



## SilverHAWQ®: Water Monitoring for E. coli

### The Challenge

Real time detection of biological pathogens (E. coli) and toxins (microcystin and other cyanotoxins) in water is an increasingly critical need.

Current methods involve lengthy processes of lab-based sampling, testing and reporting for decision making.

### Our Solution

SilverHAWQ is a versatile water quality biosensor in development by UES that is:

- Field deployable - human portable, using at point of sampling.
- Simple to use - does not need high level of lab training.
- Fast - results in about 1h vs. 24-48h.
- Accurate - reliably identifies E. coli levels as above or below 235 cfu/100ml.

### Advantages

Highly specific, selective.

Shelf stable reactants, sensor cartridges.

Data in near-real time.

Acts as fast screen for further testing.



Image Credit: escambia.floridahealth.gov / www.kcci.com

## Intellectual Property

Patents: UES has protected the SilverHAWQ technology through PCT filings (PCT/US2012/065655).

Trademarks: SilverHAWQ® is a registered trademark of UES.

Government Interests: SilverHAWQ was developed by UES with SBIR funding, among other sources.

## Future Capabilities

- Expandable to other targets such as HABs.
- Configurable with additional sensors.
- Multiple Form Factors - remotely deployable, in-line monitoring, etc.
- Networkable monitoring stations, with secure wireless communications capabilities.

## Active Partnerships Welcome

Founded in 1973, UES, Inc. is an innovative science and technology company that provides its government and industry customers with superior research and development expertise, world class support, and value-added management services. We take great pride in our developments for DoD applications and our ability to transition innovations for commercial applications.

## Why UES?

### Technical Excellence

40+ years of science & technology partnership with DoD and other customers.

Independent R&D, manufacturing facilities for product development.

### Proven Partner

Robo-Met.3D® - AFRL technology licensee.

TitanCoat™ - Tier I supplier of erosion resistant die casting pin coatings to Honda America.

ProCast® - Process simulation standard for over 25 years, developed by UES.

### Commercialization Excellence

2015 R&D 100 Award Winner (Dr. Rabi Bhattacharya, PCSS).

Tibbetts Award Winner.

DoD Commercialization Achievement Index of 100%.