West Shore Services:

Engineering

- Project Planning
  - Feasibility Studies
  - System Evaluations
  - Preliminary Engineering
  - Pre-Design Studies
  - Constructability Evaluations
  - Technical Reports
  - Specifications
  - Design Review
  - Technical Research
- Modeling
  - Process Algorithm Development
  - Distribution Systems
  - Hydraulic Modeling
  - Fire Flow Capacity
  - Drainage Studies
  - Stormwater
  - Tank Mixing
- Capital Planning
  - Project Cost Estimating
  - Grant Funding / Applications
  - Cost / Benefit Analyses
  - Capital Project Planning
  - Rate Studies
- Documentation
  - Mapping (Regions, Sites, and Facilities)
  - Operations and Maintenance Manuals
  - Plan Check
  - Code Compliance Verification
  - Peer Review

Design

- Water / Wastewater
  - Water Treatment
    - Nitrates
    - PFAs
    - Arsenic
    - Manganese
    - Surface water
  - Wells
    - Municipal
    - Private
    - Dewatering
    - Monitoring
  - Distribution Systems
  - Pilot Plant Design
  - Essential Facilities
  - Welded Tanks
  - Bolted Tanks
  - Geomembrane Lined Impoundments
  - Pipelines
  - Pump Stations
    - Booster
    - Stormwater
    - Transfer
  - Lift Stations
  - Forcemains
- Building and Site
  - New Buildings
  - Equipment Enclosures
  - Site Layout and Logistics
  - Foundations
  - Alternative Building Materials
- Agricultural
  - Wells
  - Aquaculture Facilities
  - Water Treatment Systems
  - Tanks
  - Pumping Systems
  - Ponds and Lagoons

Onsite Services

- Project Management Services
  - Project Bidding and Procurement
  - Site Sequencing and Logistics
  - Permit Assistance
  - Building and Equipment Damage Assessments
- Engineering Services During Construction
  - Project Administration
  - Submittal Review
  - Construction Management
  - Inspection / Observation
  - Facility Startup
  - Record Drawings
- Pilot Studies
- Well Testing and Sampling
  - Pump Test
  - Capacity Test
  - Title 22
  - Bac-T
- Operations Support
  - Water Treatment Operation
  - Water Distribution Operation
  - Emergency Response
  - Equipment Trouble Shooting
  - Repairs and Maintenance
  - Facility Surveys

West Shore™

Engineering - Design - Onsite

Summary of Qualifications

West Shore is a professional consulting company serving public and private water and wastewater Clients in California, Nevada, and beyond. In 2012 Nathan Thomas P E founded West Shore to be a firm committed to giving Clients sound engineering solutions with integrity and value. Located in Sacramento, West Shore is in a great position to reach an array of Clients across the State and support their operations in providing safe and reliable water for their communities, residences, factories, and farms. Our company can assist Clients in all phases of capital investment: from feasibility and planning, through the design process, to procurement, construction, and commissioning. West Shore excels at designing solutions tailored to the needs of the Client and their unique situation. In all endeavors West Shore diligently adheres to the principles of professionalism and honesty while seeking our Clients' best interests. West Shore aspires to be a leader in water facilities and water treatment innovation.

Nathan Thomas P E (CA Civil #77478), owner of West Shore, achieved a B.S. in Biological Engineering and minor in Civil Infrastructure at Cornell University. Mr. Thomas has over thirty years' experience in building construction, structural design, capital planning, and systems analysis. Specific areas of expertise include: building design, hydraulic modeling, biochemistry, data analysis, water treatment, water distribution, project planning, and constructability evaluation. Mr. Thomas spent over twelve years in the construction industry before becoming an engineer. Further, West Shore draws on a deep network of highly skilled professionals to assemble the right team for every project.

West Shore serves the community by engineering solutions, making ideas into reality. Our approach starts with getting to know each Client and their specific needs. West Shore then offers a proposal with a detailed scope of work to guide dialog regarding project expectations. At the formulation of an agreement West Shore will punctually execute the work, maintaining open communication with the Client throughout the process. As the project closes, West Shore will provide a complete draft for review to allow for fine tuning prior to final presentation. West Shore works hard to satisfy every Client and deliver the highest quality professional services on time and on budget to businesses, individuals, and agencies alike.

West Shore exists to serve people. West Shore offers professional knowledge and services at affordable cost for water related projects of agribusiness, developers, and communities. West Shore has the versatility to take advantage of modern scalable business models and keep costs completely project oriented. Our goal is to make Clients' operations more resilient and productive by partnering with Clients to deliver lean project execution and enhanced value.