



RUNOFF

CALIFORNIA-NEVADA CHAPTER SWCS –FALL 2015

PRESIDENT'S MESSAGE – JOE WILLIAMS



Greetings California-Nevada SWCS members!

Happy Holiday's!

During this time of “giving” I want to call on you to give of your time and talents to help us fill some critical Chapter committee openings as we move into 2016.

The following committees have a need for leaders and members:

- 1) Communications
- 2) Leadership Development
- 3) Student Chapters
- 4) Nominations
- 5) Annual Conference/Partnership

As you can see there are some great opportunities to advance your leadership skills as well as help out your Chapter. Please let me know of your interest. Joe.Williams@ca.usda.gov

If you don't have time to serve on a committee, how about contributing the cost of a SWCS membership to a colleague, friend or family member?

I wish each and every one of you a safe and happy holiday season!

Joe

NEW CHAPTER MEMBERS

We extend a **GREAT BIG WELCOME** to the following four members who recently joined or rejoined the SWCS and our California-Nevada Chapter SWCS. We have **106 members** as of November 23, 2015.

Arlene Adviento-Borbe - State University, AR

Josh Fodor - Santa Cruz, CA

Gary Cottle - Fallon, NV

Brittany Jensen - Sebastopol, CA

CHAPTER ELECTIONS NEXT MARCH

Chapter members will be electing three Executive Council Directors and a Secretary at the next election in March. Directors **Austin Avwunudiogba**, **Phil Hogan**, and **Zahangir Kabir** and Secretary **Erika Boyland** will be up for reelection. Directors and the Secretary serve for two years. All the members of the Executive Council are officers.

Past-President **Rob Roy** will Chair the Nominations Committee. Let Rob know that you want your name on the ballot. Robert.Roy@ca.usda.gov

HELP WITH PLANNING FOR OUR CHAPTER ANNUAL SPRING CONFERENCE

Contact President Elect **Ladi Asgill** at lasgill@suscon.org and join the annual conference planning committee. Express your preference for where to hold it next Spring. Help select the date for the conference. Work with the committee to select a theme and organize the agenda that includes technology training, installation of officers and awards presentations. Help find speakers and sponsors. Practice your publicity skills.

SCHOLARSHIP ANNOUNCEMENT

Please spread the word that the California-Nevada Chapter, Soil and Water Conservation Society, offers an annual scholarship to encourage undergraduate students interested in soil and water conservation, to obtain technical expertise, and to pursue careers in soil and water resources. A scholarship of \$1000.00 will be awarded before the Fall Semester/Quarter of the 2016-2017 school year. Applicants must (1) have successfully completed two years of study at an accredited college, (2) be enrolled in an undergraduate curriculum related to soil and water resources, and (3) have a cumulative grade point average of 2.5 or better on a 4.0 scale.

Applicants will be ranked with 50% of the evaluation based on scholarship, 25% based on activities related to the area of soil and water conservation including membership in professional societies with special emphasis on SWCS, and 25% on demonstrated need. The Chairman of the SWCS Scholarship committee will submit the applications to the committee members and upon consensus, will forward recommendations to the Chapter Executive Council for final evaluation and make the selection of the awardees.

How to Apply: Send completed application with supporting materials to the address below, postmarked by February 1, 2016. Go to our Chapter website and download the application form: www.caswcs.org/

California-Nevada SWCS Scholarship Committee

Tina Vander Hoek

USDA-NRCS

65 MAIN ST STE 108

TEMPLETON CA 93465-8703

CHAPTER COMMITTEES AND CHAIRS:

