University of New Hampshire
School of Marine Science and Ocean Engineering

Strategic Plan
2026–2030

Charting a new course through collaboration, partnership, and leadership.

A Strategic Vision to Advance the UNH Marine Enterprise

The Opportunity

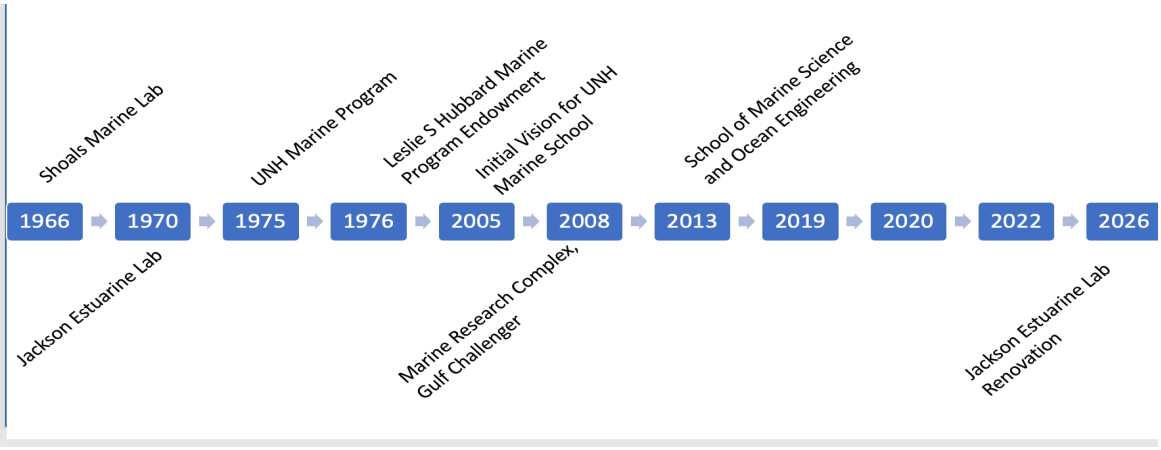
For more than 50 years, the University of New Hampshire has built a nationally significant marine and coastal enterprise, supported by a distributed network of research centers, laboratories, vessels, faculty expertise, education pathways and community partnerships along the Gulf of Maine. UNH consistently ranks in the top ten nationally in coastal and marine research funding, representing over 25% of total UNH research activity. Anchored by a unique estuary-to-offshore platform – all within close proximity to campus - UNH offers an unparalleled setting for interdisciplinary education, discovery, and engagement.

Over the past decade, the School of Marine Science and Ocean Engineering (SMSOE) has helped establish a strong foundation for interdisciplinary marine research and education at UNH. Yet, strategic opportunities remain to better connect UNH's distributed marine enterprise, strengthen incentives for collaboration, and create additional pathways for student connection to research and other in-house expertise. Pursing these opportunities will allow UNH to increase recruitment, attract partners and funding while enhancing its leadership in marine and coastal science.

This strategic plan builds upon SMSOE's long-standing accomplishments and outlines the next chapter – one that establishes a university-level, future-focused platform that integrates leadership, coordination, and investment across the marine enterprise—positioning UNH to deliver on UNH 2030 priorities, elevate the university's national profile, and prepare society for the opportunities and challenges of our ocean future.

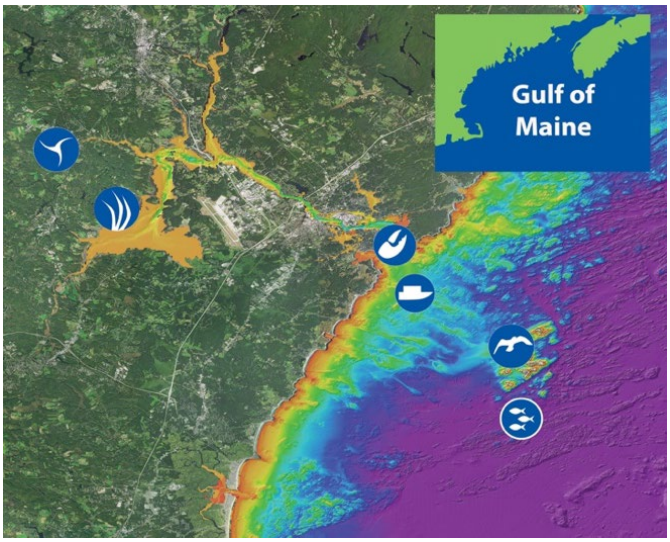
Building on Excellence: The UNH Marine Enterprise

The University of New Hampshire possesses one of the most extensive and integrated marine enterprises in the nation. As one of only a handful of institutions designated as a Land, Sea, and Space Grant University, UNH has experienced continuous growth and excellence in marine and coastal research, education, and engagement for over 50 years.



Timeline with key milestones of the UNH Marine Program and the UNH School of Marine Science and Ocean Engineering. The broader marine enterprise supported by the Marine Program and then SMSOE has continued to grow significantly throughout this timeline, with recent additions including the Center for Sustainable Seafood Systems, the NOAA Center of Excellence in Operational Ocean and Great Lakes Mapping and more.

UNH's marine enterprise spans multiple colleges, departments, centers, and institutes and brings together expertise in oceanography, marine biology, engineering, policy, mapping and geospatial sciences, aquaculture, seafood systems, coastal resilience, Arctic science, environmental monitoring, human health, and community engagement. The breadth of expertise and interdisciplinary reach of this community is one of UNH's defining strengths and creates exceptional opportunities for collaboration and innovation. See Appendix I for a partial list of UNH marine and coastal centers, facilities and programs.



