







# **NEW TROUBLED WATERS?**

### Surface Water Supply and Quality as Idaho Urbanizes

#### **PROBLEM**

For many years, Idaho has been among the country's fastest growing states. Now, literally, we are at the top of the list: the fastest growing state in America. What are the implications for Idaho's surface water supply and the health of our streams and rivers?

As population expands in places like our Treasure Valley, irrigated agricultural land is shrinking, replaced by residential subdivisions, commercial developments and associated infrastructure. The irrigation districts and canal companies holding surface water rights for these areas increasingly manage their canal systems to supply irrigation water to subdivision lawns and landscaping where farm fields once existed. This has several advantages to homeowners, including low-cost irrigation water, and it avoids using groundwater (including treated municipal water) for this purpose.

But subdivisions and commercial areas contain far fewer irrigated acres than the farming operations they replace. In other western states this routinely results in transferring a corresponding portion of the parcel's water right to a new use. Idaho follows essentially the same legal principles: water diverted from a river must be put to use; excessive diversions are disallowed; transfers may occur. Logically, reduced irrigated acres should entail reduced diversions and, accordingly, portions of water rights freed up for other uses.

However, this typically is not what happens in Idaho. The Idaho approach has been described as one where the irrigation entities continue diverting river water to "gross acres"—the original lands within the irrigation entity's overall boundary—rather than to those acres now actually irrigated.

Is Idaho missing economic opportunities by failing to move unneeded water to new uses? What are the water supply implications? Are we unnecessarily releasing stored water that is diverted into a canal but ultimately not being put to use? Might we eventually lose control of diverted but unused water? And what are the water quality challenges we face on the Boise and middle Snake Rivers? Is water quality affected if river water is diverted through urban areas and then not consumed by crops or lawns?

#### **PURPOSE**

The purpose of this Andrus Center conference is to hear perspectives on this issue from irrigation entities, cities, state officials, water experts from other states, the federal Bureau of Reclamation, and others with experience in water delivery and management. The goal is to fashion a means of gathering information about the Treasure Valley's changing irrigation water use and its implications for both water supplies and water quality. This would define the scope of the problem and allow informed decisions to address it.

# PRESENTERS



### Stephen Burgos, Public Works Director, City of Boise

Steve Burgos, City of Boise, Public Works Director. Steve Burgos is the Public Works Director for the City of Boise. His experience

includes over 20 years in the environmental industry as a private consultant and now public sector director. As Director, Steve's responsibilities consist of a wide range of water related programs including planning and operations of the City's wastewater collection and treatment system; management of sustainability planning; management of the city's geothermal heating system; water resources planning, and providing planning and engineering support for storm water drainage and flood plain review. Prior to joining the City, Steve was an environmental consultant for Brown and Caldwell Environmental Engineers and Scientists, where he served as a vice president working with clients to address complex water quality and quantity issues. Steve is a graduate of Duke University with a degree in civil and environmental engineering and a veteran of the U.S. Navy.



### Michael Creamer, Partner, Givens Pursley

Over the past 25 years Michael has developed a strong practice and reputation in the areas of natural resources,

environmental and public utilities law. Michael is sought out for his counsel in developing, acquiring and transferring water rights for municipal, commercial, farming and ranching operations throughout Idaho. He also has been actively involved in negotiating surface use agreements and oil and gas leases on behalf of land and mineral owners in the recent southwestern Idaho oil and gas play. Michael represents several independent Idaho

telecommunications companies as well as hydropower, co-gen and wind energy generators before the Idaho Public Utilities Commission and in their permitting, rights-of-way acquisitions and contract negotiations. He routinely works with other Givens Pursley attorneys to advise clients concerning environmental and public land law issues that affect their projects. Michael also has broad experience in real estate transactions and telecommunications financing. He has been recognized by his peers in Best Lawyers in America for the past ten years. Michael is a frequent lecturer and writer on natural resources and environmental issues. He served as Vice-Chair (1996-1998) and as Chair (1998-2000) of the Water Law Section of the Idaho State Bar.



#### John Hildreth, Engineer, Idaho Power Company

John Hildreth is an Engineer at Idaho Power Company in the Operations Hydrology group. John supports the real-time

operation and management of Idaho Power's hydroelectric resources. His duties include streamflow forecasting, coordinating operations for flood control, navigation, and environmental issues, performing modeling studies for planning hydroelectric generation, and participating in interdisciplinary studies of environmental issues such as water quality. John is a member of the American Society of Civil Engineers, holds a M.S. degree in Civil Engineering from Boise State University, and is a registered Professional Engineer.



