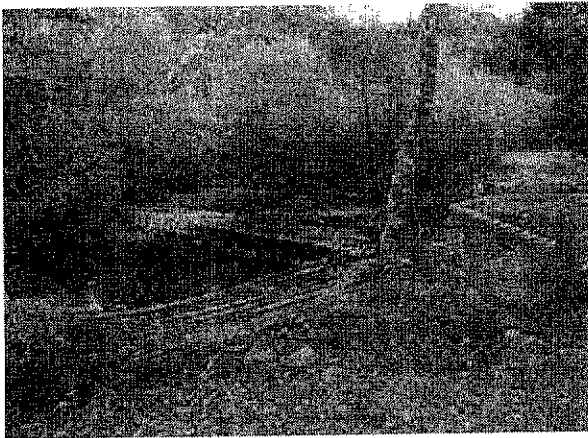


UP YOUR CREEK!

ALAMEDA CREEK ALLIANCE NEWSLETTER Issue 13 ● November 2001



NOW YOU SEE IT



NOW YOU DON'T

SWIM DAMS REMOVED

2 DOWN, 3 TO GO

About 150 “dam-busters” gathered in Sunol Regional Wilderness on August 17 to celebrate the removal of two small dams from Alameda Creek. The ceremony featured state Resources Secretary Mary Nichols, who swung a sledgehammer and told the crowd “every watershed in the state deserves the kind of citizen support Alameda Creek has.” The East Bay Regional Park District decided to remove the swim dams to eliminate public safety hazards, facilitate fish passage, and to restore habitat for trout and other aquatic life. By September, both dams were completely removed with minimal damage to riparian vegetation, and at about a third of the estimated cost.

The S.F. Public Utilities Commission recently appropriated \$1.25 million for the removal of Niles and Sunol dams further downstream in Niles Canyon. A grant proposal has been submitted to CALFED for the balance of the funds needed to remove these two antiquated dams. These structures could come out as early as fall of 2002, but more likely will be removed by 2003.

Meanwhile, the Alameda Creek Alliance is setting its sights on removal of the 31 foot high Alameda Diversion Dam, the uppermost dam on Alameda Creek. This dam removal would be a feasible mitigation for the potential replacement or enlargement of SFPUC’s Calaveras Dam (see related story on page 2). Demolishing the Diversion Dam would open up an additional eight miles of steelhead habitat, and restore the natural hydrograph of upper Alameda Creek.

AN END TO FISH RESCUE?

For the first winter since 1997, there will likely be no rescue and transport operations for fish blocked below the BART weir in Alameda Creek this year. This partly due to concerns by fisheries biologists and federal and state agencies about the genetic makeup of a restored steelhead run, and partly due to difficulties in getting needed “take” permits to handle listed species. Regulatory agencies are also discouraging the transport of chinook salmon. It is unknown whether a federal permit will be issued this year to capture steelhead for the purposes of documentation and collecting genetic samples.

Of concern is the possibility of creating a “founder effect” by moving small numbers of steelhead upstream to spawning areas, with the resulting offspring containing the genes of just a few fish. Regulatory agencies would rather “jump start” a steelhead run in the lower creek by moving smolts taken from the landlocked steelhead populations in Calaveras and San Antonio reservoirs. Genetic studies are underway to determine whether these reservoir fish, which still retain anadromy (migratory behavior), are the purest strain of Alameda Creek-adapted fish.

Since plans are already in place to provide fish passage at most barriers, the transport issue will be irrelevant within a few years. Adult steelhead returning on their own will be able to mix with the “jump start” fish, ensuring a fish population with a diverse gene pool, able to adapt to changing environmental conditions.

CALAVERAS DAM REPLACEMENT

THE KEY TO STEELHEAD RESTORATION?

Due to earthquake safety concerns, the state Division of Dam Safety has required that the SFPUC draw Calaveras Reservoir down to 30-40 % of capacity this winter. Tests are being conducted to determine the dam's stability in a major seismic event. The 200 foot high earth-fill structure, built from 1913-1925, was designed by William Mulholland (infamous for the 1928 St. Francis Dam collapse).

