

University of Colorado Law School

Colorado Law Scholarly Commons

Moving the West's Water to New Uses: Winners and Losers (Summer Conference, June 6-8)

1990

6-6-1990

AGENDA: Moving the West's Water to New Uses: Winners and Losers

University of Colorado Boulder. Natural Resources Law Center

Follow this and additional works at: <https://scholar.law.colorado.edu/moving-west-s-water-to-new-uses>



Part of the [Administrative Law Commons](#), [Agriculture Law Commons](#), [Biodiversity Commons](#), [Courts Commons](#), [Dispute Resolution and Arbitration Commons](#), [Energy and Utilities Law Commons](#), [Energy Policy Commons](#), [Environmental Health and Protection Commons](#), [Environmental Law Commons](#), [Environmental Policy Commons](#), [Hydrology Commons](#), [Indian and Aboriginal Law Commons](#), [Judges Commons](#), [Land Use Law Commons](#), [Law and Economics Commons](#), [Legislation Commons](#), [Litigation Commons](#), [Natural Resource Economics Commons](#), [Natural Resources and Conservation Commons](#), [Natural Resources Law Commons](#), [Natural Resources Management and Policy Commons](#), [Property Law and Real Estate Commons](#), [Public Policy Commons](#), [Science and Technology Law Commons](#), [State and Local Government Law Commons](#), [Urban Studies and Planning Commons](#), [Water Law Commons](#), and the [Water Resource Management Commons](#)

Citation Information

University of Colorado Boulder. Natural Resources Law Center, "AGENDA: Moving the West's Water to New Uses: Winners and Losers" (1990). *Moving the West's Water to New Uses: Winners and Losers (Summer Conference, June 6-8)*.

<https://scholar.law.colorado.edu/moving-west-s-water-to-new-uses/1>

Reproduced with permission of the Getches-Wilkinson Center for Natural Resources, Energy, and the Environment (formerly the Natural Resources Law Center) at the University of Colorado Law School.

Date: 2 / 1 / 1 / 1

Moving the West's Water to New Uses: Winners and Losers June 6-8, 1990

Wednesday, June 6, 1990

8:15 **Registration and Coffee**

8:45 **Welcome**

8:50 **Shifting the Uses of Water in the West: An Overview**

Lawrence J. MacDonnell, Natural Resources Law Center

Reliable supplies of water in the West are essentially fully developed and utilized. This presentation frames the issues and opportunities facing the western states in reallocating a portion of the existing uses of water to meet new and changing uses. Mechanisms for reallocation are considered and the state role in this reallocation is discussed.

9:40 **Changing Demands for Water in the West**

Kenneth D. Frederick, Resources for the Future

The transition from water demands of early miners and settlers to the current efforts to protect the recreational and environmental values of the West's remaining streams will be reviewed. Changing technologies, federal policies, and the growing competition between economic and environmental water uses all have their impact on western water.

10:20 **Break**

10:40 **Sources of Water I: Agriculture—the Deep Pool?**

Prof. Bonnie C. Colby, Dept. of Agricultural and Resource Economics, University of Arizona

Agricultural water is a significant source of supply for growing cities and emerging environmental demands. Recent transfers are reviewed, focusing on economic, legal and environmental issues. The potential for future transfers out of agriculture is evaluated for key regions of the West, in light of changing federal policies and shifting regional economies. Innovative transfer arrangements can address third party concerns and provide reliable new supplies.

11:15 **Sources of Water II: Federal Water Projects—For Whose Benefit?**

Bruce C. Driver, Water and Energy Attorney

This presentation will review the types of federal water projects, policies concerning allocation of federal water and issues raised by reallocation of water to reflect changing economic conditions and values. A case study of the Bureau of Reclamation's Central Valley Project in California will examine the issues raised by the transfer of entitlements to use CVP water.

12:10 Lunch talk: **Federal Water Policy to Meet a Changing West**

John Sayre, Assistant Secretary for Water & Science, Dept. of the Interior

1:40 **Sources of Water III: Interstate Transfers**

Clyde O. Martz, Davis, Graham & Stubbs

This paper will address the growing imbalance between water supply and demand on interstate rivers; the growing pressure to make unused water available; the right of individual appropriators to respond to such interstate demands; and opportunities for Upper Basin states on the Colorado River to protect future allocations by techniques that will facilitate Upper Basin development.

