The Coho Confab is a symposium to explore watershed restoration, learn restoration techniques to recover coho salmon populations, and to network with other fish-centric people. The 12th Annual Coho Confab will be held on the beautiful Mendocino Coast. Salmonid Restoration Federation and Trees Foundation are the permanent co-hosts of this educational event and this year the Confab is also sponsored by the California Department of Fish & Game, Mendocino Land Trust and Trout Unlimited. The Confab allows for participants and instructors to learn from each other’s experience. Participants learn skills and practices that can be applied to restore habitat in their home watershed.

Restoration pioneer Richard Gienger coined the term “Confab” from the verb “confabulate” which literally means to informally chat or to fabricate to compensate for gaps in ones memory. Not to imply that restorationists are prone to hyperbole when recounting the size of a rescued fish, the magnitude of the waterfall coming out of the culvert, or the heroics of a particular restoration job. Gienger will confabulate about efforts to protect coho salmon and redwood forest conservation. Other orientation presentations include an opening talk about coho salmon restoration and conservation efforts on the Garcia River by Garcia River coordinator Craig Bell and coastal turbidity monitoring by Teri Jo Barber of Ridge to River.

This year’s Confab will feature an all-day restoration tour of the Garcia River watershed that will include multiple bioengineering sites on the lower river dating back to 1995, and comprehensive sub-basin wide erosion control projects in at least one upper Garcia tributary. There will also be discussion of the public/private purchase of one third of the Garcia Watershed and its positive implications for coho recovery in the Garcia River as well as other watersheds in California. A tour of Caspar Creek will highlight the DFG monitoring of fish populations in Caspar Creek, USDA Forest Service Caspar watershed research, Caspar Creek fish ladders presented by foresters from Jackson State Demonstration Forest, and road decommissioning efforts.

Lisa Bolton of Trout Unlimited and Forestry Consultant Christopher Blencowe will lead a tour of Ten Mile River to visit the South Fork Ten Mile River Accelerated Wood Recruitment Project to demonstrate an experimental approach to large woody debris loading. Participants will also have a chance to tour fish passage projects in coastal watersheds as well as post-fire erosion control projects. On Sunday, Richard Gienger will lead a tour of coho bearing streams in the Sinkyone Forest and tour the recent forest acquisitions.

Hands-on workshops include macro-invertebrate sampling, underwater fish identification, and native plant propagation. Matt Coleman from the Mendocino Land Trust and Maureen Roche from the Mattole will co-host an underwater fish identification workshop on the Little North Fork of the Big River as well as on the main stem and estuary so participants will have an opportunity to snorkel in different micro-habitats. Participants should come prepared with a wetsuit, snorkel, and mask.

Open forums will include Stories and Songs of Salmon with songwriter Dana Lyons and a native plant propagation workshop at Jughandle Farm. Saturday night will culminate with a BBQ and concert with river troubadour and singer Dana Lyons.

Each year the Confab is held in another location on the North Coast. Next year we plan to be in the Russian River watershed.
Can We Trust Hatcheries for Salmon Recovery?

.........by Allen Harthorn, Friends of Butte Creek and SRF Board Vice-President

When a juvenile salmon pokes its odd looking head out of the gravel for the first time, it faces an extraordinarily harsh world. The chances of survival are pretty slim, probably much less than one percent on most streams. The dangers are many; just figuring out what food is and where it is available has to be challenging for a fish less than an inch long, especially when there are a whole host of predators that target one inch fish. Fortunately, instincts kick in right away and the salmon buddy-up in groups to scour the downstream flow of food and dodge predator fish and birds. Safety in numbers! The longer a fish spends in habitats that support good food sources and offer cover from predators, the better their chance of survival in the hostile marine environment.

In the racks of trays at any one of the hatcheries that are providing the mitigation for the loss of so much habitat behind dams, the eyed salmon’s first peak of the world is a nursery with thousands of like eyed clones. Next stop is the feeding pen where they will spend months being spoon fed pelletized food, much like an in industrial chicken farm. The young salmon grow quickly with incredible survival rates, and this would seem like an excellent way to make up for the loss of habitat. However, more and more research is suggesting that we may be harming wild fish more by introducing so many hatchery fish.

