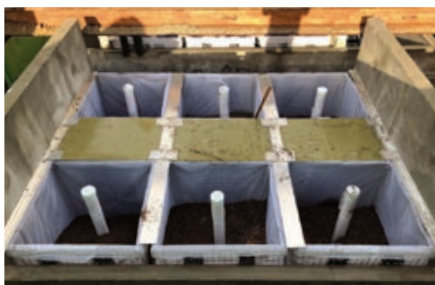
## OUTSTANDING INDUSTRIAL STORMWATER BMP IMPLEMENTATION PROJECT

### Tenth Avenue Marine Terminal Modernization Project – Stormwater Biofiltration System

*Port of San Diego*

The *Tenth Avenue Marine Terminal Modernization Project – TIGER – Stormwater Biofiltration System Project* was developed with a team approach to maximize stormwater capture on the marine terminal. The goal was to divert the 85th percentile storm design capture volume from the existing storm drain and into a stormwater BMP facility for the entire drainage area (40.3 acres) rather than only the project footprint.

The BMP system addresses 40.3 acres of a large, busy marine terminal when only 8.8 acres of treatment were required at this location, providing opportunities to utilize the additional treated acreage for other projects once an Alternative Compliance Program is implemented on tidelands. The BMP system considers and addresses high groundwater and tidal inundation issues, while leveraging existing on-site BMPs. This is the largest modular wetland system of its kind in the world with an innovative piping system that puts the units in parallel, which saves money and space. The project is gravity fed and uses no pumps, controlling stormwater flows through orifices and weirs with design geometries determined using hydraulic modeling software.



Above, installation of media into  
1 of the 11 modular wetlands



Top right, Modular wetland is  
lowered into place



Tenth Avenue  
Marine Terminal and  
Downtown San Diego



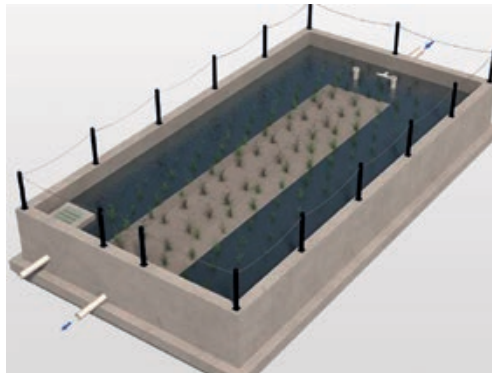
**OUTSTANDING LOW IMPACT  
DEVELOPMENT STORMWATER BMP  
IMPLEMENTATION PROJECT**

**Bioretention Basin Retrofit –  
Low Impact Development Testing and  
Demonstration Facility**

*Riverside County Flood Control and Water  
Conservation District*

The Riverside County Flood Control and Water Conservation District constructed an onsite LID Testing and Demonstration Facility in 2012 comprising of six different LID systems. The bioretention basin, one of the six systems of the facility, is one of the most widely used LID BMPs in developments throughout Riverside County. Since construction in 2012, the bioretention basin has been monitored for pollutant removal, volume reduction and maintenance requirements. The data was analyzed to assess for BMP performance in 2017. Results showed that the bioretention basin had poor pollutant removal and volume reduction rates.

The bioretention basin was retrofitted in March 2018 using a new non-field tested design to improve performance of pollutant removal and volume reduction. The new design of the basin implemented different soil types, plant types, and configuration. Since construction of the bioretention basin retrofit, stormwater effluent has been monitored and sampled to assess the effectiveness of the project. Recently collected data has shown an improvement in performance. Data will continue to be collected to learn more about effective bioretention basin design.



The new bioretention basin layout, testing a new soil mixture, new plants, and new configuration

The bioretention basin post-construction after its first storm



**OUTSTANDING NEWS, INFORMATION,  
OUTREACH, AND MEDIA PROJECT**

**Can the Trash! Clean Beach Poster Contest**

*County of Los Angeles Department of Beaches  
and Harbors*

**BLUE RIBBON POSTER**

The *Can the Trash!* Clean Beach Poster Contest is a creative environmental messaging campaign. Its tagline, "Because ocean pollution begins at home" teaches families how trash and other pollutants in their neighborhoods end up on our beaches, becoming a major cause of ocean pollution. The campaign invites 3rd through 5th graders to draw a picture with a message about protecting our beaches and ocean. The winning posters are wrapped around hundreds of trash barrels across Los Angeles County-operated beaches.

The educational components feature a colorful book with activities and games covering the various causes and consequences of pollution, and an animated song video "Clean and Blue" featuring a catchy pop tune that voices the ocean's plea for our help to stay healthy.

A dedicated website makes the educational materials easily accessible and artwork submissions can be uploaded directly to the site. Featuring multi-media elements aimed to deliver the educational material from various formats, including video, music, and print, the campaign thereby casts a wide net of appeal for various kinds of learners.

[Beaches.lacounty.gov/postercontest](http://Beaches.lacounty.gov/postercontest)



2019 winning artwork (above)



Campaign website (above);  
Educational materials (below)





## OUTSTANDING NEWS, INFORMATION, OUTREACH, AND MEDIA PROJECT

### #ThatsMyBay

Port of San Diego

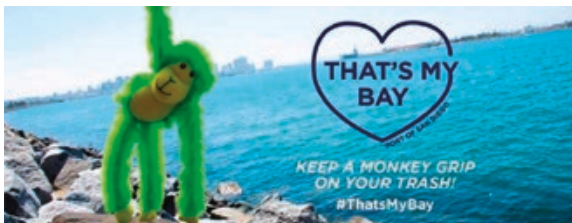
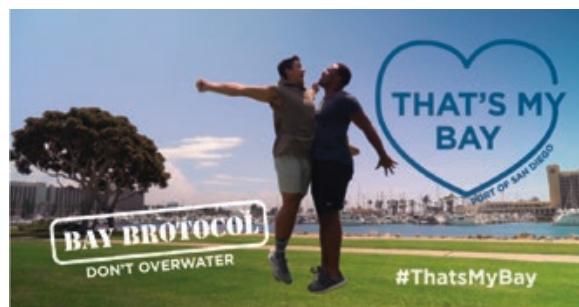
#ThatsMyBay is a behavior change, pollution prevention campaign, that seeks to increase environmental stewardship among tourists and San Diego residents who visit the San Diego Bay by creating brand identity and using empathetic visual imagery. The campaign uses a series of approximately 30-second videos with “tips” on how to keep the bay clean. With over six million impressions during the first 10 months of the campaign, #ThatsMyBay has exceeded expectations.

While still relatively new, the campaign has already demonstrated a positive impact on the San Diego Bay community by encouraging the target audiences to help keep the Bay healthy. Components of #ThatsMyBay extend beyond social media with live events to create additional opportunities for the public to learn about and get involved in pollution prevention. In addition, the strategic framework from which the campaign was developed enables #ThatsMyBay to grow with the Port’s needs and adapt to various pollution prevention scenarios—ensuring the campaign can be timeless. For more information please visit [portofsandiego.org/thatsmybay](http://portofsandiego.org/thatsmybay).



Pollution Pirate Pete demonstrates it can take hundreds of years for plastic debris to break down

Bro-cean Bros teach their overwatering neighbors how to take care of their bay



Hang-on Hank points out much of the trash in the bay comes from parking lots and busy streets

## OUTSTANDING REGIONAL STORMWATER BMP IMPLEMENTATION PROJECT

### Bolivar Park Stormwater and Runoff Capture Project

City of Lakewood

The City of Lakewood implemented this innovative water capture project at Bolivar Park, which focused on maximizing water capture for pollutant load reduction and water supply needs through infiltration and use. The project captures discharges from 3,018 acres of Los Cerritos Channel watershed and addresses bacteria, copper, and zinc loads. The proposed water capture facility includes a diversion system to redirect all dry-weather urban runoff and the first flush of wet-weather runoff from the Del Amo channel through a pre-treatment system to remove trash, debris, and sediment. A pump station and drainage pipeline conveys the water into a large, buried multi-chambered storage/infiltration facility. Project innovations include:

- First “Smart” Stormwater Capture Facility in the Los Angeles Region
- First facility to use treated stormwater for spray irrigation to supply almost 100% of annual demand for the park
- First city-led stormwater project funded entirely through the Caltrans Cooperative Implementation Agreement Program



Various stages of construction



## LEADERSHIP AWARD

**CASQA is proud to welcome Jeffrey D. Endicott into the ranks of recipients for its most prestigious award recognizing outstanding leadership within CASQA and exceptional contributions to the stormwater quality management profession**

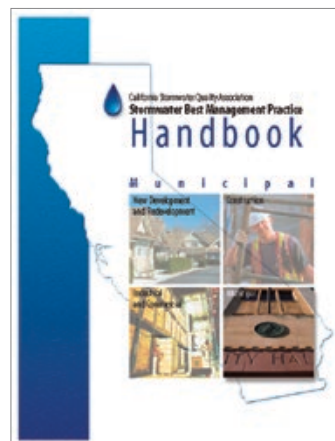
*Jeffrey D. Endicott*

Jeff has been an integral part of the stormwater profession since the early 1990s, initially as a consultant to the Riverside County, San Bernardino County, and Ventura County stormwater programs and then to Caltrans starting in 1995. In 1997, his stormwater influence expanded with his involvement on the Storm Water Quality Task Force (SQTF). Jeff was an early advocate for the creation of a more formal organization, leading to the formation of what is today known as CASQA, where he served on the Board of Directors for 13 years and on the Executive Program Committee for 15 years. Jeff served in the role of Project Manager for the development of the "go-to-reference" for stormwater – the 2003 CASQA BMP Handbooks. He is currently a Vice President at CASC Engineering and Consulting, and recently served as the President of the International Erosion Control Association – Western Chapter, and the President of the American Public Works Association – Inland Empire Branch. Jeff values the dispersal of information for the advancement of all, and his willingness to share his years of experience with those around him makes him an outstanding leader and an effective mentor.



Jeff pictured left, preparing a sampling video for the CASQA Conference

Jeff has been a member of the CASQA Annual Conference Subcommittee for 15 years (shown below, speaking at the 2012 conference)



One of the BMP handbooks, to which Jeff has made major contributions

## OUTSTANDING SERVICE AWARDEES

**Congratulations to the 2019 CASQA Outstanding Service Awardees**

*Karen Ashby  
Jill Bicknell  
Richard Boon  
Brian Currier  
Kathleen Harrison*

*Jeremy Laurin  
Matt Lentz  
Sandy Mathews  
Stephanie Reyna-Hiestand  
Armand Ruby*

*Lisa Skutecki  
Dave Tamayo  
Richard Watson  
Matt Yeager*



Photo courtesy of Monterey Bay Aquarium

## Keynote Speaker

**Dr. Kyle Van Houtan | Plenary Session on Monday, October 7 at 8:30 a.m.**

Dr. Kyle Van Houtan is the Chief Scientist of the Monterey Bay Aquarium where he oversees the Aquarium's research, including programs devoted to sea otters, white sharks and plastic pollution. Dr. Van Houtan concurrently holds an adjunct professorship at the Nicholas School of the Environment at Duke University and is an adjunct at the Monterey Bay Aquarium Research Institute (MBARI). His research explores global change, biodiversity conservation, historical ecology, and ethics.



