

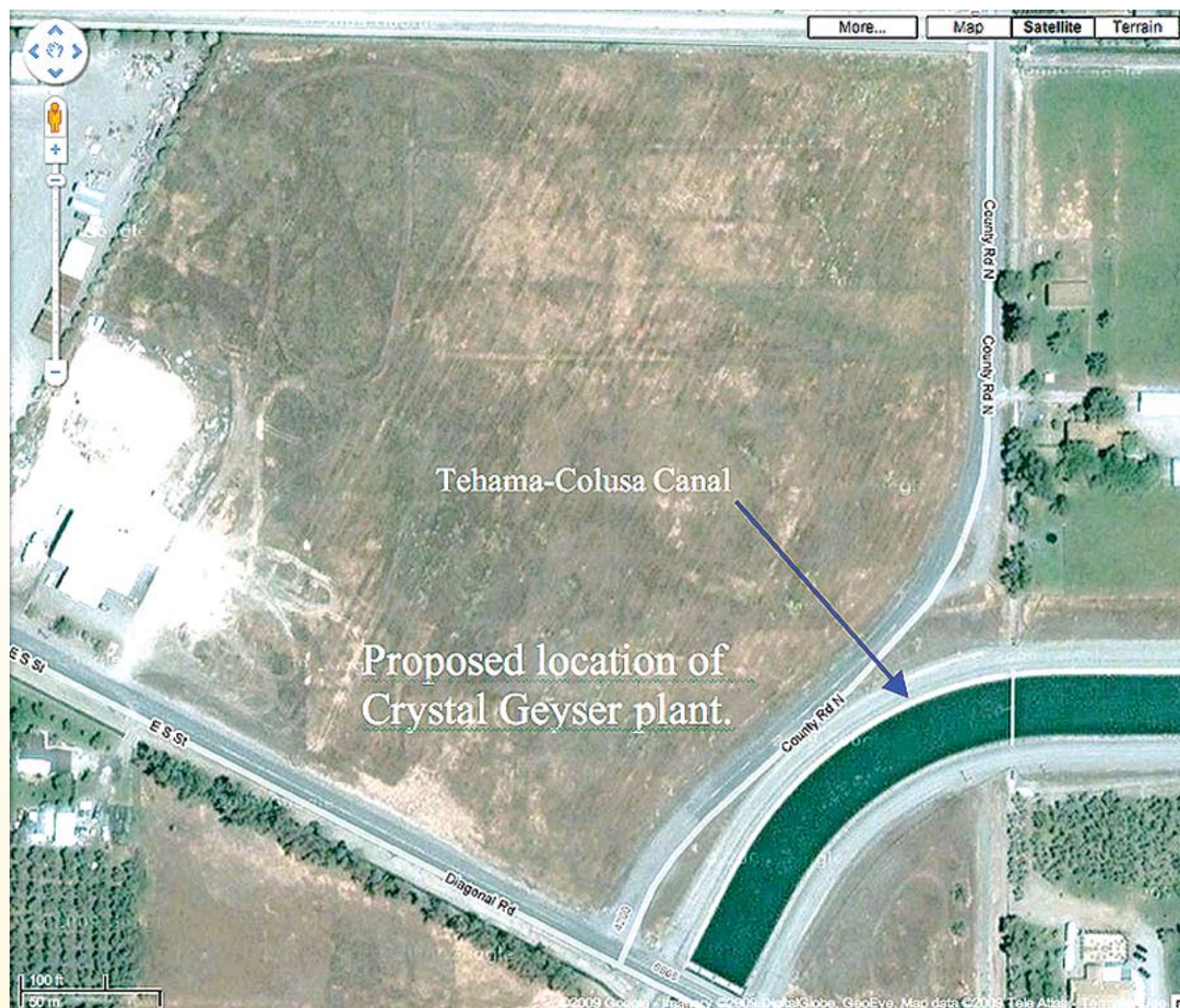


BUTTE ENVIRONMENTAL COUNCIL'S ENVIRONMENTAL

SUMMER 2009

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News



Tuscan Aquifer Attacked by Foreign Water Bottler

We shouldn't be mining it and we shouldn't be shipping it out of our jurisdiction!

By Carol Perkins

Yes, we are talking about water – again. This time the threat comes in a smaller package – plastic bottles of Crystal Geyser's Sparkling Mineral Water. While the threat appears innocuous on the surface, it is in no way insignificant. While we have seen a repetition of a few interesting facts from our local news sources, BEC has put together the really salient, yet subtle facts.

According to a recent AP article, California is home to over 40% of the nation's bottling plants. Crystal Geyser currently has a spring water plant in McCloud

and recently purchased 30 acres in Siskiyou Co. with intentions of building the largest spring water plant in the world. What might not be known is Crystal Geyser doesn't advertise where they draw their sparkling mineral water because they don't want consumers to know that it's primarily tap water.

Some facts regarding what Crystal Geyser wants

In this case, it is the City of Orland's tap water, our

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Photo (above left) shows approximate location of the proposed Crystal Geyser plant in Orland, California. One 16" diameter test well is 100 yards from the Tehama-Colusa Canal. Imagery from Google Maps.

Environmental News, a quarterly published paper, covers environmental news and events of Butte County and beyond. To submit articles or events for the Environmental News and Calendar, e-mail marym@becnet.org. Articles should be submitted 30 days before publication and must include the author's name, address, and phone number. BEC reserves the right to edit work for space, clarity or libel. The opinions expressed by contributors are not necessarily those of BEC.

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About BEC

The Butte Environmental Council (BEC) is a not-for-profit public benefit corporation. Founded in 1975, BEC protects the land, air, and water of Butte County through advocacy, environmental education, and information and referral services.

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Office Hours
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9:30 A.M. to 5:00 P.M.

How to Join BEC

To join BEC, just fill out the membership form on the back page of this paper.

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BOARD OF DIRECTORS' UPDATE

The BEC Board of Directors are moving the organization forward with restructuring of the Executive Director position into two positions with one handling advocacy duties and a second position dealing with administrative duties.

We already have had inquiries from individuals interested in applying for both positions and are actively recruiting applicants.

The BEC board hopes to have a new Administrative Director, and a new Advocacy Director by the end of September 2009. Please look for new articles by both new directors in the Fall 2009 Environmental News.

We are working with committees and volunteers on a number of issues including BEC budget and finances, by-law changes, fund raising and environmental litigation currently in progress.

Jim Gregg
Board President

Leave a Legacy

For the land, air, water, and future generations

A legacy gift to the Butte Environmental Council will not only ensure that some of our most beautiful and important resources in the northern Sacramento Valley and foothills are protected and preserved, but could also provide you with income for life, a reduction in capital gains taxes, and other benefits.

There are many ways that you can be a part of our environmental legacy:

- Remember BEC in your will or living trust
- Name BEC as a beneficiary of your IRA or Qualified Retirement Plan
- Name BEC as a beneficiary of a life insurance policy

If you currently have a will, you can easily add a codicil (an amendment) to include a bequest (a gift in your will) to BEC. An example of appropriate language for inclusion in your will or living trust is:

"I give, devise and bequeath to Butte Environmental Council, a California nonprofit public benefit corporation with the mailing address of 116 West Second Street, Suite 3, Chico, California, 95928, the sum of \$_____ dollars [or otherwise describe the gift or asset] for its general purposes and use at the discretion of Butte Environmental Council's Board of Directors."

If you are interested, please contact your personal financial planner or attorney. For basic information, please contact Butte Environmental Council at 530.891.6424.

Wal-Mart: The End is Near

The seemingly endless saga of Wal-Mart's expansion in Chico is about to come to an end. Really.

On July 30th the Planning Commission, having heard hours of comments from all parties and the public, rendered its decision on Wal-Mart's proposed expansion into a Supercenter. The Commission found the Environmental Impact Report (EIR) inadequate, and therefore denied certification of the EIR and denied the project. Wal-Mart has stated they intend to appeal that decision to the City Council. The official resolution denying the project will be presented to the Commission at the next Planning Commission meeting on August 20th. The deadline for filing an appeal is ten days later, on August 30th. After that a definite hearing date will be set for the City Council to schedule a hearing.

The EIR had multiple inadequacies, many of which were discussed in detail at the last Commission meeting. Chico Advocates for a Responsible Economy (CARE) is now gearing up for discussion with individual members of the Council. CARE believes the decision reached by the Planning Commission was the only decision they could reach with the facts presented by the EIR. However, the Council will be heavily lobbied by those in favor of the expansion, to overturn the decision.

The only way to ensure the end of this saga is to make your voice heard by contacting Council members and attending the upcoming City Council hearing. For more information on how you can help, contact CARE at info@chicocares.org or write to CARE, P.O. Box 7647, Chico CA 95927.



Aspen Restoration, Ruffa Ranch Area.



North Side Lassen Peak, North 49 Project Area.

Lassen Forest Preservation Group

Forest Update – August 2009

With the election of President Barack Obama we have much to be thankful for in the forest community. Since he became president, there is a decisive shift in Forest Service policy. Clinton's Roadless Rule, under fire during the entire Bush administration, has been reinstated, protecting areas that are currently roadless. The "Omnibus Public Land Management Act of 2009," approved by Congress in March, designated 2.1 million acres of federal land as wilderness — almost as much land as the 2.4 million acres designated during the entire eight years of Bush. A Democrat and Republican have introduced "America's Wildlife Heritage Act" in Congress. This bill, aimed at the U.S. Forest Service (USFS) and the Bureau of Land Management (BLM), will help reinstate the "multiple-use" principle of land management that allows resource extraction alongside recreation and habitat protection. As we know, during the Bush years the resource extraction side of the principle was heavily favored. This is also important as it will steer wind and solar arrays away from sensitive wildlife habitat and identify wildlife corridors. Thankfully, many other rules and regulations have been changed or deleted that were adopted under the Bush administration.

There are already proposals and testing for wind farms on our Lassen National Forest. Many of the proposed TANC lines and infrastructure was planned for the Lassen and North Eastern California area. Geothermal Energy will also be an issue in Lassen, as well as other National Forests. We are hopeful this new bill will protect sensitive areas from large development and resource extraction.

We are also seeing interesting studies on the ecological importance of wildfire and even severe wildfire. Respected scientists are compiling data to support conservative forest thinning, meadow and aspen restoration, prescribed fire, hardwood conservation and many other ecologically based treatments to assist the forest service in managing our forests sustainably.

The Lassen Forest Preservation Group (LFPG) continues to work with the USFS on the Lassen National Forest (LNF), monitoring each project that is introduced. I have written several times about the Creeks Project. This is a 10,000-acre project that stretches from Humbug and Humboldt summits above Butte Meadows down to Yellow Creek and Humbug Meadows. It is one of the most biologically diverse and ecologically important regions in the LNF. Yellow creek is a premier trout stream and drains into the Feather River making water quality and fisheries a huge issue in the project area. American Marten, California Spotted Owl, Northern Goshawk and very healthy populations of migratory songbirds call this region home. We have commented on numerous plans from the Forest Service and have visited the area at least 3 times yearly for 7 years. We have yet to see a plan submitted by the USFS that protects the sensitive species that live here, protects this important watershed and thins the forest to decrease the possibility of severe wildfire. We are currently in negotiations with the FS and we hope they will present a proposal we can support.

We have successfully come to an agreement with the USFS on the North 49 project in the Hat Creek Ranger District of the LNF. It is another very large project with many sensitive species present. The project will be done in stages and the results will be closely monitored.

Stephen Sayre is tracking the Travel Management Plan on the Lassen National Forest. This plan is attempting to designate specific roads and trails for Off-Highway Vehicle Travel and take an inventory of roads on the forest. The goal is to close roads that are not needed or in environmentally sensitive areas, and to monitor OHV traffic as well as general forest traffic.

There are also lots of projects pending and in progress on the Eagle Lake Ranger District of the LNF. Most of the Eagle Lake District is Eastside Pine and does not have the high number of sensitive species. It is however, a very diverse and interesting landscape. We are planning a field trip to the proposed "Ebey Project" next month. As always, we are looking for anyone interested in working with us on Forest Monitoring. If you like to get out in the forest, please come on a field trip with us to see what we do. Please call Trish Puterbaugh at 342-1641 or e-mail me at cohasset@shocking.com

California Oak Report

The Carbon Side of Eden

Once-bucolic Napa County is the jewel in the California wine industry crown, its 45,000 acres of winegrapes fetching the highest prices and producing superior vintages. Despite a market glut for high-end wines, Napa County winegrape growers are currently proposing to convert another 1,000 acres of coveted hillside oak woodlands to vineyards and they are balking at having to proportionally mitigate the very substantial CO2 biological emissions that accompany these woodland conversions.

