



CLIMATE CHANGE, NATURAL RESOURCES AND COASTAL MANAGEMENT

A WORKSHOP ON THE COASTAL ECOSYSTEMS OF CALIFORNIA, OREGON AND WASHINGTON

January 29-30, 2009, San Francisco, Hyatt Regency at 5 Embarcadero Center

Final Program

Location	Times	Presenter	Organization	Title
DAY 1	DAY 1	January 29, 2009	DAY 1	DAY 1
	8:00 AM	Anne Kinsinger	USGS - Regional Director, Western Region	Welcome
Grand Ballroom B/C	8:10 AM	PLENARY SESSION A -- Foundational Presentations: Climate Change Scenarios, Downscaled Models, & Effects to Coastal Natural Resource Management		
Moderator: David Patte	40 min	Jeff Burgett	USFWS - Pacific Islands	Climate Change and its Implications for Conservation and Policy
	40 min	Dan Cayan	USGS & Scripps Institution of Oceanography/UC San Diego	Climate Drivers for the Pacific Coast; Observed 20th Century Climate Change and Downscaled Models for the Pacific Coast; and Sea Level Rise
9:30AM Break				
Market St. Foyer	POSTERS -- Available for viewing throughout the workshop; presenters will be available during morning breaks			
Grand Ballroom B/C	10:00AM	PLENARY SESSION B -- Coastal Ecosystems and Climate Change		
Moderator: Carrie Thompson	15 min	Spencer Reeder	Washington Department of Ecology	Bridging the Climate Change Data and Policy Gaps: How the West Coast States are Responding Locally and Coast-wide
	20 min	Steve Goldbeck	San Francisco Bay Conservation & Development Commission	Status and Needs of Coastal Zone Managers (Report from the Coastal Zone Managers Meeting)
	10 min			Question and Answer Related to the 2 Topics, Above
	15 min	Fred Piltz	Senior Environmental Scientist, Mineral Management Service	West Coast Governors Agreement on Ocean Health: Action Plan & Priorities
	15 min	Brian Baird	State of California, California Resources Agency	West Coast Governors Agreement on Ocean Health: State perspectives on Climate Change Actions
	5 min	Angie Fredrickson	Washington Department of Natural Resources - Marine Policy Fellow	WCGA - Climate Change Action Coordination Team - Identifying Impacts to the Shorelines of California, Oregon and Washington
	10 min			Question and Answer Related to the 3 Topics, Above
11:30AM LUNCH: 90 min				
Grand Ballroom B	1:00PM	Concurrent Session A -- Coastal Watersheds and Landscapes (hydrology and ecosystems)		
Moderator: Dave Busch	20 min	Noah Knowles	USGS, Menlo Park	Projected Hydrologic Changes and Management Challenges Under CASCade Climate Change Scenarios
	20 min	Randy Hanson	USGS California Water Science Center	Climate Variability and Change on Coastal Aquifer System
	20 min	Lorraine Flint (co-author: Alan Flint)	USGS California Water Science Center	Evaluating Future Hydrologic and Ecologic Changes in Coastal Watersheds"
	20 min	Joe Hevesi	USGS - WRD - Sacramento	Simulated Hydrologic Responses to Potential Climate Change for Mountainous Drainage Basins in California
	20 min	Anne Wein	USGS Western Geographic Science Center	Proposal for Economic Consequences of a Winter Storm Scenario in California: Metrics and Methods
2:40PM -- Break				
	3:00PM			
	20 min	Mark Huff	National Park Service, Inventory & Monitoring Coordinator, North Coast and Cascades Network	Monitoring of Ecological Reserves in a Changing Climate: Perspectives from National Parks
	20 min	Glenn R Guntenspergen	USGS - Patuxent Research Center	Resilience of Coastal Wetlands to Sea Level Rise
	20 min	Jessica Halofsky	USDA Forest Service, PNW Research Stn / UW	Climate Change Effects and Adaptation Options for Forest Ecosystems in the Western US
	20 min	Kathryn McEachern	USGS - BRD Channel Islands	Fog and the hydrologic regime of Santa Rosa Island, Channel Islands National Park: Interacting effects of climate and vegetation recovery



