



*Promotes the Conservation Development and Wise Utilization of the Fisheries  
A Publication of the California-Nevada Chapter, American Fisheries Society*

VOLUME 21 NUMBER 4

WINTER 1991

## PRESIDENT'S MESSAGE

These are indeed dynamic and challenging times for our Chapter. Environmental pressures resulting from the demand for services from California's 30 million souls is exacting a terrible toll on the aquatic resources of the State. Everyday in California, over 600 housing units are completed with concomitant demands for energy, transportation, water, and raw materials. Never before have fishery resources been so severely threatened nor has the potential existed to reclaim or restore them.

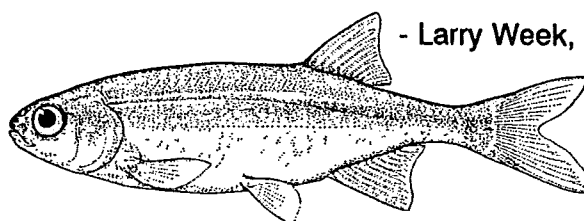
The State of California and the Federal Water Project developers have a long way to go to create an equitable system of water storage, delivery, and allocation that is responsive to the needs of a healthy aquatic environment. As the decades-long struggle languishes, punctuated by an all-time high

water demand and a prolonged drought, the fishery continue their broad decline. Only a favorable successful passage of the Miller-Bradley Bill, currently making its way through Congress, hold promise for the restoration of these fisheries.

The recently convened "Sierra Summit" brought together various competing interests who, for the first time, sat down together to discuss the continuing demise of the fragile ecosystems of the Sierra Nevadas. It is the birthplace of streams for two states, and it has suffered under the banner of "Multiple Use"; a concept that allows grazing, timber, mining, water and energy development in areas better managed for recreational values and environmental integrity. More meetings are planned, and the time for activism is now.

Many of the varied and complex aquatic ecosystems of California and Nevada are steadily declining towards the same end point that the Upper Sacramento River reached in one horrible night. Headlines screamed of the catastrophic and instantaneous loss of this northern Californian treasure. The public was righteously outraged by the event, and media coverage reached international proportions. Even now, there are fervent calls to restore the river and impose tougher regulations to prevent future such episodes. But there are no headlines decrying the slow decline of countless streams, rivers, and estuaries which are silently, inexorably losing their capacity to sustain a once-rich diversity of life. A largely complacent, uninformed society fails to understand the environmental price for that new car, green lawn, glass of wine, or fast-food hamburger.

I challenge each of you in your professional and personal life to provide the best scientific information available to the decision makers and to make a vigorous effort to objectively inform the public of the consequences of those decisions. Seize the moment.



- Larry Week, President

**AMERICAN FISHERIES SOCIETY  
CALIFORNIA-NEVADA CHAPTER  
ANNUAL CONFERENCE**

**February 6, 7, 8, 1992**

**RED LION INN  
Redding, California**

**Thursday, February 6, 1992**

**EEL RIVER SYSTEM SYMPOSIUM-WORKSHOP**

Co-sponsored by  
Cal-Neva Chapter AFS  
California Trout  
California Department of Fish and Game  
Pacific Gas and Electric Company

