California Regional Water Quality Control Board
Central Coast Region

895 Aerovista Place, Suite 101, San Luis Obispo, California 93401-7906
(805) 549-3147 • Fax (805) 543-0397
http://www.waterboards.ca.gov/centralcoast

Linda S. Adams.
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

Agricultural Order Renewal

Public Comments and Alternatives to

02/01/2010 Preliminary Draft Staff Recommendations

Group 16: Comment Letters

All of these letters were received after the deadline of June 4, 2010.

Comment ID	Affiliation	Date Received
A34	California Avocado Commission	6/18/2010
F72	Santa Barbara Pistachio Company	6/10/2010
F73	John Ivancovich	6/21/2010
FB10	California Farm Bureau	6/15/2010
M19	County of San Benito	6/14/2010
P25	Daniel Diaz and Ralph Bishop	06/21/2010
U18	Sierra Club	06/17/2010
U19	Surfrider Foundation	6/18/2010

CARL STUCKY
AGRICULTURAL MANAGEMENT AND ANALYSIS
P.O. BOX 1096, CARPINTERIA, CA. 93014-1096
TEL: 805.684.0700
csavos@gmail.com

June 1, 2010

Central Coast Regional Water Quality Control Board
895 Aerovista Pl. #101
San Luis Obispo, CA 93401-8725

RE: Preliminary Draft for the Updated Agricultural Order

Chairman Jeffrey Young and Members of the Board,

Please enter this letter into your record of comments, in response to the Updated Agricultural Order.

While the Board's concerns, as addressed in the Updated Agricultural Order, are important, and recognizing that agriculture's impact on water quality needs improvement, the problems with the system created by this Order are serious and detrimental to the efficient allocation of resources, of both the agricultural community, and the Board itself.

1. The Order treats all agriculture, in all geographical areas, the same; when the problems vary greatly. The total reporting requirements are excessive, and unneeded, for certain crops in certain regions.
2. The Carpinteria Water District has a groundwater basin management plan and performs regular water quality analysis; to have individual growers testing and reporting to your Board is redundant, as all Water District records are available to the public. The total amount of data the Order requires regarding wells and groundwater would be so vast, as to make effective utilization by the Board staff almost impossible, and certainly excessively expensive. Every basin would require a complex set of characterization analysis, including age and movement analysis, as well as water quality analysis. Without a complete model, the parts won't yield meaningful results. Even then, the interpretation will be contested by seasoned experts.
3. Eutrophication of groundwater is a long term problem. It is inappropriate to require that current property owners bear responsibility for mitigation and providing remediation to owners of affected offsite wells. Contributions to eutrophication may be ancient, and the problem may exist, regardless of the current owner's farm practices. Furthermore, the problem may persist for generations, even if all farming were to stop. It is likely BMP's will help throughout the long term, but it is certainly not guaranteed.
4. The development and maintenance requirements for riparian corridors in the Order are impractical and arbitrary. Bank stabilization, along with the associated benefits, is important. However, your Order seems to have been written without a good understanding of actual stream dynamics. Not allowing channel clearing and maintenance

will, in time, lead to flooding. The evolution of natural stream channel and alluvial development is one of repeated movement of the channel. As vegetation grows, it holds more sediment from natural, as well as man-made, sources. At some point during high-flow periods, the amount of water exceeds the carrying capacity of the channel, and flooding, or scouring, occurs (scouring, often for a new channel, can occur outside of the riparian vegetation). Willows, in particular, have a growth and regeneration habit, which, after growth and scaffold collapse, inevitably leads to channel movement.

5. The riparian buffer width requirements are arbitrary. Beyond bank stabilization, the additional width requirements are not based on any sound science that shows superior performance with increased widths.
6. The definition of top of bank is subject to interpretation. The top of bank can be evident in some locations; however, in other locations, old channel terraces, both near and distant, as well as above the current era water flows, might be contested as top of bank.
7. Some of the bank stabilization requirements and timetables likely won't be possible in Santa Barbara County. In working with a local nonprofit, and a willing landowner, it took almost three years to get a relatively simple stream improvement project approved by the County Planning Department. In the same process, a bank stabilization project permit was not granted. After requiring detailed and costly surveying, grading and engineering plans, the grading and planting (native vegetation) of 200 feet of a vertical and eroding bank was denied because there was no imminent danger to a structure above a certain threshold in value. The continued erosion and loss of Class I farmland was deemed not significant and the permit denied.
8. While requiring individual growers to employ the very latest technologies in their farm operations, your Board is remiss in not adopting the same policy for its operations. Requiring every individual grower to provide such detailed evidence of ground conditions is grossly inefficient. My impression is that a knowledgeable contractor, such as the remote sensing center at Bren School, UCSB, could give the Board an annual analysis of stream bank vegetation, and its changes over time, for significantly less money than the program now entails. Furthermore, it would exist in a form that would readily lend itself to analysis and simplified focus on problem areas. The Order, as it is written now, will generate so much information that the staff requirements to review it all will be much more expensive - and much less effective.
9. The same applies to the pesticide reporting requirements. All growers file monthly pesticide use reports with the County Agricultural Commissioners, and this is public information. The Board's resources would be better allocated to developing a unified information system that compiles pesticide use by parcel, crop, owner and watershed, which could be combined with watershed water quality analysis. Overlays of various data sets would allow staff time to be much more focused on actual problem areas and changes over time, instead of filing and creating needless record storage systems.
10. The water quality testing and analysis program requirements also appear to be an inefficient allocation of time and expense. I agree with Sarah Greene's (CCWQP) characterization of the problem and a more effective cooperative method of analysis.

In summary, I agree that there are water quality problems that need to be addressed, and that some members of the agricultural community have been remiss in employing satisfactory remediation for the problems attributed to agricultural activities. However, the Board's

Updated Agricultural Order can be improved. As it stands, it requires an inefficient allocation of capital for both growers and staff. The Board needs to continue working on the draft, including seeking a more streamlined system and utilizing the latest technology, for compiling and analyzing multiple data sets, to achieve its desired goals.

Respectfully,

(signed)Carl Stucky

Life-long avocado grower
28 years self-employed agricultural consultant and farm manager
BS, Fruit Science, Cal Poly SLO.
BS, Microbiology, UCSD.

SANTA BARBARA PISTACHIO COMPANY
US FANCY GRADE · NOT YOUR ORDINARY NUT!

OFFICE: 407 STATE STREET, SUITE B
P.O. BOX 21957, SANTA BARBARA, CA 93121
PH: (805) 962-5600 · FAX: (805) 962-6200
INFO@SBPISTACHIOS.COM

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June 8, 2010

Central Coast Water Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Dear Central Coast Water Control Board,

Our family grows pistachios in Cuyama (N.E. corner of Santa Barbara County.) We grow 100% organically, pump 100% of our water from our own wells, use 100% drip irrigation on 100% sandy soil.

There is no run off let alone any adverse chemical run off. There is also no water monitoring plan in the Cuyama Valley and no plan for enforcement if there were.

Please let me know how our organic family farm benefits from this program? Otherwise this is simple extortion devised by politicians, agri-business and politically connected service corporations such as Preservatives, Inc., that creates one more economic burden for those least culpable.

