

# Coastal Habitat Conservation in a Changing Climate: Strategies and Tools in the Southern California Region

Southern California Coastal Waters Research Program  
3535 Harbor Blvd., Suite 110, Costa Mesa, California

November 16-17, 2011

Time	Wednesday, November 16	Location
8:00am – 8:30am	<b>Workshop Registration and Breakfast</b>	Area outside of Large and Medium Conference Rooms
8:30am – 9:00am	<p style="text-align: center;"><b>Welcome Greeting – Introduction and Purpose</b></p> <p style="text-align: center;">Roger Griffis, <i>Climate Change Coordinator for NOAA Fisheries Office of Science &amp; Technology</i></p> <p style="text-align: center;">Bob Hoffman, <i>Assistant Regional Administrator for NOAA NMFS Southwest Habitat Conservation Division</i></p>	Large Conference Room
9:00am – 10:30am	<p><b>Session I. Climate Change in Southern California: What We Know and What It Means for Coastal Habitats</b></p> <p><b>Moderator:</b> Bryant Chesney, <i>NOAA NMFS Southwest Habitat Conservation Division</i></p> <p><b>Some Thoughts on Framing Climate Change in a Useful Way for Riparian Habitats</b> David Boughton, <i>NOAA NMFS Southwest Fisheries Science Center, Santa Cruz</i></p> <p><b>Climate Change Implications for the Management and Restoration of Southern California’s Tidal Wetlands</b> Jeff Crooks, <i>Tijuana River National Estuarine Research Reserve and the Southwest Wetlands Interpretive Association</i></p> <p><b>Considering Climate Change for Sandy Beach Ecosystems in Southern California</b> Jenny Dugan, <i>University of California Santa Barbara Marine Science Institute</i></p> <p><b>Ecological Implications of Climate Change on Shallow Rocky Reefs in Southern California</b> Dan Reed, <i>Marine Science Institute, University of California, Santa Barbara</i></p>	Large Conference Room
10:30am – 10:50am	<b>Break</b>	Area outside of Large and Medium Conference Rooms

<p><b>10:50am – 12:00pm</b></p>	<p><b>Session II. Vulnerability Assessment – Introduction</b>  <b>Moderator:</b> Amber Moore, <i>I.M. Systems Group/NOAA NMFS Office of Habitat Conservation</i></p> <p><b>Coastal Hazards Habitat Impacts and Making Room</b>  David Revell, <i>ESA PWA Coastal Zone Engineering and Management</i></p> <p><b>Conducting a Vulnerability Assessment</b>  Melinda Koslow, <i>National Wildlife Federation Great Lakes Regional Center</i></p> <p><b>Assessment to Action: Opportunities for Philanthropy, Local Governments and Business to Work Together</b>  Emily Young, <i>San Diego Foundation Environment Program</i></p>	<p><b>Large Conference Room</b></p>
<p><b>12:00pm – 1:00pm</b></p>	<p><b>Lunch – Provided</b></p>	<p><b>Area outside of Large and Medium Conference Rooms or Outdoor Patio Area (weather permitting)</b></p>
<p><b>1:00pm – 1:05pm</b></p>	<p><b>Instructions for Break Out Session</b>  Melinda Koslow, <i>National Wildlife Federation Great Lakes Regional Center</i></p>	<p><b>Large Conference Room</b></p>
<p><b>1:05pm – 1:10pm</b></p>	<p><b>Move to Break Out Groups</b></p>	
<p><b>1:10pm – 2:40pm</b></p>	<p><b>Session III. Vulnerability Assessment – Break Out Session</b>   <i>See list below for more information</i></p>	<p><b>See Session III Information in Packet</b></p>
<p><b>2:40pm – 3:00pm</b></p>	<p><b>Break</b></p>	<p><b>Area outside of Large and Medium Conference Rooms</b></p>
<p><b>3:00pm – 4:30pm</b></p>	<p><b>Session IV. Vulnerability Assessment – Modeling and Tools</b>  <b>Moderator:</b> John Rozum, <i>NOAA NOS Coastal Services Center</i></p> <p><b>An Introduction to Decision Support Tools for Climate Adaptation Planning</b>  John Rozum, <i>NOAA NOS Coastal Services Center</i></p> <p><b>SLAMM Modeling of the Effects of Sea Level Rise on Coastal Wetlands</b></p>	<p><b>Large Conference Room</b></p>

