OCEANS OF *Opportunity*

Annual Report of the Florida Office of Ocean Economy

First Annual Report
July 2025

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PRESIDENT'S MESSAGE

Few places in the world are as closely tied to the ocean as Florida. From our working waterfronts and bustling ports to fishing, tourism and recreation, the ocean is not just a natural asset; it is a cornerstone of our state's economy and identity.

Recognizing this, Florida Atlantic University is proud to serve as the home of the state's new **Office of Ocean Economy**, a state-supported effort to better understand, support and grow the ocean- and coastal-based industries that drive jobs, investment and innovation across our state.

The ocean economy is vast, diverse and full of opportunity. It encompasses sectors like maritime transportation, coastal construction, seafood production, ocean technology and so much more. But like any major economic engine, it requires sound data, thoughtful planning, and coordination among the private sector, academic institutions, non-government partners, investors and government. That's where the Office of Ocean Economy comes in.

This office exists to catalyze sustainable growth in Florida's ocean economy, helping ensure that our natural resources continue to fuel job creation, business expansion and long-term prosperity. Its work is grounded in common-sense principles: advancing smart investment, reducing risk to coastal infrastructure and supporting industries that make Florida competitive nationally and globally.

Florida has long benefited from the strength of its coastal geography and maritime resources. Now, with the Office of Ocean Economy, we have a strategic platform to harness those assets intelligently, responsibly and in a way that delivers measurable returns for Florida families, workers and businesses.

We are grateful to the State of Florida for its support and vision and we look forward to working alongside our partners **to cultivate an ocean economy that delivers opportunity, security and prosperity for every Floridian.**

Adam Hasner
President
Florida Atlantic University

A CONNECTED OCEAN ECONOMY

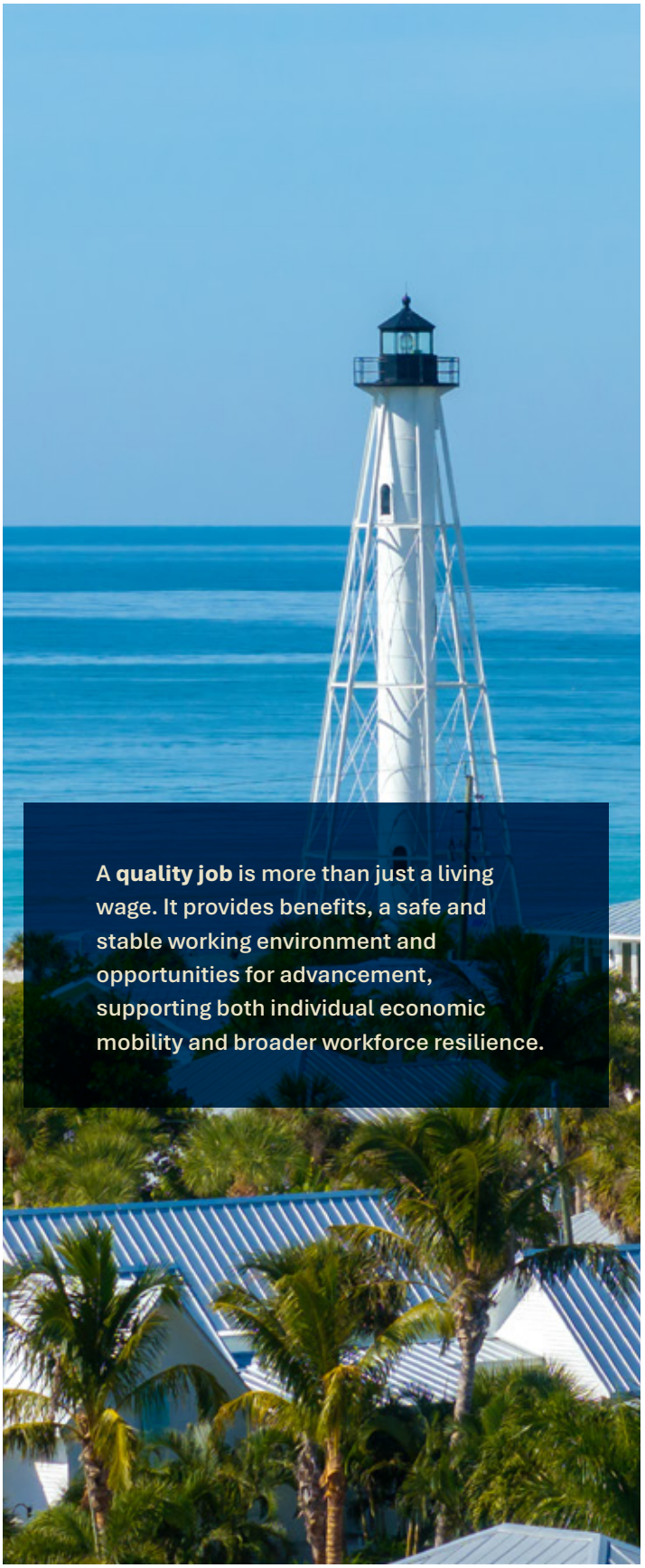
Established by the Florida Legislature in 2024, the **Florida Office of Ocean Economy** was created to strengthen the state's position as a global leader in ocean-linked industries. Housed at **Florida Atlantic University**, the Office was statutorily charged with advancing economic development through the sustainable use and stewardship of Florida's ocean and coastal resources. Recognizing the importance of ocean-related sectors to the state's long-term prosperity, the Legislature directed the Office to lead efforts in data coordination, workforce alignment, innovation acceleration and statewide strategy development.

The Florida Office of Ocean Economy serves as a **centralized hub to strengthen and grow the state's ocean economy**. By bringing together stakeholders, streamlining access to information and aligning efforts across business, research, workforce, capital and policy, we create the structure needed to accelerate innovation and commercialization, support **quality job** creation and economic mobility and generate opportunities that benefit every Floridian.

Mission and Vision

Mission: To connect the state's ocean and coastal resources to economic development strategies that grow, enhance or contribute to the ocean economy.

Vision: An ocean economy that delivers opportunity, security and prosperity for every Floridian.



A **quality job** is more than just a living wage. It provides benefits, a safe and stable working environment and opportunities for advancement, supporting both individual economic mobility and broader workforce resilience.

The Florida Office of Ocean Economy focuses its efforts across five core areas essential to unlocking the full potential of the state's ocean economy. These focus areas guide our strategy, investments and partnerships to ensure Florida remains competitive, resilient and prosperous, now and for generations to come.

Business and Entrepreneurship

The ***engine*** behind Florida's ocean economy. We support and grow ocean-focused enterprises, from traditional marine industries and tourism to ocean tech startups, powering job creation, innovation and long-term economic resilience.

Research, Innovation and Impact

The ***propeller*** of discovery, advancement and security. We power scientific discovery, innovation and commercialization that advance sustainability, strengthen national defense, boost coastal resilience and position Florida as a global leader in the ocean economy.

Talent, Training and Workforce Development

The ***crew*** that keeps Florida's ocean economy moving. We prepare, attract and retain the current and next generations through targeted strategies, training and education to support quality jobs across every sector of the ocean economy.

Policies for Florida's Future

The ***compass*** guiding long-term strategy. We shape forward-thinking policies that align ocean industry growth with environmental stewardship, community resilience and Florida's global competitiveness, working alongside local governments, industry leaders and research institutions to ensure coordinated and effective action across the state.

Investment and Access to Capital

The ***fuel*** that drives Florida's ocean economy forward. We expand access to funding, financing and strategic investment across the ocean economy. From early-stage ventures to large-scale infrastructure, we help unlock the capital needed to grow resilient industries, modernize coastal assets and attract long-term private and public investment.