If Calaveras Dam is determined to be unsafe, and needs to be strengthened or replaced, it may provide an opportunity to remove the Alameda Diversion Dam. A slightly enlarged Calaveras Reservoir could store the additional 12,000 acre-feet of water currently captured each year by the Alameda Diversion Dam. The reservoir capacity could be enlarged without raising the height of the dam, by building a new dam further downstream in the Calaveras Creek gorge.

Rebuilding or reinforcing the existing dam will open up the issue of minimum flow releases from the reservoir. This could help stop the construction of a rubber recapture dam proposed by the SFPUC for the Sunol Valley.

An enlarged Calaveras Reservoir could also potentially store additional winter runoff for the Alameda County Water District (ACWD), water which could be delivered down the creek at strategic times for the benefit of fisheries and wildlife downstream. This may make it possible to eventually consolidate and remove some of the ACWD rubber dams in the lower creek, currently used as points of water diversion, and identified as problematic for migratory fish passage (especially for out-migrating smolts). An enlarged Calaveras Reservoir which could store more of peak winter flows would also reduce the threat of flooding in the lower creek, potentially allowing for some channel restoration and re-vegetation in the flood control channel.

The Alameda Diversion Dam, a 31 foot high concrete structure completed in 1931, diverts winter and spring flows out of upper Alameda Creek via a tunnel into Calaveras Reservoir. There are eight miles of quality steelhead trout spawning and rearing habitat upstream of this dam. The dam also diverts high winter flows which may be essential for steelhead passage at Little Yosemite, downstream.

Replacement of Calaveras Dam may prove to be the key to the long-term restoration of steelhead. At this point the Alameda Creek Alliance would support a combination of a modest enlargement of Calaveras Reservoir, establishment of minimum flow releases from the dam, and removal of the Alameda Diversion Dam, as a means to ensure the viability of a restored steelhead run in Alameda Creek.



UPPER ALAMEDA CREEK DIVERSION DAM

Bay Area Creek News

Palo Alto - San Francisquito Creek

Momentum is building for the removal of Searsville Dam, a 60-foot high structure owned by Stanford University. The dam is within the Jasper Ridge Biological Preserve and blocks steelhead from access to dozens of miles of habitat upstream in Corte Madera Creek. This obsolete water diversion is 90% full of sediment and serves no flood control function. A dam removal feasibility study and draft Watershed Management Plan are underway, and Stanford is funding a Searsville Lake Sediment Impact Study.

Contact Matt Stoecker at (650) 796-9867 or matts@worldwaters.com.

Oakland - Sausal Creek

The City of Oakland removed three small check dams and failing concrete structures from Dimond Canyon in Sausal Creek in this summer. Volunteers will replant a 600 foot section of the restored creek with native vegetation. The project has re-established a more natural stream profile and will improve water quality and habitat value for native rainbow trout that have been found in the creek.

Contact Anne Hayes at (510) 231-9566 or anne@aoinstitute.org

Berkeley - Codornices Creek

The Codornices Creek watershed group, LOCCNA, won a victory in a settlement agreement for the Oxford St. Beth El development, which will protect the creek corridor and allow for future daylighting of the creek on the project site. Juvenile and adult steelhead have been found in lower Codornices Creek recently and LOCCNA has received grants to restore trout habitat in this urban creek.

Contact Juliet Lamont at (510) 848-3363 or jandp@dnai.com.

Marin - Lagunitas Creek

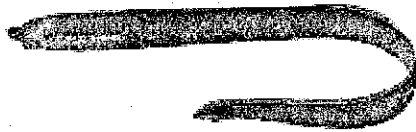
SPAWN volunteers rescued several thousand juvenile steelhead and coho trapped in drying pools throughout tributaries in San Geronimo Valley this summer. Join SPAWN this winter on their weekend creek walks to view the largest population of wild spawning coho in California.

