

Trees Foundation's *9th Annual*

# Coho Confab

*Co-hosted with the*

***Salmonid Restoration Federation and***

***Salmon Protection And Watershed Network (SPAWN)***

*and co-sponsored by*

***Department of Fish & Game, Marin Community Foundation, and NOAA's Restoration Center***



## Presenters & Workshops

***August 25, 26, and 27, 2006***

*Point Reyes National Seashore*

*at the Clem Miller Environmental Education Center in Marin County*



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*Trees Foundation, SRF, and SPAWN would like to thank the following businesses for their generous donations and support for the Coho Confab: Hain Celestial Corp., North Coast Coop, Trader Joe's of San Rafael, Tofu Shop, Signature Coffee, Casa Lindra Salsa, Brio Breadworks, Lagunitas Brewing Company, Fish Brewing Company, Tomales Bay Association, and Bagels Naturally*



Friday, August 25, 2006

## Afternoon Workshops (1-4pm)

### *Underwater Fish Identification in Lagunitas Creek*

**Eric Ettlinger**, Aquatic Ecologist of Marin's Municipal Water District

Learn to identify the native fish of Lagunitas Creek and snorkel survey techniques. This workshop will provide a first-hand look at a local creek with a diverse community of native fish and very few exotic species. This workshop will emphasize fish identification, habitat preferences, and techniques for quantifying fish abundance. A drysuit or wetsuit, snorkel, and mask are required. Drysuits, dive hoods, and gloves are strongly recommended.

**Eric Ettlinger** has a Master's Degree in Wildland Resource Science from the U.C. at Berkeley, and has been working as the Aquatic Ecologist for the Marin Municipal Water District since 1999. His major responsibilities include monitoring populations of endangered coho salmon and threatened steelhead trout, and enhancing fish habitat through the placement of large woody debris. Fish monitoring methods include snorkeling, electrofishing, smolt trapping, and spawner redd counts.

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### *Fish Rescue and Relocation: The Creek Is Going Dry—Save Those Salmon!*

**Megan Isadore with Todd Steiner**, SPAWN

This workshop, led by the Salmon Protection And Watershed Network (SPAWN), will explore issues that affect creek flow dynamics and the ways in which watershed groups can help save remnant salmonid populations. Participants will learn about issues related to creek drying, techniques for fish rescue, how to navigate through the permitting process, and how to recruit long-lasting volunteers.

**Megan Isadore** is a Fish Rescue and Relocation program crew leader and Volunteer Education and Coordination leader for SPAWN's winter spawning salmon tours. Megan has worked with SPAWN as a volunteer for eight years, participating in spawning surveys, water quality testing, educational outreach, writing and editing SPAWN's Naturalist Training Manual, and training naturalist volunteers. She's spent hundreds of hours in and around Lagunitas Creek participating in and leading volunteer teams in field research on limiting factors and smolt out-migration studies, seeking out and counting redds and salmon, relocating fry, surveying creeks for problem areas, and leading educational tours to see the spawning salmon.

**Todd Steiner** is a biologist and organizer, as well as the founder and director of the Sea Turtle Restoration Project and SPAWN. With 20+ years of field biology and environmental activism experience, he has learned to balance long-term vision with achievable short-term objectives that keep passions alive and organizations moving forward and growing sustainably. Todd has served on the Board of Directors of the Earth Island Institute, Turtle Island Restoration Network, and the San Geronimo Cultural Center. He currently sits on the Marin Municipal Water District's Lagunitas Watershed Technical Advisory Committee. Todd has recently been recognized with the "Steward of the Land Award" from the Sierra Club Marin Group, the "Outstanding Community Activism Award" from the Social Justice Center of Marin, and a "Certificate of Special Congressional Recognition" from US Representative Lynn Woolsey. He has a M.S. in Biology from Florida International University and a B.S. in Nature Conservation and Interpretation from the University of Maryland.

