



Preserving Rivers and Land for Life

# THE CURRENT

Informational Newsletter for Summer 2017 (June-August)

Over 24,800 acres protected since 1989

## American River Conservancy

### Forest to Faucet:

### An Algorithm for Preserving Clean Water, Air, and Food, Recreational Landscapes, and Family Health.

By Alan Ehrgott

OK, I admit it. This title is a mouthful . . . but stick with me here and it will all come together. First, I want to remind ourselves what an algorithm is. An algorithm is a methodical set of steps that can be used to make calculations, resolve problems, and reach decisions. Algorithms can be used to solve simple problems like making a cup of coffee, or in this case, a large, complex land use problem that affects millions of residents.

Let's take a familiar place — eastern Sacramento County, Placer, and El Dorado counties. We want to assure our community has clean water to drink, clean air to breathe, clean food to eat, a healthy ecology with wild spaces, and plenty of outdoor recreational opportunities to keep our stress down and personal health levels up. How do we build our algorithm?

Let's start with clean water. In this we are geographically lucky. We have lots of 9,000-foot mountains in the Sierra Nevada just up-slope of our homes: Pyramid Peak (9,984'), Mount Tallac (9,738'), and Ralston Peak (9,239'), just to name a few. And as I write this article on April 21st these peaks are covered with about 20 feet of snow. As snow on the western slopes melt, water is conveyed into one of three forks of the American River. On the Middle Fork, water is stored in French Meadows and Hell Hole Reservoirs for the year-round needs of Placer County. On the South Fork, water is stored in fourteen separate reservoirs, Union Valley, Loon Lake and Ice House being the largest, that provide the year-round water needs of

El Dorado County. All three forks of the American River and all sixteen reservoirs empty into Folsom Lake which provides high-quality, year-round water to Sacramento County. Given the high elevation and the large tracts of protected National lands in El Dorado and Placer County (35% of land base), our water quality is excellent—so good, in fact, that many beverage companies and other businesses locate here simply because of the water quality.

But threats to this water quality are increasing.

As our rural populations grow, non-point sources of pollution increasingly bring oil, gasoline, herbicides, pesticides and other chemicals into our local streams and rivers. The ARC conducts water quality monitoring and a dozen river clean-ups each year. On more than one occasion I have picked up full plastic jugs of herbicide (Round-Up) that have washed down from the flooding of backyards upstream. Transportation

departments spray too much of this carcinogen on roadways in the spring with resulting runoff into streams and rivers. ARC Staff have also found mounds of raw construction materials (such as lime for plaster work) exposed to rain that has washed into tributary streams. The lime drove the pH of one stream up from 7 to 12 which killed thousands of trout downstream. Our algorithm requires regulatory agencies and scrappy non-profits to monitor and patrol our collective watershed to keep pollutants from entering our domestic water supply.

Continued on page 3...



### IN THIS ISSUE

Feature Article	1 & 3
Conservation Update	2
Movie Review & Wish List	4
What's up at Wakamatsu	5
Education Update	6
Programs Calendar	7
Hikes and Events	8-9
Groundwater Article	10-11
Volunteer Opportunities	12
Chili Bar Article	13
1st Quarter Volunteers & Eddies	14
Thank you supporters	15
Become a Supporter	16

## American River Conservancy

PO Box 562  
348 Hwy 49

Coloma, CA 95613  
(530) 621-1224

Fax: (530) 621-4818

Email: [arc@ARConservancy.org](mailto:arc@ARConservancy.org)

Website: [ARConservancy.org](http://ARConservancy.org)

### ARC BOARD OF DIRECTORS

Scott Vail—*President*

Cathy Ciofalo — *Treasurer*

Greg Widroe Kyle Pogue Steve Clark  
Fred Bernstein Carla Soracco Kay Osborn  
Clint Collins Greg Carlson

### STAFF

Alan Ehergott

*Executive Director*

Elena DeLacy

*Stewardship Director*

Autumn Gronborg

*Forest Restoration Coordinator*

Julie Andert

*Public Outreach & Office Manager*

Melissa Lobach

*Campaign and Communications Manager*

Brittany Wilkerson

*Camp Manager & Nature Center Docent*

Marie Imler

*Bookkeeper*

Kelly Croffoot

*Chili Bar Manager*

Chrissy Mahoney

*Folsom Lake College Intern*

Marianne Lehnert

*AmeriCorps Stewardship & Outreach Coordinator*

Ryan Delaney

*AmeriCorps Education & Outreach Coordinator*

## Land Conservation Update

### American River Headwaters

During the summer of 2016, ARC staff and volunteers completed the restoration of 3,323 acres of wilderness-eligible landscape at the Headwaters of the Middle Fork American River on the northwest side of the Granite Chief Wilderness. Recently, Chief Tidwell of the National Forest in Washington D.C. signed a decision memo directing Forest Service staff to complete their due diligence and accept the donation of these acres from ARC for wilderness addition. As soon as the snow melts and this acreage is accessible, a Phase #1 Environmental Assessment will be completed to clear this landscape from hazmat issues. ARC expects the donation and transfer of this acreage into wilderness will occur in September or October of 2017.

This coming summer, 2017 ARC will initiate a Phase #2 restoration of another 3,400 acres and in 2018, a Phase #3 restoration of the final 3,400 acres. To date, ARC has secured \$3.163 million in competitive grant funding for the purpose of completing the next two years of restoration work. Grant funding has come from the California Department of Fish and Wildlife (\$1.8 million); Sierra Nevada Conservancy (\$500,000); the National Forest Service (\$425,000), The Nature Conservancy (\$100,000) and from ARC's own private donors and supporters (\$338,000).

### New Salmon Falls Parking Lot and Trailhead

ARC has completed the parking lot and trailhead. Before this facility can open, the BLM will need to construct a one-mile trail from the trailhead to the South Fork Trail on top of the ridge to the southeast. The BLM is expecting to begin construction of this trail in June, 2017. ARC will open the new parking lot and trailhead as soon as this short section of trail is completed. Thank you for your patience.

### El Dorado Ranch on the Main Fork of the Cosumnes River

ARC is working on a series of competitive grants that we believe will raise sufficient funding to advance the acquisition of the El Dorado Ranch on the Main Fork of the Cosumnes River. This 7,500-

acre ranch is composed almost entirely of mature blue oak woodland, springs, and tributary streams to the Main Fork Cosumnes River. The El Dorado Ranch will be a key component in the Main Fork Cosumnes River Trail much as the Cronan Ranch has been to the South Fork American River trail system. The completed acquisition of lands and the construction of the trail may take years to complete but we are committed to seeing that this, the first public trail in the upper Cosumnes River watershed, is completed in the foreseeable future.

