John N. DeBoice, P.E., Ph.D.
Senior Engineer
Oscar Larson & Associates

REGISTRATION: Civil Engineer No. 26167, California, since 1976

EDUCATION: PH.D. in Sanitary Engineering, U.C. Berkeley, 1974
M.S. in Sanitary Engineering, U.C. Berkeley, 1967
B.S. in Civil Engineering, University of Hawaii, Honolulu, 1966

INTRODUCTION:

Dr. DeBoice has a broad range of experience in the field of sanitary engineering, including design and construction of wastewater treatment facilities, sewers, lift stations and force mains, computer modeling of sewer systems and waste treatment processes and evaluations of the impact of wastewater discharge to ground waters, marshlands, tidal sloughs, rivers and open ocean areas. His water system experience includes evaluations of water treatment and distribution facilities, computer modeling of water distribution systems, planning, design and construction management of water treatment, distribution and storage facilities. He has also carried out pilot studies, designed waste handling facilities for water treatment plants, conducted corrosion studies and spoken on disinfection at Water Treatment Forums and Workshops held by the California section, AWWA, throughout California and Nevada.

Dr. DeBoice has also been responsible for the design and construction of industrial water supply and wastewater disposal facilities, and has conducted waste surveys, in-plant source control programs, and studies of corrosion, scaling, and biological fouling of cooling towers, boilers, and water distribution piping. His flood control experience includes planning for a major in-stream gravel mining operation, planning and design of drainage improvements and storm water pump stations, river modeling and design of erosion control structures. He has authored several technical publications and given presentations at numerous technical meetings and conferences.

EXPERIENCE:

Responsible for a variety of water and wastewater planning and design projects including evaluation of the Mad River Pipeline, a 70+ year old, 24-inch mortar lined and coated steel pipe that is the primary water supply line for the City of Eureka. The line extends through developed properties, along streets and across former tidal wetlands for over 10 miles from the Humboldt Bay Municipal Water District supply facilities in Arcata to the City of Eureka. The evaluation resulted in recommendations for a five-part improvement program with an estimated cost of $9.4 million. He was responsible for design and construction management of the first three phases and is currently completing design of the fourth phase. He was recently responsible for planning and design of water system improvements for Loleta Community Services District that included a new well, transmission pipeline and an iron and manganese removal treatment facility. Other water system projects have included design and construction monitoring of water treatment facility improvements for Brooktrails Township Community Services District and a 750,000-gallon steel water storage tank for the Bertsch-Ocean View Community Services District, planning for water supply for a proposed casino, planning and design of water supply lines for a 43-unit subdivision and other development projects.

Responsible for a variety of wastewater planning and design projects including: development of the operations and maintenance manual and providing startup and operational assistance for the Manila Community Services District Wastewater Treatment Facilities which treats septic tank effluent utilizing aerated lagoons and constructed wetlands, design and construction monitoring of $3.3 million in sanitary sewer system rehabilitation work to correct infiltration/inflow problems in the Del Norte County Service Area tributary to the Crescent City sewer system, performance of a pollution study and development of alternatives for wastewater collection and treatment for the community of Orick, assistance in improving the disinfection system at the Loleta Community Services District wastewater treatment facility, and preliminary design of a constructed wetland wastewater treatment system for the community of Samoa. In two separate projects for McKinleyville Community Services District he was responsible for a study on disinfection alternatives to meet PSM and RMP requirements and a complete evaluation of the treatment and disposal capacity of the District's wastewater management facilities. He was also responsible for construction management for a $14 million wastewater treatment facility upgrade for the City of Fortuna.

Storm drainage projects include planning for storm water management and wastewater disposal for a proposed casino in an environmentally sensitive coastal area, planning and design of storm drainage for a 43-unit subdivision and a geomorphological study of the impacts of a proposed sand and gravel mining operation in a river bed having seasonal flow.

AFFILIATIONS: American Water Works Association, Life Member