



SoCal SETAC NEWS

Society Of Environmental Toxicology and Chemistry
Southern California Chapter

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President's Corner...

KAT PRICKETT
SoCAL SETAC PRESIDENT

So it begins... my first "President's Corner" article. I would like to start by recognizing the wonderful commitment and efforts of the Officers and Board members who finished their service this past June. Marilyn Schwartz, now past Past President, thank you for your many (many) years of service to the chapter. You're finally free, but we hope we can entice you back some time, and we know we'll see you at SoCal SETAC events. Many thanks also to outgoing Board members Jennifer Jones, Chris Stransky, and Ian Adam for all their hard work. I'd also like to extend a thanks to Treasurer Lan Wiborg and Board member Gerald McGowen, whose terms were up, but heroically agreed to stay on another year. Other officers and Board member continuing their service are Past President Joe Gully (my inspiration), the incredibly capable Secretary Karen Riveles, newly drafted Vice-President Steve Bay, who has taken over as editor of the newsletter, and Board members Daniel Schlenk and Tim Mikel. Welcome, welcome to new Board members Fabienne Reisen, Arturo Keller, Jeff Armstrong, and Michelle Anghera, who graciously agreed to fill in for an unexpected vacancy in the 2001-2003 Board term. What a strong group to help build on the success of the past few years!

I hope those of you who attended the 2001 Annual Meeting in Long Beach enjoyed and learned from the program. We'd love to hear your comments and suggestions. Please email any Officer or Board member your thoughts. What did you like? How can we

make next year's meeting better? I would like to thank instructors (Dr. Arturo Keller and Steve Bay), plenary speakers (Mas Dojiri, Shelly Luce, Chip Johnson, Deborah Denton, and John Helly), session chairs (Ken Schiff, Steve Bay, Fabienne Reisen, Paul Krause, and Tim Mikel), all platform and poster presenters, and those who volunteered at the registration desk. All of you made the meeting the success it was. For those of you who missed the Annual Meeting, be sure to check out our extended Annual Meeting coverage in this issue of the newsletter. I hope you can join us next year!

Finally, I have to say that I am very excited for the Chapter. The Annual Meetings, dinner meetings, and newsletter have been established as regularly occurring benefits to the membership through the dedication and work of outgoing, current, and incoming Officers and Board members. It's time for all of us to consider what other benefits we would like to gain from our association. Please bring any ideas to the attention of any of the Officers or Board. We are here to facilitate changes that you, the membership, would like to see in our Chapter.

MEET THE BOARD

***Steve Bay, Southern California Coastal
Water Research Project***

I have been a southern California boy my entire life, having been born in Torrance and spending most of my childhood on the Palos Verdes Peninsula. In preparing for this article, I realize that much of my childhood was spent conducting experiments and refining my experimental skills for future application as a scientist. In fact, one of my earliest childhood memories involved an experiment in underwater physics. At the age of approximately three I conclusively proved my father's hypothesis, that his watch was not waterproof, was true using only a bathtub full of water.

Although the findings of the watch study were not well received, I continued to conduct a series of ever more ambitious experiments during my elementary and preteen years. Some of my
(continued on next page)

Meet the board (continued from previous page)

more memorable scientific accomplishments during this time included testing the following hypotheses: 1), the gear shift of a car, when parked on a steep hill, serves no useful purpose (false); 2) secretly hitching a ride on the bumper of a car is a safe and effective way of riding a Flexi-flyer to the top of a hill (also painfully false), and 3) (my favorite) it is impossible to open the door of a clothes dryer from the inside (true).

Following these near-death experiences, I decided to pursue more academic pursuits in middle and high school, interspersed with interludes of minor vandalism and social rebellion. Like former board member Chris Stransky, I too was inspired by the adventures of Jacques Cousteau and resolved to pursue a career as a marine biologist. Perhaps the most significant decision I made in high school was to heed the advice of my counselor, who suggested that I might want to apply to more than one college (just in case UC San Diego passed on the opportunity to accept my application). Although I was given a partial scholarship to UCSD and unaware that this was one of the highest rated party schools in the nation, I chose to attend my second choice, Cal State Long Beach.