- Jere A. Chase Ocean Engineering Lab
- Jackson Estuarine Lab
- Judd Gregg Marine Research Complex
- R/V Challenger and other vessels
- Shoals Marine Laboratory
- Off-shore Test Site

The university's marine infrastructure is equally distinctive. UNH maintains an unparalleled network of facilities that extends from upland watersheds to the open ocean and includes laboratories, hydrodynamic test tanks and systems, estuarine, island, coastal, offshore, and vessel-based platforms that support research, education, and public engagement. These assets include the Jere A. Chase Ocean Engineering Lab (CEPS), Jackson Estuarine Lab, Judd Gregg Marine Research Complex (Coastal Marine Laboratory, the Marine Research Pier and Pier Operations Facility), R/V *Gulf Challenger* and other vessels, the Shoals Marine Laboratory and the Off-shore Test Site. Together, these facilities provide students and researchers with access to real-world environments for discovery, experimentation, and experiential learning.

Complementing these physical assets is a rich ecosystem of research centers and collaborative organizations that advance understanding of marine and coastal systems and deliver solutions to society's most pressing challenges. These include internationally recognized programs in ocean mapping, acoustic and environmental sensing, ocean energy, sustainable seafood, and more. Collectively, these centers provide critical scientific capabilities, attract substantial external funding, and serve as trusted partners to federal agencies, industry, communities, and nongovernmental organizations.

The marine enterprise also serves as a powerful educational engine for the university. Marine education pathways exist across multiple colleges and disciplines and include undergraduate, graduate, professional, and certificate programs that prepare students for careers in science, engineering, policy, resource management, business, and the blue economy. Students benefit from a broad range of experiential learning opportunities, including field-based courses, undergraduate research, graduate fellowships, internships, vessel operations, and direct engagement with industry and community partners. The university's facilities and research enterprise provide students with opportunities that few institutions can match and contribute to exceptionally strong career outcomes and job placement.

UNH's marine enterprise also plays a vital public service role. Through workshops, seminars, technical assistance, and community partnerships, UNH serves as a trusted source of scientific information and convening capacity for New Hampshire and beyond. Annual events such as Ocean Discovery Day engage thousands of community members, while seminars, graduate symposia, workshops, and collaborative initiatives connect researchers, students, educators, policymakers, and the public around shared challenges and opportunities. The university's

long-standing partnerships with federal agencies, state agencies, municipalities, nonprofit organizations, and industry amplify the impact of its research and create pathways for translating knowledge into action.

Taken together, UNH's facilities, expertise, partnerships, and educational programs constitute a marine enterprise of remarkable breadth and depth. Stretching from estuaries to offshore waters, from laboratories to coastal communities, and from fundamental discovery to applied solutions, the UNH marine enterprise provides an extraordinary foundation upon which to expand the university's role as a national leader in interdisciplinary marine and coastal research, education, and engagement.

About SMSOE

Formed in 2013, SMSOE was built to capitalize on the existing coastal and marine excellence at UNH. SMSOE connects over 80 researchers and faculty across 4 academic colleges and 13 centers, and 20 undergraduate, graduate and post-graduate degrees and certificate programs. SMSOE organizes events, workshops and seminars, leads development initiatives, supports cutting-edge facilities and vessels, oversees four centers, a research and teaching dive program and laboratories, develops professional trainings that address student, industry, nonprofit, and government needs, and provides strategic funding to students and researchers. Details about SMSOE's current labs, centers, facilities, staffing, funding, events, and educational programming are in Appendix II.

Re-Imagining SMSOE: Key Findings

Over the past year, SMSOE has embarked on an extensive strategic planning process to evolve its identity, mission, and purpose and to develop a new framework that aligns with UNH 2030 while positioning the university's marine enterprise for long-term growth and impact.

The strategic planning process confirmed that UNH possesses one of the nation's premier marine enterprises, with exceptional strengths that provide a strong foundation for future growth. At the same time, it identified organizational and structural challenges that limit the university's ability to fully realize the collective impact of these assets. Several key findings emerged that shaped the recommendations in this strategic plan.

- **UNH has a nationally ranked and successful marine enterprise and has a significant opportunity to broaden its reputation as a leader in marine research, education, and public service.** UNH is among the nation's leading marine research institutions, ranking between 5th and 7th nationally in coastal and marine research funding in recent years, with approximately 25% of the university's total research portfolio focused on marine and coastal topics. More than 15 centers and programs, world-class research facilities spanning estuarine to offshore environments, and strong partnerships with communities, government agencies, nonprofits, and industry provide an exceptional platform for research, education, and public engagement. These strengths are further complemented by national leadership in ocean mapping, acoustics, and ocean data sciences, as well as robust experiential learning opportunities and industry connections that prepare students for successful careers. Despite these strengths, there is a strong feeling that UNH is not broadly known by students, researchers, and other partners as compared to other regional and national Universities and Institutes with significant marine assets.
- **UNH's greatest opportunity for sustaining and expanding its marine capacities lies in better connecting its existing strengths.** While the university's marine assets are exceptional, they are distributed across multiple colleges, centers, and administrative units with limited mechanisms for coordination. The strategic planning process uncovered additional opportunities to connect more broadly across disciplines, departments, centers, and colleges. Interviews both within and external to UNH identified a lack of a clear institutional strategy, organizational framework, and shared identity for the UNH marine enterprise. Fragmentation and cultural divisions have limited interdisciplinary collaboration,

reduced operational efficiencies, and constrained UNH's ability to pursue large-scale research initiatives and communicate a compelling institutional story.