For the past 28 years, ARC has been successful in acquiring and protecting high value riverfront habitat, trails, and scenic vistas within the upper American and Cosumnes River watersheds. ARC has completed over 100 acquisition and restoration projects protecting and enhancing 25,000 acres of riverfront and upland habitat and scenic trail corridors. For these reasons alone, please consider supporting ARC in 2017.

...continued from page 1

In its collective wisdom the residents of California have also approved a number of water bond measures which have provided competitive grants to acquire key riverfront lands that keep residential development from impacting water quality. ARC has applied for and received nearly \$100 million in grants to acquire key landscapes within our local watersheds. These water bonds have been shown to be an efficient and effective means of protecting our rivers and the water that flows through our faucets. Many municipalities (New York City as one example) have used tax funding to actually purchase and protect their entire watershed to keep ill-placed and ill-designed development from polluting their water supplies. A continuation of these water bonds benefits all Californians and should be part of our continuing algorithm.

Another challenge is climate change with trends toward warmer temperatures, less snow, and bigger forest fires. Wildland fires expose delicate forest soils that, without the protective canopies above, can erode quickly. Eroded slopes can fill reservoirs quickly and cause a loss of storage, costly dredging, and a decrease in water quality. ARC is working with the Tahoe National Forest, Placer County, the Placer County Water Agency, and other conservation groups to selectively thin forests where thick young stands of conifers exceed 500 trees per acre. The project will also decommission and restore old logging roads and enhance meadows which naturally store rain and snow melt for gradual release throughout the summer. Again, our algorithm requires that resource and water agencies assist in funding healthy forest initiatives that protect and keep our watersheds healthy and fire resilient in order to maintain water quality.

In addition to water, our watershed also provides clean air through the natural uptake of carbon-based greenhouse gases by oak woodland and coniferous forests and the relatively clean electrical energy produced by the ten hydroelectric installations attached to our water storage facilities. In our algorithm, residents continue to install solar panels on rooftops and in backyards. These solar panels power an increasingly large number of electric cars that in turn reduce greenhouse gases and the impacts climate change has on snowpack and watershed production. As solar energy production and energy conservation increasingly meet the greater needs of our population, smaller hydroelectric dams can be eliminated to increase river connectivity and the quality of riparian habitat.

Clean food is also a byproduct of ARC's clean watershed algorithm. At the headwaters of Granite and Shingle Creeks, ARC purchased the 272-acre Wakamatsu Farm and has welcomed two young families who are developing organic vegetable and livestock farming enterprises. With time the Wakamatsu Farm is intended to be an educational facility and social gathering place and event facility that encourages community-supported, ecologically-friendly farming practices, water conservation and watershed protection. Our algorithm prefers that farms function close to population centers to reduce transportation costs and greenhouse emissions.

Physical and mental health is also a benefit of ARC's watershed protection algorithm. Over the past 28 years, ARC has nearly acquired 25,000 acres of wildlife habitat and recreational lands fronting the American and Cosumnes Rivers. ARC has completed the South Fork American River Trail system, another at the headwaters of the Middle Fork American River, and is very close to securing a trail corridor on the Main Stem Cosumnes River. Communities with public-access trail systems are desirable. Recreational trails help sustain residential values. Communities that have invested in multiple-use, public-access trails have shown significant gains in keeping expensive health care and drug addiction in check. Boating on our local rivers, hiking, running, biking, and horseback riding on our public wild land trails is a prudent investment in physical and mental health.

By any measure, the watershed protection algorithm as described above has actually been implemented by ARC over the past 28 years. If anything, the success has been cumulative and grows each additional year ARC is supported by our larger, conservation community. As one who has been fortunate enough to be along for the ride and witness these proactive actions over the past 28 years I cannot thank you enough for your support and for your insight in protecting those basic elements, the clean water, clean air, clean food, and health that make our lives worth living.



Thank you ARC Supporters!

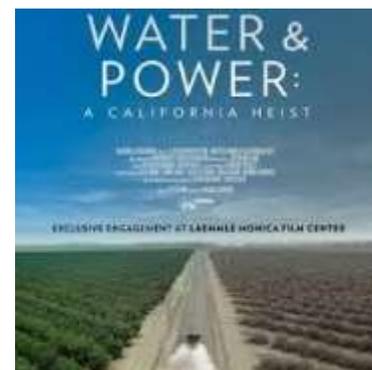
## Water and Power: A California Heist

Movie review by Ryan Delaney

Film director Marina Zenovich has always been attracted to stories of greed and corruption, so for her latest film, she wanted to expose the real story behind California's water crisis. She explains, "I decided to make this film because I thought it was 'Chinatown: The Documentary,'". In this year's film titled, *Water & Power: A California Heist*, Zenovich's film follows the rabbit hole into scandal and intrigue that indeed feels like you are watching a real-life version of 1974's *Chinatown* unfold.

The history of California's water manipulations is complex and a big undertaking in this 80 minute film. However, Zenovich meets the challenge by weaving together the stories of award-winning journalists, local citizens, activists, state officials, environmental attorneys, farmers, investors, scientists, and developers. Through these stories, we begin to uncover the truth behind California and water. The film also takes us through major water restructuring in the 1960's and the recent wave of privatization that has crippled small operations farmers and left communities with little or no water.

Just as many viewers will likely be exposed to a new side of this issue, so too was the director. Zenovich reflects on her journey making the film, explaining, "I'm originally from Central California. I know the issues with water, but I didn't know them deeply. And what I discovered is a lot's going on that we don't know about. So with the film, I hope it's just a call to arms for everyday citizens to see what is happening with our water and how it's being privatized without us knowing it." Zenovich's film is an important look into the nefarious world of water rights in California. If you are looking to deepen your understanding of the politics behind water, then go see this documentary.



### Interns Are Key to ARC's Success

Chrissy Mahoney has been an intern with ARC since March. She grew up in nature, loving it, and wanting to help preserve it. She loves writing, rock climbing, and being outside. She attends Folsom Lake College and plans to transfer to a four-year university to pursue a degree in Environmental Science.

She has been a great help in the Giving Garden at Wakamatsu, and the lizards love her, just look at the photo!