We in effect are being required to help pay for the mess created by agri-business who have put short term profit ahead of long term sustainability. This program for us is a reverse Robin Hood scenario that steals from the poor to pay for the greed and stupidity of the rich.

I anxiously await you reply.

Cordially,

Gene Zannon
Santa Barbara Pistachio Co.

c.c.
Santa Barbara 5th District Supervisor Joseph Centeno, 511 East Lakeside Parkway, SM, CA 93454
State Assemblyman Pedro Nava, 101 West Anapamu St. Suite A, SB, CA 93101
State Assemblywoman Jean Fuller, 400 California Avenue, Bakersfield, CA 93309
State Assemblyman Sam Blakeslec, 1104 Palm St., S.L.O., CA 93401
State Senator Roy Ashburn, 5001 California Avenue, Bakersfield, CA 93309
State Senator Tony Strickland, 223 East Thousand Oaks Blvd. Suite 400, Ventura, CA 91360
State Senator Dean Flores, 1800 30th. St., Suite 350, Bakersfield, CA 93301
Governor Arnold Schwarzenegger, State Capital Building, Sacramento, CA 95814

enclosures

Statement

Central Coast Water Quality Pres, Inc.
P.O. Box 1049
Watsonville, Ca 95077

* I put a stop payment on this check yesterday 6-3-10. (83)

Date
4/30/2010

Santa Barbara Pistachio co.
3380 Highway 33
Maricopa, CA 93252

Phone #	Fax #
831-761-8644	831-761-8695

Terms	Account #	Amount Due	Amount Enc.
	AW3002	$1,586.70	

Date	Transaction	Amount	Balance
12/31/2005	Balance forward		0.00
11/04/2006	INV Due 11/04/2006. Opening balance	793.35	793.35
11/13/2006	PMT #1357. aw3002	-793.35	0.00
12/01/2006	INV #1468. Due 12/01/2006.	793.35	793.35
07/14/2007	PMT #1445.	-793.35	0.00
12/20/2007	INV #1491. Due 01/16/2008.	793.35	793.35
11/08/2008	PMT #1671.	-793.35	0.00
01/03/2009	INV #1401. Due 01/03/2009.	793.35	793.35
01/20/2010	INV #1337. Due 01/20/2010.	793.35	1,586.70

* Paid 6/1/10 Chk # 1879

CURRENT	1-30 DAYS PAST DUE	31-60 DAYS PAST DUE	61-90 DAYS PAST DUE	OVER 90 DAYS PAST DUE	Amount Due
0.00	0.00	0.00	0.00	1,586.70	$1,586.70

P.S. I know how to resolve the water quality issue!
No water = No need to control water quality...
(4.3)

Irrigation draining California groundwater at 'unsustainable' pace

The GRACE satellites have tracked water movement from the Central Valley since 2003

By Sid Perkins

Web edition : Tuesday, December 15th, 2009

SAN FRANCISCO — In the past six years, the irrigation of crops in California's Central Valley has pulled groundwater from aquifers there at rates that are unsustainable if current trends continue, scientists say.

The Central Valley, which covers about 52,000 square kilometers, is one of the world's most productive agricultural regions, says Jay Famiglietti, director of the University of California Center for Hydrologic Modeling in Irvine. In 2002, farmers there produced more than 250 different crops worth a total of around $17 billion — an amount that adds up to around one-twelfth of the nation's agricultural production, he notes.

But the productivity of those fertile fields is increasingly at risk: Satellite data suggest that more than 20 cubic kilometers of groundwater has been pumped from the valley's aquifers since October 2003, Famiglietti reported December 14 at the fall meeting of the American Geophysical Union. That's roughly 4 percent the volume of Lake Erie.

Famiglietti and his colleagues analyzed data gathered by the twin satellites of the GRACE mission, which can discern and measure the movements of water both above and below the ground, on a month-to-month basis (*SN: 1/4/03, p. 6*). Between October 2003 and March 2009, the San Joaquin and Sacramento River basins — the watersheds that include the Central Valley — together lost more than 31 cubic kilometers of water, the data suggest. About one-third of that net loss evaporated from the soil or flowed out to sea after melting from the region's snowpack or being pulled from surface reservoirs in those watersheds.

The rest, about 20.3 cubic kilometers, drained away after being pulled from underground aquifers for irrigation, the researchers speculate.

On average, water tables across the region dropped about 24 centimeters per year during the 66-month period the researchers studied. But most of the water loss occurred in the San Joaquin River basin, so water tables there probably dropped an average of about 50 centimeters each year.

Because central California has been afflicted by drought conditions since 2006, state and local governments have imposed restrictions on how much water can be withdrawn from surface reservoirs. Those restrictions, in turn, have triggered an even greater reliance on groundwater withdrawals, just at a time when the precipitation needed to recharge the region's aquifers is in short supply, says Famiglietti.

The satellites can detect changes in the amount of water in a region but not how much is left. Regardless of how much water remains in the aquifer, the researchers note that a declining water table will degrade water quality and will eventually force Californians to drill deeper wells. In the long term, continued depletions of groundwater in the region could pose a significant threat to U.S. food production and to the California economy, the researchers contend.

"By providing data on large-scale groundwater depletion rates, GRACE can help California water managers make informed decisions about allocating water resources," says Michael Watkins, a project scientist at NASA's Jet Propulsion Laboratory in Pasadena, Calif.

DONALD BREN SCHOOL OF
ENVIRONMENTAL SCIENCE & MANAGEMENT
UNIVERSITY OF CALIFORNIA, SANTA BARBARA

GROUP PROJECT BRIEF

CONSERVATION ASSESSMENT FOR THE CUYAMA VALLEY: CURRENT CONDITIONS AND PLANNING SCENARIOS

Project Members:
Caitlin Andersen
Bridget Dobrowski
Melissa Harris
Edith Moreno
Patrick Roehrdanz

Project Advisor:
Frank Davis

ON THE WEB AT HTTP://WWW.BREN.UCSB.EDU/~TNC2

SPRING 2009

PROJECT OVERVIEW

The Nature Conservancy (TNC) of California has identified the Cuyama Valley (Figure 1) as a potential priority area due to its ecological richness, rare plant communities, and potential to function as a wildlife corridor between the conserved lands of the Carrizo Plain National Monument and Los Padres National Forest. The goal of our project was to assess the impacts of human land use on habitat connectivity, groundwater resources, and riparian vegetation. This analysis was performed for current conditions as well as potential futures. Our project results will provide tools and knowledge that will inform conservation planning in the region.

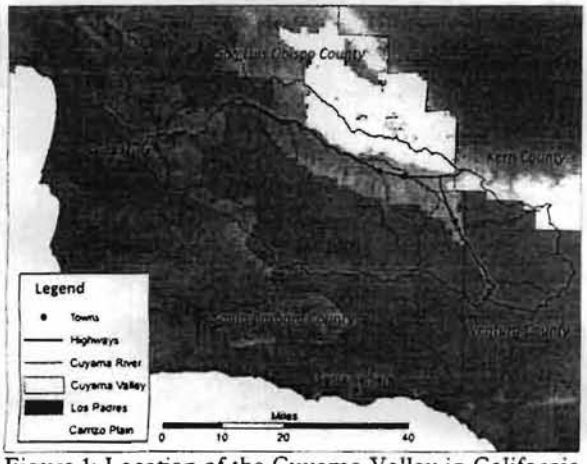


Figure 1: Location of the Cuyama Valley in California.

