

# Stream Channel Naturalization

## Workshop Agenda

May 29<sup>th</sup>, 2008

<b>9:00 -9:15</b>	Jessica Hall (SMBRC) and Tom Moody	<a href="#">Introduction to workshop and summary of Arroyo Seco Field Trip</a>
<b>9:20-10:20</b>	Tom Moody (Natural Channel Design)	<a href="#">Restoration design tools for use in Southern California: regional curves &amp; other tools.</a>
<b>10:20-10:30</b>	<b>B R E A K</b>	
<b>10:30-11:15</b>	Chris Bowles (CBEC)	<a href="#">Protecting and restoring floodplains: the importance of floodplains to stream health.</a> (172.31 MB) <a href="#">Floodplain -Flood Area/Volume Video1</a> <a href="#">Floodplain – Flood Area Video2</a> <a href="#">Floodplain – Sponge Video3</a>
<b>11:15-12</b>	A.L. Riley (SFBWQCB)	<a href="#">Restoring the functions of streams and rivers in difficult urban environments, a discussion for the restoration and regulatory community.</a>
<b>12:00 -1:15</b>	<b>LUNCH</b>	
<b>1:15-2:15</b>	Roger Leventhal (Farwest Restoration)	<a href="#">What you should know about the use of hydraulic models for restoration: asking the right questions.</a>
<b>2:15-3:15</b>	Debbie Brushaber (Mountains Restoration Trust, Calabasas), Linda O'Hirok (Cal State Los Angeles), Syd Temple (Questa Engineering Corp.)	<a href="#">Dry Canyon Creek Stream and Habitat Restoration Project</a> (DVD - 10 minutes). <a href="#">Developing a step-pool sequence for ephemeral streams. Las Virgenes Creek Restoration Project.</a>
<b>3:15-3:30</b>	<b>B R E A K</b>	
<b>3:30-4:15</b>	Ellen Mackey (Los Angeles and San Gabriel Rivers Watershed Council)	<a href="#">Go with the flow: matching plant selection to soils and hydrology.</a>
<b>4:15-4:30</b>	BMP VIDEO (12 minutes)	Video tape on willow post installation.



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4:30-5:00

Moderated by A.L. Riley  
(SFBWQCB)

Panel question & answer session.

**Biographies and Contact Information for Speakers:**

**A.L. Riley (San Francisco Water Quality Control Board), [ALRiley@waterboards.ca.gov](mailto:ALRiley@waterboards.ca.gov), phone 510.622.2420.**

Ann L. Riley, Ph.D, is the watershed and river restoration advisor for the San Francisco Regional Water Quality Control Board. This regional board makes her available to the other eight regional water boards in California, the State Water Resources Control Board, and the California Resources Agency and its departments. She is also Executive Director of the Waterways Restoration Institute, (WRI) a technically oriented organization which works on a national level to promote and sponsor demonstration stream restoration projects. She is a co-founder of the Urban Creeks Council of California, established the California Dept of Water Resources Urban Streams Restoration Program in 1984, now in its 23rd year, and is regarded as a national expert in the field of river restoration. She participated in the development of a national network of waterway citizen organizations in the 1990's, the Coalition to Restore Urban Waters. She is author of the book Restoring Streams In Cities. The watershed council she was instrumental in creating, the Wildcat-San Pablo Creeks Watershed Council, Richmond, Calif, and her non-profit won the Governor's Economic and Environmental Leadership Award in 2003. She is also a recipient of the Salmonid Restoration Federation's Nat Bingham Restorationist of the Year Award. Her PhD from the University of California, Berkeley under Dr. Luna Leopold specialized in flood and river management.