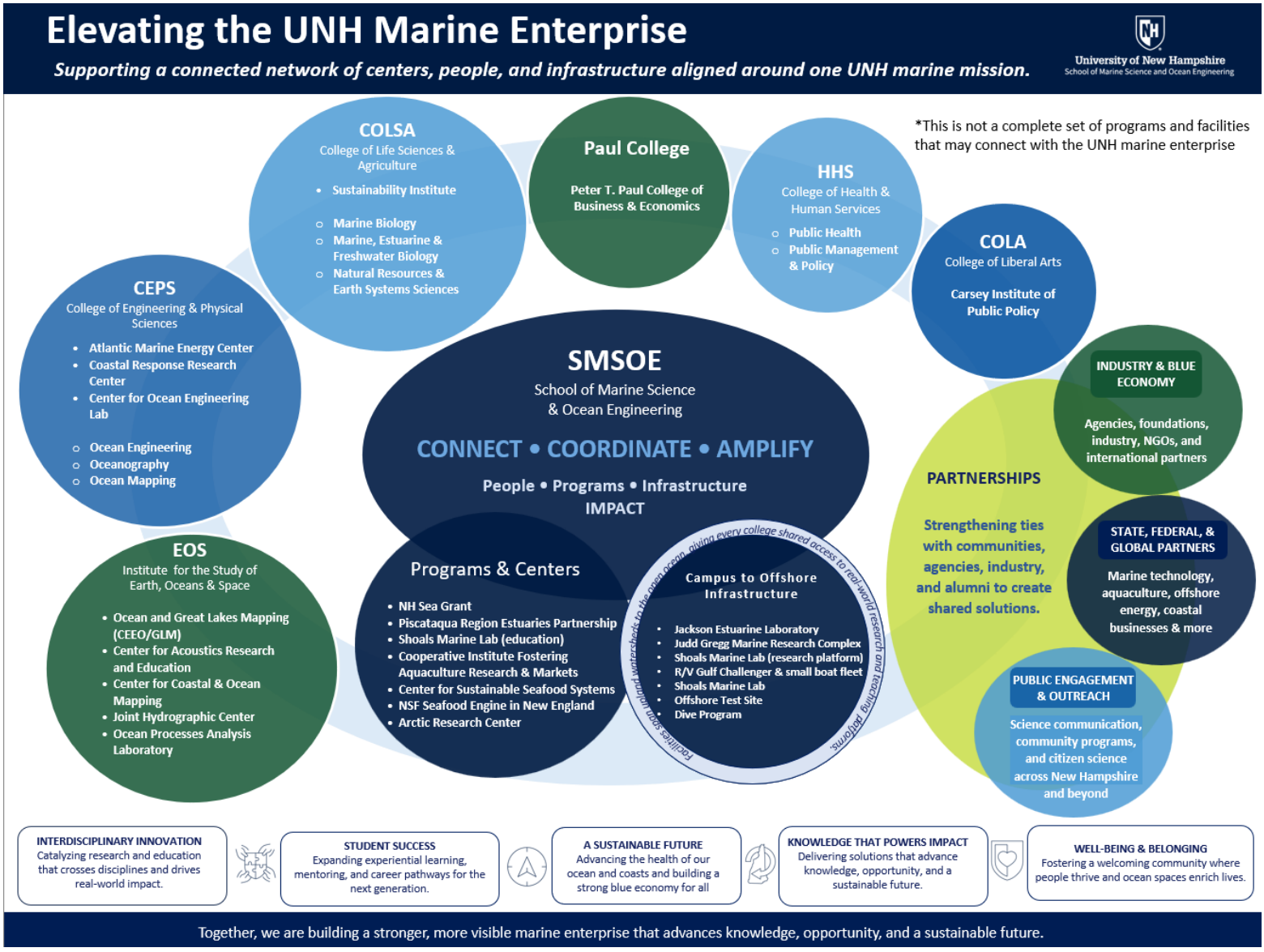
- **The student experience can be strengthened through greater collaboration.** Although UNH offers outstanding marine education and research opportunities, prospective students often encounter a confusing array of academic pathways and limited visibility of the university's collective marine strengths. As a result, UNH is not consistently recognized as a first-choice destination for marine education despite its national research stature. Better connecting academic programs under a consortium-like model (where ownership and curriculum development remains in colleges), would allow planning that can increase and enhance experiential learning opportunities, career pathways, and industry partnerships. These changes could strengthen recruitment, improve student success, and better align education with evolving workforce needs.
- **A new organizational model is needed to support interdisciplinary excellence and cross-campus connecting.** Participants in the strategic planning process consistently emphasized that SMSOE's future success as an integrator of the UNH marine enterprise will depend on strengthening and expanding the structures that connect existing expertise, facilities and programs. A more intentional, university-wide framework will enable UNH to amplify its impact while building upon the strengths that exist in colleges, centers, and faculty.
- **A revised funding model is required to sustain existing and future UNH marine success.** The current budget model for SMSOE does not enable proactive stewardship of marine facilities or an optimal approach to realizing strategic benefits related to supporting interdisciplinary teaching and research . Overlooking this shortfall places continued UNH success in marine research, education, and public service at risk.

Together, these findings point to a clear conclusion: UNH's competitive advantage lies in more effectively connecting, coordinating, elevating, and expanding connections among the exceptional marine research, teaching and public service staff, centers and programs that already exist across the university. This strategic plan provides the framework to position SMSOE to help UNH achieve that vision.

Additional details about the strategic planning process and findings can be found in Appendix III.

The Pathway Forward

The re-envisioned SMSOE organizational model and vision will address these findings by improving its capacity to connect, coordinate, and elevate UNH's distributed marine enterprise across colleges and centers, while avoiding duplication of existing academic and administrative structures. Its core role will be to serve as the connective tissue of UNH's marine enterprise—providing collaborative leadership that aligns, amplifies, and accelerates the impact of the university's distributed marine assets while complementing, rather than replicating, existing academic and administrative structures.



Charting the Future: The Vision	Our Role at UNH: The Mission
UNH's marine community is recognized as a regional, national and international leader in interdisciplinary research, education, and outreach, translating knowledge into impact through community partnerships. UNH advances solutions to local, national and global coastal and marine challenges and is a first-choice destination for students, researchers, and partners seeking purpose-driven marine careers and shared public benefit.	Through leadership and collaboration, we connect UNH's extensive marine assets—facilities, expertise, programs, and partnerships—to catalyze interdisciplinary research, expand experiential learning, increase enrollment in marine career pathways, strengthen community and industry engagement, and translate research into solutions that serve communities in New Hampshire and beyond.

Together, we will **advance interdisciplinarity with purpose**—connecting expertise, ideas, and people to accelerate discovery and impact while fostering leadership for tomorrow's marine workforce. We will advance understanding of the world's marine ecosystems —examining their health, the evolving human–ocean relationship, and the emerging challenges and opportunities shaping our ocean and coastal future. This approach positions SMSOE to advance UNH 2030 priorities and establishes marine education and research as a defining institutional differentiator.