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### *Coho Across the Riverscape: How Migration and Seasonal Habitat Use Reveals Stream Reach-specific Restoration Potential in the Lagunitas Creek Watershed*

**Matt Sloat**, Fisheries Biologist of Stillwater Sciences

During the winter of 2005/2006 Stillwater Sciences, in cooperation with the Lagunitas Advisory Group, conducted focused studies on the winter ecology of juvenile salmonids in Lagunitas Creek. The first of these studies was designed to document habitat-specific abundance, fidelity, and growth of PIT tagged coho salmon and steelhead from a moderately confined tributary to Lagunitas Creek during winter. The second study documented smolt production from stream reaches that differed in their channel confinement, and frequency of debris jams, backwaters, and other winter habitat features. During this workshop we will visit stream reaches that were the focus of these studies and discuss how the results help reveal specific restoration actions for the watershed.

**Matt Sloat** is an aquatic ecologist with Stillwater Sciences, Berkeley, California. His research interests revolve around the freshwater ecology of resident and anadromous fish, especially salmonids. Much of his recent work has included research on habitat and reach-scale variation in abundance, movement, survival, and growth of juvenile coho and steelhead in Bay Area streams including Lagunitas Creek.

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## Evening Presentations (7-9:30pm)

### *Coho Salmon: Empowerment and Local Grassroots Action! (8pm)*

**Paola Bouley and Todd Steiner**, SPAWN

**Paola Bouley** has worked as SPAWN's biologist since 2004 where she helps lead community-based monitoring and restoration projects to restore and protect coho and steelhead habitat in the Lagunitas Creek watershed. She is a community ecologist by training with ten years experience working with California's native plants and songbirds, endangered species monitoring, and habitat restoration. Paola graduated with a B.S. in Marine Biology from U.C. Santa Cruz and a M.S. in Ecology from the Romberg Tiburon Center for Environmental Studies and San Francisco State University. Over the past ten years she has spent time doing research and monitoring in a number of ecosystems ranging from California's oak woodland and riparian forests, to the intertidal zone along Monterey Bay, to Tahitian reefs, to the turbid pelagos of the urbanized San Francisco Estuary. She is nowhere happier than close to home where she works on-the-ground to protect and restore the West Marin streams that support the largest remaining wild-run of coho in California.

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### *20-Year Retrospective of Marin County Salmon Restoration Efforts (8:30pm)*

**Liza Prunuske**, Prunuske Chatham, Inc.

Marin County's salmon restoration history begins where that of most of California streams begin, with the sudden decline of fish populations in the 1970s and 1980s. The rallying point for much of the early restoration activity was the raising of Peters Dam on Lagunitas Creek in the early 1980s combined with the severe storm of January 4, 1982. These two events, combined with decades of land use changes and dam building, decimated Lagunitas' once robust coho salmon run. By the mid 1980s coho were gone from all of the streams draining into San Pablo Bay, and all but a handful in West Marin. Steelhead remained in more streams, but they too were declining.

This talk focuses on the Tomales Bay watershed of West Marin County, where she has have worked since 1982. Significant effort has also been made to assess, stabilize, and improve steelhead populations in East Marin streams and to sustain steelhead and coho populations in Redwood Creek, Easkoot Creek, and other West Marin Creeks.

The two largest streams draining into Tomales Bay, Lagunitas and Walker Creeks, have very different restoration histories and outcomes. Even with contentious disagreement about the causes of and culpability for the coho decline and the best restoration strategies, all of the groups and agencies working in Lagunitas Creek have had one clear common purpose—to bring back the coho. Early and ongoing studies and monitoring have sharpened understanding of limiting factors and helped to refine recovery actions. Visionary, stubborn leadership at key points kept funding and public support high. No one entity dominates restoration activities. Instead, the work is strongly grounded in community groups, local agencies, state and federal parks, and even individuals. Wild ideas, creativity, and persistence have marked coho's comeback in Lagunitas.

Restoration efforts in the Walker Creek watershed have followed a much different path. With over 95% of the watershed in private ownership, public agency, and non-profit participation has been minimal. Very little is known about Walker Creek salmonid populations and until recently, the system's value for fish restoration was considered low by the Department of Fish and Game. Nonetheless, local landowners, the Marin County Resource Conservation District, and NRDC have plugged away at re-establishing functional riparian corridors and reducing pollution from fine sediments and animal wastes. DFG has recently reintroduced coho into mainstem Walker Creek and their populations are now being monitored. The state of the steelhead population in what was once a strong fishery remains a mystery. Without the assessment present for Lagunitas Creek, recovery actions have had more of a generalized, shotgun approach in Walker Creek.