California's wine industry spends copious amounts of money promoting their product, including an extensive public relations campaign demonstrating their commitment to reducing and ameliorating the carbon footprint of wine. The following synopsis examines winegrape growers-vintners carbon emission impacts and professed dedication to addressing climate change:

Wine Forest Conversion Carbon

Napa County's reactionary CO2 biological emissions mitigation attitude stands in stark contrast to the May 2009 carbon footprint policy statement issued by the California Sustainable Winegrowing Alliance, a 975-member partnership between California winegrape growers and vintners: "Oak woodlands, for example, can store huge amounts of above- and below-ground carbon over their lifetime." Clearly growers and vintners recognize the unique capacity of existing oak woodlands to naturally sequester large quantities of CO2 over time. Then why is this industry uniformly refusing to mitigate significant public health effects due to that stored carbon being discharged back into the atmosphere when woodlands are unnaturally impacted for the growing of winegrapes?

After the carbon capturing oak trees are removed the soil is "deep ripped" to improve vineyard yield and remove all vestiges of oak root fungus, which is deadly to grapevines. Deep ripping is a process in which bulldozers drag rippers, consisting of 4-foot to 7-foot metal prongs, through the earth. This activity disgorges biological material behind the ripper with each pass, releasing enormous quantities of CO2 into the atmosphere.

Wine Production Carbon

According to the Napa Valley Vintners (350 wineries), "The Food Processing sector is the largest energy user in the state of California and wineries account for the largest percentage of energy use in this sector. The average Napa Valley winery uses 6.5 gallons of water per gallon of wine. The transport, heating and treatment of water account for 20% of electricity use and 30% of natural gas use in the state. All of this energy use has an associated carbon footprint." Not included in these energy figures are the over 4.7 million tourists that fly, drive and bus in annually to visit Napa Valley tasting rooms and related wine tourism.

The NVV also reports that wines "impact on Napa County's economy alone is valued at nearly \$11 billion annually...While Napa Valley produces just 4% of California's winegrapes, the region is responsible for nearly 30% of the economic impact of wine in California, and nearly 34% of the economic impact of California's wine to the U.S. economy, a mighty \$42.4 billion annually."

If Napa County and the California wine industry are going to talk the climate change talk, they need to walk the climate change walk. This luxury commerce can certainly afford to lessen and meaningfully mitigate its Big Foot carbon print and has a social responsibility to do so.

*** For a FREE copy of the California Oak Foundation's "The Oak Woodland Bird Conservation Plan" come down to the BEC office!

Paradise Irrigation District Update

By Mike McLaughlin

Paradise Irrigation District, responsible for providing water to 26,000 Paradisians, has contracted with the Butte County Resource Conservation District for a fuel reduction study. The RCD study will provide PID directors with ideas for dealing with fire abatement procedures in the watershed between the district's two dams.

At its July 18 board meeting PID Directors discussed ways to pay to enhance fire protection, and settled on the possibility of a timber harvest. A similar plan initiated in the early 1990's fell to public pressure. RCD Manager Pia Sevelius, describes the agreement as being an in-depth study, enlisting the professional services of the US Forest Service, Cal Fire and the National Resource Conservation Service, of which RCD is a partner.

BEC is a stakeholder in the process, and will be involved in the plan development. All BEC members wishing to participate, can call or e-mail the BEC office, or contact Mike McLaughlin at 877-1997.

Sacramento River Preservation Trust... 25 Years and Counting!

By John Merz

The Sacramento River Preservation Trust (Trust) was organized in 1984 to protect the natural values of the Sacramento River ecosystem. Twenty-five years later, the Trust is celebrating the significant improvements to the River's health that have come about as a result of both land acquisition and habitat restoration activity. A year-long series of events (including the two float trips that are highlighted in the calendar section of this issue of the Environmental News) are being planned and will be open to both the general public and dues-paying members of the Trust. To find out more on how to participate and/or be placed on our notification list, please contact the Trust at 530-345-1865 or visit us at www.sacriverttrust.org.

Good times aside, the River continues to be subjected to a variety of threats. Water quantity and quality issues are ongoing headlines in the news. Participation by the Trust in the development of the 2009 State Water Plan is a key component of our work in this arena. The Trust will continue to be involved in coalition-building activities to more effectively address these issues, including litigating when necessary.

The realities of a meandering river system continue to be a point of contention as well. The Trust is "at the table" with the State Department of Water Resources (DWR) as it moves forward in the development of the Central Valley Flood Management Plan, the latest in a series of planning efforts over the years that have attempted to balance flood management and habitat protection goals. The expansion of the Sacramento River Bank Protection Program, which involves the placement of rock revetment/rip-rap on the eroding banks of both the Sacramento River and her tributaries, has also become a major focus on the part of both DWR and the US Army Corps of Engineers of late. Due to the negative impacts on river dynamics associated with bank protection, in particular interference in riparian plant succession and disruption of related wildlife habitat, this program has been continually challenged by the Trust since our inception. Though current conversations include the use of set-back levees as an alternative to traditional bank protection approaches, the reality to date is that cost considerations and the potential need to use eminent domain have precluded this approach from being utilized to any significant degree so far. The Trust is committed to making sure that this technique becomes the rule rather than the exception.

And so the story goes, with politics always at play and the environment usually getting the short end of the stick. In the case of the Sacramento River, it's a mixed bag. We have reversed the historic loss of riparian habitat and have seen a number of species rebound as a result. But we have also seen the recent collapse of the salmon fishery, though the picture there is larger than just the River herself. When all is said and done, we still have a long way to go. But we are closer than we have ever been before in achieving our 25 year old mission to, in essence, keep the river a river.

Work ahead for sure, but also plenty of play. Please join us.

Tuscan Aquifer Attacked... continued from page 1

shared Tuscan aquifer: water necessary for the production of orchards. CG proposes to pump 160 ac-ft of groundwater annually from an area that already appears to be stressed. This amount of water can be pumped at 100 gallons per minute, but CG has not stated whether this volume is finished product or their production needs. According to a 2006 estimate by Pacific Institute it takes 3 liters of water to produce 1 liter of product. And, CG isn't really sure if they will pump 100gpm or 125gpm, the later equating to 200ac-ft annually (*see the July 21st Orland Press Register article*).

One acre-foot of water is equal to 325,851 gallons. That is enough water for an entire year to supply a very thirsty household of four, who each consumes over 223 gallons per day! That's twice the U.S. average, which according to the United States Geological Survey is 100 gallons a day.

The amount of water that CG proposes to pump annually is equivalent to enough water to supply 320 homes per year at an average rate of consumption. Orland, this is analogous to increasing your domestic water consumption by 1/5 nearly overnight! How many homes will that water supply when we learn to conserve?

Irrigation water stays in our watersheds

According to CG, their proposed take is equal to the

amount of water necessary to irrigate 50-60 acres of orchard; this may be true in precipitation-starved areas of the Central Valley, but not realistic for our valley conditions. Greg Overton, an orchardist in Orland indicates that CG's expected take is roughly 16ac-ft per acre and orchards are currently limited to 3ac-ft per acre (*see the July 16th KHSL news segment*).

Our agricultural economy was founded upon the availability of local water and our right to use this public resource for the benefit of all. When push comes to shove, and we run out of accessible water, which farm(s) will be willing to knock over their trees? A majority of irrigation water stays in our valley. It infiltrates and percolates back to our groundwater system. Even evaporated water plays an important role in the local hydrologic cycle: unlike **bottled water that will be shipped out of our watersheds, out of state, and out of the country.**

We do not know if the pump tests have happened, will happen or are happening. The big question is, from what depth will they pump during the test and from what depth do they hope to pump if this calamitous and inexcusable plan progresses? According to the April 28, 2009 press release for Glenn County groundwater levels, the measurement results indicate an average change for all wells measured was 3.5 feet lower than 2008; the greatest difference

of 6 feet was measured in wells with depths greater than 600 feet.

Who will regulate Crystal Geyser?

Otsuka America Inc. a pharmaceutical company of Japan has a controlling financial interest in Crystal Geyser Water Company (CGWC) and CG Roxane Water Company (they produce the spring water). Foreign ownership brings local water supplies within the reach of international trade rules. Foreign partnerships may claim 'taking of profits' if restrictions are placed on bottling production. In Michigan, there is an attempt to protect the citizen's ownership rights and jurisdiction: they are concerned about potential trade disputes between the United States and any multinational corporation or foreign government interested in diverting the public's water.

Orland city officials are looking for assurances that there will not be negative impacts. We ask, how can they can make any guarantees when they are forfeiting control to an international company? 'Our jurisdiction' may be somewhat of a misnomer if Jim McCann's (Calistoga City Manager) statements are true (*see the August 1, 2009 Enterprise Record article*): "...the state regulates water bottling facilities and the quantity of product taken." McCann also states "Cities are not in the position to regulate how

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The State of Salmon

Allen Harthorn
Executive Director, Friends of Butte Creek
Vice-President, Salmonid Restoration Federation

California used to be the State of Salmon. A hundred years ago the salmon canneries in the Sacramento Delta area of the state were booming. Millions of pounds of Sacramento-San Joaquin Basin salmon were canned every year for consumption across the country. Salmon was like canned tuna is today. I remember my mother telling me how much she disliked salmon because her mother made her eat it all the time because it was the cheapest protein source. As progressive as California has always been, our ancestors did exactly what the Kings of Europe did, and exactly what the settlers on the East Coast of the United States did, dammed and diverted the rivers, destroyed the freshwater habitat with logging and farming, and allowed the over harvest of salmon. Although restoration efforts in Europe and New England have great ambition and potential, they have suffered through hundreds of years of meager salmon runs and may never have more than remnant populations, "boutique runs" as referred to by one noted biologist. I guess someone forgot to read the history books on salmon.



*It is time for a
new Salmon Paradigm.
Can we let the iconic
King Salmon of California
disappear?*



The second year in a row of complete salmon fishing closure in California is starting to gain the attention of non anglers, or in other words, the general population who value the heritage of California, the consumers who recognize the incredible health and economic value of California salmon, and conservationists who recognize their value as an indicator species. Research in river basins across the West have shown the incredible food web connections that salmon facilitate when they bring back nutrients from the oceans. The nutrients the salmon provide supports numerous trophic levels in our water basins, from the insects, to the birds, mammals, crustaceans, and amphibians, all of which help support the grasses, shrubs, and trees. When salmon are gone, so are the best nutrients that support all the components of healthy water systems.

Sacramento-San Joaquin salmon runs hit rock bottom last year. A total of approximately 66,000 salmon returned from the ocean and back to one of a dozen or so basins that still support remnant populations. In general, salmon populations supported by hatcheries on Battle Creek, Feather River, American River, Merced, and Mokulemne, all plummeted. Probably a mere 45,000 hatchery reared fish made it home compared

to 100's of thousands in a normal year. Less than 20,000 wild salmon returned to their native streams to spawn naturally. Butte Creek once again led the way with over 11,000 wild spring run salmon. Clear Creek outside of Redding had a handful of spring run and several thousand wild fall run salmon. The rest of the spring run streams had only a couple thousand total and the few wild fall run that still return to our system was in the hundreds.

Big Chico Creek, sadly had no fish that spawned in 2008 according to the Department of Fish and Game. What is most concerning is that the wild run on Butte Creek is now facing a crash unseen in more than a decade. Estimates range from 1500 to 3000 returning adults, the lowest number since 1997. For all the great restoration projects on Butte Creek and the incredible runs of recent memory, it is obviously not enough to prop up the failures of all the other streams and the collapse of the Delta ecosystem. The predators in the ocean will continue to take their share until they get hungry and move on to other species. Unfortunately we may have dropped below a baseline population that can support Orcas, Salmon Sharks and other marine species and maintain sustainable returns to our rivers.

It is time for a new Salmon Paradigm. Can we let the iconic King Salmon of California disappear? Are we completely resigned to eating only Alaskan Wild Salmon at a much higher cost? Will cheap, environmentally destructive feed lot Atlantic Salmon continue to dominate our stores and restaurants? Will our rivers and streams slowly starve for lack of marine nutrients? Will we let the Water Buffalos suck all the water out of system? Think about how far reaching the implications are. Americans rallied to protect and recover the Bald Eagle and have had great success. We now have resident pairs of eagles in Butte Creek Canyon and hundreds flock to the valley in the winter to feed along our streams. Let's step up and do the same for the salmon. Contact your local, state and federal legislators. Tell them you support Wild Salmon. Yes we can recover the State of Salmon!

You can help support the efforts of the Friends of Butte Creek by joining online or at the upcoming SYRCL Wild and Scenic Film Festival. The 3rd Annual event is September 17, in the Sierra Nevada Big Room at 6 PM and is hosted by Friends of Butte Creek and sponsored in part by the Sierra Nevada Brewing Company. Six great films from the two day SYRCL event in Nevada City will be featured along with a silent auction, raffle and giveaways. "Red Gold", the story of the Bristol Bay Sockeye Salmon and the gold mine that could ruin it all, will be the feature film of the evening. The Big Room has generously donated a delicious intermission treat and great music will fill the air. Join us and help us Save Wild Butte Creek Salmon! Tickets are available online at www.buttetecreek.org, at www.brownpapertickets.com, and under the orange canopy at the Saturday Farmer's Market.



