When we talk about the Water Resources/Reuse Group, and specifically about “water resources services” at Carollo, we mean the services we provide our clients to help them secure adequate water supplies to meet their potable and non-potable demands. Typically, different sources of water have different institutional “rules” and water quality and reliability concerns that must be considered for their use in a community’s water supply. These include water rights, appurtenant lands, geography, seasonality, and timeframes. They certainly have different costs associated with their acquisition, delivery, and treatment. More importantly, they have different “soft” issues to be addressed: political, financing, public stakeholder issues, and sustainability concerns.

Developing these portfolios of supply and helping our clients determine how to deploy them in a cost-effective manner through infrastructure to meet demands is what Carollo’s water resources professionals do. They do this in close collaboration with other specialty groups within Carollo’s Integrated Resources Practice. This especially includes the Business Solutions Group (Kyle Rhorer), the Watershed Planning Group (Elisa Garvey), and the Energy Group (Troy Hedlund).

Potential water supplies include surface water, groundwater, recycled water, desalinated water, stormwater, produced and frac water, and other remediated sources. We provide support and expertise with inter-basin transfers, permitting, securing funding, water sale/lease negotiations, alternatives analysis, integrated master plans, aquifer management, econometrics and decision support, water quality evaluations, and watershed modeling. Increasingly included in our services are advanced water conservation, low impact development (LID) techniques to improve capture and percolation to groundwater, stormwater capture and use, and aquifer storage and recovery options.
To better strengthen our offering of water resource services, we have recruited several widely recognized water resource and specialty experts in the past couple of years.

**Tom West – Southern California**

West specializes in leading and managing complex, high-profile projects that integrate water resources planning, water quality, stakeholder involvement, multi-agency partnership and funding/financing. Over nearly 20 years, he has served as a project manager; a water quality and treatment specialist; water resources and watershed manager, and planning, management and financing consultant for more than 75 cities and special districts throughout California as well as for clients in Washington, Texas, Massachusetts, Arkansas, Singapore, and Hong Kong.

**David Rydman – Southern California**

David joined Carollo in August of 2012. Prior to joining Carollo, he served as the Water Resources Manager for the Los Angeles County Waterworks Districts. During his tenure with the Los Angeles County Department of Public Works, he was involved with water resources planning and management at all levels. This included: groundwater well design and construction management, maintenance and rehabilitation of groundwater wells, aquifer storage and recovery, groundwater basin banking, recycled water system planning, integrated regional water management planning and implementation, watershed management planning, grant application preparation, geographical information systems (GIS), stakeholder group facilitation, and water conservation program evaluation and administration.

**John Rehring – Denver**

John joined Carollo in 2011, with more than 20 years of experience specializing in water supply planning, water reuse, infrastructure, and water and wastewater master/facility planning. Currently, he is working on municipal water supply plans in Colorado and Oklahoma, statewide water conservation incentives and instream flow planning for the State of Oklahoma and U.S. Army Corps of Engineers, and a reuse research project for Denver Water in conjunction with his lead role in proposing new uses for authorization under Colorado's reuse regulations.

**Dan Vizzini – Portland**

Dan joined Carollo in 2012, and brings 35 years of experience as a political economist, financial analyst, program manager, and advisor to elected officials. While with the City of Portland, OR., Bureau of Environmental Services (BES), his leadership was instrumental in leading and implementing the City of Portland’s “green” infrastructure solutions that have been emulated nationally. He also currently serves as a strategist and policy advisor to Oregon Governor John Kitzhaber, and others, on public-private partnerships (P3) infrastructure programs, and in such diverse fields as land use planning, growth management, local infrastructure financing, utility governance and ratemaking, and integrated watershed planning and asset management.

From 2006 through 2010, Dan served as the lead investigator for the Portland Storm Water Marketplace Project to investigate market-based strategies to increase private investments in onsite storm water management. Dan is a valued advisor to elected officials and public agencies, particularly in such areas as land use planning, storm water project pre-designs, public outreach and engagement activities, and the reform of utility governance, oversight, and ratemaking.

If you need water resources support on one of your pursuits or projects, please contact Guy Carpenter or Steve McDonald so we can leverage Carollo’s expertise to help you be successful in meeting your client’s needs.