With TMDLs, climate change, and a population in which few now remember Halleck Creek's magnificent coho runs or fishing for steelhead at the mouth of Walker Creek, both streams continue to face challenges to sustaining and accelerating the recovery of their salmonid populations.

**Liza Prunuske** is a founding principal of Prunuske Chatham, an ecological planning, design and construction company in Sonoma County. She has extensive experience in developing working agreements between agricultural landowners, public agencies, and clients. Working with local districts and private landowners, Liza has planned and managed long-term, comprehensive restoration programs in the Stemple Creek, Walker Creek, and Lagunitas Creek watersheds.

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# Saturday, August 26, 2006

## Full-day Workshops (9:30am-4:30pm)

### *Giacomini Wetland Restoration Project and Long-Term Monitoring Program*

**Lorraine Parsons**, Wetland Ecologist and Project Manager (with assistance from **Amelia Ryan** and **Cassandra Liu**)

The Giacomini Wetland Restoration Project intends to restore natural hydrologic and ecological process to the 563 acre property, currently an operating dairy. Implementation of the project, which will restore extensive tidal marsh and floodplain habitat is anticipated for summer 2007 and summer 2008. The workshop will include a broad overview of wetland ecology, restoration ecology, project planning, and restoration monitoring. A hands-on, invasive weed removal component will be part of the overall workshop, as the morning session will provide the rationale and understanding of the site, and by afternoon, we'll be happy to get some on the ground work done.

**Lorraine Parsons** has a B.S., Biology; B.A., Journalism from the University of Southern California., and a M.S., Wetlands Ecology from San Diego State University. Lorraine has worked for both consulting firms and agencies prior to joining the Park Service, primarily on designing, permitting, and implementing wetland and riparian restoration and mitigation projects, and monitoring wetland and riparian areas.

**Amelia Ryan** studied Plant Biology at U.C. Davis and received B.S. in 2000. Prior to the Park Service, she worked on a Stream Habitat Restoration Project for State Parks. She will be attending San Francisco State University in the fall to start the Masters program in Conservation Biology.

**Cassandra Liu** graduated from U.C. Berkeley with a B.A. degree in Environmental Sciences. These days she spends most of her time in poison oak and stinging nettle removing invasive weeds.

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## *A Freestyle Exploration through the San Geronimo Valley to Visit SPAWN's Community-Based Projects*

**Paola Bouley**, SPAWN

Join SPAWN's watershed biologist, Paola Bouley, for a tour of SPAWN's diverse community-based projects in the San Geronimo Valley including a new large-scale rainwater harvesting and stormwater management design at the Lagunitas School, a riparian buffer reforestation and bioengineered bank-stabilization, a native plant nursery, and the recent and exciting two acre land trust purchase under towering redwoods along San Geronimo Creek.

## **Morning Concurrent Sessions (9:30am-12:30pm)**

### *Propagating Native Plants for Ecological Restoration Projects*

**Estrella Phegan**, Nursery Coordinator of Ecological Services division of Circuit Rider's Productions, Inc.

This workshop will include seed collection of local native plants and processing demonstrations. The workshop will focus on practical and ethical considerations of restoration with native plants. Emphasis will be placed on genetically appropriate source material and how to collect and propagate seeds to reduce impacts to the natural regeneration processes.

**Estrella Phegan** oversees and carries out native plant production activities including seed/cutting collection, propagation, plant maintenance, and nursery operations management. Estrella has managed several nursery facilities over the past three years, including the Hayward Community Garden and U.C. Santa Cruz's Farm and Garden. She has a Botany degree from San Francisco State University and has worked with the San Francisco Recreation and Park Department's Natural Areas Program restoring remnant native habitat in city parks.