Butte Creek Salmon photo by Matt Stoeker

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H₂O Quality News – Butte County

August 2009

This electronic newsletter is designed to keep you current on water quality issues in Butte County and beyond. We welcome comments, suggestions and any news tips that may be of interest to all who enjoy our natural resources.

Quick Facts

- Clean Water Act (CWA)
The Federal Water Pollution Control Act aims to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.
- Section 303d—CWA
Impaired waters of the state that do not meet the quality requirements of the CWA framework.
- In 2006, the regional boards gained responsibility to review available data and recommend amendments for final State Water Board approval.
- Section 401—CWA
Addresses permitting for activities that discharge into navigable waters.
- Porter-Cologne Act
Water quality section of the CA water code. Outlines state and regional Water Board activities per the CWA framework.
- ILRP
The Sacramento Valley accounts for nearly 25% of the states farm land, monitored by one of the largest coalitions: Sacramento Valley Water Quality Coalition.
- The Central Valley Regional Water Quality Control Board
Identified over 268 waterbodies with impairments impacting at least one beneficial use. All are without TMDLs.

Upcoming Activities

- Watch for more information on the following:
- Sediment removal within the Cherokee Canal

Regional Water Board Approves 2008 Draft 303(d) List

- CV Board adopts Resolution Approving the Clean Water Action Sections 305(b) and 303(d) Integrated Report June 11, 2009 (Order Number R5-2009-0059)
- The Central Valley Regional Water Quality Control Board (RWB) developed over 2,000 fact sheets, each assessing a unique waterbody-pollutant combination, with over 3,800 lines of evidence, to identify 441 proposed new 303(d) listings. The RWB indicates the large number of new listings is likely due to the large volume of new water quality data available since the 2006 Report.
- Butte Environmental Council has created a quick list of waterbodies in Butte County (or impaired tributaries outside of our county) that have made it to the draft list. BEC urges you to review this list and consider the pros and cons of the inclusion of your watershed.
- 319(h) Nonpoint Source (NPS) Implementation Grant Program, (one potential benefit of 303(d) inclusion)**
- The purpose of the program is to provide funds to restore and protect the beneficial uses of water throughout the State through the control of NPS pollution consistent with completed Total Maximum Daily Loads (TMDLs) or TMDLs under substantial development.
- However, Butte County has impaired waterbodies recognized since 1992 and **no** TMDL development. It is a time consuming and costly process and often like chasing a needle in a haystack: you know it's there but don't know why or how it got there.

Visit becnet.org/waterquality for more information and helpful links



ChicoEco Highlights a Geodesic

by Nani Teves

Hidden among the trees in the mountain community of Forest Ranch is the most amazing example of living more responsibly by combining conservation and cutting edge. Ron Kaufman and Marti Leicester spent four years planning, and 14 months building their geothermally heated and cooled, concrete geodesic dome home, which, when all was said and done was approximately the same cost as building a traditional house of the same size.

A geodesic dome looks like the top half of a soccer ball, and theirs is two domes connected by a 12ft length. They used concrete as a building material because it is low maintenance, highly insulated, insect resistant, and most importantly for their area - fire resistant. They built to optimize passive solar potential, used double pane windows, and included 10 skylights that reduce the need for indoor lighting.

Throughout the house, renewable and reused building materials were used including the floor, which is made from Marmoleum, a durable linoleum made from linseed oil, jute, and rosin. For carpeted areas, 2ft by 2ft squares were used, making it possible to replace only damaged areas. Framing studs were reused to build the loft, the kitchen cabinets are bamboo, and the stairs, window seats, and baseboards are all made from a material called Evergrain, which consists of 50% HDPE (typically recycled milk bottles) and 50% wood fibers (typically old pallets).

One of the most fascinating things about this house is that it uses geothermal energy for heating and cooling. The system was expensive but they wanted to push the technology forward by experimenting. How the system works is heat is collected from the dome interior and then pumped into the ground during cooling, and reversed during heating. They hired an out of state company (no one was available locally or even in California) to drill four 180ft deep holes. Crystal Air in Weaverville installed the system by placing tubing surrounded by Bentonite in the holes. A two-way pump is run using energy from PG&E and a back-up generator, and the extra heat from this system is used to preheat the water for their on-demand tankless water heater.

Another unique feature they included in the design is a Heat Recovery Ventilator (HRV) system. The HRV brings in fresh air and exhausts stale air, while transferring a significant portion of the heat in the stale air to the incoming fresh air. It also maintains a slightly positive air pressure in the dome so that pollen and dust are not drawn in through open doors and windows.

From the jars reused to hold screws, to the dome itself, this house is an example of how fun it can be to research, experiment and live outside the box.

If you want to learn more, see photos, or contact Ron and Marti go to www.ChicoEco.org.

www.ChicoEco.org is a BEC website that pulls together our communal knowledge of eco-projects, a directory of green businesses, and a full calendar of action events for the purpose of global cooling.

Dome Home



Marti and Ron by a model of their dome home.



Old jelly jars are reused in the garage to hold nails, screws, bolts...

Bartlett COMPUTER REPAIR

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Support & Installation

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BY APPOINTMENT ONLY



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Wellness Update:

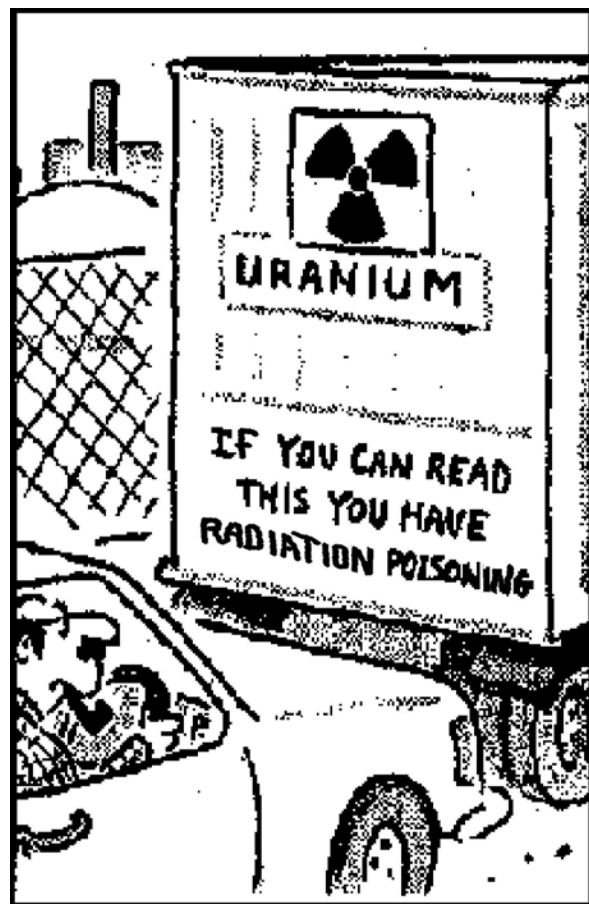
By Mary Muchowski

Work continues on the grant from The California Wellness Foundation to increase awareness of toxic issues in our daily lives, our homes and our environment.

We will be working on radio and/or television PSAs urging people to become more aware of the toxic chemicals they may be using in and around their homes. We currently have Alternative to Toxics "Recipe Cards" for household cleaning product and pesticide product replacement on our Alternatives to Toxics webpage.

SWAT (Safety Without Added Toxins) continues to encourage the Butte County Mosquito & Vector Control District to develop a comprehensive notification system to warn residents before the District sprays their neighborhoods with pesticides. You can find maps of "fogging" areas and the telephone number to receive e-mail notification before fogging events on our website www.becnet.org (click on the SWAT logo).

Julia Murphy has been helping in the office and by staffing a table at the Chapman Food & Fitness Fest Farmer's Market. Karla Kent is helping to design pamphlets and brochures which will be available on our website in pdf form. Michael Schefers, a Chico State intern has been researching the water quality of the Sacramento River and has written an article that you can check out in this issue of the Environmental News.



US Environmental Law

Precautionary Principle

By Maggi Barry

Are you aware that in the US, there are some 85,000 chemicals in the consumer marketplace and only a fraction of them have ever been tested for their impact on human health? Many of these chemicals are now known or suspected to contribute to a long list of diseases including cancer, developmental disabilities, heart disease, infertility and reproductive harm.

In the process of researching information about toxicants and their alternatives, I continually come upon the concept of the precautionary principle, especially from sources in the European Union (EU). I believe this is a very sound approach to managing toxic chemicals.

In June of 2007 the EU initiated a program to regulate chemicals and to promote their safe use called REACH (Registration, Evaluation, Authorization and Restriction of Chemical Substances). Their goal is to improve the protection of human health and the environment through better and earlier identification of the properties of chemical substances. REACH assigns greater responsibility to industry to manage the risks from chemicals and to provide safety information on the substances. Manufacturers and importers are required to gather information on the properties of their substances, which will allow their safe handling and to register the information in a central database run by the European Chemicals Agency (ECHA). REACH also calls for the progressive substitution of the most dangerous chemicals when suitable alternatives have been identified. In the new REACH program, the EU is going to start with the removal of the 1,400 "chemicals of very high concern" and the producers will have to "bear the burden of proof" to gain approval to use those chemicals.

The precautionary principle is a common sense approach that says, "Err on the side of caution," or "better safe than sorry." Most of us instinctively utilize this code throughout life as a way of avoiding unnecessary exposure to events which may harm us. Of course, in life there are many situations that are ambiguous as to whether a particular act will put us in jeopardy. We all take chances on a daily basis and reap the consequences of our choices.

Wikipedia, an online resource for information, states that the Precautionary Principle is:

"A moral and political principle which states that if an action or policy might cause severe or irreversible harm to the public or to the environment, in the absence of a scientific consensus that harm would not ensue, the burden of proof falls on those who would advocate taking the action.¹ The principle implies that there is a responsibility to intervene and protect the public from exposure to harm where scientific investigation discovers a plausible risk in the course of having screened for other suspected causes."²

According to European Environment Agency, the precautionary principle and its application to environmental hazards began as a concept within environmental science in the 1970s, when German scientists and policy-makers were trying to deal with "forest death" and its possible causes, including air pollution.³ (European Environment Agency, 2001)

One of the globally accepted definitions of the Precautionary Principle came from work at the Rio Conference, Earth Summit in 1992. Principle # 15 of the Rio Declaration says:

"In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."⁴

This says that scientific uncertainty should not rule out preventative measures needed to protect the environment. The European Environmental Agency uses this as a guide, as well as using "cost-effective" measures which shows that costs can be considered. When it comes to dealing with toxic chemicals, the EU is far more progressive than the United States.

In contrast, US environmental law is based primarily on Cost Benefit Analysis which involves backtracking to find the cause after people or the environment is sick. In 1976 the Toxic Substances Control Act (TSCA) was passed. Under TSCA, the burden of proof lies on the Environmental Protection Agency (EPA) to regulate the chemical industry and prove that a chemical is unsafe before its use can be restricted, as opposed to relying on the companies to disclose the makeup of the chemicals they are producing, and whether or not these ingredients are carcinogenic, endocrine disruptors, or a danger to our neurological systems. When the EPA has determined that a chemical could be hazardous to one's health, the burden of proof is on the agency to convince a court that the chemical is unsafe, rather than the manufacturer being required to prove that the chemical is safe before being placed on the market.

Some time following this Labor Day, legislation will be introduced in U.S. Congress that would reform the TSCA. The reform bill, known as the Kid-Safe Chemicals Act (SB 797) would transform TSCA into an effective law for regulating and protecting the public from unsafe chemicals (while encouraging the development of safer alternatives). Senator Frank Lautenberg is championing this effort in the U.S. Senate, and Rep. Bobby Rush is the leader of the reform effort in the House of Representatives.

It is critical that we unite to make our environment safer for all and for many generations to come. Please contact your representative today and urge them to support SB 797. We also urge you to do what you can in your own home by always choosing alternatives to toxics!

For more information, visit the following websites:

*www.becnet.org

* <http://www.sehn.org/precaution.html>

*http://europa.eu/legislation_summaries/consumers/consumer_safety/l32042_en.htm

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Floating Down the River

By Michael T. Schefers

The various uses of the Sacramento River, in agriculture, in the fishing industry, and in the water we drink, touch the lives of millions of Californians and help generate billions of dollars in economic activity for our state. But like the Jaywalk segment on Jay Leno's Tonight Show has shown, we don't always know much about what is in plain sight. How much do you know about the Sacramento River? Did you know that the Sacramento provides the drinking water for 25 million people and when combined with the San Joaquin River their collective watersheds cover about 45 percent of California's surface area (Rothert, 2009)? The Sacramento River originates near Mount Shasta and runs its course, minus the stop at Shasta Dam, through the Delta and into the Bay Area. The Sacramento River also supports, or at least it once did, the nation's most diverse salmon runs (Rothert, 2009). With regards to the agriculture industry, the Sacramento River watershed, in combination with the San Joaquin watershed, produces more than half the fruits, vegetables, and nuts grown in the United States (Weston, 2004). But all is not well with the Sacramento River, for it has been listed as impaired in a report by the Environmental Protection Agency (Morrill, 2002).