NOAA Fisheries released a report from the Northwest Fisheries Science Center in February of this year identifying many of the risks to wild salmon populations. The following excerpts demonstrate how hatcheries can release genetically inferior salmon while at the same time competing with wild fish for food and space. The full report can be found at: www.nwfsc.noaa.gov/resources/salmonhatchery/risks.cfm

Genetic Risks

Human intervention in the rearing of wild animals has the potential to cause genetic change. These genetic changes impact salmon diversity and the health of salmon populations.

Inbreeding can occur when the population for a hatchery comes from a small percentage of the total wild and/or hatchery fish stock, reducing the genetic diversity within a population. Inbreeding can affect the survival, growth, and reproduction of salmon.

Intentional or artificial selection for a desired trait is not common practice today, although some hatchery programs intentionally select for larger fish. This selection changes the genetic makeup of the hatchery stock, moving it further away from naturally reproducing salmon stocks.

Selection resulting from nonrandom sampling of broodstock can be a problem for hatchery fish. If, for example, only early-returning adults are used as broodstock, instead of adults that are representative of the population as a whole, there will be genetic selection for salmon that return early.

Hatcheries rear fish in vessels that are open and have lower and more constant water flow than that in natural streams and rivers. As a result unintentional or natural selection often occurs in the hatchery environment. Fish are held at higher densities than those that occur in nature which can favor fish that best survive in hatchery, not natural environments.

Artificial mating disrupts natural patterns of sexual selection. In hatcheries, humans select the adult males and females to mate, not the salmon. Humans have no way of knowing which fish would make the best natural breeders.

Ecological risks of artificial propagation on wild populations include...
Challenges to the Watershed Restoration Movement

A few years ago the watershed restoration movement had a wake up call when the Division of Industrial Relations announced that grant funding met the definition of public works, and as such was subject to the State Labor Code, meaning grant funded projects (except for some projects funded by the California Department of Fish and Game) were subject to prevailing wages. This created quite a stir and at a meeting in Eureka with labor representatives, we were told that we could either go along with the State’s classifications or we could organize ourselves and create our own restorationist category, basically a restorationist union, and have some influence over what our wage scale would be and have a collective voice that could advocate for issues important to us. The effort to create such a union never really got off the ground and we all went back to business as usual.

Many of us got our second wake up call last December. We were informed by our grant managers that a stop work order was being imposed on all State bond-funded projects. This caught most of us off guard and left us scrambling to figure out what our options were and how to influence the process to get our invoices paid and our funding restored. Several efforts emerged—ReSeed was formed and the Stop Work Order Impact web site was initiated as a forum for exchanging information. David Simpson and Richard Geinger of the Alliance for Sustainable Jobs and the Environment (ASJE) called a meeting together with union representatives in Eureka, and enlisted Mark Greenleaf of the Union of Operating Engineers to come to the SRF conference in Santa Cruz to speak at a special session to discuss how to organize ourselves in light of the stop work order. At a follow-up early morning coffee meeting during the SRF conference, the Association of Conservation and Construction Workers (ACCW) began to take shape.

With the fiscal uncertainty in California we are facing the possibility that we could lose some of the funding that restoration advocates worked so hard to secure. The need to organize ourselves has again emerged, only this time the threat to the future of watershed restoration and salmon recovery is much greater than the prevailing wage issue in 2003. With challenge comes opportunity, and in order to meet the challenge in front of us we need to take advantage of this opportunity to get organized. If (more likely when) this situation repeats itself, we need to be prepared to take concerted action on behalf of a significant group of constituents—significant enough to garner the attention and support of our legislators. As the saying goes, those who don’t learn from history are doomed to repeat it. So we need to learn the lessons of the recent pass and realize the importance of being organized. The ACCW is the fledgling organization that has taken on the difficult task of getting us organized—I encourage everyone working in watershed restoration and habitat conservation to become a member of and support SRF and ACCW.

Abundant, hatchery stocks, half of the wild stocks will also be harvested if they occur at the same time and place as the hatchery fish. Because hatchery populations have high survival in the hatcheries, they can generally support higher harvest rates. Wild stocks with typically much smaller populations could be harmed by such high harvest rates. Selective harvest of hatchery fish through catch and release programs may help.