THE STATE OF FLORIDA'S OCEAN ECONOMY

Florida's ocean economy is a vital and complex system that fuels prosperity across the state and serves as a cornerstone of its identity. With thousands of miles of coastline and a vibrant marine and coastal landscape, Florida supports a diverse set of industries that rely on healthy ocean resources, from ports and seafood to tourism and recreation. In 2023 alone, ocean-related activity sustained approximately **909,000 jobs**, generated **$59 billion in labor income** and contributed **$96 billion in Gross State Product (GSP)**. This represents over **6% of the state's total economic output**, making Florida not only the **largest ocean economy by employment in the United States**, but also one of the most ocean-dependent economies in the world.

Florida Ocean Economy at a Glance

Big Picture

- **$96 billion** in Gross State Product (GSP)
- **908,800 total jobs** supported (517,800 direct)
- **$59 billion** in labor income
- **$23 billion** in federal, state and local tax revenues
- Accounts for **6% of Florida's GSP and 6.3% of all employment**

Top Performing Sectors (2023 GSP Breakdown)

- **Marine & Coastal Tourism**: 37% of Ocean Economy GSP
- **Marine Transportation**:33%
- **Construction, Energy, Military, Minerals (CEMM)**: 24%
- Remaining 6%: **Marine Industries, Living Resources, Marine Research**

Growth Outlook (2023-2026)

- **115,000 new jobs projected**
- **Marine Tourism:** +95,000 jobs (CAGR 9.9%)
- **Marine Transportation:** +13,000 jobs (CAGR 3.4%)
- Modest growth in Construction, Energy, Military and Minerals (CEMM), Marine Industries and Marine Research
- **Living Resources:** slight dip, unless aquaculture outpaces wild catch

Wages and Workforce Trends

- **Average Wages** cluster in a **$60K – $70K** range (2025 dollars)
- **Tourism jobs** remain lowest-paid, though slowly rising
- **Marine Transportation** still highest-paying (~$78K), but losing ground
- **Real wages fell 1.2% per year (2014 – 2023)** in most sectors
- **Wage erosion** signals competitiveness concerns in skilled trades

Why it Matters

- **Florida ranks #1** in ocean economy employment in the U.S.
- **16 publicly owned seaports**, global cruise capital, 8,436 miles of coastline, including barrier islands
- Ocean economy ties together **urban & rural economies** across Florida
- Generates value **far beyond coastal zones** via supply chains and household spending

What Makes Up Florida's Ocean Economy?

Florida's ocean economy is made up of six major sectors. Each one depends on the ocean or coast to operate and plays a vital role in creating jobs, supporting communities and driving innovation.

1.

Marine and Coastal Tourism

Beaches, boating and cruise ships
This sector includes hotels, restaurants, dive shops, charter boats, eco-tourism and cruise terminals. It's Florida's largest ocean-based employment sector and depends on clean water and healthy coastal ecosystems.

2.

Marine Transportation

Ports, ships and cargo
Covers shipping, port operations, logistics and cruise travel. It includes everything from container ships to passenger vessels, along with the infrastructure that keeps them running.

3.

Construction, Energy, Military and Minerals (CEMM)

Coastal building and defense
Includes construction of ports, seawalls, and other marine infrastructure, as well as coastal energy projects and military facilities. Also includes dredging and offshore mineral operations.

4.

Marine Industries, Manufacturing and Shipbuilding

Boats, marine tech and equipment
This sector builds and repairs vessels, creates navigation and marine electronics, and manufactures equipment for marine use, including new technologies focused on clean, sustainable solutions.

5.

Living Marine Resources

Fishing and aquaculture
Includes commercial fishing, seafood processing, and farming of shellfish and ornamental fish. These businesses rely on healthy marine ecosystems and sustainable practices.

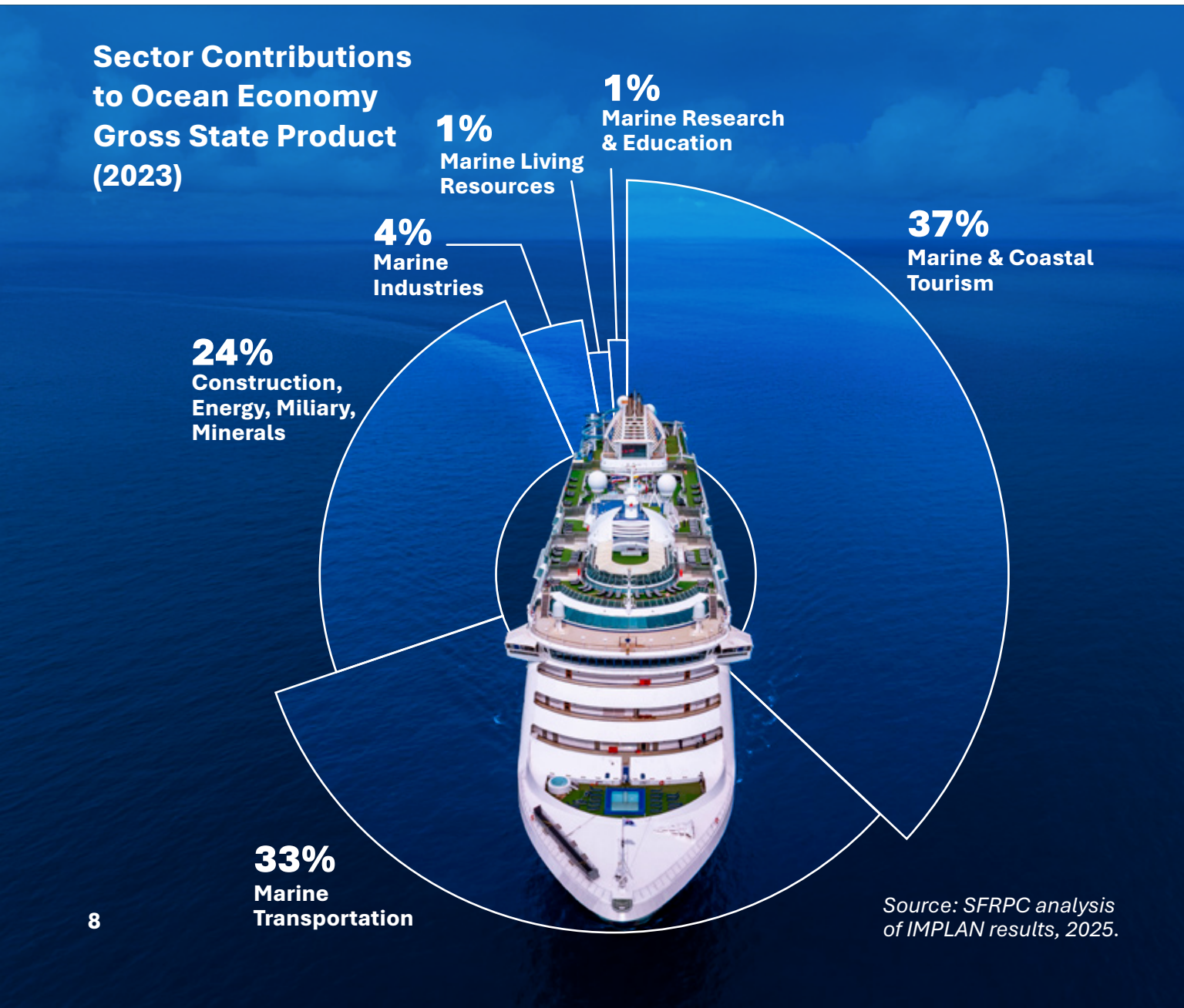
6.

Marine Research and Education

Scientists, students and discovery
Universities, labs and research institutions that study the ocean and train the next generation of marine professionals. This sector supports innovation, conservation and informed coastal planning.

