



Stan Shumaker, P.E.



**Mobile: (775) 544-0688**  
**shumakersn@gbis.com**

## SKILLS and ATTRIBUTES

40 years of Technical Expertise  
Public Works Management  
Wastewater Process  
Water Treatment

## EXPERIENCE

**City of Reno Public Works**  
*Sanitary Engineer*

**Clark County Sanitation District**  
*Project Engineer*

## EDUCATION

B.S., Civil Engineering,  
California State University, Sacramento, CA

**Stan Shumaker, P.E.** has over 40 years of professional engineering experience in Nevada dealing with numerous aspects of wastewater collection, treatment, beneficial reuse, residual solids management, odor control, permit compliance and regional planning.

Stan was a project engineer for the Clark County Sanitation District (now the CCWRD) during a period of rapid growth and transformation. The District transitioned from operating an aging trickling filter plant linked to a new but overly complex physical-chemical phosphorus removal plant to building a conventional activated sludge plant, that was then modified to include a biological phosphorus removal process with instrumented control. His work also included an odor control study (involving neighboring residents on the odor panel), implementation of sustainable odor control practices and processes, a study of sludge disposal alternatives (that evolved from an aerated windrow composting trial project), and a UV disinfection pilot study.

Similarly, Stan worked for the City of Reno Department of Public Works during the transformation of the Reno-Stead treatment facility from a dated oxidation ditch plant into an efficient biological nutrient removal facility with effluent filtration and disinfection that provides reclaimed water for irrigation of a local golf course and sports fields.

He was involved with comprehensive studies to address the twin challenges of providing cost effective wastewater management within the closed basins of Reno's North Valleys service area: planning and design of treatment facilities to accommodate growth of the community, while implementing the best practices of beneficial recovery and use of a valuable water resource. A part of the North Valleys work included a successful pilot study of an advanced wastewater treatment process to produce water suitable for indirect potable reuse.

Stan's work for the City of Reno included investigation of the Truckee River Water Quality Standards (WQS) and Total Maximum Daily Load (TMDL) limits with local and state agencies that directly influence the operation of the Truckee Meadows Water Reclamation Facility (TMWRF), review and comments on the river and lake WQS adopted by the Pyramid Lake Paiute Tribe, and review of the environmental impact reports for the Truckee River Operating Agreement. As part of the TMWRF expansion and retrofit projects, he successfully promoted adoption of the in-basin phosphorus removal process previously implemented at CCWRD to replace TMWRF's complex PhoStrip process, and replacement of the gas chlorine system with liquid sodium hypochlorite for safety reasons. On an annual basis he worked with TMWRF staff to identify facility rehabilitation needs and prioritize projects within budget constraints.

Stan has been a long-time member of the Water Environment Federation, and was a judge of environmental engineering and science projects for the Intel ISEF for several years. He was born and raised in Woodland, CA, received a Bachelor of Science degree in civil engineering from California State University, Sacramento, became a Nevada resident in 1983 and has lived in Reno since 1997 with his wife Neila.