Annual Conference/ Partnerships*: Ladi Asgill lasgill@suscon.org

Awards Committee*: Ladi Asgill lasgill@suscon.org

Bylaws Committee: Appointment Pending

Communications Committee*: Appointment Pending

Runoff Newsletter Editor: Walt Bunter wbunter@pacbell.net

Runoff Newsletter Publisher: Walt Bunter wbunter@pacbell.net

Website Updates: Walt Bunter wbunter@pacbell.net

Financial Oversight Committee*: Appointment Pending

Leadership Development: Appointment Pending

Membership Committee*: Joe.Williams@ca.usda.gov

Nominations Committee*: Rob Roy Robert.Roy@ca.usda.gov

Policy Committee: Ladi Asgill lasgill@suscon.org

Professional Development: Phil Hogan phil.hogan@ca.usda.gov

Scholarship Committee*: Tina Vander Hoek Tina.Vanderhoek@ca.usda.gov

Strategic Plan Committee: Ladi Asgill lasgill@suscon.org

Austin Avwunudiogba) aavwunudiogba@csustan.edu

BE AN AMBASSADOR IN NATURAL RESOURCE CONSERVATION

Be an ambassador in natural resource conservation by promoting environmental education. The Natural Resources Conservation Service has a Teachers and Students webpage located at [this link](#). Within it, you'll find many free educational tools. Here is an example:

“It's a dirty job but someone has to do it -- S.K. Worm, the official annelid, or worm, of the Natural Resources Conservation Service helps students explore and learn about soil.”

Please share these materials through newsletters, emails, social media and any other venues you have available. Make a classroom visit. Meet with elementary school teachers. Go on the radio. Write a letter to the editor of your local newspaper. The more educators that are informed, the better our message of conservation will resonate with students in California and Nevada.



CALIFORNIA-NEVADA CHAPTER MEMBERS

106 on November 23, 2015

If any of your colleagues are not listed, please encourage them to become a member of SWCS.

Arlene	Adviento-Borbe	-	State University, AR	Ray	Hunter	-	Fresno
Bianca	Alexandru	-	Salinas	Brittany	Jensen	-	Sebastopol
Brian	Andraski	-	Carson City, NV	Carole	Jett	-	Sparks, NV
Ladi	Asgill	-	Delhi	Zahangir	Kabir	-	Davis
Austin	Avwunudiogba	-	Turlock	Jeremy	Kearns	-	American Canyon
Bill	Baker	-	Temecula	James	Kocsis	-	Davis
Matt	Baldzikowski	-	Los Altos	James	Komar	-	Red Bluff
Erik	Beardsley	-	Red Bluff	Eric	Larson	-	Sebastopol
Erika	Boyland	-	Bakersfield	Steve	Lewis	-	Minden, NV
Colin	Brown	-	New Haven, CT	Bill	Lincoln	-	Middletown
Walter	Bunter Jr.	-	Davis	Sacha	Lozano	-	Santa Cruz
Joel	Butterworth	-	Sonoma	Drew	Mather	-	Hollister
CaliforniaDairy	Campaign	-	Turlock	Sandy	Mathews	-	Hayward
Diana	Carson-Walker	-	Visalia	Robert	Maurer	-	Berkeley
Richard	Casale	-	Aptos	John	McCann	-	Reno, NV
Dennis	Chessman	-	Davis	Roland	Meyer	-	Davis
James	Chidester	-	Concord	Sonya	Miller	-	Galt
Denny	Churchill	-	Quincy	Daniel	Montelbetti	-	Sacramento
Richard	Clark	-	La Verne	Daniel	Mountjoy	-	Watsonville
Duane	Cornett	-	Marysville	Louis	Nagy	-	Ventura
Dennis	Corwin	-	Riverside	Sally	Negroni	-	Dixon
Gary	Cottle	-	Fallon, NV	Son	Nguyen	-	La Mesa
Chris	Davis	-	Sacramento	Patti	Novak-Echenique	-	Silver Springs, NV
Randy	Davis	-	Marysville	Bobette	Parsons	-	Grass Valley
Mary	Dellavalle	-	Apple Valley	Jeff	Peters	-	Richmond
W.	Denham	-	Pasadena	Roger	Poff	-	Nevada City
George	Dingilian	-	Corona	Gil	Pridmore	-	Napa
Jeff	Dlott	-	Soquel	Wendy	Rash	-	Winters
John	Drumm	-	Davis	Floyd	Rathbun	-	Fallon, NV
RaeAnn	Dubay	-	Red Bluff	Julianne	Rolf	-	Grand Terrace
Rex	Dufour	-	Davis	Andrew	Rosenau	-	Sacramento
Mel	Duncan	-	Folsom	Robert	Roy	-	Fresno
Matt	Dunnahoe	-	Auburn	Jeffrey	Rubin	-	Oakland
Jim	Earsom	-	Loma Linda	Diana	Ruiz	-	Riverside
Norman	Elam	-	Palm Springs	Carol-Anne	Rutenbergs	-	Auburn
Tom	Esgate	-	Penn Valley	George	Sato	-	Rancho Cordova
ESI Resource	Services	-	Rancho Cordova	Alan	Sayce	-	Whittier
Valerie	Eviner	-	Davis	Michael	Simmons	-	Goleta
Julie	Fallon	-	Santa Maria	Mike	Singer	-	Davis
Clarence	Finch	-	Fresno	Jim	Smith	-	Mesquite, NV
Allison	Flynn	-	El Cerrito	Phil	Smith	-	Hanford
Josh	Fodor	-	Santa Cruz	Jill	Sohm	-	Los Angeles
Alan	Forkey	-	Yuba City	James	Spear	-	Red Bluff
DJ	Funk	-	Paso Robles	Mark	Steffek	-	Alturas
Thomas	Gamette	-	Folsom	David	Steiner	-	Napa
Christoper	Giovannoni	-	Watsonville	Mark	Stowell	-	Irvine
E.	Griner	-	Bonsall	Sarah	Tanuvasa	-	Bakersfield
Keith	Hamblin	-	Redding	Ron	Taskey	-	Atascadero
Douglas	Hanford	-	Sonoma	Tina	Vander Hoek	-	Templeton
Howard	Harris	-	Ridgecrest	Mark	Weltz	-	Reno, NV
Richard	Hathaway III	-	Hat Creek	Ruth	Wildman	-	Davis
Michael	Hogan	-	Tahoe City	Joe	Williams	-	Visalia
Phil	Hogan	-	Woodland				
Lisa	Hokholt	-	Livermore				

