Gerry O. LaBudde PE

Principal/Owner

Gerry has 30 years of engineering experience as principal, manager, and project engineer. His experience includes design of water and wastewater treatment facilities, evaluation and design of wastewater collection and water distribution systems, pumping stations, construction management, master planning, and startup of various water/wastewater treatment systems. Gerry specializes in assisting small to medium sized communities and understands challenges facing small systems. In addition to practicing engineering, he owned and operated a 1-mgd conventional surface water treatment plant and was responsible for the operation and maintenance of four additional surface water treatment plants and distribution systems for 25 years.

WORK EXPERIENCE

SECOR Consulting, Staff Engineer, 1992-1994

ECO:LOGIC Engineering, Principal/Partner, 1996-2010

Stantec Consulting Services, Principal, 2010-2014 (Stantec Consulting purchased ECO:LOGIC Engineering Sept. 2010)

Weimar Water Co., Partner/General Manager, 1998-2023

Triton Construction Services, Principal/Partner, March 2014-April 2024

Hydros Consulting, Principal/Partner, April 2014-Present

EDUCATION

BS, Civil Engineering, California Polytechnic University, San Luis Obispo, California, 1992

MS, Environmental Engineering, University of California, Davis, California, 1996

REGISTRATIONS

Grade 4 Water Treatment Operator #21089, California Department of Public Health

Grade 2 Water Distribution System Operator #19090, California Department of Public Health

General Contractor #994499 State of California

Professional Engineer #55767, State of California

PROJECT EXPERIENCE

Water

Christian Valley Park CSD – Reservoir Replacement Project, Auburn, California (Project Manager/Engineer)
Provided planning, engineering and construction management services for the evaluation of alternatives for the replacement of a 1.5 Mgal Hypalon covered reservoir. Prepared contract documents, managed bidding process, provides construction inspection services for the replacement of the existing reservoir with two new 750,000 gallon tanks, new pumping facilities, and SCADA/electrical upgrades.

Christian Valley Park CSD – Kenneth Loop Pipeline, Auburn, California (Project Manager/Engineer)
Provided planning and engineering services for alternative alignments for a critical loop to increase reliability, operational flexibility and hydraulic capacity. Significant public outreach with property owners for acquisition of easements. Project currently in the design phase.

Water Treatment Plant Evaluation, City of Nevada City, California (Project Manager/Engineer)
Review of existing water treatment plant to assess treatment plant for reliability, compliance and overall condition. Worked closely with operations staff during the evaluation.

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Christian Valley Park CSD – Capital Improvement Plan, Auburn, California (Project Manager/Engineer)

Prepared capital improvement project for existing system to support rate study. CIP took into account existing facility condition and remaining useful life. Information was used to estimate cost and timing of the improvements to identify cash flow needs for setting water rates. Results of the CIP were incorporated into the rate study and included treatment, distribution and storage improvements.

Lockeford Community Services District, Lockeford, California (Project Manager/Engineer)

Prepared Engineer's Report and rate study in accordance with Proposition 218 to support the District's efforts to increase water rates.

Storage and Treatment System Upgrades, Meadow Vista County Water District (Principal in Charge/Project Engineer)

Mr. LaBudde was responsible for the planning, design and construction management of a redundant filter system, storage tank, booster pump station and pretreatment facilities for a 2.5 MGD surface water plant. The project consisted of construction of pressure filter system that operates in parallel to the existing gravity filters. The existing flocculation/sedimentation basin was completely refurbished with plate settlers, sludge removal system and new mixers. A new 4,500 gpm pump station and two 1 MG tanks were constructed. Plant had to continue to operate through construction. Project costs was $10.5 million.

Regional Water Supply Project, Nevada Irrigation District/City of Lincoln (Principal in Charge/Project Engineer)

Mr. LaBudde was responsible for planning and predesign of a 40 MGD surface water plant. The initial study consisted of a siting/feasibility study to determine the feasibility of the project which will supply drinking water to over 20,000 customers within the City of Lincoln as well as 5,000 homes in the unincorporated areas of Placer County. Predesign included the over 17 miles of raw and treated water pipelines, a 700 acre-ft reservoir and dam, 40 MGD water treatment plant and storage, hydroelectric facilities and metering station. The project is currently in the CEQA phase.