Attending CSULB was a fateful choice, for my undergraduate and graduate studies there led to working with Dr. Donald J. Reish (an internationally renowned expert on polychaetes and marine toxicology) and meeting my future wife, Cathy. Research for my masters degree focused upon the physiological effects of trace metals on a polychete worm and involved measuring oxygen consumption rates, growth, and using radioisotopes to measure the subcellular distribution of chromium. Along the way, I was fortunate enough to work on various projects in the "worm lab", such as measuring invertebrate colonization rates in the harbor, learning crustacean taxonomy, and studying the fauna living on barrels of radioactive waste recovered from the bottom of the Atlantic Ocean.

My association with Dr. Reish helped me obtain several part-time jobs during graduate school, including one as a technician in the bioassay department at SCCWRP in 1980. I have stayed at SCCWRP all this time, for I recognized that this was a unique organization that presented an opportunity to conduct creative research and produce information that would be used to improve the marine environment. True to my expectations, I have had an extremely diverse set of experiences at SCCWRP, including finding innovative ways to fabricate scientific equipment from items found at Home Depot, measuring mitochondrial enzyme activity and



cies.

Most of my free time is spent watching (and funding) my daughter as she experiences high school and her many outside activities. In addition, I enjoy making things with my hands, such as fish prints, tacky Christmas presents for my staff, an occasional biological illustration, and various things out of wood. My most ambitious project to date has been building an electric car, which is a Mazda truck converted to all electric power using batteries (pictured). While not as sexy as Tim Mikel's Jaguar, I have traveled over 50,000 miles without noise pollution and tailpipe emissions during my daily commute to SCCWRP.

As your vice-president, I look forward to helping SoCal SETAC grow in both reputation and size.

BOARD MEETING MINUTES JUNE 21, 2001

Contributed by Karen Riveles

On June 21, 2001, a SoCal SETAC Officer and Board of Directors Meeting was held at AMEC in San Diego, CA. Lan Wiborg presented the Treasurer's Report. She is currently working on our application for tax-exempt status. The chapter will need to pay \$800 in business taxes with the State of CA because we are now incorporated. Our chapter is incorporated and non-profit, but we are not yet tax exempt. Karen Riveles gave the Secretary's Report. We discussed the need to have a welcome email that can be sent to all new members. The contact information (names and emails) for the Officers and Board of Directors will be updated on the web page. We discussed the idea of having a box on next year's Meeting registration form that can be checked in case someone would like to attend the Meeting, but does not wish to become a member. As of this

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Board Meeting Minutes (continued from previous page)

Board Meeting, we had 159 names in the extended membership database, and 101 current members in the chapter.

The current membership voted in a general election administered via email to elect new members to the Board of Directors. The election results were that Arturo Keller, Jeff Armstrong, and Fabienne Reisen were elected to the Board. Daniel Karen was elected but could not accept the position because he moved out of Southern California. Michelle Anghera, who was also nominated, was elected to replace Daniel. Lan Wiborg will remain Treasurer of the Chapter, Steve Bay was elected Vice President, and Gerry McGowen has extended his Board membership for another year. As Vice President, Steve Bay also becomes our new newsletter editor.

The final stages of planning for the SoCal SETAC Annual Meeting were discussed at the Board Meeting. We worked out the guidelines for sponsorship and advertising for the Annual Meeting, and discussed other logistical concerns.

The next Board Meeting will be in the Ventura/Oxnard Area on **Thursday September 6, 2001**. Any member who is interested may attend the Board Meeting. Email Karen Riveles (karenriv@aol.com) for further details on meeting times and locations.

SoCAL SETAC ANNUAL MEETING

OVERVIEW

Contributed by Kat Prickett

The SoCal SETAC 2001 Annual Meeting was held this year in beautiful downtown Long Beach at the Long Beach Hilton from July 13-14. Two short courses were offered this year. Dr. Arturo Keller from the Bren School at UC Santa Barbara taught *TMDL Development for Watershed Management*. The course was very well received and there is talk of possibly developing the class to be offered at an upcoming SETAC NA Annual meeting. Please see Gerry McGowen's article for further coverage of this course.