2:25 **Sources of Water IV: Tribal Water Rights**

John E. Echohawk, Native American Rights Fund

As tribal reserved water rights for present and future uses become quantified through litigation or settlements, a significant change in use of water in the West is occurring. This presentation will examine the recognition of Indian water rights and their potential as a source of water.

3:10 **Break**

- 3:30 **Sources of Water V: Urban Water Conservation—"The Last Water Hole or Mostly a Mirage?"**
Gary C. Woodard, Division of Economic and Business Research, University of Arizona
 The end of the era of massive water development projects means that municipal water demands increasingly are being met through reallocation and conservation. An overview of conservation options is offered, with emphasis on their suitability to various circumstances, including magnitudes and uncertainties of demand reductions, and economic and political costs.
- 4:15 **Update on Market Strategies for the Protection of Western Instream Flows and Wetlands**
David Harrison, Moses, Wittemyer, Harrison & Woodruff; and
Robert Wigington, The Nature Conservancy
 In several western states The Nature Conservancy is proceeding with the acquisition of water rights to protect instream flows and wetlands. A number of case studies will be discussed to illustrate 1) original filings for instream water rights, 2) the conversion of water rights to instream or wetlands use, 3) the borrowing of storage water for instream use, and 4) the acquisition of restrictive covenants on the use or development of water rights.
- 5:00 **End of Day**
- 6:00 **Cookout on Flagstaff Mountain**

Thursday, June 7, 1990

- 8:45 **Evaluating Judicial Capacity to Determine Public Welfare Values in Water Transfers**
Prof. Charles DuMars, University of New Mexico
 This paper explores the breadth of the concept of public welfare values in water, the impact of those values on water rights transfers, and the capacity of judicial forums to resolve these issues.
- 9:30 **Area-of-Origin Protection: A Dialogue**
Christopher Meyer, National Wildlife Federation; **Gregory J. Hobbs, Jr.**, Davis, Graham & Stubbs
 Issues raised by the transfer of water from an area-of-origin will be discussed by two speakers in response to a series of questions. The nature of the interests affected will be addressed as well as possible policy responses.
- 10:30 **Break**
- 10:50 **Economic and Social Impacts of Agriculture-to-Urban Water Transfers: The Arkansas Valley of Colorado**
Prof. Charles W. Howe, University of Colorado
 Early transfers stayed within the Valley, but recent transfers have been outside the regional economic area. Future transfers may involve more valuable crops and the agricultural processing industries. Employment and income impacts will be assessed from regional and state viewpoints.
- 11:35 **Lunch** (on your own)
- 1:15 **The Role of Water Transfers in the Accommodation of New Uses: The Case of the Truckee-Carson**
Prof. A. Dan Tarlock, Chicago-Kent College of Law
 The Truckee-Carson basins are a microcosm of potential reallocation patterns and institutional changes emerging in the West. Litigation has allowed the Pyramid Lake Paiute Tribe to assert fisheries maintenance claims. National environmental organizations have begun a campaign to transfer water rights from the Truckee Carson Irrigation District to the Stillwater Wildlife Management Area. The net effect of the changes occurring in the Truckee-Carson basins suggests that voluntary water transfers can contribute to the management of watersheds to promote bio-diversity.
- 2:00 **The Lake, The City and The Farmers: Can They All Win or at Least Not Lose?**
Thomas A. Graff, Environmental Defense Fund
 Environmentalists have challenged the level of water diversions from Mono Lake Basin by the City of Los Angeles. To the extent they prevail, the city must find other sources of water and power. The question thus arises: whose water will the city get and who will pay the cost of replacement and delivery?
- 2:45 **Break**

- 3:05 **FERC's Role in Protecting Non-Consumptive Water Uses**
Peter J. Kirsch, Cutler & Stanfield, Washington, DC
The Electric Consumers Protection Act was supposed to alter substantially the role that FERC plays in protecting nonconsumptive water uses. The hundreds of pending and contemplated dam relicensings are now forcing FERC to put the theory of that statute into practice. This presentation will discuss the opportunities and pitfalls which FERC faces.
- 3:50 **Water Districts and Water Transfers: What Role? What Effects?**
Prof. Brian Gray, The Hastings College of Law, San Francisco
The presentation will analyze the effects of public ownership of water rights and contract rights to water on the transfer of water in California. It will consider whether the existence of large public agency water suppliers facilitates transfers within the agency but inhibits the transfer of water to users outside the agency. Respondent: *Larry D. Simpson*, Northern Colorado Water Conservancy District
- 5:00 **Reception**