**Chris Bowles (CBEC), [Chrisbowles@mac.com](mailto:Chrisbowles@mac.com), Phone 916.570.2502.**

Dr. Bowles is a civil engineer specializing in hydraulics, hydrology, geomorphology, water resources, water quality and environmental restoration. He has over fifteen years of project management experience on a wide variety of large multi-disciplinary, multi-stakeholder projects such as floodplain restoration, sediment studies, watershed hydrology, water quality, river and wetland restoration in California, Nevada, Washington, Oregon, and Florida, and oversees, including projects in the UK and Central America. Nine of these years have been spent in practice in the US. His technical expertise spans the range of hydraulic and hydrologic modeling (HEC software and a wide variety of 1D, 2D and 3D hydraulic models), GIS and field data collection (topographic and bathymetric surveying, water quality monitoring, flow gauging and sediment transport measurements). Prior to specializing in environmental hydrology, Dr. Bowles worked initially as a land surveyor and latterly as a site construction supervisor.

**Debbie Brushaber (Mountains Restoration Trust, Calabasas), [dbruschaber@mountainstrust.org](mailto:dbruschaber@mountainstrust.org), Phone 818.591.1701x205.**

Debbie Bruscher along with Jo Kitz are the acting directors of the Calabasas Mountains Restoration Trust (MRT). Bruscher has spent more than 25 years in the real estate industry; her work has ranged from land acquisition for master-planned developments to natural resource protection to financing, appraisal and construction. For the past 16 years, she has focused on water-quality improvement, habitat restoration and open-space acquisition; for eight of those years she has been a project manager at the MRT. She worked to develop Headwaters Corner at Calabasas, a 12-acre interpretive site containing significant environmental and cultural



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resources. Last year she headed the restoration of Dry Canyon Creek at that site; more than 900 linear feet of restored stream now support numerous aquatic plants and animals. Bruschaber is president of the Calabasas Historical Society and Historic Preservation Commissioner for the City of Calabasas.

**Ellen Mackey (Los Angeles and San Gabriel Rivers Watershed Council),  
emackey@mwdh2o.com, Phone 818.504.2196.**

Ellen Mackey is a Senior Ecologist, certified by the Ecological Society of America, and a staff ecologist with the Metropolitan Water District of Southern California. She has been on assignment to the Los Angeles and San Gabriel Rivers Watershed Council for the past eight years. She continues to spend time in the field, evaluating and mapping habitat along the rivers. In 2004, she completed editing and finalizing the Los Angeles River Landscaping Guidelines and Plant Palettes for Los Angeles County Department of Public Works. In 2006, she coauthored Care and Maintenance of Southern California Native Plant Gardens. Most recently she authored the site-specific Marengo Street Park Maintenance Manual for a small park in Altadena. Her front-yard native plant landscaping is certified by the National Wildlife Federation's Backyard Habitat Program. For ten years her home has been open to the public in October as a sustainable home in the National Tour of Solar Homes and for the past 5 years as part of the Theodore Payne Foundation Garden tour in April.

**Jessica Hall, JHALL@waterboards.ca.gov** is the Ballona Creek Watershed Coordinator at the Santa Monica Bay Restoration Commission, where she provides support for the activities of the Ballona Creek Watershed Task Force, develops watershed enhancement projects with stakeholders, outreaches on issues relating to watershed, and particularly stream, health, protection, and restoration, and promotes the Watershed Management Plan. She is also a Senior Associate with Restoration Design Group, a Berkeley-based stream restoration firm. Ms. Hall's recent work focused on mapping the historical streams of the Los Angeles region, correlating them to the network of storm drains that replaced them, and identifying opportunities for restoration. She is a co-author of Seeking Streams: A landscape framework for urban and ecological revitalization in the upper Ballona Creek Watershed. She is also a landscape designer, and developed mini-park and greenway designs utilizing native plants while at the non-profit urban forestry organization North East Trees. Ms. Hall has a Master's in Landscape Architecture from California State Polytechnic University at Pomona, and a Bachelor of Arts in Architecture from Princeton University.