Do you know a college-age student who would like to intern at summer camp? Contact [ryan@ARConservancy.org](mailto:ryan@ARConservancy.org)

## ARC Wish List

### Office/Nature Center

- 12-passenger van
- Small household toolkit with the basics
- Vintage indoor and outdoor light fixtures
- Videographer and Animator intern
- Sturdy vintage dishes
- Photos of properties
- Rolling duffle bag/suitcase
- Two laptop computers
- Button-making machine
- Computer speakers
- Golf Cart

### Stewardship

- Snack bars
- Grocery gift cards
- Potting soil
- Generator
- Cedar or redwood 2x4s/planks
- Garden tools – shovels, rakes, hoes, small spades, pitchforks
- Seedling trays
- Michael's gift card
- Sleeping Cots

\* Established in 1869  
 \* Birthplace of 1st Japanese-American

## What's up at Wakamatsu?

\* Site of 1st Japanese Colony in USA  
 \* Gravesite of Okei-san, 1st Japanese Woman Settler

### Plan Ahead for Open Farm Days

by Melissa Lobach

Have you been wanting to tour the farm at your leisure and visit your favorite spots at your own pace? So many have been asking for open access at Wakamatsu, so ARC is offering select dates this Spring and Fall when you can hang out at the Farm. Once a month on the first Saturdays, you can stroll from Okei-san's gravesite to the Graner House without a guide. You can slowly or briskly walk or run around the 1.5-mile lake trail loop. In fact, it's a wheelchair accessible trail, so you can push along a friend. Bring your own supplies for a picnic. Or just bring a chair and a book to read or write. Observe the gorgeous landscape. Listen to the sounds of life. Watch nature do its thing. Count the birds, bees, and butterflies. Reconnect. Just breathe. Plan to relax at Wakamatsu Farm for a change.

If you want the company of other people, you'll find some very friendly docents and naturalists hanging around during Open Farm Days. They can tell you what they know about the place, people, plants, and creatures from the past, present, and future of Wakamatsu. In fact, any one of them might just talk your ear off, so it's probably best to plan for that, too.

Last year, during the Placerville Gold Panning Championship, Wakamatsu was open to the public for three days. Over 200 people visited Wakamatsu Farm on those dates, including international visitors and even a few members of the Japanese gold panning team. Like so many visitors, many of them had no idea about the fascinating history and delightful experience they enjoyed at Wakamatsu. Those dates gave the ARC the confidence and experience needed to host regular Open Farm Days during Spring and Fall on the first Saturdays of our most temperate months.

This year, Open Farm Days will be held on May 6th, June 3rd, July 1st, September 2nd, October 7th, and November 4th. If you forget the dates, find them on the ARC's website calendar. The hours are from 10:00am to 2:00pm. Drop by anytime during those times and dates only, no reservation required. For a mere \$10 per carload, your visit directly benefits Wakamatsu Farm. Buses and large vans will run you about \$5 per person. Keep in mind the amenities at Wakamatsu are still quite limited while we are building the infrastructure needed to make future visitors more comfortable. If you know where to look, you'll find a couple of restrooms, a few park benches, and a few picnic tables. We're still "roughing it" at Wakamatsu, so it's best to bring your own gear and pack it out with you, including your trash and recycling. Please plan to manage your own level of comfort.

If you make it out to Open Farm Day just one time this year, aim for June 6th. On that Open Farm Day, ARC is hosting our first Wakamatsu Kite Festival to observe the Wakamatsu colony's 148th anniversary. All the proceeds will help us service our historic Keyaki tree, the only living reminder of the colonists. We'll offer kite making, a couple of booths, food trucks, beer, and fun. If there's wind, we'll see kites over Wakamatsu! If there's no wind on June 3rd, you are welcome back to Open Farm Day when you can try to fly again.

Please share these dates with all your friends. And please help ARC spread the word that Wakamatsu Farm is not a public park, meaning it's not open for public access when you see the open gates. Wakamatsu is a working Farm, so for obvious liability and safety reasons, it's not appropriate for folks to show up anytime to check out Wakamatsu Farm, which is private property. Encourage everyone to plan their Wakamatsu visit during Open Farm Days. We hope to see you and your friends on these special days.

Contact Melissa at [wakamatsu@ARConservancy.org](mailto:wakamatsu@ARConservancy.org) or 530-621-1224 with any questions or to reserve a private tour.

#### A Hike around the Lake

Walking along the path  
 On a sunny winter's day  
 Hearing sounds from all directions  
 A raven cawing along the way  
 Calling out to the world.  
 It is such a special place  
 I'm sure he was telling me  
 To be thankful and full of grace.  
 A gentle breeze and bird calls.  
 Green trees and grass all about.  
 A wondrous way to connect  
 And release all fears and doubts.  
 Geese flying above in a V  
 Deer hoof prints all around.  
 Squirrels and little creatures  
 Can always be found.  
 If we just are here and now,  
 Open up and get out of our boxes  
 We might even possibly see  
 A coyote or perhaps red foxes.

Gail Crawford

## Education Update

It has been a very busy and exciting few months for our education programs at the American River Conservancy! We had another successful turnout for our annual eco-competition called Nature Bowl. Every year, students gather into teams to compete in this science-based educational program. American River Conservancy is one of several semi-finals sites where students get to show off their ecological knowledge.

As the end of the school year comes to a close, we begin to wrap up our science education program at Wakamatsu Tea and Silk Colony Farm. Students of all ages visited our farm, where they learned about science subjects such as adaptations, pollination, water and much more! These programs couldn't have happened without the

support and effort of all of our lovely volunteers! We would like to extend a very warm thank you to everyone who gave their time to teach future generations the value of nature.



2nd Graders learning about pollination at the farm



First Graders learning about habitats at the Nature Center

about the natural world. Visit our website to register your camper, and contact [ryan@ARConservancy.org](mailto:ryan@ARConservancy.org) or (530) 621-1224 for more information. Early registration is encouraged. Some scholarships available.

Looking towards the future, we are preparing for our next big event in education. With summer just around the corner, it is not too early to start thinking about signing your children up for Nature Camp 2017. With sessions available for ages 4-11, campers will

explore and learn more



6th graders learning about different animal adaptations up at the farm.

### Wakamatsu Open Farm Days

Visit the Farm at your leisure.

1st Saturdays of Spring & Fall, 10:00 am to 2:00 pm

Don't miss Wakamatsu's 148th Anniversary Observance on June 3rd, 2017, Open Farm Day, including a Kite Festival!

Kites - Food - Beer - Fun

See ARC's website for schedule of Open Farm Days and Public Tours.

