BLUE TECH JOBS OVERVIEW

From Research to Commercial Deployment

Randy Deshazo, Deputy Director, and Director of Economic Development and Research

South Florida Regional Planning Council | October 30, 2026







Blue Tech: technologies that support work in the ocean, efficiently draw resources from it, or provide for the sustainability of those resources

Technology and innovation for ocean-facing industries across 9 sectors

01 Ocean observation & water quality	02 Autonomous marine systems	03 Marine renewable energy
04 Aquaculture & seafood technology	05 Marine pharmaceuticals & biotech	06 Coral & ecosystem restoration
07 Resilient coastal infrastructure	08 Marine manufacturing & clean vessels	09 Marine data & software

Defense applications cut through many of these sectors

Source: SFRPC, Blue Tech in South Florida, Oct. 2026, Table 1.

Southeast Florida's research, testing, and port assets

RESEARCH AND FIELD FACILITIES

UM Rosenstiel School • NOAA AOML • NOAA SEFSC Miami Laboratory • FAU SeaTech • FAU Harbor Branch • Smithsonian Marine Station • Mote coral reef center, Summerland Key • FWC research lab, Marathon

MARINE TESTING

FIU Aquarius Reef Base • NSU Oceanographic Campus • Keys Marine Laboratory • UM SUSTAIN wind-wave tank • UM Experimental Hatchery • FAU Harbor Branch Aquapark • Navy South Florida Ocean Measurement Facility (military access)

WATERFRONT

PortMiami • Port Everglades • Port of Palm Beach • Port of Fort Pierce • Port of Key West • Working waterfront on the lower Miami River, New River and Stock Island

PARTNERS

Marine Research Hub • Florida Office of Ocean Economy (FAU) • Risk and Resilience Tech Hub • Miami-Dade Innovation Authority • Marine Industries Associations of South Florida and Palm Beach County • Florida Oceanographic Society • Chapman School of Seamanship

How can firms, research institutions and local governments turn these assets into more Blue Tech jobs here?

Sources: UM, NOAA AOML and SEFSC, FAU, FIU, NSU, FIO/USF, Smithsonian, Mote, FWC, NAVSEA and port websites; EDA; Miami-Dade Beacon Council (Nov. 2017); BlueTech Site Finder (Oct. 2026).

Blue Tech firms say permitting and capital are tied as the largest barriers



Designed and distributed with the help of the Marine Research Hub. Survey sent to 40 firms; 12 (30%) responded. Caveat lector.

Source: SFRPC firm survey, July 29–Oct. 1, 2026; n=12.

Workspace costs and permitting review delays are obstacles



Source: SFRPC firm survey, July 29–Oct. 1, 2026; respondents per item vary.

Approvals extend beyond local government

Approvals sought or expected. Percentage of firms. Select all that apply. n = 12.



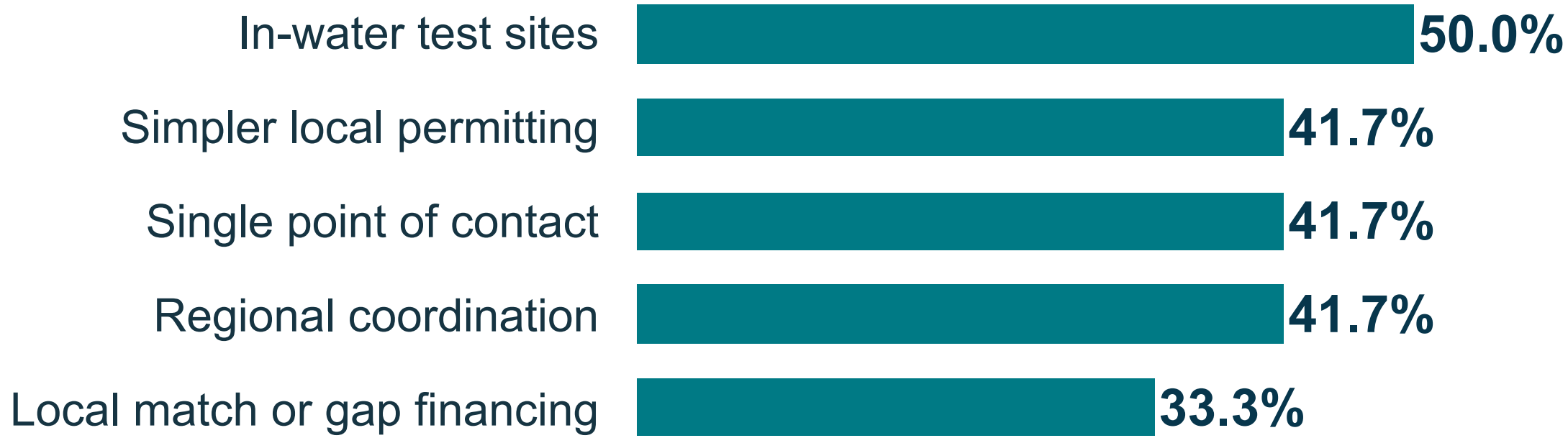
A designated contact can coordinate the full approval path.