How the weather interacts with the Sacramento River can be divided into two specific seasons, dry and wet. It is the wet season that is the focus of this article. The rainy season not only brings water to the valleys and snow to the mountains, it also carries pesticides and other toxic substances from the agricultural fields and orchards into the river. The abundant application of pesticides is of particular concern in the Sacramento Valley.

"An annual application of an insecticide is frequently recommended for the almond and stonefruit orchards in early winter, primarily for the control of boring insects. Approximately 450,000 kg of insecticide active ingredients is applied annually, usually in January and February, to Central Valley dormant [not leafed out] orchards" (Holmes, 2003).

This is corroborated by Susan Anderson of the University of California, Davis when she wrote "Pesticides are applied throughout the year, but heavy use occurs during the winter months in the Central Valley. Significantly, the winter months in the Central Valley are the wettest of the year, and the surface runoff that follows storm events provide the major transport mechanism by which pesticides enter watersheds" (Anderson, 2004). Mr. Lei Guo states "transport of pesticides by surface runoff during rainfall events is a major process contributing to pesticide contamination in rivers" (Guo, 2004).

Genotoxic chemicals have the ability to damage DNA and are capable of causing mutations or cancer.

they have become the dominant urban insecticide used in California. Pyrethroids are applied in all 58 counties of the State with over 345,000 kg reportedly used for landscape pest control in 2005 (Holmes, 2008). Also of interest is the presence of DDT (banned in 1972) and the chemicals that it breaks down into (DDE and DDD). Bill Jennings, CSPA Executive Director, and author of the article Water Board Report Shows that Irrigated Agriculture Has Polluted the Delta and Most Central Valley Waterways goes on to suggest the possibility that DDT and other "prohibited" pesticides were being smuggled in from Mexico where DDT is still legal (Jennings, 2007).

There are also four organophosphorus insecticides used in Central Valley agriculture including diazinon, chlorpyrifos, methidathion, and Malathion, with diazinon being used the most (Holmes, 2003). The Environmental Protection Agency (EPA) has classified diazinon as a Group E chemical (evidence of noncarcinogenicity for humans); however, exposure to diazinon can cause cholinesterase inhibition in humans; that is, it can overstimulate the nervous system causing nausea, dizziness, confusion, and at very high exposures (e.g. accidents or major spills) respiratory paralysis and death. It is known that "dur-



Figure 1: Printed with permission of SFEP.

So how big of a problem is agricultural runoff? Here are some figures for California:

"In 2000, more than 14 million acres of land were dedicated to agriculture, and 188 million pounds of pesticide active ingredients were applied (California Department of Pesticide Regulation Pesticide Use Database, <http://www.cdpr.ca.gov/dprdatabase.htm>). Of this, 126 million pounds were utilized in the Central Valley" (Anderson, 2004).

It's been written that the average annual runoff going into the Sacramento River is just over 7 trillion gallons. That equals to about 1/3 of the total runoff for the state of California (Domagalski, 1996).

So what exactly is in the river, beside water and a decreasing number of salmon? There are genotoxicants such as captan, carbaryl, Malathion, methyl bromide, trifluralin, and ziram (Anderson, 2004). Genotoxic chemicals have the ability to damage DNA and are capable of causing mutations or cancer. Pyrethroid pesticides are an increasing concern, as

Urban *Runoff* What You Can Do to Prevent It!

By Mary Muchowski

By now you know that pesticides, herbicides and fertilizers are generally not good for the environment, especially when they enter our waterways. And, while you may want to blame agriculture for all the pesticides in our rivers, you should look under your sink and on your garage or shed shelves. We city residents can (even if unwittingly) contribute greatly to our polluted waters.

Stormwater in most Butte County urban areas, drains directly into a creek (however, some just hold the water letting it filter naturally into the ground, such as in my neighborhood). Stormwater, and anything else that happens to be in the gutter or drain, does not flow to the sewer treatment plant. It is not treated in any manner before it hits the creeks, which is why it is so important not to dump anything into the gutters or drains. Most people know now that you should never dump oil, antifreeze, or other toxic chemicals into the gutters or storm drains. However, when we use pesticides around our houses and yard we may not think about how they can unintentionally end up in our waterways through the storm drains. If we apply them just before a rain, they can enter our creeks as runoff. The same holds true if we water our lawns directly after treatment with a weed & feed product; runoff ends up flowing down the sidewalk or driveway to the gutter.

While organophosphates (such as diazinon and chlorpyrifos) are being phased out of many consumer pesticide products, the trend is indicating that they are being replaced by pyrethroids. Pyrethroids are synthetic versions of a pesticide that is naturally derived from the chrysanthemum flowers called pyrethrum. One of the first and most widely-used pyrethroids is called permethrin, in fact any pesticide ending in "thrin" is likely a pyrethroid. Permethrin made up the bulk of five pyrethroids being used in 1993, however by 2002 there were 10 different products and permethrin dropped to less than half of the total. This may be more than you want to know, but my point lies here: "...many of the newer compounds have toxicities to aquatic life nearly 20 times greater than permethrin" (Amweg, et. al. 2004). So, while pyrethrum is derived from chrysanthemums, the synthetic adaptations of this chemical seem to be increasingly toxic to insects and aquatic life. We should only use these chemicals when absolutely necessary, and always follow the instructions on the label.

There are things that you can do to help prevent urban pollution from entering our waterways:

Lawn, Garden & Landscaping:

- Minimize or end use of pesticides, herbicides and synthetic fertilizers.
- Shrink your lawn
- Plant native grasses, shrubs and trees.

Household Hazardous Waste:

- Dispose of properly

Pet and Animal Waste

- Pet waste can contain bacteria, viruses and parasites. It can also pollute our creeks when carried by runoff.*
- Pick up after your pet and dispose in the garbage.

Automobile Maintenance:

- The detergents, solvents and other chemicals used to clean cars contribute to the pollution of urban runoff.*
- Wash and detail your vehicle on the lawn rather than in the driveway or street.
- Wash your car at a car wash that recycles water.
- Take oil to a recycling center.
- Fix leaks as quickly as possible.

Remember, never dump anything down the storm drains!

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30th Annual Endangered Species Faire

Diversity: It's the Spice of Life

The 30th Annual Endangered Species Faire was a great success! Despite a light rain off and on most of the day, several thousand people showed up to celebrate mother nature, enjoy the entertainment and learn about a diversity of environmental issues. When the subject of the weather came up, the most common response was “we really need the rain” – everyone seemed to enjoy being out in the much-welcome precipitation!

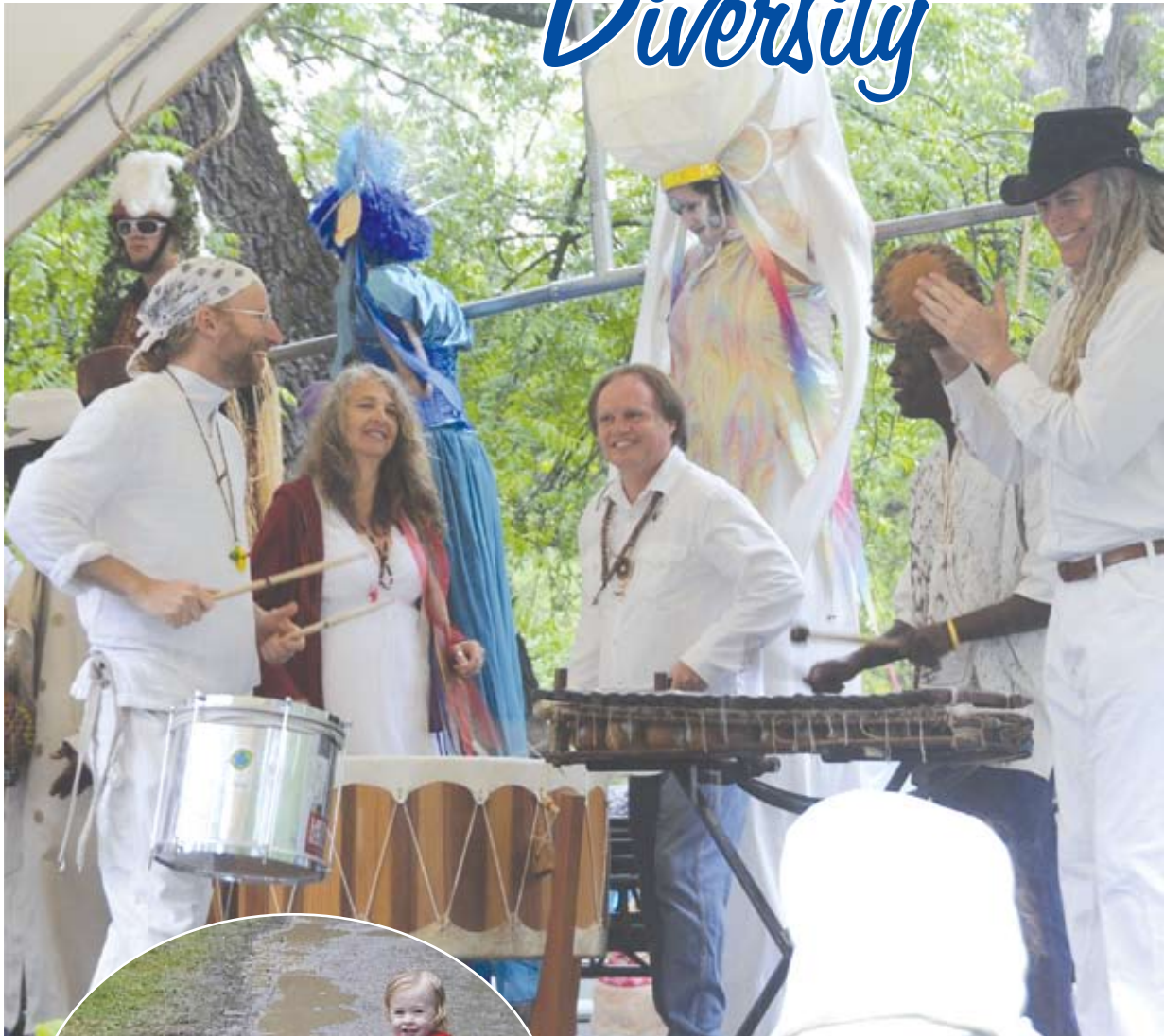
Diversity: It's the Spice of Life was the theme of this year's Faire, and the variety of displays at the booths helped make this point. The educational booths presented by non-profit organizations, federal agencies and schools were amazing, and most had an interactive activity to reinforce the concepts the group was trying to convey. This year we had a booth exhibit on orangutans, created and presented by a very determined and pro-active school girl named Allison Boyer, working with a group called RedApes.org. As usual, the agencies, such as the Plumas National Forest and the U.S. Fish & Wildlife Service, had beautiful and informative displays.

One of the features of the day was the One Heart Ceremony, a beautifully choreographed performance that expresses the oneness and interconnectedness of all living creatures with the elements. The performance highlights the forces as we see them and allows us to recognize and show our gratitude to the natural world on which we all depend. This heart-warming ceremony was created and narrated by Rosamond Crowder and a host of talented musicians, dancers and performers brought it to life.

Special THANKS to all of the entertainment that braved the elements: Whipple, Hooker Oak School, Local World, Wild Things and Ha'Penny Bridge! We also appreciate that Rosamond Crowder and all the participants in the One Heart Ceremony were able to quickly adapt the ceremony to fit on the stage, under the big tent, even though we all held hope (until the last minute) that the rain would subside before the ceremony was to take place. Despite the condensed version prompted by the rain, the audience was touched by the magic invoked by the ceremony.

All in all, it was amazing that so many people came out to the Faire and that the majority of the organizations attended as well as the vendors. What a great day enjoying mother nature's moisture, listening to great music and learning something new about the environment! Hope to see you next year...

BEC interns Emily Alexander, Marina Hammon-Adams, and Whitney Moyer were invaluable! They worked extremely hard to develop materials for the BEC educational booth and did a great job organizing the volunteers. More thanks to Julia Murphy, Lisa Hill, Dr. Diane Schmidt's students, and all the other great volunteers. Our wonderful major sponsors make this event possible, so we would especially like to thank: Altacal Audubon Society, Barris Farms, Chico News & Review, Chico State Sustainability Program, FREE, New Urban Builders, Sierra Club – Yahi Group, Sierra Nevada Brewing Company, and the U.S. Fish and Wildlife Service. Business Sponsors included A&J Party Rentals, Butte Natural Distributing, Durham Electric, Ed's Printing, In Tents Events, Left Coast Pizza, Mountain Sports, Mt. Shasta Spring Water, Printed Image, Pullins Cyclery, Robert Seals, Small Town Sound, and Waste Management. Special appreciation also goes to all the Friends of the Faire, who contributed financially to keep the Faire rolling.