# Sunday and Monday, October 6–7

## SUNDAY

4:00p–7:00p REGISTRATION DESK AND CONFERENCE SERVICES (Monterey Conference Center Level One: Serra Lobby)

5:00p–7:00p WELCOME EVENT (Monterey Marriott Level 10: Ferrante's Bayview): Appetizers will be served; cash bar

## MONDAY

7:00a–8:30a COFFEE & REFRESHMENTS (Monterey Conference Center Level One: Serra Lobby)

7:30a–5:30p REGISTRATION DESK AND CONFERENCE SERVICES (Monterey Conference Center Level One: Serra Lobby)

8:30a–10:00a PLENARY SESSION (Monterey Conference Center Level One: Serra Ballroom)  
WELCOME AND OPENING REMARKS: Daniel Apt, Chair–CASQA Board of Directors • CASQA AWARDS ANNOUNCEMENT: Mark Lombos, Chair–Awards Committee  
LEADERSHIP AWARD ANNOUNCEMENT AND ACCEPTANCE • KEYNOTE ADDRESS: Dr. Kyle Van Houtan, Monterey Bay Aquarium

10:00a–10:30a BREAK (Monterey Conference Center Level One: Serra Lobby) AND POSTER PRESENTATION AUTHORS AVAILABLE (Monterey Conference Center Level Two: Colton I, II, III)

10:00a–5:00p POSTER SESSION (Monterey Conference Center Level Two: Colton I, II, III)

OFFSITE FIELD TOUR 10:30a to 4:00p	<b>Field Tour Monterey and Beyond</b>	Moderator: Chris Ogaz, CASC Engineering and Consulting, Inc.  This year the field tour will be a partial-day tour that will visit a green street project and the Pure Water Monterey Ground Water Replenishment Project site, which has a planned ribbon cutting ceremony set for early October. The tour will require moderate mobility. Light layered attire, comfortable closed-toe shoes, hats and/or sunglasses are recommended. Water and lunch are provided.  Bus pick-up/drop-off: Monterey Conference Center (left of front entrance)
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PRIMING THE PUMP– LETTING IDEAS FLOW (Morning)	<b>Funding and Finance Debating New School Procurement Alternatives</b>	<b>Stormwater Infrastructure and Natural Waterways Green Infrastructure</b>	<b>Stormwater Infrastructure and Natural Waterways Stormwater Use</b>	<b>Sustainability Future of Water</b>	<b>Trash</b>	<b>Municipal Program Implementation Homelessness and Water Quality</b>	<b>Construction and Post-Fire Response Fire Recovery and Water Quality</b>
	Room: Portola - De Anza Ballroom I	Room: Portola - De Anza Ballroom II	Room: Portola - De Anza Ballroom III	Room: Portola - Bonsai I, II, III	Room: Marriott - San Carlos I, II	Room: Marriott - San Carlos III	Room: Marriott - San Carlos IV
MODERATOR	Chad Praul Environmental Incentives	Jason Drew NCE	David Pohl Burns & McDonnell Engineering	Andrea Crumpacker Weston Solutions, Inc.	Kristina Hysler Wood Environment & Infrastructure Solutions, Inc.	Nicole West LSA	Michael Harding Michael V. Harding, CPESC
10:30a to 12:00p	Facilitated Discussions:  What Are the Essential Elements of an In-Lieu Fee, WQ Credit, or Trading Program for Water Quality? <i>Grant Sharp County of Orange</i>  Paying-for-Performance: See Why It Works for Anne Arundal County <i>Chad Praul Environmental Incentives</i>  Broadening Measure W's Success: Should the State Incentivize Local Stormwater Funding Programs? <i>Michael Drennan Drennan Enterprises, Inc.</i>  Funding an Alternative Compliance Program Demonstration in the SF Bay Area <i>Rinta Perkins City of Santa Clara</i>	Facilitated Discussions:  Green Infrastructure Basics / Green Infrastructure 101 <i>Dave Rios NCE</i>  Planning for Green Infrastructure <i>Amanda Booth City of San Pablo</i>  O&M of Green Infrastructure <i>Matt Fabry San Mateo Countywide Water Pollution Prevention Program</i>  Communicating Green Infrastructure to the Elected Officials / Community / Public <i>Jason Drew NCE</i>  Technical Design / Designing (alternative topic)	Facilitated Discussions:  Opportunities for Stormwater Capture and Use  Priorities for Overcoming Constraints for Greater Stormwater Use  <i>Stephanie Gaines County of San Diego</i> <i>Lisa Skutecki Brown &amp; Caldwell</i> <i>Kristen Ruffell Sanitation Districts of Los Angeles County</i> <i>Chris Crompton County of Orange</i>  <i>Richard Boon Riverside County Flood Control and Water Conservation District</i> <i>Richard Gilb San Diego County Regional Airport Authority</i>	Facilitated Discussions:  Build a Better Box? <i>Lisa Haney Orange County Sanitation District</i>  Everyone is Self-Sufficient? <i>Brian Currier Office of Water Programs at Sacramento State</i>  Tied to the Future of Governance and Permitting? <i>Dana Booth Sacramento County</i>  What is the Value of Water? <i>Matt Yeager Riverside County Flood Control and Water Conservation District</i>	Facilitated Discussions:  Trash BMP Challenges and Successes <i>Beth Baldwin Alameda Countywide Clean Water Program</i>  Proving Trash Load Capture Equivalency <i>Kristine Corneillie Larry Walker Associates, Inc.</i>  MS4 and Receiving Water Trash Monitoring <i>Terra Miller-Cassman Wood Environment &amp; Infrastructure Solutions, Inc.</i>  Working with Neighboring Jurisdictions <i>Andy Rodgers West Yost Associates</i>	Facilitated Discussions:  Municipal Management Programs <i>Jennifer Stern City of Oakland</i>  Encampments and Flood Control Facilities <i>Amanda Carr County of Orange</i>  Water Quality and Stormwater Agencies' Role <i>Kirsten Struve Santa Clara Valley Water District</i>  Homelessness and Trash <i>Richard Muhl Central Valley Regional Water Quality Control Board</i>	Facilitated Discussions:  Pollutants of Concern: Natural and Anthropogenic Sources <i>Nancy Gardiner and Bob Scott Haley &amp; Aldrich, Inc.</i>  Hydrologic Changes in the Watershed Due to Wildfire: Flooding and Debris Flows <i>Andrew Earle and Ian Paton Wright Water Engineers, Inc.</i>  Hazard Assessment Using sUAVs in Inaccessible Areas <i>Robert Leeper Haley &amp; Aldrich, Inc.</i>  Remote Technologies for Water Quality Impact Assessment <i>Stephanie Race Earth Labs Group</i>

Note: Agenda is provisional and subject to change





12:00p–1:30p	LUNCH (Monterey Conference Center Level One: Serra Ballroom) AND EXHIBITOR FOCUS (Monterey Conference Center Level Two: Steinbeck Ballroom)						
12:00p–6:00p	EXHIBIT HALL OPEN (Monterey Conference Center Level Two: Steinbeck Ballroom)						
TRAINING WORKSHOPS (Afternoon)	<b>Funding and Finance</b> <b>Build a Stormwater P3</b>  Room: Portola - De Anza Ballroom I	<b>Stormwater Infrastructure and Natural Waterways</b> <b>From Green Light to Green Street: Design Considerations for Bioretention in the Public Right of Way</b>  Room: Portola - De Anza Ballroom II	<b>Industrial</b> <b>Industrial General Permit</b>  Room: Portola - De Anza Ballroom III	<b>Outreach and Education</b> <b>Sparking Action: Social Science Best Management Practices for Promoting Water Quality Protection</b>  Room: Portola - Bonsai I, II, III	<b>Trash</b> <b>On-Land Visual Trash Assessment: "CliffsNotes" Hands-on Training and Tweaks Based on Lessons Learned So Far</b>  Room: Marriott - San Carlos I, II	<b>Monitoring, Science, and Data Management</b> <b>Stormwater Sampling Methodologies: A Primer for All QSPs, QISPs, and Municipal Staff</b>  Room: Marriott - San Carlos III	<b>Construction and Post-Fire Response</b> <b>Funding Post-Fire Remediation: Traditional Funding Sources and Innovative Financial Services Products for the Second Response</b>  Room: Marriott - San Carlos IV
MODERATORS	Ken Susilo Geosyntec Consultants, Inc.	Liesbeth Magna EOA, Inc.	Jeremy Laurin Pacific Gas and Electric Matthew Lentz GSI Environmental Inc.	Jennifer Tabanico Action Research	Rachael Keish Keish Environmental	Matthew Renaud Alta Environmental Sean Porter Apex Companies LLC	Mike Harding Michael V. Harding, CPESC
1:30p to 3:00p	Speakers: <i>Greg Cannito Corvias</i>  <i>Klair White Ernst &amp; Young Infrastructure Advisors LLC</i>  <i>Elizabeth Cousins Nossaman LLP</i>  <i>Wing Tam City of Los Angeles</i>  <i>Ken Susilo Geosyntec Consultants, Inc.</i>	Speakers: <i>Liesbeth Magna EOA, Inc.</i>  <i>Jill Bicknell EOA, Inc.</i>  <i>Peter Schultze-Allen EOA Inc.</i>  <i>Daniel Apt Olauun</i>  <i>Sauna Dunton Lotus Water</i>	Speakers: Pollutant Source Assessments <i>Ed Othmer Stantec</i>  Selecting & Implementing BMPs <i>Katie McCoy Kennedy Jenks Consultants</i>  Infiltration 101 <i>Tim Simpson GSI Environmental Inc.</i>  Regulator Panel Discussion on Implementing the IGP Amendment <i>Laurel Warddrip (Lead) State Water Resources Control Board</i> <i>Pushpa Zachariah State Water Resources Control Board</i> <i>Regional Water Quality Control Board Panelists:</i> <i>Pavlova Vitale and Nerissa Schrader Los Angeles</i>  <i>Laurie Walsh San Diego</i>  <i>Margaret Monahan San Francisco</i>	Speakers: <i>Jennifer Tabanico Action Research</i>  <i>Joey Schmitt Action Research</i>	Speakers: <i>Rachael Keish Keish Environmental</i>  <i>Chris Sommers EOA, Inc.</i>  <i>Selena Gonzalez Keish Environmental</i>	Speakers: QSP Sampling <i>Matthew Renaud Alta Environmental</i> <i>Jennifer Peterson NV5</i>  QISP Sampling <i>Sean Porter Apex Companies</i> <i>David Renfrew Alta Environmental</i>  MS4 Sampling <i>Garth Engelhorn Alta Environmental</i> <i>Tommy Wells FMF Pandion</i>  Laboratory Perspectives on Sampling <i>Dennis Doring Enthalpy Analytical</i>  SMARTS Ad Hoc Report Compliance <i>Speaker TBD State Water Resources Control Board</i>	Speakers: Calrecycle Programs for Debris Control <i>Robert Healy California Department of Resource Recycling and Recovery</i>  New Instruments to Finance Landscape Resilience under a Changing Climate <i>Stephanie Race Earth Labs Group</i>  The USDA Emergency Watershed Program <i>Speaker TBD</i>
3:00p–3:30p	BREAK AND EXHIBITOR FOCUS (Monterey Conference Center Level Two: Steinbeck Ballroom)						
3:30p–5:00p	Training workshop continued	Training workshop continued	Training workshop continued	Training workshop continued	Training workshop continued	Training workshop continued	Training workshop continued
5:00p–6:00p	EXHIBITOR FOCUS (Monterey Conference Center Level Two: Steinbeck Ballroom)						
6:30p–10:00p	NETWORKING EVENT (Offsite: Monterey Bay Aquarium) Bus pick-up/drop-off: Monterey Conference Center (left of front entrance)						

## CASQA Has Launched a Podcast Series!

[casqa.org/news-library/podcasts](https://casqa.org/news-library/podcasts)



CASQA will be recording its first podcasts at the 2019 CASQA Annual Conference, focused on all things stormwater. The podcasts will dive deeper into conference discussions, get to know more about the leaders in the stormwater field, and share CASQA's organizational goals. Conference attendees will be able to watch the podcast recordings throughout the conference.

► The recording schedule and location are listed on page 22.





## JOIN US IN MONTEREY AT THE 15<sup>TH</sup> ANNUAL CASQA CONFERENCE OCTOBER 7-9, 2019

VISIT BOOTH #12-13 TO LEARN WHY WE DO WHAT WE DO!