In addition, *Demonstration of Marine Monitoring Methods*, was offered by Steve Bay of Southern California Coastal Water Re-

search Project (SCCWRP), in conjunction with the L.A. County Sanitation Districts. This popular field course is discussed further in Steve Bay's article; check it out.

In the evening of the first day, about 40 of the meeting's 55 attendees were on hand for a new and popular addition to the Annual Meeting: the Poster Social. Attendees enjoyed appetizers and their favorite libations while viewing posters, chatting with colleagues, and listening to the brief presentations of student participating in the Best Student Poster competition. For more detail see Karen Riveles' article on this event.

The meeting continued on the following day, starting with the Opening Ceremonies. Debra Denton was on hand to update all of us on the activities of SETAC North America. Outgoing Board members and officers Jennifer Jones, Gerry McGowen, Chris Stransky, and Marilyn Schwartz were recognized and honored for their contribution to the chapter. In addition, Joe Gully presented the Marissa Gaumont Memorial Award of Service, a \$200 donation in the name of outgoing Past President Marilyn Schwartz to Kids at Heart, an organization that tutors economically and socially disadvantaged youth in the region.

Following the Opening Ceremonies, the TMDL theme continued with the start of the Plenary Session, chaired by Ken Schiff from SCCWRP. Each plenary speaker discussed a different aspect of the TMDL process. Mas Dojiri (City of Los Angeles) provided an overview to the process, Shelly Luce (Heal the Bay) discussed the 303(d) listing process, Chip Johnson (US Navy, Space and Naval Warfare Systems Center) provided insight into pollutant source analysis, Debra Denton (US EPA) spoke about identifying targets in the context of TMDL, and John Helly (UC San Diego Supercomputer Center) discussed scalable watershed modeling.

In the afternoon, a total of 16 presentations were given in 4 sessions. Concurrent sessions on the Palos Verdes Shelf and Air Monitoring were held before the afternoon break. After the break, additional presentations were given on TMDL and Watershed issues and Sediment Toxicity and Toxicity Mechanisms. I'd like to thank all those who presented for providing a wide range of interesting platform talks.

I hope all attendees enjoyed the meeting, learned a lot, and were able to make new acquaintances in the field

and renew contact with old colleagues. On to 2002 – let us know what you would like to see at the next Annual Meeting.



Outgoing President Joe Gully passes the buck to new president Kat Prickett.

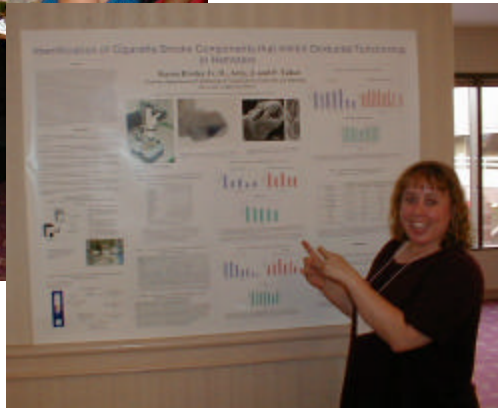
POSTER SOCIAL A GREAT SUCCESS

Contributed by Karen Riveles

This year's SoCal SETAC Annual Meeting started off with a Poster Social. This ice-breaker/student poster session was a great success! Five students shared their research, which included a wide variety of topics including air pollution, copper accumulation, water and sediment quality, and reproductive toxicology. Each student was given five minutes to present their work and then a question and answer period followed. The appetizers and drinks added a festive nature to the event. This event provided an excellent opportunity for the student members of the chapter to participate, as well as a relaxing environment to get to know people in the chapter.



The poster social provided a good opportunity to make new contacts.



Karen Riveles shows off her award-winning poster.

