

**WELLS FARGO CENTER FOR THE ARTS**  
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 50 Mark West Springs Road  
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 Administration 707.527.7006  
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# 33<sup>rd</sup> Annual Salmonid Restoration Conference

March 11-14, 2015 ~ Santa Rosa, CA

## Fisheries Restoration: Planning for Resilience

### Plenary Session • Friday, March 13

Ruth Finley Person Theater, 9:00am

**California's Climate in Perspective: Paleoclimate Records of Past Droughts and Floods**  
 B. Lynn Ingram, PhD, University of California, Berkeley, and author of *The West Without Water*

**Historical Context for Interpreting Early Accounts of Pacific Salmon in California**  
 Brian Spence, PhD, NOAA Fisheries, Southwest Fisheries Science Center

**Intermission and Book Signing with Lynn Ingram in the Lobby**

### How Do Successful Restoration Projects Happen?

Ann Riley, PhD, Watershed and River Restoration Advisor, San Francisco Bay Regional Water Resources Control Board, and author of *Restored Urban Streams*

**Swimming Upstream: Salmon Protection in a Tough Political Climate**  
 Congressman Jared Huffman, U.S. Congress



## 2015 Conference Co-sponsors

Bureau of Land Management, Cachuma Operation and Maintenance Board, California Department of Fish and Wildlife, California Department of Water Resources, California American Water, California Conservation Corps, CalTrans, California Trout, Cardno, Cascade Stream Solutions, cbec, inc., City of Santa Rosa Creeks Department, Contech, ESA PWA, GHD, Gold Ridge Resource Conservation District, Guadalupe Coyote Resource Conservation District, Hanford ARC, HDR, ICF International, Marin Municipal Water District, McBain and Associates, Mendocino Resource Conservation District, Metropolitan Water District, Michael Love and Associates, NOAA Fisheries, North Coast Solar, Northern California Council of Federation of Fly-Fishers, Pacific States Marine Fisheries Commission, Pacific Watershed Associates, Prunuske Chatham, R2 Resource Consultants, Restoration Design Group, Rincon Consultants, Solano County Water Agency, Sonoma County Agricultural Preservation and Open Space District, Sonoma County Water Agency, Sonoma Resource Conservation District, Stillwater Sciences, The Bay Institute, The Nature Conservancy, Trees Foundation, Trout Unlimited, U.S. Fish & Wildlife Service, Worthington Products

## March 13, Friday Afternoon Concurrent Sessions

### RECOVERY

#### West Coast Salmonid Recovery Plans and Strategies

Session Coordinators:  
*Charlotte Ambrose and Nora Berwick, NOAA Fisheries*

### CLIMATE

#### Climate Change Vulnerability Assessments: The Road to Resilience and Adaptation

Session Coordinator:  
*Mike Furniss, MJ Furniss & Associates*

### HABITAT

#### Instream Wood Loading Projects in Northern California: Status and Challenges

Session Coordinator:  
*Tom Leroy, Pacific Watershed Associates*

Room	Classroom A	Carlston Cabaret	Fireside Room
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1:15pm

#### Implementing Mechanisms for Coho Salmon, Chinook Salmon, and Steelhead Recovery Across NOAA's West Coast Region

*Charlotte Ambrose, California Programs Coordinator, NOAA Fisheries*

#### Recovering Steelhead on the Edge: South-Central and Southern California

*Mark Capelli, Steelhead Recovery Coordinator, NOAA Fisheries*

#### Recovering Central Valley Chinook Salmon and Steelhead

*Brian Ellrott, Salmon Recovery Coordinator, NOAA Fisheries*

#### A Brief Introduction to Vulnerability Assessments: Conceptual Model, Terminology, and Early Lessons

*Michael J. Furniss, USFS, Redwood Sciences Lab (retired), MJ Furniss & Associates*