Specifically, SMSOE will:

- Elevate UNH's **national marine identity**, strengthening recruitment, partnerships, and investment.
- Serve as a **cross-university integrator**, linking faculty, students, centers, and facilities for interdisciplinary collaboration.
- Strengthen **marine education pathways and experiential learning** by facilitating and supporting collaborative, student-centered discussion, planning, and execution to promote enhanced recruitment and student outcomes.
- Provide a **front door for external partners** seeking expertise, workforce connections, and collaborative research.
- Organize, prioritize, and **advance philanthropic support for the marine enterprise** at UNH.
- Steward and coordinate access to UNH's **campus-to-estuary-to-offshore infrastructure**, ensuring equitable and efficient use.
- Act as a **'large proposal engine'** for **interdisciplinary, convergence** research, education and public service programs.

Years 1-3: Connecting People, Programs, and Purpose

Realizing the vision outlined in this plan will require a set of interconnected goals, strategies, and actions and a steady, organized effort spanning over a three-year period. The table below outlines these goals and the potential strategic activities to achieve them. Together, they provide a practical roadmap for strengthening UNH's marine enterprise by focusing efforts on areas where SMSOE can have the greatest impact. While the specific actions will evolve as opportunities and needs emerge, these priorities establish a clear direction for cross-campus collaboration. An implementation plan will be developed for this strategic plan with clear goals and measurables for each of the first three years.

Goals	Potential Strategic Activities
Visibility, Identity, and Enhanced Reputation *Demonstrating UNH's value proposition and strengthening enrollment pipelines*	• Partner with UNH Communications and Marketing to create a **unified digital presence** (website, social media, video tours) and a **coordinated strategy** that clearly communicates the breadth and excellence of marine education pathways, experiential learning opportunities, facilities, and career outcomes. • Partner with colleges and UNH admissions to support marine-focused **campus tours, open houses, "Ocean Discovery Day", and targeted recruitment events** that position marine research and education pathways as a distinctive UNH asset. • Develop evaluation criteria for SMSOE and the broader marine enterprise at UNH, conduct **annual impact assessments** and prepare concise leadership-ready summaries that document progress, outcomes, and return on investment.
Convening, Interdisciplinary Research and Career Advancement *Catalyzing collaboration and positioning UNH for large-scale impact and career advancement*	• Host targeted **seminars and convenings** that foster interdisciplinary community and idea generation - engaging, connecting and bridging marine interest and expertise across all UNH colleges. • Establish an **annual UNH Marine Retreat and Symposium** to showcase UNH excellence to faculty, students, partners, and funders. • Coordinate **workshops and proposal-building activities** in collaboration with the Research and Innovation Office. • Launch university-wide call for proposals to support bottom-up formation of **pilot interdisciplinary research clusters or "pre-centers"** (e.g., Coastal Resilience, Arctic Futures, Ocean Technology) provide seed funding and facilitate conversation, discussion, research and planning as needed. • Facilitate access to **professional development opportunities** to do interdisciplinary work, identifying and filling gaps where possible. • Work with UNH Career and Professional Success staff to **build UNH marine alumni network, identify and promote UNH marine career pathways**. • Ensure SMSOE representation on national and international ocean research boards and committees so UNH is 'at the table' for priority setting initiatives.
Partnerships, Public Engagement *Serving as UNH's connective tissue with communities, industry, and state and federal entities*	• Establish a **central "front door" for external partners** seeking collaboration, technical assistance, or student talent. • Strengthen **applied research, co-op, and community science partnerships** that address real-world marine challenges. • **Enhance connections with UNH affiliate faculty** to strengthen community partnerships and networks. • Work with **industry partners** to expand field-based and technology-enabled learning aligned with technology shifts.

	• Build an **external-facing email list/newsletter** to connect with existing and new partners.
Shared Infrastructure, Access, and Stewardship *Maximizing UNH's unique estuary-to-ocean platform*	• Develop and implement **improved shared-access policies** for marine facilities, vessels, and monitoring assets that prioritize and promote expanded student access and diversify use. • Ensure **robust support for field research safety, diving programs, and compliance**. • Coordinate **facility planning, maintenance, and upgrades** across centers to reduce redundancy and improve use. This will begin with an effort to develop goals for facilities use that are consistent with UNH 2030 priorities across the marine enterprise. • Develop an **inventory management system** and publicize and market the associated marine infrastructure and capabilities of UNH. • Develop **shared physical and programmatic spaces** that intentionally foster collaboration and community.
↑ Enrollment & Retention ↑ Research Scale & Visibility ↑ Workforce & Community Impact ↑ Belonging & Interdisciplinary Culture	

Measuring Progress Toward UNH 2030

SMSOE will operate with a commitment to continuous learning and adaptive management. The measures that follow provide a framework for assessing progress toward UNH 2030 priorities, identifying emerging opportunities, and ensuring that investments in the marine enterprise translate into measurable outcomes and enduring impact. Measures for success will be developed, adopted, and annually reviewed and evaluated.

First Choice Destination	*Outcome:* Marine education and research is a regional and national differentiator for UNH. • Increased enrollment in undergraduate and graduate programs • Longitudinal external surveys indicate improving reputation and leadership
Interdisciplinary Education and Research Excellence	*Outcome:* Interdisciplinary community of practice in ocean and coastal research and education • New interdisciplinary proposals and funded programs • Expanded industry and community partnerships (NH and Beyond) • Expanded and broadened use of UNH marine facilities • Improved coordination in developing and supporting marine education pathways at UNH
Commitment to Well-Being and Belonging	*Outcome:* Enhanced cross-campus connection, community and identity • Longitudinal community surveys (students, faculty, staff) indicate contribution to well-being and belonging
Strengthening UNH's Impact	*Outcome:* Enhanced scope of impact of the UNH marine enterprise on NH and beyond • Longitudinal, annual cross-campus evaluation demonstrates increasing impacts of the UNH marine enterprise on students, communities, ecosystems and economies.
↑ Enrollment & Retention ↑ Research Scale & Visibility ↑ Workforce & Community Impact ↑ Belonging & Interdisciplinary Culture	

Governance and Accountability

SMSOE will operate through a networked, integrative, and forward-looking model, providing leadership while facilitating collaboration across colleges, centers, and laboratories. This consortium-like approach leverages existing strengths, minimizes administrative redundancy, and reflects the inherently interdisciplinary nature of marine and coastal challenges. Leadership will be advanced through a cross-campus investment strategy, enabling shared ownership, management, and priority setting.

