

Bracing for Climate Change: Strategies for Mitigation and Resiliency Planning Conference 2019

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11-12 December 2019

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FINAL PROGRAM

TECHNICAL AGENDA – Wednesday, December 11

7:00 am – 5:00 pm
Conference Registration
El Capitan Foyer

7:00 am – 8:00 am
Continental Breakfast
El Capitan Ballroom

7:30 am – 8:00 am
Presenters' Meeting
El Capitan Ballroom

SESSION 1: KEYNOTE PANEL— REGULATORY PERSPECTIVES

ALL SESSIONS WILL BE HELD IN THE EL CAPITAN BALLROOM

8:00 am – 8:10 am

Welcome

Conference Co-Chairs: Sara Head, Yorke Engineering, LLC and Michael Hendrix, LSA Associates

8:10 am – 9:35 am

Regulatory Perspectives Panel ...pg. 1

Co-Chairs: Michael Hendrix, LSA Associates and Abby Young, Bay Area Air Quality Management District

This panel will feature several governmental officials who will discuss how local and regional agencies are working to help California meet its climate planning goals.

Panelists:

- Gregg Hart, *Santa Barbara Supervisor (2nd District) and Board Member, Santa Barbara County APCD*
- Courtney Smith, *Chief Deputy Director, California Energy Commission*
- Aeron Arlin Genet, *Air Pollution Control Officer, Santa Barbara County APCD*
- Heidi Harmon, *Mayor of San Luis Obispo*

9:40 am - 10:00 am

Video broadcast from COP 25 by Michele Gehring, A&WMA President, attending as an official observer at the COP 25 (UNFCCC Climate Change Conference) in Madrid, Spain

10:00 am – 10:20 am

Networking Break

SESSION 2: GHG EMISSIONS AND REDUCTION STRATEGIES

Chair: Miriam Lev-On, The Levon Group LLC

10:20 am – 10:40 am

CC31

Building a Municipal Climate Program for the City of Los Angeles...pg. 20

Jeremy Pathmanabhan, PE, Stephanie Gee, Mahsa Ostowari, LA Sanitation & Environment, Los Angeles, CA

10:40 am – 11:00 am

CC07

Comparison of Two Ways to Combat Warming of California Cities...pg. 23

William Dean, California Environmental Protection Agency, Sacramento, CA

11:00 am – 11:20 am

CC33

The Role of Verification in the California Program...pg. 15

Barbara Toole O'Neil, Aster Global Environmental Solutions, Inc., San Francisco, CA; Janice McMahon, Aster Global Environmental Solutions, Inc., North Lawrence, OH

11:20 am – 11:40 am

CC18

Summarizing the Efforts of The Environmental Partnership Since its Launch and Data Collected from Program's First Full Year of Implementation in 2018...pg. 28

Matthew Todd, Program Director, The Environmental Partnership

11:40 am – 12:00 am

CC03

Developing Shipping Emission Inventory for the State of Kuwait...pg. 31

Ashraf Ramadan, Kuwait Institute for Scientific Research, Kuwait City, Kuwait

12:00 pm – 1:00 pm

Lunch for all attendees

Channel Terrace & Garden Grille

FINAL PROGRAM

Wednesday, December 11, con't.

SESSION 3: CLIMATE ACTION PLANS AND MITIGATION STRATEGIES

Chair: Sara Head, Yorke Engineering, LLC

1:00 pm – 1:20 pm

CC16

Ventura County Climate Action Plan Development and Public Participation...pg. 45

Donald R. Price, Ventura, CA

1:20 pm – 1:40 pm

CC35

A Pollutant-based Strategy for Mitigating Climate and Air Quality Pollutants ...pg. 37

Abby Young, Bay Area Air Quality Management District, San Francisco, CA

1:40 pm – 2:00 pm

CC11

Development of the Climate Action and Resiliency Plan for the City of Alameda, CA...pg. 76

Paula Fields Simms, Eastern Research Group, Inc. (ERG), Sacramento, CA; Eliza Berry, ERG, Oakland, CA; Arleen O'Donnell, Charles Goodhue, ERG, Lexington, MA; Tegan Churcher Hoffman, Blue Earth Consultants, Oakland, CA; Erin Smith, City of Alameda, CA

2:00 pm – 2:20 pm

CC12

Walk-Through of CARB GHG Programs - Applicability, Reporting, and Compliance...pg. 67

Cassandra B. Drotman, Raymond H. Huff, SCS Engineers, Long Beach, CA; Haley DeLong, SCS Engineers, Santa Rosa, CA

2:20 pm – 2:40 pm

CC13

The SANDAG Mobility Management Toolbox: Calculating Local VMT Reductions...pg. 57