#### Choosing and Using Climate Change Scenarios for Vulnerability Assessments of California's Salmonids

*Nate Mantua, NOAA Fisheries, Southwest Fisheries Science Center*

#### California Golden Trout: Can Their Warming Streams Handle Cattle Grazing and Climate Change?

*Kathleen Matthews, Pacific Southwest Research Station, U.S. Forest Service*

#### Developing Plans to Integrate Wood Loading Techniques into Watershed Scale Restoration Planning

*Tom Leroy and Chris Moore, Pacific Watershed Associates*

#### Low-cost Restoration Techniques for Rapidly Increasing Wood Cover in Coastal Coho Salmon Streams

*Jennifer Carab, The Nature Conservancy*

#### Heliwood Placement in the Mattole Estuary

*Sungnome Madrone and Drew Barber, Mattole Salmon Group*

3:00pm

### BREAK

#### Putting Recovery Plans into Action in Southern Oregon and Northern California

*Julie Weeder, Salmon Recovery Coordinator, NOAA Fisheries*

#### Implementation Mechanisms for Recovering Bi-State Middle Columbia River Steelhead

*Nora Berwick, Salmon Recovery Coordinator, NOAA Fisheries*

#### Implementation Mechanisms in Oregon for Recovering Middle Columbia River Steelhead

*Nora Berwick, Salmon Recovery Coordinator, NOAA Fisheries*

### BREAK

#### Multi-year Drought Effects of Winter-run Chinook Salmon in the Central Valley

*Joshua Israel, U.S. Bureau of Reclamation*

#### Flow Availability Assessment for Salmonid Recovery Planning, Russian River Watershed

*Jeremy Kobor, Matt O'Conner and Associates*

#### Predicting Tidal Lagoon Response to Future Conditions Using a Simple Quantified Conceptual Model

*Dane Behrens, PhD, ESA PWA*

### BREAK

#### Using Helicopters to Improve Salmonid Habitat in a Snake River Tributary, Combining Aerial and Ground Implementation Strategies to Address Habitat Deficiencies

*Eric Hoverson, Confederated Tribes of the Umatilla Indians, Fisheries Habitat Program*

#### Watershed Scale Fish Habitat Restoration in Tributaries of the Lower Klamath River

*Rocco Fiori, Fiori GeoSciences*

#### Can the CHaMP Protocol Detect Habitat Changes Resulting From the Addition of Large Wood to a Northern CA Stream?

*Elizabeth Mackey, Pacific States Marine Fisheries Commission*

## March 14, Saturday Afternoon Concurrent Sessions

### CLIMATE

#### Navigating Water Flow Changes in the Eel and Russian Rivers

Session Coordinator:  
*Dougald Scott, PhD*

### SRF Annual Banquet

Enjoy a gourmet Copper River salmon dinner, local fine wines, Sierra Nevada beer, a fun-filled cabaret, awards ceremony, and a live dance band with river troubadour *Alice di Michele* and her band.

Room	Classroom B
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1:15pm

#### Maintaining Flows and Water Quality for Eel River Coho Recovery—Taking Lessons from the Russian River

*Scott Greacen, Executive Director, Friends of the Eel River*

#### Potter Valley Project Overview: Licensing, Operations, and Fisheries Protection

*Paul Kubicek, Senior Consulting Scientist, Pacific Gas and Electric Company*

#### Potter Valley Project Blockwater Investigation

*Alison O'Dowd, Humboldt State University River Institute, Department of Environmental Science and Management*

3:00pm

### BREAK

#### Lake Mendocino's Role in Russian Flow and Fisheries Management

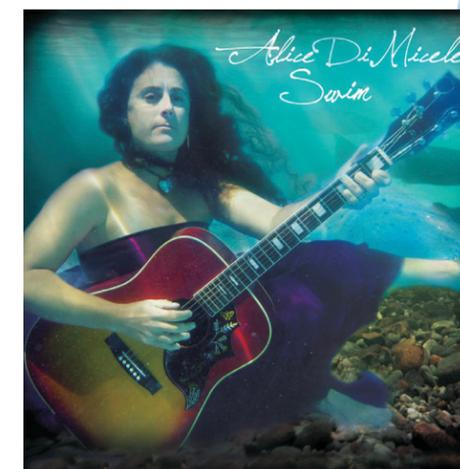
*David Manning, Environmental Resources Manager, and Don Seymour, Principal Engineer, Resource Planning, Sonoma County Water Agency*

#### Long-term Trends in Streamflow in the Eel/Russian Basins and California's North Coast

*Eli Asarian, Riverbend Sciences*

#### Is There a Place for Percentage Flow Management in California's North Coast Region?

*Gabriel Rossi, Fisheries Hydrologist, McBain and Associates*



6:30pm

Banquet in the Grand Lobby

# March 14, Saturday Afternoon Concurrent Sessions

## RECOVERY

### Coho Salmon Habitat Restoration in Northern California: Prioritization and Implementation at ESU to Site Scales

Session Coordinators:  
*Jay Stallman, Stillwater Sciences, and Dan Porter, The Nature Conservancy*

