



Water Efficiency Plan

Delivering simple solutions to complex water optimization decisions

CHEMStaff

NALCO Water
An Ecolab Company

DELIVERING BEST-IN-CLASS VALUE IN

WATER OPTIMIZATION

With CHEMStaff, Nalco Water offers the most comprehensive approach to analyzing your plant's water usage, and identifying solutions to meet your facility's operational and sustainability needs.

CHEMSTAFF WATER MODELING SERVICES FOR YOUR OPERATIONS

CHEMStaff is ideally qualified to develop a detailed map of your current water usage and provide insightful recommendations to meet your water conservation needs.

OUR COMPREHENSIVE APPROACH TO WATER CONSERVATION INCLUDES:

- A dedicated team of water modeling experts
- Proprietary Water Modeling Software
- Automated water treatment and chemistry control
- 24/7 remote performance monitoring with System Assurance Center
- Water treatment equipment offerings

WATER MODELING EXPERTS

CHEMStaff offers our global customers an exclusive team of consultants that are experienced in understanding the complex relationship between your plant's processors and your utility water systems.

OUR DEDICATED TEAM OF CONSULTANTS WILL WORK WITH YOU TO:

- Understand your water conservation goals and constraints, using a multi-disciplinary approach
- Perform a comprehensive water and energy analysis for each process and utility system within your plant
- Draft a comprehensive system diagram of water flows throughout your plant
- Apply business savvy technical solutions that return value to your organization
- Develop an actionable water, energy, and cost saving road map to meet your sustainability goals



PROPRIETARY

WATER MODELING SOFTWARE

Understanding how water can be recycled, reused, and conserved requires a detailed map of the entire water system in terms of both water quantity and, most importantly, water quality. Our Proprietary Water Modeling Software combines the strength of a hydraulic model with the confirmation of a salt balance allowing you to see how changes in the operation of any single unit will affect both the water quantity and water quality of the entire plant-wide water system.

THE CHEMSTAFF WATER EFFICIENCY PLAN PROVIDES:

- Detailed understanding of each application's water quantity and water quality
- Comprehensive map of all water units within the system, highlighting unit interconnectivity, as well as the current plant water balance
- Accurate identification of all water conservation options
- Modeling the impact of operating changes across the entire water circuit

PHASE 1



DRAFT BASE CASE

2-4 weeks
LOCATION:
off-site

Using proprietary software, local knowledge and global expertise, Nalco water studies your operation and develops initial solutions.

PHASE 2



VERIFY BASE CASE

4 days
LOCATION:
Your Plant

A team of experts performs on-site validation and establishes customer confirmation to optimize the plan. The team consists of:

- WEP Team Leader
- Local Nalco Water Representative
- Process Modeler
- Process Engineer
- Design Engineer
- Business Developer

PHASE 3



DEVELOP FUTURE SCENARIOS

2-4 weeks
LOCATION:
off-site

CHEMStaff conducts analysis and modeling of multiple future scenarios and documents:

- Process Design
- Cost of Solution
- Return on Investment
- Impact on Your Goals

PHASE 4



REPORT & ACT

2-hour meeting
LOCATION:
Your Plant

Nalco Water presents Water Efficiency Plan and delivers final report. We work with you to prioritize future projects in alignment with your key business drivers.

MAXIMIZE
Quality, Revenue,
Asset Life, Profitability

MINIMIZE
Waste, Energy, Water Usage
Environmental Impact,
Total Cost of Operation

Typical outcomes range from **\$250K** to **\$5M** in **SAVINGS OR REVENUE GAIN** opportunities

WE SUCCEED WHEN OUR CUSTOMERS SUCCEED

By partnering with Nalco Water, your organization receives a comprehensive solutions approach that is not only aligned with your short- and long-term goals but is also backed by state-of-the-art research and technical support facilities throughout the world.

AT NALCO WATER, PEOPLE REPRESENT OUR LARGEST INVESTMENT AS WELL AS OUR GREATEST ASSET.

We stay connected to the field and the evolving needs of our customers, delivering best-in-class products and application technologies with superior service. This means we solve more problems more effectively while improving your efficiency and profitability. We are your solutions partner.

RELEVANT NALCO WATER TECHNOLOGIES

In 2012, the EPA published a handbook on planning water sustainability with these structural elements: (1) goal-setting, (2) objectives and strategies, (3) alternatives analysis, (4) financial strategy. Six Sigma states that reproducible methodologies are required to successfully and measurably meet goals.

Using our proprietary advanced modeling software, Nalco Water can accurately replicate your water use and operations based on actual plant data and water analyses. Recycle/reuse considerations and alternate water treatment scenarios are evaluated for technical and financial impact.

www.nalco.ecolab.com/program/predictive-modeling-services

ARE YOU AT RISK?

THE WATER RISK MONETIZER is a financial modeling tool that allows you to factor water scarcity into decisions that support your business growth and help ensure the availability of fresh water for future generations. www.waterriskmonetizer.com

THE ECOLAB SMART WATER NAVIGATOR is an online tool that helps companies reduce water usage, energy and cost at the facility level. www.smartwaternavigator.com

FOR INFORMATION

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