Filter Rehabilitation Project, Foresthill Public Utility District, Foresthill California (Project Manager/Engineer)

The District relies on two pressure vessels for treatment. Filters were installed in 1983 and required major rehabilitation to maintain reliability and treatment efficiency. Project involved the design and construction management of the improvements. Staging improvements and start up were critical aspects of the project to maintain water service during progression of the work.

Hidden Valley Water System (Project Engineer)

Mr. LaBudde provided evaluation of the Hidden Valley Water System including review of Contractor submittal to rehabilitate pump station, hydraulic model assessment of distribution system, distribution and pumping system improvements, and operational input to improve system efficiency.

Water System Modeling, Mustang Valley, California (Project Engineer)

Mr. LaBudde performed hydraulic modeling analysis of irrigation distribution system to determine cause(s) of low pressure in the Mustang Valley Mutual Water Company System. His analysis provided recommendations to alleviate problem and further expand the system.

Water Treatment Plant Expansion, Angels Camp, California (Project Engineer)

Mr. LaBudde was project engineer for the expansion of the Angels Camp Water Treatment Plant including a new pressure filter, rehabilitation of an existing filter, new headworks, and a 2.5-mg welded steel storage tank.

Water Master Plans, Various Locations, California (Project Engineer)

Mr. LaBudde served as project engineer for numerous water master plans for various communities including Lockeford, Live Oak, Foresthill, Escalon, Christian Valley, and Newman. Systems included groundwater wells and surface water treatment plants including conjunctive use systems.

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Copper Cove Water Storage Project, Calaveras County, California (Project Manager/Engineer)
As project manager and engineer, Mr. LaBudde designed two 0.5-mg steel storage tanks on an existing site. The project was phased to construct the first tank and place in service, demolish the existing redwood tank, and then construct the second tank. Improvements included new site/distribution system piping, drainage, and access road.

County Service Area 31 Well No. 3 Nitrate Treatment System, Flag City, California (Prinicpal-In-Charge)
Mr. LaBudde was responsible for design of improvements to provide a well head nitrate treatment system. In coordination with Siemens Water Technologies, ion-exchange was selected and installed at the site with the system designed and permitted to blend treated water with the well source to meet a nitrate concentration of 23 mg/L. Due to site constraints, off-site regeneration of the ion-exchange resin was incorporated into the system operation. A particular challenge of this project was designing the system to meet peak fire flow demands of 1,200 gpm and average demands less than 400 gpm.

Filter Addition Project, Christian Valley, California (Project Manager)
As project manager, Mr. LaBudde designed this filter expansion project to provide a third pressure filter to decrease filter loading rates below DHS standard. The additional filter provided additional capacity and redundancy to the plant. In addition to the filter, the project included modifications to the plant chemical feed and instrumentation systems. He assisted the District in locating a used four-cell pressure filter, which was refurbished as part of the project.

Water Storage Tank, Weimar, California (Principal-In-Charge/Engineer)
Mr. LaBudde was responsible for design of a 1-mg water storage tank, site work, site piping and controls.

La Dolce Vita Tank Project, Auburn, California (Principal-In-Charge/Engineer)
Mr. LaBudde was responsible for the design of a 0.5-mg water storage tank, site work, site piping and controls.

Alta/Bowman WTP Storage Improvement Project, Auburn, California (Project Manager/Engineer)
Mr. LaBudde served as project manager and engineer for the design of site piping and 0.1-mg steel storage reservoirs at two sites. Improvements included tanks, interconnecting piping, and site grading.

Water Storage Tank (Project Engineer)
Mr. LaBudde served as project engineer for the detailed design of the Sierra Lakes County Water District Water Storage Tank, which included a new booster pumping station and a 0.5-mg welded steel storage tank.