TMDL SHORT COURSE

Contributed by Gerry McGowen

Professor Arturo Keller of the Bren School of Environmental Science and Management, University of California, Santa Barbara presented a short course entitled "TMDL Development for Watershed Management" on July 13. A TMDL or Total Maximum Daily Load is a calculation of the maximum amount of a pollutant that a waterbody can assimilate and still meet water quality standards, and an allocation of that amount to the pollutant's sources after allowing for a margin of safety.

The first section of the course focused on historical aspects, components, and the significance of TMDLs, which will address both point and non-point sources of pollution. Nationally, the top three sources of impairments to waterbodies are sediments, nutrients, and pathogens. Arguably, the greatest strength of the TMDL program is that it endeavors to integrate watershed management. In the second section of the course, Professor Keller discussed models—their use, types, and selection criteria. There are several models available for TMDL use. Two of the major models are BASINS (Better Assessment Science Integrating Point and Nonpoint Sources) and WARMF (Watershed Analysis Risk Management Framework). BASINS was developed by Tetra Tech for

the US EPA in 1996 and is available for free download. Systech Engineering developed WARMF; it is not available for download, nor is it free. Efforts are currently being expended to compare the two programs by using both to analyze the same watersheds.

The costs associated with model development can be substantial and are related to watershed complexity, pre-existing data, and the size of the stakeholder group. The stakeholder group is important to the TMDL process, and it may include a state agency, local agencies, major water users, environmental organizations, community leaders, and others. It is often useful to employ a facilitator to help the stakeholder group reach consensus.

Professor Keller ended the course with a discussion of management options and cost/benefit analysis. A list of management options, including all possible combinations, should be developed, evaluated on a common basis, and ranked. Finally, the costs and benefits of these potential actions need to be evaluated.

TMDLs are likely to play a major role in the Nation's efforts to clean its waterbodies over the next decade or two. The 16 individuals that took this course were provided a good introduction to the TMDL process. If you missed this opportunity to take this course, you may get a second chance. Interest was expressed for having this course offered at an upcoming SETAC national meeting.

MONITORING METHODS SHORT COURSE

Contributed by Steve Bay

The "Demonstration of Marine Monitoring Methods" short course was truly a hands on experience. Eleven participants, who included students and scientists from public and private organizations, spent the morning sampling mud, sorting fish, and examining oceanographic data. The course was jointly presented by the Southern California Coastal Water Research Project (Steve Bay)

and the County Sanitation Districts of Los Angeles County (Dave Montagne).

All activities were conducted at sea aboard the Ocean Sentinel, one of the Sanitation Districts' monitoring vessels. The course emphasized the procedures used for collecting chemical and biological samples from the sea floor. The use of a CTD to collect water column data for salinity, temperature, dissolved oxygen, and chlorophyll was also demonstrated. A manual describing standardized procedures for field sampling has been developed for use in regional surveys of southern California and is available at www.sccwrp.org.

A Van Veen grab was used to collect sediment from two locations off the Palos Verdes peninsula. Procedures for the collection of chemistry, toxicity, and benthic macrofauna samples from the grabs were demonstrated, along with a discussion of QA/QC procedures. An otter trawl was used to collect fish and epibenthic

invertebrates from each location. The course participants assisted with sorting the trawl catch and making measurements of size class, biomass, and external abnormalities.

Many thanks are due to the marine operations staff of the County Sanitation Districts for sharing their expertise during the course and providing a unique learning experience aboard the Ocean Sentinel.



NorCal SETAC president Laura Valoppi tries her hand at processing a fish trawl.

Membership Reminder

It's time to renew your SoCal SETAC membership!!!

Membership fees for 2001-2002 are now due (all memberships are due for renewal on July 1 of each year).

Please fill out a membership form (found both in this newsletter and on the website) so we can update your contact information. Send the form and your check made out to SoCal SETAC to:

Karen Riveles
SoCal SETAC Secretary
P.O. Box 655
Riverside, CA. 92502

If you have any questions regarding your membership status, you can email Karen at karenriv@aol.com

If you attended the annual meeting, your membership was automatically renewed.