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### *Fish Passage Barriers: Tools for Assessment, Prioritization, and Implementation Workshop*

**With Leah Mahan**, NOAA Restoration Center, **Jon Mann**, Prunuske Chatham, Inc., **Michael Bowen**, Coastal Conservancy, **Darcy Aston**, Fishnet 4C, and **Martina Koller**, Pacific States Marine Fisheries Commission

Practitioners and planners have made substantial progress in documenting and prioritizing fish passage barrier removal projects in California. More information is still needed to complete barrier datasets and further prioritize barrier removal or modification projects. Several tools have been developed to help restoration practitioners plan and prioritize fish passage barrier removal projects. CalFish is a multi-agency cooperative on-line database that serves as a clearinghouse for fish data in California. CalFish is designed to gather, maintain, and disseminate fish and aquatic habitat data and data standards. The California Passage Assessment Database (PAD), which is housed at [www.calfish.org](http://www.calfish.org), contains up-to-date information on known or possible fish passage barriers in California and their status. The PAD is a helpful tool when prioritizing barrier removal projects within a watershed or region. Practitioners can submit information on barriers to the [www.calfish.org](http://www.calfish.org) database for inclusion in the PAD. Barrier removal experts have developed Fish X-ing software designed to assess potential barriers and the extent to which they are passable. Specific field measurements are required to collect sufficient data for use of Fish X-ing.

There are many ways to prioritize barrier removal projects. Some barrier removals are prioritized on a watershed level, while others have been prioritized at a regional level. FishNet 4C has been working with Central Coast Counties to prioritize county road crossing barriers for repair or replacement. This has led to increased efficiency in implementing fish passage restoration projects and helps provide justification for funding the prioritized sites. There are many federal, state, and local funding sources that provide assistance with fish passage barrier removals including the California Coastal Conservancy, the NOAA Restoration Center, the California Department of Fish and Game, the U.S. Fish and Wildlife Service, the Natural Resource Conservation Service, American Rivers, and many private foundations. This workshop provides an introduction to the status of barrier inventories and prioritization in California, a demonstration of [www.calfish.org](http://www.calfish.org), a review of tools for assessing barriers, examples of successful prioritization efforts, and a discussion of funding sources for fish passage barrier removal design and implementation.

**Jonathon Mann** is a California Registered Professional Civil Engineer with extensive experience in hydraulic engineering and a special focus on fish passage and stream channel restoration. Jon joined Prunuske Chatham, Inc. (PCI) in February 2005 and has been increasing his expertise in erosion control and bank stabilization using biotechnical techniques. Recently, he has designed and prepared construction plans for stream bank stabilization projects in Marin and Napa counties along with wetland mitigation plans in Sonoma County. Before joining PCI, Jon worked for seventeen years with the federal government. He served on many national and state committees for the conservation and protection of salmonid habitat and migration pathways. Jon's leadership and help led to the identification and prioritization of over 500 fish passage problems at stream crossings throughout Coastal California. To date, systematic restoration, with Jon's involvement at over 30 of those sites, has been completed to improve fish access to more than 100 miles of stream habitat.

**Michael Bowen**, an Oakland native, graduated from the U.C., Berkeley, with a degree in history and a focus on water policy in the western United States. He worked at California Trout for eight years, spending much of that time developing grey hairs on water-based conflicts on the Gualala and the Eel rivers. After leaving CalTrout, he served as the first employee of the Low Impact Hydropower Institute, an organization seeking to establish a market-based means of certifying “green” hydropower operations. He then worked for the Coastal Commission’s Energy Unit, commenting on behalf of the Commission on the siting of power plants in the coastal zone. Mr. Bowen now works in the North Coast Work Group of the Coastal Conservancy.

**Darcy Aston** is the Program Director for FishNet 4C, a coalition of Central Coast Counties working to implement salmonid protection and restoration projects. Darcy works with the Counties of Sonoma, Marin, San Mateo, Santa Cruz, and Monterey, assisting them in implementing on-the-ground restoration projects, employing best management practices during maintenance activities, and incorporating aquatic habitat protections into land use regulations and policies. Prior to moving to Northern California last year, Darcy worked for 14 years for the Santa Barbara County Water Agency, assisting in the development and implementation of a regional water efficiency program. She also worked on the development of the County’s Project Clean Water storm water quality program, and managed watershed planning and restoration projects. Darcy holds a B.A. in Environmental Studies from the U.C. Santa Barbara.

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### *On Farm Watershed Management: Implementing Practices for Improving Water Quality and Habitat Conservation*

**David Lewis**, U.C. Cooperative Extension and **Nancy Scolari**, Marin Resource Conservation District

Tomales Bay and its surrounding watershed is valued for its natural and cultural resources. It is home or stopping grounds for over 20,000 resident and migratory birds a year. Threatened coho salmon spawn annually in the Olema Creek watershed. The catchment also has a rich agriculture and mariculture history. Dairy and livestock ranching began in the region around 1850. There are records of a native oyster fisher from 1890 and commercial production of oysters began in 1918. Repeatedly through this history, there have been conflicts between viable local economies and wildlife habitat integrity.