Contact SPAWN at (415) 488-0370 or spawn@igc.org

NATIVE FISH RESOURCES OF ALAMEDA CREEK

Although our fish restoration efforts are often *Oncorhynchus*-centric, focusing on salmon and steelhead, Alameda Creek also supports a rich assemblage of other native fish. Worth mentioning first are the many healthy populations of native rainbow trout in the watershed, including in upper Alameda Creek and in tributaries in the upper Sunol Valley, as well as in Arroyo Mocho, southeast of Livermore. Other species include:

The Pacific lamprey (*Lampetra tridentata*) is an anadromous fish that has the advantage of being able to ascend barriers in the creek using its sucking disc mouth, to reach spawning areas upstream. The parasitic adults, which usually feed in the ocean, attach themselves to the side or undersurface of their prey with their rasp-like teeth. Spawning adults are found in gravel riffles and runs. Larval lamprey (called ammocetes) inhabit silt and mud of shallow eddies, and have been found as far upstream as Sunol Park.

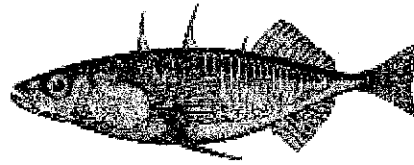


Pacific lamprey

Another large predatory fish in the creek is the Sacramento pike-minnow (*Ptychocheilus grandis*), formerly known as the squawfish. Pike-minnows are found from Sunol park downstream, and occasionally reach two feet in length in the larger pools of Niles Canyon.

The Sacramento sucker (*Catostomus occidentalis*) is a common bottom-feeder found in Alameda Creek in Sunol Park, especially above Little Yosemite; in Arroyo Hondo and its tributaries Smith and Isabel Creeks, above Calaveras Reservoir; in Arroyo Mocho upstream of Livermore; and in Arroyo del Valle upstream of Del Valle Reservoir.

California roach (*Lavinia symmetricus*) and hitch (*Lavinia exilicauda*) are omnivorous native minnows which hybridize with each other. We have the Sacramento roach, one of eight subspecies, throughout Alameda Creek. This small minnow is grey-steel blue on top and dull silver on the bottom. Both species are generally found in small warm intermittent streams, although they can be found in a variety of habitats. Dense populations are frequently found in isolated pools, as they are tolerant of relatively high temperatures and low oxygen levels.



Threespine stickleback

Threespine stickleback (*Gasterosteus aculeatus*) can be seen in Alameda Creek below Little Yosemite.

Sacramento perch (*Archoplites interruptus*) is a rare California native that apparently was not originally found in Alameda Creek. There is a thriving population of planted perch in Calaveras Reservoir (although not verified in recent years), and a small but sustaining population in Niles Canyon. Tule perch (*Hysterocephalus traski*) are also occasionally caught in Niles Canyon.

Speckled dace (*Rhinichthys osculus*) were collected in 1905 in Arroyo Hondo, but could not be found by 1978. The dace is gone from most former sites in central California.

Sacramento blackfish (*Orthodon microlepidotus*) could be found in the creek up until 1973.

Prickly sculpin (*Cottus asper*) live in Alameda and Arroyo Hondo Creeks above and below Calaveras Reservoir. Riffle sculpin (*Cottus gulosus*), a native of foothill streams, was last collected from Alameda Creek in 1938.