Results from our analysis allowed us to form a few main conclusions regarding the current status of conservation interests in the valley, as well as the likely impacts of planning scenarios.

- If groundwater extraction continues at its current rate, we estimate that available water will be depleted in 50 years. Future land use will be governed by the availability of this limited resource.
- Habitat connectivity is relatively strong under current conditions and in all modeled scenarios. Major impediments include agriculture, developed regions, and major highways. Bridge underpasses help mitigate the effect of roads on species movement.
- Loss of historically present riparian vegetation and river complexity has occurred in conjunction with increasing groundwater extraction and agriculture.

APPROACH

Land Use – researched the types of human activity within the valley and how each has changed over time

Water Use – updated the groundwater budget for the region and highlighted trends of decline

Historic River Habitat – analyzed how riparian vegetation has changed due to groundwater pumping and land conversion

Habitat Connectivity – used Circuitscape software to model habitat connectivity within the valley for the San Joaquin kit fox, Blunt-nosed leopard lizard, Two-striped gartersnake, and Pronghorn antelope

Scenario Planning – developed four scenarios to evaluate impacts of changing dominant land use practices. All scenarios depict a plausible future for the region in the year 2050. They represent shifts in agriculture, development, and level of dedicated conservation.

LAND USE

Irrigated agriculture is the dominant land use, with 20,000-25,000 acres primarily devoted to row crops rotated between root vegetables, alfalfa, and grains. Rural residential development is currently limited to the unincorporated towns of Cuyama, New Cuyama, and Ventucopa totaling roughly 1,350 residents. Additionally, there are gravel, sand, and gypsum mines and several oil fields within the valley (Figure 2).

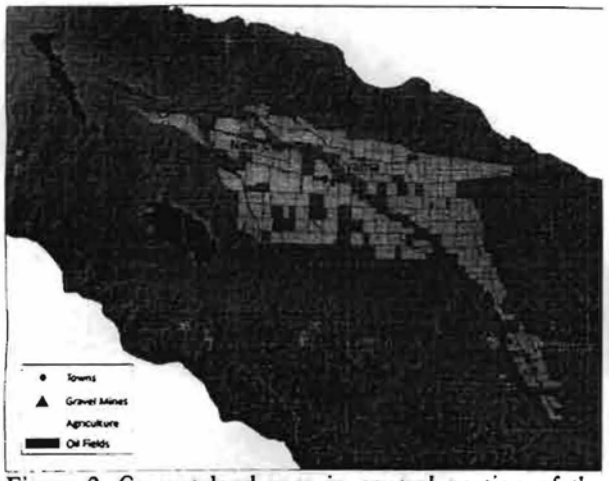


Figure 2: Current land uses in central portion of the Cuyama Valley.

HYDROLOGY AND WATER USE

The Cuyama groundwater basin is the sole source of water for the region and supports all of the land use in the valley. Over 95% of water is applied towards agriculture. The principal source of recharge to the basin is the Cuyama River, which is dry for most of the year except during winter storms. On average, the region receives less than ten inches of rain annually and faces serious hydrologic impacts as a result of low annual rainfall, high evapotranspiration rates, and intensive pumping for agriculture.

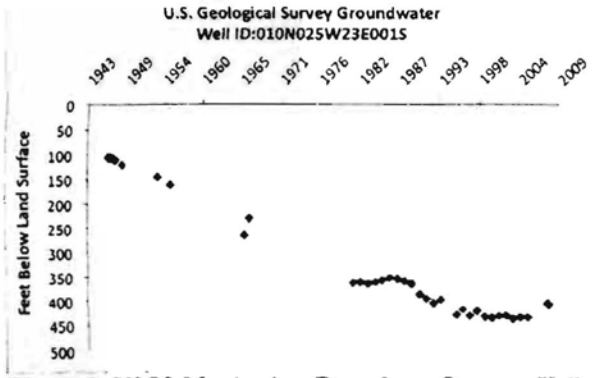


Figure 3: USGS Monitoring Data for a Cuyama Valley well.

Groundwater levels have declined over 300 feet in the last 60 years in some parts of the basin (Figure 3). We calculated that total withdrawals in the basin exceed recharge by just over 30,500 acre-feet/year. If the current rate of groundwater extraction continues, we estimate that the total storage will deplete within 50 years.

HISTORIC RIVER HABITAT

We analyzed historic aerial photographs of the river to understand how groundwater pumping and land conversion has affected riparian vegetation within the valley. Eighteen transects were placed along a section of the river that runs through agriculture, as this area has experienced the most drastic land use changes. The width of the river channel and woody riparian vegetation was measured across each transect and compared over time.

The analysis showed that the largest change occurred between 1938 and 1978, most likely due to the introduction of agriculture (Figure 4). Prominent changes include the narrowing of the river channel and an overall loss of woody vegetation.

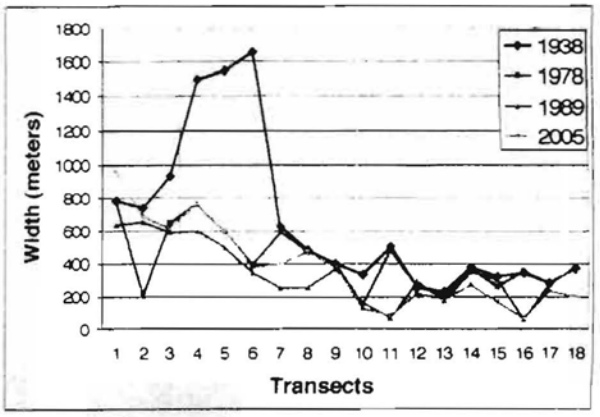


Figure 4: Combined channel and riparian vegetation width through time, from 1938 to 2005.

HABITAT CONNECTIVITY

The purpose of a connectivity analysis is to describe how easily a species can move through a landscape. We used a program called Circuitscape to model habitat connectivity across the valley, as well as along the river. Habitat suitability maps were created for four species – San Joaquin kit fox (*Vulpes macrotis mutica*), Blunt-nosed leopard lizard (*Gambelia sila*), Two-striped gartersnake (*Thamnophis hammondii*), and Pronghorn antelope (*Antilocapra americana*). Habitat types were assigned suitability values between 0 and 100 based on species preference, with a 0 being the least suitable. These habitat preference maps serve as

the input to Circuitscape. The output from Circuitscape (Figure 5) displays species movement in terms of electrical current. High current (bright yellow) indicates "pinch points" where species are funneled through a narrow area. These areas could be interpreted as critical pathways. Where current is less concentrated (green to blue), many options exist for species movement.