- |       |  |       |  |
|-------|--|-------|--|
| 8:00  | Registration and Continental Breakfast<br>(Continental Breakfast provided with Registration)   | c.    | Lower Eel (Estuary, Eel RCD, Salt River, Larabee Creek, Cutthroat, Gravel Mining)<br>- <b>Tom Hassler</b>  |
| 8:45  | Introduction to the Symposium - <b>Ken Aasen</b>   | d.    | Van Duzen (Summer Steelhead, Cutthroat, Squawfish, Yager, Palco Program)<br>- DFG Region 1, TBA  |
| 9:00  | Introductory Background and Historical Overview of the Eel River Watershed - <b>Bill Trush</b>   |       |  |
| 9:30  | History and Current Status of Salmonids:<br>a. Chinook, Coho, Fall Steelhead, Cutthroats<br>- <b>Park Stiener</b><br>b. Spring/Summer Steelhead - <b>Weldon Jones</b>  | 12:15 | LUNCH (Provided with Registration)   |
| 10:00 | History and Current Status of Other Fishes<br>- <b>Peter Moyle</b>   | 1:30  | Impacts of the Sacramento Squawfish:<br>a. Effects on Other Fish - <b>Larry Brown</b><br>b. Potter Valley Research - <b>R. Geary</b><br>c. Control Options - <b>Larry Week</b> and <b>Jim Hamilton</b> |
| 10:30 | BREAK  | 3:00  | BREAK  |
| 10:45 | History and Current Status of Fish Habitat:<br>a. Pristine Conditions, Impacts, Status<br>- <b>Gary Flosi</b><br>b. Restoration Needs, Efforts, Results<br>-<br>c. Restoration Evaluation (Physical/Biological)<br>-<br>Sub-basins:<br>a. Main Eel (Pillsbury, Potter, PG&E, Middle, Tomki, Outlet) - <b>Larry Week</b><br>b. South Fork (Coho, Restoration, Angling, Benbow Dam, Bull, Redwood, HTC, Elder)<br>- <b>Scott Downie</b> and <b>Dave Rosgen</b> | 3:15  | Watershed Management Activities<br>a. Eel-Russian Commission - <b>J. Eddy</b><br>b. DFG Basin Plan - DFG TBA   |
|       |  | 4:15  | Comment and Question Panel<br>- <b>Forrest Reynolds</b>  |
|       |  | 5:00  | Concluding Remarks<br>a. <b>Don Erman</b><br>b. <b>Cal Trout</b>   |

# **CALIFORNIA-NEVADA CHAPTER 1991 EXECUTIVE COMMITTEE**

Larry Week, President	Calif. Dept. of Fish & Game P.O. Box 47 Yountville, CA 94599 707-944-5526 (W) 707-252-6452 (H)	Jean Baldridge, Membership	Entrix 2125 Oak Grove Road, Suite 300 Walnut Creek, CA 94598 415-935-9920 (W) 415-680-6675 (H)
Tom Taylor, President Elect	Calif. Dept. of Parks & Recreation Resources Protection Division P.O. Box 942896 Sacramento, CA 94296-0001 916-653-9389 (W) 209-463-2381 (H)	Peter Alexander, Conservation	East Bay Regional Park District 11500 Skyline Blvd. Oakland, CA 94619-2443 415-531-9300
Don Erman, Past President	Dept. of Forestry & Resource Mgt. University of California Berkeley, CA 94708 415-642-5285 (W) 415-548-4004 (H)	Susan Ellis, Continuing Education	2139 Rachael Way Carmichael, CA 95608 916-355-7114(W) 916-484-3026 (H)
Chuck Knutson, Secretary	Calif. Dept. of Fish & Game 1416 Ninth Street, Room 1251 Sacramento, CA 95814 916-653-6894	Tom Lambert, Finance	Pacific Gas & Electric Co. 3400 Crow Canyon Road San Ramon, CA 94583 415-866-5844 (W) 415-939-2292 (H)
Dave Lentz, Treasurer	Calif. Dept. of Fish & Game 1701 Nimbus Road, Suite B Rancho Cordova, CA 95670 916-355-0101 (W)	Steve Parmenter, Exhibits	Calif. Dept. of Fish & Game 407 West Line Street Bishop, CA 93514 619-872-1171 (W)
<b><u>COMMITTEES</u></b>		Martin Brittan, Sacramento Subunit	266 Lark Lane Folsom, CA 95630 916-278-7678 (W) 916-989-4039 (H)
Kevan Urquhart, Awards	994 Graywood Circle Stockton, CA 95209 916-739-4908 (W)	Ralph Hinton, Local Arrangements	Calif. Dept. of Water Resources 2440 N. Main Street Red Bluff, CA 96080 916-527-2263
Seth Macinko, Policy & Resolutions	Dept. of Forestry & Resource Mgt. University of California Berkeley, CA 94708 415-642-5285 (W)	Bob Reavis, Photography Contest	Calif. Dept. of Fish and Game 1416 Ninth Street, Room 1251 Sacramento, CA 95814 916-739-3506
Alan Baracco, Bylaws & Nominations	Calif. Dept. of Fish & Game 1701 Nimbus Road, Suite B Rancho Cordova, CA 95670 916-355-7098 (W) 916-677-3347 (H)	Nick Villa, <i>Pisces</i> Editor	Calif. Dept. of Fish and Game 1701 Nimbus Road, Suite B Rancho Cordova, CA 95670 916-355-7096 (W) (916) 355-7102 FAX

## **PISCES EDITOR NEEDED**

The Chapter is seeking an enthusiastic and hard-working individual to be our next *Pisces* editor. The individual will serve on the Executive Committee. If you are interested or know someone who may be interested, please contact Larry Week or Nick Villa.