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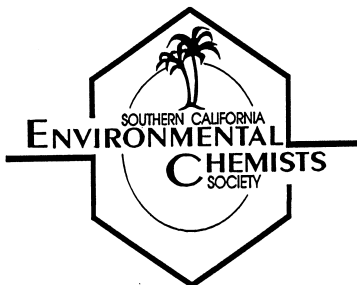
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- aquatic resources
- restoration ecology
- environmental compliance

the Team... the Tools... the Results

ENTRIX

The SOUTHERN CALIFORNIA ENVIRONMENTAL CHEMISTS SOCIETY
would like to invite you to attend our



GENERAL MEETING
Tuesday, September 18, 2001

"Bight '98 Survey Results"

hosted by

City of Los Angeles Hyperion Treatment Plant

12000 Vista Del Mar
Playa Del Rey, CA

Enter at Gate C and check in with the guard.

Please RSVP by 9/14/01

at Dianay@sccwrp.org or at (714) 372-9213

Admission is no-charge if you pre-register or \$10 at the door

Agenda

8-9am Registration

9:00 "Survey Results Overview" Steven Weisberg, Director, Southern California Coastal Water Research Project (SCCWRP)

9:40 "Southern California Bight: 1998 Regional Monitoring; Sediment Chemistry." Dr. Jim Noblet, SCCWRP

10:20 Break

10:40 "Sediment Toxicity in the Southern California Bight: 1998 Regional Monitoring." Steven M. Bay, SCCWRP

11:20 "Preliminary results of Bight'98 Fish Bioaccumulation Study" Dr. M. James Allen, SCCWRP

12:00 Lunch hosted by SCECS

1:00pm Lab Tour

CALENDAR OF EVENTS

Contributed by Marilyn Schwartz

AUGUST 2001

Third International Workshop on Earthworm Ecotoxicology (IWEE) 26-29 August, 2001,
University of Aarhus, Denmark.
mho@dmu.dk

SETAC UK Branch Annual Meeting Pollution in a Changing Environment: Implications for Environmental Management.
29-31 August 2001. University of East Anglia, Norwich, UK.
b.reid@uea.ac.uk

SEPTEMBER 2001

11th Southern States Annual Environmental Conference & Exhibition 24-27 September
Biloxi, Mississippi
carpenter@che.msstate.edu

Wildlife Society 8th Annual Meeting
25 - 29 September, Reno, Nevada
www.wildlife.org/2001.html

28th Annual AQUATIC TOXICITY WORKSHOP
30 September – 3 October
Winnipeg, Manitoba
www.atw.ca

OCTOBER 2001

1st International Fresenius Conference of Aquatic & Terrestrial Ecotoxicology & Risk Management
22 - 23 October, Frankfurt am Main, Germany
smummenbrauer@akademie-fresenius.de

NOVEMBER 2001

22nd Annual SETAC Meeting.
11 – 15 November
Baltimore, Maryland.

Society of Toxicology: Use of Genomic Data in Risk Assessment: State of the Art 2001.
7 - 8 November, Washington, DC
<http://www.toxicology.org/memberservices/FormsApps/genomics.pdf>

DECEMBER 2001

Society for Risk Analysis Annual Meeting
2 - 5 December
Washington, DC
www.sra.org



SETAC 22nd Annual Meeting
Baltimore Convention Center
11 - 15 November 2001

***“Changing Environmental Awareness:
Societal Concerns and Scientific Responses”***

SHORT COURSES INCLUDE:

Whole Effluent Toxicity (Part 2)
Toxicity Identification Evaluations
Predicting the Toxicity of Metals
Determination of Biological Impairment
Application of GIS
Interviewing: A Workshop for Students
Molecular Techniques in Ecotoxicology

SPECIAL SYMPOSIA:

Perfluorinated Chemicals
Problems of Scale in Assessment of
Contaminant Fate and Transport
Endocrine Disruptors: Policy, Science and Issues
Advances in Regional and Coastal Ecological
Assessments
Hydrocarbons in Ecological Assessments

ALSO:

72 platform sessions and over 1,000 posters
SoCal SETAC meeting at noon on Tuesday
Banquet at the National Aquarium