[ARCconservancy.org/events](http://ARCconservancy.org/events) or call 530-621-1224 for private tours

Open Farm Day Prices: \$10/car (additional for passenger vans & buses)



Photo by Betty Sederquist



# PROGRAMS PLUS

## NATURE WALKS

### WAKAMATSU HISTORICAL PUBLIC TOUR

*Sunday, June 18<sup>th</sup> 10am-12pm (Father's Day)*

The site of the first Japanese colony in America in 1869, the Wakamatsu Tea and Silk Farm Colony is on the National Register of Historic Places and a California registered historical landmark. This 272-acre property features Okei-san's historic gravesite, an 1850's farmhouse, and a turn-of-the-century barn. Rich in cultural and natural resources, the rolling landscape boasts productive farming soils, wildlife habitat, oak woodlands, ponds, and a wheelchair-accessible trail. Mature children 10+ are welcome on tours. **Cost: \$5/Children 10-17 years old, \$10/Adults.**

### HISTORIC FLUME TRAIL HIKE

*Saturday, July 8<sup>th</sup> 8:30 – 11:30am*

Acquired by the American River Conservancy and the BLM in 1991, this trail, also called the Red Shack & the Old Ditch Trail, passes by the faint remains of a ditch and flume that brought water from Chili Bar down to local ranchers. ARC volunteer and local history teacher Keith Atwater will lead this hike down to the river; this area may someday be a botanical preserve due to its native flowers and plants. Optional: stop at the nearby Hooverville orchard for some fresh fruit! This is a three-mile round-trip hike with a somewhat steep walk back up. Fit 10-year-olds+ welcome. Rain or shine. Please call to sign up and for meeting location (Placerville). Suggested Donation: **\$5/members, \$10/non-members.**

### CRONAN RANCH HIKE

*July 9<sup>th</sup> & 15<sup>th</sup> 8:30 – 11:30am*

Hike a longer loop of the Cronan Ranch trails with ARC hike leader Amy Brinkley. Come enjoy a variety of terrain, great views of the river, and the rolling prairie on this challenging 5-7 mile hike. This is a moderate level hike, with some challenging elevation change. Fit 10-year-olds+ welcome. (Amy is a Community college librarian, outdoors enthusiast, food and animal lover.) Contact ARC to sign up and for meeting location (Pilot Hill area). **Suggested donation: \$5/members, \$10/non-members.**

### LOVER'S LEAP HIKE

*Sunday, July 16<sup>th</sup> 8am to mid-afternoon*

ARC volunteers and hike enthusiasts Donna Orth and Evan Jones will lead this 6-mile hike in the El Dorado National Forest. Lover's Leap is best known as one of the premier granite rock climbing spots in California. It is also famous for its position along the old Pony Express Route and we'll be hiking directly on the original route. This is an intermediate hike with some elevation change and strong winds likely at the top. Fit 10 year-olds+ encouraged to attend. Please call to sign up, and for meeting location (Pollock Pines). Suggested donation: **\$5/members \$10/non-members.**

### CAPLES LAKE TO EMIGRANT LAKE HIKE

*Saturday, August 19<sup>th</sup> 8:30am-5pm*

ARC volunteer Donna Orth will lead this hearty hike in the high Sierra. This is an awesome out-and-back hike for the weekend warrior. The trail begins at the western-most point of Caples Lake, and takes you to Emigrant Lake. Beautiful views and trails. Responsible teens+ welcome. Participants must be able to hike for 8-9 miles in 4 hours. Rain postpones. Please call to sign up and for meeting location (Pollock Pines). 1.5 hour drive from Placerville. Suggested Donation: **\$5/members, \$10/non-members.** Drivers may be needed. Indicate interested in driving when signing up.

### GRANITE CHIEF OVERNIGHT BACKPACK TRIP

*Saturday & Sunday, August 19-20, 8am – 5pm*

ARC volunteer Tom Dodson will lead this exploration of the Granite Chief Wilderness Area from the Grayhorse Valley Trailhead. This is an overnight trip, so bring your own backpack with supplies and food. Hike difficulty, intermediate with 800ft. elevation gains at the beginning and end of the hike, a total of 16 miles round trip. Age minimum: 12 years-old with backpacking experience. **This is not a beginner's hike. Cost: \$40/members, \$55/non-members**



## MISCELLANY

### WAKAMATSU OPEN FARM DAY & KITE FESTIVAL

*Saturday, June 3<sup>rd</sup> 10am–3pm*

This celebration honors the 148<sup>th</sup> anniversary of the first Japanese colony in America who arrived at Gold Hill on June 8, 1869. ARC honors these early pioneers during our regular Open Farm Day. ARC's kite festival includes food and beer for purchase, a raffle, some booths and entertainment. Bring your own single-lined kite or make a kite to fly. Picnics are welcome, and bring a chair. Amenities at Wakamatsu Farm are limited. **Cost: \$10 per vehicle.** (Additional cost for passenger vans and buses). 941 Cold Springs Rd., Placerville. Also Note: Open Farm Day repeats on **July 1** (with no festival) when you can tour Wakamatsu Farm at your leisure. **10am–2pm**

### FISHING ON THE FARM

*1<sup>st</sup> Wednesday of each month, (June-August) 6pm – Dark*

ARC is partnering with the El Dorado Chapter of *Trout Unlimited* for a monthly fishing night at the Wakamatsu Colony Farm in Gold Hill. Try your hand at casting techniques, catch a few bass, and enjoy the serenity of the 8-acre lake at the historic farm. Participants **MUST** have a valid CA fishing license. Adults only, please. Rain or shine (lightning storm cancels). Please call to sign up and for meeting location (Gold Hill/Placerville area). **Cost: \$10/members, \$15/non-members.**

## LECTURES & WORKSHOPS

### THE INSIDE DIRT ABOUT SOILS

*Saturday, June 17<sup>th</sup> 9am-12pm*

Ecologist Ray Griffiths will briefly describe El Dorado County soils, their origin and uses. Formation factors, colors, depth and textures will be discussed. Ray is a 38-year resident of Georgetown, former college instructor, avid gardener, and native plant enthusiast. Mostly a presentation, but this is an easy pace on uneven terrain when walking. Responsible teen+ welcome. Please call to sign up, and for meeting location (Gold Hill/Placerville area). Suggested donation: **\$5/members \$10/non-members.**

### CAPTURING WAKAMATSU: A POETRY WORKSHOP

*Sunday, July 9<sup>th</sup> 10am-12pm*

Taylor Graham, El Dorado County Poet Laureate, and award-winning Sacramento-area poet Katy Brown, will lead an exploration of farmhouse, barn and surroundings, then ask participants to write a poem inspired by what they've experienced. Any who wish may share their poems with the group and ARC. Children 8+ welcome with adult supervision. Please call to sign up, and for carpool meeting location (Placerville). Suggested Donation: **\$5/members, \$10/non-members.**