Butte Environmental Council
& the City of Chico invite you to the

Bidwell Park & Chico Creeks Cleanup

Saturday **September 19th**
2009

9 am to 1:30 pm

Meet at:

Hooker Oak Rec. Area

or

Chico Country Day School
(11th Street & Broadway)

or

Nord Ave @ Big Chico Cr.
(near Bidwell Ave.)

or

Floral Ave @ E. Lassen Ave

Volunteer picnic to follow at 1:30 P.M.

Let's make the

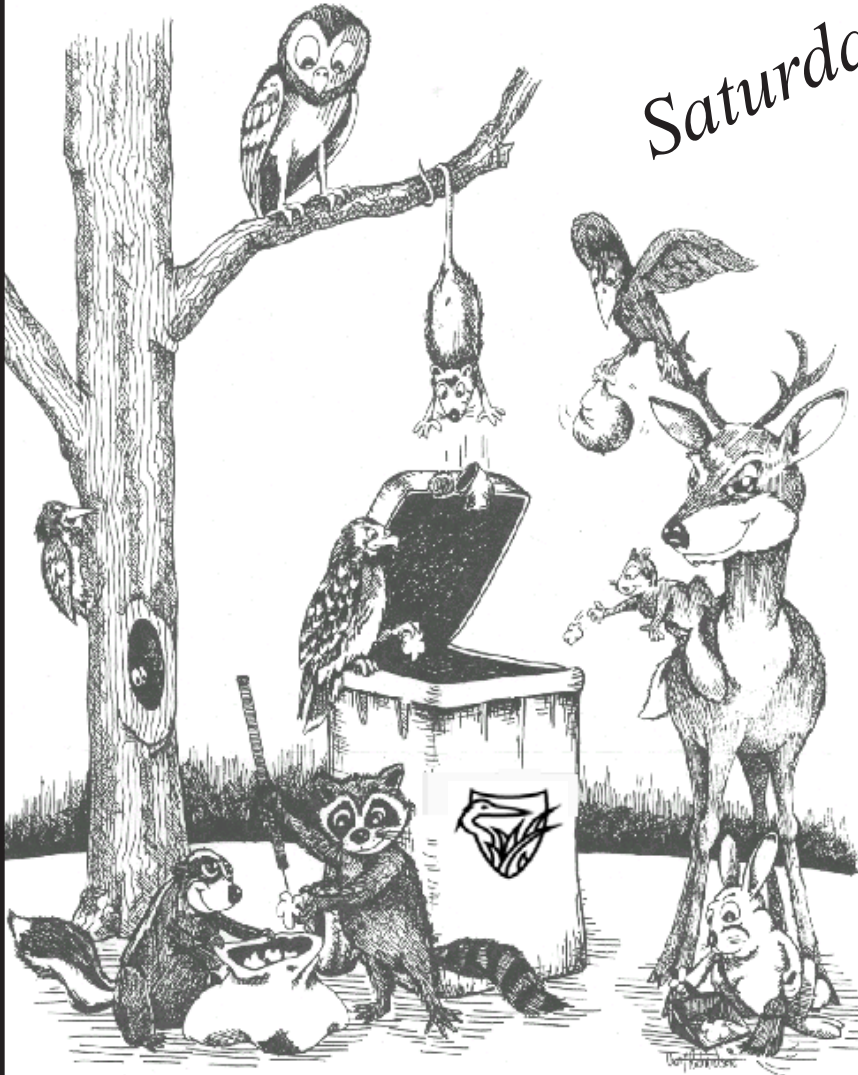
25th Annual

California Coastal

Cleanup Day the

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*For days and hours of
collection, please visit***www.becnet.org***and click on the
Recycle CFL logo*

Keeping your body and house clean, like eating food, is one of those eternal human concerns. Methods of personal and environmental hygiene have evolved over thousands of years, and traditionally utilized plant materials to clean and deodorize both body and home. However, the advent of industrial manufacturing has seen many additions to the cleaning tool-kit that are completely man-made, and concerns have begun to surface about the safety of these man-made newcomers.

Some History on Hygiene and Cleanliness

By Mignette San Segundo

Personal hygiene in ancient times was often dictated by one's religion, as in ritual ablutions (bathing) for Hindus; the Qur'an promoted a high standard of physical hygiene for Muslims as well. Romans, with their aqueducts, were the first society to institute bathing as a social norm, with their large public baths. In addition, Romans had Cloaca Maxima, the large sewer into which public and private latrines flowed. Roman toilets didn't flush like modern toilets, but rather had a continuous flow of water underneath the toilet which terminated at the sewers.

Indoor plumbing (a toilet) was a rarity in Western cities and reserved for the rich. Plain folk used shared facilities, which drained into cesspools. These cesspools and shared facilities contributed to the spread of diseases like cholera.

Before electricity, homes were heated with wood, coal and oil, and shut tightly to keep the cold out all throughout the winter. This made for a home that was dingy and stinky by the time warm weather came around, resulting in a truly necessary "spring cleaning." Generally this involved all the furniture and dry goods being brought outside for airing and cleaning, and a thorough scrubbing of the soot and ash accumulated in the house during the winter.

Air fresheners in the form of incense or fragrant flowers also date back to ancient civilizations. The first 'industrial' air fresheners were copied from military insecticide dispensers, and contained c. 1% perfume, c. 25% alcohol or similar solvent, and c. 75% chlorofluorocarbon (CFC, heavily regulated in 1987 by the Montreal Protocol because of its ozone layer-depleting properties). In the early '50's, companies further tinkered with their invention to "reduce" odors as well as mask them, using a variety of unsaturated esters, long-chain aldehydes, and pre-polymers. In the '90's, the 'plug-in' was introduced. This features a gel-type fragrance concentrate in a tray that releases perfume as the tray heats up via a warmer unit which is activated when the unit is plugged in.

Soap, an oil or fat-based preparation and one of the oldest tools in the personal and environmental hygiene toolbox, largely gave way to detergents when World War II resulted in a shortage of fats and oils. Detergents are non-soap washing and cleaning products created from a cornucopia of chemical sources. In 1946, industry created the first 'built' detergent, which means the product contained a surfactant (basic cleaning ingredient) and a 'builder' (ingredient which accelerates the surfactant). Phosphate compounds are traditional builders.

The Problem

Many, if not most, of these products have been put on the market with limited testing, especially for long-term or synergistic effects (the same is true for many agricultural chemicals, but to address those as well exceeds the scope of this paper). While lethal-dose animal tests may determine roughly the amount of any of these products to kill or sicken us with one exposure, there are few studies that track low-dose exposure to multiple products over the long term—which is how most people use cleaning products.

In addition to causing human illness, there are some compounds, like phosphates, that are environmentally harmful without necessarily making humans directly ill. Phosphates (see detergent section, above) are minerals that soften water; but they also act as fertilizers; when they enter a watershed, it causes a rapid algae growth, with consequent water pollution and disruption of aquatic ecosystems.

Surfactants (see detergent section, above) are largely petroleum-based. Aside from the obvious problem of continued supply, petroleum extraction itself is energy-intensive and will become more so as unconventional extraction methods, like oil shale, are exploited. Additionally, the extraction and refining of petroleum produces significant levels of pollution.

Chlorine bleach (sodium hypochlorite) is not an organochlorine, which are more toxic and persistent in the environment (commonly used in pesticides, DDT is an organochlorine compound)—however, chlorine bleach is reactive, and a lung and eye irritant. Chlorine bleach also releases small quantities of organochlorines as it breaks down, which causes cancer in animals and humans.

Women's Voices For The Earth lists these ingredients and their known risks to human health on their website:

- **Monoethanolamine (MEA)** is a surfactant found in

some laundry detergents, all-purpose cleaners and floor cleaners and is a known inducer of occupational asthma.

- **Ammonium quaternary compounds** are disinfectants found in some disinfectant sprays and toilet cleaners that have been identified as inducers of occupational asthma.

- **Glycol ethers**, such as 2-butoxyethanol, are solvents commonly found in glass cleaners and all-purpose spray cleaners that have been linked to reduced fertility and low birth weight in exposed mice.

- **Alkylphenol ethoxylates (APEs)** are surfactants found in laundry detergents, stain removers, and all-purpose cleaners, which have been found to reduce embryo survival in fish, and alter tadpole development. APEs are commonly detected as contaminants in rivers and streams – including in the Long Island Sound, and have also been found in household dust.

- **Phthalates** are carriers for fragrance in glass cleaners, deodorizers, laundry detergents and fabric softeners, which have been linked to adverse effects on male children, reduced sperm count in adult men, and increased allergic symptoms and asthma in children.

The Solution

Steve Israel (D-NY) introduced a resolution in July 2009 aimed at increased transparency in household cleaning product ingredients. Historically, companies have often claimed that their ingredients are 'trade secrets' and to disclose them would be to jeopardize their competitive advantage. The resolution, HR 3057, was drafted in conjunction with the Citizens Campaign for the Environment and the Huntington Breast Cancer Action Coalition, and is called the Household Product Labeling Act of 2009. Interestingly, he is also on the House Cancer Caucus.

continued on next page

Recycle CFLs!



Compact
Fluorescent Lights
Save \$\$ MONEY \$\$
and ELECTRICITY.

But, they also contain
a small amount of
MERCURY, so it is
illegal to put them in
the trash.



Please visit www.becnet.org for days & hours. Click on CFL logo.

From Rep. Israel's website:

"According to a recent study by the Center for the New American Dream, the institutional cleaning industry uses an estimated five billion pounds of chemicals annually in the United States. Children are at an increased risk for being affected by these products, as are women who make up a disproportionate amount of housekeepers and cleaning service staff."

Increasingly, people are turning to the cleaning meth-

ods that their grandparents used—vinegar, baking soda, Borax, castile soap, lemon juice, and sunshine—in an effort to make a safer home and a healthier environment for themselves and their children. It is a given that, like Monsanto trying to prevent dairy farmers from labeling their products 'rbgh-free,' the household cleaner manufacturers will resist the passage of this legislation; but chances are people will simply buy that box of baking soda, rather than a product that its makers won't even disclose the ingredients of.

Floating Down the River continued from page 9

ing the 1993/94 winter season, 75% of the total diazinon applied in the Sacramento River basin was during January 1994 (DPR, 1999). Most of the insecticide was applied during the first three weeks of the month, as the rainfall occurred in the last week. Butte, Glenn, Sutter and Yuba Counties accounted for 90% of the diazinon use in the Sacramento River basin" (Holmes, 2003). However, there is some positive news for Butte County: Looking at numbers from the Department of Pesticide Regulation's 2007 Annual Pesticide Use Report, the amount of diazinon used in Butte County has dropped dramatically (approximately 70%) when compared to the 2000 report.

Some of the effects of diazinon are different for fish like salmon depending on its life stage, and alevins, (young fish) were the most vulnerable to the effects of diazinon compared to either adult fish or eggs. This is the case because the eggs have a protective membrane and the adult fish are already fully formed. Some other effects of exposure to diazinon that occur in alevins include multiple deformities including lordosis, yolk sac edema and hemorrhaging (Viant, 2006). Only minute amounts of diazinon are required to have negative effects on Chinook salmon. Only 1.0 µg-L-1 is required to significantly inhibit olfactory-mediated alarm responses, and homing behavior can be impaired at 10.0 µg-L-1 (Scholz, 2000). To give a few examples of how small the amounts are required to cause serious harm, 1 ppb = 1 µg/L, or one part per billion is equal to one microgram per liter. Another way to picture 1 ppb would be to say it is one sheet in a roll of toilet paper stretching from New York to London (Satterfield, 2004).

So how pervasive is diazinon in our and other communities? And on what is diazinon actually being used? It is being heavily used on turf, alfalfa, lettuce, and almonds, citrus, cotton, and for dormant sprays in fruit and nut orchard crops. A few more uses of diazinon include foundation and landscape applications as well as urban pest control. As to how much of diazinon is used, about 900,596 pounds was applied within California in 1998 (California Department of Pesticide Regulation, 2000). As a result of the widespread use in agriculture and within residential areas, traces of diazinon have been detected in homes, offices, soils, crops, commodities, urban storm waters, and surface waters (Bailey et al., 1995; Currie et al., 1990; Tsuda et al., 1995). In a number of studies, much if not most of the pesticides and insecticides enter into the Sacramento River south of Colusa, with one study suggesting the Feather River and in turn the Jack Slough as a major source of diazinon (Holmes, 2003). The part of the Sacramento River that has the highest concentrations of diazinon recorded is the Sacramento Slough at Kamak with a peak of around 0.225 µg/L on January 31, 1994 (Holmes, 2003). The fact that diazinon is being detected in the surface waters in this state and the country as a whole is of concern since about half of the nation's drinking water comes from surface water (USGS, 1997). And surface water is also necessary for the continuation of vital aquatic ecosystems that provide important environmental and economic benefits (Goh, 2000).

