



Arnold Schwarzenegger
Governor

**BIOMASS TO ENERGY:
FOREST MANAGEMENT FOR WILDFIRE
REDUCTION, ENERGY PRODUCTION,
AND OTHER BENEFITS**

APPENDIX 12

PIER FINAL PROJECT REPORT

January 2010
CEC-500-2009-080-AP12

Appendix 12: Biomass to Energy Project Team, Committee Members and Project Advisors

Research Team Members

Mark Nechodom - Principal Investigator

Mark Nechodom is the project Principal Investigator and a social scientist at the U.S. Forest Service's Pacific Southwest Research Station in Davis, CA. Dr. Nechodom's background is in biomass energy policy development and public policy research.

Peter Stine – Administrative Manager

Peter Stine is the administrative manager for the B2E project and the Program Manager of the Sierra Nevada Research Center, Pacific Southwest Research Station, U.S. Forest Service. Dr. Stine is a wildlife biologist.

Christie Aldrete

Christie Aldrete provides program management support and communication outreach at the U.S. Forest Service Pacific Southwest Research Station.

Adam Barnett

Adam Barnett assists with project management. He is a social science research analyst at the U.S. Forest Service Pacific Southwest Research Station. Mr. Barnett's background is in natural resource social sciences.

Greg Bahry

Greg Bahry is a Vice-President of TSS Consultants. He manages model development for the B2E project. Mr. Bahry is a computer modeling specialist with extensive experience developing database models to analyze the economics of alternative materials processing systems.

Klaus Barber

Klaus Barber is the Regional Analyst for the US Forest Service in California. Mr. Barber leads the Stewardship and Fireshed Assessment program which provides the B2E project with landscape scale data on fuels treatment effects.

Karen Beardsley

Karen Beardsley manages the Programming Resources Group of the Information Center for the Environment at the University of California, Davis. She oversees data management for the B2E project.

Joyce Cooper

Joyce Cooper is an Associate Professor in the Department of Mechanical Engineering at the University of Washington. Her role in the project includes analysis of the goal, scope, data, and computational methods used in the environmental models. Dr. Cooper's background combines environmental assessment with product design and management.

Loyd Forrest

Loyd Forrest is President and CEO of TSS Consultants, the principal contractor on the B2E project. Mr. Forrest is experienced in assessing biomass market, economic, environmental and technology risks for financing biomass technology projects, purchases of existing facilities or investments in new facilities. His background is in public administration and forestry.

Paul Fulton

Paul Fulton is the network administrator for the Information Center for the Environment at the University of California, Davis. He manages data archiving, quality control, user interface, and the B2E project server.

David Ganz

David Ganz specializes in forestry and fire science for TSS Consultants. He oversees the fire behavior domain of the B2E project. Dr. Ganz has over 11 years of experience in natural resources management including several years working abroad consulting on large-scale natural resource management projects.

Marat Gubaydullin

Marat Gubaydullin is a computer programmer for the Information Center for the Environment at the University of California, Davis. He has expertise in database architecture and programming.

Alan Jacobson

Alan Jacobson is a Vice President of TSS Consultants. He offers extensive biomass-to-energy expertise. During the past fifteen years, Mr. Jacobson specialized in biomass availability and cost studies of agricultural residues, forest residues, sawmill and remanufacturing residues, and urban wood residues.

Mimi Jenkins

Mimi Jenkins is a Professional Research Engineer in the Department of Civil and Environmental Engineering at the University of California, Davis. Dr. Jenkins provides expertise in systems modeling and model development to the B2E project.

Jay Lund

Jay Lund is a Professor in the Department of Civil and Environmental Engineering at the University of California, Davis. Dr. Lund brings extensive experience in systems analysis and modeling to the B2E project.

Tad Mason

Tad Mason is Vice President of Forestry for TSS Consultants. He oversees the forestry domain of the B2E project. For the last 18 years, Mr. Mason has been active in wildland and forest fuels reduction, biomass fuels procurement, as well as project assessment, development and implementation.

Mike McCoy

Mike McCoy is the Co-Director of the Information Center for the Environment (ICE) at the University of California, Davis. ICE is responsible for data management for the B2E project.

Gregg Morris

Gregg Morris is President of Future Resources Associates and Director of the Green Power Institute. Dr. Morris specializes in economic and policy analysis of the biomass energy industry in California.

Laurie Perrot

Laurie Perrot provides expertise in the Forest Service's Stewardship and Fire Assessment process and technical writing. Ms. Perrot's background is in forest planning. She is currently the Environmental Coordinator for the Tahoe National Forest.

Maureen Puettmann

Maureen Puettmann is a Research Associate in the Department of Wood Science and Engineering at Oregon State University. Dr. Puettmann's background is in the life cycle assessment of wood products. She provides expert consultation on forest products data, life cycle assessment design, and modeling.

Lito Real

Lito Real is the lead computer programmer for TSS Consultants. He is responsible for model development and programming for the B2E project. Dr. Real has extensive experience in database architecture and design.