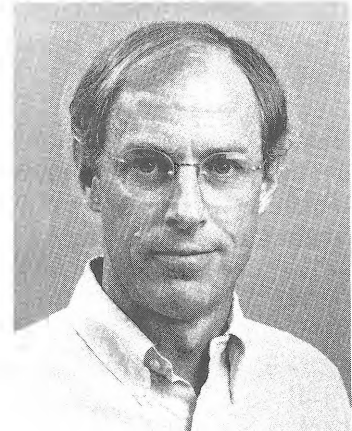
Friday, June 8, 1990

- 8:45 **Water Marketing and the Law**
Prof. Mark Squillace, University of Wyoming College of Law
Western states have traditionally looked to large water development projects to satisfy new demands. Escalating costs and concerns for the environment make water transfers an attractive option. This paper will explore legal impediments to water transfers and consider the extent and manner that transfers are and should be encouraged through legislation.
- 9:30 **Legal Devices for Enhancing Water Diversion Opportunities Within the Appropriation System**
David Hallford, Saunders, Snyder, Ross & Dickson, Denver
In much of the West, developing reliable new water for municipal and industrial demands and for maintaining minimum streamflows can be quite difficult because of overappropriation of the dependable river flows. This talk will discuss legal devices such as plans for augmentation, exchanges, reuse plans, and substitute supply plans which can facilitate reliable new water supplies within the constraints of the appropriation system and its protection of senior water rights.
- 10:15 **Break**
- 10:35 **Transferring Conserved Water: The Oregon Experience**
Becky Kreag, Oregon Water Resources Department
Improved irrigation efficiency and changes in crop types offer ways to reduce water uses. In 1987, Oregon enacted a statute allowing the transfer of this "conserved" water under certain circumstances. This presentation will discuss Oregon's experience in implementing this approach.
- 11:20 **Shifting Water to Urban Uses: Activities of the Metropolitan Water District of Southern California**
Timothy Quinn, Metropolitan Water District of Southern California
- 12:05 Lunch talk: **Water, The Community, and Markets in the West**
Prof. Helen Ingram, University of Arizona
- 1:45 **Water Transfers: Can They Protect and Enhance Rural Economies?**
Michael J. Clinton, Bookman-Edmonston Engineering, Inc.
Recent willing buyer, willing seller water transfers involving rural areas have resulted in "win-win" solutions for buyers and sellers. The negotiation experience associated with the Intermountain Power Project near Delta, Utah will be described, as well as negotiations leading to agreements in California's Imperial Valley, Arvin-Edison Water Sotrage District and Yuba River Basin.
- 2:30 **Conference Observer—Concluding Remarks**
Prof. F. Lee Brown, Jr., University of New Mexico
- 3:00 **End of program**

MOVING THE WEST'S WATER TO NEW USES: WINNERS AND LOSERS
June 6-8, 1990

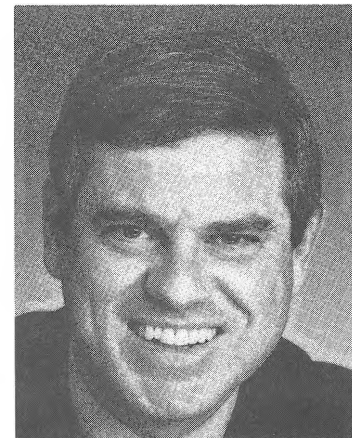
CONFERENCE ORGANIZER

LAWRENCE J. MacDONNELL holds degrees from the University of Michigan, (B.A.'66); University of Denver College of Law, (J.D.'72); and Colorado School of Mines, (Ph.D.'74) He is Director of the Natural Resources Law Center and an adjunct professor at the University of Colorado School of Law. He has taught at the Colorado School of Mines and the University of Denver and has been a research economist at the Denver Research Institute. He has also been an instructor and course director for the Colorado Outward Bound School. Recent publications include "Transferring the Uses of Water in the West," 43 Okla. L. Rev. 1 (1990; "Federal Interests in Western Water Resources: Conflict and Accommodation," 29 Natural Res J. (1989) and "Changing Uses of Water in Colorado: Law and Policy," 31 Ariz. L. Rev. 783 (1989). He co-edited the book Instream Flow Protection in the West (1989), and co-authored the article "National Interests in Instream Flows" in that book.