The importance of the Sacramento River to California is very hard to overstate and its importance to the state will only increase as the population continues to rise. What's in this river will be especially important to those dependent on it for their different needs. Combine the importance of the river to millions of people with the unpredictability of the weather, (when will it rain, how much will it rain, and how concentrated of a time period will the rain event be) and you can see that even farmers with the best intentions would not be able to know when to spray their pesticides with the goal of causing the minimal possible runoff into the river. Even if the runoff is minimized to the lowest amount possible, it takes only the smallest amounts to disrupt wildlife. And things in small amounts usually have a habit of building up over time.

In the Central Valley, farmers are the main source of these chemicals; however, it is important to point out that there are organic farmers who do not use any pesticides, herbicides or synthetic fertilizers, and there are some farmers who do not use pesticides or herbicides but still use synthetic fertilizers and thus cannot be considered fully organic.. Farmers are not the only sources of pesticides that end up in our waterways. Pesticides are used commercially for structural pest control, public health pest control, and in plant nurseries. Any pesticide used commercially needs to be reported, however, city residents can use pesticides, herbicides and synthetic fertilizers without reporting it. The chemicals used by many urban residents include pest control products, "weed and feed" lawn products which often contain an herbicide, a synthetic fertilizer and occasionally a pesticide, and synthetic garden fertilizers.

So what can be done about what ends up in the river? For the farmers one possibility would be to use the least amount of insecticides as possible and to check the fields or orchards for pests first before using chemical pesticides. Residential gardeners and lawn tenders should take note of this suggestion as well. A second idea would be to adopt an Integrated Pest Management (IPM) Plan. Creating a buffer zone between the developed part of the field and the nearby stream or river is good way to reduce runoff and provide places for beneficial insects and predators to live. Another option would be to diversify the crops being grown, by either growing different crops side by side or by adopting a rotation cycle to protect against specific threats that would appear targeting a specific plant. The state and county governments have their part to play as well, by enforcing the no drift laws to ensure that what's sprayed in the field stays in that field, like Vegas. That way the farmers secure their livelihood and the river is safe, from at least one threat. But then there is this sucking sound coming up from southern California...

*Only minute amounts
of diazinon are required
to have negative effects
on Chinook salmon.*



SWAT UPDATE



You may not be aware that the BEC website is an entry into the SWAT webpage. SWAT: Safety Without Added Toxins is a grassroots group that formed in early 2008, made up of concerned citizens to draw attention to mosquito spraying in Butte County. We believe our neighbors have a right to know what is being sprayed around their homes, and when it is happening. And ultimately, we believe mosquito fogging is an outdated and unsafe method of mosquito control.

Pesticide Watch, a statewide environmental health organization, serves as an advisor and fiscal sponsor, and is a tax-deductible non-profit organization. We are committed to educating the public, local businesses, and organizations to support a non-toxic approach to mosquito control that ensures the safety of the community and environment. We will provide comparative research of the health and ecological effects of pesticides to the Butte County Mosquito and Vector Control District (The District), the Butte County Public Health Department, and the West Nile Virus Task Force. We strive to educate about natural predators and methods to eliminate mosquito habitat in our own yards and neighborhoods. We will inform the public about how to be included on the "notification for pesticide fogging in your neighborhood" list and utilize media to inform the public and elected officials.

SWAT Goals:

- Implementation of Comprehensive Notification about pesticide fogging
- Non-toxic mosquito control
- Local officials supportive of non-toxic mosquito control

After a dormant period since last fall, our group members will be refocusing our efforts on attending District's Board of Trustee's monthly meetings and the West Nile Virus Task Force meetings in order to stay informed of activities related to mosquito abatement. We will continue to table at upcoming events to educate and inform the public about ways to reduce mosquito populations and be proactive in ensuring our community utilizes less or non-toxic approaches to mosquito control.

Click on www.becnet.org, then on the SWAT logo to sign up for the SWAT mailing list as well as to find the current mosquito fogging maps and spray schedules for Butte County. You may also go to the District's website at www.bcmvcd.com and sign up for their email notification.

CAR USE Drops 90% IN CHICO

by Jess Kiddin

Chico has seen a dramatic drop in car use in 2012. By ending the subsidy of the private automobile and instead prioritizing public transportation and bicycle and pedestrian mobility, the number of cars on Chico's roads dropped 90% from 2009 levels.

Riding bicycles, using jitneys or other public transport, and walking have become so safe and comfortable that most people have sold their cars or are sharing them with others.

Many truck owners have started small businesses delivering groceries and other bulky items to people on a pre-arranged basis to maximize the number of deliveries they can make per trip.

The student-run business "Steady Students" is using bicycle-powered carts in their delivery service and picking up compostable kitchen waste for community gardens.

"All of those wasted spaces—parking lots and parking spaces in residential and retail areas have become housing in some areas and neighborhood grocery stores in others," reported Chico's mayor, N. Able Freedom.

The local air quality district director is exultant about the cleaner air in Chico. "We are getting the best readings on Chico's air quality since we started keeping records. We have used the yearly grant money to change over parking spaces to public gardens, plant more trees, and fund other publicly-chosen projects that improve air quality. More trees will provide canopies for cooler riding and even cleaner air. This is such a win-win situation."

"Our whole family feels great. Jake rides his scooter and Taylor takes her bike to school every day. Our kids even ride their bikes to games and music lessons," said local father Mark D. Change.

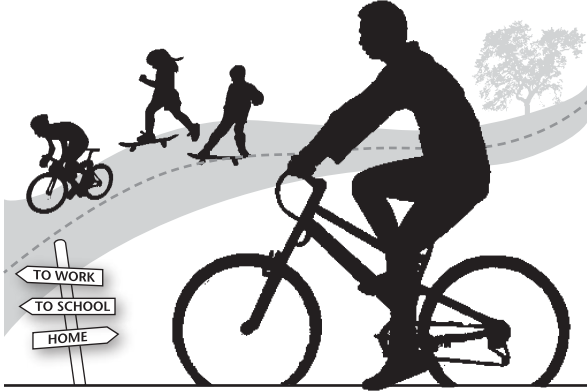
"I use my electric bicycle to ride to and from work and all over town," said a local resident. "I'm not sweaty when I get to work. Some of my friends who have physical problems are using electric-assist bicycles, some three and four-wheelers. Now that the streets have more bikes than cars, they feel they are more visible and ride every day."

My husband and I didn't really know anyone in our neighborhood until the change. The neighbors come into their front yards more often now that streets are more popular," said local mother Gloria Nature. "One of our retired neighbors is a school teacher. She helps my daughter with homework, and my daughter runs errands for her.

"When students get to school by bikes, skateboards, rollerskates, or walking, they are alert and have had time to visit with each other," said elementary school teacher, Patience Galore. "School attendance is up because asthma is down, and general health is up. You know, schools are paid based on attendance. If this trend continues, we can restore the music and arts programs."

"When I step outside my door," confided Granny Dee, "children are laughing, jumping rope, and playing games in the neighborhood. An occasional car comes into the neighborhood, but drivers are courteous so they aren't a danger to anyone. There are so many people outside now that the occasional bad driver is easily identified.

Some former parking spaces were converted to allow artists and small businesses such as bicycle repair and tutoring to set up streetside in small kiosks.



Local police chief Hyman R. Bitter reported, "We've seen a big decrease in crime. There are so many people out and about, even during the evening hours, that there are too many witnesses and the speed limits are so well-enforced that quick get-aways are impossible. Consistent enforcement of "home zone" speed limits has paid for itself. Local police walk beats and are trained in arbitration of community disputes. Many problems are now solved outside of courts."

"Decline in oil availability and steady increases in gas prices in 2010 caused initial panic, but we had already instituted a lot of changes that made the transition easier," said local activist Morey Kwa Liddy. He described some of the factors that produced this turnaround in car use.

The ACLU took on the practice of how speed limits were set at the end of 2009. Morey said, "As hard as it might be to believe now, the cities in the State of California were setting speed limits higher than 25 mph based on measuring only the speeds of cars and trucks, not the other road users. The ACLU successfully argued that literally not counting the other road users deprives a person of the basic human right of freedom of movement. The practice was found by the court to be unconstitutional because it did not give all people equal protection under the law.

One of the local subsidies for private car owners that was withdrawn is free public parking. Car parking on streets and parking lots started being charged at its real value—both in terms of land value and cost to the community and environment.

In 2011, bicyclists, pedestrians, veterans, senior advocacy organizations, parent organizations, and neighborhood groups marched on the Capitol in Sacramento with torches, pitchforks and placards.

Protesters demanded the State Transportation Department prioritize public transportation between cities and standardize improved methods of carrying bicycles on rail and bus services so that people can safely and dependably travel throughout the state without a private vehicle.

"We've never seen the like of this before," said the governor. "We fought this at first but once we realized these people were serious and seriously committed, we figured we'd try it. The new system is working especially well at the community levels and within the State. Other states and the federal government are now looking at California's progress in making this important transition away from car dependency."

This vision for Chico's future was written by Donna Cook, inspired by the article, "Car Use Drops 90%, Bikes Reign," in "Tube Times," issue 68, April 1, 2000. Thank you to sfbike.org.

Complicated problem: GLOBAL WARMING

Simple Solution:



**PULLINS
CYCLERY**

801 Main St., Chico
(530) 342-1055
pullinsusa@aol.com

See businesses below by number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CRV	\$	\$	◆	\$	◆	\$	\$		◆	\$	\$		◆	\$		◆	\$	\$	◆	\$
Glass		\$	◆	\$	◆	\$	◆			◆	\$		◆	◆		◆	◆		◆	
Metal																				
Bi-metal cans		\$	◆			◆	◆			◆			◆	◆		◆	◆		◆	
Tin cans		\$				◆	◆			◆			◆	◆		◆	◆		◆	
Aluminum foil/ pie pans			◆				\$			◆										
Scrap metals		\$		\$		\$					\$	F								
Plastics														◆						
#1 Plastic		\$	◆	◆	◆		\$		◆	◆	\$		◆	◆		◆	◆		◆	
#2 Plastic		\$	◆		◆		\$			◆	\$		◆	◆		◆	◆		◆	
#3-7 Plastic		\$	◆				◆			◆	\$		◆	◆		◆	◆			
Paper																				
Newspaper			◆		◆	◆	\$			◆			◆	◆		◆	◆		◆	
Magazines			◆				◆			◆			◆	◆			◆		◆	
Phone books			◆				◆			◆			◆	◆			◆		◆	
Cardboard			◆		◆	◆	\$			◆			◆	◆			◆		◆	◆
Mixed paper			◆				\$			◆			◆	◆			◆		◆	
Ledger paper			◆				\$			◆			◆	◆			◆		◆	
Hazardous Waste																				
Alkaline batteries			◆					◆	◆					◆						
Car batteries		\$				\$	◆	◆			\$	◆		◆						
Paint								◆						◆	◆					
Pesticides								◆						◆						
Fluorescent lights & ballasts							\$	◆						◆						
Used motor oil							\$	◆				◆		◆	◆		\$			
Anti-freeze								◆						◆	◆					
Miscellaneous																				
Appliances (no freon)		◆				F						F								
Appliances (with freon)												F		F						
Cars														F						
Yard waste							◆					◆	◆							
Ewaste								◆				◆		◆	◆		◆			

◆ Accepts recyclables listed

\$ Cash paid for recyclables listed

F Fee charged to accept recyclables listed

- 1) 20/20 Recycling Centers**
California Department of Conservation
Albertson's, 1050 Oroville Dam Blvd., Oroville
Albertson's, 146 W. East Ave., Chico
Safeway, 1596 Hwy 99, Gridley
Safeway, 1016 W. Sacramento Ave., Chico
Safeway, 690 Mangrove Ave., Chico
Safeway, 1366 East Ave., Chico
Safeway, 6020 Clark Rd., Paradise
T-F 11-5, Sa 8:30-5, closed 1:30-2
- 2) Aldred Scrap Metals/Steel Mill Recyclers**
786 Oroville-Chico Hwy, Durham, 342-4930 M-F 8-5
- 3) AS Chico Recycling Donation Center**
417 Cherry St., Chico, 898-5033
Sa 10-2:30, www.csuchico.edu/as/recycle
- 4) Berry Creek Rental & Recycle**
10 Menzie Lane, Berry Creek, 589-4828, Tu-Su 9-6