## HABITAT

### Beyond the Thin Blue Line: Floodplain Processes, Habitat, and Importance to Salmonids: Part II

Session Coordinators:  
*Tommy Williams, PhD, and Brian Cluer, PhD, NOAA Fisheries*

## MONITORING

### Validating Effectiveness Monitoring: Part II

Session Coordinators:  
*Neil Lassette and Justin Smith, Sonoma County Water Agency*

Room	Carlston Cabaret	East Auditorium	Classroom A
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1:15pm

### Determining What Actions to Implement in your Watershed: A Guide for SONCC Coho Salmon

*Julie Weeder, Recovery Coordinator, NOAA Fisheries*

### Building on Recovery Planning: a Process for Identifying, Quantifying, Prioritizing, and Validating Cost-effective Coho Salmon Restoration Actions

*Joshua Strange, PhD, Stillwater Sciences*

### 2D Hydrodynamic Based Logic Modeling Tool for River Restoration Decision Analysis: A Quantitative Approach to Project Prioritization

*David J. Bandrowski, Trinity River Restoration Program, U.S. Bureau of Reclamation*

### Mimicking Hydrologic Process to Restore Ecological Function

*Jacob Katz, California Trout*

### Building Landscape Hydrologic Resilience to Climate Change Is Analogous to, and Synonymous with Salmonid Ecosystem Restoration

*John McKeon and Brian Cluer, NOAA Fisheries*

### The Rise of the Stage Zero Channel as a Stream Restoration Goal

*Michael Pollack, PhD, Northwest Fisheries Science Center, NOAA Fisheries*

### Dry Creek Habitat Enhancement Project Adaptive Management Plan: Evaluating Physical and Biological Response

*Neil Lassette, Sonoma County Water Agency*

### Monitoring the Effectiveness of Fish Passage Projects in Coastal Northern California

*Ross Taylor, Ross Taylor and Associates*

### Validating the Effectiveness of an Off-channel Habitat Enhancement Project in Green Valley Creek through Use of PIT Tag Detection Systems

*Amelia Johnson, California Sea Grant and UC Cooperative Extension*

3:00pm

## BREAK

### A Multi-faceted Approach to Restoring the Sediment Impaired Elk River

*Bonnie Pryor, Northern Hydrology and Engineering*

### A Science Framework and Reach-wide Plan for Restoring Coho Salmon Habitat in Lower Ten Mile River

*Jay Stallman, Stillwater Sciences, and Lauren Hammack, Prunuske Chatham, Inc.*

### Coho Habitat Restoration Strategies & Projects, Russian River Tributaries, Sonoma County

*Matt O'Connor, O'Connor Environmental, Inc.*

## BREAK

### Restoration of Riparian Forests and Ecosystem Processes and Implications for Salmon

*Katie Ross-Smith, Cardno*

### Yolo Bypass Widening into the Elkhorn Basin: A Multi-Benefit Opportunity for Floodplain Habitat, Flood Relief, and Fish Passage

*Jai Singh, cbec engineering, inc.*

### Enhancing Channel and Floodplain Connectivity: Improving Salmonid Winter Habitat on Lagunitas Creek, Marin County, California

*Greg Kamman, Kamman Hydrology & Engineering, Inc*

## BREAK

### Changes in Stream Habitat Conditions in the Mattole River Watershed Over Two Decades

*Nathan Queener, Mattole Restoration Council*

### Enhancing Salmon and Steelhead Habitat in the Nimbus Basin, Lower American River, California

*Chris Hammersmark, PhD, PE, cbec, inc. eco engineering*

### Cattle Exclusionary Fencing and Off-Channel Watering on Salsipuedes Creek (Santa Ynez River) in Support of Southern Steelhead

*Scott Engblom, Cachuma Project Water Agencies*

12:15pm

Saturday Lunch in the Grand Lobby & the Atrium

# March 13, Friday Afternoon Concurrent Sessions

## RESTORATION

### Chasing Salmon—Strategically Planning for Salmon Restoration in Coastal California

Session Coordinator:  
*Lisa Hulette, The Nature Conservancy*

## CONSERVATION

### The Continuum of Conservation: Achieving Long-term Ecosystem Goals through Integrated Programs and Diverse Partnerships

