

WATERiD

This research presents a methodology for developing a national database for water infrastructure system which includes both drinking water, wastewater, and storm water. The database is entitled as “WATERiD” and can be accessed at www.waterid.org. Water infrastructure in U.S. is aging poorly and municipal governments are struggling to find easy access to comprehensive information about sustainability of their water infrastructure such as condition assessment, renewal engineering, subsurface utility engineering, best management practices, and cost of technologies. There are more than 50,000 water/wastewater utilities in the United States and no two utilities are alike. However, there are common technologies that are used by a different utility and lesson learned from application of those common technologies can be used as knowledge by other utilities. Because there is no easy accessible platform through which successful experiences and lessons learned can be shared, common mistakes including unnecessary change of orders are made repeated in different locations. WATERiD is enabling utilities to share their experience and lesson learned, and is a single point information center for the utilities where they can find all the water infrastructure sustainability relevant information. To collect lessons learned and utility experience, more than 100 utilities throughout the U.S and 30 additional international utilities were contacted. The data from utilities are compiled, taxonomically classified, and uploaded in WATERiD for sharing between the utilities. This paper describes a process for developing the database including database architecture, database critical functionalities such as upload and categorization, and future development work. Sustainability building upon foundational WATERiD resources has and will continue to take the cooperation of utilities, organizations, and professionals from across the water infrastructure industry.



Figure 1: WATERiD Website