SECTOR CONTRIBUTIONS AT A GLANCE

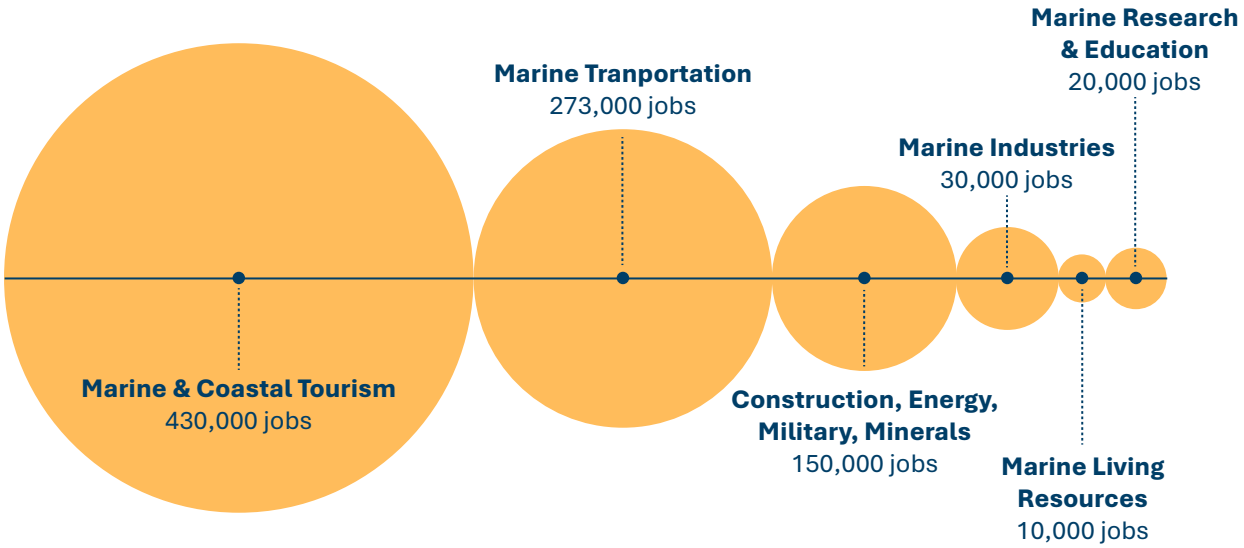
Understanding how different sectors contribute to Florida's ocean economy provides critical insight into the state's strengths, dependencies and opportunities for future growth. The pie chart offers a high-level view of how Florida's ocean economy breaks down by sector contribution to overall economic output for the ocean economy. This snapshot illustrates the relative scale of each sector's impact and reinforces the importance of maintaining a balanced, resilient economy that draws strength from both service-driven and industrial marine activities.



Source: SFRPC analysis of IMPLAN results, 2025.

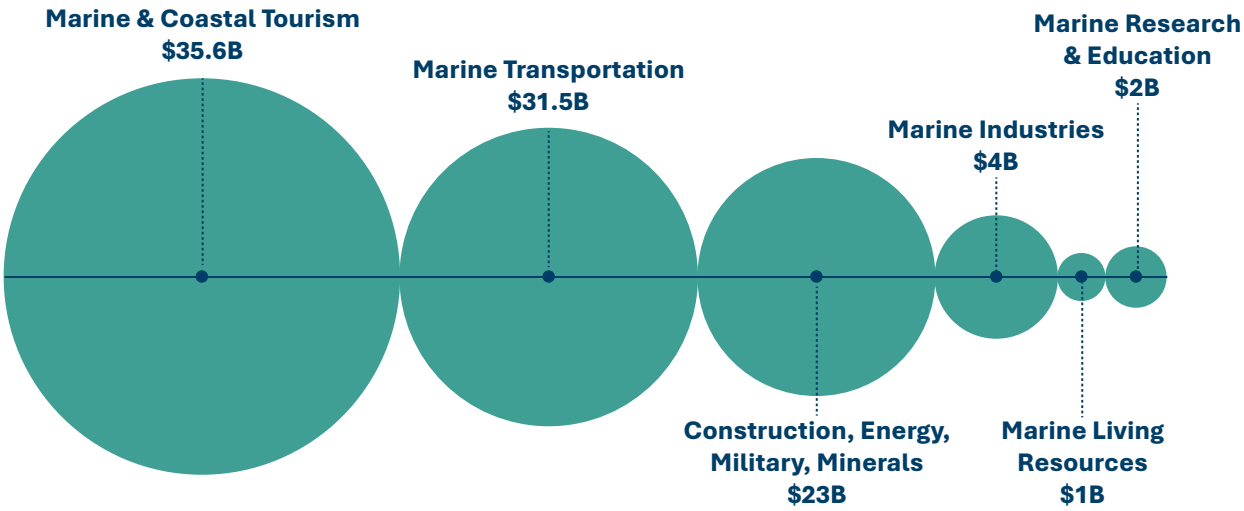
Total Ocean Economy Jobs by Sector in Florida (2023)

Tourism accounts for more than **430,000 jobs**, or nearly **half of the ocean economy's employment**, followed by marine transportation at **273,000**. Construction and marine industries round out the top contributors.



Gross State Product by Ocean Sector in Florida (2023)

Tourism and transportation also lead in GSP, with **$35.6 billion** and **$31.5 billion,** respectively. Notably, marine research and education, while small in headcount, contributes a remarkable **$314,000 in GSP per direct job** — the highest productivity level of any marine sector.



The table below summarizes the 2023 jobs and economic impact based on the six sectors of the ocean economy.

	Direct Employment	Total Employment (including indirect/ induced)	Total Labor Income	Gross State Product
Marine and Coastal Tourism	288,806	430,439	$21.2B	$35.6B
Marine Transportation	123,098	273,317	$20.5B	$31.5B
Construction, Energy, Military and Minerals	86,658	156,896	$13.9B	$22.9B
Living Resources	5,720	8,553	$238M	$823M
Marine Industry	9,497	28,585	$2.4B	$3.8B
Marine Research and Education	4,000	11,019	$827M	$1.3B
TOTAL	**517,779**	**908,808**	**$59B**	**$96B**
% OF FLORIDA (2023)	3.6%	6.3%	8.3%	6.1%
U.S. RANKING	1	N/A	3	3

Source: SFRPC analysis of QCEW, ENOW, QCEW, REMI and IMPLAN, 2025.

Florida's ocean economy thrives on a dynamic mix of high-impact sectors. Tourism and transportation drive job growth and economic scale, while marine research and innovation deliver exceptional value per worker. Together, they position Florida to lead the nation in building a resilient, high-value ocean economy for the future.

WORKFORCE TRENDS AND PRESSING GAPS

Florida's ocean economy cannot thrive without a strong, skilled workforce. As demand rises across sectors, from shipbuilding and aquaculture to tourism and ocean tech, the need for qualified talent is more urgent than ever. Florida faces a projected shortfall of more than **110,000 ocean-related workers over the next five years**, with talent gaps most acute in fields such as **marine welding, port logistics, aquaculture and environmental engineering**. The state's workforce is aging, and too few training pathways are aligned with industry demand. Only **36% of current postsecondary programs** meet the specific needs of the marine sector and key roles like crane operators, SCUBA technicians and cybersecurity analysts remain hard to fill. Addressing these workforce challenges is essential to sustaining economic growth, expanding access to quality jobs and maintaining Florida's competitive edge in the ocean economy.

Only **36% of current postsecondary programs** align with the needs of marine sectors, making it difficult for learners to transition into careers. At the same time, **over 30% of workers** in key roles like crane operation, research diving and welding are nearing retirement. These trends are compounded by regional disparities — **Broward County alone has 130,000 residents** with some college but no degree.