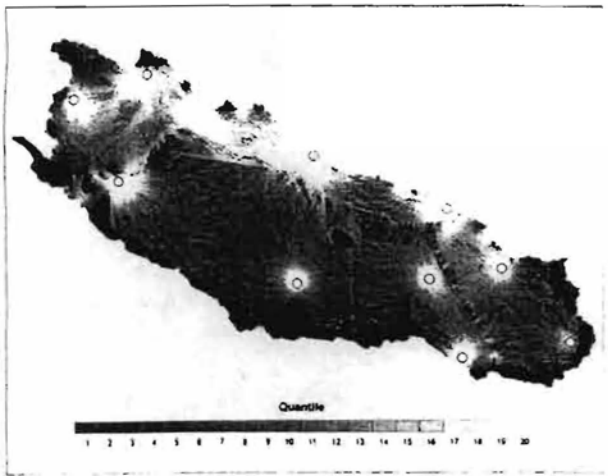


Figure 5: Circuitscape map for San Joaquin kit fox. Yellow and blue indicate high and low levels of current, respectively.

Our analysis showed there is low resistance across the landscape, indicating that connectivity is strong for all four species. Highways 166 and 33 impose the greatest barriers to movement. However, because resistance values overall are very low, this suggests that bridge underpasses provide adequate connections across the valley.

PLANNING SCENARIOS

The future of the Cuyama Valley is uncertain; however, it is important to consider possible future land use changes and their effect on conservation interests. These scenarios depict our vision of how the valley may look by the year 2050.

Ghost Town – groundwater pumping and treatment costs are so high that agriculture ceases and with no replacement industry, the valley is effectively deserted

Wine Country – the valley becomes a vibrant weekend destination providing boutique lodging, fine dining, and locally crafted wines

Satellite City – an increased demand for housing from Santa Maria spurs the growth of Cuyama and New Cuyama and groundwater is entirely diverted from agriculture to support this growth

Nature Preserve – conservation entities invest in the valley creating a fully protected link between the Carrizo Plain National Monument and Los Padres National Forest

Figure 6 illustrates the fundamental differences of each scenario along three axes of comparison: extent of agriculture, magnitude of human development, and level of dedicated conservation activity.

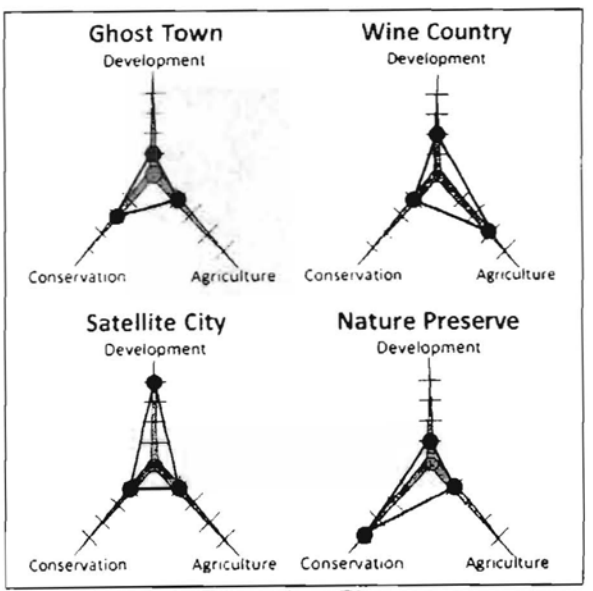


Figure 6: Scenario Comparison Figure.

SCENARIO METHODOLOGY

We made a few assumptions that dictate the outcome of all scenarios. First, it was assumed that no new water supply is brought to the region so development was limited by the natural supply of groundwater in the Wine Country and Satellite City scenarios. Secondly, climate change is expected to have minimal effects on the region by 2050, and was not incorporated into any scenario.

To understand the scenario impacts on the valley's connectivity and groundwater resources, the total acreages of (1) rural development, (2) industry, (3) row crop agriculture, (4) orchards and vineyards, and (5)

natural vegetation were altered and new water budget calculations and connectivity analyses were performed.

	Development	Industrial	Row Crop Agriculture	Orchard & Vineyard	Natural Vegetation
Current Conditions	274	2,643	26,228	2,299	51,220
Ghost Town	274	2,643	26,228	2,299	51,220
Wine Country	846	0	579	3,661	77,577
Satellite City	9,651	3,391	501	0	69,121
Nature Preserve	99	0	137	0	82,428

Table 1: Current and future land use acreage.

Table 1 summarizes how these land use acreages change for each scenario as compared to current conditions. An important feature to note is that land use acreages remain the same between current conditions and the Ghost Town scenario because it was assumed that the landscape would not drastically change. However, a deserted landscape will clearly function differently for species movement. Our Ghost Town connectivity analysis incorporated these considerations by assigning slightly higher suitability values for all species.

IMPACTS ON CONNECTIVITY

We evaluated how each planning scenario impacted habitat connectivity as compared to current conditions. Our analysis shows that resistance to species movement is reduced in all planning scenarios (Figure 7). However, since baseline values are already so small (less than 0.08), the overall gains in habitat connectivity are minimal. To make substantial improvements on habitat connectivity, Highways 166 and 33 would need to be altered to better facilitate species movement.

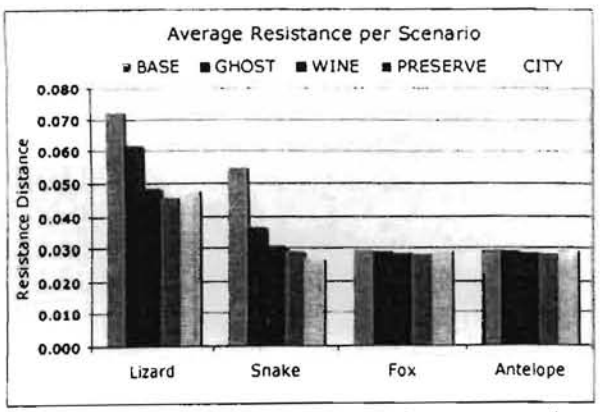


Figure 7: Average resistance per species per scenario.

IMPACTS ON GROUNDWATER

The current groundwater budget was adjusted to reflect changes in water use for each scenario (Table 2). It is important to reiterate that development in the Wine Country and Satellite City scenarios was limited by a groundwater extraction rate equal to recharge, and that no new water supplies are brought to the region.

In all scenarios, the groundwater budget is no longer in a state of deficit. There is now a small surplus in the Wine Country scenario even though agriculture is still expected to be the dominant user. There is a relatively large surplus in the Satellite City scenario, which is attributed to the 40% urban return flow assumed for this scenario. Both the Ghost Town and Nature Preserve scenarios experience significant surplus conditions due to the lack of groundwater extraction for human use. Although the groundwater basin experiences surplus conditions in all scenarios, it would take an appreciable amount of time to recharge the basin to pre-agricultural conditions.

	Recharge AF/Yr	Net Irrigation AF/Yr	Net Muni. & Indust. AF/Yr	Natural Vegetation AF/Yr	Deficit or Surplus AF/Yr
Current Conditions	11,500	40,392	200	1,440	-30,532
Ghost Town	=	⬇	⬇	⬇	10,660
Wine Country	=	⬇	⬆	=	542
Satellite City	=	⬇	⬆	=	5,260
Nature Preserve	=	⬇	⬇	⬆	9,352

Table 2: Water balance calculations for current conditions and planning scenarios.