Elliott H. Wezerek, ICF, Sacramento, CA; Krystal Ayala, SANDAG, San Diego, CA

2:40 pm – 3:00 pm

CC32

(Sea Level) Rise to the Challenge: Case Study of the Climate Lens Assessment of the City of Richmond, BC's Flood Protection Program...pg. 42

Svend Andersen, GHG Accounting Services Ltd., Vancouver, British Columbia, Canada

3:00 pm – 3:20 pm

Networking Break

SESSION 4: GHG EMISSIONS ANALYSES WITHIN THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Chair: Adam Poll, Dudek

3:20 pm – 3:50 pm

CC34

Addressing GHG Emissions Within CEQA: Carbon Offsets and Net Zero Initiatives...pg. 82

John McDougal, Element Markets, Houston, TX; Michael Hendrix, LSA Associates, Riverside, CA; Linda Klein, Cox Castle & Nicholson, San Francisco, CA

3:50 pm – 5:30 pm

Panel: GHG Emissions Analyses Within CEQA: Past, Present, Future...pg. 89

Addressing GHG emissions under CEQA has evolved since 2010, when GHG emissions analysis was first incorporated in CEQA. Court cases and improved threshold methodologies have shaped the current landscape, yet the absence of consistent guidance from agencies and the threat of legal challenges test Lead Agencies' ability to meet increasingly aggressive statewide goals and local/regional climate action plans. This panel will discuss that evolution.

Panelists:

- Jennifer Reed, *Air Quality Services Manager, Dudek, San Juan Capistrano, CA*
- Nicole Vermilion, *Associate Principal, Orange County, PlaceWorks, Santa Ana, CA*
- Rich Walter, *Vice President, Environmental Planning, ICF, San Francisco, CA*
- Brian Schuster, *Senior Consultant, Air Quality and Climate Change, ESA, San Francisco, CA*
- Michael Hendrix, *Associate, Air Quality and Climate Change, LSA Associates, Riverside, CA*

5:30 pm – 6:30 pm

Networking Reception and Poster Presentation

Channel Terrace & Garden Grille

5:45 pm

CC27 Poster Presentation

The Value of Voluntary Sustainability Reporting...pg. 96

Nora Jang, Keramida Inc., Cerritos, CA

FINAL PROGRAM

TECHNICAL AGENDA – Thursday, December 12

7:00 am – 4:00 pm
Conference Registration
El Capitan Foyer

7:00 am – 8:00 am
Continental Breakfast
El Capitan Ballroom

7:30 am – 8:00 am
Presenters' Meeting
El Capitan Ballroom

SESSION 5: ADAPTATION

Chair: Michael Conrardy, AECOM

8:00 am – 8:20 am
CC15

Getting to Resiliency: Policy and Legal Tools for Responding to Climate Risks in Urban Communities...pg. 117
Selina Lee-Andersen, McCarthy Tétrault LLP, Vancouver, British Columbia, Canada

8:20 am – 8:40 am
CC22

Assessing Climate Change Risk and Prioritizing Adaptation Strategies...pg. 108
Maria Facchin Asmussen, Ramboll, Copenhagen, Denmark; Ross Beardsley, Kaity Lieschke, and Sue Kemball-Cook, Ramboll, Novato, CA; James McCann, Ramboll, Arlington, VA

8:40 am – 9:00 am
CC04

An Alternative Approach for Addressing Global Climate Change... pg. 121
E. Joseph Duckett, EJD Consulting LLC, Pittsburgh, PA

9:00 am – 9:20 am
CC01

Accelerating Beyond Early Adopters to Achieve Equitable and Widespread Electric Vehicle Use in the San Francisco Bay Area...pg. 129
Rebecca Fisher, Tin Le, Mark Tang, Karissa White, Deanna Yee, and Ranyee Chiang, Bay Area Air Quality Management District, San Francisco, CA

9:20 am – 9:40 am
CC10

Estimating Benefits and Costs of Adaptation...pg. 112
Arleen O'Donnell, Charles Goodhue, Eastern Research Group, Inc. (ERG), Lexington, MA

9:40 am – 10:00 am
CC37

Effective Climate Risk Analysis for CDP Disclosure...pg. 103
Douglas E. Huxley, Jacobs, Denver, CO; Elyse J. Engel, Jacobs, San Jose, CA; Sabrina Yokum, Jacobs, Knoxville, TN

10:00 am – 10:20 am
Networking Break

SESSION 6: DYNAMIC DOWNSCALING CLIMATE CHANGE MODELS

Chair: Michael Hendrix, LSA Associates

10:20 am - 11:30 am

Panel: Dynamic Downscaling Climate Models for Better Risk Analysis and Adaptation Planning...pg. 151

Global climate models have relatively coarse spatial resolution. If you want to know how temperatures or precipitation might change on finer spatial scales, you need to downscale the climate model output. Through collaborative efforts, a statistical downscaling of four global climate models called Localized Constructed Analogs (LOCA) was completed which led to the development of the Cal-Adapt Tools. The panel will discuss how the Cal-Adapt toolkit can be used to determine climate risks and develop an adaptation plan.

