

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): Digital LMS coursework and turnkey sampling kits empowering residents to collect lab-grade shoreline data
- **'Ghost' Marine Sampling Drone**: A low-cost (<\$2,900), open-source, shallow-draft vessel deploying multi-depth 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 scaling the HMS Pillar 1 framework
- **Enterprise Systems Scale**: Architected learning systems for 1M+ users and consolidated global enterprise databases (Amadeus/Bose) to power HMS drone telemetry pipelines
- **Scientific & Laboratory Rigor**: Conducted isotopic analysis and managed data tracking for 20,000+ annual radiocarbon samples (Beta Analytic), ensuring HMS data withstands municipal and Federal scrutiny
- **Logistics & Gamification**: Designed tabletop games (subQuark) and scaled a 20,000+ unit global fulfillment pipeline to drive distribution of HMS sampling kits

Field Capability & Credentials

- **Marine Operations**: NAUI Certified Divemaster; 50-year avid boater
- **Safety & Compliance**: State-Certified Firefighter & Paramedic (TX); OSHA Safety Award of Excellence
- **Education**: M.A. in Geoscience & Science Education (UT Dallas); B.S. in Physical Science (UH-Clear Lake)
- **Discipline**: Selected for the 1980 Canadian Olympic Fencing Team