Fish Health

The effects of disease on hatchery fish and their interaction with wild fish are not well understood. Hatcheries can have disease outbreaks. Once released, these fish can transmit disease to wild fish.

The Hatchery Science Review Board for the Report to Congress for the Columbia River Hatchery Reform has provided some excellent thoughts on where we are today. “Hatchery fish cannot replace lost habitat or the natural populations that rely on that habitat. Therefore, hatchery programs must be viewed not as surrogates or replacements for lost habitat, but as tools that can be managed as part of a coordinated strategy to meet watershed or regional resource goals, in concert with actions affecting habitat, harvest rates, water allocation, and other important components of the human environment.”

The American Fisheries Society, Cal Neva Chapter, recently held a forum on Hatchery Reform. It was agreed that “hatcheries in California are now recognized as a significant and persistent threat to the viability of natural origin Chinook salmon populations and fisheries.” (Lindley et al. 2009) We will likely never successfully recover our salmonids with the current level of dependence on hatchery production. It is time for change.
The Salmonid Restoration Federation (SRF) and Salmon River Restoration Council (SRRC) are hosting the 4th Annual Spring-run Chinook Symposium following the annual Salmon River Spring Chinook and Summer Steelhead Dives. This is a truly collaborative educational event with diverse symposium co-sponsors including the Salmon River Restoration Council, Karuk, Yurok, Hoopa and Klamath tribes, the Mid-Klamath Watershed Council (MKWC), US Fish and Wildlife Service, US Forest Service, and the Bureau of Reclamation.

SRF is pleased to offer this opportunity for local landowners, restorationists, tribes, fisheries biologists, and agency staff to participate in the dives and Symposium. The Symposium will offer workshops, field tours, and presentations on problems and solutions specific to Spring-run Chinook. The event kicks off with a dive safety training on Tuesday, July 21st, followed by participation in the actual dives or an alternate Salmon River Education and Exploration workshop on July 22nd. A locally organized event, the dives bring together a coalition of agency personnel, tribal members, and concerned citizens who form small teams to dive the entire Salmon River in order to get the best possible estimate of salmonids holding in the Salmon River. The Salmon River surveys are a focal point in the effort to protect and restore Klamath Spring-run Chinook, bringing together a wide range of stakeholders in a cooperative approach to recovery.

The Symposium will begin on Thursday, July 23rd with an opening welcome and blessing by Karuk Tribal representatives. SRF and SRRC will then provide an overview and orientation for the rest of the symposium. The first session will begin with a Klamath Chinook stock identification research status report, presented by Dr. Amy Sprowles and Andrew Kitzinger from Humboldt State University. Immediately afterwards, the Klamath Basin Spring Chinook Monitoring Program will be discussed by Nat Pennington (SRRC Fisheries Program), LeRoy Cyr (US Forest Service, Ukonom Ranger District), Mike Belchik (Yurok Tribe Fisheries biologist), and Sara Borok (CDFG fisheries biologist). Toz Soto and Will Harling will discuss juvenile winter rearing monitoring efforts on the Mid-Klamath and Salmon Rivers.

The symposium will also feature Mid-Klamath and Salmon River fish passage improvement projects and off-channel habitat enhancement work. Presenters will include Will Harling (MKWC), Toz Soto (Karuk Tribe), and Tom Hotaling and Nat Pennington (SRRC). Phd. Frank Lake, US Forest Service, will present on the relationship between fire and Klamath Basin spring-run Chinook. Andy Baker from the North Coast Regional Water Quality Control Board and Lyra Cressey from SRRC will present on the benefits for spring-run Chinook under TMDLs. Ron Reed of the Karuk Tribe will provide a cultural perspective on Chinook, and Petey Brucker, Leroy Cyr, and Toz Soto will provide a broad look at spring-run Chinook habitat restoration. Other sessions include harvest management and monitoring of spring-run Chinook in the Klamath basin, as well as potential ESA listing of spring-run Chinook. After dinner, there will be a panel discussion on spring-run Chinook Recovery, including discussions about the Klamath Settlement.