Session Coordinator:  
*Karen Gaffney, Sonoma County Agricultural Preservation and Open Space District*

Room	East Auditorium	Classroom B
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1:15pm

### A New Salmon Joint Venture for California: Collaboration for Recovery

*Rene Henery, Trout Unlimited*

### Scaling-Up Streamflow Restoration for California's Salmon and Steelhead

*Matt Clifford, Trout Unlimited*

### Integration of Watershed and Fisheries Recovery in California's Private and State Timberland Operations and Regulatory Processes

*Richard Gienger, Sierra Club Representative, State Coho Recovery Team*

### Innovative Tools, Data, and Planning for Riparian Corridor Conservation

*Tom Robinson and Karen Gaffney, Sonoma County Agricultural Preservation and Open Space District*

### Conserving Stream Ecosystems and Working Lands in Perpetuity

*Misti Arias and Sheri Emerson, Sonoma County Agricultural Preservation and Open Space District*

### The North Coast Resource Partnership: Multiple Benefits for Watersheds & Communities

*Jen Jenkins Kuzmar, County of Humboldt, and Toz Soto, Karuk Tribe, Fisheries Program*

3:00pm

## BREAK

### A Salmon Safe Harbor Agreement for Dry Creek—Piloting a New Tool in the ESA Tool Box for the National Marine Fisheries Service in the Russian River Watershed

*Dan Wilson and Robert Coey, NOAA Fisheries, West Coast Region*

### Yurok Tribe Fisheries Restoration and Perspective in the Lower Klamath

*Sarah Beesley, Yurok Tribal Fisheries Program*

## BREAK

### Deepening the Roots of Conservation Science

*Chuck Striplen, PhD, San Francisco Estuary Institute—Aquatic Science Center*

### Engaging Diverse Communities in Restoration and Conservation

*Raquel Ortega and John Griffith, California Conservation Corps*

## Panel Discussion

### Are We Resilient—How Will California Implement Effective Anadromous Restoration?

*Gail Seymour, California Department of Fish and Wildlife*

7pm

Poster Session and Reception in the Atrium



# March 14, Saturday Morning Concurrent Sessions

## RECOVERY

### Mechanisms for Recovery Implementation for West Coast Salmonids

Session Coordinators:  
*Charlotte Ambrose and Nora Berwick, NOAA Fisheries*

## HABITAT

### Beyond the Thin Blue Line: Floodplain Processes, Habitat, and Importance to Salmonids: Part I

Session Coordinators:  
*Tommy Williams, PhD, and Brian Cluer, PhD, NOAA Fisheries*

## MONITORING

### Validating Effectiveness Monitoring: Part I

Session Coordinators:  
*Neil Lassettre and Justin Smith, Sonoma County Water Agency*

## CLIMATE

### Managing for Drought: Advances in Groundwater Policy and Recharge Practices

Session Coordinator:  
*Amy Trainer, West Marin Action Committee*

## ADAPTATION

### Challenges and Applications for Salmonid and Watershed Recovery in Highly Altered Systems

Session Coordinator:  
*Cynthia Le-Doux Bloom, AECOM*

## Room

### Classroom A

### East Auditorium

### Carlston Cabaret

### Fireside Room

### Classroom B

## 9:00am

### Working with Veterans to Implement Recovery Plans in California

*Bob Pagliuco, NOAA Fisheries*

### Coalition Based Steelhead Recovery Efforts in Coastal Southern California

*Sandra Jacobson, South Coast Steelhead Coalition Coordinator, California Trout*

### Coho Recovery South of the Golden Gate

*Jim Robins, Alnus Ecological*

### Partnering to Advance Central Valley Salmon and Steelhead Recovery

*Claire Thorp, National Fish and Wildlife Foundation*

### Detecting and Designing Synchronous Channel and Floodplain Habitats

*Rocko Brown, University of California, Davis*

### Development of a Multi-threaded Wetland Channel Complex and the Implications for Salmonids

*Lauren Hammack, Prunuske Chatham, Inc.*

### Restoration of Fluvial Processes, Floodplains, and Habitat in Lower Butano Creek

*Chris Hammersmark, cbec, inc.*

### Improving Monitoring: Identifying The Missing Links Between Stream Restoration: From Design to Evaluation

*Zan Rubin, University of California, Berkeley*

### Comparison of Benthic Invertebrate Community Structure and Diet Composition of Steelhead Trout in Dry Creek, California