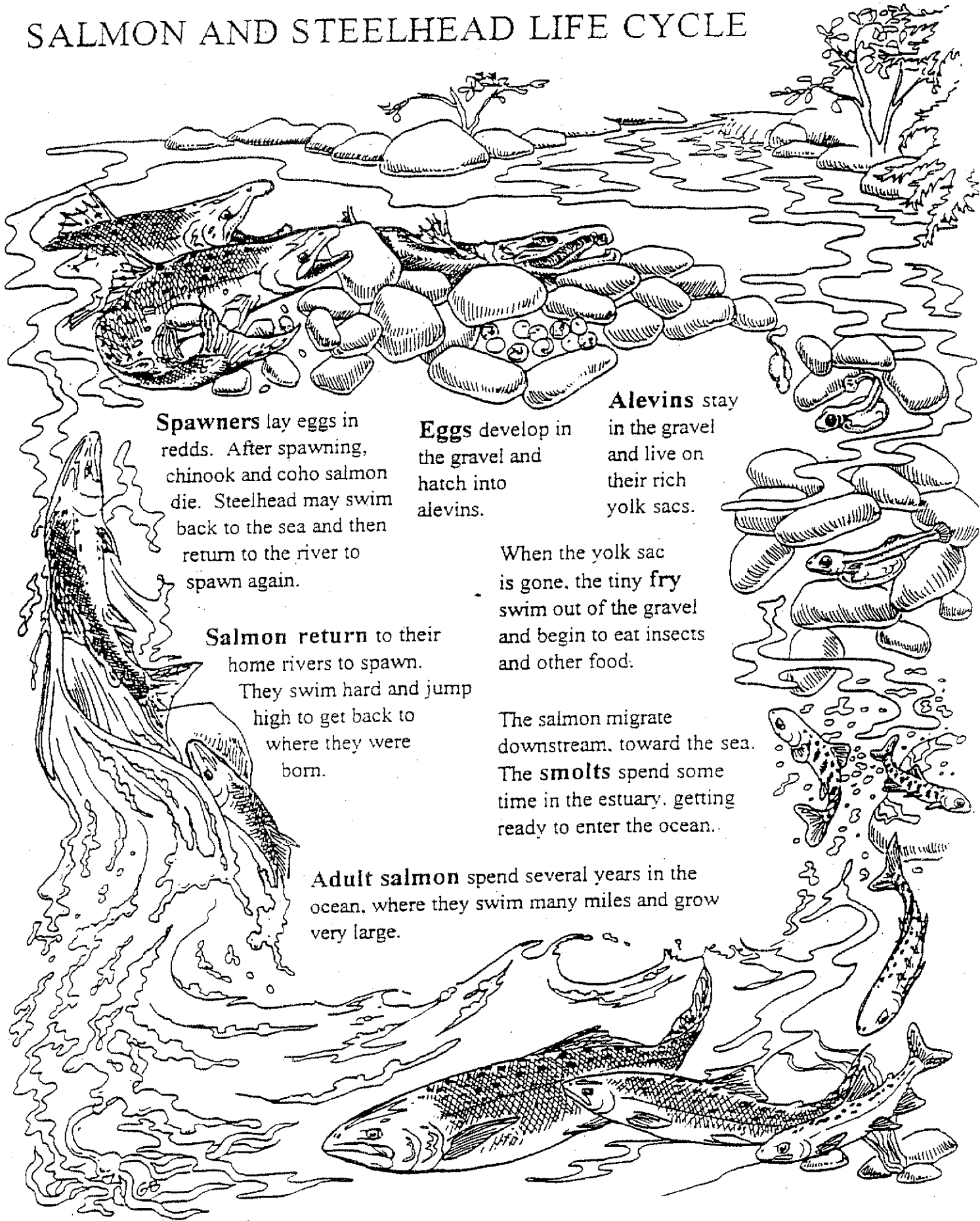


Prickly sculpin

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SALMON AND STEELHEAD LIFE CYCLE



Spawners lay eggs in redds. After spawning, chinook and coho salmon die. Steelhead may swim back to the sea and then return to the river to spawn again.

Salmon return to their home rivers to spawn. They swim hard and jump high to get back to where they were born.

Adult salmon spend several years in the ocean, where they swim many miles and grow very large.

Eggs develop in the gravel and hatch into alevins.

Alevins stay in the gravel and live on their rich yolk sacs.

When the yolk sac is gone, the tiny fry swim out of the gravel and begin to eat insects and other food.