Key Skill Gaps Across Sectors

- Maritime safety and logistics (TWIC, STCW, OSHA-30)
- Digital tools and automation (AutoCAD, data analytics, cybersecurity)
- Trades and field skills (welding, SCUBA tech, aquaculture systems)
- Multilingual communication and eco-tourism interpretation

Credentialing systems remain fragmented. Many certifications do not transfer between regions or stack into degrees and veterans often struggle to translate military skills into civilian credentials. Paid internships and apprenticeships are still limited, especially in marine science and engineering roles.

The Path Forward

Florida must expand **stackable credentials**, create **bridges between non-credit and academic programs** and ensure **paid, work-based learning** is widely available. By investing in workforce alignment now, Florida can grow a resilient, high-skill ocean economy that supports opportunity across every region.

Source: The Florida Ocean Economy: A Comprehensive Workforce and Education Report, Florida Office of Ocean Economy, 2025

Florida's Ocean Jobs Are Growing – But Pay Isn't Keeping Up

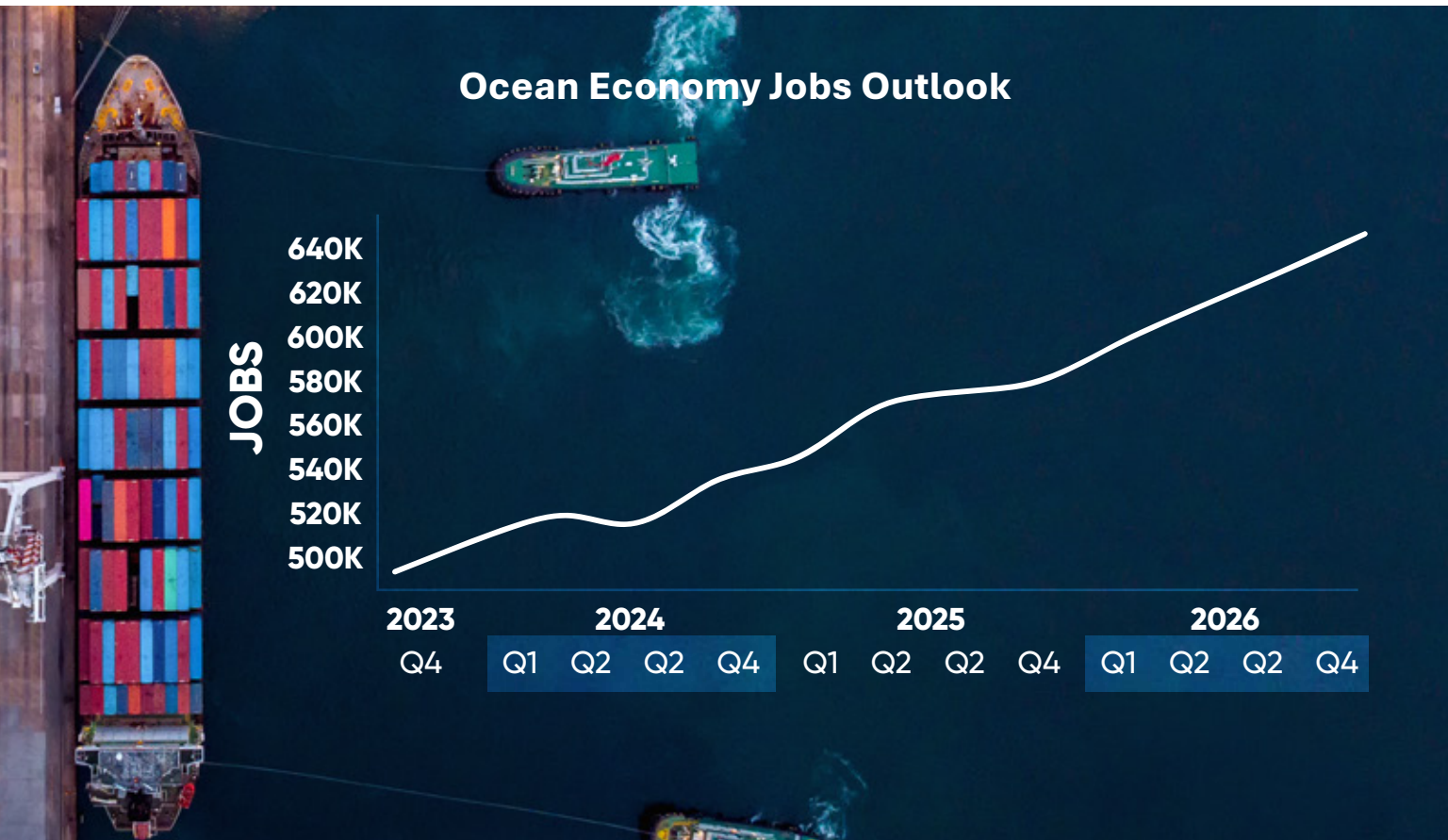
Between 2014 and 2023, Florida's ocean economy added jobs at a steady pace — **about 3.2% a year** — with fast growth in marine industries and research. But while more people were hired, paychecks shrank. After adjusting for inflation, wages dropped an average of **1.2% per year**. That means workers are earning less even as job responsibilities grow.

The biggest wage declines were in **marine industries (-4.6% per year), construction and energy (-3.8%)** and **transportation (-3.5%)**. When pay differences between industries shrink like this — a trend called **wage compression** — it becomes harder to attract skilled workers, keep experienced staff, or encourage people to train for specialized roles.

Only two sectors bucked the trend: marine living resources and tourism, which saw both jobs and wages rise thanks to growth in aquaculture and tighter labor markets in hospitality.

Short-Term Growth Outlook (2023-2026)

Florida's ocean economy is showing **steady momentum**, with signs of not just recovery but long-term growth. **Consistent job gains across key sectors** point to the underlying strength of the state's maritime industries, driven by increasing demand for services, products and research connected to Florida's coastal and ocean resources.



According to the Florida Office of Ocean Economy's baseline forecast, **direct employment is projected to grow from 517,779 to 633,119 jobs** by the end of 2026. Sector-specific forecasts include:

Sector	Job Growth	% (CAGR)
Marine Tourism	**+95,000**	**9.9%**
Transportation	**+13,000**	**3.4%**
Construction (CEMM)	**+5,700**	**2.1%**
Marine Industries	**+1,700**	**5.6%**
Marine Research	**+271**	**2.2%**
Living Resources	**-87**	**-0.8%**