- 🏠 CERTIFIED STORMWATER MAINTENANCE AND COMPLIANCE
- 📊 PIPELINE CONDITION ASSESSMENT
- 🔧 PIPELINE MAINTENANCE
- 🌳 PIPELINE REHABILITATION AND UV GRP LINING
- 🔧 UNDERGROUND UTILITIES REPAIR AND REPLACEMENT
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TUESDAY								
7:00a–8:30a	COFFEE & REFRESHMENTS (Monterey Conference Center Level Two: Steinbeck Ballroom)							
7:30a–5:30p	REGISTRATION DESK AND CONFERENCE SERVICES (Monterey Conference Center Level One: Serra Lobby)							
8:00a–5:00p	POSTER SESSION (Monterey Conference Center Level Two: Colton I, II, III)							
8:00a–7:00p	EXHIBIT HALL OPEN (Monterey Conference Center Level Two: Steinbeck Ballroom)							
TECHNICAL SESSION <b>1</b>	<b>Legislation, Policy, Permitting, Legal Planning</b>  Room: Portola - De Anza Ballroom I	<b>Stormwater Infrastructure and Natural Waterways Innovative Regional BMPs</b>  Room: Portola - De Anza Ballroom II	<b>Outreach and Education Measuring Outreach Success</b>  Room: Portola - De Anza Ballroom III	<b>Total Maximum Daily Loads Development and Implementation Polychlorinated Biphenols (PCBs) – #1</b>  Room: Portola - Bonsai I, II, III	<b>Trash Implementation in Arid Areas and by Non-Traditional MS4s</b>  Room: Marriott - San Carlos I, II	<b>Monitoring, Science, and Data Management High Resolution Data Applications</b>  Room: Marriott - San Carlos III	<b>Construction and Post-Fire Response Experience with the Construction General Permit</b>  Room: Marriott - San Carlos IV	<b>Stormwater Infrastructure and Natural Waterways China Sponge City Experiences</b>  Room: Marriott - Los Angeles
MODERATORS	Hawkeye Sheene Woodard & Curran	Raina Dwivedi Tetra Tech	Jenna Voss County of Orange	Jason Freshwater Santa Ana Regional Water Quality Control Board	Elizabeth Yin Larry Walker Associates, Inc.	Sheri Dister Weston Solutions, Inc.	Daniel Cortese City of Hemet	Chris Crompton County of Orange
8:30a to 8:55a	A National Program Focused on Performance of Stormwater Infrastructure: Updates on the Stormwater Testing and Evaluation for Products and Practices (STEPP) Initiative  <i>Seth Brown Storm and Stream Solutions, LLC</i>	Culver City's Partnerships to Implement Culver Blvd Stormwater and Road Realignment Project  <i>Lee Torres Culver City</i>	Community Based Social Marketing Case Studies from the Central Coast  <i>Lucas Sharkey Central Coast Regional Water Quality Control Board</i>	Countywide Attainment of PCBs Load Reductions Using Green Infrastructure  <i>Amanda Booth City of San Pablo</i>	It's Dry Down There – Capturing Trash in the Desert With Little to No Water Flow  <i>Melanie Sotelo CASC Engineering and Consulting, Inc. (representing City of Palm Springs)</i>	Identifying Opportunities for Sustainable Street Designs and Green Infrastructure Using Innovative Models Based on High-Resolution LiDAR Data  <i>Leila Talebi Paradigm Environmental</i>	A Fundamental Approach to Soil Stabilization and Revegetation on Disturbed Sites  <i>Brian Free Profile Products LLC</i>	Guidelines, Technical Considerations, and Case Studies for China's Sponge City Performance Evaluation  <i>Li Junqi Beijing University of Architectural Industry</i>
9:00a to 9:25a	Considering USEPA's Integrated Planning Framework for a Phase I Stormwater Program  <i>Paul Hartman Larry Walker Associates, Inc.</i>	A Tale of Two Watersheds: Bellflower's Innovative Stormwater Facility  <i>Bernardo Iniguez City of Bellflower</i>	Discover Your Watershed Today! Community Engagement and Education via Historic Watershed Mapping  <i>Meghan Daniels Parsons Corporation</i>	Improving Bioretention Best Management Practice (BMP) Effectiveness – Evaluating Pollutant Removal from Stormwater with Biochar Amended Bioretention Soil Media (BSM)  <i>Lisa Sabin EOA, Inc.</i>	Track 2: Implementing a Trash Plan  <i>Selena Gonzalez Keish Environmental</i>	High-Resolution Integrated Watershed Studies  <i>Sean Torres City of San Diego</i>	CGP: The Permit You Thought You Knew  <i>Andrew Sidor Michael Baker International</i>	The Effectiveness Evaluation of China's Phase I Sponge City Effort: Findings and Lessons Learned  <i>Xie Yingxia Chinese Association of Water Supply and Drainage</i>

## Follow the CASQA Conference on Social Media

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TECHNICAL SESSION 2	<b>Legislation, Policy, Permitting, Legal</b> Panel: Understanding the Current Status and Potential Impacts of the State Water Board Biostimulatory Substances Objective and Program to Implement Biological Integrity  Room: Portola - De Anza Ballroom I	<b>Stormwater Infrastructure and Natural Waterways</b> CASQA Awardee Presentations  Room: Portola - De Anza Ballroom II	<b>Outreach and Education</b> Marketing and Metrics  Room: Portola - De Anza Ballroom III	<b>Total Maximum Daily Loads Development and Implementation</b> Polychlorinated Biphenols (PCBs) – #2  Room: Portola - Bonsai I, II, III	<b>Trash</b> Trash Control Measure Planning – #1  Room: Marriott - San Carlos I, II	<b>Monitoring, Science, and Data Management</b> Microbial Source Tracking  Room: Marriott - San Carlos III	<b>Construction and Post-Fire Response</b> Fire Responses Down South  Room: Marriott - San Carlos IV	<b>Stormwater Infrastructure and Natural Waterways</b> China Sponge City Experiences  Room: Marriott - Los Angeles
MODERATORS	Karen Ashby Larry Walker Associates, Inc.	Aldo Licitra Riverside County Flood Control and Water Conservation District	Andy McGuire County of Orange	Jason Freshwater Santa Ana Regional Water Quality Control Board	Kirsten Struve Santa Clara Valley Water District	Heather Krish City of San Diego	Melanie Sotelo CASC Engineering and Consulting, Inc.	Chris Crompton County of Orange
9:30a to 9:55a	Panelists:  Regulator Perspective <i>Jessie Maxfield State Water Resources Control Board</i>  CASQA Perspective <i>Chris Sommers EOA, Inc.</i>  Municipal Perspective <i>Joe Bellomo Willdan Engineering</i>	 <b>2019 CASQA Awardee: Outstanding Regional Stormwater BMP Implementation</b>  Bolivar Park Stormwater Capture and Runoff Capture Project  City of Lakewood  <i>Oliver Galang Craftwater Engineering, Inc.</i>	Fred & Izzy Say: “Use Emotion and Storytelling to Connect to the Public”  <i>Lisa Duba Gigantic Idea Studio, Inc.</i>	Coming to Your Agency Soon? – Managing PCBs during Building Demolition: Part 1 – Implementation  Jon Konnan EOA, Inc.	Using Land Substitution to Achieve Trash Amendments Compliance  <i>Kacen Clapper Wood Environment &amp; Infrastructure Solutions, Inc.</i>	Using Microbial Source Tracking Tools to Support Public Health Decision Making: Evaluating Beach Water Quality Following Emergency Disposal of Post-Fire Debris Flow Sediment  <i>Jared Ervin Geosyntec Consultants, Inc.</i>	QSP Services for Installation of Erosion Control BMPs in Areas Affected by the Lilac Fire  <i>Daniel Secrist CASC Engineering and Consulting, Inc.</i>	Overview of China's Fight Against Black and Odorous Waters  <i>Wang Jiazhao The National Institute of Urban Planning</i>
10:00a to 10:25a		 <b>2019 CASQA Awardee: Outstanding Low Impact Development Stormwater BMP Implementation</b>  Bioretention Basin Retrofit Low Impact Development Testing and Demonstration Facility  Riverside County Flood Control and Water Conservation District  <i>Ava Moussavi Riverside County Flood Control and Water Conservation District</i>	Ready? Open. Click. GO! Creating an Engaging Email Marketing Public Outreach Campaign  <i>Suzi Senna S. Groner Associates, Inc. (SGA)</i>	Coming to Your Agency Soon? – Managing PCBs during Building Demolition: Part 2 – Implementation  <i>Sandy Mathews Larry Walker Associates, Inc.</i>	Phase II, Track 2, No Two Alike  <i>Ann Gillespie County of San Luis Obispo</i>	Keeping up with Science: Challenges and Opportunities in Managing Water Quality with an Ever-Evolving Microbial Toolset  <i>Alexander Schriewer Weston Solutions, Inc.</i>	Post-Fire Debris Flows are Expected, Communities are Evacuating, and it's Time to Sample Because That's What We Do! Key Takeaways from Evaluating Contaminant Flux of the 2018 Holy Fire  <i>Rebekah Guill Riverside County Flood Control and Water Conservation District</i>	Shanghai Underground: The Megacity's Fight Against Illicit Connections <i>Yin Hailong School of the Environment, Tongji University</i>
10:25a–11:00a BREAK AND EXHIBITOR FOCUS (Monterey Conference Center Level Two: Steinbeck Ballroom)								



TECHNICAL SESSION <b>3</b>	<b>Legislation, Policy, Permitting, Legal Contaminant Risks and Policies</b>	<b>Stormwater Infrastructure and Natural Waterways</b> Stormwater Wastewater Nexus	<b>Outreach and Education</b> #ChangeAgent	<b>Total Maximum Daily Loads Development and Implementation Strategy</b>	<b>Trash</b> Track 2 Trash Control Measure Effectiveness	<b>Monitoring, Science, and Data Management</b> Forum: Fighting Drought with Stormwater: A Collaborative, Multicampus University of California Research Project	<b>Construction and Post-Fire Response</b> Panel: Stormwater Issues Following Wildfire: What We Can Do and Why It's Important
	Room: Portola - De Anza Ballroom I	Room: Portola - De Anza Ballroom II	Room: Portola - De Anza Ballroom III	Room: Portola - Bonsai I, II, III	Room: Marriott - San Carlos I, II	Room: Marriott - San Carlos III	Room: Marriott - San Carlos IV
MODERATORS	Matt Yeager Riverside County Flood Control and Water Conservation District	Brad Wardynski Craftwater Engineering, Inc.	Nicole West LSA	Cindy Rivers County of Orange	Chris Sommers EOA, Inc.	Daniel Apt Olaunu Stella Shao GSI Environmental Inc.	Mike Harding Michael V. Harding, CPESC
11:00a to 11:25a	Statewide Drywell Guidance Update: Results and Recommendations Moving Forward  <i>Matthew Freese State Water Resources Control Board</i>	Coastal Protection with Integrated Stormwater and Wastewater Management  <i>Tim Monahan SRT Consultants</i>	 <b>2019 CASQA Awardee: Outstanding News, Information, Outreach, and Media Project</b>  #ThatsMyBay  Port of San Diego  <i>Melissa Dailey Port of San Diego</i>	Strategies and Tools for Developing Alternative Compliance Approaches for Bacteria TMDLs Identified for the San Diego Region Bacteria TMDL  <i>Ashli Desai Larry Walker Associates, Inc.</i>	Proposition 1 Trash BMP Effectiveness Study in the San Diego River Watershed: Collaboration Among the County of San Diego, the San Diego River Conservancy, and Urban Corps of San Diego to Find Cost-Effective BMPs for Trash Reduction  <i>Vada Yoon Michael Baker International</i>	Panelists:  Overview of MRPI Project <i>Stanley Grant Emily Parker Virginia Tech</i>  Microbial Communities and Their Impact on Various Functions of Biofilter <i>Patricia Holden University of California, Santa Barbara</i>  Removal of Trace Metals by Biofilter <i>Haizhou Lu University of California, Riverside</i>  Removal of Indicator Bacteria and Pathogens by Biofilter <i>Yiping Cao Source Molecular Stella Shao GSI Environmental Inc.</i>	Lilac Fire 2017 Panelists:  San Diego County's Role <i>René Vidales San Diego County</i>  Development of the Hazard Assessment and Mitigation Plan (HAMP) <i>Kathleen Harrison Geosyntec Consultants, Inc.</i>  The Role of the Hydraulic Application Contractor <i>John Richards Pacific Restoration Group, Inc.</i>  The Role of the Drainage and Sediment Control Contractor <i>Larry Holley Summit Erosion Control</i>  The Role of a QSP as Third Party Inspector <i>Daniel Secrist CASC Engineering and Consulting, Inc.</i>
11:30a to 11:55a	PFAS – Current and Future Regulatory Outlook  <i>Lisa Kammer Weston Solutions, Inc.</i>	A New Perspective on Dry Weather Flow Diversions – Benefits for Both Stormwater and Wastewater/Reuse Systems  <i>Kathleen Higgins Woodard &amp; Curran</i>	Communication Game: Level Up and Make a Difference  <i>Lisa Haney Irvine Ranch Water District</i>	South Orange County Comprehensive Human Waste Source Reduction Strategy Work Plan  <i>Clint Boschen Tetra Tech</i>	Trash Full Capture Equivalency and Lessons Learned About Control Measure Effectiveness from Over Five Years of On-Land Visual Trash Assessments  <i>Chris Sommers EOA, Inc.</i>		
12:00p–1:30p LUNCH & OUTSTANDING SERVICE AWARDS ANNOUNCEMENT (Monterey Conference Center Level One: Serra Ballroom)							

## JOIN CASQA



CASQA is a non-profit professional member association dedicated to the advancement of stormwater quality management through collaboration, education, implementation guidance, regulatory review, and scientific assessment.

