



## STATEMENT OF QUALIFICATIONS

PROTEUS Consulting is a boutique consulting firm that catalyzes the synergy between Water, Energy, Information Technology, Economics, and Communication sectors. We exist to bring about metamorphosis in the Water Industry. With versatile and high quality solutions, we facilitate the transformation of business-as-usual to high-energy and productive environment. We are known for our creativity and problem-solving skills, and our clients appreciate the individual attention this small, flexible firm is able to provide.

The Water Industry is at the threshold of a radical transformation. We help our clients undergo that change systematically by removing barriers and releasing the pressure, while enhancing the metamorphosis through cross-discipline flow of innovative ideas and strategies.

The Water Industry has a Big Data problem. Visualization, Analytics, and Optimization is going to yield tremendous Insight and therefore efficient operations. PROTEUS Consulting is heralding a new era with infusion of information design in the water business – we will rapidly move from function-based advisory operations model to a real-time, real-world, whole-business approach. Advanced monitoring, model-based control, dynamic data analysis and real-time forecasting is no longer a distant dream, it is the reality of the moment.

PROTEUS Consulting is a minority and woman-owned, small disadvantaged micro-business.

### CONTACT INFORMATION

CEO:	Soma Bhadra, P.E.	Skype:	consultproteus
Email:	soma@consult-proteus.com	Facebook:	PROTEUS Consulting
Phone:	+1 858 353 2805	Twitter:	consultproteus
Website:	www.consult-proteus.com		

### WATER+INFORMATION

Our success stems from our ability to quickly and effectively understand the unique physical, cultural, and economic opportunities of each assignment. We specialize in building creative solutions that honor each project's distinct features and are committed to integrating design, engineering, and community in a manner that creates value and conserves resources – human and material capital.

- Technology Management Plans
- Data Visualization
- Analytics and Forecasting
- Diagnostics and Predictive Strategy
- Business Intelligence
- Dashboards
- Operations and Maintenance Optimization
- Procedures and Process Mapping
- Decision Capture / Knowledge Management
- Field Application Software
- Mobile Apps

## PROJECTS

### **TECHNOLOGY MASTERPLAN, ENCINA WASTEWATER AUTHORITY, CARLSBAD, CA.**

Proteus Consulting has teamed with Westin, Inc. to develop the Technology Master Plan for Encina Wastewater Authority (EWA). The goal of this exercise is to assess EWA's strategic requirements for information and control systems now and into the future and to formulate a roadmap for implementing the technologies that address those requirements. This plan will enable EWA to determine how to leverage existing and new information systems through systems and business process integration – including the use of new technologies for consolidating, trending and distributing information. The roadmap will outline the business case for improvements in the technology sector for EWA and enable them to achieve their mission to be an environmental leader, and provide sustainable and fiscally responsible wastewater services to the communities it serves while maximizing the use of alternative and renewable resources.

### **OPERATIONS AND ENERGY OPTIMIZATION FOR POTABLE WATER AND RECYCLED WATER SYSTEMS.**

Proteus Consulting is developing a robust real-time energy optimizer to meet a distinct set of water quality operating rules in the water system. The system will generate an optimized pump schedule that changes every quarter hour. As telemetry data from water reservoirs levels and pump flows is received from the Supervisory Control and Data Acquisition System (SCADA) every 10 minutes, the program will take account of daily zonal demand variations, available supply capacity, system constraints, and real-time power cost information to generate every quarter-hour a schedule for each pump. By this model, the inherent flexibility in the water system is identified on a real-time basis and then potentially bid on the energy market to yield revenue for the Water Districts.

### **CONSULTING SERVICES FOR OPERATIONS OPTIMIZATION, CITY OF SAN DIEGO, CA.**

Proteus Consulting is a valued team member for the Operations Optimization project led by CH2MHill and Brown & Caldwell. The scope of the project includes and thorough review and evaluation of City of San Diego's Public Utilities Department's existing facilities, operations and business processes to determine where improvements in operational efficiencies and/or cost savings or revenue improvement can be made in the areas of energy utilization, water production and distribution, chemical usage, data utilization, wastewater sludge processing and disposal, operator staffing, and warehouse practices and procedures.

### **SMART-OPS, OPERATIONS OPTIMIZATION FOR WASTEWATER TREATMENT PLANTS.**

Treatment plant operations are typically timed and phased based on discrete measurements or strategies. Proteus Consulting is working on software that will lay the foundation to develop comprehensive dynamic, real-time, whole-business strategy for wastewater plant operations and control. The software portfolio will consist of a suite of sustainability-focused solutions that honor the wastewater industry's specific needs and are committed to integrating operations, management, and environment in a manner that conserves and optimizes resources – human and material capital. The



solution will encompass analytics, optimization, and visualization. A phased approach is offered for the implementation instead of a comprehensive solution since it allows the client to adopt a module when required and at a pace that is suited for the agency. The software solution has the following goals: Meet effluent and emissions permits, Maximize Biogas production, Optimize Aeration, Optimize solids quality to market needs, Optimize chemical usage, Optimize digestion, and Optimize energy use.

**FIELD DATA ACQUISITION APPLICATION.**

Proteus Consulting is developing an inexpensive field data acquisition application for a handheld device (say on a Tablet or SmartPhone) that combines the functionality of GIS, work order management system, complaints record system, and asset management system, utilizing a light weight graphical interface and messaging protocols. The platform will be designed to provide field crews with data functionality the need to perform their jobs regardless of the back-end applications, databases, and spreadsheets that provide the data. This application will provide timely and current access to maintenance and service information and ability to upload/update status reports during site visits.

**BUSINESS INFORMATION**

Structure: S Corporation  
Established: October, 2010  
ORCA/DUNS: 831677229  
EIN: 90-0614930  
NAICS: 541330, 541340, 541490, 541611, 541618,541620, 541690,541990, 611430, 221310, 221320,  
PSC: AD24, AD26, AH34, AH35  
FSC: 4601, 4620, 4630, 7030, 7435  
SIC: 1623, 1629, 1781, 4941, 4952, 4953, 4959, 4971, 4619, 7389, 8299, 8711, 8712, 8741, 8742, 8744, 8748  
NIGP: 91820, 91831, 91832, 91835, 91838, 91842, 91843, 91846, 91875, 91887, 91888, 91890, 91897, 92517, 92524, 92528, 92533, 92535, 92538, 92544, 92555, 92567, 92570, 92583, 92587, 92596, 92597, 95816, 95826, 96110, 96156, 96161, 96896

**CERTIFICATIONS**

*Small Business Enterprise* – Port of Long Beach, San Diego County Water Authority, San Diego Association of Governments (SANDAG) Architecture and Engineering (A & E) Small Business “Bench” (#103011)  
*Small Local Business Enterprise (SLBE & ELBE)* – City of San Diego (#12PC0555)  
*Small Business (Micro)* – California Department of General Services (#1417140)  
*Woman and Minority Owned Business Enterprise (WMBE)* – California Public Utilities Commission (CPUC) (VON 10100168)  
*Emerging Business Enterprise (EBE)* – Office of Small Business & Disabled Veteran Business Enterprise Services, City of Los Angeles

Updated 2/10/2013



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www.consult-proteus.com

soma@consult-proteus.com

+1 858 353 2805

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*Disadvantaged Business Enterprise (DBE)* – California Unified Certification Program (CUCP) - pending approval

*Small Disadvantaged Business* – Small Business Administration (Self certified)

*Minority Owned* – Small Business Administration (Self certified)

*Woman Owned* – Small Business Administration (Self certified)

Updated 2/10/2013