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Grand Ballroom C	1:00PM	Concurrent Session B - Bays and Estuaries		
Moderator: Lief Horwitz	20 min	Bruce Jaffe	USGS, Coastal and Marine Geology	Geomorphic Response of Estuaries to Sea Level Rise and Climate Change
	20 min	Patty Glick	National Wildlife Federation: Seattle	Sea-level Rise and Coastal Habitats in the Pacific Northwest: Application of a Model
	20 min	Eric Grossman	USGS, Coastal and Marine Geology	Forecasting Response of Large River Deltas and Nearshore Ecosystems to Sea-Level and Climate Change in Puget Sound: "Estuary Squeeze"
	20 min	Michelle Orr	Phil Williams & Associates	Planning for Sustainable Estuarine Restoration with Sea Level Risk
	20 min	John Takekawa	USGS - WERC BRD San Francisco Bay	Estuary-Nearshore Climate Change Effects and Relationship to Migratory and Listed Species
	2:40PM -- Break			
	3:00PM			
	20 min	Scott W. Starratt	USGS, Menlo Park	Sea Level and Climate Variability: Diatom Records from Coastal Marshes
	20 min	Jaime Kooser	San Francisco Bay National Estuarine Research Reserve	Sentinel Sites: Using NOAA's National Estuarine Research Reserve System for Climate Change Research, Monitoring and Education
	20 min	Robin Miller	USGS - WRD - Sacramento	Plant Biomass Carbon Inputs, Losses, and Storage in Re-established Marshes in the Sacramento-San Joaquin Delta
	20 min	Brian Pellerin	USGS - WRD Sacramento	The Role of Climate Variability on Constituent Transport from an Agricultural Watershed
	20 min	Judy Drexler	USGS - WRD - Sacramento	Peat Accretion Rates, Carbon Storage, and Sustainability of Marshes in the Sacramento-San Joaquin Delta, California
Regency A/B	1:00PM	Concurrent Session C -- Nearshore and Open Ocean		
Moderator: Sam Johnson	20 min	Bruce Richmond	USGS, Coastal and Marine Geology	West Coast Shoreline Change Over the Last Century: Results from the USGS National Assessment of Shoreline Change Studies.
	20 min	Dave Revell (co-authors include Bob Battalio & Peter Gleick)	Philip Williams & Associates, Env. Hydrology	An Initial Assessment of the Impact of Sea Level Rise to the California Coast
	20 min	Patrick Barnard	USGS, Coastal and Marine Geology	A Comprehensive, Process-Based Modeling Approach for Assessing Coastal Flooding and Inundation under Extreme Storm Scenario:
	20 min	Brian Collins	USGS Western Earth Surface Processes	Climate Change Based Prediction of Coastal Cliff Landslides Near San Francisco, California
	20 min	Sue Haig	USGS Forest & Rangeland Ecosystem Science Center	Effects of Climate Change on Pacific Coast Ecosystems: Modeling Predicted Sea Level Rise on Rocky Shores and Sandy Beaches
	2:40PM -- Break			
	3:00PM			
	20 min	Julie Thomas	Scripps Institution of Oceanography	Role of Ocean Observing Systems for Climate Change Studies
	20 min	Curt Storlazzi	USGS, Coastal and Marine Geology	The Influence of Climate Change on Coastal Processes and Benthic Habitats: Past Observations, Present Modeling, and Future Projections
	20 min	John Takekawa (for Josh Adams, author)	USGS - BRD - San Francisco Bay	Seabirds and their Marine Environments: Movements, Dynamic Habitats, and Change
	20 min	Brian Wells (co-authors include Steve Lindley & John Field)	NOAA	Linkages Between Climate Variation and the Pelagic Ecosystem of the California Current
	20 min	Maria Brown	NOAA	Climate Change Effects and Management Response Along the North-Central California Coast
Grand Ballroom B	5:30 PM	Steve Wessells	USGS	Video showing of the South Bay Restoration Project, entitled "Wetland Revival"



