

# David René Miller

## Founder & Executive Director | Headwaters & Marine Stewards (HMS)

*Candid Platinum Rated 501(c)(3) Non-Profit*

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### Overview

Environmental executive bridging the gap between science and municipal action. Combines 30 years of enterprise systems architecture with a geoscience foundation to engineer watershed resilience.

### Two pillars of impact

- **Pillar 1: Certified Citizen Scientist (Spring '27):** LMS coursework and sampling kits empowering communities to collect lab-grade shoreline data
- **Pillar 2: 'Ghost' Marine Sampling Drone:** Semi-autonomous, shallow-draft vessel deploying 10-foot telemetry winches to monitor hotspots research craft cannot reach

### Founder DNA

- **Academic & curriculum mastery:** Geoscience Professor & STEM Lead (Miami-Dade College). Authored science curricula to scale the HMS Pillar 1 framework.
- **Enterprise systems scale:** Architected learning systems for 1M+ users and consolidated databases (Amadeus/Bose) to power HMS drone telemetry pipelines.
- **Scientific & laboratory rigor:** Conducted isotopic analysis and managed data tracking for 20,000+ annual samples (Beta Analytic), ensuring HMS data withstands Federal, state, and municipal scrutiny.
- **Logistics & gamification:** Designed tabletop games (subQuark); scaled a 20K+ unit home-based global fulfillment pipeline. This blueprint drives logistics for HMS water-sampling kits and Steward ranking pathways.

### Field capability & credentials

- **Marine operations:** 50+ year boater; NAUI Certified Divemaster & PADI Advanced Open Water Diver
- **Safety & compliance:** State-Certified Firefighter & Paramedic (TX) | OSHA Safety Award of Excellence
- **Education:** M.A. in Geoscience & Science Education (UTexas) | B.S. in Physical Science (UHouston)
- **Discipline:** Selected for the 1980 Canadian Olympic Fencing Team