### HEALING THE HEART

*July 30<sup>th</sup> 12:30-2:30pm*

Herbalist Candis Cantin will teach this experiential class on this ancient system of healing. As we all know, our heart is an extremely vital organ and heart disease is a major health problem with serious consequences, but heart conditions can go beyond clogged arteries and cholesterol readings. In the ancient systems of healing, such as Chinese, Ayurvedic, and the Greek system, the concept of "heart" references the physical heart and the entire arterial system, but also encompasses a broad physiological as well as psychological function as well. Nightmares, anxiety, sorrow, feeling mentally dispersed, or even excessive excitement might be determined to be a heart disorder. We will be exploring many herbs to help our circulation, heart and emotions. Herbal honey and other herbal preparations will be explained and experienced. Contact ARC to sign up and for meeting location (Coloma area). **Suggested donation: \$5/members, \$10/non-members.**

**See our website for full descriptions  
and to sign up – [ARConservancy.org/events](http://ARConservancy.org/events)  
Or contact [julie@ARConservancy.org](mailto:julie@ARConservancy.org)  
530-621-1224**

## Cosumnes River Provides Model for Floodplain Restoration in California

Research in the Cosumnes River watershed in the eastern Sacramento-San Joaquin Delta region has shown the benefits to water storage and wildlife from floodplain restoration that could prove useful across the state.

### Preface:

This article is reprinted with permission from its author, Michelaina Johnson. Michelaina is a senior at UC Berkeley, the co-director of the Berkeley Water Group IdeaLab, and a Haas Scholar (2016-17). The American River Conservancy is an active member of the Cosumnes Coalition, and is helping facilitate the surface water quality monitoring program in the Cosumnes River watershed that is now in its third year. Surface water (i.e., the water in rivers, streams, lakes and ponds) is inextricably linked to groundwater, and the actions that we take in the upper watershed certainly have an impact on conditions in the lower watershed.

—Elena DeLacy,  
Stewardship Director

With California's surface drought over, the state can prioritize investing in groundwater recharge and floodplain restoration to help fight one of its biggest lingering problems: groundwater overdraft. As it does so, the relatively unknown Cosumnes River watershed has emerged as a model.

Roughly half of the groundwater basins in California's Central Valley are critically overdrafted, including the San Joaquin Valley basin to the south of the Cosumnes. Though groundwater levels in the Cosumnes basin have also appreciably declined since the 1950s, cutting edge research at the Cosumnes River Preserve, a 50,000-plus acre public-private partnership in the eastern Sacramento-San Joaquin

Delta, has shown that floodplain restoration can substantially recharge groundwater as well as provide habitat and improve fish migration.

Preliminary results from an ongoing University of California Water study on the Cosumnes River suggests that breaching levees to allow small- and medium-sized floods to inundate agricultural fields could triple the recharge provided by irrigation. This is welcome news as California figures out

how to make the state's surface and groundwater systems more sustainable and have more multi-beneficial uses for humans and wildlife.

Facing diminishing groundwater levels, the state passed the Sustainable Groundwater Management Act (SGMA) in 2014 to work toward long-term groundwater sustainability.

That same year, voters approved the

Water Quality, Supply and Infrastructure Improvement Act (also called Proposition 1) to provide \$7.5 billion for water-related infrastructure projects. Groundwater supplies roughly 30 percent of water deliveries in the state, and that amount skyrockets in droughts, such as the recent record-breaking one.

California's dependence on groundwater for agricultural and municipal use has caused an immense statewide overdraft averaging over 1 million acre-feet per year. This is partly due to the vast majority of Central Valley rivers being dammed and leveed, which shrinks the river's floodplain and consequently reduces groundwater recharge.

"Think of the river as a really slowly beating heart," explained Michael Eaton, former project director for the Nature Conservancy at the Cosumnes River Preserve who still lives along the Cosumnes. "When it flowed high, it would have pushed water into the aquifer. When the river receded, it would have drawn from the aquifer [and] it would have kept the river alive and wet, if not flowing."



Flooding in the lower Cosumnes River watershed in January 2017. Research has shown that floodplain restoration on the Cosumnes can help recharge groundwater and boost fish habitat. Photo by Michael R. Eaton

...continued from page 10.

The uniqueness of the Cosumnes River compared to the other rivers in the Central Valley has made it the reference system for researchers studying floodplains and groundwater recharge. Because the Cosumnes is the only nearly dam-free river draining the western slope of the Sierra Nevada and its flow is produced predominantly by rain rather than snow, the Cosumnes retains a relatively natural flood regime, including near annual flooding of its lower watershed.

Beginning in the late 1990s, U.C. Davis researchers became interested in the river after the largest flood in the Cosumnes' recorded history completely inundated the lower watershed. Two decades of research in the lower watershed has revolutionized river restoration in California. Perhaps the most well-known study on the Cosumnes, published in 2008, demonstrated that juvenile Chinook salmon reared in floodplains have higher survival and growth rates than those confined to a river channel, which is critical considering state law has stringent rules to protect this fish. The floodplain restoration at the Cosumnes River Preserve resulting from levee breaching also revealed that native habitat, such as oak riparian forest, will return to a landscape if natural processes are restored.

These findings provide proof for the multiple benefits of floodplain restoration. Joshua Viers, professor and watershed scientist at U.C. Merced, highlighted that floodplain restoration is a "fairly low-cost means through which to achieve [the] multiple benefits" desired by Proposition 1, which funds conjunctive use projects.

He also noted that "floodplain restoration is going to have to happen in conjunction with a lot of other things because the groundwater deficit is so large." Other strategies include off-season flooding of agricultural fields and mandatory dam releases to generate sufficient flow for fish migration and groundwater recharge.

At the Cosumnes River Preserve, thousands of acres of crop fields are flooded during winter to create migrating waterfowl habitat and to recharge groundwater, displaying the multiple benefits of off-season agricultural field inundation. The studies looking at how the Cosumnes River behaves as a naturally flowing river have informed how dam operators should manage water releases to mimic natural flow regimes for fish.

Despite the path-breaking research and restoration occurring in the lower Cosumnes River watershed, more than half a century of extensive groundwater pumping from agriculture and nearby urban growth has disconnected the river from its aquifer and generally caused the river to lose its baseflow during summer into mid-fall. The Cosumnes

Coalition, a partnership advocacy group for the Cosumnes, plans to utilize SGMA to address groundwater extraction and promote new multi-benefit projects that will augment recharge and return base flows to the river.