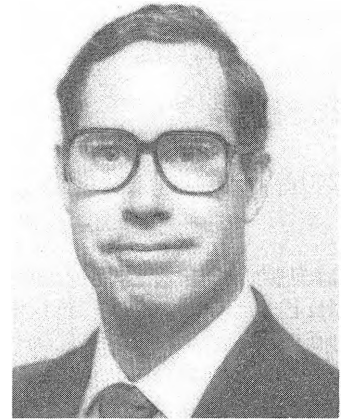


CONFERENCE FACULTY

F. LEE BROWN is Professor of Economics, co-director of the Natural Resources Center, and director of the Division of Public Administration at the University of New Mexico. His research and writing interests focus on western water policy and institutions, with emphasis on their economic dimensions. He teaches with an interdisciplinary team a course on "Water Resources Administration: A Field Based Problem at Isleta Pueblo." Recent books include Water and Poverty in the Southwest, with Helen Ingram, University of Arizona Press, Nov. 1987; New Courses for the Colorado River co-edited with Gary Weatherford, Univ. of New Mexico Press, 1986; and The Southwest Under Stress, with Allen Kneese, Johns Hopkins Press for Resources for the Future, 1981. His B.A. ('64) is from Rhodes College; his M.S. in Mathematics ('66) and Ph.D. in Economics ('69) are from Purdue.



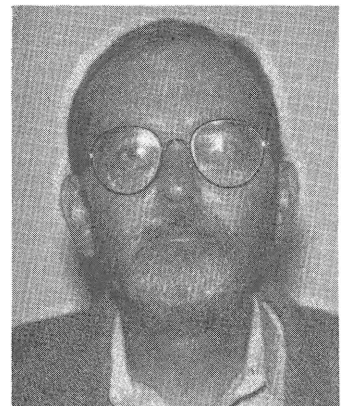
MICHAEL J. CLINTON is a Vice-President with Bookman-Edmonston Engineering, Inc. in Glendale, California, where he specializes in surface and ground water hydrology, irrigation and drainage system planning and operation, Colorado River operations and salinity control, and mediation of Indian water rights and environmental disputes. Previously he worked on water resources management with the US Dept. of Interior, overseeing programs in the Bureau of Reclamation, Bureau of Indian Affairs, and the Geological Survey (1984-87). From 1970-84 he was a water resources engineer with the Bureau of Reclamation. He has a B.S. in Civil Engineering ('70) from the Univ. of Utah. He is a member of the U.S. Committee on Irrigation, Drainage and Flood Control and the Colorado River Water Users Association.



BONNIE COLBY is Associate Professor of agricultural and resource economics at the University of Arizona Department of Agricultural Economics. Her undergraduate degree is from the Univ. of California and Ph.D. from the Univ. of Wisconsin. Her research, teaching and consulting focus on the economics of water resources management and policy. She has authored over 40 publications in this area, including a number of journal articles and a book, Water Marketing in Theory and Practice: Market Transfers, Water Values and Public Policy, 1987. In addition to her work on water reallocation, she specializes in research on water quality, valuation of water rights and environmental amenities, and natural resource management in developing tribal and rural economies.



BRUCE C. DRIVER is a private attorney/consultant in Denver, working on water and energy-related matters. He is a consultant to the Western Governors' Association on water and Indian legal affairs, and is part-time counsel to the firm Chadbourne & Parke, Washington, DC. In 1985-86 as Scholar-in-Residence with the Western Governors' Association he authored a westwide study on water efficiency entitled "Western Water: Tuning the System," which suggested certain changes western states might make to their water codes to enhance water use efficiency. From 1981-85 he was Counsel to the U.S. House Subcommittee on Energy Conservation and Power. He has a B.A. in History (Yale), an M.B.A. in Finance (Columbia Univ. School of Business), and a J.D. from the Univ. of Michigan.