On-farm conservation and restoration of biological and physical processes have been and continue to be critical endeavors to resolve these conflicts. Examples include the installation of manure management systems on dairies in the late 1970s and conservation easements purchased by the Marin Agricultural Land Trust from 1980 to the present. Most recently, the Tomales Bay Group (TB.A.G) formed to provide direction and support in water quality management for animal agriculture producers in the watershed. This group has participated on the Tomales Bay Shellfish Technical Advisory Committee, reaching consensus on measures to protect shellfish harvesting areas within the Bay. In addition, TB.A.G members cooperated with the U.C. Cooperative Extension to understand sources of water quality impact on ten dairies and ranches. Results from this research and other assessments of nonpoint source pollution within the watershed have been used in applications for implementation funding. The Marin Resource Conservation District (Marin RCD) is integrating several grants awards, such as \$750,000 through the California Costa-Machado Act (Proposition 13) in March 2003, with funding support from the Natural Resources Conservation Service’s Environmental Quality Incentives Program to increase the number of ranches on which conservation practices are being implemented.

This workshop will start with a brief introductory slide show on the history of livestock agriculture, shellfish production, and on-farm habitat and water quality conservation within the Tomales Bay watershed. We will then build upon this background through a farm visit, viewing examples of how a working ranch partners with technical and financial assistance providers to implement habitat and water quality improving conservation practices.

**David Lewis** is a U.C. Cooperative Extension Advisor focusing on watershed management in Sonoma, Marin, and Mendocino Counties. In this position, he develops and implements projects that integrate natural resource conservation with agricultural viability. To do this, he works with agriculture and natural resource managers to improve water quality and watershed functions through research and education. His training and background are in geology, as well as water quality and quantity in California oak woodlands. In conducting his thesis research, David examined 17 years of water quality and quantity measurements from a Sierra Foothills oak woodland watershed. Local experience includes working with agricultural landowners in the Garcia River and Tomales Bay watersheds to develop and implement measures that improve water quality and facilitate compliance with water quality regulations. He also co-leads instream monitoring of habitat and coho survival for the Russian River Coho Salmon Captive Broodstock Program.

**Nancy Scolari** is the Executive Director of the Marin Resource Conservation District (Marin RCD). Nancy received a B.A. in Environmental Studies and Planning at Sonoma State University before enlisting in the U.S. Department of Agriculture’s AmeriCorps program. It was during this time she assisted landowners with the development, implementation, and monitoring of their ranch conservation plans. She then went on to work for the Southern Sonoma RCD, assisting in the development and implementation of the Stemple and Sonoma Creek Watershed Enhancement Plans. She has been with the Marin RCD for nine years, during which time she has facilitated the implementation of over 70 on-the-ground conservation projects, based on watershed-wide plans and assessments.

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## Afternoon Concurrent Sessions (1:30-4:30pm)

### *Tails From a Hidden World—Natural History and Underwater Exploration of Salmonids and Their Habitat*

**Maureen Roche**, Mattole Salmon Enhanceress

Salmonid Spacetime Synopsis: When the San Andreas unzipped Baja, 57 million years ago, most of California was still underwater. Lagunitas Creek arose 250,000 years ago, when King Peak and Mattole River were only beginning. Now, worn-down, the 1.6 million year old Coast range protected redwoods, salmon, and woolly mammoths from glaciers. Life has co-evolved to survive storms, quakes, wildfires, draughts, and floods, but not the arrogant ignorance of “desertification” in this ancient temperate rainforest. Compare the abundance and diversity of relictual species in six north coast streams with minimal survival conditions for (us) them. Species identification, biome viability, and in-stream diver strategies will be explored from a fish’s view.

**Maureen Roche** is a 60-year young mother of two and grandmother of two, ICU nurse of 42 years, chief medical officer of Petrolia Volunteer Fire Dept., Grand Canyon River Guide, naturalist, and riverine researcher. She dives up to 50 river miles per year researching critical habitat, primarily on the Mattole River in Humboldt County. Maureen works with various governmental agencies and NGOs.

