EXAMPLES FROM COAST-TO-COAST OF THE WATER RESOURCES UTILITY OF THE FUTURE

Utilities large and small are beginning to take on the Water Resources Utility of the Future (UTOF) mantle. Some are making it a guiding force that permeates their management philosophy while others are doing so to the degree market forces and return on investment dictate. All, however, can use the support of the federal policy to move in this direction. The brief examples which follow illustrate the types of activities, which, if realized on a national scale, would have profound benefits to the economy, the environment and public health.

The **Milwaukee Metropolitan Sewerage District (MMSD), Wisconsin** has set stringent, 25-year sustainability, cost reduction and efficiency goals. MMSD promotes the future use of green infrastructure, cost-effective watershed-based permitting and effluent trading, renewable energy sources to meet 100% of its energy needs, and reduction in its carbon footprint by 90% from a 2005 baseline through energy efficiency projects.

The **Ohio River Basin** serves as a model for other watershed-based trading programs. Launched in 2009 with some states joining as recently as 2012, the project is a first-of-its-kind interstate multi-credit trading program. At full scale, it will become the world's largest water quality trading program, potentially creating credit markets for 46 power plants, thousands of wastewater facilities and other industries, and up to 230,000 farmers.

The **East Bay Municipal Utility District (EBMUD), California**, is blending community food waste (e.g. fats, oils, and grease from local restaurants and food waste from wineries and farms) with their own biosolids to produce enough methane-generated electricity to meet their own energy demand and send excess to the local grid. This 55,000 megawatt-hour/year $31 million biogas project saves the utility $3 million a year in energy, and contributed to EBMUD's reduction of 13,300 metric tons of carbon from its 2010 baseline.