SMSOE's campus placement will advance UNH 2030 priorities by providing a university-level platform that develops a culture and community that catalyzes collaboration, coordination, and visibility across the distributed marine enterprise, differentiating UNH among its peers.

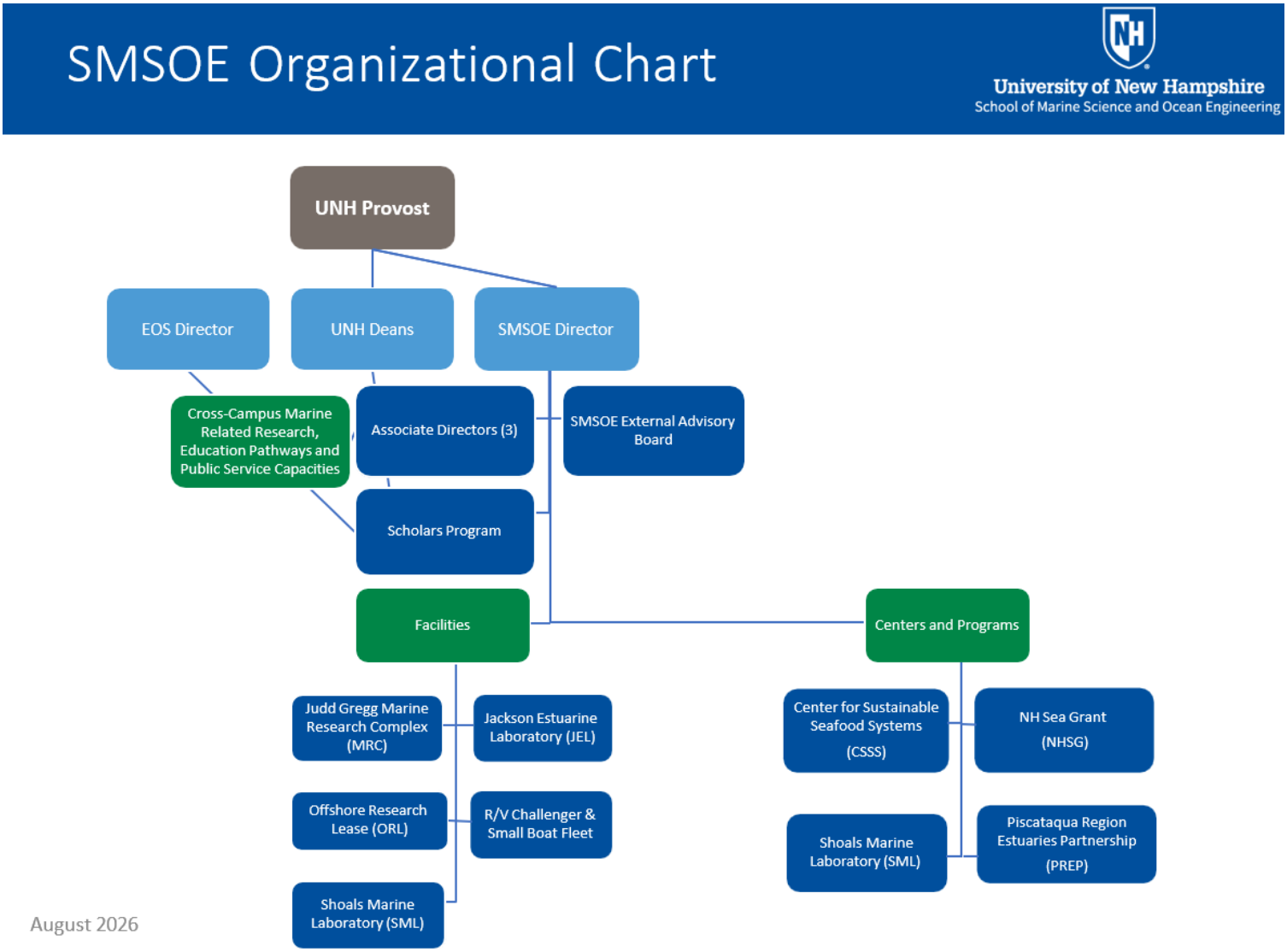
Organizational Structure

- **Direct Reporting to the Provost:** To bridge research, teaching, and public service elements of the marine enterprise administered in UNH colleges and EOS, the SMSOE Director will continue to report directly to the Provost and will collaborate directly with the Provost's Council. This positioning has been essential to developing the cross-campus shared vision for SMSOE outlined in this strategic plan.

- **Limited subset of centers and programs:** SMSOE will continue to be the home for a limited subset of centers and programs that clearly benefit from cross-campus connections made possible through SMSOE'S unique campus positioning and networking emphasis, including those that are:

    1) Based at UNH marine facilities (e.g. Shoals Marine Laboratory)
    2) Charged with delivering statewide or public-service missions that depend on leveraging cross-campus relationships (e.g. PREP and NH Sea Grant).
    3) Focused on interdisciplinary topics or themes that depend on sustained collaboration across colleges and units.
    4) Emerging interdisciplinary initiatives that require coordinated leadership, seed funding, and cross-campus support to establish and grow. (e.g. UNH Center for Sustainable Seafood Systems, the Arctic Research Center).

- **Faculty and Staff:** SMSOE faculty and staff will include those that are directly associated with the labs, centers and programs that are housed within SMSOE. Additional research and staff positions, particularly those that meet specific needs or gaps in the UNH marine community and/or bridge SMSOE with colleges and centers will also be appointed. Approval for these positions will be given by the SMSOE Leadership Team.