71ST SWCS INTERNATIONAL ANNUAL CONFERENCE

Galt House Hotel • Louisville, Kentucky July 24-27, 2016

Theme Announced: Great River Landscapes

Call for Presentations –The SWCS Call for Presentations is now open, and abstracts are being accepted for oral presentations, posters, symposia, and workshops. **SUBMISSION DEADLINE: January 7, 2016**

SUBMIT YOUR PROPOSAL at: www.swcs.org/16ac

This year's conference will feature three special interest areas of focus as well as the eight traditional/general topic areas. Special consideration will be given to presentations that cater to the conference theme.

Conservation Systems in the Riparian Corridor

Water Quality Trading: The Good, the Bad, and the Ugly

Protecting Water Quality at the Multi-State Scale

2015 General Conference Submissions – Great River Landscapes

Adaptive Management of Conservation Efforts

Conservation Economics and Policy

Conservation Models, Tools, and Technologies

Conservation in Nontraditional Agriculture

Conservation Policy and Program Design

Outreach, Education, and Community Engagement

Social Sciences Informing Conservation

Soil Health Resources, Indicators, Assessment, and Management

Water Resource Assessment and Management

Detailed information regarding the Call for Presentations may be found at www.swcs.org/16ac

HONORING CONSERVATIONISTS: 2015 AWARDS

The submission period for SWCS awards and scholarships is now open! Do you know someone who deserves to be honored for their efforts in the world of soil and water conservation and education? Show them their value through an SWCS award! The awards nomination process is simple to complete and there are opportunities for both members and nonmembers. Take this time to reward conservationists for their worthy efforts! Log onto www.swcs.org/awards for further details. Are you a SWCS student or SWCS young professional looking for financial assistance to further your education in soil and water conservation and science? Apply for an SWCS scholarship! Scholarships are open to those who have been with the Society for at least one year and will be disbursed for the 2016-2017 school year.

Log onto www.swcs.org/scholarships for further details on the available scholarships.