Friday’s portion of the Symposium will begin with an orientation by Petey Brucker and several local tribal speakers, followed by three concurrent field tours. The Karuk Tribe will host the Traditional Management Practices and Current Restoration Techniques tour, including road decommissioning, riparian restoration, and forestry management for fire fuels reduction. Toz Soto, Leroy Cyr, and Will Harling will lead a Mid-Klamath Mainstem Fish Passage Improvement and Off-channel Habitat Enhancement Float, with a discussion of refugia use and importance, creek mouth enhancement, and salmonid identification. Nat Pennington and Tom Hotaling of the Salmon River Restoration Council will lead the Salmon River Sampler workshop and tour, highlighting restoration efforts in the Salmon River Basin. Petey Brucker and Mark Garza will host an Upslope Restoration tour, including emphasis on topics such as road stewardship, noxious weed control, and fire, fuels, and forestry. Family activities for folks with children will be provided by SRRC staff. Following the day tours and dinner there will be a “Springer Soirée,” an evening gathering with live music by some fishy superstars, campfire revelry, and star-filled skies at a nearby campsite. For more information about this exciting event, please check out the Salmonid Restoration website at www.calsalmon.org, visit www.srrc.org, or call (707) 923-7501.
Salmonid Restoration Federation hosted the 27th Annual Salmonid Restoration Conference last spring in Santa Cruz, California. Hundreds of participants attended from all over the state despite this time of severe budget cuts and travel freezes. Interestingly, the stop work order and agency travel freezes affected the demographics of conference attendees. The location, agenda, and the economic landscape brought out the grassroots restoration and watershed community. The conference was primarily attended by restoration practitioners and non-profits as well as students, watershed stewards project members, private landowners, agency personnel, and county staff. This is regarded as the premiere habitat restoration conference in the Pacific Northwest and hosting the conference in Santa Cruz afforded wonderful opportunities to view projects on the Central Coast and highlight issues that pertain to coastal watershed and coho salmon recovery.

The conference featured workshops on topics including Estuary Restoration, Fish Passage Design and Implementation, Coho Use and Restoration of Off-channel Habitat, Watershed Monitoring and Assessment, and Sustainable Agriculture: Water Quality and Riparian Habitat Restoration. All day field tours included tours highlighting Resource Management for Steelhead and Coho Salmon Conservation in Santa Cruz county: a Tour of San Lorenzo River and Soquel Creek projects, Carmel River Restoration Projects, Southern Coho Streams and the NOAA lab and Broodstock program, Coho Salmon and Steelhead Enhancement Projects on the Santa Cruz North Coast, Dams and Daylighting: Progress and Opportunities in San Francisquito Creek and half-day tours of fish passage projects and sustainable agriculture projects in conjunction with those morning workshops.

The Plenary session featured Dr. Peter Moyle and Dr. Josh Israel from UC Davis who discussed the state of California salmonids in California, Mike Furniss from Redwood Sciences Lab who addressed climate change and salmonid recovery, Dr. Astrid Scholz of Ecotrust presented on how marine ecology and oceanic conditions affect salmonids, and Dr. Bob Curry of Watershed Systems highlighted the status of restoration efforts in Monterey Bay and adjacent watersheds.

Concurrent sessions addressed biological, policy, and environmental and physical issues affecting salmonids. Concurrent sessions included the following topics: Water Diversions & Water Wars in California; FERC Relicensing Restoration Opportunities; Central & South Coast Steelhead: Biology, Genetics, and Recovery Strategies; Fire Ecology, Forests, and Fisheries; Dam Removal and Modifications for Salmonid Recovery; Restoration at the Crossroads; Juvenile Steelhead and Coho Salmon: Central Coast Habitat and Population Research; Hydrologic and Geomorphic Legacy Issues: Solutions for the Past and the Future; Coho Salmon Recovery and Restoration: Putting Theory into Practice.

The 28th Annual Salmonid Restoration Conference will be held in Redding, CA next March 10-13 and SRF will be posting the call for abstracts later this summer. The Redding conference will showcase large-scale restoration efforts on the Trinity and Sacramento Rivers as well as innovative projects on Battle, Clear and Cow Creek.

To learn more about the conference, please visit www.calsalmon.org
The Association of Conservation Contractors and Workers (ACCW) is a fledgling organization that was recently formed at the SRF conference to create a common voice for the people and organizations that accomplish the work of conservation in California. We are seeking to organize our efforts to further our shared aspirations through the current challenging economic time and far into the future.