Gerber Well Raw Water Main Arsenic Improvements, Sacramento, California (Principal-In-Charge/Project Manager)
California American Water operates the parkway water system. Groundwater wells within the service area exceed the new arsenic standard and require treatment. The project included the design a new 5,000-foot, 12-inch transmission main to connect an existing well to the treatment plant. The pipeline alignment was along a major roadway and included a bridge crossing. Well head improvements were also included.

Camp John Mensinger Water Treatment System, Tuolumne County, California (Principal-In-Charge)
Mr. LaBudde designed a small surface water treatment system including modification of grading and fencing around spring boxes to limit surface influences, eliminate an open raw water reservoir that was found to be a significant source of raw water turbidity, slow sand filtration followed by bag filtration and chlorination, and provide chlorine contact storage.

Arsenic Removal System, Live Oak, California (Principal-In-Charge)
Mr. LaBudde managed the design (performed by another firm), for three well head arsenic removal systems for the City of Live Oak's drinking water wells to comply with the U.S. EPA's Arsenic Treatment Rule. The treatment systems consisted of skid-mounted manganese dioxide pressure vessels with ferric chloride, sodium hypochlorite, and potassium permanganate chemical feed systems.
A solids residual handling system was installed at one of the well sites to remove the solid residuals in the filter backwash. This system consisted of a backwash storage tank, recycle pumps, sludge pumps, and sand drying beds. The project included construction management, on-site inspection, and start up services for the project.

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Squaw Valley Water Treatment/Siting Study, Squaw Valley, California (Principal-In-Charge/Engineer)
The SVPSD required a water treatment technology and siting study for a future water treatment facility in the Valley. The District's existing groundwater wells are of high quality, but recent groundwater studies have suggested that future wells may need treatment for iron, manganese, and arsenic. The project involved a series of technical memorandums discussing treatment technologies and potential facility sites. In working closely with District staff and the Water and Sewer Committee through a decision matrix analysis process, a proposed site and greensand filtration process was recommended.

Micke Grove Regional Park DBCP Project, San Joaquin County, California (Project Manager/Engineer)
Mr. LaBudde performed a feasibility analysis to evaluate treatment alternatives for DBCP removal versus an alternative water supply from the City of Lodi. The project included design of the well head treatment system including carbon contactors and chlorination system.

Mountain House Water Treatment Plant, Mountain House, California (Project Engineer)
Mr. LaBudde served as project engineer for the preliminary and detailed design of the Mountain House Water Treatment Plant, which included two Trident treatment units with a capacity of 3 mgd each, and two welded steel storage tanks, each with a capacity of 4.5 mg.

Zone 7 Well Chlorination System Project, Livermore, California (Project Engineer)
As project engineer, Mr. LaBudde provided predesign evaluation of the system to evaluate centralized vs. decentralized treatment. The project included predesign and eventual design of the improvements including wells, treatment/well buildings, chemical feed systems for the addition of chlorine and ammonia, chemical containment systems, controls, and civil site work.

1-mgd Water Treatment Plant Design, Northstar, California (Project Engineer)
Mr. LaBudde served as project engineer for retrofitting the existing inline water treatment plant to replace existing sand filters with a membrane unit. Additional improvements included chemical feed, residual handling, and pumping. The facilities were designed and constructed within existing treatment plant while maintaining operation of the existing facilities.

Well Replacement Project, Lockeford, California (Principal-In-Charge)
Mr. LaBudde assisted the District in securing USDA funding to replace an existing well that failed. The project included the evaluation of alternatives sites, design of the well, and mechanical/electrical equipment topside. The project was completed under an expedited schedule to ensure reliable service.