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Location	Times	Presenter	Organization	Title
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DAY 2	DAY 2	January 30, 2009	DAY 2	DAY 2
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Grand Ballroom B/C	8:00AM	PLENARY SESSION C -- Management and Species Challenges		
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Moderator: David Patte	25 min	Richard Feely	NOAA - Pacific Marine Env't. Lab. - Seattle	Ocean Acidification and the Effect to Open Ocean and Coastal Ecosystems
	25 min	Terry Root	Stanford University	Wildlife Responses to Climate Change (Terrestrial) and Management Challenges
	25 min	Ellie Cohen	PRBO Conservation Science	Managing for Change: Adaptive Conservation Strategies

9:30 AM -- Break

Market St. Foyer	POSTERS -- Available for viewing throughout the workshop; presenters will be available during morning breaks			
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Grand Ballroom B/C	10:00AM	PLENARY SESSION D -- Adapting Our Management and Decision Making		
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Moderator: Carrie Thompson	30 min	Stephen Schneider	Stanford University	Climate Change Policy -- Expecting the "Unimaginable Surprises" & Actions to Consider
	20 min	Mike Scott	USGS/Idaho Cooperative Fish & Wildlife Research Unit at Univ. Idaho	Managing for Change in Coastal Area Refuges
	20 min	Jan Thompson	USGS	CASCaDE A Decision Tool for Examining the Effect of Climate Change on the San Francisco Delta Ecosystem
	20 min	Kathy O'Halloran	USFS - Olympic NF	Using Existing Information to Development Adaptation Strategies-- Olympic NF Case Study

11:30 AM LUNCH (90 minutes)

Regency A/B	1:00PM	Concurrent Session D -- Aquatic Biota		
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Moderator: Dave Busch	20 min	Bill Peterson	NOAA Northwest Fisheries Science Center, Hatfield Marine Science Center, Newport, Oregon	Forecasting Returns of Coho and Chinook salmon in the Northern California Current: a Role for High-Frequency Long Term Observations
	20 min	Gordon Reeves	USDA Forest Service, PNW Research Stn	Effects of Climate Change on the Freshwater Life-history of Anadromous Fish in the Pacific Northwest
	20 min	Larry R. Brown	USGS California Water Science Center	Increased water temperatures from CASCaDE climate-change scenarios: implications for selected California fishes
	20 min	Jeff Kershner	USGS Northern Rocky Mountain Science Center	Are Current Native Trout Strategies Adequate in a Warming Climate?
	20 min	Alec Maule	USGS Western Fisheries Research Center	The use of bioenergetics modeling to predict effects of climate change on individual fish, fish populations and fish communities