The ACCW is a broad, diverse group of organizations and individuals who regularly provide services to and/or enter into contracts with government, non-profit organizations, private landowners or other entities to accomplish projects that protect and increase the health and productivity of the land, air and waters of the state of California.

The mission and purpose of the ACCW is to represent, support and advocate for conservation contractors and workers and the organizations that employ them. The ACCW seeks development of a robust “green” economy and a knowledgeable, empowered workforce. We seek to organize ourselves in order to protect and restore California’s natural ‘infrastructure’ and to gain greater control over all aspects of our work through collective action. ACCW will act on behalf of its members to affect policies, laws and public perceptions to enhance our ability to deliver maximum benefit to society in the form of sustainability, productivity and environmental quality.

The recent and still unresolved funding freeze and the Federal government’s stimulus program provide the backdrop for the actions we are taking. The arbitrary way that funding for conservation purposes was first withdrawn and then, ostensibly, restored, points out our vulnerability. There is a critical need to advocate strongly and collectively. At the same time, the application of stimulus dollars to our projects through various agencies, Federal and State, provides both an opportunity and a series of painful complexities. We are in a period of great economic change and instability. In order to sustain our work and accomplish recovery of our lands and rivers, we must have a more active and meaningful voice in the dialogue concerning society and the natural infrastructure.

The job-creation potential of our program and its long-range implications cannot be overemphasized. Already, in some rural communities, watershed restoration has become the largest source of local employment. Many of these employees will be the future managers of the land resources whose productivity they have helped renew. In fact, those who plan and do the work of restoring and protecting our watersheds are increasingly well-positioned to mediate intelligently between society and the landscape and might best be charged with the task of articulating our crucial interdependencies.

When we started out doing this work over 30 years ago, we were to a great degree carried forward by our idealism and desire to contribute to a healthy natural world. We began our work in isolation from each other, independent and inspired by the challenges in our own watersheds and sub-regions. We came a long way on such a footing. We established a foundation of scientific and practical know-how as well as working partnerships with many public resources agencies that together have allowed us to accomplish much. To secure these gains, however, in this economic climate, and to go on to the huge body of work awaiting us, we need the influence that can only be gained through collective action. To this end, ACCW proposes working in the following areas:

**Politics:** We must develop the capacity to promptly mount broad, effective responses to government or private sector actions that affect our work. This will include, in some instances, direct efforts to influence legislation. We will explore alliances with other sectors of the economy such as labor unions and professional trade organizations, and enter into agreements with them where appropriate.

**Funding:** We must continuously seek new and sustained funding for conservation programs and projects. This focus will require that we track State and Federal programs, and work to influence the funding that comes through them. Our oversight of these processes will help them reflect the working realities that contractors and workers in the field know best. This will include working to make the ARRA stimulus program a more purposeful initiative directed to fund projects that can quickly employ all types of conservation workers while at the same time restoring valuable estuaries, wetlands, streams and watersheds.

**Information-Sharing:** We will provide for the smooth exchange of information between ACCW members and reporting on fast-changing circumstances affecting their support base, operations and funding programs. This will require working closely with organizations such as the Planning and Conservation League, the California

continued on next page
The California Bond Freeze and How the Stop Work Order Affects the Restoration Field

On December 17, 2008, California’s Pooled Money Investment Board (PMIB) voted to freeze $3.8 billion in payments to projects receiving state bond funds, bringing hundreds of environmental projects across the state to a grinding halt. The move was prompted by the state budget stalemate and the global credit crunch, which conspired to lock California out of the bond market.

Two months later the Legislature passed a revised budget, yet the bond freeze continued. Across the state, environmental groups have been forced to let go of staff or close their doors completely. In March, State Treasurer Bill Lockyer successfully sold $6.5 billion in General Obligation (GO) bonds in the open market. This was enough to start paying back invoices to groups that had submitted them prior to the freeze and to fund some projects that were deemed high priority. However, in mid-April there was a Build America Bond (BAB) sale, and the Resources Agency, its 20 departments, and the Office of the Treasurer decided not to pay out funds from the March sale alone but to go through the process of vetting and fitting projects to funding source with both sales at once.