- 5) California Vocations (C.O.V.E.)**
Curbside recycling in Magalia, Paradise,
Paradise Pines, west side of Skyway to Nimshu
877-0937, M-F 8-4
- 6) Chico Scrap Metals, Chico Scrap Metal South & Nor-Cal Recyclers**
Auto bodies (call first), 878 E. 20th St., Chico,
343-7166, M-F 8-12, 1-4, Sa 8-12; 766 Oroville-Chico
Hwy., Durham, 345-6241, M-F 8-4
1855 Kusel Rd., Oroville, 532-0262
M 8-4, Tu-F 9-4, Sa 8-12
- 7) Chico Transfer & Recycling**
2569 Scott Ave., Chico, 893-0333, M-F 8-4, closed
12-1 for lunch. www.northvalleydisposal.com
- 8) Butte Co. Household Hazardous Waste**
Collection Facility /AC Industrial Services
1101 Marauder St. (at Chico Airport) 343-5488, Fri-
Sat. 9-1 Free to Butte County residents.
- 9) Country Roads Disposal**
Curbside recycling in Bangor, Berry Creek, Feather
Falls & Palermo, 589-3680, M-F 8-5
- 10) Fair St. Recycling - Work Training Center**

- 2300 Fair Street, Chico, 343-8641
M-F 9-4, Sat. 9-3:30, www.wtcinc.org/fsr.htm
- 11) Joe Verni Recycling**
4980 Lincoln Blvd., Oroville, 534-7402
M-F 9-3:30, Sa 9-1
- 12) Neal Road Landfill**
879.2350, Toll-free # 866.369.DUMP, http://www.
buttecounty.net/publicworks/divisions/solidwaste/
landfill.html
- 13) NorCal Waste Curbside Recycling** 342-4444
- 14) NorCal Waste Oroville Recycling Center & Household Hazardous Waste**
2720 S. 5th Ave., Oroville, 533-5868; Recycling Center
M-Sa 8:30-3:30; Hazardous Waste F 1-6
Free to City of Oroville residents.
- 15) Ord Ranch Transfer Station & Gridley Household Hazardous Waste Recycling**
Ord Ranch Road, Gridley, 846-0810; Transfer Station
Sa-Su 9-4; Hazardous Waste 2nd Sunday of month,
Gridley residents only 9-4
- 16) Paradise Elementary School**
588 Pearson Rd., Paradise; Drop boxes open 24 hrs.

- 17) Recycle Paradise**
951 American Way, Paradise
Holiday Mkt, 14001 Lakeridge Cir., Magalia
(CRV, newspapers only); Stratton's Mkt.
5760 Sawmill Rd., Paradise (CRV, newspapers
only) 877-2777, M-Sat 10-4
- 18) TOMRA Pacific**
Collins & Denny Mkt, 434 Plumas Ave., Oroville
Raley's Supermarket, 2325 Myers St., Oroville
(916) 381-6861, Tu-Sa 9:30-5, closed 1-1:30
- 19) Waste Management-North Valley Disposal**
Curbside recycling in Chico (893-4777), Biggs, Durham
(by Appt), & Gridley (846-0810)
www.northvalleydisposal.com
- 20) Westside Recycling & Wood Products**
2669 Hwy. 32, Chico, 892-2262, M-Sa 10-6, Su 10-4
- 21) Earthworm Soil Factory**
704 Neal Rd., 895-9676 (accepts yard waste)

ADDITIONAL RESOURCES:

www.recyclebutte.net

Tuscan Aquifer Attacked...
continued from page 4

much they take out.” It is interesting to note that the plant would be located very near (possibly right across the street from) the federally owned Tehama-Colusa Canal.

Recently in the news, Fryeburg Maine and her citizens have been sued by Nestle five times (one suit, four appeals) for “interfering with the right to grow their market share.” Nestle is also an internationally owned company. And, what might happen if CG decided to sell the plant to Nestle? Orland, do you have the financial backing to protect your rights to your water?

Considerable consequences

Crystal Geyser (CG) has operated a small bottling plant in Calistoga since 1978. Early on, water that filled this plant’s bottles came from the aquifers below the town. Purportedly those wells are now *contaminated* and water is trucked in from another undisclosed source. Napa city officials rejected CG’s bid to enlarge their bottling operations in 2007 at which time they were hoping they would be able to keep their operations closer to their Calistoga plant, but indicated they had northern CA opportunities under review. The latest news out of the Calistoga area (see the July 23 article in the Weekly Calistogan) is the potential closing of their plant and the loss of 50 jobs if the bid for the Orland plant goes through. The article indicates that some of the employees would follow the plant.

Orland city officials returned CG’s application requesting they readdress the development plan surrounding noise issues. Richard Weklych, vice president of manufacturing, noted, “there has been some history” between Crystal Geyser and Calistoga, mainly because of trucks and noise.

Late in 2008, the Otsuka America Inc. recalled about eight million bottles of Crystal Geyser brand bottled water manufactured in California. The medicine or pesticide-like scent described in customer complaints may have been the result of sitting too long in a warehouse somewhere during the summer months. Oh, what waste!

Across the country, as Nestle loses bids for bottling-plant development, CG is coming in behind them... a small, ‘community-conscious company’ who requests the same opportunities that Nestle just lost out on: egregious abuse of cheap water, tax breaks, regulatory loopholes, huge profits and – did we mention – local water for cheap.

The environmental, economic, and regulatory impacts of an Orland bottling plant are enormous.

It is critical that you send your thoughts to Nancy Sailsbery, Director of Community Services Department, at nsailsbery@cityoforland.com or send your letters to: Orland City Hall, Attn: Nancy, 815 4th St., Orland, CA 95963. Comments are being compiled until the matter goes to a public hearing which has yet to be determined. You should also forward your comments to Glenn County Supervisors John Viegas and Tracey Quarne at gboard@countyofglenn.net. Follow updates on www.becnet.org/waterbotlr.



Butte Environmental Council
116 West Second Street Suite # 3
Chico, CA 95928
(530) 891-6424
(530) 891-6426 (fax)

Become a BEC Volunteer!

We need YOUR help!

We need help – lots of help! With the Environmental Banquet, the Endangered Species Faire and the Creek Cleanups – our small staff and Board of Directors have their hands full. Any assistance is always very much appreciated.

If you can volunteer your time (no matter how much or how little) and/or have a special skill to share, please fill out the coupon below. If you have volunteered in the past but are not sure if we still have your name and current phone on file please submit an updated form.

We will keep your name on file and give you a call when our needs coincide with your offer.
THANK YOU!

Please mail or fax this form to the BEC office (see address above)

Name: _____

Address: _____

City & Zip: _____

Telephone: _____

Email: _____

Times that are usually most convenient for me to volunteer:

☐ Weekday mornings ☐ Weekday afternoons

☐ Weekday evenings ☐ Weekends

I am interested in helping with the following activities (please check all that apply)

☐ Artwork (graphic art, illustrations, etc.)

☐ Creek Cleanups

☐ Endangered Species Faire (traditionally the 1st Saturday in May)

☐ Publicity

☐ Soliciting sponsors/donations

☐ Booth Construction and set-up (Friday before the Faire)

☐ Tear down and clean-up

☐ Environmental News articles, BEC’s quarterly newspaper

☐ Fundraising

☐ Office Work

☐ Mailings

☐ Phones

☐ Research

☐ News clippings (cutting and filing)

☐ Photography (taking photo’s of BEC events and activities; nature photography)

☐ Writing letters to elected officials and regulatory agencies

☐ Environmental Health/Toxic Awareness

Other (please specify) _____

Friday-Sunday, August 28-30, - Juniper Lake Trip

Leader: Jennifer Patten. Juniper Lake is located in the southeastern corner of Lassen Volcanic National Park and is the park's largest lake. We'll be hiking, birding, swimming and enjoying the lake in kayaks and canoes. Camping is rustic with pit toilets, but no potable water. For further details and to reserve a space, contact Jennifer Patten at 530.345.9356 or jpchico@sbcglobal.net.

Sunday, September 6 - Willow Lake Bog and Terminal Geyser Lassen National Forest and Park

Meet at Chico Park & Ride (Hwy 99/32) west lot at 8:30 am. Willow Lake is in Lassen National Forest just outside the southern boundary of Lassen Volcanic National Park, and north of Chester. Terminal Geyser, in an area of active hydrothermal activity, is reached from Willow Lake by a 1.5 mile trail into Lassen National Park. Travel to Willow Lake on Hwys. 32 and 36 to Chester. From there drive 13 miles to the lake. The last five miles of road are unpaved and rough. Bring lunch, water, sun/insect protection, and money for ride sharing. Call for alternate meeting place. Leader: John Whittlesey, 530.533.2166.

Saturday, September 12 - Big Chico Creek Watershed Monitoring Event

Big Chico Creek Watershed Alliance is in their 6th season of watershed monitoring, and you can join us. Volunteers will measure in-stream conditions and other factors useful in determining the health of Big Chico Creek. No experience is necessary, and training will be provided. Meet at Five Mile Picnic Area Parking Lot (off Centennial Way). New volunteers are welcome! For more information contact thamill@bigchico-creek.org or 530.342.6620. Sponsored by Big Chico Creek Watershed Alliance.

Saturday - Sunday, September 12-13 - Wade Lake Backpack

(grade 1, class B) Enjoy this popular area after the crowds have left. We will stay at gorgeous Wade Lake where we can swim, boulder on headwall cliffs, or bird on the lake's plateau. Sunday we'll visit two more lakes ranging from cool to freezing, but spectacular for viewing. Last year we had one of our best trips here. Individual commissary. Contact leader, John, at 530.872.8258 or at hubhollister@yahoo.com.

Saturday, September 19 - Bidwell Park and Creeks of Chico Annual Cleanup

Help Butte Environmental Council clean up Bidwell Park, Little Chico Creek, Big Chico Creek, Sycamore Creek and Lindo Channel from 9:00 am to 1:30 pm (includes lots of snacks and a free lunch afterwards). Bring gloves and water and wear closed-toe shoes. For the park cleanup (suitable for children), meet at Hooker Oak Park parking lot. For the creeks cleanup, meet at the Country Day School parking lot (West 11th St x Broadway). Your help is especially needed if you have a pickup truck. For more information, contact BEC at 530.891.6424.

Saturday, September 19 - Walk for the Gold to support the Special Olympics Butte County

One Mile Recreation Area. Registration at 9 am. Pre-walk softball & coffee, tea & water. BBQ at 11 am. For more information call 530.521.7399 or 530.518.2356.

Saturday, September 26 - North Valley Start! Heart Walk Fundraiser in Lower Bidwell Park

Join co-workers, friends and family members in the non-competitive, three-mile walk to begin your commitment to heart-healthy living through walking. Sponsored by the American Heart Association. Call 530.342.4247 for more info.

Thursday, October 1 - Sacramento River Preservation Trust and Chico State's Adventure Outings River Float

A moonlight float will take place from approximately 4:00pm to 10:00pm. Location: Irvine Finch to Scotty's Landing. Please contact the Trust for pricing and other details at 530.345.1865 or liz@sacrivertrust.org.

Sunday, October 4 - Mozart Mile One Mile Recreation Area starting at 8:30 am. Walk or run with entertainment by local musicians along the way. Proceeds benefit the North State Symphony and youth music. For more information, call 530.898.5984.

Saturday, October 10 - Big Chico Creek Watershed Monitoring Event

Big Chico Creek Watershed Alliance is conducting watershed monitoring, and you can join us. Volunteers will measure in-stream conditions and other factors useful in determining the health of Big Chico Creek. No experience is necessary, and training will be provided. Meet at Five Mile Picnic Area Parking Lot (off Centennial Way). New volunteers are welcome! For more information please contact thamill@bigchicocreek.org or 530.342.6620. Sponsored by Big Chico Creek Watershed Alliance.

Saturday, October 10 - Oak Woodland Ecology and Management Workshop

taught by UC Davis oak specialist Doug McCreary. From 9 am to 5 pm starting at the CSU Chico Herbarium (129 Holt Hall) with afternoon field trips. For more information, contact the Herbarium office at 530.898.3511 or see workshop flyer to pre-register. Sponsored by Friends of the Biological Sciences Herbarium.

Saturday, October 24 - Make a Difference Day in Bidwell Park

Come make a difference in Bidwell Park! Project site 1: One Mile Recreation Area--volunteers will work on several projects: habitat restoration, removing litter and helping weed around young oak trees. Meet in the area south of the One Mile restrooms and park in the Sycamore Field parking lot. Project site 2: Upper Bidwell Park trail maintenance. From 10 am to 1 pm, wear closed-toe shoes, tools and water provided. Sponsored by the Chico Park Division. For more information, call the volunteer coordinator, Lise-Smith-Peters, at 530.896.7831. If you're under 18, please bring release form signed by parent or guardian.

Saturday, October 24 - Sacramento River Preservation Trust and Chico State's Adventure Outings River Float Sacramento River bend area float will take place on Saturday, October 24 from 9:00am to 4:00pm from Jelly's Ferry to Bend Bridge. Please contact the Trust for pricing and other details at 530.345.1865 or liz@sacrivertrust.org.