	Richard Gersberg, <i>San Diego State University School of Public Health</i>  <b>Applying the Coastal Storm Modeling System to Assess the Physical and Ecological Impacts of Climate Change</b> Patrick Barnard, <i>U.S. Geological Survey</i>	
<b>4:30pm – 4:40pm</b>	<b>Closing Remarks</b>  Bryant Chesney, <i>NOAA NMFS Southwest Habitat Conservation Division</i>	<b>Large Conference Room</b>
<b>5:00pm – 6:30pm</b>	<b>Reception (Appetizers and cash bar)</b>  <i>See packet for map and directions</i>	<b>Hotel Hanford</b>
<b>Time</b>	<b>Thursday, November 17</b>	<b>Location</b>
<b>8:00am – 8:30am</b>	<b>Workshop Registration and Breakfast</b>	<b>Area outside of Large and Medium Conference Rooms</b>
<b>8:30am – 9:30am</b>	<b>Session V. Adaptation Planning</b> <b>Moderator:</b> Rachel Couch, <i>State Coastal Conservancy Central Coast Program</i>  <b>Using the Climate Adaptation Knowledge Exchange (CAKE) Website to Facilitate Adaptation Action in California</b> Jessi Kershner, <i>EcoAdapt</i>  <b>Climate Change and Shoreline Infrastructure: the Adapting to Rising Tides Project</b> Wendy Goodfriend, <i>San Francisco Bay Conservation and Development Commission</i>  <b>Ballona Wetlands Climate Ready Estuary Research: Implications for Restoration Planning</b> Jeremy Pal, <i>Loyola Marymount University, Civil Engineering and Environmental Science</i> ; and Sean Bergquist, <i>Great Ecology, Inc.</i>	<b>Large Conference Room</b>
<b>9:30am – 9:35am</b>	<b>Instructions for Break Out Session and Data Tools Café</b>  Bryant Chesney, <i>NOAA NMFS Southwest Habitat Conservation Division</i>	<b>Large Conference Room</b>
<b>9:35am – 9:45am</b>	<b>Break to reconvene in break out groups</b>	
<b>9:45am – 11:15am</b>	<b>Session VI. Adaptation Planning Break Out Session</b>	<b>See Session VI.</b>

	<i>See list below for more information.</i>	<b>Information in Packet</b>
<b>11:15am – 1:00pm</b>	<p align="center"><b>Session VII. Lunch &amp; Data Tools Café</b></p> <p><i>See list below for more information.</i></p>	<b>See Session VII. Information in Packet</b>
<b>1:00pm – 2:40pm</b>	<p align="center"><b>Session VIII. Moving Forward – Policy and Planning Perspectives</b></p> <p><b>Moderator:</b> Roger Griffis, <i>Climate Change Coordinator for NOAA Fisheries Office of Science &amp; Technology</i></p> <p><b>USACE’s Systems Approach to Geomorphic Engineering</b> Paul Wagner, <i>U.S. Army Corps of Engineers Institute for Water Resources</i></p> <p><b>California Landscape Conservation Cooperative: Who We Are and Where We Are Going</b> Debra Schlafmann, <i>U.S. Fish and Wildlife Service California Landscape Conservation Cooperative Coordinator</i></p> <p><b>Using the Coastal Act to Prepare for Climate Change</b> Michelle Jespersen, <i>California Coastal Commission</i></p> <p><b>California’s Action Plan for Adapting to Extreme Events and Sea Level Rise</b> Amber Mace, <i>Executive Director, California Ocean Protection Council</i></p> <p><b>Regional Climate Action Planning in Greater Los Angeles</b> Paul M.E. Bunje, <i>Managing Director, Los Angeles Regional Collaborative for Climate Action and Sustainability</i></p> <p><b>Climate Change Mitigation and Adaptation – A Local Government Perspective</b> Jason Giffen, <i>County of San Luis Obispo, Director of Department of Planning &amp; Building</i></p>	<b>Large Conference Room</b>
<b>2:40pm – 3:00pm</b>	<b>Break</b>	<b>Area outside of Large and Medium Conference Rooms</b>
<b>3:00pm – 4:00pm</b>	<p align="center"><b>Session IX. Moving Forward – Monitoring, Research, and Tool Development</b></p> <p><b>Moderator:</b> Chris Solek, <i>Southern California Coastal</i></p>	<b>Large Conference Room</b>