Proposition funding will be distributed starting with the earlier California propositions that were passed, and are still providing funding for California conservation and public works projects. Proposition 12 is now done and the requisite departments will start the process of paying bills and starting up frozen projects. Now projects funded through Propositions 40, 50 and 84 can utilize the template created for the dispersal of Prop 12 funds, which should greatly expedite the rest of the process.

Summary of Current Watershed Bills

Assembly Bill 1364 (Evans) and Senate Bill 553 (Wiggins) were born from the ongoing bond freeze and issues relating to frozen grants and contracts, how and when the state applies prompt payment, and who or what is truly eligible for both prompt payment and late payment penalties. These important measures seek to address these following concerns:

SB 553 will create equity for all nonprofits in eligibility for late payments under the Prompt Payment Act. The bill will provide that contracts are statutorily recognized under the Act, and remove outdated, restrictive language that solely excludes nonprofits from late payment penalties when the State does not have a signed budget, and when nonprofit contracts exceed $500,000.

AB 1364 will simply codify that all contracts and grant agreements executed prior to the freeze are considered valid agreements in the eyes of the State; and provide all state agencies and departments with statutory authority to amend frozen contracts and grant agreements as needed. Given the vast amount of contracts and grant agreements that could expire over the next several months, this bill is needed to ensure the integrity of those agreements, and provide state partners necessary flexibility to amend terms on deliverables and timelines that may not be met, through no fault to the grant recipient or contractor.

AB 1520 (State Watersheds)—Establishes the Statewide Watershed Program as a mechanism to provide assistance and funds to community-based efforts in the conservation, protection, and restoration of the state’s watersheds and to promote coordinated management of watersheds. It would also create a State Watershed Advisory Committee to provide additional assistance in the establishment, administration, or operation of the program.

Council of Land Trusts, the Salmonid Restoration Federation, the California Watershed Coalition and others that have played informational and leadership roles in the conservation community.

Communication: We will establish effective communication with the general public and with our elected and appointed officials to inform them with force and clarity of the nature and importance of our work and our workers. The vision of a large body of organized and skilled working people throughout the State committed to restoring the landscape and renewing productivity of land and rivers, place by place, community by community, must be made socially and politically compelling. The dramatic and eminently effective transition of the work of conservation in California from State agencies and their employees to small community-based businesses and non-profit organizations over the past three decades is a story that remains to be adequately interpreted and told.
The Salmonid Restoration Federation (SRF), with the support of the Department of Fish & Game, will sponsor a Bioengineering Field School near San Luis Obispo. Instructor John McCullah of Salix Applied Earthcare will teach techniques to restore riparian habitat, control erosion, and stabilize banks. Participants will learn how to build willow mattresses and live siltation baffles.

See www.watchyourdirt.com

For more info visit www.calsalmon.org

SRF Bioengineering Field School
September 15-18, 2009 on the Central Coast

The Salmonid Restoration Federation (SRF), with the support of the Department of Fish & Game, will sponsor a Bioengineering Field School near San Luis Obispo. Instructor John McCullah of Salix Applied Earthcare will teach techniques to restore riparian habitat, control erosion, and stabilize banks. Participants will learn how to build willow mattresses and live siltation baffles.

See www.watchyourdirt.com

Road Maintenance & Erosion Control Field School
October 13-16, 2009 on the Garcia River

Salmonid Restoration Federation, CA Department of Fish & Game and Pacific Watershed Associates will offer a field school to learn techniques to address culvert and road drainage practices as well as erosion control techniques. This field school will be held at Oz Farm on the Garcia River. All meals and lodging are included in the course fees. The curriculum includes conducting road sediment assessments (problem identification and prescription development); implementing fish-friendly road upgrading practices (stream crossing upgrades and improved road drainage practices to protect water quality); proper road decommissioning practices; road inspection, and maintenance practices; erosion control and erosion prevention practices, and spoils management. Throughout the course we will emphasize the concepts of making our road systems as “hydrologically invisible” and as resilient to storm events as possible. We will also focus on educating participants about how best to address the root causes of observed erosion problems, through both maintenance and repair practices at each potential work site.