July 29–Oct. 1, 2026. 12 responses from 40 firms. Response rate: 30%.

Source: SFRPC survey response workbook, responses 1–12. Shares = counts ÷ 12.

Test sites lead firms’ priorities

Priority actions. Percentage of respondents. Up to three choices. n = 12.



Test sites lead at 50.0%. Three actions tie at 41.7%.

July 29–Oct. 1, 2026. 12 responses from 40 firms. Response rate: 30%.

Source: SFRPC survey response workbook, responses 1–12. Shares = counts ÷ 12.

Three peer regions use three distinct operating models

SAN DIEGO

PORT-LED PILOTS

Funding, port test sites, permitting assistance, and market connections.

BOSTON

VENTURE INCUBATION

Mentors, product-market fit, finance, and customer introductions.

LOS ANGELES

SHARED WATERFRONT CAMPUS

Shared waterfront workspace, tenant laboratories, and dock access.

Leaders brought large anchors together to commit funding and facilities and share early risks. They gave firms practical reasons to join through access to customers, capital, expertise, and testing space. They also asked partners to contribute mentoring, internships, and technical exchanges.

Sources: Port of San Diego (July 2026); SeaAhead/BlueSwell (2026); AltaSea (2026).

St. Petersburg: the Innovation District and its assets

ECONOMIC ASSETS

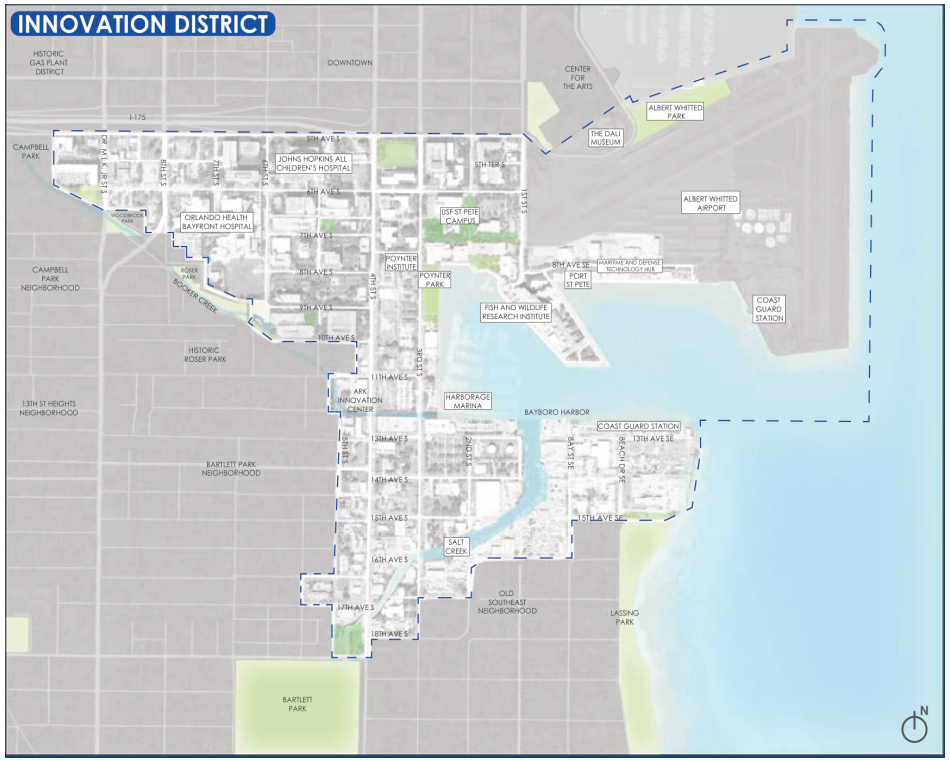
Anchor firms, research institutions, startups

PHYSICAL ASSETS

Labs, waterfront, port and research space

NETWORKING ASSETS

Working groups, partnerships and a trusted intermediary



The Maritime and Defense Technology Hub provides shared marine technology space within the district.