# PRE-REGISTRATION FORM

CAL-NEVA AFS ANNUAL CONFERENCE **FEBRUARY 6-8, 1992**

RED LION INN, 1830 HILLTOP DRIVE, REDDING, CALIFORNIA

(916) 221-8700

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**Eel River Symposium, February 6, 1992**

			# to Attend	Total \$
Pre-registration	\$25.00	X	_____	_____
Student (pre-reg. only)	\$15.00	X	_____	_____

**Cal-Neva Annual Conference February 7-8, 1992**

AFS Cal-Neva & Nat'l members	\$30.00	X	_____	_____
Non-members	\$35.00	X	_____	_____
Guests of Paid Registrants	\$ 5.00	X	_____	_____
Discount Student Registration	\$10.00	X	_____	_____

Banquet	\$20.00	X	_____	_____
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\$1 Raffle Tickets	\$ 1.00	X	_____	_____
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1992 Annual Dues (if not paid via AFS parent society dues statement)	\$ 5.00	X	_____	_____
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Meeting Subtotal	_____	_____
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Donation for the sole use of the Conservation Committee	_____	_____
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Donation for the sole use of the Educational Outreach Program	_____	_____
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Donation to the Jim Schuler Memorial Scholarship Fund	_____	_____
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TOTAL TO REMIT	_____	_____
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(NOTE!! On-Site registration will be \$45/\$50 for the meeting and \$30 for the Eel River Symposium, PRE-REGISTRATION IS DUE 1/27/92)

MAKE CHECKS OR MONEY ORDERS PAYABLE TO: CAL-NEVA-AFS. NO PURCHASE ORDERS WILL BE ACCEPTED FOR THE DISCOUNTED PRE-REGISTRATION RATE. Send this form and payment to **David Lentz**, 6182 Tahoe Way, Sacramento, CA 95817. We will accept checks, cash, travelers checks, money orders or purchase orders at the meeting--No credit cards.

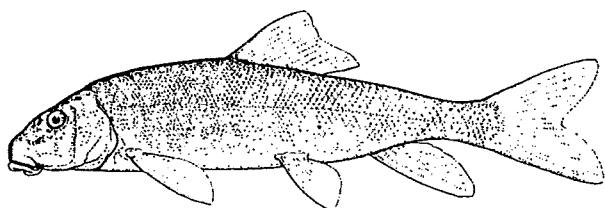


**AMERICAN FISHERIES SOCIETY**  
**California-Nevada Chapter**  
**6182 Tahoe Way**  
**Sacramento, CA 95817**

Non-Profit Org.  
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 Sacramento, CA  
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## FREE REGISTRATION

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To receive a copy of this report call or write to:

Steven L. Stone  
Strategic Environmental Assessments Division  
Office of Ocean Resources  
Conservation and Assessments  
National Ocean Service  
Rockville, Maryland 20851  
(301) 443-0453



## PROCEEDINGS AVAILABLE

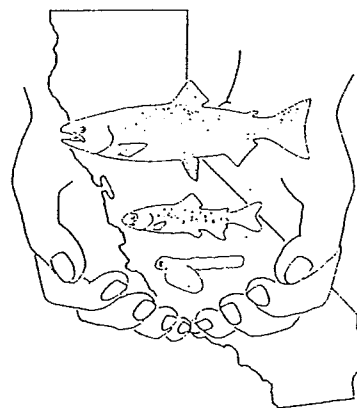
Proceedings of the 1990 Northeast Pacific Chinook and Coho Salmon Symposium are now available! This Western Division AFS biennial symposium was held in September 1990 and was hosted by the Humboldt and Cal-Neva Chapters. Topics include: Threatened and Endangered Salmon, Genetics and Hatchery Practices, Chinook and Coho Management in Large River Systems, Smolt Quality and Immigration Cues, Harvest Management Techniques, and Management of Fall Chinook of the Klamath River System.