Eaton, who is also an adviser for the Cosumnes Coalition, describes the Cosumnes' influence on the SGMA as synergistic – lessons learned from the Cosumnes helped to shape the SGMA which, in turn, will shape multi-benefit projects on the Cosumnes and elsewhere.

"Modern groundwater science suggests that we've only begun to tap the potential of the Cosumnes for highly cost-effective groundwater recharge," said Eaton. And future research on the topic will undoubtedly reveal promising new techniques for enhancing water reliability and storage in California.



Michelaina Johnson

## Interested in volunteering?

Go to [ARConservancy.org/get-involved](http://ARConservancy.org/get-involved).  
Use the "volunteer form" button to sign up for  
your specific volunteer interests.

# VOLUNTEER OPPORTUNITIES

Mother Nature has done her part in washing down natural and unnatural debris from the shores of the South Fork American River; now it's our turn to remove the trash! Raft some exciting Class III rapids and volunteer for one (or all!) of this year's River Cleanups. Due to the nature of the South Fork American River cleanups, we ask that only volunteers with previous boating experience participate. Please contact [Marianne@ARConservancy.org](mailto:Marianne@ARConservancy.org) or (530) 621-1224

- July 11 – Upper South Fork (Chili Bar Run)
- August 24 – Lower South Fork (The Gorge)
- August 30 – Low Water Wednesday (Coloma to Greenwood)



AIM group helping in the Giving Garden



### Save the Date for the Great Sierra River Clean Up:

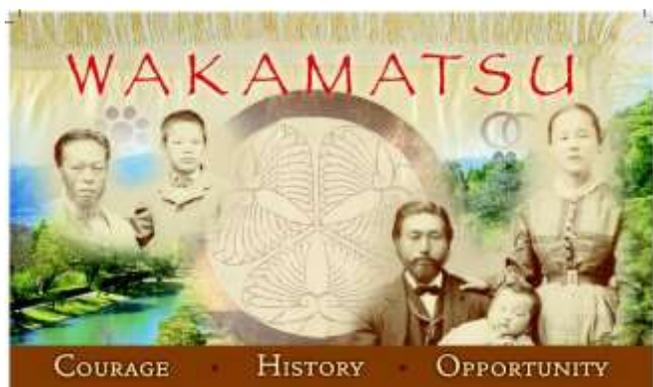
Saturday, September 16th, 2017

Join us for this family-friendly Volunteer Event to clean up our local waterways! Cleanup sites are located throughout El Dorado County. More information coming soon. For answers, contact [Marianne@arconservancy.org](mailto:Marianne@arconservancy.org).

### The Giving Garden at Wakamatsu Farm 8:00am to 12:00pm

Help us maintain the native plant garden, vegetable rows, and orchard and complete some exciting new projects at the beautiful Wakamatsu Farm! Volunteers are critical to the success of this project. All skills, ages, and abilities are welcome. Please contact [Marianne@ARConservancy.org](mailto:Marianne@ARConservancy.org) or 530-621-1224.

6/6	7/8	8/9
6/14	7/12	8/5
6/20	7/18	8/15
6/24	7/26	8/23
6/28	8/1	



### Wakamatsu Farm Volunteer Orientation Saturday, June 10 10:00am to 5:00pm

To support all aspects of the Wakamatsu Farm experience, the ARC is seeking volunteers for existing and new programs and projects. For those who are seriously committed and will promise to donate a little regular time, ARC will host an orientation on Saturday, June 10 from 10:00 until 5:00. Please register for the Wakamatsu Volunteer Orientation or learn more about volunteer programs at the Farm by contacting [wakamatsu@ARConservancy.org](mailto:wakamatsu@ARConservancy.org), or by calling Melissa at 530-621-1224.

### Chili Bar help needed

#### Now, and throughout the Summer

If you have the time and ability to assist, Kelly Croffoot, our park manager, in completing some repairs at the park, please email Kelly at [chilibarpark@gmail.com](mailto:chilibarpark@gmail.com). (see article on page 13)

Go to [ARConservancy.org/get-involved](http://ARConservancy.org/get-involved).  
Use the "volunteer form" button to sign up for your specific volunteer interests.

## Chili Bar, Our Hidden Treasure

By Marie Imler



The hillside has been eroded and is in need of shoring.

In the mid 1800's Chilean immigrants had come by the hundreds to stake their claim on the California Gold Rush in Coloma. There were many different camps up and down the river. The camp known as Spanish Flats had immigrants from Mexico and they only spoke their native tongue of Spanish. There was also the camp known as American Flats and that was American miners who spoke English. One Sunday while the American miners were away, one shyster sold their camp known as American Flats to a newly arrived group of Chilean miners for a considerable sum. The Chileans immediately and vigorously began mining the site until the return of the true owners that afternoon. With no one of either group speaking the others' native tongue, communication was impossible.

American miners quickly sent word of the claim being "jumped" by these Chilean miners to all the other camps. The miners assembled quickly with rifles and guns to drive these thieves away. By three in the afternoon some 40 men had gathered, rifles in hand, threatening to shoot anyone who got in their way. It worked out that no one was shot and the Chilean Miners were driven across the river to what is now known as Chili Bar. The Chilean miners were quite pleased with their new location as it proved to be very lucrative in gold. They remained at Chili Bar until 1886 when a smallpox epidemic wiped them all out.

Currently Chili Bar is owned by the County of El Dorado, but The American River Conservancy maintains a conservation easement of the Chili Bar put-in and river park.

Over the years since ARC was given the easement at Chili Bar there have been many battles over the property use and rights over land ownership, Through it all, ARC has done its best to maintain an enjoyable area for the public to come



The stairway has been left unstable and unusable.

and spend the day or to put in their raft to navigate the rapids, or just to enjoy the beauty of the park.

It has been a struggle over the past few years with the drought and water being released from the dams above Chili Bar on different scheduled days and times. This year has proven to be quite the opposite, with an overabundance of water coming through that has caused flood damage and left the park in dire need of repair to accommodate the quickly arriving summer crowd of boating enthusiasts.

If you have the time and ability to assist Kelly Croffoot, our park manager, in completing some of these repairs, or if you have an excavator or tractor you can lend a hand with, please call the office to schedule as soon as possible. Any assistance would be greatly appreciated.

Together we can get this hidden treasure open and available for all to use.