### Doug Kenney, Director, **Western Water Policy Program**

Doug Kenney is Director of the Western Water Policy Program, located within the University of Colorado

Law School in the Getches-Wilkinson Center for Natural Resources, Energy and the Environment. He has written extensively on several water-related issues, including law and policy reform, river basin and watershed-level planning, climate change adaptation, and water resource economics. Among his publications are In Search of Sustainable Water Management: International Lessons for the American West and Beyond (2005, Edward Elgar Publishing) and The Water-Energy Nexus in the Western United States (2011, Edward Elgar Publishing). He is also affiliated with the CU/NOAA Western Water Assessment (exploring the link between climate change/variability and western US water management) and is a member of the CU Environmental Studies faculty. Dr. Kenney has served as a consultant to a variety of local, state, multi-state, and federal agencies, including several Interior Department agencies, EPA, the US Forest Service, and special commissions; and national governments and NGOs in Asia and Africa. Additionally, he has made presentations in 21 states (and the District of Columbia), 8 nations, and 5 continents. He has a B.A. in biology from the University of Colorado, a M.S. in Natural Resources Policy and Administration from the University of Michigan, and a Ph.D. in Renewable Natural Resource Studies from the University of Arizona.

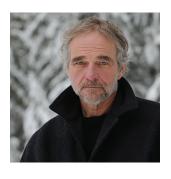


Patricia Limerick, **Director and Chair,** Center of the **American West at** the University of Colorado, Boulder

Patty Limerick is the Faculty Director and

Chair of the Board of the Center of the American West at the University of Colorado Boulder, where she is also a professor of environmental studies and history. In addition, Patty was named to serve as the new Colorado State Historian and appointed to the National Endowment for the Humanities advisory board called The National Council on the Humanities. Patty was nominated by President Obama in Spring 2015 and was confirmed by the United States Senate in November of 2015. She is the author of Desert Passages, The Legacy of Conquest, Something in the Soil, and A Ditch in Time. A frequent public speaker and a columnist for The Denver Post, Limerick has dedicated her career to bridging the gap between academics and the general public, to demonstrating the benefits of applying historical perspective to contemporary dilemmas and conflicts, and to making the case for humor as an essential asset of the humanities. A recipient of the MacArthur Fellowship and the Hazel Barnes Prize (the University of Colorado's highest award for teaching and research), she has served as president of the American Studies Association, the Western History Association, the Society of American Historians, and the Organization of American Historians, as well as the vice president for teaching of the American Historical Association. She received her B.A. from the University of California, Santa Cruz, and her Ph.D. from Yale University.

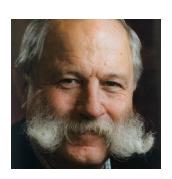
# PRESENTERS



#### Dick Manning, Environmental author, and journalist

Freelance magazine writer, with essays and articles published in *Harper's*, *Men's Journal*, *The Los Angeles Times*, *American Scholar*,

The New York Times, Audubon, Outside, and many others. Newspaper editor and reporter for fifteen years, working at newspapers in Montana and southern Idaho. One Round River was named a significant book of the year by The New York Times. Winner of the University of Montana's Mansfield Center's Lud Browman award for science writing, Richard Margolis award for environmental writing, Montana Audubon Society award for environmental reporting, Montana Wilderness Association award for writing, three-time winner of C.B. Blethen Award for investigative journalism. Worked as a consultant on agriculture, poverty and the environment to the McKnight Foundation, the Rockefeller Foundation and the Food and Agriculture Organization of the United Nations.



### David Robbins, President and Co-Founder, Hill & Robbins P.C.

David Robbins is president and co-founder of Hill & Robbins, P.C., where his practice emphasizes the fields

of water and natural-resources law, water quality, and environmental law. Prior to entering private practice, Mr. Robbins served in the U.S. Army (Captain, 1969-1972) and with the U.S. Environmental Protection Agency, Region VIII (1973-1974). He then joined the Colorado Attorney General's Office as a First Assistant Attorney General and head of the Natural Resources Section (1975-77), and was later appointed the Deputy Attorney General (1977-1978). Mr. Robbins represented

the State of Colorado in a variety of interstate water matters, and served as counsel to the state engineer in adjudication proceedings and trials concerning basin-wide rules and regulations. He also represented the Colorado Water Conservation Board, and successfully defended the constitutionality of the state's first instream flow protection law.



### Roland Springer Snake River Area Manager, U.S. Bureau of Reclamation

Roland is the area manager of Reclamation's Snake River Area Office, where he oversees Reclamation

facilities and activities throughout the Snake River basin, from eastern Oregon through western Wyoming. He has served Reclamation in Idaho, Salt Lake City, Boulder City, Nevada and Washington, D.C. He has also worked as a consulting water resources engineer and a management consultant to federal agency leaders. Roland has B.S. and M.S. degrees in civil engineering from MIT and an MBA degree from Cornell University, and is a Professional Engineer and Project Management Professional.