Regular or affiliate membership in CASQA is open to organizations and individuals in the stormwater field, whether holders of NPDES permits or not. If you are not currently a member, by joining now, you can receive substantial reductions on future CASQA annual conferences. Additional member benefits include exclusive access to the Bi-Weekly Update, Water Quality NewsFlash, Member Library, and Member Forum, as well as member discounts to online and downloadable products, and events. CASQA membership provides substantial benefits even if you are based outside California.



TECHNICAL SESSION <b>4</b>	<b>Legislation, Policy, Permitting, Legal</b> Panel: Legal Update	<b>Stormwater Infrastructure and Natural Waterways</b> Forum: Greenlighting Green Stormwater Infrastructure—Insights for Design-Construction-Maintenance	<b>Industrial Metals Role in Industrial Compliance</b>	<b>Total Maximum Daily Loads Development and Implementation Modeling</b>	<b>Trash</b> Panel: Lessons Learned and Challenges of Maintenance of Large Full Trash Capture Devices	<b>Monitoring, Science, and Data Management</b> BMP Assessment and Modeling	<b>Construction and Post-Fire Response</b> Fire Response Planning
	Room: Portola - De Anza Ballroom I	Room: Portola - De Anza Ballroom II	Room: Portola - De Anza Ballroom III	Room: Portola - Bonsai I, II, III	Room: Marriott - San Carlos I, II	Room: Marriott - San Carlos III	Room: Marriott - San Carlos IV
MODERATORS	Ryan Baron Best Best & Krieger	Sandy Mathews Larry Walker Associates, Inc.	Matthew Lentz GSI Environmental Inc.	Andrea Zimmer CDM Smith	Ben Nguyen City of San Jose	Rebekah Guill Riverside County Flood Control and Water Conservation District	Claudia Steiding CASC Engineering and Consulting, Inc.
1:30p to 1:55p	Panelists: <i>Tess Dunham</i> <i>Somach Simmons &amp; Dunn</i>  <i>Shawn Hagerty</i> Best Best & Krieger	Panelists: <i>Sandy Mathews</i> <i>Larry Walker</i> Associates, Inc.  <i>Alina Constantinescu</i> <i>Larry Walker</i> Associates, Inc.  <i>Sharon Gosselin</i> Alameda County Public Works - Clean Water Program	Potential IGP Implications from the National Academy of Sciences MSGP Report  <i>Michael Stenstrom</i> University of California, Los Angeles	Groundwater-Surface Water Modeling to Support Instream Flow and Algae TMDL Management in the Ventura River Watershed  <i>Al Preston</i> Geosyntec Consultants, Inc.	Panelists: <i>Ben Nguyen</i> <i>Jennifer Seguin</i> <i>Sam Anzaldual</i> City of San Jose	BMP Performance Assessment Based on California State-Wide Monitoring Data  <i>Ken Schiff</i> Southern California Coastal Water Research Project (SCCWRP)	Post Fire Mitigation: "Why We Select Which Sites to Mitigate"  <i>Kathleen Harrison</i> Geosyntec Consultants, Inc.
2:00p to 2:25p			Out of Sight But Not Out of Mind: The Role of Our Roofs in Storm Water Pollution  <i>Elliott Ripley</i> Ashworth Leininger Group	Rainbow Creek TMDL Adaptive Management Planning Tool  <i>Brianna Datti</i> Tetra Tech		Modernizing the Los Angeles County Watershed Management Modeling System (WMMS): The Latest Advancements in Modeling Stormwater, Water Quality, and BMP Performance  <i>Stephen Carter</i> Paradigm Environmental	Utilizing Unmanned Aerial Systems for Post-Wildfire Hazard Assessments and Hydrologic Response Planning  <i>Robert Leeper</i> Haley & Aldrich, Inc.

## Watch the CASQA Podcast Recordings

### MONDAY, OCTOBER 7

- 10:20 am – 10:40 am Continuing the Conversation... Dr. Kyle Van Houtan, Conference Keynote Speaker
- 3:00 pm – 3:20 pm Get to Know... CASQA Conference Sponsor Programs
- 5:15 pm – 5:35 pm Continuing the Conversation... Sparking Action: Social Science Best Management Practices for Promoting Water Quality Protection

### TUESDAY, OCTOBER 8

- 8:00 am – 8:20 am Get to Know... CASQA Scholarship Awardees
- 10:30 am – 10:50 am Stormwater... Why We Do What We Do
- 1:10 pm – 1:30 pm Continuing the Conversation... Stormwater Issues Following Wildfire: What We Can Do and Why It's Important
- 1:30 pm – 1:50 pm Get to Know... CASQA Outstanding Service Awardees
- 3:50 pm – 4:10 pm Continuing the Conversation... the MS4 Stormwater Program – What's Ahead From a National Perspective

## Monterey Conference Center Level Two: Colton I, II, III

### TUESDAY, OCTOBER 8 (cont.)

- 4:10 pm – 4:30 pm Continuing the Conversation... Regulatory Update
- 5:10 pm – 5:30 pm Continuing the Conversation... the Current Progress on Implementing Stormwater Capture and Use Programs – Constraints and Opportunities
- 5:00 pm – 7:00 pm Roving Reporter: CASQA Conference Impressions and the Benefits of Being a CASQA Member
- 5:00 pm – 7:00 pm Roving Reporter: Conference Exhibitors

### WEDNESDAY, OCTOBER 9

- 8:00 am – 8:20 am Get Involved in CASQA!
- 8:20 am – 8:40 am What CASQA Is Up to and Why: CASQA's Vision, Priorities, and Projects
- 9:10 am – 9:30 am Get to Know... the California Stormwater Authority
- 1:30 pm – 1:50 pm Continuing the Conversation... Addressing Stormwater and Homelessness Through Pay for Performance Partnerships




TECHNICAL SESSION <b>5</b>	<b>Legislation, Policy, Permitting, Legal</b> <b>Panel: Regulatory Update</b>	<b>Stormwater Infrastructure and Natural Waterways</b> <b>Bioretention</b>	<b>Industrial</b> <b>IGP Amendments</b>	<b>Municipal Program Implementation</b> <b>Panel: The MS4 Stormwater Program – What's Ahead from a National Perspective</b>	<b>Sustainability</b> <b>Regional Coordination</b>	<b>Trash</b> <b>Innovations in Trash Management</b>	<b>Construction and Post-Fire Response</b> <b>Forum: Communicating with Regulators – The Construction General Permit</b>
	Room: Portola - De Anza Ballroom I	Room: Portola - De Anza Ballroom II	Room: Portola - De Anza Ballroom III	Room: Portola - Bonsai I, II, III	Room: Marriott - San Carlos I, II	Room: Marriott - San Carlos III	Room: Marriott - San Carlos IV
MODERATORS	Dominic Roques Central Coast Regional Water Quality Control Board	Merrill Taylor Craftwater Engineering, Inc.	Laura Carpenter Brown and Caldwell	Scott Taylor Michael Baker International/ National Municipal Stormwater Alliance	Lisa Skutecki Brown and Caldwell	Cathleen Garnand Santa Barbara County	Kadi Whiteside Southern California Edison  Lucy Cortez-Johnson CASC Engineering and Consulting, Inc.
2:30p to 2:55p	Panelists: National Regulatory Perspective <i>Ellen Blake</i> <i>U.S. EPA Region 9</i>  Central Coast Regulatory Perspective <i>Dominic Roques</i> <i>Central Coast Regional Water Quality Control Board</i>	Green Stormwater Infrastructure Assessments in Santa Clara County, CA; An In-Situ Analysis of Select Bioretention Project  <i>Laura Bates</i> <i>San Jose State University</i>	The 2018 IGP Amendment Compliance Options, a Potential Pathway from ERA Level 2 to Baseline Status  <i>Marty Spongberg</i> <i>Wood Environment &amp; Infrastructure Solutions, Inc.</i>	Panelists: National Legislative Update <i>Steve Dye</i> <i>Water Environment Federation (WEF)</i>  WEF Stormwater Institute Initiatives <i>Seth Brown</i> <i>Storm and Stream</i>	The Role of Stormwater in Alleviating a Coastal Water Supply Shortage: The Monterey Peninsula Story  <i>Jeff Condit</i> <i>Monterey Regional Stormwater Management Program/ Monterey One Water</i>	Curb Inlet Screens as Trash Controls – A Study of the Effectiveness of These Devices in Comparison to Certified Full Capture Systems  <i>John Fusco</i> <i>EOA, Inc.</i>	Panelists: <i>Amy Kronson</i> <i>State Water Resources Control Board</i>  <i>Brandon Roosenboom</i> <i>State Water Resources Control Board</i>  <i>Richard Muhl</i> <i>Central Valley Regional Water Quality Control Board</i>
3:00p to 3:25p	San Francisco Bay Area Regulatory Perspective <i>Keith Lichten</i> <i>San Francisco Bay Regional Water Quality Control Board</i>  STORMS Perspective <i>Chris Beegan</i> <i>State Water Resources Control Board</i>	Lessons Learned Bioretention Basin BMPs  <i>Paul Landon</i> <i>Keish Environmental</i>	State Water Board Perspective – New Industrial Stormwater General Permit Requirements  <i>Laurel Warddrip</i> <i>State Water Resources Control Board</i>	National Stormwater Initiatives and the National Municipal Stormwater Alliance <i>Scott Taylor</i> <i>Michael Baker International</i>  State and Local Stormwater Initiatives <i>Geoff Brosseau</i> <i>California Stormwater Quality Association (CASQA)</i>	Integrated Watershed Improvement and Water Resources Project Planning in North Orange County  <i>Daniel Apt</i> <i>Olaunu</i>	Are Video-Based Trash Assessments Feasible?  <i>Brett Gamble</i> <i>Mikhail Ogawa</i> <i>Engineering</i>	
3:25p–4:00p	BREAK AND EXHIBITOR FOCUS (Monterey Conference Center Level Two: Steinbeck Ballroom)						