Awards for SWCS Members

The **Fellow Award** recognizes exceptional professional achievement coupled with service to the Society. This award is given first and foremost for professional excellence.

The **Outstanding Service Award** recognizes distinguished service to the Society over a long and sustained period (10 years minimum).

The **Commendation Award** recognizes members for service to their chapters (members having received other Society awards are also eligible).

The **Conservation Research Award** recognizes SWCS members or teams of members whose research has led to exceptional improvements in soil conservation, water conservation, and/or related natural resources research.

Awards for SWCS Members and Nonmembers

The **Hugh Hammond Bennett Award** recognizes extraordinary national and international accomplishments in the conservation of soil, water, and related natural resources.

The **Harold-Kay Scholl Excellence in Conservation Award** recognizes individuals who creatively and effectively provide technical assistance in conservation planning and plan application.

The **Honor Award** recognizes people for outstanding accomplishments compatible with Society objectives.

The **Merit Award** recognizes noteworthy conservation activity or products of organizations, agencies, or firms.

CONSERVING FARMS IS GOOD INVESTMENT

BY RICH ROMINGER Special to The Sacramento Bee. Published on October 14, 2015

Yolo County, where my family has farmed for five generations, has lost farmland to development, as part of more than 1 million acres of farmland lost in the state in the last 25 years. Our farmlands are a finite resource; once converted to urban or suburban development, they are lost to agriculture.

With that loss, we chip away at our ability to grow food and protect watersheds, open space and wildlife habitat. We also forever alter our carbon footprint. Thanks to a 2012 study by UC Davis researchers, we know that protecting farmland from development is an important strategy to reduce green-house gas emissions. The study found that an urban acre in our county emits 70 times more greenhouse gases than an acre of irrigated cropland.

Fortunately, Gov. Jerry Brown and his administration understand the importance of conserving our agricultural lands for all their many benefits, including buffering us against the worst of climate change. Early this year, the Governor's Strategic Growth Council launched the Sustainable Agricultural Lands Conservation program to protect farmland, including funding conservation easements with willing landowners to permanently keep their land in agriculture.

The program is part of a larger effort to encourage smart growth in the state, where local governments and developers build the next generation of housing and transit services within our cities and protect our farmland at the urban/suburban edge. The agricultural lands program started modestly this year. With \$5 million in funding, the strategic growth council awarded grants in seven counties to permanently protect a total of about 14,000 acres of farmland from development. The council also awarded five grants to local governments to develop strategies for protecting farmland.

This is a good start, but considering there were applications for 10 times more dollars than what was available, and given the alarming rate of farmland loss, clearly there is an opportunity to do more. Fortunately, the strategic growth council's budget just increased from \$130 million last year to \$400 million this year. Thursday, it will decide how much should go to farmland conservation.

This is groundbreaking work, and the council and the Resources Agency, which is in charge of implementing the program, are to be commended for their leadership. No other state in the country has attempted to make linkages between climate protection and farmland conservation, let alone fund it. And the potential for connecting urban smart growth with adjacent farmland conservation is exciting-

Success will depend, in part, on having sufficient funding so the agricultural conservation program doesn't wither on the vine. The council has the chance to build upon the early momentum by funding it at a level that enables the program to reach its potential.

(Rich Rominger, a Yolo County farmer, is a former state secretary of food and agriculture and a former deputy secretary at the U.S. Department of Agriculture.)

EDITOR'S CHALLENGE

The following article foretells that thousands of acres of farmland in the San Joaquin Valley have been retired and more thousands will be retired in the near future. It is staggering to imagine the conservation challenges these retired lands will present to control wind erosion to minimize the impact on air quality and on solar farms. Do we have cover crops, hedgerow species and windbreak species that can be established under these drier field conditions? Can existing programs and staff handle the workload? Let's start a conversation in our newsletter. Send me your outlook on conservation treatment alternatives and delivery programs to protect retired farmlands.