Vegetation and trees have been ripped out of the ground. The concrete rock wall for the park center has had all the supporting dirt washed away from underneath it and is in need of immediate repair. There are many more issues that need to be addressed before the park can open for public use.

## EDDIES... VOLUNTEERING JANUARY—MARCH 2017

In January, February, and March 2017 we had a lot to do. At the Acorn Creek/Salmon Falls Trailhead, we installed fencing and native plants. At the Wakamatsu Farm, there was always a job to do. From planting natives in the demonstration garden, starting seeds in the greenhouse, and cleaning the Graner House, to monitoring bluebirds, volunteers were busy making things happen. Nature Bowl, which was two days of environmental education at the Nature Center, was a success in March. Our Land Stewards monitored ARC properties this quarter as well. It's also good to know that all of our mailings, board meetings, and much of the work around the office happens with the help of volunteers like the ones listed below! THANK YOU!

AIM  
Allen Joanne  
Allyn Carl  
Anderson Wade  
Barron Pat  
Bean Mike  
Bernstein Fred  
Brinkley Jacquelyn  
Brinkley Amy  
Brown Katy  
Bush Carolyn  
Cantin Candis  
Carlson Greg  
Chesney Thea  
Chidester Alyssa  
Ciofalo Catherine  
Clark Steve  
Clark Beatrix  
Cole David  
Collier Julie  
Collins Clint  
Cornell Karen  
DeLacy David  
DeLacy Elena  
DeLaney Ryan  
DeVille Marissa  
Dhami Armaan  
D'Nelly-Warachy Sharon  
Dolar Teagan  
Dugan Lindsey  
Edelhofer Satomi

Evans Pam  
Ferguson Bill  
Fleming Katherine (Kat)  
Flint Candace  
Forsberg Paul  
Gay Lori  
Giles John  
Giusti Krista  
Gow Ola Jane  
Graham Judy (Taylor)  
Grant Samantha  
Greene Noelle  
Griffiths Gabe  
Guglieri Wendy  
Gustafson Walt  
Hanebutt Marcia  
Hebenstreit James  
Hodge Christopher  
Hoisington Shelly  
Holmes Patrick L.  
Hume Corinne  
Jacobs Timothy  
James Mark  
Jane Ola  
Jensen Bill  
Kaneshiro Stanley  
Knobloch Daisy  
Konyecsni Lisa  
L. Patrick  
Land Christine  
Linzy Jessy

Lloyd Sophia  
Lobach Melissa  
Lowis Janeene  
Mae Doni  
Maerdian Lydia  
Mahar Ken  
Mahoney Christine  
Mantei Dominic  
Markey John  
McAlpine Elizabeth (Lisa)  
Mengelkoch Joan  
Mone Catherine  
Monzo Pat  
Newhart KayLynn  
Nicita Eric  
Orth Donna  
Osborn Kay  
Pagendam Larry  
Peeters Michelle  
Pogue Kyle  
Quan Jenna  
Reed Jim  
Reinero Sophia  
Riley Roy  
Robert John  
Roberts Michael  
Rodriguez Mark  
Roy Sudipto  
Russ Jim  
Sagar Roy  
Schardt Lynn

Sedillo Sam  
Setoodeh Steve  
Skrbina Mark  
Soldano Donna  
Sonenstein Noah  
Soracco Carla  
Speck Joseph  
Supinger Wendy  
Surburg Suzanne  
Tanimoto Herb  
Tootle Jesse  
Tootle Mark  
Tootle Tracy  
Tran Denise  
Vail Vicky & Scott  
Valdes Michael Tony  
Valdes Tony  
Van Rossum Caleb  
Walker Annie  
Warachy Michaela  
Whiffin Judith & Trevor  
Widroe Greg  
Wilkerson Brittany  
Winkelblack Louise

We have recently converted to a new database and are still working out the kinks. If we have missed your name for last quarter, please let us know.  
Julie

THE AMERICAN RIVER CONSERVANCY IS LOCATED IN THE  
**AMERICAN RIVER NATURE CENTER**  
INSIDE THE MARSHALL GOLD DISCOVERY  
STATE HISTORIC PARK  
AT 348 HWY. 49, COLOMA, CA

THE NATURE CENTER & BOOKSTORE ARE OPEN TO THE PUBLIC  
**FRIDAY THRU SUNDAY FROM 10 AM-4 PM.**  
OUR OFFICES ARE OPEN TO VOLUNTEERS AND SUPPORTERS  
**MONDAY THRU FRIDAY FROM 9 AM-5 PM AND**  
**WEEKENDS FROM 10 AM-4 PM.**



## THANK YOU, AMERICAN RIVER CONSERVANCY JANUARY-MARCH 2017 SUPPORTERS!

To become a supporter see page 16, or visit us at [ARConservancy.org](http://ARConservancy.org)

**ARC Supporters, In-Kind, and Monthly Donors**

Akana, Val  
Allan, Christina  
Allyn, Carl & Cathy  
Anonymous  
Bailey, Martin  
Barron, Pat  
Barrow, Randy & Karen  
Beauchamp, David  
& Betty  
Beeman, Joyce  
Bond, Anne  
Boyes, Lynnee & Robert  
Bradshaw, Robert  
& Betsy  
Brett, Russell & Debra  
Brewer, Marshall and Linda  
Binkley, Amy  
Brinkley, Jacquelyn  
Brubaker, Sherie  
Bush, Carolyn  
Celio, Tracy  
& McCallick,  
Carlo Oliver  
Coyne, Paul & Marjorie  
Damer, Michael  
& Jamie Hartshorn  
Derr, Michael  
& Michelle  
Dodge, Minerva  
Dodge, Richard  
Edelhofer, Satomi  
Edmondson, Nina  
England, Paul  
Evans, Pam  
Flory, Jen  
Gaus, Ruth  
Giles, John & Mary Lou  
Giles, Mary Lou, Robert  
Gold Country Paddlers  
Greenwood, Veronique  
Guglieri, Wendy L  
Haines, Mark  
Hallstrom, David  
Halverson, Marie  
Hansen, Denise  
Hawkes, Sara  
Hession, Jack & Mary Kaye  
Hildebrandt, Eric  
Hodges, Diana  
Hope, Leja  
Houghton, Barbara  
Hutton, Kathy  
Imgrund, David & Gerda