Copies of the Proceedings are available for \$15 each (US). A limited number of copies have been printed so order promptly. Contact Dr. Thomas Hassler, U.S. Fish and Wildlife Service, California Cooperative Fisheries Research Unit, Humboldt State University, Arcata, California 95521, (707) 826-3268.

## THE CALIFORNIA SALMON, STEELHEAD AND TROUT RESTORATION FEDERATION

*Announces its*

### TENTH ANNUAL CALIFORNIA SALMON, STEELHEAD AND TROUT RESTORATION CONFERENCE



February 27-March 1, 1992  
Shasta Community College,  
Redding, California

Co-Sponsors

California Department of Fish and Game, Salmon Restoration Association, Cal Trout, Marin Rod & Gun Club, Trout Unlimited, USFWS-Klamath River Fisheries Restoration Program, Shasta Community College, USDA Soil Conservation Service

Contact: Debbie Marshall for details (707) 443-8369

## STUDENT ATTENDANCE AWARDS

NOTICE! - The Chapter will offer support for students to attend the February 1992 Annual Meeting in Redding. We will be providing two FREE room nights (double occupancy) on Thursday 6th, and Friday 7th, for up to six students. Preference will be given to students who are both Cal-Neva and parent society members. Successful applicants will be selected by a two-stage random drawing, with student members drawn first, and nonmembers drawn for any remaining slots. Send your name, address, school affiliation, advisors name, and membership status to Kevan Urquhart, Awards Committee Chair by December 30, 1991. Winners will be notified by January 7, 1992.

### FISHERIES PROFESSIONALS SHARE YOUR EXPERTISE WITH RESTORATIONISTS JOIN THE CALIFORNIA CHAPTER, SOCIETY FOR ECOLOGICAL RESTORATION

The Society for Ecological Restoration announces the formation of a California chapter, known as SERCAL. The chapter's board of directors has asked me to invite all fisheries professionals who live or work in California to become members of SER and its first California Chapter SERCAL.

Why should a fisheries biologist want to join SER? Because fisheries scientists have long been involved in the restoration of in-stream habitats and SER is focused on restoration of stream habitats. SER is seeking more interaction with fisheries biologists... Why? Because generally speaking more emphasis has been given to

streambank revegetation and less on in-stream values. Your involvement, however, can make a difference. Meanwhile your exposure to other restorationists would enable you to gain invaluable experience in all facets of stream restoration. So join forces with other professionals such as botanists, landscape architects, revegetation specialists, ecologists, engineers, and others in making SER and SERCAL a powerful organization in the restoration efforts of California's streams. If you are interested and would like more information contact: Bill Elsey, The Habitat Restoration Group, 6001 Butler Lane, Suite 1, Scotts Valley, CA 95066 Telephone (408) 439-5504.

### Join SERCAL Today!

Yes, I want to be a member of SERCAL

NAME \_\_\_\_\_

COMPANY/AFFILIATION \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZIP CODE \_\_\_\_\_

AREA OF EXPERTISE/INTEREST \_\_\_\_\_

TELEPHONE NUMBER (\_\_\_\_) \_\_\_\_\_

#### Annual Rates SERCAL

- ☐ \$15 Chapter member    ☐ \$100 Contributing  
☐ \$25 Chapter Associate (Nonvoting for institutions)

#### Annual Rates for National SER

- ☐ \$30 Individual    ☐ \$75 Organizational  
☐ \$20 Student    ☐ \$100 Contributing

Additional SERCAL Contribution \$ \_\_\_\_\_

TOTAL ENCLOSED \$ \_\_\_\_\_

Detach or copy coupon, enclose check, and mail to: SERCAL, 1009 J Street, Sacramento, CA 95814