Registration Forms and Hotel Selection
available online

Check www.setac.org for details

SoCal SETAC Officers and Board of Directors – Fiscal Year 2001-2002

POSITION	NAME & AFFILIATION	RESPONSIBILITIES
Past President	Joe Gully L.A. County Sanitation Districts jgully@lacsdsd.org	Advisor/Stand-in for President and Vice-President. Program Committee Chair for SoCal SETAC Annual Meeting
President	Kat Prickett Arcadis JSA kprickett@jsae.com	National SETAC Liaison Board Agenda & Action Items
Vice-President	Steve Bay SCCWRP steveb@sccwrp.org	Newsletter Editor
Treasurer	Lan Wiborg City of San Diego, MWWD L7W@sdcity.sannet.gov	Membership Maintenance Meeting Finances & Contracts Non-Profit Application
Secretary	Karen Riveles UC Riverside karenriv@aol.com	Election Coordinator
Board Member (Academic)	Daniel Schlenk UC Riverside Daniel.schlenk@ucr.edu	
Board Member (Private)	Tim Mikel Aquatic Bioassay and Consulting tmikel@vcista.net	
Board Member (Public)	Gerald McGowen City of Los Angeles, EMD gem@san.ci.la.ca.us	
Board Member (Student)	Fabienne Reisen U.C. Riverside fabienne_reisen@hotmail.com	
Board Member (Academic)	Arturo Keller U.C. Santa Barbara keller@bren.ucsb.edu	
Board Member (Private)	Michelle Anghera U.C. Los Angeles angheras@email.msn.com	
Board Member (Public)	Jeff Armstrong Orange County Sanitation District jarmstrong@ocsd.com	

THIS SPACE FOR RENT

CHEAP !!!

FREE Generic Job Announcements and INEXPENSIVE Commercial Advertisements/Announcements are being accepted for future issues of SoCal SETAC News

Free job postings are limited to 5 lines at publication width (2.40 in., 11 point, Times New Roman font) and are subject to edit as needed to format the newsletter. Job announcements beyond the 5-line limit described or including logos can be purchased at the commercial rates. Per issue ad rates are:

Full Page: \$100
Half Page: \$75
Quarter Page: \$50
Eighth Page: \$35

Please send camera-ready advertisements or job listings to Steve Bay at steveb@sccwrp.org for inclusion in the next issue of SoCal SETAC News.

**SOCIETY OF ENVIRONMENTAL TOXICOLOGY AND CHEMISTRY
SOUTHERN CALIFORNIA CHAPTER
2000-2001 APPLICATION FOR MEMBERSHIP**

Please send application and payment (checks payable to Southern California SETAC) to SoCal SETAC, c/o Karen Riveles, P.O. Box 655, Riverside, CA. 92502. Please do not send cash.

Name _____ Affiliation _____
 Address _____ City _____ State _____ Zip _____
 Phone No.: _____ FAX No.: _____ E-Mail* _____

**E-Mail address required to receive newsletter.*

Category of Employer: (Please check one that applies)

Government _____ Industry/Business _____ Academic _____
 Student _____ Consultant _____ Other _____

Technical Background: (Please check one that applies)

Atmospheric Science _____ Engineering _____
 Biology _____ Health Science _____
 Chemistry _____ Toxicology _____
 Earth Science _____
 Ecology _____ Other _____

Degree(s) earned: ___ B.A./B.S. ___ M.A./M.S. ___ Ph.D. ___ P.E. ___ Other _____

Class of Membership for which you are applying: (Please check only one)*

Annual membership covers July 1st - June 30th. Dues paid prior to May 1st will apply only to the current membership cycle.

_____	Active Member	\$20.00 per year
_____	Regional Member	\$20.00 per year
_____	Student Member	\$10.00 per year

***Active Members** and **Regional Members** are qualified professionals who share the stated purpose of the Chapter and who have education, training, research or applied experience in environmental toxicology and/or chemistry. **Active Members** must also be members of National SETAC. **Student Members** are individuals who share the stated purpose of the Chapter and are students showing promise of becoming qualified for Regional or Active status at a later date.

Please check here if you would prefer not to be included in the membership directory _____