Friday, January 1, 2010 - Annual Polar Bear Swim across Lower Bidwell Park's Sycamore Pool starting at 1 pm. This is a no-host event--you just show up at the appropriate time.

Friday, January 1, 2010 - New Year's Day Upper Bidwell Park Banana Belt Hike to view early spring flowers and the last of the fall flowers. Sponsored by the California Native Plant Society Mt. Lassen Chapter. Meet at 10 am at Parking Area E. Bring lunch and water.

Friday, January 1, 2010 - New Year's Day Bidwell Park Hike Meet at the Five Mile parking lot (south side) at 1 pm. Hike will be to the Yahi Trail or to Lower Bidwell Park, depending on the group's wishes. Bring snacks and water. Rain cancels. Call Jeanne 530.899.9980 or John 530.872.8258 for more information. Sponsored by the Sierra Club Yahi Group.



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Altacal Audubon Society
PO Box 3671, Chico, CA 95927
ptj64@sbcglobal.net
www.altacal.org

American Lung Association
10 Landing Circle, Ste 1
Chico, CA 95926
530.345.5864, Fax: 530.345.6035
www.californialung.org
nvr@northvalleyregion.org

Arboretum Management Club, CSUC
Big Chico Creek Restoration
First & Normal Sts., Chico, CA 95929
530.345.4542
www.csuchico.edu/amc
mikiel@ecst.csuchico.edu

A.S. Recycling Program
BMU 002, CSU Chico, Chico 95929
Drop off center: 417 Cherry St., Chico
530.898.5033, Fax: 530.898.6782
www.aschico.com/recycle
asrecycle@csuchico.edu

A.S. Environmental Affairs Council
BMU 203, CSU Chico
Chico, CA 95929
530.898.5701 or 530.218.5820
Fax: 530.898.6014
www.csuchico.edu/eac
asenvironmental@csuchico.edu

Barber Neighborhood Association
(Southwest Chico neighborhood)
barberneighbors@yahoo.com

Barry R. Kirshner Wildlife Foundation
P.O. Box 841, Durham, CA 95938
530.345.1700
www.kirshner.org

Bidwell Park Endowment Fund
PO Box 3223, Chico, CA 95927-3223
530.345.7265
ptombarrett@sbcglobal.net

Bidwell Wildlife Rehabilitation Center
PO Box 4005, Chico, CA 95927
530.343.9004 (Wildlife Help Phone)

Big Chico Creek Watershed Alliance
PO Box 461, Chico, CA 95927
530.892.2196
www.bigchicocreek.org
coordinator@bigchicocreek.org

Butte Creek Watershed Conservancy
PO Box 1611, Chico, CA 95927
530.893.5399, Fax: 530.893.0694
www.buttecreekwatershed.org
creek@buttecreekwatershed.org

Butte Environmental Council, Inc.
116 W. 2nd St. Ste 3
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530.891.6424, Fax: 530.891.6426
www.becnet.org, staff@becnet.org

Butte Humane Society
2579 Fair St., Chico, CA 95928
530.343.7917, Fax: 530.343.3734
www.buttehumane.org
shelter@buttehumane.org

California Conservation Corps
2725 Hwy 32, Ste F Chico, CA 95973
530.894.0495, www.ccc.ca.gov

California Native Plant Society
2707 K Street, Suite 1
Sacramento, CA 95816
916.447.2677, Fax: 916.447.2727
cnps@cnps.org, www.cnps.org

California Native Plant Society
Mt Lassen Chapter
PO Box 3212, Chico, CA 95927
530.343.8240
wyethia@earthlink.net

California Oak Foundation
1212 Broadway, Ste 842
Oakland, CA 94612
510.763.0282, Fax: 510.208.4435
www.californiaoaks.org
oakstaff@californiaoaks.org

California Park Association
1750 Humboldt Rd., Chico, CA 95928
530.343.4161, Fax: 530.894.6984
www.calipark.com

California Sportfishing Protection Alliance
1316 Neilson St., Berkeley, CA 94702
510.526.4049; jbeuttler@aol.com
www.calsport.org

California Wilderness Coalition
1212 Broadway, Ste. 1700
Oakland, CA 94612
510.451.1450, Fax: 510.451.1445
www.calwild.org, info@calwild.org

Chapman-Mulberry Neighborhood Organization
C/O Supervisor Jane Dolan
District 2, Butte County
196 Memorial Way, Chico, CA 95926
530.891.2830, F: 530.879.2479
Jdolan@buttecounty.net

Cherokee Preservation Society
530.534.0400, Fax: 530.534.0400

Chico Avenues Neighborhood Association
PO Box 4510, Chico, CA 95927
www.chicoavenues.org
chicoavenues@sbcglobal.net

Chico Certified Farmer's Market
305 Wall St., Chico, CA 95928
530.893.3276, Karrottalk@aol.com
Terry Givens, Market Manager

Chico Community Environmental Gardens
151 Silver Dollar Way
Chico, CA 95928
530.680.5291, Fax: 530.899.9190
www.ccegardens.org

Chico Creek Nature Center
1968 E. 8th St.
Chico, California 95928
530.891.4671, Fax: 530.891.0837
www.chico.com/naturecenter
naturecenter@chico.com

ChicoEco
www.chicoeco.org
379 E 10th Ave, Chico
530.892.1227
nanibay@hotmail.com

Chico Food Not Bombs
Email: zrogers@sunset.net
(530) 893-5772

Chico Grange
2775 Nord Ave., Chico, CA 95926
530.895.1817
www.chicogrango.org

Chico Greenline Coalition
PO Box 3524, Chico, CA 95927
www.chicogreenline.com
info@chicogreenline.com

Chico Natural Foods Coop
818 Main St., Chico, CA 95928
530.891.1713, www.chiconatural.com

Chico Peace and Justice Center
526 Broadway, Chico, CA 95928
530.893.9078, www.chico-peace.org
chico-peace@sbcglobal.net

Chico Tree Enhancement & Education Program
PO Box 68, Forest Ranch, CA 95942
530.895.0866
roger@streaminders.org

Chico Velo Cycling Club
PO Box 2285, Chico, CA 95927
530.343.8356, Fax: 530.342.4646
800.482.2453, www.chicovelo.org
ed@chicovelo.org

Community Action Volunteers in Education (CAVE)
BMU 309, 3rd Floor, CSU Chico, Chico, CA 95929
530.898.5817, Fax: 530.898.6431
caveclerical@csuchico.edu, www.aschico.com/cave

Community Legal Information Center, CSUC
Environmental Advocates
Chico, CA 95926, clic@csuchico.edu
530.898.4354, Fax: 530.898.4911
www.csuchico.edu/clic/ea
clic@csuchico.edu

Environmental Action & Resource Center
CSU Chico, BMU 301
Chico, CA 95929
530.898.5676, Fax: 530.898.6782
www.csuchico.edu/earc
earc@csuchico.edu

Environmental Water Caucus (EWC)
319 Lenox St., Oakland, CA 94610
Land: 510.893.1330 Cell: 510.693.4979
Fax: 510.893.1331; www.ewccalifornia.org
enesmith@ewccalifornia.org

Farm Sanctuary

PO Box 1065, Orland, CA 95963
530.865.4617, Fax: 530.865.4622
www.farmsanctuary.org
info@farmsanctuary.org

Flying Mammal Rescue of California

916.838.7002
admin@flyingmammalrescue.org
www.flyingmammalrescue.org

Friends of Bidwell Park

PO Box 3036, Chico, CA 95927
530.892.1666
www.friendsofbidwellpark.org
info@friendsofbidwellpark.org

Friends of Butte Creek

PO Box 3305, Chico, CA 95927
530.879.0887
friends@buttecreek.org
www.buttecreek.org

Friends of the Biological Sciences Herbarium

CSU Chico, Chico, CA 95929
530.898.5381
ljaneway@csuchico.edu
www.csuchico.edu/biol/Herb/Friends.html

Friends of Plumas Wilderness

PO Box 225, Taylorsville, CA 95983
530.283.6649

Friends of the River

915 20th St., Sacramento, CA 95814
www.friendsoftheriver.org
info@friendsoftheriver.org
916.442.3155, Fax: 916.442.3396

GRUB (Growing Resourcefully United Bellies)

530.680.4543

Habitat for Humanity

2288 Park Ave Ste A
Chico, CA 95926
Mail: PO Box 3073, Chico CA 95927
530.343.7423, www.buttehabitat.org
tritter@buttehabitat.org

Institute for Sustainable Development

CSU Chico, Chico, CA 95929
530.898.3333, Fax: 898.3336
sustainability@csuchico.edu
http://www.csuchico.edu/sustainablefuture/

Kids & Creeks

PO Box 3271, Chico, CA 95927
530.895.1749
contact@kidsandcreeks.org
www.kidsandcreeks.org

KZFR

341 Boradway St Ste 411
Chico, CA 95927
530.895.0706, Fax: 530.895.0775
Studio: 530.895.0131
On Air: 530.895.0167
www.kzfr.org, G.M.: jill@kzfr.org

Lassen Forest Preservation Group

1540 Vilas Road
Cohasset, CA 95973
530.342.1641

Little Chico Creek Watershed Group

379 E 10th Ave, Chico, CA 95926
530.892.1227; nanibay@hotmail.com

Middle Mountain Foundation

PO Box 3359
Yuba City, CA 95992-3359
530.671.6116
www.middlemountain.org
middlemountain@yahoo.com

Mill Creek Watershed Conservancy

40652 Hwy 36 East
Mill Creek, CA 96061
Phone & Fax: 530.595.4470
milcrk1@aol.com

Neighbors for Environmental & Fiscal Responsibility (NEFR)

PO Box 4512, Chico, CA 95927-4512
530.345.6125

Northern California Regional Land Trust

167 E. Third Ave, Chico, CA 95926
530.894.7738
Fax: 530.894.7738
www.landconservation.org
ncrlt@landconservation.org

Plumas Forest Project

PO Box 903, Blairsden, CA 96103
530.836.0461
John Preschutti
always@psln.com

River Partners

580 Vallombrosa Ave
Chico, CA 95926
530.894.5401 ext 22
www.riverpartners.org
info@riverpartners.org

Sacramento River Preservation Trust

631 Flume St.
Box 5366, Chico 95927
530.345.1865
Fax: 530.899.5105
www.sacriverttrust.org
jmerz@sacriverttrust.org

Sacramento River Watershed Program

PO Box 188585
Sacramento, CA 95818
916.549.4017, www.sacrivert.org
marylee@sacrivert.org

Shady Creek Outdoor School

(formerly known as Woodleaf Outdoor School)
530.292.3436
georges@sutter.k12.ca.us
www.shadycreek.org

Sierra Club, Yahi Group

PO Box 2012, Chico, CA 95927
530.345.2696
www.motherlode.sierraclub.org/yahi/

Sierra Forest Legacy

915 20th St., Sacramento, CA 95811
916.442.3155 x207
Fax: 916.442.3396
craig@sierraforestlegacy.org

South Chico Neighborhood Association

PO Box 3582, Chico, CA 95927
guzzettidavid@yahoo.com

Southwest Chico Neighborhood Association

www.swchicoe.org
swcna@swchicoe.org

South Campus Neighborhood Council

Attn: Charlie Pruesser
1405 W 3rd St, Chico, CA 95928

Streaminders

PO Box 68, Forest Ranch, CA 95942
530.895.0866
roger@streaminders.org
www.streaminders.org

The Cause

530.895.8852
www.be-the-cause.org

The Bidwell Ranch Conservancy

Chico, CA, 530.345.7205

The Esplanade League

PO Box 4868, Chico, CA 95927
www.esplanadeleague.org
eleague@shocking.com

The Nature Conservancy, Northern Central Valley

500 Main St., Ste. B
Chico, CA 95928
530.897.6370, Fax: 530.342.0257
www.nature.org

TreeAction

530.892.1818
www.treeaction.org
fgair@sbcglobal.net

Trout Unlimited

1808 B 5th St., Berkeley, CA 94710
510.528.4164, www.tu.org

Upper Ridge Areas, Inc

PO Box 154, Magalia, CA 95954
530.873.1787
ridgebird2@comcast.net

Valley Water Protection Association

7399 Hwy. 99, Oroville, CA 95965
530.343.0916
colewaterinfo@yahoo.com

Vallombrosa Avenue Neighborhood Association

2096 Vallombrosa Ave
Chico, CA 95926

116 W. Second St., Suite 3
Chico, CA 95928
(530) 891-6424

www.becnet.org

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Residents must realize that federal, state, and local water agencies do not see northstate residents as their first priority. Water demands and lack of foresight has already decimated an entire region: Owens Valley.

An informed and involved populace is essential to prevent a repeat of Owens Valley. Please become involved!

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to help!**

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Butte Environmental Council
www.becnet.org

**Butte Sutter Area Groundwater
Users Association**
<http://buttegroundwater.org>

**California Sportfishing
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<http://www.calsport.org>

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