2018 conference scene



TECHNICAL SESSION <b>6</b>	<b>Legislation, Policy, Permitting, Legal</b> <b>Panel: Integrated Water Quality Management: Striving for a Sustainable Future by Breaking Down Silos</b>  Room: Portola - De Anza Ballroom I	<b>Stormwater Infrastructure and Natural Waterways</b> <b>Green Infrastructure Implementation and Tracking</b>  Room: Portola - De Anza Ballroom II	<b>Industrial Roundtable: Get to Know Your Solution Providers – Speed Dating</b>  Room: Portola - De Anza Ballroom III	<b>Municipal Program Implementation</b> <b>Alternative Compliance Lessons</b>  Room: Portola - Bonsai I, II, III	<b>Sustainability Panel: The Current Progress on Implementing Stormwater Capture and Use Programs – Constraints and Opportunities</b>  Room: Marriott - San Carlos I, II	<b>Trash Trash Control Measure Planning – #2</b>  Room: Marriott - San Carlos III	<b>Construction and Post-Fire Response</b> <b>BMPs Challenges and Considerations</b>  Room: Marriott - San Carlos IV
MODERATORS	Lisa Haney Irvine Ranch Water District	Ken Schiff Southern California Coastal Water Research Project (SCCWRP)	Sean Porter Apex Companies LLC	Stephanie Reyna-Hiestand City of Tracy	David Pohl Burns & McDonnell Engineering	Kristine Corneillie Larry Walker Associates, Inc.	Beth Smiley Thunder Mountain Enterprises, Inc.
4:00p to 4:25p	Panelists: <i>Steve Jepsen</i> Southern California Alliance of Publicly Owned Treatment Work (SCAP)  <i>Daniel Apt</i> Olaunu  <i>Richard Luthy</i> Stanford University	 <b>2018 CASQA Awardee: Outstanding Stormwater Research</b>  International Stormwater BMP Database  <i>Eric Strecker</i>	Panelists: <i>Rob Chapler</i> StormwaterRx LLC  <i>Nathan Holloway</i> Clear Water Services  <i>TJ Mothersbaugh</i> WaterTectonics  <i>Matt Mahoney</i> Clear Creek Systems, Inc.	Lessons Learned from Developing an Offsite Storm Water Alternative Compliance Program  <i>Raymond Ngo</i> City of San Diego	Panelists: <i>Stephanie Gaines</i> County of San Diego  <i>Chris Beegan</i> State Water Resources Control Board  <i>Richard Gilb</i> San Diego Airport Authority	Let's Talk Trash: Developing a Scalable Trash Capture Study from Planning to Operations  <i>Jim Harry</i> City of San Diego	Post-Fire Construction BMP Challenges and Enforcement in Unincorporated Sonoma County  <i>John Mack</i> Sonoma County
4:30p to 4:55p	<i>Matthew Fabry</i> City/County Association of Governments of San Mateo County  Panelist TBD State Water Resources Control Board	Tracking the Benefits of Green Stormwater Infrastructure (GSI) – A New Data Visualization Tool for Public and Private GSI in Santa Clara County  <i>Nick Zigler</i> EOA, Inc.		Alternative Compliance and Flow Thru Treatment – Lessons Learned  <i>Jarrod Miller</i> <i>Michael Baker</i> International	<i>Paul Alva</i> County of Los Angeles  <i>Chris Crompton</i> County of Orange  <i>Kristen Ruffell</i> Sanitation Districts of Los Angeles County  <i>Lisa Skutecki</i> Brown & Caldwell  <i>Richard Boon</i> Riverside County Flood Control and Water Conservation District	Comparison of the Difference Between Visual Trash Assessments for Priority Land Uses Along Roadway Segments and Within Parcels Adjacent to Roadway Segments  <i>Teresa Lyndon</i> D-Max Engineering, Inc.	Planning for Burned Watersheds: Plan Now or Pay Later  <i>Ben Willardson</i> CWE
5:00p–7:00p	EXHIBITOR RECEPTION (Monterey Conference Center Level Two: Steinbeck Ballroom)						



2018 conference session



JENSEN DEFLECTIVE SEPARATOR

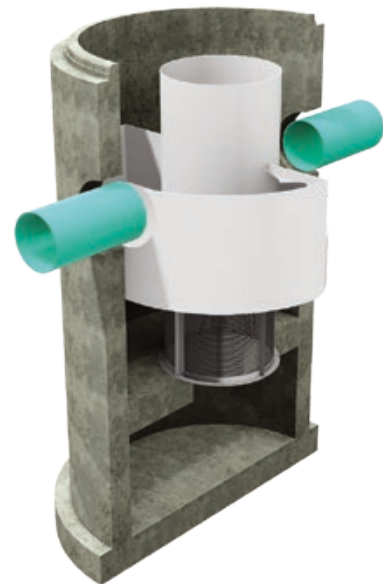
# Accelerate stormwater treatment



**Long Beach, California - 16-Foot Diameter JDS at Long Beach Airport**

## THE JDS CONFIGURATION

- Eliminates 100% of trash discharged from stormwater drainage systems
- Only nonblocking screening system to avoid burp of trash and debris during high flows
- Certified Full Capture Device by California State Water Resources Control Board for trash capture and retention
- Certified TSS removal by New Jersey Department of Environmental Protection as manufactured treatment device for stormwater



Call us at (855) 468-5600 to speak with a stormwater engineer. [jensenprecast.com/jds](https://jensenprecast.com/jds)



WEDNESDAY							
7:00a–8:30a	COFFEE & REFRESHMENTS (Monterey Conference Center Level Two: Steinbeck Ballroom)						
7:30a–3:30p	REGISTRATION DESK AND CONFERENCE SERVICES (Monterey Conference Center Level One: Serra Lobby)						
8:00a–8:30a	EXHIBITOR FOCUS (Monterey Conference Center Level Two: Steinbeck Ballroom)						
8:00a–12:10p	EXHIBIT HALL OPEN (Monterey Conference Center Level Two: Steinbeck Ballroom)						
8:00a–1:30p	POSTER SESSION (Monterey Conference Center Level Two: Colton I, II, III)						
TECHNICAL SESSION <b>7</b>	<b>Funding and Finance</b> P3s and Alternative Funding/Delivery Approaches  Room: Portola - De Anza Ballroom I	<b>Outreach and Education</b> Building a Community of Leaders  Room: Portola - De Anza Ballroom II	<b>Industrial PFAS in Stormwater</b>  Room: Portola - De Anza Ballroom III	<b>Municipal Program Implementation</b> Making Inspections Work for You  Room: Portola - Bonsai I, II, III	<b>Sustainability Resiliency</b>  Room: Marriott - San Carlos I, II	<b>Monitoring, Science, and Data Management</b> Novel Stormwater Studies / Human Health and Sources  Room: Marriott - San Carlos III	<b>Construction and Post-Fire Response</b> Panel: Using Recycled Organics for Stormwater Management & Treatment: Challenges, Successes, & Opportunities  Room: Marriott - San Carlos IV
MODERATORS	Todd Snyder County of San Diego	Jeanette Huddleston Sacramento County	Jonathan Meronek SCS Engineers	Brenda Ponton Woodard & Curran	Stephanie Gaines County of San Diego	Amy Margolis Weston Solutions, Inc.	Craig Kolodge Association of Compost Producers (ACP)
8:30a to 8:55a	Enabling Conditions and Barriers of Community-based Public Private Partnerships (P3s)  <i>Jeremy Sokulsky</i> <i>Environmental Incentives</i>	Engaging Middle Schoolers – Future CASQA Members! – in Green Infrastructure Planning Using Flow Path Mapping and Visualization Software  <i>Juli Beth Hinds</i> <i>University of California, San Diego</i>	Emerging Contaminant: Per- and Polyfluoroalkyl Substances (PFAS) and Surface Water  <i>Laura Carpenter</i> <i>Brown and Caldwell</i>	City of San Diego's Industrial Commercial Inspection Program Gets a New Look  <i>Julie MarLett</i> <i>City of San Diego</i>	Resilient South City: Resilient By Design and Water Quality  <i>Eric Zickler</i> <i>Lotus Water</i>	California's First Chemical Human Health Risk Assessment on Stormwater – Results from the Santa Susana Field Laboratory  <i>Ruth Custance</i> <i>Geosyntec Consultants, Inc.</i>	Panelists:  Returning to Baseline – A Year Later <i>Brendan Mulholland</i> <i>Lawrence Berkeley National Laboratory</i>  Post-Fire Hazardous Stormwater Treatment – What Works... What Doesn't <i>Todd Thalamer</i> <i>CalRecycle</i>
9:00a to 9:25a	Follow the Money – Integrating Stormwater into Community Development  <i>Chris Helmer</i> <i>City of Imperial Beach</i>	Rain Guardians: Protecting Green Infrastructure by Leveraging Environmental Stewardship in Neighborhoods  <i>Meghan Daniels</i> <i>Parsons Corporation</i>	PFAS in Stormwater: What We Know  <i>Rula Deeb</i> <i>Geosyntec Consultants, Inc.</i>	Public Outreach Strategies Improve Commercial/ Industrial Stormwater Management Programs  <i>Erin Lennon</i> <i>EOA, Inc.</i>	Battle-Testing Green Infrastructure Plans for Future Climate Change Resiliency  <i>Matthew Fabry</i> <i>City/County Association of Governments of San Mateo County</i>	Residential Drainage Areas with Onsite Wastewater Treatment Systems Contribute HF183 During Wet Weather  <i>Neil Searing</i> <i>County of San Diego</i>	Public Policy Implications on the Use of Recycled Organics for Watershed Protection <i>Charles Helget</i> <i>Republic Services</i>  Caltrans Two Year Evaluation of Compost Best Management Practices <i>Scott Dowlan</i> <i>Caltrans</i>

## We Value Your Feedback!

Thank you for your participation in the CASQA Annual Conference. The organizing subcommittee would like to invite you to complete our conference evaluation survey. Your feedback will enable us to improve our conferences and better meet your needs.

If you are interested in completing a conference survey, you can do so via the Conference Survey icon in the CASQA Annual Conference Mobile App, scan the code on the right, or go to [www.surveymonkey.com/r/K83LY5W](https://www.surveymonkey.com/r/K83LY5W).

Thank you!







TECHNICAL SESSION <b>8</b>	<b>Funding and Finance</b> Panel: Development and Implementation of the Los Angeles County Safe, Clean Water Program Room: Portola - De Anza Ballroom I	<b>Outreach and Education</b> Stakeholder Engagement Room: Portola - De Anza Ballroom II	<b>Industrial</b> Forum: How Litigation and Regulation Drive Technology – The Perfect Versus the Good Room: Portola - De Anza Ballroom III	<b>Municipal Program Implementation</b> Managing Stormwater Infrastructure Room: Portola - Bonsai I, II, III	<b>Sustainability</b> Stormwater as a Resource Room: Marriott - San Carlos I, II	<b>Monitoring, Science, and Data Management</b> Monitoring Programs Room: Marriott - San Carlos III	<b>Trash</b> Panel: Comply with the Trash Amendment and Save the Planet: Stopping Plastic and Tobacco Waste at the Source Room: Marriott - San Carlos IV
MODERATORS	Richard Watson Richard Watson & Associates	Jennifer Kaiser Vallejo Flood & Wastewater District	Wayne Rosenbaum Environmental Law Group LLP	Paul Glenn CDM Smith	TJ Moon Los Angeles County	Brianna Menke City of San Diego	Peter Schultze-Allen EOA Inc.
9:30a to 9:55a	Panelists: <i>Richard Watson Richard Watson &amp; Associates Russ Bryden Los Angeles County Corinne Bell Natural Resources Defense Council Diana Mahmud City of South Pasadena</i>	Student Outreach: Utilizing One Program for Compliance with Another  <i>Kory Hebner Sonoma County Water Agency</i>	Panelists: <i>Wayne Rosenbaum Environmental Law Group LLP Sean Porter Apex Companies LLC Ian Adam Fuscoe Engineering Ed Othmer MWH Global / Stantec Matthew Lentz GSI Environmental Inc.</i>	Identifying and Eliminating Dry Weather Flows, a Paired Monitoring and Outreach Approach  <i>Reed Thornberry City of San Marcos</i>	Stormwater Capture in West Los Angeles: Collaborating to Build a Multi-Benefit Project  <i>Brian Dietrick Woodard &amp; Curran</i>	How Riverside County Flood Control and Water Conservation District Optimizes Use of Monitoring Resources To Do What We Do Across 7,300 Square Miles  <i>Rebekah Guill Riverside County Flood Control and Water Conservation District</i>	Panelists:  A Framework for the Next Generation of Municipal Foodware Policies <i>Peter Schultze-Allen EOA Inc.</i>  Foodware and Tobacco Waste Policies in Santa Cruz County <i>Tim Goncharoff County of Santa Cruz</i>
10:00a to 10:25a	<i>John Heintz Latham &amp; Watkins LLP</i>	When It Rains, It Pours: Exploring Resident Engagement With a Rain Barrel Outreach Campaign  <i>Reid Bogert San Mateo Countywide Water Pollution Prevention Program</i>		Proactive Maintenance Planning Through Purposeful Data Collection: Applying Lessons Learned from 32 miles of Stormwater Pipe Inspections  <i>Emir Williams City of San Diego</i>	Planning for Stormwater to Supplement San Diego's Pure Water Program  <i>Jim Rasmus Carollo Engineers, Inc.</i>	Truckee River Water Quality Monitoring, The Program—A Ten Year Update  <i>Stefan Schuster CDM Smith</i>	Foodware Policy Investigation in San Mateo County <i>Eun-Soo Lim County of San Mateo</i>  Tobacco Waste Policy <i>Joanne Brasch California Product Stewardship Council</i>
10:25a–11:15a BREAK, EXHIBITOR FOCUS AND PRIZE DRAWING (Monterey Conference Center Level Two: Steinbeck Ballroom)							





