

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 scientific inquiry and municipal action. David combines 30 years of enterprise systems architecture with a foundational background in geoscience to engineer solutions for watershed resilience. His career is defined by a commitment to data integrity and the scaling of proactive, community-led environmental defense.

Two Pillars of Impact

- **Certified Citizen Scientist (Spring '27):** This initiative utilizes LMS coursework and professional sampling kits to empower communities to collect lab-grade shoreline data
- **'Ghost' Marine Sampling Drone:** This semi-autonomous, shallow-draft vessel deploys telemetry winches to monitor environmental hotspots traditional research craft cannot reach

Founder DNA

- **Academic & Curriculum Mastery:** Former Geoscience Professor & STEM Lead (Miami-Dade College); authored the science curricula that scales the HMS Pillar 1 framework
- **Enterprise Systems Scale:** Architected learning systems for 1M+ users and consolidated global 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 municipal and Federal scrutiny
- **Logistics & Gamification:** Designed tabletop games (subQuark) and scaled a 20,000+ unit home-based fulfillment pipeline to drive distribution of HMS sampling kits

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