ACKNOWLEDGEMENTS

Frank Davis, Project Advisor
Tom Maloney, Tejon Ranch Conservancy
Scott Butterfield, The Nature Conservancy
Rusty Brown, Map & Imagery Laboratory, UCSB
Tom Dunne, Bren School, UCSB
Lee Hannah, Bren School, UCSB
Heather Imgrund, Santa Barbara County Planning & Development
Dennis Gibbs, County of Santa Barbara Water Resources Division

CALIFORNIA FARM BUREAU FEDERATION
NATURAL RESOURCES AND ENVIRONMENTAL DIVISION
2300 RIVER PLAZA DRIVE, SACRAMENTO, CA 95833-3293 · PHONE (916) 561-5665 · FAX (916) 561-5691

June 15, 2010

Via U.S. Mail and Email
AgOrder@waterboards.ca.gov
chewitt@waterboards.ca.gov
rbriggs@waterboards.ca.gov

Roger Briggs
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401

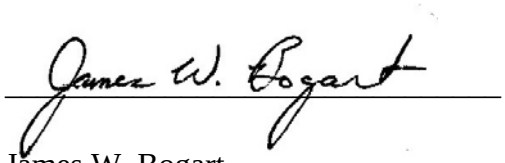
Re: ***Formal Request to Meet with Regional Board Staff Regarding the Preliminary Alternative Agricultural Proposal in Response to Preliminary Staff Recommendations for an Agricultural Order to Control Discharges from Irrigated Lands***

Dear Mr. Briggs,

The following agricultural organizations formally request to meet with Regional Board staff to discuss future agricultural orders or waivers to control discharges from irrigated lands. The purpose of the meeting is to discuss the Preliminary Alternative Agricultural Proposal submitted to the Regional Board on April 1, 2010 in response to the Preliminary Staff Recommendations for an Agricultural Order to Control Discharges from Irrigated Lands. In addition, the agricultural organizations request to discuss, in the context of the Ag Proposal, staff's prioritization of the water quality goals in accordance with the Board's directive. Given the importance of this issue, we respectfully request a timely response to this formal meeting request. Please contact Kari Fisher at (916) 561-5666.

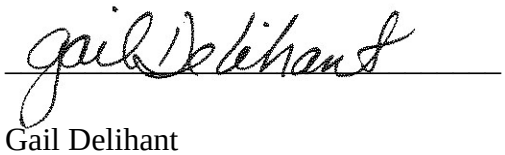
Sincerely,

Kari E. Fisher
Associate Counsel
California Farm Bureau Federation
Monterey County Farm Bureau
San Benito County Farm Bureau
San Luis Obispo County Farm Bureau
San Mateo County Farm Bureau
Santa Clara County Farm Bureau
Santa Cruz County Farm Bureau
Santa Barbara County Farm Bureau

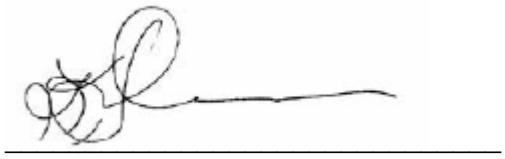


James W. Bogart
President & General Counsel
Grower-Shipper Association of Central California

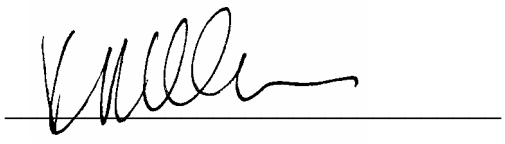
Richard Quandt
President
Grower-Shipper Association of Santa Barbara
and San Luis Obispo Counties



Gail Delihant
Director, CA Government Affairs
Western Growers



Kay Mercer
Executive Director
Central Coast Agricultural Water Quality Coalition



Kris O'Connor
Executive Director
Central Coast Vineyard Team

Tom Bellamore
President
California Avocado Commission

Robert Dolezal
Executive Vice President
California Association of Nurseries and Garden Centers

Rick Tomlinson
Director of Government Affairs
California Strawberry Commission

cc: John H. Hayashi, Board Member
David T. Hodgin, Board Member
Dr. Monica S. Hunter, Board Member
Russell M. Jeffries, Vice Chairman of the Board
Gary C. Shallcross, Board Member
Tom P. O'Malley, Board Member
Roger Briggs, Executive Director
Lisa McCann
Angela Schroeter
Howard Kolb

COUNTY OF SAN BENITO
BOARD OF SUPERVISORS

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RESOLUTION NO 2010-69
Urging the Regional Water Quality Control Board
To Re-establish the 2004 Ag Waiver

WHEREAS, Agriculture is the number one industry within San Benito County and the San Benito River Valley supports some of the most productive farmland in the state; and

WHEREAS, Agriculture within San Benito County is diverse, comprised of fields of peppers, garlic, onions, tomatoes, broccoli, celery and orchards; and

WHEREAS, this diversity speaks volumes about the understanding and responsibility of the water quality concern for the environment and future generations of farmers held by our agricultural industry today; and

WHEREAS, the County Board of Supervisors recognize the public trust it holds, and conducts its business with honesty, integrity and respect for the individual and the various industries, including agriculture, and holds the organization of County government to the same standard; and

WHEREAS, the County Board of Supervisors is concerned about the manner in which the Regional Water Quality Control Board (RWQCB), Region 3, and its staff have approached the renewal of the current Ag Waiver; and

WHEREAS, the County Board of Supervisors is deeply troubled by the substance and tone of the RWQCB staff proposals; and

WHEREAS, the County Board of Supervisors recognizes the Agricultural industry's stewardship and efforts made to improve water quality; and

WHEREAS, the County Board of Supervisors is concerned about RWQCB's staff insistence on a highly regulated program of specific actions and timelines in place of partnership.

NOW THEREFORE BE IT RESOLVED, the San Benito County Board of Supervisors urges the Regional Water Quality Control Board to re-establish the 2004 Ag Waiver based on the collaborative success of the past, and that they work with the agricultural industry to achieve a program that will meet our regional water quality needs.

PASSED AND ADOPTED by the San Benito County Board of Supervisors, State of California, at the meeting of said Board held on the 8th day of June, 2010 by the following vote:

AYES: **SUPERVISORS:** BOTELHO, LOE, BARRIOS, DE LA CRUZ, MONACO
NOES: **SUPERVISORS:** None
ABSENT: **SUPERVISORS:** None

Reb Monaco, Chairman

ATTEST: Linda Churchill
Clerk of the Board
By: Janet Slibbages

Approved as to Legal Form
Matthew W. Granger

Dear Angela

Please pass these communications to the board members. Both Daniel & I appreciate working with you. Previous to working with you we met up with some real slumbers (altho Kati McNiel was a real nice & honest young lady). If there are any changes on our issues please let us know.

God Bless

Joyce

STATE OF CALIF...
CENTRAL COAST ...
Received
JUN 17 2010
895 ... Place, ...
San Luis ...