Sources: Alison Barlow, SPID, interview (Oct. 2026); SPID About; SFRPC report, pp. 8–9.

How the St. Pete Innovation District organizes collaboration

ANCHORS

Contribute funding, technical capacity, and strategic needs.

NONPROFIT OPERATOR

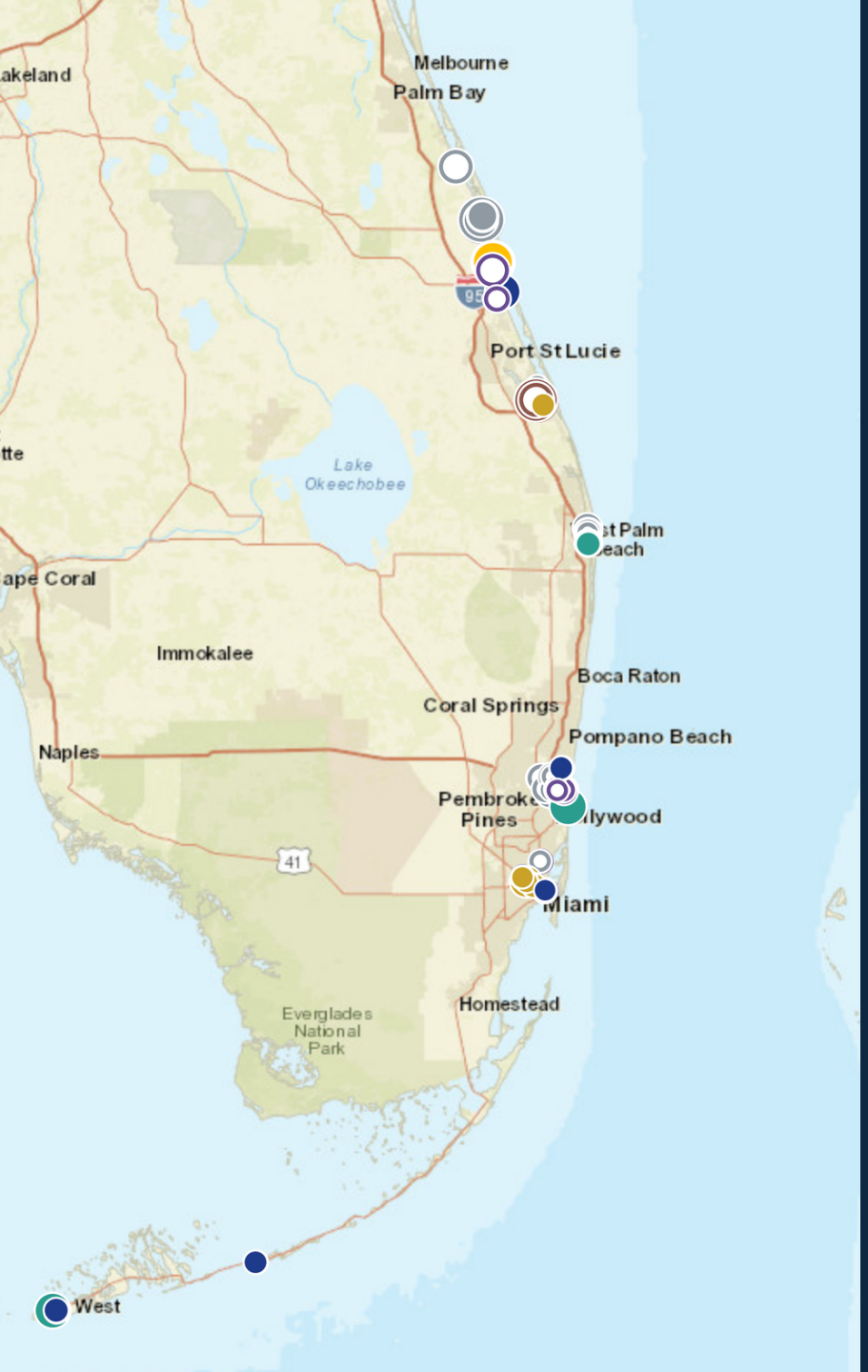
Dedicated staff convene institutions and manage projects.