The salmon migrate downstream, toward the sea. The **smolts** spend some time in the estuary, getting ready to enter the ocean.

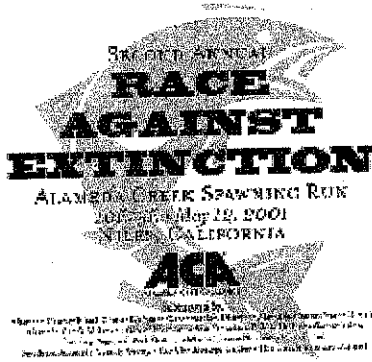
ACA Festival T-Shirts

We still have many gorgeous five-color t-shirts left over from this year's Fremont Steelhead Festival. These are available at cost for \$7 postage paid (see design below).

Contact the Alameda Creek Alliance at:
P. O. Box 192
Canyon, CA 94516
Phone (510) 845-4675
e-mail: alamedacreek@hotmail.com
web site: www.alamedacreek.com

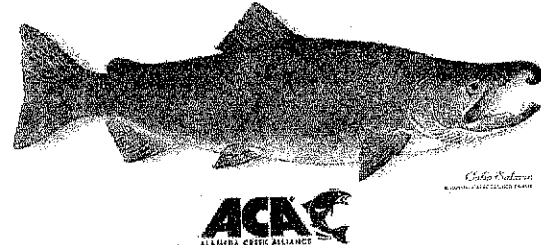
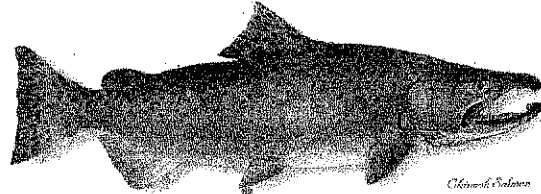
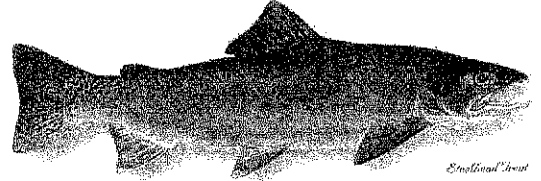


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*Three Reasons to Save
and Restore Alameda Creek*



ALAMEDA CREEK ALLIANCE MEMBERSHIP FORM

Yes, I would like to become a member of the Alameda Creek Alliance and receive the newsletter *Up Your Creek!* Enclosed is \$10 or more for a one year membership. For a membership of \$20 or more you will receive an Alameda Creek Alliance "Three reasons..." T-shirt (please specify size). Make checks payable to Alameda Creek Alliance.

Name _____ \$10 **Fry**

Address _____ \$25 **Parr**

City _____ **Zip** _____ \$50 **Smolt**

Phone _____ \$100 **Spawner**

e-mail _____ **Send me a free bumpersticker**

Mail to: Alameda Creek Alliance, P.O. Box 192, Canyon, CA 94516

Alameda Creek Alliance
P.O. Box 192
Canyon, CA 94516



www.alamedacreek.org

A red check in this box means you will be dropped from the mailing list unless you return the enclosed post card.

Up Your Creek!

ACA Newsletter #13

Thank you to our new and renewing members:

Robert Abbott, Ron Adamson, Deborah Amshoff, Marsha Badella, Richard Bailey, Tim Balvin, Ron & Viola Barklow, Dennis Baum, George & Moana Becker, Gordon Becker, Herman Betchart, John Bihl, John & Mary Bjorkholm, Tom Blalock, Finlay Boag, Noah Booker, Dale Bowyer, Bruce & Janet Bradley, Brendan & Patrick Brady, Gray Brechin, Belinda Breyer, Derrell Bridgman, Laurie Brown, Ken Brunskill, Chris Burmester, Truman Burns, Ted Buttner, Debra Caldon, Maryanne Canaparo, Dan Castro, Steve & Patricia Cate, Jim Cavalieri, Barbara Celonian, John Cerruti, Alison Chaiken, Allen Chase, Ray Chew, Tom Chew, Rich Cimino, Warren Cluie, Andy Cohen, Sam Cohen, Katie Colbert, Jim Coltharp, Fred Conwell, Steve Cowles, Virginia Cummins, Manny DaCosta, Nancy Dagle, Nancy & Greg Davis, Mike Day, John Demian, Larry Dennis, Mary Ellen Dick, Ken Digness, Bob DiMiceli, Jack Dokey, Scott Dougherty, Shon & Don Duel, Jim & Amy Dunne, Roger & Judy Ecker, Ken Elliot, Lloyd Ellis, Walter Epp, Steve Evans, Mike Ferry, Brian Flaig, Pat Flannigan, Wayne Flora, Mike Forney, Bob Foster, Jenn Fox, Debbie Frederick, Joanne & Michael Freemire, David Garges, Cliff Garratt, John Gibb, Sharon Gosselin, Doug Graver, Chris Gubera, Jeff Hagar, Chuck Hammerstad, Dan Harding, Bruce Harris, Roy Heavilin, Diane Heckman, Michael Henry, David Heyes, Paul Higgins, Heather Hinds, Kevin Hints, John Hobson, Kelly Hoeven, Maurice Holloway, Peter Holthe, Stephen Holtzclaw, Jennifer Hosterman, Jeff & Catherine Houston, Bart Hughes, Paul Idle, John & Dawn Jacobs, Bree James, Carol Jaques, Frank Kampeik, Jeff Kappeler, Lockie Kellogg, Jeff Kelly, Derrick King, Keith Kishiyama, Thomas Knoth, Art Lampert, Mondy Lariz, Chet Letto, Roger Leventhal, James Levy, James Littlejohn, Jeff Lorelli, Toni Loveland, Sandy Lungerhausen, Amber Mace, Roland & Rebeca Madany, Ralph Moir, Gerry Mooney, Jim Morehead, Elizabeth Moreno, Louis Morgan, Edward Morris, Natalie & David Munn, Jeffrey Nelson, Steve O'Donnell, Bill Olinger, Duke Otoshi, Lance Parrow, Chris Pattison, Steve Paulson, William Peakes, Karl Pederson, Gerald Perko, Dwayne Petty, Mike Powell, Craig & Linda Priesendorf, Trent Pridemore, Jim Prola, Shannon R., Lynn Ragghianti, Brian Rasmus, Rick Rayford, Dan Reasor, David Reinsche, Barbara Robben, Dan Rose, John Roubanis, Pierre Rusconi, San Francisquito Watershed Council, Ken Sarachan, Mike Schmidt, Greg & Dianne Schneider, Carol Schupbach, Susan Schwartz, Bill Scoggins, Phil Scordelis, Gary Scott, Matt Shaffer, Kathleen Shannon, Jerry Smith, Elizabeth Soderstrom, Cheryl Solomon, Southern Alameda County Sierra Club, Mike Souza, Deanna Spooner, Dennis Stefani, Todd Steiner, Norm Stevenson, Scott & Sandra Stevenson, Pat Stillman, Stacy Stoner, James Strain, Brad Sundeen, Stacey Sutton, Cathy Sweeney, Bruce Tarkington, Scott Taylor, Aileen Theile, Annette Thompson, Louise Throop, Irv & Diane Tiessen, Mike Tomlinson, Mike Toovey, Jim Townsend, Tri-City Anglers, Tri-City Ecology Center, Bob Upah, Peter Van Der Naillen, Marty Van Slyke, Chuck Vogel, George Vogilin, Dennis Waespi, Stephen Walker, John Walton, Robert Weickowski, Wendy Weikel, Karla Werninghaus, Richard Wetzig, Chris White, Steve Wiley, Warren Wilson, Mike Wisti, Susan & Douglas Witmore, Worldwaters, Inc.