TECHNICAL SESSION <b>9</b>	<b>Funding and Finance</b> Estimating Program Costs: Examples, Resources, and a Trash Example	<b>Outreach and Education</b> Tools for Inspiring Change	<b>Industrial CASQA Awardee Presentations</b>	<b>Municipal Program Implementation</b> Roundtable: Addressing Stormwater and Homelessness through Pay for Performance Partnerships	<b>Sustainability Sustainable Methods for Parks</b>	<b>Monitoring, Science, and Data Management</b> Accurately Quantifying Non-Stormwater Flows	<b>Trash</b> Trash Control Measure Planning – #3
	Room: Portola - De Anza Ballroom I	Room: Portola - De Anza Ballroom II	Room: Portola - De Anza Ballroom III	Room: Portola - Bonsai I, II, III	Room: Marriott - San Carlos I, II	Room: Marriott - San Carlos III	Room: Marriott - San Carlos IV
MODERATORS	Bronwyn Kelly Carollo Engineers, Inc.	Bill Dean BCK Programs, LLC	Lisa Haney Irvine Ranch Water District	Chad Praul Environmental Incentives, LLC	Kelly Havens Geosyntec Consultants, Inc.	Katie Padilla City of San Diego	Paul Hartman Larry Walker, Associates, Inc.
11:15a to 11:40a	Trash Order Compliance Program Costs and Cost Recovery Strategies  <i>Stephanie Shamblyn Gray HDR</i>	Thinking Outside the Box – Creating Engaging Public Outreach Video Campaigns  <i>Arlene Chun San Bernardino County Stormwater Program</i>	 <b>2019 CASQA Awardee: Outstanding Industrial Stormwater BMP Implementation Project</b>  Tenth Avenue Marine Terminal Modernization Project – Stormwater Biofiltration System  Port of San Diego  <i>Christian Braun Port of San Diego</i>  <i>Alex Yescas HDR</i>	Panelists:  <i>Matt Sjöholm Third Sector Capital Partners, Inc.</i>  <i>Kirsten Struve Santa Clara Valley Water District</i>  <i>Amanda Booth City of San Pablo</i>  <i>Amanda Carr County of Orange</i>	Modernizing Park and Zoo Relevancy: How to Increase Sustainability, Improve Resiliency, and Protect Water Availability  <i>Jennifer Walker Watearth, Inc.</i>	Flow Source Forensics: Using Multiple Lines of Evidence to Identify and Quantify Dry-Weather Flow Sources  <i>Joanna Wisniewska County of San Diego</i>	Trash Amendment Compliance – A Municipal Roll Out Plan for the Future  <i>Tim Murphy City of Carlsbad</i>
11:45a to 12:10p	Developing Resources for Assessing Costs and Benefits in Stormwater Management  <i>Erik Porse Office of Water Programs at Sacramento State</i>	Tactical Green Infrastructure: Implementing Simple, Low-Cost, and Fast-Paced Stormwater Projects  <i>Kevin Perry Urban Rain Design, Inc.</i>	 <b>2019 CASQA Awardee: Outstanding Industrial Stormwater BMP Implementation Project</b>  Port of Port Angeles – Marine Terminal Stormwater Biofiltration Treatment System  Port of Port Angeles  <i>Laura Weiden Kennedy Jenks Consultants</i>		Malibu Legacy Park: Nine Years of Success and Lessons Learned  <i>Persephone St. Charles Woodard &amp; Curran</i>	How Accurate are My Flow Data? Water Level Sensor Evaluation to Assess Confidence in Compliance Assessments  <i>Jeremy Burns Wood Environment and Infrastructure, Inc.</i>	State Trash Amendment Planning for Large Municipalities Using GIS  <i>Charles Mohrlock County of San Diego</i>
12:10p–1:30p LUNCH, CONFERENCE SCHOLARSHIP PROGRAM AWARDS ANNOUNCEMENT, CONFERENCE THANK YOU'S (Monterey Conference Center Level One: Serra Ballroom)							

## Continuing Education Credits

Professional development credits can be earned for in-person attendance and webcast viewing. Verification forms are available at CASQA Conference Services.

### 2019 Participating Organizations (pending approval of the conference program)

- Certified Inspector Sediment and Erosion Control (CISEC)
- Certified Erosion, Sediment and Stormwater Inspector (CESSWI)
- Certified Municipal Separate Storm Sewer System Specialist (CMS4S)
- Certified Professional in Erosion and Sediment Control (CPESC)
- Certified Professional in Storm Water Quality (CPSWQ)
- California Water Environment Association (CWEA)
- Minimum Continuing Legal Education (MCLE)
- Professional Engineers (PE)



TECHNICAL SESSION <b>10</b>	<b>Funding and Finance</b> <b>Forum: Managing an Enterprise in Local Government – Best Practices</b>  Room: Portola - De Anza Ballroom I	<b>Stormwater Infrastructure and Natural Waterways</b> <b>Concrete Pavement BMPs</b>  Room: Portola - De Anza Ballroom II	<b>Industrial Permit Compliance Methods</b>  Room: Portola - De Anza Ballroom III	<b>Municipal Program Implementation</b> <b>Proactive Asset Planning</b>  Room: Portola - Bonsai I, II, III	<b>Sustainability Forum: Fostering Urban Capture and Use</b>  Room: Marriott - San Carlos I, II	<b>Monitoring, Science, and Data Management</b> <b>Data Management</b>  Room: Marriott - San Carlos III	<b>Trash</b> <b>Receiving Water Trash Reduction and Monitoring</b>  Room: Marriott - San Carlos IV
MODERATORS	Elizabeth Treadway Wood Environment and Infrastructure, Inc.	Vicki Kalkirtz City of San Diego	Elisa Garvey Carollo Engineers	Richard Boon Riverside County Flood Control and Water Conservation District	Chris Beegan State Water Resources Control Board	Bonnie de Berry EOA, Inc.	Chris Sommers EOA, Inc.
1:30p to 1:55p	This forum will engage attendees in a discussion of best practices for managing the “business” of stormwater services.  Attendees will discuss how best practices have evolved in their agencies as well as methods to transition to an enterprise operation.	Sweeper Pilot Study & Porous Pavement  <i>Jim Hook</i> City of San Diego	Temporary and Pilot Treatment Systems as Interim Compliance Under the California IGP  <i>Kristine Sommer</i> Clear Water Services, LLC	Preparing for a CBP3: Start with a Dynamic GSI Accounting and Planning System  <i>Heidi Niggemeyer</i> City of Salinas	Panelists:  <i>Brian Currier</i> Office of Water Programs at Sacramento State  <i>Daniel Apt</i> Olaunu	Using Federated Data and Open APIs to Improve Understanding, Prioritization and Management  <i>Eric Bollens</i> CloudCompli, Inc.	Trash Booms – Costs, Benefits, and Challenges to an Alternative Trash Capture Device  <i>Kirsten Struve</i> Santa Clara Valley Water District
2:00p to 2:25p		Pervious Concrete Pavement Pilot Study at Heavy Traffic Site  <i>Vik Bapna</i> CWE	No Exposure... No Problem!  <i>Kate Downey</i> Clements Environmental Corporation	City of San Diego Watershed Asset Management Plan Evolution  <i>Sumer Hasenin</i> City of San Diego		Achieving Consistent and Efficient MS4 Permit Compliance and Reporting with ArcGIS Online  <i>Craig Gooch</i> Psomas	New Receiving Water Trash Monitoring Protocols – Preliminary Results from the San Francisco Bay Area  <i>Paul Randall</i> EOA, Inc.
TECHNICAL SESSION <b>11</b>	<b>Funding and Finance</b> <b>Roundtable: Moving the Needle – How to Make My Stormwater Program Politically Relevant to Garner Funding</b>  Room: Portola - De Anza Ballroom I	<b>Stormwater Infrastructure and Natural Waterways</b> <b>Siting BMPs in Challenging Locations</b>  Room: Portola - De Anza Ballroom II	<b>Industrial IGP Case Studies</b>  Room: Portola - De Anza Ballroom III	<b>Municipal Program Implementation</b> <b>Long Term Planning Big and Small</b>  Room: Portola - Bonsai I, II, III	<b>Sustainability Green Infrastructure</b>  Room: Marriott - San Carlos I, II	<b>Monitoring, Science, and Data Management</b> <b>Stormwater Programs</b>  Room: Marriott - San Carlos III	<b>Trash</b> <b>Plastics from Macro to Micro</b>  Room: Marriott - San Carlos IV
MODERATORS	Jason Drew NCE	Nancy Gardiner Haley & Aldrich, Inc.	Dave Mercier Michael Baker International	Kristina Hysler Wood Environmental and Infrastructure, Inc.	Heidi Niggemeyer City of Salinas	Garth Engelhorn Alta Environmental	Patrick Kuga Michael Baker International
2:30p to 2:55p	Panelists:  <i>Jason Drew and Dave Rios</i> NCE  <i>John Bliss</i> SCI Consulting Group	NYCDEP Green Infrastructure: Porous Concrete Panel Pilot Project  <i>Anthony Falcone</i> HDR	Four Years In – What Have We Learned?  <i>Kelly Hansen</i> KERAMIDA, Inc.	San Francisco's Large-Site Green Infrastructure Grant Program  <i>Sarah Bloom</i> San Francisco Public Utilities Commission	Green Stormwater Infrastructure (GSI) at the VA Palo Alto Health Care System  <i>Heather Halkola</i> VA Palo Alto Health Care System	An Overview of the Washington Stormwater Center  <i>John Stark</i> Washington State University	Stemming the Tide of Plastics with a Foodware Ordinance  <i>Agnes Martelet</i> City of Carmel
3:00p to 3:25p		How Can We Make These BMPs Work at Our Facility?  <i>Debbie Nakamura</i> Metropolitan Water District of Southern California	Choose Your Own Exceedance Response Action Adventure: If at First You Don't Succeed, Try Another BMP  <i>Julie Walters</i> Geosyntec Consultants, Inc.	School District Phase II Designation Planning: Lessons Learned from 16 Years of Storm Water Management  <i>Annika Dorman</i> D-Max Engineering, Inc.	GI as a Strategy for Community Resiliency and Placemaking: The North Richmond Watershed Connections Project  <i>John Steere</i> Contra Costa County Watershed Program	Validating Stormwater Program Effectiveness with Standardized Outfall Stormwater Monitoring  <i>Krista McDonald</i> 2NDNATURE	Microparticles and Microplastics in San Francisco Bay Area Stormwater  <i>Alicia Gilbreath</i> San Francisco Estuary Institute



# CASQA Poster Presentations

CASQA is pleased to include a poster session at the conference. The posters will be displayed all days on Level Two of the conference center (Colton I, II, III). The poster authors will be available to answer questions at the Monday morning break and during other breaks as available.