MORE CALIFORNIA FARMLAND COULD VANISH AS WATER SHORTAGES LOOM BEYOND DROUGHT

BY DALE KASLER - dkasler@sacbee.com - The Sacramento Bee – November 26, 2015

FIREBAUGH. California's water shortage won't end when the drought is over. New groundwater regulations will result in hundreds of thousands of acres of farmland being retired.

After two years without water, **Garrett Rajkovich's** farm in western Fresno County is dying. It might never be farmed again. His almond trees have turned a ghostly gray and his grapevines are shriveling. Approximately 1,200 acres face the prospect of permanent retirement. "This was a beautiful, thriving orchard five years ago," Rajkovich said during a recent stroll through his almond grove.

Rajkovich's troubles represent an extreme case, even by the standards of California's epic drought. Unlike many farmers, he didn't have groundwater as a backup when deliveries of surface water from the federal government dried up. But what he's going through represents a taste of things to come. Land retirement is coming to California agriculture. The drought will end someday, maybe even this winter, but farmers will still face long-term shortages of water. The driving force: a new state law regulating the extraction of groundwater.

The relentless groundwater pumping that has kept hundreds of farms going the past four years is coming to an end. California's Sustainable Groundwater Management Act, set to take effect in 2020, will limit how much groundwater can be extracted over the long haul. While details of what constitutes "sustainable" pumping are still being fleshed out, water policy experts say many farmers will gradually have their water supplies curtailed – and the nation's leading agricultural state will farm fewer acres.

"It's not a question of if – it's a question of how much and where," said Chris Scheuring, a lawyer and water expert at the California Farm Bureau Federation.

Many of the state's farmers are already feeling long-term water problems. Westlands Water District, which serves farmers over a vast swath of land in Fresno and Kings Counties, plans to retire tens of thousands of acres as part of a tentative deal with the U.S. government over issues related to drainage problems that have degraded the soil.

The new groundwater law is expected to further shrink agriculture's presence. As many as 300,000 acres could permanently disappear from agriculture, said farm economist Vernon Crowder, a senior vice president at agricultural lender Rabobank.

That's not a huge amount in a state with nearly 9 million irrigated acres of farmland. But it's not trivial, either. It's enough acres to grow the entire \$1.2 billion California tomato crop. The concept is unsettling to people such as Don Cameron, a member of the state Board of Food and Agriculture and a champion of water-conservation efforts. "It's the topic people don't want to talk about," said Cameron, who raises tomatoes, pistachios and grapes in the Fresno County community of Helm.

The subject is particularly touchy in the San Joaquin Valley, the heart of California's \$54 billion-a-year agricultural industry. Experts at UC Davis estimated that farmers have been draining the valley's underground water reserves by as much as 5 million acre-feet per year during the drought to help compensate for staggering shortfalls in water deliveries from the State Water Project and the federal government's Central Valley Project.

What's more striking, perhaps: Even before the drought began four years ago, the valley's aquifers were being depleted by 1 million to 2 million acre-feet per year, according to data compiled by the state Department of Water Resources. An acre-foot is 326,000 gallons. Pumping has been so extensive that portions of the valley floor are literally sinking, a phenomenon known as subsidence. As land subsides, the aquifers gradually lose much of their ability to be replenished by rain. In other words, this is a deep, systemic problem that will squeeze farmers long after the drought ends.

"When the drought is over, we're going to be looking at places that don't have much water in their wells," said Ellen Hanak, an analyst at the Public Policy Institute of California. "People are doing the math and reading the writing on the wall."

Farmers feel misunderstood

Some experts say the groundwater restrictions will be especially rough on small farms, which won't have the financial cushion to keep going. Jim Verboon, who grows walnuts on 100 acres of land in Kings County, looks at his larger neighbors and wonders how he'll make it. "I don't know if this groundwater law, the way it's crafted, is in my best interest or in any small grower's best interest," said Verboon, a third-generation grower. "There's a certain amount of land in the San Joaquin Valley that's not going to be farmed, except in very wet years."

Land retirement isn't a new concept. Farmland has been disappearing in California for decades, usually giving way to urban development. An estimated 765,000 acres of irrigated farmland vanished between 2000 and 2012, about half of it in the San Joaquin Valley, according to the state Department of Conservation. That represented about 8 percent of the valley's agricultural base.