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Location	Times	Presenter	Organization	Title
Grand Ballroom B	1:00PM	Concurrent Session E -- Nearshore Habitats, Bays and Estuaries		
Moderator: Tom Suchanek	20 min	Eric Miller	MBC Applied Environmental Sciences	Regime shift, NPGO, PDO, and the southern California kelp forests: the effect of climate variability on coastal resources, 1967-2007
	20 min	Tim Tinker	USGS Santa Cruz Field Station	Using long term research on sea otters and kelp forest food webs to study the effects of climate change on coastal ecosystems
	20 min	Paul Hershberger	USGS Western Fisheries Research Center	Impacts of Climate Change on Emerging Diseases of Wild Marine and Anadromous Fishes
	20 min	Ronald M. Thom	DOE Pacific Northwest National Laboratory	Climate driven dynamics of eelgrass along the U.S. Pacific Coast: resilience and vulnerability of a critical nearshore fisheries habitat
	20 min	Mary McGann	USGS, Coastal and Marine Geology	Foraminifera: A tool for dating and assessing climatic and ecosystem change in estuarine and marine environments
Grand Ballroom C	1:00PM	Concurrent Session F -- Species/Population Management		
Moderator: Diane Elam	20 min	Frank Schwing	NMFS	Think Like a Fish: How Climate Change Affects Marine Populations
	20 min	Steve Palumbi	Stanford University	Are marine species adapted to current environmental gradients? Prospects for climate change.
	20 min	Jaime Jahncke	PRBO Conservation Science	Seabird Responses to Variability in Coastal Upwelling at Multiple Time Scales
	20 min	Debbie Reusser	USGS Western Fisheries Research Center	Integrated Monitoring and Information Systems for Managing Aquatic Invasive Species in a Changing Climate
	20 min	Diana Stralberg	PRBO Conservation Science	Predicting Effects of Climate Change on Bird Distributions Across Scales and Ecosystems: How Species-based Modeling can Inform Management and Decision Making
	2:40PM -- Break			
Grand Ballroom B/C	3:15PM	PLENARY SESSION E -- WRAP-UP: Moving Forward and Closing Remarks		
Moderator: David Patte	30 min	Rebecca Shaw	The Nature Conservancy of California	Natural Systems Adaptation to Climate Change in California - How the West Coast Moves Forward
	30 min	Dan Ashe	FWS-- Science Advisor to the Director, Washington, D.C.	Later is Over: The Imperative for Transformation in Conservation
	20 min			Question and Answer for Dan and Rebecca
	10 min	Ren Lohofener	FWS-- Regional Director, Pacific Southwest Region	Closing
4:30PM ADJOURN				
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POSTERS and DECISION SUPPORT PRODUCT DEMONSTRATIONS Posters will be available for viewing throughout the workshop in the Market St. Foyer; presenters will be available during morning breaks.
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Location	Times	Presenter	Organization	Title
Market St. Foyer		Bill Labiosa	USGS Western Geographic Science Center	The Puget Sound Ecosystem Portfolio Model: Spatially-Explicit Long-Term Planning Tools for Linking Human Well-Being and Regional Change in Puget Sound
		Ben Sleeter	USGS Western Geographic Science Center	Measuring rates of land cover change in coastal California, Oregon and Washington
		Andy Yuen	US FWS San Diego NWRC	FWS Draft Strategic Plan on Climate Change
		Judy Drexler	USGS - WRD - Sacramento	Sacramento-San Joaquin Delta: Marsh Carbon Sequestration
		Bill Wilen, Bill Kirchner	US FWS National Wetlands Inventory	SLAMM demonstration
		Charlotte Ambrose	National Marine Fisheries Service	Endangered Salmon and Steelhead: Climate Change an Important Component in their Potential Extinction
		Chaeli Judd, Ron Thom, Dana Woodruff, Kathleen Judd, Steve Gajewski and Andrea Copping	Pacific Northwest National Laboratory	Decision-Support for Climate Change: Lessons Learned from the Gulf of Mexico
		Andrea Copping, Mark Wigmosta, Tarang Khangaonkar, Zhaoqing Yang and Dana Woodruff	Pacific Northwest National Laboratory	Interpreting Climate Change through Integrated Watershed and Estuarine Modeling in the Pacific Northwest
		Ron Smith, Louanne McMartin	US FWS	Climate Change and Non-native Invasive Species
		Edward G Josberger	USGS	Glacier Wastage and the Marine Ecosystems of the Gulf of Alaska
		Caroline Warner, Beth Huning	San Francisco Bay Joint Venture	Wetland Restoration and Projected Impacts from Climate Change Recommendations for and by Partners of the San Francisco Bay Joint Venture
		Susan Wynn	US FWS Carlsbad Fish and Wildlife Office	Laguna Mountains skipper: A coastal montane butterfly at the vanguard of climate change