Communication to Board Members only

Although I was able to attend the May 12th meeting time constraints did not allow me to stay and share my thoughts. As I am the sole caregiver for my 95 year old mother my personal appearance at meetings will the foreseeable future will not be possible. For that reason I will take pen in hand to express my concerns and opinions.

First of all may I express my heart felt gratitude for acting with such integrity where this issue is concerned. One person said to me "you got one sentence for 9 years work". My answer was "yes I sentence but

a very good sentence. Straight forward, to the point without any confusion as to what the definition of "is" is. I am a simple man and I appreciate the sentence as a simple common sence provision that in my opion should make sense to anyone no matter what ideology they hold, and cost neutral to boot. I hope in your future negociations concerning this order that you will stand firm on this provision #28. Only a social and legal beligerant could possibly find fauet with it.

* one concern I might bring up; what teeth does this provision hold to bear. Historicaly for example S.B. County has a dumping law that

entails a $25,000.00 doclar fine while S.L.O. county has a law concerning dumping with not 1 iota of "teeth". There for beligreants have no incentive to do any thing but stick their middle finger in the air and continue as they did for decades. I'm sure you get my drift.

* I must admitt I am a Neanderthal when it comes to comprehending "Buerospeak" such as compared your "Order" paperwork. After reviewing it several times I was confused to some extent about what to appeared to be 1 provision that conflicted with another in a number of Cases. It is my fear that there might be some unintended consequences

em that might eminate from such an extensive order. In this arena it is my suggestion that you listen carefully to Ms. Hayashi concerning possible pit falls that might result from conflicting provisions or by painting agriculture with a "broad brush". This man has had feet on the ground experience just as Ms. Diaz + I did over a life time in the field of agriculture. By his actions in Nipomo where he walked the walk of responsible Ag operations he has proven to be a man of quality and not part of the belligerant fringe of his Ag family. Experience is an exceptional form of

knowledge and is difficult to grasp without actual experience.

* I found the position of the Ag folks at the May 12th interesting and in a few cases compelling. I found one position however absolutely disgusting and an attempt to circumvent the good work you have done. It was very telling that their lawyer wanted Fish + Game (an agency virulently hated by ever Ag person I know) to hold the reins over water issues. I cannot speak for other areas but I can speak with full surity without a shaddow of a doubt that this totaly dysfunctional agency

in Nipomo operated with unmitigated dereliction of duty at best. At worst they operated with total corruption under the color of authority. It is no wonder that the Ag lawyer wants the water Board out of the picture: You actually (have & should) did your job with integrity. They (have) could easily tripped the poisoning belligerents in the bud in 2001 but instead were in bed with them working against their mandated duty at every foot fall. If they are given the reins, mark my words their will be NO IMPlemention worth the powder to blow it to hell and

belligerents will be emboldened to continue their destructive practices just as they did in Nipomo for decades. If you ever need a deposition from me as to their history of depredation in Nipomo (to strengthen your agency's position) you need but to ask.

Again I thank you Ladyp. Ms. Kelman for your integrity in your inclusion of provision #28 in your "order". Please keep me informed Angela through Angela as this situation evolves.

Sincerely

Robin Briley

AKA Creek Dog

Communication to Board member only

Mr. Diaz has asked me to articulate and opinions some of his concerns on this issue. First of all he would like to apologize for his confrontational comments concerning a particular individual on the board. Mr. Diaz's comments were driven by two things: #1 Mr. Diaz just the same as the board members had sat through 9½ hours of serious banter concerning the issue. After 9½ hours he was still in a serious mode when 2 member of the board were engaging in a chuckle fest in a noticeable manner. He found this activity insulting and unproffesional. Had he had 60 more

seconds (we were offered 2 to 3 min.) he could have finished his thought that the individual in question was not the polluter However the trash & chemical pollution still exists today on that parcel and others to this day. This leads to his second legitament concern. Why after years of being aware of this situation has there been no implementation in the cleanup of the residual material still in the watercourses from 2001 and 2006. Please review the Executive Boards report when Mr. Furukawa proved us to be truthfull by cleaning up "Some" of the trash. Please note that Mr.

Hayashi cleaned up "Some" of the trash showing an admirable stance of good will in doing the right thing for the right ~~thing~~ reason. Contrast that with the beligerants whose responsibility it was to clean up the mess. Daniel feels that by "lawyering up" in the manner they did was transparently Obstructionist to any one with a brain in their head. No more inspections etc etc. By this action their position was and Daniel believes is today, Fuck You! to the community to the overall environment including down stream Agriculturalists and Ladys & Gentelmen especially to you as a

Ag agency. The attitude of this entity demonstrates the need for regulations of their Ag family. Although they no doubt represent 1% (just as Hells Angels represent and are proud of their social and legal belligerance of the motorcycle "community") of the Ag community their in your face arrogance can cause their entire community to be painted by a broad brush. So Daniel as We both understand that the cogs of government turn slowly - but how many years beyond 2006 should it take Daniel believe after 9 years of personal experience that political

dereliction and corruption is behind the lack of implementation very much including Cal. Fish + Game. Of that there is no ~~doubt~~ doubt!!! whatsoever!!!

We have attempted to exercise our rights as citizen to work in concert with good will and truth with a government that we were taught was by and for the people. We have extended our energy we feel in substantial manner and can only hope that the water board can show symbiotic appreciation by attempting to circumvent political obstruction it malfeasance and effect

the clean up of the residual pollution on all the water courses (completely documented) that still exibit an insuet. Mr. Diaz asked that the board communicate with him through Angelica as to the current situation concerning they situation

Thank you

Robb Bishop for

Daniel Diaz

California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101,
San Luis Obispo, California 93401-7906

Attention:
Angela Schroeter, Agricultural Regulatory Program Manager
aschroeter@waterboards.ca.gov
Howard Kolb, Agricultural Order Project Lead Staff
hkolb@waterboards.ca.gov.

Subject:preliminary draft Agricultural Order June 16, 2010

Dear Angela Schroeter and Howard Kolb

Thank you for the opportunity to review the PRELIMINARY DRAFT AGRICULTURAL ORDER CONDITIONALLY WAIVING INDIVIDUAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS (Order). Our review of this Order is oriented from the Sierra Club's interests to preserve and protect natural resources and associated water quality benefits provided by properly functioning streams and wetlands.

We appreciate the dilemma discussed in attachment 5, top of page 8, describing the challenge to implement a program to maximize water quality benefits and minimize implementation problems within the agricultural economy. We believe the draft order is on the right track to achieve the water quality objectives, and it appears compatible with some water resource and flood protection programs in the Central Coast that may contribute to solutions, offsetting costs to agriculturists. We are optimistic that the clarified and new regulations in the Order will result in agricultural practices that are able to integrate with multi-objective water resource and flood protection infrastructure projects and thus distribute and reduce costs among stakeholders. Presently in the Pajaro River Watershed, there are a few such projects which are organized into an Integrated Resource Water Management Plan (IRWMP) intended to benefit agricultural and other stakeholders in the Watershed. We anticipate the "Farm Plan" development process discussed in the Order will provide for water quality improvements that can be credited to the Watershed Projects, increasing their "Benefit Cost" ratios thus making them more competitive for federal and state funding. Our comments below elaborate on this point in the Pajaro River Watershed, with which we are most familiar, but which we anticipate may be generic to the Central Coast region.