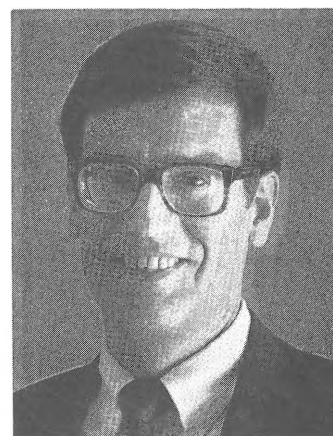
CHARLES T. DuMARS (B.S. University of Oregon, '66; J.D. University of Arizona, '69) is a Professor of Law at the University of New Mexico, specializing in courses on water law, mining law, constitutional law, and comparative private international law. Previously he was counsel for the New Mexico Legal Rights Project, 1973-76, and counsel for the Mexican American Legal Defense and Education Fund, Inc., 1972-73. He is author of numerous books and articles on water law, constitutional law, and private international law. He has been a member of the Western States Water Council and the Bureau of Land Management Advisory Board for New Mexico. He is one of the state investigators for the Natural Resources Law Center's 6-state water transfers study project.



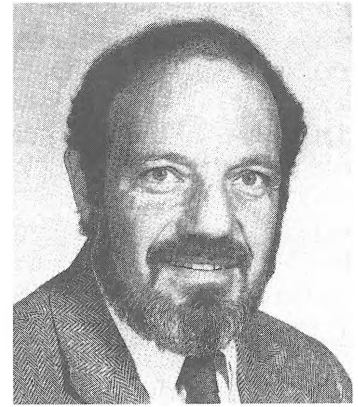
JOHN E. ECHOHAWK, a Pawnee, is Executive Director of the Native American Rights Fund. He was the first graduate of the Univ. of New Mexico's special program to train Indian lawyers, and was a founding member of the American Indian Law Students Assoc. He has been with NARF since its inception. He serves on the Boards of the American Indian Resources Institute, the Association on American Indian Affairs, the National Committee for Responsive Philanthropy, Independent Sector, Natural Resources Defense Council, and the National Center for American Indian Enterprise Development. He has received numerous service awards and recognition for his leadership in Indian law. His B.A. ('67) and J.D. ('70) are from the Univ. of New Mexico. He was Reginald Heber Smith Fellow from 1970-72.



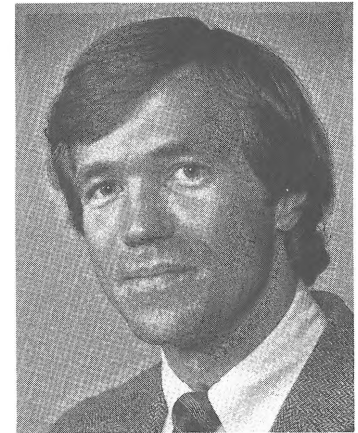
KENNETH D. FREDERICK (B.A. Economics, Amherst, '61; Ph.D. Economics, MIT, '95) has been with Resources for the Future in Washington, DC since 1971, as a Senior Fellow since 1978. From 1977-88 he directed RFF's Renewable Resources Division. Previously he was Assistant Professor at California Institute of Technology (1967-71). He was a consultant to the U.S. Agency for International Development, including two years in Brazil (1967-69). His publications include Scarce Water and Institutional Change, '86; "The Future of Irrigated Agriculture," in Forum for Applied Research and Public Policy, '88; "Irrigation Under Stress," Resources, '88; and "The Legacy of Cheap Water," Resources, '83. He is on the Western Water Policy Project Working Group of the Natural Resources Law Center, 1988-91.



THOMAS J. GRAFF is senior attorney with the Environmental Defense Fund in Oakland, California. He has been a lecturer at the Univ. of California-Berkeley (Boalt Hall), and while on leave from EDF, was visiting Professor of Law at Harvard Law School (1979). He served on the staff of Governor-elect Edmund G. Brown, Jr. (1974-75). Prior to that he was an associate with Howard, Prim, Smith, Rice & Downs, Attorneys (1970-71); was legislative assistant to Mayor John V. Lindsay in New York City's Washington Office (1969-70); and was Frank Knox Fellow at London University (1967-68). He has served with the Colorado River Board of California, the Berkeley Law Foundation, the San Joaquin Valley Drainage Citizen's Committee, and the Delta Environmental Advisory Committee.



