

**PANEL PARTICIPATION REQUEST FORM
(Due 12 Noon, Monday, December 6, 2010)**

**January 6 and 7, 2011 Public Workshop on Draft Technical Report
on the Scientific Basis for Alternative San Joaquin River Flow and
Southern Delta Salinity Objectives**

State and Federal Water Contractors (name of individual participant or group of participants) requests participation of the following panelists in the above workshop:

NAME OF PANELIST	PROPOSED PARTICIPATION IN THE FOLLOWING PANELS	EXPERTISE
Chuck Hanson	Panel 2	See Attached CV
Terry Erlewine	Panels 1, 3, and 4	See Attached CV
Joe McGahan	Panel 3	See Attached CV

Curriculum Vitae

Charles H. Hanson

RESUMÉ

Charles H. Hanson
Senior Fishery Biologist

Education

Ph.D. Ecology and Fisheries Biology, University of California, Davis, 1980

M.S. Fisheries Biology, University of Washington, 1973

B.S. Fisheries Biology, University of Washington, 1972

Certification

Certified Fisheries Biologist
American Fisheries Society

Experience

Dr. Hanson has more than 30 years of experience in freshwater, estuarine, and marine biological studies. Dr. Hanson has contributed to the study design, analysis, and interpretation of fisheries, stream habitat, and stream flow (hydraulic) data used to develop habitat restoration strategies, Habitat Conservation Plans, Endangered Species Act consultations, and environmental analyses. Dr. Hanson has conducted evaluations of the effectiveness of various water diversion fish screening systems, assisted in fish screen design and permitting, and developed operational modifications to reduce organism losses while maintaining operational reliability of the water projects and hydroelectric systems. He has directed numerous investigations and environmental impact analyses for projects sited in freshwater, estuarine, and marine environments of the San Francisco Bay/Delta, the central and northern California Coast, Puget Sound, Hudson River, and Chesapeake Bay. Dr. Hanson has participated as an expert witness on fisheries and water quality issues in numerous public hearings and superior court litigation. Dr. Hanson has been extensively involved in incidental take monitoring and investigations of endangered species, development of recovery plans, consultations, listing decisions and identification of critical habitat, and preparation of aquatic Habitat Conservation Plans. Dr. Hanson served as a member of the USFWS Native Delta Fish Recovery Team, numerous technical advisory committees, and as science advisor to settlement negotiations. Dr. Hanson has also participated in the development of adaptive management programs including real-time monitoring, management of power plant cooling water and other diversion operations, and the San Joaquin River Vernalis Adaptive Management Plan (VAMP).

1991-Present Senior Biologist/Principal, Hanson Environmental, Inc.

Provides services in the design, execution, and interpretation of biological monitoring, fishery sampling, and regulatory compliance programs. Prepares technical compliance reports and exhibits for submittal to regulatory agencies, public hearings, and litigation. Presents findings to the public and press and presents expert witness testimony in litigation and regulatory hearings. Develops the design, implementation, and performance monitoring of habitat enhancement and mitigation projects to benefit fish and wildlife.

1982-1991 Senior Biologist, Vice President, TENERA, L.P.

Provided services related to the collection, analysis, and interpretation of biological and engineering data, preparation of documents submitted to regulatory agencies, presentation of findings to the public and press, and presentation of expert testimony in regulatory hearings.

1978-1982 Senior Scientist, Ecological Analysts, Inc.

Responsible for the collection, analysis, and interpretation of data on the abundance, distribution, and dynamics of various fisheries and invertebrate populations for use in evaluating the impact of power plant operations on aquatic populations for more than ten coastal and estuarine power plant sites in California. Prepared various regulatory environmental exhibits, technical reports, and generic and site-specific analyses of biological and engineering information for the applicability of alternative cooling water intake technologies.

1975-1978 Research Assistant, University of California, Davis

Conducted extensive investigations into behaviorally selected and energetically optimal swimming speeds of juvenile fish in relationship to selected microhabitats to help in establishing a data base and methodology for determining instream flow criteria. Conducted laboratory studies on the swimming performance and behavioral responses of fish to hydraulic gradients to develop biological design criteria for water intake systems.

1973-1975 Research Scientist, The Johns Hopkins University

Conducted fishery and zooplankton surveys in freshwater and marine environments along the Atlantic coast. Evaluated the acute and chronic effects of exposure to elevated water temperatures on freshwater and marine fish and invertebrates. Developed onsite and mobile bioassay laboratory facilities.

1969-1973 Research Assistant, University of Washington

Conducted bioassays to determine the synergism between elevated water temperature and duration of exposure on the toxicity of chlorine to two species of salmon. Determined the effectiveness of various techniques, including use of chlorine and thermal shock treatment in minimizing colonization by marine fouling organisms. Evaluated the acute and chronic effects of exposure to elevated water temperature on freshwater and marine fish and invertebrates. Participated in the evaluation of the behavioral attraction and avoidance of response of juvenile fish to thermal and chemical gradients.