Maureen Roche

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### *Rapid Bioassessment Monitoring—Stream Health Assessment*

**Jim Harrington**, CDFG Water Pollution Control Laboratory

An alarming number of California’s aquatic habitats are becoming degraded by pollution and development. Species biodiversity is being lost as growing human populations and developments make increasing demands on natural resources. Learn about a new technique to assess stream health by studying the biological communities (macroinvertebrates), instead of using chemical analysis, through a technique developed by bio-assessment pioneer, Jim Harrington. He has created a highly effective program that is accessible to everyone and really works! Jim helped design a program in California which is now in use statewide. Jim is part of the Sustainable Land Stewardship International Institute which utilizes strong citizen advocacy to achieve aquatic habitat protection, conservation, and preservation. The workshop will provide an overview and field orientation of the techniques involved.

**Jim Harrington** graduated from Humboldt State University with a B.S. in Fisheries Management and a M.S. in Watershed Management. His graduate work emphasis was in water quality of wildland streams. He developed an analytical technique for monitoring changes in the benthic macroinvertebrate communities of second-order streams affected by clear-cut logging. Jim started working as an aquatic biologist in 1980 for Redwood National Park where he worked on inland and estuarine aquatic resource studies. In 1987, Jim started working for the California Department of Fish and Game’s Pesticide Investigation Unit and is currently assigned to the Water Pollution Control Laboratory (WPCL). He is also the program director of WPCL’s Aquatic Bioassessment Laboratory. For the past ten years, Jim has volunteered with the Sustainable Land Stewardship Institute International ([www.slsi.org](http://www.slsi.org)) to help watershed groups monitor the health of streams and rivers. He has written a well-used methods manual and has conducted over 50 three-day workshops throughout the state.

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### *Field Review of Barrier Assessment, Design and Removal Techniques*

**Leah Mahan**, NOAA Restoration Center, **Jon Mann**, Prunuske Chatham, Inc.,

**Margaret Tauzer**, NOAA Fish Passage Engineer, **Kallie Kull**, Marin County Public Works

Many efforts are underway to provide passage through fish passage impediments such as dams, culverts, fords, and other man-made structures installed in streams and rivers. Fish passage barriers can be caused by a variety of conditions, including jump height, water depth, and water velocity. Through experience, engineers, barrier removal practitioners, and agencies have designed standardized fish passage criteria and developed an array of accepted design approaches, depending on the conditions and constraints at each barrier site. The National Marine Fisheries Service and the California Department of Fish and Game have developed fish passage criteria, for juvenile and adult salmonid life stages, that must be met before fish passage projects can be approved for funding or permits. A wide array of methods have been developed to repair fish passage barriers. The preferred approach is complete removal of the barrier structure and replacement (if needed) with a clear spanning structure that does not interfere with stream channel processes or salmonid passage. If this approach cannot be used due to site constraints or project costs, other approaches can be used to reduce or eliminate the barrier by altering the stream grade and/or channel hydraulics through the barrier site. Several design options are frequently used to plan barrier removal projects: Hydraulic Option, Active Channel Option, and Stream Simulation Option. There are many examples of fish passage barriers and barrier removal projects near the Coho Confab workshop in Marin County. The workshop will visit local Marin County fish passage barrier sites and discuss site constraints, possible approaches to fish passage, and measurements to assess their passage status. The field tour will also visit a project during construction to discuss implementation considerations, and a completed barrier removal/modification to assess project results.

**Leah Mahan** works with the NOAA Restoration Center in the Community-based Restoration Program, a funding program for marine and anadromous habitat restoration. During her past five years in the Community-based Restoration Program, Leah has observed and interacted with a variety of fish passage and habitat restoration projects and practitioners throughout California. Through this interaction, she has gained a general understanding of the wide variety of approaches that can be used to address fish passage, and the required steps to successfully complete fish passage projects including planning, permitting, funding, implementation, and monitoring. Leah received a B.A. in Ecology and a M.S. in Botany from California State University, Chico in 2000 and 2002, respectively.

