Are you listening to your lake?

Digital Twins for Lake Infrastructure

Introducing WADR™
Watershed **A**utonomous **D**ata **R**ecorder

WADR™ gives you the data you need bring your lake back to health.
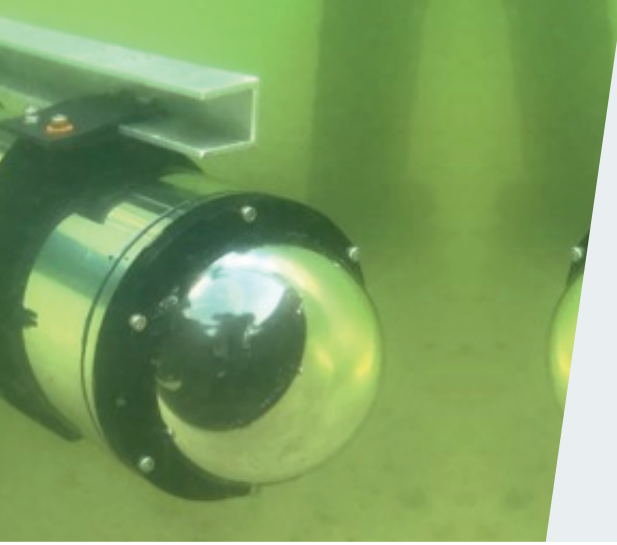
3D data collection

WADR™ is the first of its kind bathymetric drone capable of fully autonomous mapping of lake infrastructure and water quality sampling in a true 3D data collection process.

Air boat design

Air boat design enables navigation even through dense lake vegetation. 1000's of geocoded measurements recorded for a typical lake to support trending analysis and study of lake surface and subsurface.
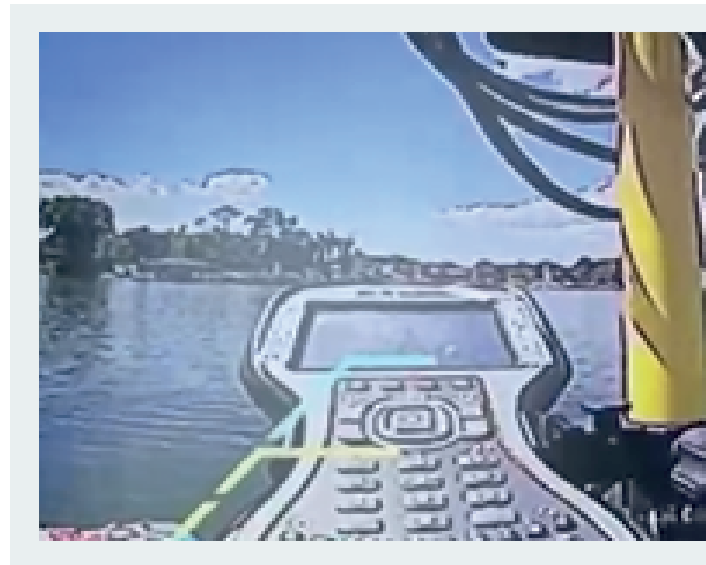
Virtual copy

Digital Twin technology for lake infrastructure creates a virtual copy of your lake's size and shape along with a detailed matrix of lake attributes that are critical to assessing the lake's health and water quality.

WADR™ is the first of its kind bathymetric drone capable of fully autonomous mapping of lake infrastructure and water quality sampling in a true 3D data collection process. Our community lakes are under constant assault from pollutants carried into the lake from stormwater runoff that alter the natural biochemistry and give rise to algal blooms that can deprive your lake of vital nutrients and oxygen. WADR™ gives you the data you need bring your lake back to health and to maintain it as a vital community resource.

- Maps hard and soft lake bottom surfaces.

- Programmable and automated water quality data collection.

- 3D sampling at programmable depths, above and below lake thermocline.

- Customizable sensor payloads including DO, pH, TDS, chlorophyll-A, temperature, turbidity, clarity.

- Onboard photogrammetry for lake vegetation inventory studies.

- Air boat design enables navigation even through dense lake vegetation.

- 1000's of geocoded measurements recorded for a typical lake to support trending analysis and study of lake surface and subsurface dynamics in reaction to bioremediation efforts.

- Aerial data collection provides surrounding microwatershed mapping and contours as well as infrared and NDVI to identify plant species vigor.

THE USE OF DIGITAL TWIN TECHNOLOGY

has been used in the facility management industry for decades in order to reduce cost and time needed to design, build and maintain critical infrastructure such as hospitals, public utilities, airports, universities and heavy industry. A digital twin is a virtual copy that enables us to simulate its operation. During design a building energy consumption can be evaluated and changes incorporated to optimize that energy use.

DIGITAL TWIN TECHNOLOGY FOR LAKE INFRASTRUCTURE CREATES A VIRTUAL COPY OF YOUR LAKE'S SIZE AND SHAPE ALONG WITH A DETAILED MATRIX OF LAKE ATTRIBUTES THAT ARE CRITICAL TO ASSESSING THE LAKE'S HEALTH AND WATER QUALITY.

Interested in learning more? Register your name at
https://ccitechs.com/contact