Dennis Schuetzle

Dennis Schuetzle is the Vice President for Research and Technology with TSS Consultants and the President of REI International, the Renewable Energy Institute. Dr. Schuetzle contributes expertise to the B2E project in life cycle assessment and process engineering. He has 35 years of experience in managing and implementing environmental science and engineering programs.

Pam Spath

Pam Spath is a Senior Chemical Engineer at the U.S. Department of Energy National Renewable Energy Laboratory. Ms. Spath has worked extensively on life cycle assessments of various power generation and hydrogen production systems. She consults on life cycle assessment and modeling for the B2E project.

Linda Spiegel

Linda Spiegel is the B2E project contract manager at the California Energy Commission, Public Interest Energy Research program. Her background is in wildlife biology.

Greg Tamblyn

Greg Tamblyn is the Renewable Energy Programs Manager for TSS Consultants. He manages model development for the B2E project. Mr. Tamblyn has a background in engineering, energy, business development, and environmental science.

Fred Tornatore

Frederick Tornatore is Vice President of Environmental and Technology Services for TSS Consultants. He oversees the environmental domain of the B2E project. Mr. Tornatore has over 30 years of experience in assessing the environmental effects of the development and utilization of renewable energy resources.

James Tsui

James Tsui is an engineer and financial analyst for TSS Consultants. Mr. Tsui He has over 20 years of experience in energy project engineering, development, and finance.

Tom Wegge

Tom Wegge is the principal economist at TCW Economics. Mr. Wegge's expertise is in resource economics and oversees the economics domain of the B2E project. He has provided economic analysis services to public and private clients in California for more than 20 years.

Technical Advisory Committee Members

Anex, Rob, Associate Professor, Department of Agricultural and Biosystems Engineering, [Iowa State University](#)

Bain, Rich, Thermochemical Conversion Group Manager, [National Renewable Energy Laboratory](#)

Berbach, Marty, Staff Environmental Scientist, [California Department of Fish and Game](#)

Berton, Fernando, [California Integrated Waste Management Board](#)

Cromwell, Dean, Senior Research Manager, [California Department of Forestry and Fire Protection](#)

Dennis, Nick, Registered Professional Forester

Gasser, Don, System Forester (retired), Pacific Gas and Electric

Goines, Bruce, Rural Community Assistance Program Leader, [USDA Forest Service, State and Private Forestry](#)

Hofmann, John, Director, Natural Resources, [Regional Council of Rural Counties](#)

Jenkins, Bryan, Professor Department of Biological and Agricultural Engineering, [University of California, Davis](#)

Lee, Gaylon, Forest Activities Program Manager [California State Water Board](#)

Rasmussen, Reinhold, Professor, [Oregon Graduate Institute](#)

Scahill, John, National Renewable Energy Laboratory, [US Department of Energy](#)

Siegel, David, Chief, Integrated Risk Assessment Section, [California Office of Environmental Health Hazard Assessment](#)

Simeroth, Dean, Chief, Criteria Pollutants Branch, [California Air Resources Board](#)

Tiangco, Val, [California Energy Commission](#)

Policy Advisory Committee Members

Policy Advisory Committee Chairs

Sedell, Jim, Director, USDA Forest Service, [Pacific Southwest Research Station](#)

Weingardt, Bernie, Regional Forester, USDA Forest Service, [Pacific Southwest Region](#)

Policy Advisory Committee Members

Berbach, Marty, Staff Environmental Scientist, [California Department of Fish and Game](#)

Bischel, Dave, President, California Forestry Association

Bowen, Bruce, Director of Environmental Policy, [Pacific Gas and Electric](#)

Boyd, Jim, Commissioner, [California Energy Commission](#)

Burke, Tim, Alturas Field Manager, [US Bureau of Land Management](#)

Carlson, Bill, Carlson Small Power Consultants

Ferrell, John, Director, National Biomass Coordination Office, [US Department of Energy](#)

Geldert, Dale, Director, [California Department of Forestry and Fire Protection](#)

McDermond, Ken, Deputy California Nevada Office Manager, [US Fish and Wildlife Service](#)

Hofmann, John, Director, Natural Resources, [Regional Council of Rural Counties](#)

Larson, Steve, Executive Director, [California Public Utility Commission](#)

Menke, John, Senior Environmental Scientist, [California State Water Board](#)

Mule, Rosalie, Board Member, [California Integrated Waste Management Board](#)

Nastri, Wayne, Region 9 Administrator, [US Environmental Protection Agency](#)

Nawi, David, Board Member, [California Board of Forestry and Fire Protection](#)

Paparian, Mike, [California Environmental Protection Agency](#)

Thomas, Craig, Director, [Sierra Nevada Forest Protection Campaign](#)

Trott, Chris, Fuel Procurement Manager, [Covanta Energy](#)

Turbeville, Bruce, Chairman, [Fire Safe Council](#)

Report Editor

Susan Wolbarst

Susan Wolbarst is a writer and editor from Davis, California. She has a journalism background. She has published numerous articles and edited reports for many public agencies and private clients.