PUBLIC PARTNERS

Provide property, infrastructure, and local support.

60+ **organizations in the Tampa Bay Ocean Team network (district count)**

Sources: Alison Barlow (2026); SPID Ocean Team; SFRPC report.



Where can our Blue Tech industry grow?

Potential locations for shared facilities and pilots across seven counties. Candidate sites require further review.

66
candidate parcels in 7 counties

306.7
total acres

132.1
acres waterfront · 32 parcels

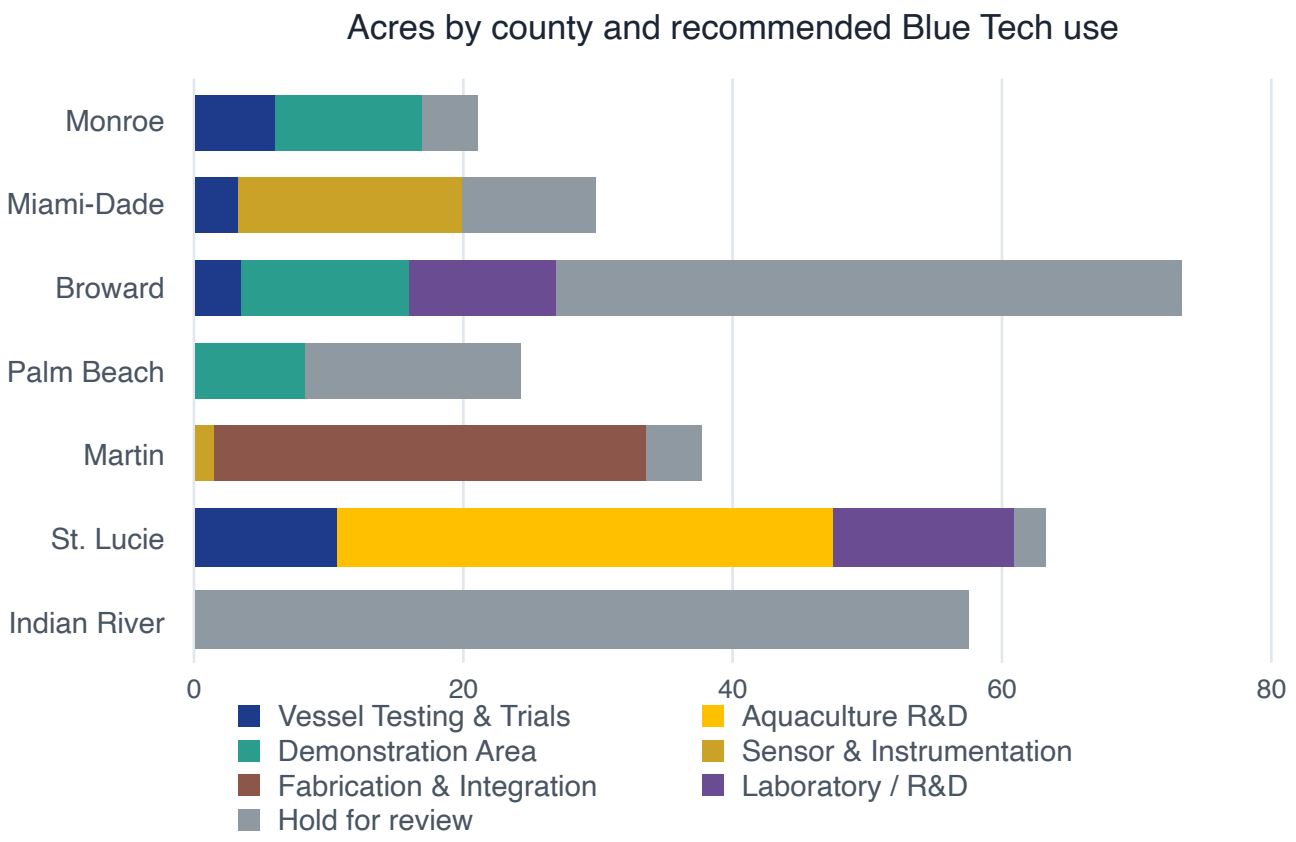
174.6
acres non-waterfront · 34 parcels

- Vessel Testing & Trials
- Aquaculture R&D
- Demonstration Area
- Sensor & Instrumentation
- Fabrication & Integration
- Laboratory / R&D
- Hold for review

Hollow markers = no navigable water at the edge; size = acreage. Basemap © Esri.