Our review comments are organized about Attachment B, utilizing the page number and topic to list our comments as follows:

Page 5, Farm Plan <CLARIFICATION AND ADDITION >

Farm Plan must focus on resolving priority water quality issues related to individual operations and the watershed. Farm Plan must include irrigation management, pesticide management, nutrient management, salinity and sediment management, and Plan must identify and schedule implementation of practices to eliminate or minimize discharge of waste using best practicable treatment or control. Farm Plan nutrient management plan element must be certified by professional to be protective of water quality. Farm Plan must be updated at least annually. Upon notice by the Executive Officer, Farm Plan must be submitted to the Water Board. Discharger must modify Farm Plan upon notice by the Executive Officer. Farm Plan must include photo documentation of aquatic habitat.

We agree that the Farm Plan needs to address "*resolving priority water quality issues related to individual operations and the watershed."* However, it appears the Draft Order prioritizes irrigation run-off issues over the matter of storm water drainage. We believe both issues should be addressed in the Final Order. Poorly managed storm water has potential adverse water quality impacts to local drainage, regional receiving channels and natural streams. Lower watershed communities are at a significantly greater risk than those in the upper watershed due to the accumulated impacts as the watershed area increases. Strategic storm water management on the other hand may address this disparity and conversely have greater potential positive impacts to receiving waters if multi-objective goals for drainage and flood control projects are pursued watershed wide. Contemporary state and federal flood protection programs are capable of accommodating such multi-objective planning, and there are such projects presently taking place in the Pajaro River Watershed. These projects include the USACE Upper Llagas Creek Project in the Morgan Hill area and the USACE Lower Pajaro River Project in the Watsonville area. Presently these projects are preparing environmental impact studies including NEPA and CEQA documents which are expected to be reviewed by the CCRWCB during the interim renewal period of time for this Order. The Sierra Club will advocate said contemporary multi-objective planning policy for these projects and point out how they can contribute or support the beneficial uses of water as discussed in the Attachment 2 page of this Draft Order. We believe water quality problem solving needs to occur at various scales and take into account the roles and responsibilities of all involved.

We support the CCRWQCB's focus on the "Farm Plan", and its role of contributing to solutions at the local scale, but believe it needs to be strategically linked to large scale solutions such as the aforementioned flood control projects. We are optimistic that the water resource-flood control infrastructure planned for the Pajaro River Watershed will provide for a robust agricultural economy because of the contemporary planning, cooperation and progress made in the water resources area. We believe the CCRWQC will need to issue a 401 Water Quality Certification for these projects and should condition them to require water quality improvement design and construction elements.

Despite the growing pains Pajaro River Watershed water agencies have endured lately, continued progress has prevailed producing work plans and funding to solve the Pajaro Watershed's water resource problems. The aforementioned Pajaro River IRWMP could study the pollution issues identified and reported in the Farm Plans. The Final Order should identify this potential IRWMP linkage to multi-objective problem solving to optimize private enterprise and government solutions and funding at the watershed scale.

Perhaps an International Standards Organization (ISO) protocol can ultimately be developed specific to Pajaro Valley excess irrigation/ storm water discharge practices adjacent to:

- Levees or modified floodplains
- reclaimed water pipelines
- wetlands
- groundwater recharge areas (instream and off stream)

Perhaps the universal recognition of an ISO for water quality could contribute to the array of solutions appropriate to address the food safety confidence issue.

Page 12, Aquatic Habitat Requirements; < ADDITION
See Preliminary Draft Order Attachment B- Terms and Conditions; Part G. >

Proposed requirements include 1) protection of existing perennial, intermittent, or ephemeral streams or riparian or wetland area habitat; 2) minimum buffers widths for perennial and intermittent streams; 3) minimum buffer widths for lakes, wetlands, and estuaries. OPTION to minimum buffer requirements is development and implementation of a Riparian Function Protection and Restoration Plan; 4) identification of aquatic habitat on ranch maps and photo documentation.

We agree that Aquatic Habitat requires protection as a beneficial use including aquatic life (warm or cold freshwater habitat, wildlife habitat). We view aquatic and riparian habitat as inter-dependent with water quality in its role hosting the chemical, physical, and biological processes that function to keep water clean and vital. It serves as an indicator of the integrity and health of a watershed and its resistance to water pollution and groundwater contamination. We are encouraged by the case studies cited in the PRELIMINARY DRAFT STAFF RECOMMENDATIONS FOR AN AGRICULTURAL ORDER page 17 where constructed wetlands were installed providing a measured level of water quality improvement. We anticipate that such wetland projects will require formal planning at the watershed scale in context with features such as river reaches or lakes that perhaps have been modified for flood protection or water supply purposes involving public works infrastructure. We believe the aforementioned projects in the Pajaro River Watershed (and projects in other locations in the region) provide opportunities to address agricultural run-off pollution issues to a significant degree. The local drainage collection and drainage system typically situated at the outboard toe of a flood protection levee could be designed to include a constructed wetland to receive pre-treated agricultural run-off. This run-off would originate from the tail water at the low end of an irrigated field shown on the Farm Plan and could drain into the levee drainage/wetland system for interim storage, treatment, monitoring, and appropriate remedial measures before it would be discharged onto the lower terrace floodplain and riparian corridor. This highly productive zone of hydrophilic vegetation could be managed to improve water quality in the receiving water body.

Thank you for the opportunity to comment on the Draft Order and we look forward to participating at your July 8, 2010 public meeting in Watsonville.

Sincerely,
Kenn Reiller
Chair, Sierra Club Ventana Chapter
Water Committee

Carol Georgi <cdgeorgi@hotmail.com> 06/18/10 16:37 >>>
****

Surfrider Foundation San Luis Bay Chapter www.slosurfrider.org

Attn: Angela Schroeter Agricultural Regulatory Program Manager California
Regional Water Quality Control Board
895 Aerovista Place, Suite 101San Luis Obispo, CA 93401-7906
RE: public comment of the Agricultural Order

Dear Water Quality Board Members,

The Surfrider Foundation San Luis Bay Chapter is in support of the California Agricultural Order for water quality regulations for agricultural runoff. Our members use our coastal waters daily, and many report illness and disgust when agriculture runoff is present in the water. We have learned that urea in agricultural runoff results in the formation of domoic acid that acts as a neurotoxin in marine mammals and humans. This chemical reaction is one example of the harmful results caused by agricultural runoff and is documented by Dr Raphael Kudela of UCSC who informed SLO county of these health risks on April 29, 2010 at the Marine Interests Group. Dr Kudela's research is included at the bottom of this letter.

We need protection from agricultural runoff for our health and safety. We deserve to have non-polluted coastal waters; our beaches are not sewers. We understand that there are about 1500 farms on the central coast. Unregulated agricultural runoff is exposing citizens to health risks and asking the coastal communities to foot the bills of cleaning up rivers, streams, and coastal waters from pollution caused by agricultural runoff.