## Oral Presentation + Poster Presentation

Green Stormwater Infrastructure Assessments in Santa Clara County, CA; An In-Situ Analysis of Select Bioretention Project  
*Laura Bates, San Jose State University*

Public Outreach Strategies Improve Commercial/Industrial Stormwater Management Programs  
*Erin Lennon, EOA, Inc.*

Truckee River Water Quality Monitoring The Program – A Ten Year Update  
*Stefan Schuster, CDM Smith*

Utilizing Unmanned Aerial Systems for Post-Wildfire Hazard Assessments and Hydrologic Response Planning  
*Robert Leeper, Haley & Aldrich, Inc.*

## Alternate Oral Presentation + Poster Presentation

Raise the Grade for Stormwater Infrastructure Using the Envision Sustainability Rating System Tools  
*Suzanne Wilkins, CDM Smith*

## Scholarship Program Poster Presentation

**2019 CASQA Conference Scholarship Awardee:**  
Analysis of Trash Rafts in Santa Clara County Creeks  
*Kylie Kammerer, Intern at Santa Clara Valley Water District*

**2019 CASQA Conference Scholarship Awardee:**  
Using Stable Isotopes in Determining Tap Water Fractions During Dry Weather Flows in San Diego County  
*Hannah Carney, San Diego State University Department of Geography*

On-Land Visual Trash Assessments: The Methodology and Effectiveness of the On-Land Visual Trash Assessment Program  
*Evan Bosinger, EOA, Inc.*

West Little Llagas Creek Interpretive Wildlife Trail  
*Kristi Martinez-Kisso, City of Morgan Hill - Environmental Services Division*

## Poster Presentation

**2019 CASQA Awardee: Outstanding News, Information, Outreach, and Media Project:**  
Can the Trash! Clean Beach Poster Contest  
*Susana Espinosa, Los Angeles County Department of Beaches and Harbors*

Caltrans' Protect Every Drop Stormwater Public Education and Awareness Campaign: Doing Your Part  
*Ana Serrano, Caltrans*

Caltrans' Protect Every Drop Stormwater Public Education and Awareness Campaign: Litter is Preventable  
*Ana Serrano, Caltrans*

Data Collection Tools to Assess Post-Wildfire Impacts at a Watershed Level: An Approach Using Drones and Geospatial Techniques  
*Austin Kay, Alta Environmental*

Does What We Do Make a Difference? Connecting the Dots from Inspections and Outreach to Outfall Flows  
*Joey Schmitt, Action Research*

GIS-Based Screening and Prioritization in Identifying Alleys for the Los Angeles County Green Alley Master Plan  
*Sheri Dister, Weston Solutions, Inc.*

Lake Isabella Dam Safety Modification Project: Stormwater Challenges with a Large Construction Project  
*Everett Omori, U.S. Army Corps of Engineers*

Not Just Any Ordinary Sample; What You Need to Know Before Sampling PFAS  
*Bridgette Reddington, Alta Environmental*

Parking with a Purpose – Early Implementation of Green Stormwater Infrastructure  
*Julianna Martin, County of Santa Clara*

Quality Data Matters: Challenges in Effective Resource Management and Solutions through Quality Assurance  
*John Franco Saraceno, CA Department of Water Resources*

Rediscovering San Marcos: Employing Innovation into the Streetscape Design While Maximizing Land Use Efficiency and Achieving Full Storm Water Compliance  
*Pavitra Rammohan, DeepRoot Green Infrastructure LLC*

Remedial Engineered Control and Restoration of Seasonal Stream at Former Rocket Manufacturing Facility  
*Justin Evans, Ensafe, Inc.*

Simulating Storm Water Infiltration Systems Using MODFLOW-USG  
*Mehran Ebrahimi, GSI Environmental Inc.*

Storm & Sewer Water Ions Filtration Technology (SWIFT)  
*Michael Omary, Michael R. S. Omary*

Value, Methods, and Lessons Learned for Regional Large-Scale Cone Penetration Testing to Determine Infiltration Site Selection in Support of the Los Angeles Green Streets Master Plan  
*Paul Glenn, CDM Smith*

Why Aren't We Using Stormwater?  
*Ellen Mackey, Metropolitan Water District of Southern California*

Assessment of the Contribution of Utility Vault Water to Surface Water Pollution  
*Jeremy Laurin, Pacific Gas & Electric Company*

Risk-Based Threshold for a Mixture of Human and Gull-Associated Microbial Source Tracking Markers in Recreational Water: Implications for Regulatory Programs  
*Kendra Brown, Exponent*

Green Infrastructure Optimization to Achieve Pre-Development Conditions of a Semiarid Urban Catchment  
*Hessam Tavakol-Davani, Benchmark Civil Engineering and Land Surveying*

In-Depth Analysis for the Selected TMDLs Incorporated into the California Storm Water NPDES Permits- Strategic Planning to Comply with the TMDLs  
*Chris Hsu, GSI Environmental*

Prediction of Groundwater Plume Migration in Response to Stormwater Recharge  
*Bronwyn Kelly, Carollo Engineers*

Regional Stormwater Infiltration Project on a Site with Contaminated Soils, a Case Study  
*Bronwyn Kelly, Carollo Engineers*

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California Stormwater  
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In the event of a cancellation of a scheduled presentation, an alternate presentation below will be substituted.

## Funding and Finance

What Might the California Stormwater Authority Mean for Your Stormwater Program?  
*Gerhardt Hubner, California Stormwater Authority*

## Industrial

Technology to Address the Evolving Challenge of Industrial Stormwater  
*Nick Roberts, Mapistry*

Rule of Three: Training, Testing, and Teamwork  
*Cynthia Liles, Clements Environmental Corporation*

## Legislation, Policy, Permitting, and Legal

The Continuous Process of Improving Implementation  
*Aryana Moore, CASC Engineering and Consulting, Inc.*

## Monitoring, Science, and Data Management

An Environmentally Relevant Approach for Stormwater Toxicity Testing Compliance Monitoring  
*Chris Stransky, Wood Environment & Infrastructure Solutions, Inc.*

Making Your Stormwater Monitoring Data Work for You  
*Gary Conley, 2NDNATURE*

## Municipal Program Implementation

Take Your Program to the Next Level by Putting Your Data to Work For You  
*Grant Sharp, County of Orange*

## Stormwater Infrastructure and Natural Waterways

Stormwater Quality Treatment with Open Graded Friction Course Pavement in Highway Environments  
*Mark Keisler, Caltrans*

## Sustainability

Raise the Grade for Stormwater Infrastructure Using the Envision Sustainability Rating System Tools  
*Suzanne Wilkins, CDM Smith*

## Trash

Mosquitoes, Catch Basins, and Trash Prevention – Avoiding Pestilence in Neighborhoods  
*Paul Binding, Santa Cruz County Mosquito and Vector Control*



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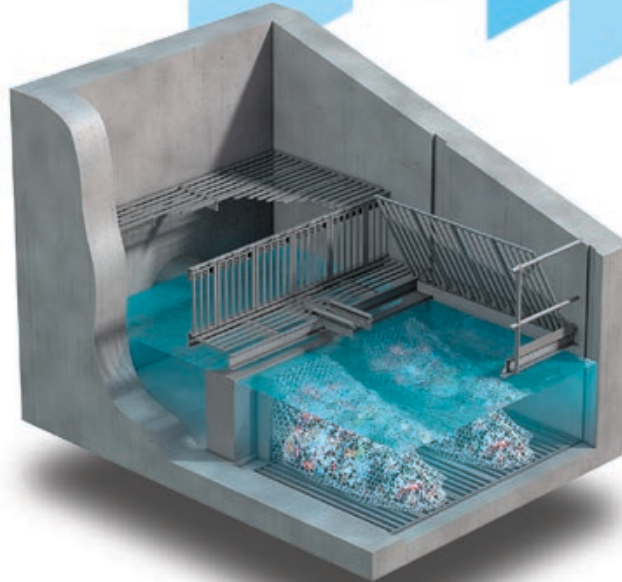
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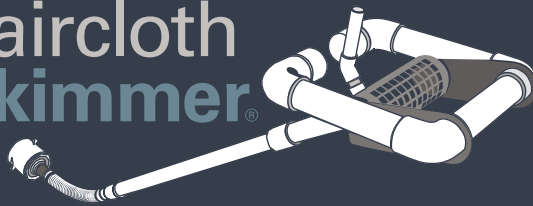
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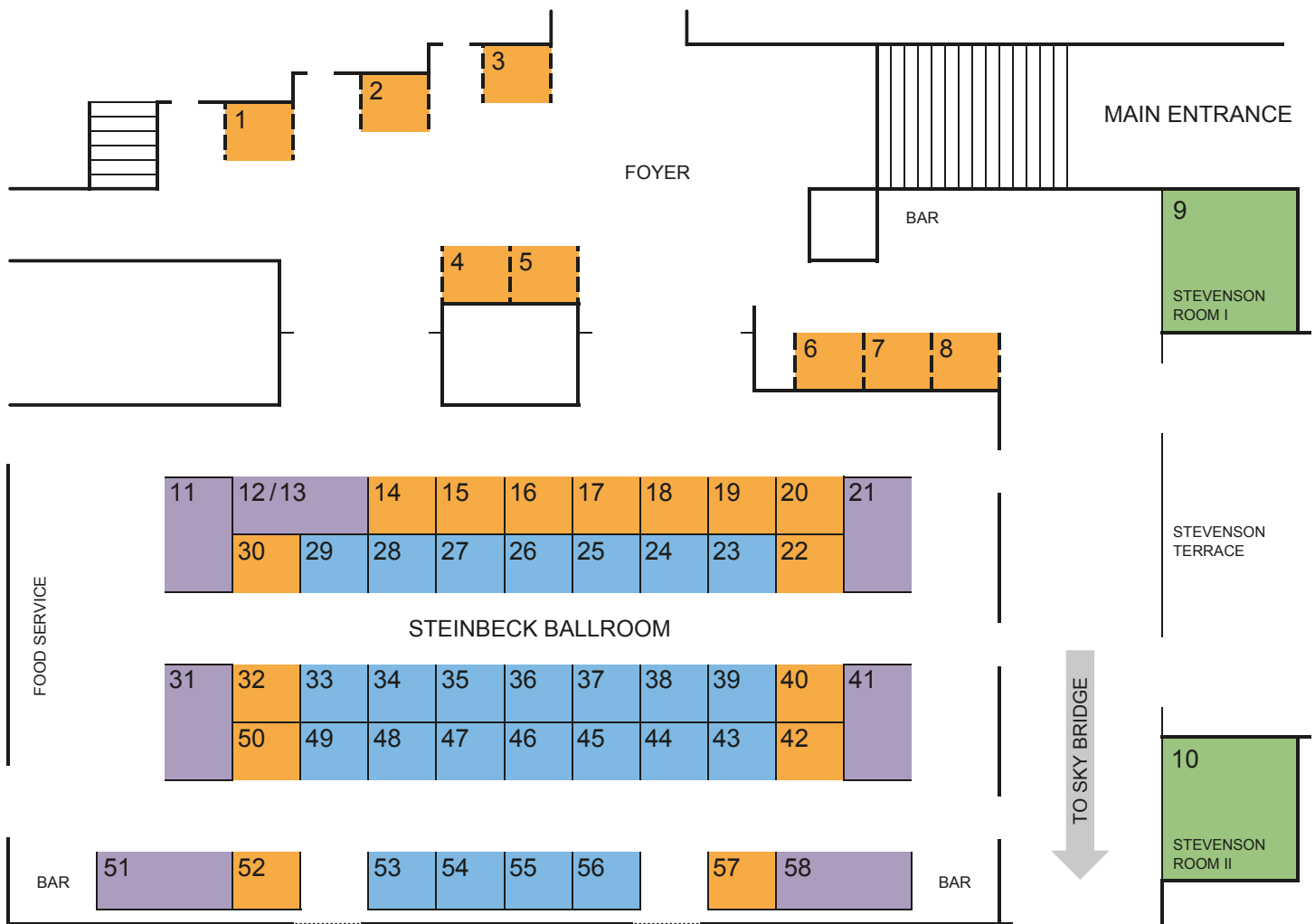
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# Conference Exhibit Hall Map



## Monterey Conference Center Level Two: Steinbeck Ballroom

### Exhibit Hall Hours

#### MONDAY, OCTOBER 7

Exhibit Hall Open	12:00 pm – 6:00 pm
Lunch and Exhibitor Focus	12:00 pm – 1:30 pm
Break and Exhibitor Focus	3:00 pm – 3:30 pm
Exhibitor Focus	5:00 pm – 6:00 pm
Networking Event (offsite)	6:00 pm – 10:30 pm

#### TUESDAY, OCTOBER 8

Exhibit Hall Open	8:00 am – 7:00 pm
Exhibitor Focus	8:00 am – 8:30 am
Break and Exhibitor Focus	10:25 am – 11:00 am
Lunch and Exhibitor Focus	12:00 pm – 1:30 pm
Break and Exhibitor Focus	3:25 pm – 4:00 pm
Exhibitor Reception	5:00 pm – 7:00 pm

#### WEDNESDAY, OCTOBER 9

Exhibit Hall Open	8:00 am – 12:10 pm
Exhibitor Focus	8:00 am – 8:30 am
Break, Exhibitor Focus, and Prize Drawing	10:25 am – 11:15 am







