

HEALTHCARE

Optimized Cooling Tower Performance



- **Decrease risks** with better system control over microbiological growth
- **Boost efficiencies** with higher water quality
- **Spend efficiently** by evaluating CapEx that saves on OpEx
- **Protect your investment** with real-time monitoring and remote system adjustment
- **Upgrade performance** with the continuous improvement model of the Earthwise Standard of Care



ONSITE PROJECT CONSULTING

Our Certified Water Technologists (CWT) survey the facility to identify water system "watch outs" and opportunities for improving the performance of mission-critical equipment.

Our CWTs aim to cut OpEx by reducing the facility's water footprint while also minimizing risk of legionella growth.

Earthwise personnel consider ways to improve the efficiency of critical equipment, extend asset life, reduce chemical consumption, and provide remote system performance monitoring.

Earthwise Proven Process

The process starts with a complete mechanical and system survey of the facility.

Our partners in industrial hygiene, safety and environmental services offer an additional dimension of expertise.

Initial Plant Survey

- Define piping networks
- Consult OEM guidelines

Standard of Care

- Over 100-point service inspection
- Managed by a VP of Compliance & Waterborne Pathogen Control

Independent Lab Work

- Obtain and analyze data
- Generate a plant formulary and determine what type of system to implement.

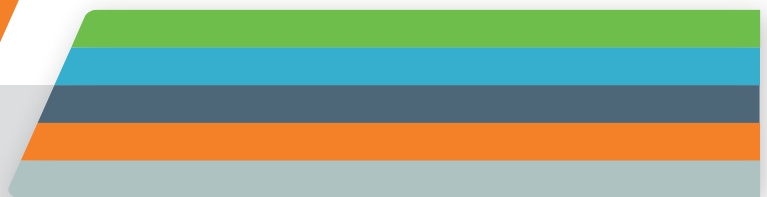
Sampling and Testing

- Conducting biological and deposit analysis
- Photo documentation

Customized Solutions

- Follow ISO manufacturing and services guidelines
- Full technical services with 24/7 remote monitoring and emergency response

CASE STUDY



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PROJECT BACKGROUND

- A large metropolitan 600-bed hospital
- Consuming 9 million gallons of water per year
- Significant bleed rates to prevent scaling and maintain heat transfer capabilities for climate control

EARTHWISE APPLIED SOLUTIONS

Ion-Exchange System

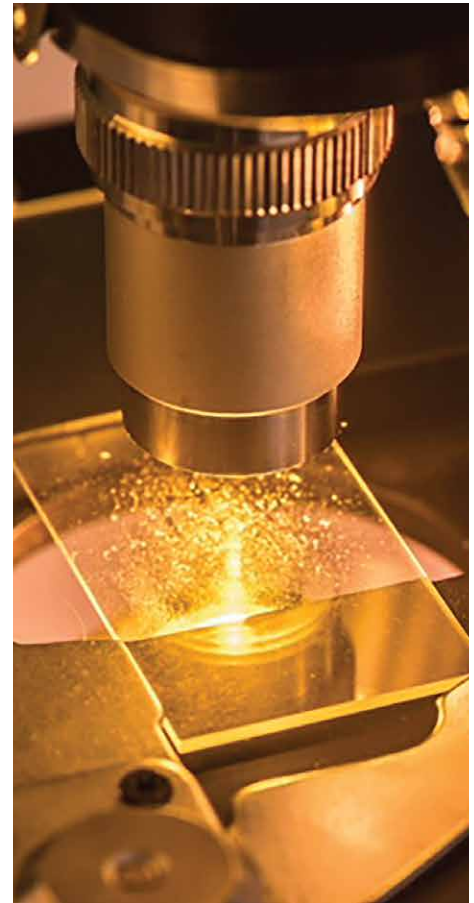
Pretreatment of cooling water allowed the cycles of concentration to increase to 7, resulting in significant savings in utility spend and treatment product consumption.

Data-Driven Control

Real-time data gathered with 24-hour remote monitoring software improved onsite personnel's reaction to system changes that previously went untreated and decreased system performance.

Results

- Increased cooling tower efficiency by 2 million gallons of water per year
- Zero downtime - system upgrades did not interfere with hospital operations
- Reduced risks to staff from hazardous chemicals handling
- Provided immediate reduction -Day One- in facility operating costs



| | Realized OpEx Savings |
|----------------------------------|-----------------------|
| Reduction in Water Usage | 1.9M gallons |
| Annual Water Savings | \$ 22,000.00 |
| Reduction in Treatment Chemicals | \$ 17,000.00 |
| Capital Expense Payback | 1 Year |

CASE STUDY