Imler, Marie  
Jackson, Angela  
Kaznowski, Jan  
Kinsch, Kevin  
Kulton, Tim  
Lawrence, Jeff  
Levinson, Teresa  
Lindert, Linda  
Liu, Grace  
Lobue, Linda  
Loeffelbein, Ruthie  
Lost Dog Farm  
Lowis, Janeene  
Markiewicz, Dorothy  
McCombs, Mary  
Meyer, Eugene & Teri  
Minton, Jonas & Julie  
Mone, Catherine  
Murray, Pam Sakamoto  
Nevins, Marcile & Steven  
Oakes, Leslie  
O'Farrell, Susan  
Orsega, Christopher  
Orth, Donna & Thom  
Osborn, Kay & Monte  
Osborn, Mary  
Perry, Erin  
Pesheck, Belinda  
Pingle, Dr. Ray & Jana  
Posey, Laurel  
Rose, Charles  
Ryan, Kimberly  
Sacramento Region  
Community Foundation  
Schlavin, Eric-  
Schneid, Tracy  
& Van Horssen, Steve  
Seidler, Chuck  
Shigeo, Kanda  
Spencer, Ann  
Taylor, Dee  
Ting, Farrah  
United Way  
Vail, Scott & Vicky  
Wells, David  
Wilmot, Robert  
Woods, William

**Wakamatsu Donations**

Anonymous  
Fleming, Karen  
Ishizu, Lily  
Mone, Lorraine  
Plachy, William  
Tanimoto, Herb

**Conservation & Trails**

FATRAC  
Time Your Race

**Donations made in Honor of...**

Howard Vossen  
El Dorado Int'l Folk Dance  
Assoc. in memory of Robin  
Ramsay (in  
honor of Sarah Ramsay)

**Year End Appeal**

ARTA River Trips  
Ball, Joe  
Barrett, Virgil & Harlene  
Britting, Ron & Elaine  
Broshahan, Brian  
Coco, Dale  
Derr, Michael & Michelle  
Derr, Michael & Michelle  
DiVittorio, Melissa  
Giles, Mary Lou & John  
Gill, Robert  
Gilson, Mary  
Greenwood, Veronique  
Haines, Mark  
Harris, Linda  
Hechtman, Barton  
Hulquist, Jeana  
Kerr, J  
Levitsky, Susan  
Lloyd, Wendy & Kim  
Maher, James  
& Julie Cozzolino  
Mueller, Racheal  
Raley, Michele & Bruce  
Rudd, Chris  
Thomas, Tim  
Toner, Shiela  
Wilcox, Roger

Knickerbocker Creek,  
El Dorado, California, US  
Apr 23, 2017 8:04 AM - 12:16 PM  
Protocol: Traveling 3.0 mile(s)  
Comments: Bird walk for  
American River  
Conservancy.

41 species

Canada Goose 4  
Turkey Vulture 4  
Red-shouldered Hawk 2  
Red-tailed Hawk 2  
Killdeer 1  
Band-tailed Pigeon 12  
Mourning Dove 3  
Anna's Hummingbird 2  
Acorn Woodpecker 6  
Nuttall's Woodpecker 3  
American Kestrel 1  
Western Wood-Pewee 1  
Pacific-slope Flycatcher 2  
Ash-throated Flycatcher 2  
Western Kingbird 3  
Hutton's Vireo 3  
California Scrub-Jay 8  
American Crow 2  
Common Raven 4  
Tree Swallow 4  
Oak Titmouse 6  
Bushtit 4  
White-breasted Nuthatch 2  
House Wren 3  
Bewick's Wren 1  
Wrentit 1  
Western Bluebird 3  
European Starling 1  
Yellow-rumped Warbler 2  
Lark Sparrow 1  
White-crowned Sparrow 4  
Golden-crowned Sparrow 2  
Spotted Towhee 1  
Black-headed Grosbeak 2  
Red-winged Blackbird 4  
Brewer's Blackbird 3  
Bullock's Oriole 3  
House Finch 3  
Purple Finch 1  
Lesser Goldfinch 6  
House Sparrow 1

View this checklist online at <http://ebird.org/ebird/view/checklist/S36205128>

This report was generated automatically  
by eBird v3 (<http://ebird.org>)

# PRESERVING RIVERS AND LAND FOR *LIFE*

## NOURISH THE LEGACY THROUGH SUSTAINABLE GIVING

VISIT [ARCONSERVANCY.ORG](http://ARCONSERVANCY.ORG) & MAKE YOUR SECURE ONLINE DONATION

*I WOULD LIKE TO SHARE THE AMERICAN RIVER CONSERVANCY'S VISION OF TOMORROW.*

NAME \_\_\_\_\_ D.O.B. \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

PHONE # \_\_\_\_\_ CEL PHONE # \_\_\_\_\_

EMAIL ADDRESS \_\_\_\_\_

CREDIT CARD# \_\_\_\_\_ / ( )  
EXPIRATION CODE  
Mo./Yr. (ON BACK)

SIGNATURE \_\_\_\_\_

RECURRING GIFT:	
<input type="checkbox"/>	\$ ___ /MONTH
OR	
ANNUAL SUPPORT:	
<input type="checkbox"/>	\$ ___ OTHER
<input type="checkbox"/>	\$ 1000
<input type="checkbox"/>	\$ 500
<input type="checkbox"/>	\$ 250
<input type="checkbox"/>	\$ 100
<input type="checkbox"/>	\$ 50
<input type="checkbox"/>	\$ 35

- NEW SUPPORTER
- RENEWING SUPPORTER
- GIFT MEMBERSHIP
- IN REMEMBRANCE/HONOR OF  
\_\_\_\_\_  
\_\_\_\_\_

- PLEASE CONTACT ME ABOUT  
PLANNED GIVING/LEGACY CIRCLE
- MAKE MY GIFT ANONYMOUS

*Donations of \$35 or more will be given a 1-year membership. Your gifts to ARC are tax deductible.*

Please make your check payable to the AMERICAN RIVER CONSERVANCY  
348 Highway 49 • PO Box 562 • Coloma, CA 95613 • (530) 621-1224

THE AMERICAN RIVER CONSERVANCY AND NATURE CENTER PROVIDE NATURAL HISTORY INTERPRETIVE SERVICES IN THE  
MARSHALL GOLD DISCOVERY STATE HISTORIC PARK, COLOMA, CA



**American River Conservancy**  
P.O. Box 562  
Coloma, CA 95613

RETURN SERVICE REQUESTED

NON-PROFIT ORG.  
U.S. Postage  
**PAID**  
Permit No. 7  
Coloma, CA  
95613

*Preserving Rivers and Land for Life*

**OUR MISSION**  
The American River Conservancy serves our communities by ensuring healthy ecosystems within the Upper American and Upper Cosumnes River watersheds through land conservation, stewardship and education.