	<p><i>Waters Research Program</i></p> <p><b>Evaluating Regional Watershed Sensitivity to Climate Change: Future Runoff and Sediment Variability in Southern California</b> Terri Hogue, <i>University of California Los Angeles</i></p> <p><b>The Effect of Nitrogen Enrichment on C1-Cycling Microorganisms and Methane Flux in Salt Marsh Sediments</b> Irina Irvine, <i>National Park Service Santa Monica Mountains National Recreation Area</i></p> <p><b>CalCOFI: The Influence of Regional Ocean Climate on Coastal Habitats and Communities</b> Tony Koslow, <i>Scripps Institute of Oceanography</i></p>	
<b>4:00pm – 4:30pm</b>	<p><b>Closing Remarks</b></p> <p>Bryant Chesney, <i>NOAA NMFS Southwest Habitat Conservation Division</i></p>	<b>Large Conference Room</b>

**\*\*Break Out Session Descriptions – List of groups and locations included in folder**

**Vulnerability Assessment Break Out Session** – This break out session at 1:00pm – 2:45pm on Wednesday (11/16) will be a mini-tutorial on how to conduct a vulnerability assessment based on the National Wildlife Federation’s "Scanning the Conservation Horizon: A Guide to Climate Change Vulnerability Assessment." Each breakout group will be given some initial background information on a specific species (steelhead, clapper rail, or black abalone) to use as the example to go through the steps of a vulnerability assessment.

Facilitators:

- Melinda Koslow – Regional Campaign Manager, Climate Change Adaptation for the National Wildlife Federation’s Great Lakes Regional Center
- Roger Griffis – Climate Change Coordinator for NOAA Fisheries Service, Office of Science & Technology
- Juliette Hart – Research Assistant Professor of Marine Environmental Biology for University of Southern California Sea Grant
- Jessica Hitt – Science and CAKE Content Editor for EcoAdapt
- John Rozum – EBM Tools Training Coordinator for NatureServe/NOAA Coastal Services Center
- Kristen Goodrich – Coastal Training Program Coordinator for the Tijuana River National Estuarine Research Reserve

**Adaptation Planning Break Out Session** – This break out session at 9:30am – 11:15am on Thursday (11/17) will be an opportunity for workshop participants to respond to key questions regarding

adaptation planning and habitat conservation. The underlying purpose is to engage stakeholders and initiate collaborative planning to adapt to climate change impacts. We intend the collective responses to help inform priorities for future resource management and future research, monitoring, and tool development initiatives. Break out groups will be based upon broad habitat types: riverine, estuarine (lagoons and embayments), and open coast marine.

Facilitators:

- Karen L. Martin – Professor of Biology at Pepperdine University Natural Science Division
- Dan J. Pondella – Associate Professor of Biology at Occidental College and Director of the Vantuna Research Group
- David Boughton – Ecologist for the NOAA NMFS Southwest Fisheries Science Center, Santa Cruz
- Eric Stein – Head of the Southern California Coastal Water Research Project Biology Department
- Jeff Crooks – Research Coordinator for the Tijuana River National Estuarine Research Reserve and the Southwest Wetlands Interpretive Association
- Richard Zembal – Natural Resources Director for the Orange County Water District and Principal Investigator and Administrator of the Clapper Rail Recovery Fund held by the Huntington Beach Wetlands Conservancy

**Data Tools Café** – This session, from 11:00am – 1:00pm on Thursday (11/17), provides a “hands-on” opportunity to discover and learn more about tools that provide climate change information. Utilizing individual laptops, discussion leaders will guide participants through tools such as:

- Ecosystem-Based Management tools (John Rozum, *NOAA Coastal Services Center*),
- NOAA Digital Coast (John Rozum, *NOAA Coastal Services Center*),
- The Climate Adaptation Knowledge Exchange (CAKE) (Jessica Hitt, *EcoAdapt*), and
- CalAdapt (Kevin Koy, *University of California Berkeley*).