Professional Associations

American Fisheries Society (Life Member)

American Institute of Fisheries Research Biologists (past Program Committee Chairman)

Pacific Fisheries Biologists (past Program Chairman)

Who's Who in the West

San Francisco Bay and Estuarine Society (past President)

Technical Advisory Committees

State Water Resources Control Board Striped Bass Workshop

American River Technical Advisory Committee

Mokelumne River Technical Advisory Committee

Santa Ynez River Technical Advisory Committee

Bay-Delta Oversight Committee (BDOC) Aquatic Resources

USFWS Delta Native Fish Recovery Team

CVPIA Striped Bass Technical Team

Publications

Hanson, C.H. and C.P. Walton. 1990. Potential effects of dredging on early life stages of striped bass (*Morone saxatilis*) in the San Francisco Bay area: An Overview. Pages 39-57 In Effects of Dredging on anadromous Pacific coast fishes. Wash. Sea Grant.

Hanson, C.H. and E. Jacobsen. 1985. Orientation of juvenile Chinook salmon and bluegill to low water velocities under high and low light levels. California Fish and Game 71(2):110-113.

Hanson, C.H. and H.W. Li. 1983. Behavioral response of juvenile Chinook salmon (*Oncorhynchus tshawytscha*) to trash rack bar spacing. California Fish and Game 69(1):18-22.

Hanson, C.H., J.R. White, and H.W. Li. 1977. An alternative approach for developing intake velocity design criteria. Trans. Calif.-Nev. Wildl. Soc.:10-18.

Curriculum Vitae

Terry Erlewine

TERRY ERLEWINE

State Water Contractors
1121 L Street, Suite 1015, Sacramento, California 95814

EDUCATION

M.S., Civil Engineering, University of California, Davis, 1988)

B.S., Civil Engineering, University of California, Davis, 1977

CERTIFICATION

Registered Civil Engineer, State of California

EXPERIENCE

Mr. Erlewine is the General Manager of the State Water Contractors and has devoted his entire career to California water supply management and planning. State Water Contractors (SWC) is a non-profit mutual benefit corporation that represents that interests of the 27 public agencies located throughout California that receive water from the California State Water Project (SWP). As General Manager of SWC, Mr. Erlewine is directly responsible for overseeing and carrying out the objectives of SWC, including, but not limited to: timely completion of SWP facilities; assisting to ensure proper and efficient SWP operations; protection of water rights needed by the SWP and the SWC Member Agencies; review and coordination of litigation affecting the SWP; presentation of SWC views to legislative and administrative agencies, myriad stakeholders, interested parties, and the general public; and development and maintenance of a public information program about the SWP. In addition to these and other responsibilities, Mr. Erlewine plays a key role in coordinating with the California Department of Water Resources with regard to statewide SWP operations, water supply management and deliveries, and the numerous institutional efforts, programs, policies, environmental regulations, and multi-party agreements affecting SWP operations. Mr. Erlewine is also responsible for developing, managing and disseminating information as it pertains to SWP delivery facilities, including current water supply and water quality conditions, flow and storage data, flood and drought status, and all regulatory matters affecting the SWP. In addition, Mr. Erlewine oversees the SWC's participation in the current and developing framework for managing water supply and ecological issues within the Sacramento-San Joaquin Bay-Delta.

STATE WATER CONTRACTORS (1994 to Present)

- General Manager
- Assistant General Manager
- Principal Engineer

BOOKMAN-EDMONSTON ENGINEERING (1991 to 1994)

- Supervising Engineer

CALIFORNIA DEPARTMENT OF WATER RESOURCES (1978 to 1991)

- Senior Engineer, Water Resources
- Staff Engineer, Water Resources

ASSOCIATIONS

American Society of Civil Engineers (1978 to 1998)

American Geophysical Union (1984 to 1993)

American Water Works Association (1996 to 2002)

Curriculum Vitae

Joseph C. McGahan

RESUME

JOSEPH C. MCGAHAN

Registered Civil Engineer

California No. 26307

Education: California State Polytechnic College, 1970, B.S.
California Institute of Technology, 1971, M.S.

Position: President, Summers Engineering, Inc.

Joseph C. McGahan is President of Summers Engineering, Inc., in Hanford, California. Mr. McGahan has spent 40 years working in the field of irrigation, drainage, and municipal water supply engineering, principally in the Central San Joaquin Valley of California.

Responsibilities and affiliations as follows:

Responsible for seeing that the firm's projects are completed in a timely manner. Coordinate studies and the design of various water resource projects. Responsible for irrigation, drainage, and groundwater studies for numerous clients. The work has included the preparation of feasibility reports, economic analyses, structural design, hydraulic design, hydrogeologic analyses, preparation of specifications and supervision of construction. Other work includes the design of water treatment facilities for municipal purposes.

Serves as Drainage Coordinator for the Grassland Drainage Area, a 100,000 acre area on the west side of the San Joaquin Valley dealing with subsurface drainage issues.

Serves as Watershed Coordinator for the Westside San Joaquin River Watershed Coalition for lands within the San Joaquin Valley Drainage Authority. The Coalition was formed to provide coverage for participating lands under the Irrigated Lands Regulatory Program.

Project Manager for the Dissolved Oxygen Upstream Monitoring Program under the California Bay Delta Program. The project involves monitoring and investigations of the San Joaquin River and tributaries related to dissolved oxygen. Responsibilities include project management, administration, and maintaining several real time flow and water quality monitoring stations.

Member of the American Water Works Association, American Society of Civil Engineers, and the U. S. Committee on Irrigation and Drainage.