Leadership and Committees

The re-envisioned SMSOE will be supported by a leadership structure and committee system that balances top-down alignment and bottom-up engagement

- **SMSOE Director:** The SMSOE Director will report directly to the UNH Provost to maintain independent leadership for the UNH marine enterprise and to sustain collaboration and partnership with college deans and the EOS director that are necessary to deliver outcomes that serve students and UNH's academic and research missions. The SMSOE Director will be appointed by the Provost and will hold a 3-year, renewable term.

- **Leadership Team:**
  - Function: Primary decision-making and strategic planning body. Provides leadership and supports implementation of SMSOE initiatives
  - Chair: SMSOE Director
  - Membership:
    - Up to 4, part-time Associate Directors with a focus on themes such as Interdisciplinary Research and Education, Engagement and Impact, and Facilities Stewardship

- Appointments:
  - Associate Directors will self-nominate and be appointed by the SMSOE Director with input from the Provost and corresponding Deans. They will hold a 2-year, renewable term.

- **Marine Scholars Program:**
  - Function: Provides input to the leadership team on decision-making and planning. Provides leadership and supports implementation of SMSOE initiatives
  - Chair: SMSOE Director
  - Membership:
    - Up to 10 additional members will bridge the SMSOE with marine-related programs in UNH colleges and EOS.
  - Appointments:
    - The SMSOE Marine Scholars program may be faculty or staff at any level. They will self-nominate and be selected by the SMSOE Leadership team and approved by the Provost and relevant Dean or Director. They will hold a 2-year renewable term.

- **External Advisory Committee:**
  - Function: Provides support and advice to help guide SMSOE activities
  - Chair: SMSOE Director with support from Associate Directors
  - Membership:
    - Up to10 members selected to represent a diverse set of perspectives, experiences and approaches connected to foundation, government, NGO or other organizations or communities.
  - Appointments:
    - Selected by the SMSOE Leadership Team and approved by the Provost.
    - Members will serve 2 or 3-year terms (to allow for staggered onboarding of new members).

- **UNH Advisory Committee:**
  - Function: Maintains internal UNH connections that support and provide guidance for SMSOE activities and governance.
  - Chair: SMSOE Director with support from Associate Directors
  - Membership: All College Deans, the EOS Director.

- **Subcommittees and working groups** will be formed to oversee implementation of strategies that support strategic plan objectives as needed. Possible subcommittee themes are indicated below. Members of the Executive Committee will lead each sub-committee, and committee membership will be drawn from faculty and staff from colleges and centers. Each subcommittee will be set up with a clear charge that will outline the purpose, membership, goals, and deliverables. Working groups will have a charge that will clearly define expectations for engagement with other campus entities. Possible committees and workgroups may include:
  - Communications committee
  - Pier Expansion working group
  - Challenger replacement working group
  - Education pathways committee or consortium (SMSOE will not award degrees, but may facilitate discussion, research and collaboration to support education pathways supported elsewhere at UNH)

- Workforce Development committee (engagement and in partnership with UNH CaPS as needed)
  - Research and Facilities
  - Outreach

- **Networked, consortium-like model that leverages existing faculty and staff:** All faculty and staff across the university may participate in the SMSOE's leadership, programs, activities, and committees while remaining affiliated with their home institution. Joint appointments and other shared leadership roles that span SMSOE and participating colleges or centers will provide critical leadership and strengthen collaboration across the marine enterprise.

Evaluation and Review

An annual report that summarizes activities, impacts and performance based on both established UNH 2030 and SMSOE specific performance metrics will be provided for review by the UNH Advisory Committee. Every 5 years, SMSOE will be reviewed by a review team named by the UNH Advisory Committee that includes both internal and external reviewers.

Appendix I: UNH Marine and Coastal Centers, Facilities, & Programs

- AMEC – Atlantic Marine Energy Center
- COEL – Center for Ocean Engineering Lab
- CRRC – Coastal Response Research Center
- NHSG – New Hampshire Sea Grant
- CCOM – Center for Coastal Ocean Mapping
- JHC – Joint Hydrographic Center
- NSPIRE - New England Seafood Partnership for Innovation, Research, and Engagement (NSF Seafood Engine in New England)
- CEEOGLM – Center of Excellence for Operational Ocean and Great Lakes Mapping
- CSSS – Center for Sustainable Seafood Systems
- CIFARM – Cooperative Institute Fostering Aquaculture Research & Markets
- PREP – Piscataqua Region Estuaries Partnership
- ARC – Arctic Research Center
- SML – Shoals Marine Laboratory
- OPAL – Ocean Processes Analysis laboratory
- CARE – Center for Acoustics Research and Education
- JEL – Jackson Estuarine Laboratory
- MRC – Marine Research Complex
- ORL – Offshore Research Lease
- SI – Sustainability Institute
- CARSEY – Carsey School of Public Policy
- Graduate School
- Marine Biology, MS, PhD
- MEFB - Marine, Estuarine and Freshwater Biology, BS
- NRESS - Natural Resources & Earth Systems Sciences, MS, PhD
- Ocean Engineering, BA, MS, PhD
- Ocean Mapping, MS
- Oceanography, MS, PhD

*This is not a complete set of programs and facilities that may connect with the UNH marine enterprise. UNH unit affiliations are indicated in the figure on page 6.

Appendix II: The SMSOE at a Glance

SMSOE Labs and Centers

Shoals Marine Laboratory is a remote field station located 6-miles off the coast on Appledore Island, Maine, jointly operated by Cornell University and the University of New Hampshire. For over 50 years, SML has been a leader in marine science education, research, and outreach. In a typical year, SML hosts over 50 high school and 200 college students (70+ from UNH) in addition to supporting workshops, retreats and public tours and programs. SML employs 5 full-time staff, 14 seasonal staff and 35 adjunct faculty.

The Piscataqua Region Estuaries Partnership is a collaborative-driven local organization and National Estuary Program. PREP works closely with over 50 municipalities in NH, Maine, and Massachusetts to improve water management practices that restore and maintain healthy coastal ecosystems. PREP hosts undergraduate interns and connects UNH researchers to programming that meets local and regional ecological and community needs. PREP employs 5 full-time staff and 5 part-time staff.