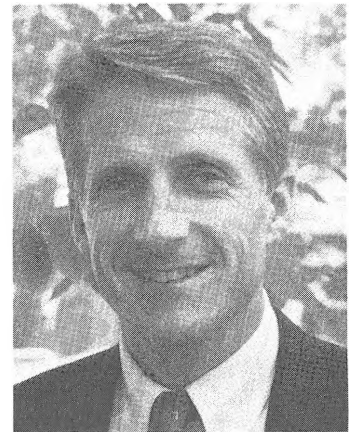
BRIAN E. GRAY (B.A. Pomona College; J.D. University of California, Berkeley) is a Professor of Law at the University of California, Hastings College of the Law. He is chair of the Advisory Council of the University of California's Water Resources Center and is past chair of the California State Bar Committee on the Environment. Formerly in private practice, he has represented both public and private environmental agencies in water resources matters. He is author of several articles on water resources law, including "No Holier Temples: Protecting the National Parks Through Wild and Scenic River Designation," U. Colo. L. Rev., 1987, and co-author of "Water Trading: Free Market Benefits for Exporters and Importers," (Calif. Assembly Office of Research 1985).



DAVID C. HALLFORD has been an attorney with Saunders, Snyder, Ross & Dickson since 1985, working extensively in water issues before and since joining the firm. He has been active in ground water adjudications, augmentation planning and water exchanges. He has worked with numerous water districts in water supply development, including planning, municipal issues, and contracting. He has extensive experience in property law as applied to the title and purchase of water rights and the valuation of water rights. Since 1984 he has taught an annual continuing legal education course on Colorado Water Law. His B.A. (with honors) in English and Speech is from Oklahoma Panhandle State University, '77; his J.D. (with honors) is from the University of Denver College of Law.



DAVID L. HARRISON (B.S.'68, Civil Engineering, Hydraulics; J.D.'71, Univ. of Colorado) has been with Boulder law firm Moses, Wittemyer, Harrison & Woodruff since 1973. He is a former Chair of the Water Law Section of the Colorado Bar Association; a member of the Colorado Water Conservation Board; and former Chairman of the national Board of Governors and Trustee of the Colorado Chapter of The Nature Conservancy. Publications include "Legal Strategies for Implementing Instream Flows Under Existing Federal and State Laws - Restoring Minimum Flows to Already Over-Appropriated Streams" (1976), "Using an Expert in a Groundwater Dispute: The San Luis Valley Case," with State Engineer Jeris Danielson (1983), and "Converting Conditional Water Rights to Instream Flow Protection: A Property Transfer Strategy," with Robert Wigington (1987).



GREGORY J. HOBBS has been a partner with Davis, Graham & Stubbs in Denver since 1981 practicing natural resource law, specializing in water rights, water quality, air quality, toxic substances, and mined reclamation. His past practice included the Colorado Attorney General's Office (1975-79) and the U.S. EPA in Denver (1973-74). Recent articles include "Water Rights Protection in Water Quality Law," '89, and "Water Quality vs. Water Quantity: A Delicate Balance," ('88). He is a member of the Denver Regional Air Quality Council and the Colorado Environment 2000 Project Citizen Advisory Committee, among numerous others. His B.A. is from Notre Dame ('66) and J.D. from the University of Calif., Berkeley ('71).



CHARLES W. HOWE (B.A. Rice, '52, Ph.D. Stanford, '59) has been Professor of Economics at the University of Colorado since 1970 and Director of the Research Program in Environment & Behavior since 1986. Major research interests are the role of water resources in Third World development and increasing the efficiency of water allocation in the Western United States. His books include Benefit-Cost Analysis for Water System Planning (AGU, '71), Natural Resource Economics (Wiley, '79), and Managing Renewable Natural Resources in Developing Countries (Westview, '82). He is President of the Association of Environmental and Resource Economists.