### Hawk Stone, Surface Water Specialist, Department of Environmental Quality

Hawk Stone is Idaho DEQ's surface water specialist. He has worked on streams and rivers throughout the state

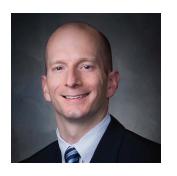
since 2001. Beginning his career in southwest Idaho, he now works on surface water projects statewide. He holds a BSc in chemistry from the University of Leeds in England, and is an Idaho Certified Public Manager.

In 2013, Hawk completed a watershed plan ("TMDL") for the streams in the lower Boise River watershed. This project brought together agricultural, urban and

## PRESENTERS

environmental interests to address sediment and bacterial pollution in a rapidly urbanizing watershed. He also developed a comprehensive, valley-wide map of all surface water and irrigation and drainage channels. More recent projects include the Idaho Forest Practices Act audit, and analysis of mercury levels in Coeur d'Alene River fish.

Hawk is DEQ's program lead for the Idaho Forest Practices Act, and organizes the annual Idaho Water Quality Workshop. This summer, Hawk and his employees will be collecting data to measure the effect of timber harvest on riparian shade. Hawk Stone lives in Boise, Idaho.



#### Andy Waldera, Principal, **Sawtooth Law Offices**

Andy Waldera practices in the areas of water, land use law, environmental/natural resources, and agricultural law. He represents clients in

judicial, administrative, and local government proceedings regarding water rights and land use matters involving state-based land use, water and environmental laws, as well as actions proceeding under the federal Clean Water Act (CWA), the Endangered Species Act (ESA), the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Mr. Waldera is serving his second, three-year appointment by the Board of Ada County Commissioners to the Ada County Waterways Advisory Committee. He served six terms (2009-2014) as the Chair of the Idaho State Bar Water Law Section.

Mr. Waldera authors monthly articles as a member of the Editorial Board of the Western Water Law and Policy Reporter, a water law publication distributed to water resource professionals throughout the western United States, as well as authoring water/natural resource lawbased articles for The Advocate, the official publication of the Idaho State Bar.



#### Mat Weaver, Deputy **Director, Idaho Department of Water Resources**

Mat Weaver is the Deputy Director of the Idaho Department of Water Resources. As Deputy, Mat

oversees the Department's Hydrology Section, Water Compliance Bureau, and Information Technology Services Bureau. Despite those obligations, he spends most of his time wrestling with the job responsibility category of "other duties as assigned", which recently has included trying to settle the Boise River Basin Refill matter.

Mat was born in Bozeman, MT, and grew up across the Pacific Northwest. He earned a B.S. in Civil Engineering from Montana State University, a Master of Earth Science in Hydrology from Boise State University, and is currently a licensed Professional Engineer in the State of Idaho.

#### **TUESDAY, APRIL 17**

9:00 a.m. Opening

John Freemuth, Ph.D,

Executive Director, Andrus Center for Public Policy

IdahoPTV Video (3-4 minutes)

9:15 a.m. Panel: How is water supply affected by the continued

reduction in acres of irrigated agricultural land?

Michael Creamer, Givens Pursley

Mat Weaver, Idaho Department of Water Resources

Andrew Waldera, Sawtooth Law Offices

10:30 a.m. Break

10:45 p.m. Panel: How are other states dealing with changes

in water use and growth?

David Robbins, Hill & Robbins P.C.

Doug Kenney, Western Water Policy Program

Noon Lunch

12:15 p.m. Lunch Speaker

Roland Springer, U.S. Bureau of Reclamation

1:15 p.m. Break

1:30 p.m. Panel: What are the water quality implications

of the urbanization of agricultural land?

Dick Manning, Environmental author and journalist

John Hildreth, Idaho Power Stephen Burgos, City of Boise

Hawk Stone, Department of Environmental Quality

2:45 p.m. Closing speaker

Patricia Limerick, Center of the American West

at the University of Colorado, Boulder

4:00 p.m. Reception, Jordan Ballroom

#### **ABOUT THE ANDRUS CENTER**

The Andrus Center for Public Policy advances the legacy issues of former Idaho Governor and Secretary of the Interior, Cecil D. Andrus — wise use of our environmental resources and public lands, proper funding of education for our children, and the cultivation of leadership from all segments of our society.

Executive Director John Freemuth, PhD, teaches in the Boise State University Master of Public Administration Program and Political Science Department. Freemuth's research and teaching emphasis is in natural resource and public land policy and administration. He is the author of an award-winning book, *Islands under Siege: National Parks and the Politics of External Threats*, numerous articles on aspects of natural resource policy, and eight Andrus Center white papers, all of which can be found at andruscenter.org