New Hampshire Sea Grant is a federal-state (UNH) partnership that is one of 34 Sea Grant programs in the U.S. under the umbrella of the National Oceanic and Atmospheric Administration (NOAA)'s National Sea Grant College Program. NH Sea Grant works to support a coastal environment that sustains healthy ecosystems, economies, and people through integrated research, extension, education, and communications efforts. NH Sea Grant runs research and other funding competitions and is supported by 21 full or part-time staff.

The Center for Sustainable Seafood Systems (CSSS) supplies sound science and engineering practices to seafood production by providing education that supports a seafood workforce, innovates seafood technologies through interdisciplinary research, collaborates with industry and communicates findings. CSSS connects with over 20 undergraduate and graduate students through coursework, research

projects and internships annually. The CSSS employs 4 full-time staff along with one part-time staff along with graduate assistants.

SMSOE Facilities

SMSOE sustains UNH coastal and marine research, education, and outreach by operating the Jackson Estuarine Laboratory (JEL), the Judd Gregg Marine Research Complex (Marine Complex), dry-storage for large marine equipment, an open ocean test site, the 50' R/V Gulf Challenger, the 33' Tego as well as a fleet of small vessels and a trucks, including one that delivers salt-water and other supplies to on-campus teaching and research facilities.

SMSOE Dive Program

The UNH Dive Program consists of an academic portion, where students, faculty, and staff may enroll in courses for academic credit, and a research and education support portion, which supports experienced faculty and student divers allowing participants to engage in university-sponsored underwater research projects and field education programs.

SMSOE Staffing

In addition to SML, PREP, and CSSS staffing, SMSOE supports 2 full-time facilities support staff, a diving instructor and teaching assistants, one vessel captain and first mate, 2 administrative staff and a Director. Additional part-time staff support facilities and operations management.

SMSOE Funding Opportunities

SMSOE provides a range of funding opportunities that support interdisciplinary research and education.

- Graduate Research Funding (10-13 awards of $5-10K/year)
- Chase Family Peer Mentorship Fellowship (3-4 awards of $15,000 per year)
- SMSOE Research Equipment Funding (2-3 awards of $10-15K/year)
- Travel and Education Funding (10-15 awards, $10K/year)
- Graduate Student Recruitment Travel Funding (10-15 awards, $10K/year)
- Summer undergraduate internships (SML) (15 awards/year)
- SMSOE works with colleges to provide start-up funds and support for research faculty.
- SMSOE provides faculty support to develop curriculum in areas where there may be gaps in UNH's current curriculum.

Public Events

SMSOE supports networking, community, and interdisciplinary research and education.

- Ocean Discovery Day – (annual) Two-day outreach event brings more than 2,600 community members to campus with approximately 200 volunteers and 60 marine-related exhibits
- Graduate Research Symposium (annual) features 8-9 graduate student presentations with an audience of ~100
- Seminar Series – 4/year with an audience between 30 – 100 participants
- SMSOE Weekly Announcements – Reaches 300+ individuals weekly
- Graduate Student Meetings – Monthly meetings, ~30 students
- Graduate Student Seminars – Monthly, average attendance ~25 students
- Graduate Student events: Trip to SML, Spring Field Day, average attendance ~30 students

Curriculum

- Research Diving and Basic Scuba
- Resources Management Practicum
- Coastal Seminars

- Marine Policy Certificate Program
- Small Boat Safety Course – 8 graduate students per year.
- Introduction to Marine Policy
- Coastal & Marine Policy Introduction
- Citizens & Community Science Certificate Program
- Rhodes Academy Law of the Sea Program
- Arctic Research Methods I and II
- Special Topics: Microbial Ecological Biogeochemistry

Budget

- Core Programs:
  - Facilities support, Dive Program, Staffing and Community Support ($1.4M)
- Imbedded Programs and Centers:
  - Shoals Marine Laboratory ($1.7M)
  - Piscataqua Region Estuaries Partnership ($2.7M)
  - NH Sea Grant ($2.4M)
  - Center for Sustainable Seafood Systems ($900K)

*Revenues are a combination of grants, gifts, and service-generated revenue. A UNH investment of $890,000 supports core programs and NH Sea Grant match.

Appendix III: The SMSOE Strategic Planning Framework and Process

The strategic planning process for the School of Marine Science and Ocean Engineering (SMSOE) was designed as an inclusive, iterative effort to assess the current state of UNH's marine enterprise and identify a future direction that strengthens its impact, visibility, and contribution to the university's mission.

The process was structured as a multi-layered, participatory process that engaged internal leadership, faculty, students, and external partners while maintaining alignment with the broader UNH 2030 strategic planning effort.

Steering Committee

A Steering Committee, consisting of university leadership and key decision-makers, provided strategic oversight and guidance throughout the process. The committee served as a sounding board for emerging concepts, reviewed interim findings and recommendations, and ensured that proposed directions remained aligned with institutional realities, opportunities, and the priorities articulated in UNH 2030. The Steering Committee also played a critical role in considering organizational structure, resource requirements, and pathways for implementation.

Co-Chairs: Nancy Target and Erik Chapman
COLSA: Kim Babbitt
CEPS: Brad Kinsey
COLA: Jim Parsons
REEO: Mark Milutinovich
Paul College: Qingran Li
UNH Finance: Sara Littlefield Connor
CHHS: Dain LaRoche

Planning Committee

A cross-campus Planning Committee served as the primary working group for the strategic planning effort. The committee included representatives from multiple colleges, research institutes, centers, and marine-related programs across the university. Meeting regularly throughout the process, the committee conducted environmental scans and facilitated discussions on opportunities and challenges facing marine science and higher education. Activities included SWOT and PESTLE analyses, exploration of emerging trends in research and education, consideration of organizational models, and development of draft vision, mission, goals, and strategies. The committee also generated ideas for strengthening interdisciplinary collaboration, student pathways, community engagement, and the visibility of UNH's marine enterprise.