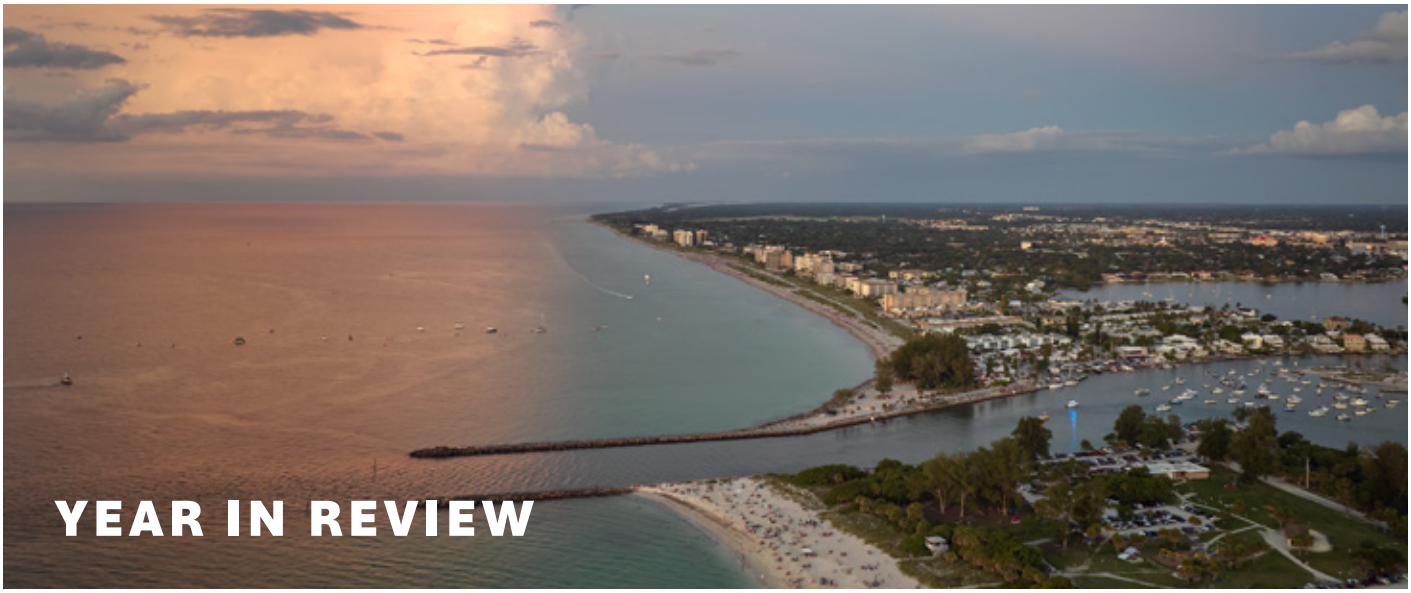
This expansion is expected to the powered by increased visitor volumes, port infrastructure investment and commercial interest in marine technology and innovative shipping methods.

Florida's Ocean Policy Framework: Enabling Growth and Stewardship

Florida's ocean economy is guided by a robust framework of state statutes and programs that sustain the economic productivity of coastal regions while protecting vital marine resources. From strategic port investments and aqua-culture development to coastal resilience and beach renourishment, the state's policy architecture enables Florida to lead the nation in ocean-related employment and economic activity.

Key statutes include the **Florida Coastal Management Program (s. 380.20–380.32, F.S.)**, which coordinates multi-agency planning for shoreline development; the **Seaport Transportation and Economic Development Program (s. 311.07–311.14, F.S.)**, which funds port infrastructure; and the **Aquaculture Program (s. 597.004, F.S.)**, which promotes sustainable seafood and shellfish production. The **Resilient Florida Grant Program (s. 380.093, F.S.)** further supports ocean economy infrastructure through funding for vulnerability assessments and coastal resilience improvements.

As the Florida Office of Ocean Economy continues to grow, it will develop and maintain a comprehensive repository of relevant statutes, regulations and strategic plans that shape Florida's ocean economy. The Office will also provide analysis and recommendations to improve public policy in ways that enhance industry growth, workforce opportunity, environmental sustainability and long-term economic resilience. Together, these efforts will strengthen the legal and operational foundation that sustains Florida's $96 billion ocean economy and ensure that its benefits reach families, workers and communities across the state.



YEAR IN REVIEW

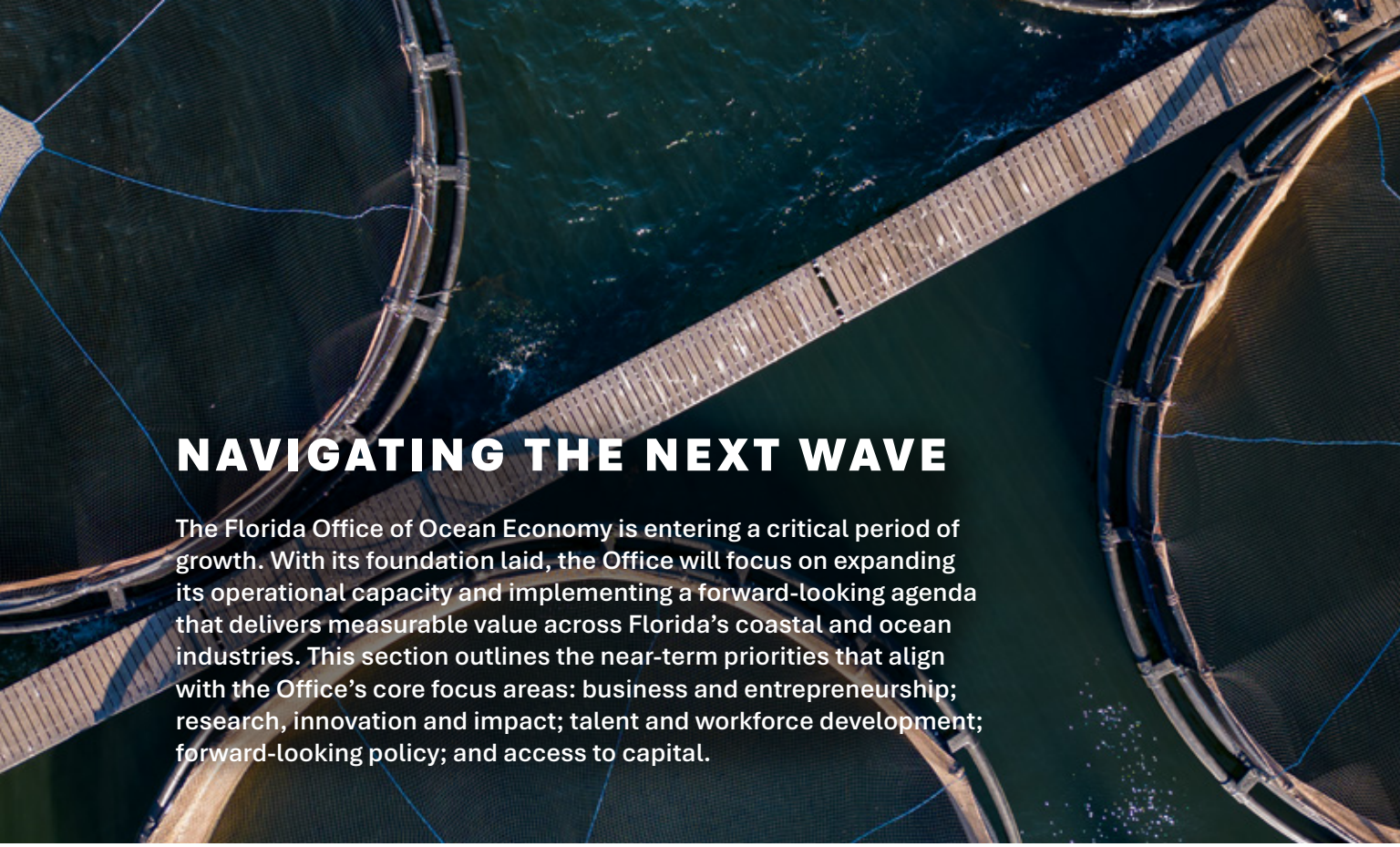
In its first year, the Office prioritized fact-finding and landscape assessment. This initial phase focused on understanding the structure, scale, and needs of Florida's ocean economy. Efforts included compiling baseline economic data, identifying priority workforce and infrastructure gaps, and mapping existing programs and assets across sectors and regions. To support this, the Office gathered input from industry associations, research institutions, local and regional agencies, and economic development organizations. These early activities laid the groundwork for deeper collaboration and more targeted engagement in the years ahead.

Awareness and Events

The Office participated in numerous events and convenings to introduce itself to **organizations, stakeholders and communities** across Florida. These outreach efforts focused **on raising awareness**, establishing **new relationships**, and setting the foundation for a collaborative and inclusive statewide ocean economy initiative. Through these engagements, the Office began surfacing local needs, **identifying opportunities** for partnership and cultivating early momentum around a shared vision for Florida's ocean future.