Nonetheless, farmers get angry about land going idle, either permanently or temporarily, because of water problems.

They generally accept the idea that groundwater pumping needs to be reined in. But they argue the problem wouldn't be nearly as bad if the Endangered Species Act were relaxed, less water were set aside for fish, and more surface water were delivered to the valley from the Sacramento-San Joaquin Delta.

"We are not understood. We grow a lot of the nation's food," said Mark Sorensen, a raisin and blueberry grower in Caruthers and president of the Fresno County Farm Bureau. "I'm not sure those on the coast, in the Bay Area, Los Angeles understand that concept. The surface water is key."

If the land-retirement process isn't managed properly, Hanak said, the valley could be left with vast stretches of land simply going to dust. That would compound the region's air pollution problem, already among the most severe in California, she said.

And unless some other uses are found for the land, there could be economic impacts throughout rural California. Although farm employment has held up surprisingly well in the drought, UC Davis economists say the temporary idling of 540,000 acres this year erased 10,000 farm jobs that would have been created if water were plentiful.

Take land out of production for good, and the job losses likely will mount. "When we're out of business, guess what? They're not getting a paycheck here," said Rajkovich, who employed two dozen full-time employees when his Firebaugh farm was fully active.

UC Davis farm economist Richard Howitt said the farm economy won't collapse, however. Most growers have survived the drought and kept revenue strong by concentrating their water supplies on high-dollar crops such as almonds and pistachios.

That trend will intensify in the coming years, Howitt said. Between groundwater restrictions and climate change – which is expected to shrink the Sierra snowpack – farmers will be pressed into progressively harder choices about what to plant and how many acres to leave idle. “We’re going to have to live within a smaller water footprint, which means we’ll have to learn to live with a smaller farming footprint,” Howitt said.

Solar energy farms starting to bloom

What will that look like?

Farmers hope they can keep as many acres in agriculture as possible. They’re working on projects to [capture winter stormwater](#) more effectively, and to recycle the water they put on their crops. Some believe they can cope with the groundwater legislation by fallowing more fields in dry years and minimizing the amount of land that gets permanently retired.

Not far from Rajkovich’s dying orchards, the Panoche Water and Drainage District is working on pilot projects to desalinate and reuse the water drained off its fields. The goal is to reduce dependence on groundwater.

District general manager Dennis Falaschi envisions a string of desalination plants up and down the valley. The plants might not generate enough water to produce a crop, but they could prevent someone’s almond orchards from dying of thirst.

“That can keep 300,000 acres of trees alive,” Falaschi said.

But land retirement is already a reality in some parts of the valley, where farming has given way to new uses. On West California Avenue outside Mendota, on land that used to produce tomatoes and cotton, sit a pair of solar energy farms and a medium-security federal prison.

The newest of the facilities, a 626-acre solar farm built by First Solar Inc. of Tempe, Ariz., opened in June. Made up of 750,000 photovoltaic cells, the plant has a 61-megawatt capacity and generates enough juice to light up 10,000 homes.

“You’re going to see more,” said Jose Gutierrez, a deputy general manager at Westlands Water District.

Westlands retired these lands more than a decade ago, although not because of water shortages. Rather, the land had been rendered increasingly useless for agriculture because of an incessant buildup in the soil of salt and other minerals linked to drainage problems in the clay soil.

For decades, irrigation water delivered by the U.S. government’s Central Valley Project hasn’t drained properly on much of the land served by Westlands. After a group of farmers sued, claiming the federal government reneged on a pledge to fix the problem, a settlement was reached in 2002. Part of the deal called for Westlands to buy 70,000 damaged acres and retire the land, including the parcels in Mendota.

It’s taken a while, but some of the land is sprouting new uses. More than 2,400 acres of land within Westlands’ territory has been converted to solar farms in recent years. Gutierrez said another 2,600 acres will go solar in the next year or two.