*Andrea Dockham, Sonoma County Water Agency*

### Jam 'in for Salmon: Monitoring Channel Response to Large Wood Placement

*Kathleen Morgan, Gualala River Watershed Council*

### California Water Law, Water Transactions for Instream Flow, and New Opportunities to Integrate Surface and Groundwater Accounting

*Tom Hicks, Attorney at Law*

### Funding the Future and Touching the Third Rail: How California Passed a Water Bond and Finally Regulated Groundwater

*Tina Cannon Leahy, Principal Consultant, Assembly Water, Parks and Wildlife Committee*

### Instream Flow Objectives for Priority Sacramento Tributaries

*Daniel Schultz, State Water Resources Control Board*

### River Regulation: The Decoupling of Salmon and Freshwater Habitats

*Joseph Merz, PhD, University of California Santa Cruz and Cramer Fish Sciences*

### Survival Improvements at Fish Guidance Systems Designed to Improve Safe Downstream Passage of Anadromous and Catadromous Fish

*Shane Scott, Principal, S. Scott & Associates, LLC*

### Making Use of a Big Estuary—California Chinook Salmon Fry and Salty Water

*Yvette Redler, NOAA Fisheries*

## 10:30am

## BREAK

## BREAK

## BREAK

## BREAK

## BREAK

### Recovery Plan Implementation Through the Eel River Forum

*Darren Mierau, California Trout*

### Salmon Recovery—Local Solutions to Regional Challenges

*Steve Martin, Executive Director, Snake River Salmon Recovery Board*

### Implementing Steelhead Recovery at the Local Level in the Bi-State Walla Walla Basin

*Brian Wolcott, Executive Director, Walla Walla Basin Watershed Council*

### Doomed to Die on the Straight and Narrow: Can We Break the Levee to Let Recovery Flow?

*Sean Hayes, NOAA Fisheries, Southwest Fisheries Science Center*

### You Are What You Eat: Isotope Tools to Track Floodplain Rearing of Native Fishes

*Rachel Johnson, NOAA Fisheries, Southwest Fisheries Science Center*

### Cost-Effective Planning for Large-Scale Floodplain Habitat Restoration in the Salmon River, Western Siskiyou County

*Joel Monsbke, Stillwater Sciences*

### Immediate Fish Response to Stream Habitat Enhancement in the Spawning Reach of a Highly Altered Central Valley Stream

*Andrea Fuller, FISHBIO*

### Broadening the View of "Limiting Factors" vs. "Process-based" Restoration Strategies to Maximize Systematic Endangered Species Planning and Recovery in the West

*Derek Booth, Cardno*

### Validating Restoration Design and Implementation Actions on Trinity River Project Sites

*David Bandrowski, Trinity River Restoration Program, U.S. Bureau of Reclamation*

### An Integrated Approach for Enhancing Dry Season Flows in North Coastal California

*Joel Monschke, Stillwater Sciences*

### Engineered Groundwater Recharge in the Upper Mattole River, Humboldt County, California: Can the Scale of this Solution Match the Scale of the Problem?

*Brad Job, Senior Civil/Environmental Engineer, Pacific Watershed Associates*

### Creative and Voluntary Solutions to Increasing Flows in the Shasta River Watershed

*Lisa Hulette, Senior Project Director, Salmon Program, The Nature Conservancy*

### Salmon Feeding Strategies and the Bioenergetic Modeling of Juvenile Chinook salmon Growth During a Drought in the San Joaquin

*Taylor Spaulding, California State University, Fresno*

### Genetic Analysis of Central Valley O. mykiss: Patterns, Processes, and Recovery Planning in a Modified Landscape

*Devon E. Pearse, University of California, Santa Cruz*

### Measuring the Effects of Drought on the Macroinvertebrate Community Composition in Topanga Creek, CA

*Lizzy Montgomery and Crystal Garcia, RCD of the Santa Monica Mountains*



## 12:15pm

Saturday Lunch in the Grand Lobby & Atrium