Research and Data Infrastructure

To support **evidence-based planning**, the Office began building the core **research and data infrastructure** necessary to guide its mission. This included developing an **economic framework** to define and track Florida's ocean economy, evaluating current and projected **workforce needs** and identifying **policy opportunities** that support sustainable growth. The Office launched a **comprehensive economic analysis** to establish a clear baseline, conducted a **statewide workforce and education assessment** to understand job trends and training needs, and mapped **marine training programs** and **credential pathways** to identify sector-specific gaps. Initial **policy research** also began to explore areas where alignment or reform could enhance long-term outcomes. Together, these efforts lay the foundation for future **investment strategies, performance tracking** and **public-private collaboration**.



NAVIGATING THE NEXT WAVE

The Florida Office of Ocean Economy is entering a critical period of growth. With its foundation laid, the Office will focus on expanding its operational capacity and implementing a forward-looking agenda that delivers measurable value across Florida's coastal and ocean industries. This section outlines the near-term priorities that align with the Office's core focus areas: business and entrepreneurship; research, innovation and impact; talent and workforce development; forward-looking policy; and access to capital.

Building the Office's Operational Capacity

Core Focus Areas: All Areas

As a newly established entity, the Office's initial focus will be on scaling internal systems, staffing and strategic communications. This includes formalizing partnerships with academic and industry leaders and developing tools to track progress across all core focus areas. To serve as Florida's hub for the ocean economy, the Office must also build robust internal infrastructure, ranging from data platforms and public engagement strategies to coordination protocols. These efforts will ensure that the Office operates efficiently, transparently and with the ability to lead cross-sector efforts statewide.

Water Quality: Turning Crisis into Catalyst

Core Focus Areas: Research, Innovation & Impact; Policy; Access to Capital

Water quality remains one of Florida's most visible and impactful environmental challenges. Harmful algal blooms, nutrient runoff and septic overflows negatively impact tourism, fisheries, aquaculture and public health. These challenges present an opportunity for Florida to lead in the development and deployment of scalable water quality solutions. The Office will support efforts to pilot real-time monitoring and mitigation technologies, foster public-private collaborations and promote transparent data-sharing platforms such as the Protecting Florida Together Water Quality Map. This focus will strengthen ecosystem health while supporting industry stability and long-term public trust.

Coastal Resilience and Restoration

Core Focus Areas: Policy; Research, Innovation & Impact; Workforce Development

The economic success of Florida's ocean industries depends on the health of its coastline. Rising sea levels, intensifying storms and erosion are putting communities and businesses at risk. The Office will support integrated approaches that combine natural systems with engineering and design innovations to reduce vulnerability and create new opportunities in the resilience sector. By advancing living shorelines, mangrove restoration and novel adaptation strategies, Florida can protect existing industries and build a globally relevant coastal resilience industry — one that provides economic benefits, high-skill jobs and exportable expertise.

Workforce Alignment: Building a Future-Ready Talent Pipeline

Core Focus Areas: Talent & Workforce Development; Business & Entrepreneurship

Florida's long-term competitiveness in the ocean economy depends on a workforce that is trained, credentialed and ready for evolving industry needs. The Office will focus on aligning K–12 STEM programs, technical education and higher education with the needs of sectors such as marine construction, aquaculture, environmental monitoring and maritime technology. It will also support the expansion of apprenticeships, regional workforce hubs and career awareness initiatives to ensure diverse and equitable access to ocean-related careers.

Data Infrastructure: Measuring What Matters

Core Focus Areas: All Areas

Decision-makers across Florida need consistent, reliable data to understand and grow the ocean economy. Right now, data systems are fragmented, methodologies vary by sector and many small-scale or emerging industries go untracked. The Office will lead efforts to define and standardize economic data for the ocean economy, develop a centralized clearinghouse, and collaborate with partners to fill persistent data gaps. A shared data framework will support better investment decisions, policy development and workforce alignment.

Strengthening the Startup Ecosystem

Core Focus Areas: Business & Entrepreneurship; Access to Capital

Florida's coastal challenges are inspiring new solutions from early-stage companies in marine tech, water quality, aquaculture and resilience. But startups face barriers to growth, including fragmented resources, a lack of pilot sites and limited access to specialized talent. The Office will work to bridge these gaps by supporting tech transfer partnerships with universities, expanding entrepreneurial infrastructure near ports and research hubs, and helping ventures connect with mentorship, facilities and customers. A vibrant startup ecosystem will accelerate innovation, attract investment and create jobs across the state.

Sustainable Seafood and Aquaculture

Core Focus Areas: Business & Entrepreneurship; Access to Capital; Policy

With wild fisheries under stress, sustainable aquaculture is emerging as a strategic growth sector for Florida. Shellfish and seaweed farming, land-based aquaculture and nutrient-filtering systems offer a path toward food security, economic diversification and improved water quality. The Office will help remove regulatory and financing barriers, support market access for local producers and ensure aquaculture is developed responsibly alongside robust monitoring and permitting frameworks. This work will expand opportunities in working waterfront communities while advancing environmental and economic goals.

Leveraging Outside Investment

Core Focus Areas: Access to Capital; Policy

Expanding the ocean economy requires significant investment and Florida must position itself to compete effectively for federal and private dollars. The Office will coordinate efforts to pursue grant funding from agencies such as NOAA, DOE and USDA; attract venture capital and private equity into scalable marine innovations; and align public-private partnerships to bring additional capital into coastal infrastructure, resilience and workforce programs. Strategic investment not only fuels economic growth — it accelerates innovation, creates quality jobs and will position Florida as the leader in the ocean economy.

CHARTING THE COURSE FORWARD

Florida's ocean economy stands at the threshold of opportunity. With world-class assets, an expansive coastline and strong momentum across key sectors, the state is uniquely positioned to lead the nation and compete globally, in ocean-based innovation, resilience and economic growth. This final section outlines Florida's current strengths and what it will take to sustain leadership in the years ahead.

Florida's Competitive Position

Florida holds a commanding position in the nation's ocean economy:

- It leads the nation in **cruise passenger embarkations, maritime employment** and **aquaculture sales** of ornamental fish and hard clams.
- Its **14 deep-water ports** handle more than **$190 billion** in merchandise trade annually, with new shore power investments helping transition toward cleaner, low-emission port operations.
- Flagship events like the **Fort Lauderdale International Boat Show** and strategic efforts like **Ocean Exchange** elevate Florida's status as a global hub for ocean innovation and entrepreneurship.

Investing in Florida's Ocean Future

Florida's ocean economy is on a strong upward trajectory. However, long-term success will depend on proactive, strategic investments that build resilience, drive innovation and ensure broad-based opportunity. Priorities include:

- Expanding **stackable credential pathways** and **regional training programs** to build a future-ready workforce.
- Investing in **port modernization** and **coastal infrastructure** to strengthen supply chains and protect assets.
- Supporting **applied marine research** and **technology transfer** to grow emerging industries.
- Aligning **state policy and funding** with long-term goals for economic development, environmental health and resilience.

Full Speed Ahead

Florida's ocean economy is big, growing, and essential, but without sustained investment in its people, infrastructure and innovation ecosystem, it risks falling short of its full potential. The Florida Office of Ocean Economy is committed to navigating these challenges and advancing a bold vision: **an ocean economy that delivers opportunity, security and prosperity for every Floridian.**

CASE STUDIES IN THE OCEAN ECONOMY

The following case studies are a partial reflection of the many outstanding assets and activities across Florida's ocean economy. Together, they highlight the innovation, resilience and economic opportunity that define Florida's leadership in this vital sector.