**Linda O'Hirok (Cal State Los Angeles), lohirok@calstatela.edu**

Dr. O'Hirok completed her B.A. and M.A in Geography, Ecosystem Analysis, from the University of California, Los Angeles and her PhD. in Geography from Arizona State University with an emphasis in fluvial geomorphology. She has been teaching at California State University, Los Angeles in the Department of Geography and Urban Analysis for 17 years. Courses include fluvial and coastal geomorphology, field techniques, arid lands, water resources and stream restoration with a primary goal of introducing students from the inner city to the value of preserving and restoring the integrity of riparian and wetland habitats. For over 20 years, Dr. O'Hirok has surveyed step-pool streams in the Santa Monica Mountains with Dr. Anne Chin to provide baseline data. In 2006 she became part of the Mountains Restoration Trust team to restore the habitat and geomorphology of Dry Canyon Creek in Calabasas. Dr. O'Hirok was responsible for assessing the bed morphology and designing the ephemeral tributary of Dry Canyon Creek.

**Roger Leventhal (Farwest Restoration), farwesteng@aol.com, Phone 510.522.7200.**



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Roger Leventhal, P.E. is a hydrologist and hydraulic engineer specializing in the analysis, design and implementation of urban creek restoration projects. As principal of his own firm, Mr. Leventhal has over 22 years of experience designing, permitting and implementing creek and wetlands restoration projects throughout California. He has developed particular expertise in applying the geomorphic approach to creek restoration design and then using more traditional computer modeling to analyze these designs for impacts. Many of his projects include fish passage issues and involve barrier removal and restoration of the creek and/or retrofitting of culvert barriers when removal is not possible. He often works closely with building and landscape architects to consider new approaches to site development that provide for protection of creeks through low impact stormwater design and to understand the long-term consequences of improper site development. He also works on several tidal marsh restoration projects using dredged sediments for beneficial reuse by creating wetlands including the Montezuma Wetlands Project, the Hamilton Restoration Project, and the Bair Island Project. He has a BS in Geology from UCSB and a Masters in Hydraulic Engineering from UC Berkeley. Mr. Leventhal is appointed as a member of the Bay Conservation and Development Commission, Design Review Board primarily to provide guidance on engineering design and construction in ecologically sensitive areas around the San Francisco Bay margin. He was also appointed a member of the Bay Area Wetlands Design Review Group.

**Sydney Temple, P.E., Principal (Questa Engineering Corp.), [STemple@QuestaEC.com](mailto:STemple@QuestaEC.com)**

Mr. Temple is a California licensed professional engineer specializing in water resource engineering. He supervises Questa's hydrologic/hydraulic/geomorphic studies and the development of Creek restoration design and bank stabilization projects. Mr. Temple has 15 years of professional experience in hydrologic analysis, with extensive experience in investigating, designing, and permitting fish passage and stream restoration projects. He has designed fish passage barrier removal and stream restoration projects in Los Angeles, Ventura, Santa Barbara County, San Luis Obispo, Monterey, San Mateo, and Marin Counties. Two of his projects have won a design awards from the American Public Works Association (APWA). With an academic background in geology and geomorphology, Mr. Temple integrates the fields of fluvial geomorphology and hydraulic analysis as it pertains to fish passage and stream restoration projects within urban environments. Since 1991, he has been the design engineer for over \$10 million in biotechnical bank stabilization and channel restoration projects. Mr. Temple's other experience includes flood control studies, culvert day-lighting plans, water quality improvement projects, wetland/aquatic habitat restoration, and watershed planning studies

**Tom Moody (Natural Channel Design), [tom@naturalchanneldesign.com](mailto:tom@naturalchanneldesign.com), Phone (928) 774-2336 x1.**

Tom Moody, P.E. is a civil engineer licensed in Arizona and Utah and principal in Natural Channel Design, Inc. Tom has performed stream assessments and restoration designs for perennial and ephemeral channels in Nevada, Arizona, Utah, and New Mexico. He is an expert in the geomorphic approach to stream channels and has conducted research on stream systems and watershed science in the arid regions of California, Utah, Arizona, New Mexico, and Alaska. He has conducted workshops on the geomorphic approach to natural channel design and soil bioengineering. He is an Arizona native and has spent the past 30 summers on the rivers of southeast Alaska.