**Kallie Kull** is currently employed as the Senior Planner for Fish Passage in Marin County’s Public Works Department, Kallie is working hard to plan, permit, fund, and implement fish passage restoration projects. Several of Marin County’s projects will be featured during the Coho Confab

fish passage session and field tour. Prior to her position with Marin County, she worked for seven years as the Program Director of the FishNet 4C Program, developing salmon restoration policies and programs for the Counties of Mendocino, Sonoma, Marin, San Mateo, Santa Cruz, and Monterey. Her graduate studies at U.C. Berkeley focused on watershed ecology and fluvial geomorphology, while summers were spent in Alaska as a fisheries biologist for NOAA Fisheries.

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## Open Forums and Resource Workshops (5-6:30pm)

### *Recovering California's Central Coast Salmon and Steelhead Under the Federal ESA*

**Charlotte Ambrose**, NMFS North Central California Coast Recovery Coordinator

The National Marine Fisheries Service is the Federal agency with regulatory jurisdiction over anadromous salmonids listed as threatened or endangered under the Federal Endangered Species Act. Once a species is listed, the listing agency is responsible for developing a plan for species recovery. Recovery plans for salmonids in California are currently under preparation. Key components of recovery plans include: (1) criteria for population/species viability; (2) assessment of population-based and habitat-based threats; (3) recovery criteria and site-specific management actions that will reduce or eliminate identified threats; and (4) an assessment of costs. Draft recovery plans for California's listed salmonids are due June 2007 with final plans due December 2007. Public workshops have been held in several areas in the Central Valley and Santa Cruz to give the public an opportunity to participate in the process. Additional workshops are forthcoming and information will be posted at the website [www.abag.ca.gov/abag/salmon/recoveryworkshops/](http://www.abag.ca.gov/abag/salmon/recoveryworkshops/)

**Charlotte Ambrose** has a Forest Resources Degree from the University of Georgia (emphasis on terrestrial and aquatic species). From 1996 to 1999 she was a self-employed biologist in Mendocino County, conducting aquatic, terrestrial, and archaeological surveys for small and large landowners and preparing biological assessment reports for landowners and state/federal agencies. She worked for the Institute of Sustainable Forestry (evaluating forestland operations) and was appointed by the Mendocino County Board of Supervisors to serve on the Mendocino Forest Council, a committee deliberating forestry and land use issues. From 1999 to present Charlotte has been employed by the National Marine Fisheries Service and is currently the Salmon and Steelhead Recovery Coordinator for the North-Central California Coast. She is primarily responsible for facilitating the development of recovery plans for coho salmon, Chinook salmon, and steelhead from Humboldt south through the San Francisco Bay to Santa Cruz. Charlotte is also the Agency's official liaison on salmon and steelhead issues for: State Coho Salmon Recovery Team, State Board of Forestry, State Fisheries Restoration Grant Program, FishNet 4C (Multi-county group comprised of Board and staff representatives from the counties of Marin, Sonoma, San Mateo, and Santa Cruz,) and grading/riparian ordinance development for Mendocino/Sonoma Counties.

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### *Stories and Songs of Salmon*

**Jeannette Anglin and Tribal Council Guests**, Representatives from the Federated Indians of Graton Rancheria

Jeannette will welcome participants to the aboriginal territory of the Coast Miwok Indians and explain the history and recent Federal Restoration of the Tribe. She will tell of the tribal activities that include reclaiming the language, customs and skills such as basketry. She will describe the Tribe's partnerships with environmental groups in their aboriginal territory.

**Jeannette Anglin** is a member of the Federated Indians of the Graton Rancheria Tribal Council, an elected position of the Tribe. She is learning the Coast Miwok language, basketry of the Coast Miwok and Southern Pomo and is part of a group revitalizing the cultural aspects of the Tribal history. She has been instrumental in overseeing tribal scholarships and starting a Youth Council. Jeannette is a retired secondary public school teacher and administrator. In retirement she also serves on the Sonoma State University Academic Foundation, the Laguna de Santa Rosa Foundation Board of Directors, and the Chop's Teen Center Board of Directors in Santa Rosa.

**Dana Lyons**, Musician, Children's Book Author and Educator

This open forum is a chance to interact, in an informal setting, with this wonderful eco-troubadour.