Non-polluted coastal waters is an important resource for all of California. We must work together to keep pollutants and toxins out of the water.

Yours Sincerely,

Jeff Pienak, ChairSurfrider Foundation San Luis Bay Chapter
www.slosurfrider.org

Addemdum: Dr Raphael Kudela's research regarding the harm to humans from urea in coastal waters as a result of agricultural runoff.

Dr Raphael Kudela of UCSC spoke at the April MIG meeting"Marine Animals as Ocean Sentinels of Harmful Algae: Early Warning or ignored Problem"
Notes:the presence of urea in ocean water is rare; humans are the main source of urea in the ocean water from Agricultural runoff & septic system leakage. Urea in ocean water increases (doubles) the growth of the toxic bloom associated with red tide. When the toxic bloom growth is doubled, toxicity results. Domoic Acid (DA) is a chemical that is produced by algae or plankton when it blooms. In marine mammals and humans, DA is a tricarboxylic acid that acts as a neurotoxin.
65% of CA sea lion and sea otters studied, tested positive for domoic acid in their blood----------domoic acid information and

history:http://www.cimwi.org/stranded_domoic.html
----------this url is the pdf of Dr. Raphail Kudela's scientific research on toxic algae in California.

http://oceansci.ucsc.edu/faculty/documents/1_Kudela_HA_2008.pdfAccepted Manuscript
Title: The Potential Role of Anthropogenically Derived Nitrogen in the

Growth of Harmful Algae in California, USA
Authors: Raphael M. Kudela, Jenny Q. Lane, William P. Cochlan
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The Potential Role of Anthropogenically Derived Nitrogen in the Growth

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The Potential Role of Anthropogenically Derived Nitrogen in the Growth of Harmful Algae in California, USA

Raphael M. Kudela1*, Jenny Q. Lane1, and William P. Cochlan2
1Ocean Sciences Department, University of California Santa Cruz, 1156 High Street, Santa Cruz, CA 95064, USA
2Romberg Tiburon Center for Environmental Studies, San Francisco State University, 3152 Paradise Drive, Tiburon, CA 94920-1250, USA
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1

1 Abstract 2 3 Cultural eutrophication is frequently invoked as one factor in the global increase in 4 harmful algal blooms, but is difficult to definitively prove due to the myriad of factors 5 influencing coastal phytoplankton bloom development. To assess whether eutrophication 6 could be a factor in the development of harmful algal blooms in California (USA), we 7 review the ecophysiological potential for urea uptake by Pseudo-nitzschia australis 8 (Bacillariophyceae), Heterosigma akashiwo (Raphidophyceae), and Lingulodinium 9 polyedrum (Dinophyceae), all of which have been found at bloom concentrations and/or exhibited noxious effects in recent years in California coastal waters. We include new 11 measurements from a large (Chlorophyll a > 500 mg m-3) red tide event dominated by 12 Akashiwo sanguinea (Dinophyceae) in Monterey Bay, CA during September 2006. All of 13 these phytoplankton are capable of using nitrate, ammonium, and urea, although their 14 preference for these nitrogenous substrates varies. Using published data and recent 15 coastal time series measurements conducted in Monterey Bay and San Francisco Bay, 16 CA, we show that urea, presumably from coastal eutrophication, was present in 17 California waters at measurable concentrations during past harmful algal bloom events. 18 Based on these observations, we suggest that urea uptake could potentially sustain these 19 harmful algae, and that urea, which is seldom measured as part of coastal monitoring 20 programs, may be associated with these harmful algal events in California. 21 22 23 Key Words: ammonium, eutrophication, nitrate, nitrogen uptake kinetics, urea

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Kudela lab web pageLatest Satellite ImageryCal-PReEMPT (HAB monitoring)Class web pagesOcea130/230 Biological OceanographyOcea 101

The Marine Environment Overview: I am a phytoplankton ecologist who

wishes to understand the fundamental question: what controls phytoplankton growth and distribution in the ocean. More specifically, how do the multiple interactions of light, macro- and micronutrients and phytoplankton physiology determine the rates, processes, and patterns we observe in the marine environment? Oceanography is rapidly moving away from observational science towards an understanding of underlying mechanistic processes at all scales, in part because of the wealth of revolutionary new technological and scientific advances. My approach is to combine a suite of 3 tools: (1) remotely sensed data from moorings and satellites in combination with biological models; (2) novel bio-optical methods assaying phytoplankton physiology; and (3) the refinement of stable and radio-tracer isotopes. Specific Research: We are currently working on several projects in the laboratory and field, primarily in central California. CIMT: Within the Monterey Bay National

Marine Sanctuary, we are part of a multi-institution program (the Center for Integrated Marine Technology) which aims to understand the linkages from wind to whales. We are involved in the shipboard and remote sensing components of this project. The CIMT websitehas many more details. ECOHAB: Within the Monterey Bay region, there are several funded groups working closely together on the Pseudo-nitzschia/domoic acid complex. We are funded to develop in the field and laboratory an understanding of how Si, N, C, and light interact physiologically to trigger DA production, and to develop molecular markers for toxin production.

Colleagues at MBARI (C. Scholin), UCSC (D. Garrison, M. Silver, J. Goldman, E. Rue), U. Maine (M. Wells), and MLML (G.J. Smith) are working on related aspects, ranging from the role of metal availability, including iron, to the transfer of toxin through the marine food web. Cal-PReEMPT: In collaboration with Dr. Gregg Langlois at the California Department of Health Services, we are developing better monitoring tools for Harmful Algal Blooms occurring in the state of California, with funding from the NOAA MERHAB program. This is a multi-year effort involving Peter Miller (lead PI) and Mary Silver at UCSC, as well as Rick Stumpf (NOAA) and collaborators in Oregon and Washington states. See the Cal-PreEMPT webpagefor details.

NASA projects: A physiological model of nitrogen utilization by natural phytoplankton assemblages which can predict new production in coastal waters using remotely sensed data (AVHRR and ocean color data) or moorings was developed as part of NASA grant NAG5-6563. As part of the EPA funded Coastal Intensive Sites Network (CISNet; NASA grant NAG5-7632), we also developed regional algorithms (pigments, CDOM, sediments, new production) along a gradient of water conditions, from the blue-water stations occupied off central California to the turbid waters of San Pablo Bay. These methods are currently being applied to ongoing projects, including CoOP and CIMT.

CoOP: As part of an NSF-sponsored Coastal Ocean Projects program, we were part of a 5-year study of coastal productivity (The Role of Wind Driven Transport in Shelf Productivity). This program has 3 field years, with a combination of instrumented moorings and cruises, followed by two years of data assimilation and development of a coupled physical-biological model. We are responsible for the bio-optical component and shipboard process studies, and is developing regional algorithms for new and primary production. More information is available here.

As part of the CoOP program River Influences on Shelf Ecosystems (RISE), we are currently evaluating the role of the Columbia River Plume in modulating coastal productivity. This program is also 5 years, with 4 field seasons and an integrated modeling component. More information is available here.

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