HELEN M. INGRAM is Director of the Udall Center for Studies in Public Policy, and also Professor in both Political Science and the School of Public Administration and Policy at the University of Arizona. She has written extensively on regional water issues. Her recent publications include, Water Politics: Continuity and Change, ('90); Water and Poverty in the Southwest (with Lee Brown), ('87); "Behavioral Assumptions of Policy Tools," (with Anne Schneider) in The Journal of Politics, ('90); "Improving Implementation Through Framing Smarter Statutes," (with Schneider) in Journal of Public Policy ('90); "Interest Groups, Participation and the Environmental Movement," (with Dean Mann) in Environmental Politics and Policy: Theories and Evidence ('90).



PETER J. KIRSCH (B.A. Oberlin College; J.D. Univ. of Chicago) is an attorney with Cutler & Stanfield in Washington, DC, specializing in environmental and energy law and public sector negotiations. He has litigated matters involving most of the major federal environmental statutes, including the National Environmental Policy Act, Endangered Species Act, Section 404 of the Clean Water Act, Part I of the Federal Power Act, and section 4(f) of the Transportation Act. He has been involved in high-visibility cases representing citizens or environmental interests in the Platte River Whooping Crane case, and expansion of airports in Louisville, St. Louis, and Dallas-Fort Worth. He is general counsel to Friends of the Earth, a major national environmental organization.



BECKY KREAG has been Deputy Director of the Resource Management Division of the Oregon Water Resources Department since 1987 and before that worked as a Water Resources Planner with the Department (1983-87). She worked on the Areawide "208" water quality program from 1979-82, the estuarine resource assessment with the Oregon Department of Fish & Wildlife from 1978-79, and the Oregon Coastal Zone Management Program from 1973-77. She has a Masters of Science in Water Resources Management from the University of Michigan, and is an avid white water boater and tennis player.



CLYDE O. MARTZ has been associated with Davis, Graham & Stubbs in Denver since 1962, as a Partner and, since June 1989, Of Counsel. His emphasis has been on natural resources and public lands. He has also been on the faculty of the University of Colorado School of Law for various periods, from 1947-58, 1960-62, and 1988-present, teaching Natural Resources, Real Property, Administrative Law, and Contracts. He held the Raphael Moses chair at the Law School in 1988. He was Executive Director of the Colorado Dept. of Natural Resources in 1987, Solicitor with the U.S. Dept. of Interior (1980-81), and Assistant Attorney General of the United States (1967-69). His AB is from the University of Nebraska ('41) and LLB from Harvard ('47).



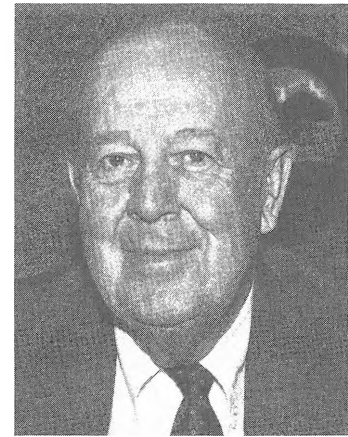
CHRISTOPHER H. MEYER is counsel to the National Wildlife Federation's Boulder field office, where he specializes in western water allocation. He is also an adjunct faculty member at the University of Colorado School of Law where he teaches a seminar in advanced water law. Before moving to Colorado in 1984, he spent six years with NWF's water resources program in Washington, DC. He has published articles dealing with the Sporhase decision, Section 404 of the Clean Water Act, economics and water allocation, and transportation planning under the Clean Air Act. He earned two degrees from the University of Michigan, an A.B. (high honors in Economics) in 1977, and a J.D. (cum laude) in 1981.



TIMOTHY H. QUINN is currently Director of the State Water Project and Conservation Division at The Metropolitan Water District of Southern California, responsible for four key areas: the State Water Project, Bay-Delta Hearings, water transfer negotiations, and water conservation. Formerly MWDSC's Chief Economist, he continues to supervise economic analyses of water supply and distribution systems, water quality, and pricing. Previously he was a project manager at the Rand Corporation, specializing in natural resource and environmental policy issues. He also served on the staff of the President's Council of Economic Advisors under Presidents Ford and Carter. His B.A. in economics is from Univ. of Colorado, and M.A. and Ph.D. in economics from the Univ. of California-Los Angeles.