Preliminary screening of potential uses by parcel

Using the revised decision tree in the appendix



Vessel Testing & Trials — **23.4 ac**
8 parcels · waterfront · 4 counties

Aquaculture R&D — **36.9 ac**
2 parcels · waterfront · St. Lucie

Demonstration Area — **31.5 ac**
5 parcels · waterfront · most in Palm Beach

Sensor & Instrumentation — **18.2 ac**
8 parcels · waterfront · most on the Miami River

Fabrication & Integration — **32.1 ac**
2 parcels · upland · Martin

Laboratory / R&D — **24.4 ac**
6 parcels · upland · Dania Beach and Fort Pierce

Hold for review — **140.3 ac**
35 parcels · 16 on residential use codes

Source: FDOR tax roll (FL DOH parcels service); BlueTech Site Finder, 66 parcels, Oct. 2026; conservation lands excluded (FNAI FLMA). Water access/depth: NOAA CUDEM + NOAA ENC charts, screening grade. Uses: decision tree on slide 17, applied Oct. 24, 2026; zoning tested with tax-roll use codes.

Regulatory tools for testing and facilities

Public agency pilot agreements	Miami-Dade: I.O. 3-38 pilot agreements (12-month limit); MDIA challenge pilots at South Dade Landfill.
Permitted research uses	St. Petersburg: EC-2 names R&D and marine and life sciences as intended uses and gives labs and R&D a 2.0 FAR bonus. Innovation District master plan proposes new zoning overlays (not adopted).
Research use approvals	Fort Pierce permits marine research and education in an industrial district. Lake Worth Beach allows R&D and marine research as administrative or conditional uses.
Preservation incentives	Monroe County: Maximum residential density without TDRs when 50% of Maritime Industries upland stays working waterfront.
Marine site-design rules	City of Miami: Miami River marine industry is exempt from waterfront setbacks; structures may span man-made slips in D1 to D3 zones.

Sources: SFRPC Blue Tech report, Oct. 7, 2026; Miami-Dade releases (Feb. 6 and June 3, 2026) and I.O. 3-38 memo; St. Petersburg LDR Sec. 16.20.130; St. Pete Innovation District master plan (Jan. 2026); Fort Pierce Sec. 125-187; Lake Worth Beach LDR Sec. 23.3-6; Monroe County Comp. Plan Policy 101.5.6; Miami 21 Sec. 3.11 (Ord. 13804)

Five priorities for local and regional action

Pilot demonstration permits	Define eligible pilot uses, time limits, review steps and operating conditions.
Public sites and a navigator	Host repeat pilots, purchase pilot services and provide one contact to coordinate reviews.
Waterfront land-use rules	Clarify research, testing and marine production uses. Preserve working waterfronts.
Nonprofit operators	Set funding, access and maintenance rules. Include hiring and internships.
Regional network of sites	Connect specialized sites under a regional brand. Retain local governance and shared workforce programs. Recruit industry champions.

CEDS provides a framework for implementation

REGIONAL COORDINATION

The regional planning councils convene public, private and institutional partners to agree on economic priorities.

SFRPC: Broward, Miami-Dade, Monroe.
TCRPC: Indian River, Martin, Palm Beach, St. Lucie.

IMPLEMENTATION THROUGH CEDS

Identify a lead organization for each action. Agree on partners, milestones and measurable outcomes.

- Use the annual update to track progress.
- Carry priorities into the 2027–2032 strategy.
- EDA can fund specific kinds of projects; applications have no fixed deadline.

A Blue Tech CEDS action needs an owner and measurable outcomes.

Source: EDA, 13 CFR Parts 303–304; SFRPC 2025 CEDS Annual Report; Oct. 2026 draft report.

Questions?

Thank you!

Randy Deshazo
Deputy Director and Director of Economic Development and Research
South Florida Regional Planning Council
rdeshazo@sfrpc.com

Next Up

Panel 1: What do Blue Tech companies do in Southeast Florida?