**Saturday, February 8, 1992**

**MORNING GENERAL SESSION**

**PANEL: LEGISLATION, LAWS, AND CONSERVATION BIOLOGY**

**Chair: Monty Knudsen**

**Dan Beard**

From the office of Congressman George Miller

**Bill Bradley**

California State Senator

**Douglas Wheeler**

Secretary, Resources Agency

**Jack Burke**

Regional Solicitor, U.S. Dept. of the Interior

**AFTERNOON TECHNICAL SESSION**

**SESSION 4: Resolving Water Project and Fishery  
Resource Conflicts**  
**Chair: Dave Vogel**

1:30 A Resource Agency Approach  
- **Bill Loudermilk**, CDFG

2:30 A Federal Water Agency Approach  
- **Ken Lentz**, USBR

2:30 An Urban Water Wholesaler - **Richard  
Clemmer**, Metropolitan Water District  
of Southern California

3:00 BREAK

3:30 A Consultant Approach - **Dave Vogel**,  
CH<sub>2</sub>MHILL

4:00 An Interest Group Approach - **William Kier**,  
Kier and Associates

4:30 A Public Policy Approach - **Tim Wallace**,  
UCB

**SESSION 5: Contributed Papers**  
**Chair: Nick Villa**

1:30 Ecology, Life History, and Status of the Shasta  
Crayfish of Northeastern California - **Theo Light**,  
**Chris Myrick** and **Don Erman**, UCB

2:00 Growth and Condition of Juvenile Salmonids in  
the Lower American River - **Daniel Castleberry**,  
**Michael Saiki** and **Barbara Martin**, USFWS; and  
**Joseph Cech, Jr.**, UCD

2:30 A Field Test of Artificial Redds for Quantifying  
the Early Survival of Salmonids - **Michael Saiki**,  
**Daniel Castleberry** and **Barbara Martin**, USFWS

3:00 BREAK

3:30 Physiological Comparisons of Northern Squawfish  
and Rainbow Trout - **Joseph Cech, Jr.**, **Todd  
Hopkins** and **J. Peterson**, UCD; **Daniel  
Castleberry**, USFWS

4:00 Distributional Ecology of Bat Rays in Tomales  
Bay - **Todd Hopkins** and **Joseph Cech, Jr.**, UCD

4:30 Ice in Stream Pools in California's Central Sierra  
Nevada: Spatial and Temporal Variability and  
Reduction in Habitat Availability - **Niel Berg**,  
USFS

**SESSION 6: Status and Management of Endangered  
Threatened and Depleted Salmonids -**  
**Chair: Dennis McEwan**

1:30 Design and Construction of a Natural, Native  
Trout Hatchery in Nevada - **Dave Rosgen**,  
Wildland Hydrology Consultants, Inc.

2:00 Status of San Joaquin Chinook Salmon  
- **Mark Pisano**, CDFG

2:30 Spring-Run Chinook Salmon: Current Status and  
Factors Affecting Their Presence in Summer  
Holding Pools - **Elizabeth Campbell** and **Peter  
Moyle**, UCD

3:00 BREAK

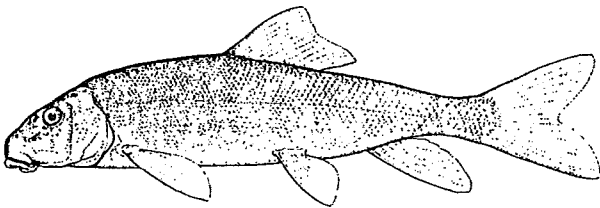
3:30 Status and Management of Coho Salmon in  
California - **Thomas Hassler**, HSU

4:00 The Definition of "Species" Under the  
Endangered Species Act: Application of Pacific  
Salmon - **Robin Waples**, NMFS

4:30 Status and Management of Coastal Cutthroat  
Trout Stocks - **Eric Gerstung**, CDFG

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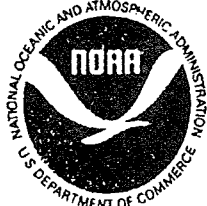
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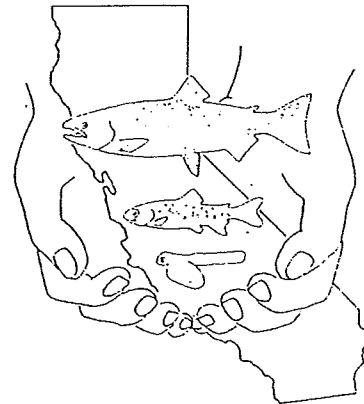
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