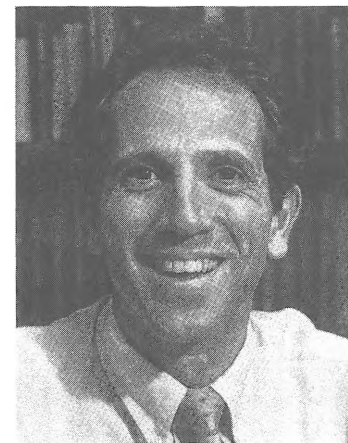
JOHN M. SAYRE was sworn in as Assistant Secretary for Water and Science on October 10, 1989. As Assistant Secretary he has policy and administrative responsibility for the Bureau of Reclamation, U.S. Geological Survey and the Bureau of Mines, with a combined annual budget of about \$1.7 billion. Sayre is a native of Boulder, Colorado, and graduated from the Univ. of Colorado with a B.A. in economics (cum laude '43) and with a J.D. in 1948. He served as a Navy officer from 1943-46. From 1966-89 he was a partner in the natural resources department of Davis, Graham & Stubbs in Denver. He has extensive experience in special and statutory district work involving litigation, legislation, financing contracts, environmental matters and Federal and State regulations.



LARRY D. SIMPSON has been with the Northern Colorado Water Conservancy District since 1971 in various capacities, including as General Manager since 1982. Previously he was Assistant Chief of Operations with the Los Angeles County Flood Control District (1962-71), and was an officer with the U.S. Army Corps of Engineers (1960-62). He holds a Professional Engineering Degree from the Colorado School of Mines ('59), and an M.B.A. in finance from Calif. State University, Los Angeles ('67), with graduate engineering studies at the Univ. of Southern California. He is a Director and Past President of the Colorado Water Congress, and a member of the Four-State Irrigation Council, as well as numerous other water related professional organizations. He currently operates a small farm near Windsor, Colorado.



MARK SQUILLACE has been a professor of law at the University of Wyoming College of Law since 1986, teaching mining law, torts, water rights and environmental law. Prior to that he was a Visiting Associate Professor of Law at the West Virginia University College of Law (1985-86); Director of Litigation with the Environmental Policy Institute in Washington, DC (1981-84); as Attorney Advisor with the Office of the Solicitor in Washington (1978-81). He has a B.S. in mathematics from Michigan State Univ. ('74) and a J.D. from the Univ. of Utah College of Law ('78). Recent publications include Environmental Law, Vol. 3: Air Pollution ('88), The Strip Mining Handbook ('90), "Water Marketing in Wyoming," ('89), and "A Critical Look at Wyoming Water Law" ('89).



A. DAN TARLOCK (A.B. and LL.B. Stanford University) is Professor of Law at the IIT Chicago-Kent College of Law. From 1981-87 he served on the Natural Resources Law Center's Advisory Board and was a delegate to the Center's first Sino-American Conference on Environmental Law in Beijing, P.R.C. in August 1987. In 1988 he was appointed to a three-year term on the Water Science and Technology Board of the National Academy of Sciences. Publications include Water Resources and Management 3d (with Meyers, Corbridge & Getches); Law of Water Rights and Resources; and "New Commons in Western Waters," in Water and the American West: Essays in Honor of Raphael J. Moses. He is currently a Vice-Chairman of the ABA Water Resources Committee.



ROBERT WIGINGTON is the staff water attorney for the western region of The Nature Conservancy. He has practiced water law in Colorado for 10 years and works out of the Colorado Field Office of The Nature Conservancy located in Boulder. He graduated summa cum laude from The Colorado College in 1973 and took his J.D. from the University of Colorado in 1979.



GARY C. WOODARD (B.S. Chemistry, University of Michigan at Dearborn, '76; M.P.P. Institute of Public Policy Studies, Univ. of Michigan '81; J.D. Univ. of Michigan, '81) has been with the Division of Economic and Business Research at the University of Arizona since 1982, where he directs research in natural resources policy. He was an adjunct professor in the Department of Agricultural Economics at the Univ. of Arizona spring 1989 and in the Department of Hydrology and Water Resources from 1984-86, teaching graduate courses in quantitative methods of water resource management. Recent publications include "Legal Framework for Water Transfers in Arizona," '89, (with Checchio); "Water Rates, Conservation and Equity: Must There Always Be a Tradeoff?" forthcoming in Putting Water Planning into Urban and Regional Planning ('90).