Panelists and Presentations:

Cal-Adapt Tools Overview...N/A
Michael McCormick, Senior Climate Change Planner, California Governor's Office of Planning and Research

Adaptation Planning Using Cal-Adapt...N/A
Zhe Chen, Senior Climate Change Specialist, LSA Associates

Climate Risk Mapping for Emergency Response...N/A
Preeti Verma, Climate Change Specialist, LSA Associates

11:30 am – 11:50 am
CC06

Dynamic Climate Downscaling in San Francisco Using WRF...pg. 140
Matthew S. Jones, Haley Johnson, San Diego, CA

11:50 am – 12:10 pm
CC21

Using the Cal-Adapt Extreme Precipitation Tool: A Case Study...pg. 134
Ross Beardsley and Sue Kemball-Cook, Ramboll, Novato, CA; Ida Bülow Gregersen, Ramboll, Copenhagen, Denmark; Tim Sturtz, Ramboll, Bellingham, WA; Shari Beth Libicki, Ramboll, San Francisco, CA

12:10 pm – 1:10 pm

Lunch for all attendees
Channel Terrace & Garden Grille

FINAL PROGRAM

TECHNICAL AGENDA – Thursday, December 12, con't.

1:10 pm - 1:30 pm

COP 25 video update from Jeffrey Muffat, A&WMA Treasurer, attending the COP 25 UNFCCC Climate Change Conference in Madrid, Spain

SESSION 7: RESILIENCY PLANNING

Chair: Matt Dunn, Rincon Consultants Inc.

1:30 pm – 1:50 pm

CC24

Integrating Climate Risk and Adaptation into the Safety Element of General Plans...pg. 176
Rose Newberry, Dudek, San Diego, CA

1:50 pm – 2:20 pm

CC28

Preparing and Responding to Climate Change in the Central Coast...pg. 166
Matthew Dunn, Annaliese Miller, Rincon Consultants Inc., Ventura, CA

2:20 pm – 2:40 pm

CC26

The Role of Trees in Climate Change Resilience...pg. 172
Ryan Allen, Dudek, Los Angeles, CA

2:40 pm – 3:00 pm

CC19

Acute Infectious Disease Associated with Catastrophic Climate Events and Global Warming in Mexico...pg. 186
Jesús Santos-Guzmán, Gregorio Martínez-Osuna, Escuela de Medicina, Campus Monterrey; Victor Jiménez, Andrea Josefina Luviano García, Tecnológico de Monterrey, Escuela de Medicina, Campus Monterrey; Daniel Palazuelos, Compañeros en Salud – Mexico/Harvard Medical School; Francisco Gonzalez-Salazar, Centro de Investigaciones Biomédica del Noreste (IMSS) and Ciencias de la Salud, Universidad de Monterrey (UEM); Rubinia Iveth Fernández-Flores, Tecnológico de Monterrey, Escuela de Medicina, Campus Monterrey; Mario Manzano Camarillo, Francisco Gazca, Escuela de Ingeniería y Ciencias, Monterrey; Gerardo Manuel Mejía-Velázquez, Mohamed Farhan Majid, Rice University

3:00 pm – 3:20 pm

Networking Break

SESSION 8: WASTE MANAGEMENT AND REMOTE SENSING

Chair: Harish Rao, Rao Consulting Services, Inc.

3:20 pm – 3:40 pm

CC17

Utilizing Anaerobic Digestion to Combat GHG Emissions from Organic Waste...pg. 200
Michael Theodoulou, William Bonkoski, Robert Holt, Suez Water Technologies & Solutions, Oakville, Ontario, Canada

3:40 pm – 4:00 pm

CC29

Tool For Estimating Emissions and Outputs from Healthcare Waste Management Choices...pg. 195
Walt Vernon, Mazzetti, San Francisco, CA; Shannon Bunsen, Mazzetti, Seattle, WA; Troy Savage, Mazzetti, Charlottesville, VA

4:00 pm – 4:20 pm

CC20

Monitoring Methane Emissions at the Source from Space - A Novel Approach...N/A
Brody Wight, GHGSat Inc., Montreal, Québec, Canada

SESSION 9: FUTURE DIRECTIONS PANEL— WHERE DO WE GO FROM HERE?

4:20 pm – 5:00 pm

Co-Chairs: Sara Head, Yorke Engineering, LLC, and Brian Bunker, Bay Area Air Quality Management District

A panel of speakers from the conference will be selected to discuss important observations, next steps, and address audience questions and input.