Regional Water Supply Project, Placer County, California (Principal in Charge/Engineer)
The original siting study was completed by the project team in 2005 and included an evaluation of 13 potential water treatment plant sites between Auburn and the City of Lincoln. The siting study included evaluation of water demands, raw water storage facilities, project phasing for a 40-mgd water treatment plant to serve portions of the City of Lincoln within the NID service area, as well as identified the preferred location of the treatment plant. The project is currently in the planning and predesign phase with the original project team for all aspects of the project including pipelines, raw water reservoirs, water treatment plant process/site layout, environmental constraints analysis, and potential hydro-electric facilities.

Fluoride Refurbishment Project, Placer County, California (Principal in Charge/Project Engineer)
Mr. LaBudde was responsible for the complete refurbishment of three fluoride storage/feed and water quality monitoring systems at three separate turnouts where the District purchased and diverted water from Zone 7, a water wholesaler. Project challenges included retrofitting existing facilities with limited documentation while maintaining supply and service to customers.

Effluent Control Valve Replacement, Calaveras Public Utility District, California (Principal in Charge/Project Engineer)
Mr. LaBudde was responsible for diagnosing problem with existing effluent control valve and specifying new valve and controller. Project included assisting contractor during emergency repair to maintain water service for the community.

Wastewater

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Wastewater Treatment Plant Upgrade, Williams, California (Principal-In-Charge)
Mr. LaBudde served as principal-in-charge for the conversion of this secondary pond system to tertiary treatment Biolac activated sludge, clarifier, headwork, disk filter, UV disinfection, and reparation basin.

Flood Improvement Project, Williams, California (Project Manager/Engineer)
As project manager and engineer, Mr. LaBudde was responsible for Improvements including an emergency effluent force main, interconnecting pond piping to increase flow capacity of the WWTP to prevent bypasses during peak flow events, and modifications to chlorine contact basin to provide more convenient means of cleaning the basin. He prepared all contract documents and provided engineering services during construction.

Emergency Disinfection System, Livingston, California (Project Engineer)
Mr. LaBudde performed a disinfection pilot study to design chlorination-dechlorination system to disinfect pond effluent prior to emergency discharge to the Merced River. Based on pilot results, he designed, constructed, and operated disinfection system on temporary basis.

Wastewater Treatment Plant Expansion, Woodland, California (Project Engineer)
Mr. LaBudde provided design of the return activated sludge (RAS) pump station and chlorine contact basin expansions, as well as an equipment storage facility.

Wastewater Treatment Plant, San Andreas, California (Project Engineer)
Project Engineer on a pilot study for the San Andreas WWTP to determine sludge treatability with lime for Class A and B biosolids. Study included the use of Simon Moos dewatering and sludge stabilization equipment. Sludges studied included septic tank and primary sludge.

Wastewater Treatment Plant, Yuba City, California (Project Engineer)
Mr. LaBudde served as project engineer for an evaluation of anaerobic digester performance at the Yuba City WWTP. His analysis included review of historical performance data, determination of existing capacity, and consideration of alternative mixing methods to improve the digester performance.

Wastewater Treatment Plant Improvements, Grass Valley, California (Project Engineer)
As project engineer, Mr. LaBudde assisted in the detailed design of wastewater treatment plant including a new aeration basin/anoxic basin complex with mixed liquor recycle pumps, a new blower building, a new secondary clarifier, expansion of the return sludge pump station, expansion of the filters, lime feed system, expansion of the chlorine contact basin, sludge dewatering, filtrate equalization facilities, an equalization pump station, and related improvements.

Reclamation System Upgrade, Lockeford, California (Principal-In-Charge/Project Manager)
Mr. LaBudde prepared the Report of Waste Discharge to permit the proposed site, assisted the District's CEQA consultant, and designed the improvements. Improvements consisted of upgrades to chorine contact basin, booster pump station, flood irrigation system, runoff containment/recycle system, and site work.

Wastewater Treatment Plant Upgrade, Ripon, California (Project Manager/Engineer)
As project manager and engineer., Mr. LaBudde provided predesign to evaluate treatment/disposal alternatives to increase treatment and disposal of facility to 2.3 mgd. He also completed final design of new headworks, site piping, aeration, pond layout, and disposal area improvements.