**Dana Lyons** is the singer/songwriter best known for his dynamic performances and outrageous hit songs "Cows With Guns," "RV" and "Ride The Lawn." Bringing together a mix of comedy, ballads, and love songs, Dana's sharp wit and beautiful voice have him performing at concert halls, festivals, conventions, fundraisers, and universities across the US and around the world. Dana's music style includes a bit of everything; his biggest radio hit, "Cows With Guns," receives crossover radio play on country, rock, alternative, community, college, and oldies radio stations worldwide. Dana has toured in 46 of the 50 American states, around the East Coast of Australia, and across Ireland, England, New Zealand, Mexico, Kazakhstan, and Siberia. Two of Dana's songs have been made into award-winning illustrated books: *Cows With Guns*, published by Penguin (winner of the Bulltizer Prize), and *The Tree*, published by Illumination Arts.

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## *Community Led Estuarine Restoration in California*

**Gillian O'Doherty**, NOAA Restoration Center, Santa Rosa, CA.

Estuarine habitats are some of the most productive in the world, providing habitats for a variety of macrophytes, invertebrates, fish, and marine mammals. Estuaries are often described as “nursery” habitat, meaning that they provide a productive area that gives juveniles who use them an advantage to survive and enter the adult population. Up to 90% of estuarine wetlands has been lost in urban California and much of what remains has been degraded by development, flood control structures, infilling, and decreased water supply and quality.

The question of how to restore these areas becomes more urgent as we learn more about the species that depend on them and as development and water quality pressures increase. Changes in management and resource use as well as hands on enhancement projects are important to restore the natural function of estuaries. Community involvement is particularly important in estuarine restoration due to the need to balance the political and technical considerations of these complex systems.

In this presentation we will discuss some of the major impacts to estuarine habitats, their importance to fisheries, in particular salmonids, and look at some ongoing restoration efforts throughout the state. We will also discuss resources that are available to community groups wishing to do estuarine restoration. The Mattole Estuary, San Francisco Bay, and the Carmel Lagoon will be highlighted.

**Gillian O'Doherty** received her undergraduate degree in Evolution and Ecology from U.C. Davis in 1997 and her M.S. in Restoration Ecology from the University of Liverpool in 2004.

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## *Art of the Environment: Power Compositions*

**Steve Waldron**, Naturalist of SPAWN

This workshop will explore the role of place-based art as a tool for environmental interpretation and community involvement. Participants will have the opportunity to discover the power in engaging with the landscape through the spontaneous process of ephemeral eco-art installation. No art supplies needed but a pair of work gloves, an open mind, and the willingness to get down and dirty with Mother Nature will be most appreciated.

**Steve Waldron** is a fish molecular biologist at U.C. San Francisco and a SPAWN naturalist. He has degrees in Biology and Environmental Studies from the U.C., Santa Cruz. A 3<sup>rd</sup> generation bay area native, Steve has been living along the central California coast for the last 17 years and is deeply committed to understanding the natural history of the region. He can be found walking the southern Marin coastal sage scrub hills most everyday, turning over logs to find haiku and listening for songs in the coyote bush. His science and art have been featured in the science journal “Nature”, the *North Bay Bohemian*, the San Francisco Naturalist's Society newsletter “The Biophilic”, the Gallery Route One in Pt. Reyes Station, and his nature photo blog at [www.pacificnaturalist.com](http://www.pacificnaturalist.com).

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**Sunday, August 27, 2006**

## **Concurrent Workshops (11am-2pm)**

### *Tails From a Hidden World—Natural History and Underwater Exploration of Salmonids and Their Habitat*

**Maureen Roche**, Mattole Salmon Enhanceress

### *Rapid Bioassessment Monitoring—Stream Health Assessment*

**Jim Harrington**, CDFG Water Pollution Control Laboratory

### *Bird Response to Riparian Restoration*

**Melissa Pitkin**, PRBO Conservation Science

Explore the conservation biology of riparian-associated songbirds along California's Central Coast, the current status of several migratory songbirds and measures that can be taken to ensure their conservation. Learn about mist netting, nest monitoring, point count surveys, and radio telemetry and how bird monitoring can be used to evaluate the success of riparian restoration programs.

**Melissa Pitkin** holds an M.S. in Environmental Education from Southern Oregon University. Melissa has worked for PRBO Conservation Science since 1997 as both a field biologist and as the director of PRBO's Education and Outreach Program. As director, Melissa develops and implements projects that focus on translating the science of bird and ecosystem conservation to a wide variety of audiences including adults and youth, partners, and special interest groups.

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