Beyond that, a company called Westside Holdings wants to build a 20,000-acre solar energy park, billed as the largest in the country, on retired farmland near the Lemoore Naval Air Station in Kings County. Its financial backers include CIM Group, a glitzy real estate developer from Los Angeles whose credits include the Hollywood theater that hosts the Oscars.

Solar’s surge has the approval of community leaders such as Mendota Mayor Robert Silva. Although most of the jobs are temporary, the installation of solar farms has boosted employment in a depressed part of the state.

“Farming is good, farming is great, but we need other jobs for this community,” Silva said. “There’s a lot of sun here and we’ve got to take advantage of it.”

Tens of thousands of additional acres of farmland would be retired by Westlands under yet another settlement the district signed with the federal government in August over persistent drainage issues. The agreement doesn’t take effect until it’s ratified by Congress, and approval isn’t a sure thing.

Rajkovich’s farm near Firebaugh is among those due to be retired. The district would buy him out at a price to be determined, and the 1,200 acres wouldn’t get any more Central Valley Project water. “It would be capped off and that water supply would be redistributed to the rest of the district,” said Westlands spokeswoman Gayle Holman.

Neither side is thrilled at the prospect. Rajkovich isn’t sure whether he’ll recoup the millions he spent planting almond trees, installing irrigation lines and making other improvements to the land. While his family maintains a smaller farm near Stockton, he called the situation in Firebaugh “financially and emotionally draining.”

As far as Westlands is concerned, shutting off the tap to a piece of farmland violates every principle the district holds dear. “We are in the business of agriculture, farming, delivering water to farmers to produce,” said Johnny Amaral, a Westlands deputy general manager. “This whole area is getting strangled.”

Dale Kasler: 916-321-1066, @dakasler The Bee’s Ryan Sabalow contributed to this report.

Read more at: <http://www.sacbee.com/news/state/california/water-and-drought/article46665960.html#storylink=cpy>

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Hugh Hammond Bennett

CHAPTER EXECUTIVE COUNCIL

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**CHECKOUT THE CA-NV CHAPTER
SWCS WEBSITE**

www.caswcs.org

PLEASE SUBMIT PHOTOS,
NEWS ITEMS, AND
FEATURE ARTICLES
TO THE EDITOR FOR THE
WINTER ISSUE OF RUNOFF

BY JANUARY 25

RUNOFF is the official California-Nevada
Chapter SWCS newsletter.

Editor and Publisher:
Walt Bunter – wbunter@pacbell.net

RUNOFF reserves the right to edit all submissions.

“In other words, the treatment must fit not only the needs and adaptabilities of the land but the needs and adaptabilities of the farmer as well

Soil conservation is probably the youngest of all the agricultural sciences.

Conservation farming put first things first by attending to the needs of the soil—by seeing to it that the starting-off place, the base, is put into sound health and kept that way. Any other approach, no matter what it may be, always has and always must lead eventually to agricultural disaster.

Too many people have lost sight of the fact that productive soil is essential to the production of food.

Almost invariably, conservation farming—which, after all, is common sense farming with scientific methods—begins to show results the very first years it is applied.

And, usually, it takes no more labor or machinery to carry on conservation farming than it does to farm the wasteful way—without consideration of conservation needs.”

Many farmers—most farmers, and that means millions—need some technical help in making the change to this more efficient, easier, and more productive type of farming, and they need also moral support and encouragement.

As a nation we need to renew our acquaintance with the land and reaffirm our faith in its continuity of productiveness—when properly treated. If we are bold in our thinking, courageous in accepting new ideas, and willing to work with instead of against our land, we shall find in conservation farming an avenue to the greatest food production the world has ever known—not only for the war, but for the peace that is to follow.

If there were some standardized simple remedy for the ills of the land that could be applied indiscriminately, the job of soil conservation would be comparatively easy. But there is about as much variety in erosion and the performance of the water and wind as in the landscape of the country.”

The above quotes are from: H. H. Bennett. "Adjustment of Agriculture to Its Environment." Annals of the Association of American Geographers XXXIII (December, 1943): 163-198. This was Bennett's presidential address to the Association of