## BOOTH #

<b>1</b>	<b>Caltest Analytical Lab</b>  Melinda Kelley 1885 North Kelly Road Napa, CA 94558 (707) 258-4000 www.caltestlabs.com	<b>8</b>	<b>Mosquito and Vector Control Association of CA</b>  Rachel Hickerson One Capitol Mall, Suite 800 Sacramento, CA 95814 (916) 440-0826 www.mvcac.org	<b>16</b>	<b>PAT CHEM LABORATORIES</b>  Stephen Berentsen 1824 1st Street San Fernando, CA 91340 (818) 639-5300 www.pat-chem.com
<b>2</b>	<b>Clear Creek Systems, Inc.</b>  Matthew Mahoney 1175 N Greenville Road Livermore, CA 94550 (925) 899-8123 www.clearcreeksystems.com	<b>9</b>	<b>Gullywasher</b>  Jeff Pettey 5242 57th Avenue South Seattle, WA 98118 (206) 799-3296 www.gullywasher.com	<b>17</b>	<b>ADS, Inc</b>  Ryan Wade 956 Catherine Street Alviso, CA 95002 (800) 733-7473 www.ads-pipe.com
<b>3</b>	<b>Storm Water Inspection &amp; Maintenance Services, Inc.</b>  Ethan Purkey P.O. Box 1627 Discovery Bay, CA 94513 (925) 516-8966 www.swimsclean.com	<b>10</b>	<b>Whitson CM/ California Filtration Specialists</b>  Mitch Whitson 11021 Via Frontera, Suite E San Diego, CA 92127 (858) 673-0966 www.whitsoncm.com www.cafiltrationspecialists.com	<b>18</b>	<b>Hydro International</b>  Phil O'Neill 109 First St. Solvang, Ca 93463 (805) 350-8163 www.hydro-int.com
<b>4</b>	<b>Monterey Regional Stormwater Management Program</b>  Jeff Condit 5 Harris Court, Bldg. D Monterey, CA 93940 (831) 645-4621 www.montereysea.org	<b>11</b>	<b>Jensen Precast</b>  Caitlin Shanley 825 Steneri Sparks, NV 89431 (775) 352-2700 www.jensenprecast.com	<b>19</b>	<b>2NDNATURE</b>  Michelle Tanner 500 Seabright Avenue, Suite 205 Santa Cruz, CA 95060 (831) 426-9119 www.2ndnaturewater.com
<b>5</b>	<b>G2 Construction, Inc.</b>  John Alvarado 1352 East Borchard Ave. Santa Ana, CA 92705 (714) 748-4242 www.g2construction.com	<b>12/13</b>	<b>Downstream Services, Inc.</b>  Loren Roberts 2855 Progress Place Escondido, CA 92029 (760) 746-2544 www.downstreamservices.com	<b>20</b>	<b>Oldcastle Infrastructure</b>  Mark Lehnerz 7000 Central Parkway, Suite #800 Atlanta, GA 30328 (800) 579-8819 www.oldcastleinfrastructure.com
<b>6</b>	<b>Hydra TMDL Systems, Inc.</b>  Denis Frieznier 77851 Las Montanas Rd., Suite A Palm Desert, CA 92211 (818) 516-4946 www.hydratmdl.com	<b>14</b>	<b>DeepRoot</b>  Rachel Roberts 101 Montgomery St., Suite 2850 San Francisco, CA 94104 (415) 781-9700 www.deeproot.com	<b>21</b>	<b>Bio Clean</b>  Sean Hasan 5796 Armada Drive, Suite 250 Carlsbad, CA 92008 (855) 566-3938 www.biocleanenvironmental.com
<b>7</b>	<b>Frog Creek Partners</b>  Brian Deurloo 800 W. Yellowstone Hwy. Casper, WY 82601 (307) 439-9570 www.frogcreek.partners	<b>15</b>	<b>Coanda, Inc.</b>  Steve Esmond 3943 Irvine Blvd #327 Irvine, CA 92602 (714) 289-2113 www.coanda.com	<b>22</b>	<b>Soil Retention</b>  Nick Jansson 1265 Carlsbad Village Drive, Suite 100 Carlsbad, CA 92008 (760) 966-6090 www.soilretention.com



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### 24 Layfield Geosynthetics

Jan Nichols  
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Spring Valley, CA 91978  
(619) 797-1984  
[www.layfieldgroup.com](http://www.layfieldgroup.com)

### 25 Weck Laboratories, Inc.

Leo Raab  
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[www.wecklabs.com](http://www.wecklabs.com)

### 26 CULTEC, Inc.

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(203) 775-4416  
[www.cultec.com](http://www.cultec.com)

### 27 Filtrex

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## Super Premium Exhibitors



### 28 Stormwater - Endeavor Business Media

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### 29 StormTree

Paul Iorio  
24 Corliss St., Suite 9092  
Providence, RI 02940  
(401) 626-8999  
[www.storm-tree.com](http://www.storm-tree.com)

### 30 LSC Environmental Products, LLC

Andy Iturrira  
2183 Pennsylvania Ave.  
Apalachin, NY 13732  
(607) 625-3050  
[www.lscenv.com](http://www.lscenv.com)

### 31 StormTrap

Charlie Carter  
1287 Windham Parkway  
Romeoville, IL 60446  
(815) 941-4549  
[www.stormtrap.com](http://www.stormtrap.com)

### 32 Porous Technologies, LLC

Will Harris  
163 Thadeus Street  
South Portland, Maine 4106  
(888) 357-1161  
[www.stormcrete.com](http://www.stormcrete.com)

### 33 CBI Systems, Ltd.

Ty Garmon  
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[www.stormwaterinspect.com](http://www.stormwaterinspect.com)

### 34 Aquatic Informatics Inc.

Melissa MacPherson  
2400-1111 West Georgia Street  
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[www.aquaticinformatics.com](http://www.aquaticinformatics.com)

### 35 Prinsco

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### 36 Impact

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# Conference Exhibitors (continued)



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<b>38</b>	<b>METER Group, Inc. USA</b>	<b>45</b>	<b>Stormwater Biochar, LLC</b>	<b>52</b>	<b>EnviroCert International, Inc.</b>
	Sandra Kopczynski 2365 NE Hopkins Court Pullman, WA 99163 (509) 332-2756 www.metergroup.com		Ryan Holman 6628 SE 68th Ave. Portland, OR 97206 (503) 789-6760 www.stormwaterbiochar.com		Lori Moore 6 East Medical Court Drive Marion, NC 28752 (828) 655-1600 www.envirocert.org
<b>39</b>	<b>Clear Water Services, LLC.</b>	<b>46</b>	<b>ERTEC Environmental Systems</b>	<b>53</b>	<b>Pure Filter Solutions, LLC</b>
	Kristine Sommer 2825 Franklin Canyon Rd. Rodeo, CA 94572 (425) 412-5700 www.clearwaterservices.com		Joe Sherratt 1150 Ballena Blvd., Suite 250 Alameda, CA 94501 (510) 521-0724 www.ertecsystems.com		Nicole Wilson 105 Southpark Blvd. Bldg. B, Suite 202 St Augustine, FL 32086 (404) 245-5727 www.pfilters.com
<b>40</b>	<b>Earthsavers</b>	<b>47</b>	<b>Profile Products</b>	<b>54</b>	<b>KISTERS North America</b>
	Howard Schau P.O. Box 2083 Woodland, CA 95776-2083 (866) 928-8537 www.earth-savers.com		Danny Reynaga 750 W Lake Cook Rd. #440 Buffalo Grove, IL 60089 (847) 215-1144 www.profileproducts.com		Becca Fong Emery 1520 Eureka Road, Suite 102 Roseville, CA 95661 (916) 723-1441 www.kisters.net
<b>41</b>	<b>Contech</b>	<b>48</b>	<b>RJR Engineering</b>	<b>55</b>	<b>Revel Environmental Manufacturing, Inc.</b>
	Vaikko Allen 11815 NE Glenn Widing Dr. Portland, OR 97220 (503) 240-3393 www.conteches.com		Rick Hajas 2340 Palma Drive, #200 Ventura, CA 93023 (805) 485-3935 www.rjreng.com		Marcel Sloane 960-B Detroit Ave. Concord, CA 94518 (925) 676-4736 www.remfilters.com
<b>42</b>	<b>PACE Advanced Water Engineering</b>	<b>49</b>	<b>CIF Composites, Inc.</b>	<b>56</b>	<b>FODS, LLC</b>
	Michelle Hoalton 17520 Newhope St., Suite 200 Fountain Valley, CA 92708 (714) 481-7203 www.pacewater.com		Brian Lewthwaite 1810 Verling Ave. Victoria, BC V8M 1X6 (250) 652-6313 www.cifcomposites.com		Bryce Clingerman 98 Inverness Drive East #350 Englewood, CO 80112 (303) 395-1069 www.getfods.com
<b>43</b>	<b>Sitka Technology Group</b>	<b>50</b>	<b>StormwaterRx LLC</b>	<b>57</b>	<b>Aqua Shield Inc.</b>
	Damon Knight 920 SW Sixth Avenue, Suite 111 Portland, OR 97204 (503) 808-1220 www.sitkatech.com		Chris Fromme 8912 NE Alderwood Road Portland, Oregon 97220 (800) 680-3543 www.stormwaterx.com		Kelly Williamson 2733 Kanasita Drive Chattanooga, TN 37343 (423) 870-8888 www.aquashieldinc.com
<b>44</b>	<b>Water Tectonics</b>	<b>51</b>	<b>Clean Way Environmental Partners, Inc.</b>	<b>58</b>	<b>Cloud Compli</b>
	TJ Mothersbaugh 6300 Merrill Creek Parkway, Suite C-100 Everett, WA 98203 (206) 947-5950 www.watertectonics.com		Bridget Garlinghouse P.O. Box 30087 Portland, Oregon 97294 (800) 723-1373 www.cleanwayusa.com		Aimee Grove 85 Argonaut, Ste. 210 Aliso Viejo, CA 92656 (949) 226-6743 www.cloudcomplli.com



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Reyna-Hiestand, Hawkeye Sheene,

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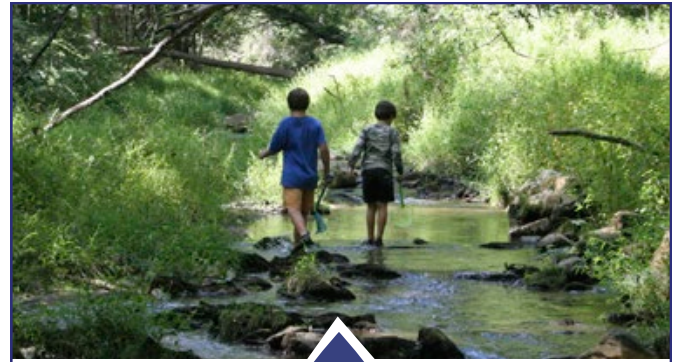




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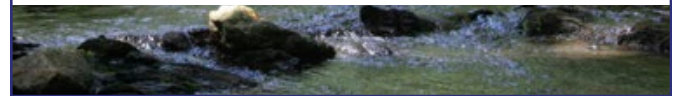
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## Stormwater BMP Services

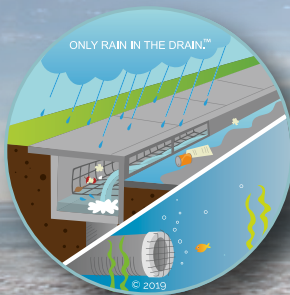
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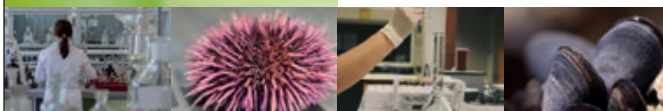
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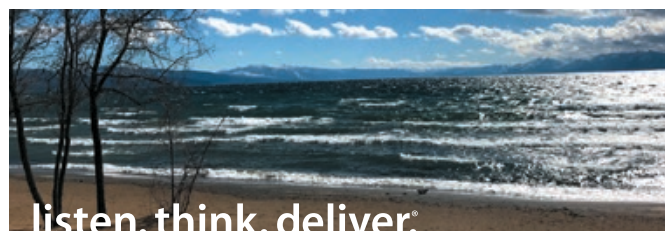
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