STATEWIDE

Anchoring Science: Florida Institute of Oceanography

The **Florida Institute of Oceanography (FIO)**, based at the **University of South Florida**, is a statewide collaborative organization comprising of more than **30 institutions** advancing marine research, education and economic resilience. FIO operates key assets such as the **R/V Weatherbird II, R/V W.T. Hogarth**, and the 118- foot twin-hulled **R/V Western Flyer**, which is equipped with advanced deep-sea exploration technology. FIO also operates the **Keys Marine Laboratory (KML)**, a full-service marine field station in partnership with **FWC**.

Since 2015, FIO has administered over **$14 million** through the **Florida RESTORE Act Centers of Excellence Program (FLRACEP)**, supporting projects on fisheries, coral reef health, marine wildlife and water quality. These grants have generated over 60 peer-reviewed publications and supported more than 50 graduate students across 11 Florida institutions. FIO also drives **STEM workforce development**, with over **10,000 undergraduates** and **2,000 graduate students** participating in field-based programs. Through these efforts, FIO contributes to job creation and a skilled workforce in sectors like fisheries, aquaculture and restoration. With more than **3,000 alumni** entering marine and technical careers, FIO continues to deliver the **research, talent and tools** needed to strengthen Florida's **ocean economy** and environmental resilience.

From Ideas to Impact: Ocean Exchange Anchors Innovation in Florida

Ocean Exchange, a nonprofit based in **Fort Lauderdale**, identifies and accelerates global ocean-focused startups through its **annual innovation competition**, awarding **non-dilutive $100,000 grants**. Since its launch, finalists have raised over **$3.2 billion** in follow-on capital, with **$320,000 awarded in 2024** alone. Winning innovations address challenges in **reef restoration, waste-to-energy, cruise emissions** and **marine data monitoring,** many with direct relevance to **Florida's ocean economy**.

Startups like **Oyster Heaven** (biodegradable oyster reefs), **Phoenix Waste Solutions** (zero-fuel waste processing), and **BLUEiQ** (ship-strike prevention) are now piloting solutions statewide. As a core partner in **The Continuum**, a **$13.9 million NOAA-funded ocean-tech accelerator** located in Saint Petersburg, Ocean Exchange is building the commercialization pipeline for **resilience, ecosystem services, and marine logistics.**

With 150 – 200 global delegates attending each year, Ocean Exchange connects innovators to **ports, shipping executives, researchers and investors** — positioning **Florida as a national leader** in scalable ocean innovation.

Futureproofing with the Resilient Florida Program

Launched in **2021** and managed by the **Florida Department of Environmental Protection**, the **Resilient Florida Program** is a statewide initiative that protects coastal communities from **sea level rise, flooding and severe storms**. What sets the program apart is its combination of **infrastructure funding** with **mandatory local vulnerability assessments**, creating a **data-driven approach** to resilience planning.

To date, the program has awarded **over $1.8 billion** for projects such as **seawalls, stormwater upgrades, and wetland restoration**. In **2023 alone**, **$275 million** was distributed across **75 projects**, reinforcing Florida's **coastal economy**, including **tourism, ports and fisheries.**

Beyond funding, Resilient Florida fosters **cross-sector collaboration** and requires a **Statewide Flooding and Sea Level Rise Resilience Plan** each year. This ensures legislators are guided by the **latest science and local data**, embedding resilience into the **state's long-term budgeting**. The result is a strategic model that supports **both economic prosperity and environmental durability** across Florida's ocean economy.

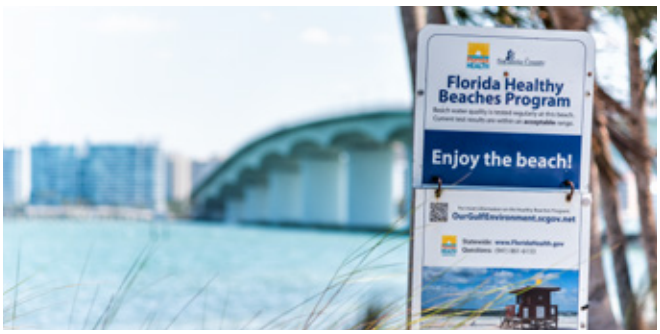
Clean Water, Stronger Coasts: Florida's Investments in Water Quality

Florida's iconic waterways — from **Lake Okeechobee** and **Tampa Bay** to **Biscayne Bay** and the **Indian River Lagoon** — face mounting threats from **nutrient runoff**, **algal blooms** and **septic overflows**. These issues damage ecosystems and have direct economic consequences for the **ocean economy**, which generates **over $40 billion in GDP** and supports **more than 700,000 jobs** statewide.

To respond, Florida has committed **over $600 million** for FY 2025–2026 in water quality projects, including **$189 million in general funding, $100 million for the Indian River Lagoon and $80 million for the Kissimmee River Basin**. These investments support **infrastructure upgrades, septic-to-sewer conversions and ecosystem restoration**, reducing harmful algal blooms and preserving marine habitats.

The State's efforts were further strengthened by the **Blue-Green Algae Task Force**, established by Governor DeSantis. Composed of subject-matter experts, the Task Force provides recommendations and guidance aimed at protecting Florida's water resources and **reducing algae blooms**.

The **Protecting Florida Together** initiative provides **real-time data** on blue-green algae, red tide, and nutrient pollution through interactive maps and health alerts. Meanwhile, the **Healthy Beaches Program**, run by the **Florida Department of Health**, monitors bacterial levels at recreational beaches to protect **public health and tourism**, which draws **over 30 million beachgoers annually**. Together, these programs safeguard both **environmental health and Florida's economic vitality**.



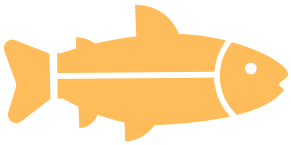
SOUTHEAST FLORIDA

Power from the Current: Building Florida's Marine Energy Future

Florida's ocean currents, especially the Gulf Stream, offer a consistent and powerful source of marine energy — an **emerging sector with high potential to provide clean, baseload electricity**. Harnessing this resource requires investment in durable offshore infrastructure, undersea grid connections and a skilled workforce.

Florida is stepping up. The **College of the Florida Keys** offers an A.S. in Renewable Energy Engineering Technology, while Florida Atlantic University's Southeast National Marine Renewable Energy Center (SNMREC), backed by funding from the U.S. DOE, is training the next generation of marine energy professionals. SNMREC is also leading development of the **nation's first ocean current test site** off Palm Beach County, supported by an $800,000 DOE grant and partners like Lake Worth Beach Electric Utility.

A planned 12 – 15-mile subsea demonstration cable could power real-time generation and **serve as a national model**. A prior study estimated 271 jobs and $40 million in local impact during construction alone.

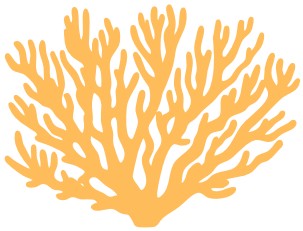


Farming the Future: Atlantic Sapphire's Land-based Salmon Revolution

With wild fish stocks under pressure, Atlantic Sapphire's **land-based aquaculture facility** in Homestead, Florida, offers a scalable, sustainable solution. Using cutting-edge **recirculating aquaculture systems (RAS)** in its "Bluehouse," the company raises Atlantic salmon without antibiotics, escapes or impact on wild ecosystems.

The 400,000+ square-foot facility recycles **99% of its water**, can repurpose fish waste to sell as fertilizer and produces **20 million pounds of salmon** annually near major markets, cutting transport emissions and costs. Plans to expand production to **400 million pounds** could supply up to **30% of U.S. salmon demand** and create **20,000 jobs** across the seafood supply chain.

To compete globally, Atlantic Sapphire calls for a **USDA organic seafood standard**, federal support and inclusion in institutional purchasing programs. As seafood demand grows, this Bluehouse model offers a **domestic, environmentally friendly blueprint** for the future of sustainable aquaculture in Florida and beyond.



Turning Seaweed Into Solutions: Sargassum Eco Lumber

Sargassum Eco Lumber, based in **Homestead, Florida**, is tackling one of the state's growing coastal problems — **massive Sargassum seaweed blooms** — by converting marine biomass and plastic debris into **sustainable construction panels**. Founded by **Raquel and Andrés de Antonio Crespo**, the company's process creates a **formaldehyde-free, water-resistant lumber alternative** used in furniture, pallets and building materials.

The panels are made by **solar-drying collected Sargassum**, blending it with **recycled polyethylene** and compressing it into durable boards. In its first season, the company **diverted tons of marine waste from landfills**, while creating **new green jobs** for former hospitality workers and fishers.

To scale production, the team has partnered with **scientists, ports and beach managers** to monitor blooms and install **on-site solar dryers**, cutting emissions and stabilizing supply. The company is now working with **technical colleges** to develop a **workforce pipeline**, positioning itself at the forefront of Florida's **circular economy and ocean innovation sector**.

Charting Careers: MIASF Builds Florida's Yacht Workforce

The **Marine Industries Association of South Florida (MIASF)** is preparing Florida's next generation of marine professionals through a strong industry partnership. **MIASF's Yacht Service Technician Apprenticeship Program (YSTAP)** is a two-year training initiative launched in 2020. It blends full-time industry work with evening classes in welding, painting, hydraulics and more. With **26 partner companies** and over 50 successful graduates, the program addresses critical **workforce needs in Florida's $24 billion marine industry**.

MIASF is building a resilient talent pipeline, combining technical skills, hands-on experience, and academic excellence to fuel the continued growth of Florida's ocean economy.

FLIBS: Driving Global Marine Innovation from Fort Lauderdale

The **Fort Lauderdale International Boat Show (FLIBS)** is the **world's largest in-water boat show** and a cornerstone of Florida's **marine economy**. Hosted by the **Marine Industries Association of South Florida**, FLIBS brings over **100,000 attendees from 93 countries**, generating **$824 million in direct sales** and contributing over **$1.8 billion annually** to Florida's economy.

Beyond commerce, FLIBS is a **marine workforce and innovation hub**. It supports the **Yacht Service Technician Apprenticeship Program**, partners with **Junior Achievement** and funds scholarships to strengthen career pipelines. It also champions **Ocean Exchange**, a nonprofit awarding **$100,000 prizes** to startups advancing **sustainable ocean technologies.**

From living seawalls to carbon-to-fuel systems, Ocean Exchange winners gain global exposure through FLIBS. By fusing industry, innovation and education, FLIBS positions Florida as a leader in the future of the **ocean economy**.

Shore Power Transforms PortMiami and Port Everglades

PortMiami and **Port Everglades**, two of the world's busiest cruise ports, are leading efforts to reduce emissions by investing in **shore power infrastructure**. This technology allows ships to plug into the local electrical grid while docked, shutting off engines that would otherwise emit air pollutants **harmful to both public health and the environment**.

At **PortMiami**, a $125 million investment, with **$21.7 million in grant support**, enabled shore power at **five terminals**, making it the first port on the U.S. East Coast to power **three ships simultaneously**. At **Port Everglades**, upgrades are underway to supply shore power to **up to eight berths**, in partnership with **FPL** and major cruise lines.

Shore power not only reduces air and water pollution but also **improves the passenger experience** and **protects public health** in nearby urban communities. By embracing this clean technology, Florida's ports are supporting a **sustainable tourism economy** while establishing the state as a **national leader in port innovation**.

TAMPA BAY/WEST CENTRAL FLORIDA

The Continuum: Tampa Bay's Launchpad for Ocean Innovation

Led by the University of South Florida's College of Marine Science and supported by a **$13.9M NOAA grant, The Continuum** is a hub for ocean-focused startups tackling challenges like **coastal resilience, ocean carbon, pollution and marine ecosystem services**.

Positioned at the intersection of **academia, industry and government**, The Continuum partners with platforms like **Ocean Exchange and Seaworthy Collective** to connect innovators with funding and public-sector support. In 2024, Ocean Exchange awarded grants to startups like **Oyster Heaven** (reef restoration), **Phoenix Waste Solutions** (micro waste-to-energy tech) and **Carbon Bridge** (carbon-neutral marine fuel).

To date, The Continuum and its network have supported **domestic, environmentally friendly blueprint**, backed by over **$1 billion in assets**. Beyond startups, it integrates **students and the local community** through hands-on research, mentorship, and workforce training — serving as a national model for sustainable, innovation-led economic development.

St. Pete's Ocean Tech Powerhouse: The Innovation District

The **St. Petersburg Innovation District (SPID)** is a nationally recognized hub driving collaboration across **marine science, tech, health and resilience**. Anchored by institutions like **USF's College of Marine Science, NOAA, USGS and the Florida Fish and Wildlife Institute**, SPID fuels Florida's ocean economy through partnerships, research and workforce development.

SPID supports **ocean innovation** in areas like sea-level modeling, marine energy and water quality, and partners with **The Continuum**, a NOAA-backed startup accelerator. Through collaborations with **St. Petersburg College**, SPID offers **career-ready certificate programs** in GIS, drone ops and coastal data, engaging 100+ students annually and promoting equity in STEAM fields.

Now expanding, SPID's new **HUB2** facility will serve as a national center for **ocean tech testing**, marine defense, and unmanned systems, further positioning Florida as a leader in the ocean economy.

Science in Action: Mote Marine Laboratory

Mote Marine Laboratory, a leading independent research institution, combines **cutting-edge science, ecosystem restoration and technology development** to tackle Florida's coastal challenges. From **coral and seagrass restoration** to **harmful algal bloom (HAB) mitigation**, Mote's work strengthens the ecological foundations of Florida's **tourism and fishing industries**.

Through its **Florida Red Tide Mitigation Initiative**, Mote partners with the **Florida Fish and Wildlife Conservation Commission** to develop tools that reduce the economic and environmental toll of red tide. Its **technology transfer program** helps turn research into market-ready products, attracting **industry investment** and spurring growth in coastal environmental technology.

By advancing both science and commercialization, Mote supports job creation, environmental health and economic resilience — proving that marine research is a critical engine for Florida's **ocean economy**.

PANHANDLE/NORTHWEST FLORIDA

Reviving the Bay: Apalachicola's Oyster Comeback and Coastal Resilience

Once the source of **90% of Florida's oysters** and **10% of the national supply, Apalachicola Bay** supported a **$134 million regional economy**. After years of **upstream water mismanagement**, the fishery collapsed, leading to a **five-year moratorium** on wild oyster harvesting beginning in 2020.

In response, the **Apalachicola Bay System Initiative (ABSI)** was launched by **Florida State University** with **$8 million in funding from Triumph Gulf Coast**. The initiative, now continued through the **Partnership for a Resilient Apalachicola Bay**, focuses on **reef restoration, water quality and sustainable harvest management**. Restoration efforts use **limestone and recycled shell** to rebuild habitat, with early signs of recovery already benefiting **sportfishing, guiding and coastal tourism.**

While commercial harvesting may resume in **2026**, the broader goal is ecosystem recovery. These investments help protect the **health of the bay** and sustain the **local economy** through clean water, resilient fisheries, and outdoor recreation.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OCEAN ECONOMY