Co-Chairs: Nancy Kinner and Erik Chapman
COLSA: Easton White
CEPS: Tom Lippmann
COLA: Tom Safford
REEO: Caitlin Piette
Paul College: Scott Lemos Jr
CHHS: Semra Aytur
EOS – OPAL: Rob Letscher
CCOM : Jay Rushforth (broader community)
NHSG: Lindsey Williams (evolving structures and practices/institutional change)

Environmental Assessment and Information Gathering

The planning process incorporated multiple forms of evidence gathering and analysis. Existing SMSOE programs, facilities, activities, and financial information were documented and assessed. SWOT and PESTLE analyses were used to examine internal strengths and challenges and to understand the broader political, economic, social, technological, legal, and environmental factors likely to shape the future of marine science and higher education. The planning team also reviewed peer institutions and emerging models for interdisciplinary institutes and marine enterprises.

Iterative Development and Synthesis

The process followed an iterative approach in which findings from committee discussions, interviews, focus groups, and environmental analyses were regularly synthesized and brought back to the Planning Committee and Steering Committee for review and refinement. Through this cycle of engagement and feedback, the process evolved from an assessment of SMSOE's current state toward a broader vision for an interdisciplinary, future-focused institute that could connect, coordinate, and amplify UNH's distributed marine assets while advancing the university's strategic priorities.

The resulting strategic plan reflects a collective effort to build on UNH's longstanding strengths in marine and coastal science while positioning the institution to respond to future opportunities in research, education, workforce development, and community impact.

Stakeholder Engagement Summary

Overview

Between fall 2025 and winter 2025–2026, the School of Marine Science and Ocean Engineering (SMSOE) implemented a structured stakeholder engagement process to inform the development of a refreshed strategic direction for the school and the broader UNH marine enterprise. This effort built upon feedback first gathered during a university-wide all-hands meeting in 2024.

The engagement effort was designed to gather insights from **faculty, students, university leadership, research centers, community partners, and national experts** connected to UNH's marine enterprise.
The engagement process was designed to:

- Gather perspectives on SMSOE's strengths, challenges, and future opportunities
- Identify priorities for research, education, and partnerships
- Strengthen relationships with internal and external stakeholders
- Ensure the strategic planning process reflected the needs of the university, regional partners, and the broader marine science community

This effort supported the goal of aligning the marine enterprise with the university's broader strategic direction and advancing interdisciplinary collaboration, research impact, and student engagement.

Engagement Scope

The engagement process included a broad cross-section of internal and external stakeholders connected to marine science, ocean engineering, coastal communities, and blue-economy sectors (see Appendix A). Engagement with internal stakeholders ensured that faculty, staff, and students across UNH's marine enterprise had opportunities to contribute. These conversations provided insights into institutional strengths, structural challenges, and opportunities for interdisciplinary collaboration.

Image generated with ChatGPT

External engagement focused on organizations and individuals who collaborate with UNH or rely on marine science expertise to support research, policy, education, and regional economic development. These stakeholders provided insights into regional needs, collaboration opportunities, and ways the university can better serve coastal communities and industry partners.

Stakeholder Groups Engaged

Internal UNH Stakeholders

- UNH faculty and staff with work related to marine and estuarine/coastal topics.
- Center and laboratory directors
- Graduate students and researchers
- College leadership
- University administration

External Stakeholders

- Federal science agencies
- Regional coastal organizations
- Nonprofit science organizations
- National interdisciplinary experts
- Industry and marine economy partners

Engagement Methods

A mixed-methods approach was used to gather both qualitative and quantitative input from multiple stakeholder groups. One-on-one interviews with university leaders, partners, and subject-matter experts provided detailed perspectives on institutional strengths, strategic positioning, partnership opportunities, governance challenges, and emerging research areas. Focus groups with targeted stakeholder groups—including faculty, students, and partners—enabled deeper discussion of research collaboration, educational pathways, facility access, interdisciplinary opportunities, and organizational structure. In addition, a survey of UNH marine research centers collected input on research capacity, facility needs, partnership opportunities, and coordination challenges across the broader marine enterprise.

One-on-One Interviews	Focus Groups	Surveys
UNH Leadership College Deans National Experts	Center Directors Regional Partners Graduate Students	Marine Research Centers

These engagements helped ensure the planning process incorporated perspectives across **research, education, community engagement, and industry partnerships**.

Key Themes from Stakeholder Engagement

1. UNH Has Exceptional Marine Research Assets

Stakeholders consistently highlighted UNH's **unique combination of facilities and expertise**, including:

- coastal and estuarine research laboratories
- marine vessels and field infrastructure
- ocean mapping leadership
- strong federal agency partnerships
- interdisciplinary research capacity

These assets create a **rare "estuary-to-ocean" research platform** supporting research, education, and outreach.

2. SMSOE's Value is Interdisciplinary Collaboration

Participants widely viewed SMSOE as an important **cross-college connector** that enables interdisciplinary research.

Stakeholders noted that SMSOE can:

- convene researchers across departments
- support large collaborative research proposals
- coordinate shared research infrastructure
- facilitate interdisciplinary initiatives

Many emphasized that **interdisciplinary collaboration is essential for addressing complex ocean challenges**.

3. Fragmentation Across the Marine Enterprise

Despite significant strengths, stakeholders frequently described the marine enterprise as **fragmented across colleges and centers** at UNH.

Common concerns included:

- unclear governance structures
- limited coordination across programs
- lack of visibility of SMSOE across campus
- limited incentives for interdisciplinary collaboration

Addressing this fragmentation was widely viewed as essential to strengthening UNH's marine leadership.

4. Opportunity to Elevate UNH's National Reputation

Stakeholders believe UNH has the **research capacity of a top ocean institution but** lacks national visibility.

Key areas of strength include:

- ocean mapping and seafloor science
- aquaculture and seafood systems
- coastal resilience
- Arctic research
- marine technology and renewable energy
- Remote sensing/Ocean color

A more integrated structure could help position UNH as a **national leader in coastal and ocean science**.

5. Need to Strengthen Marine Education and Workforce Pathways

Participants highlighted opportunities to improve:

- clarity of marine-related degree programs
- connections between research and education
- interdisciplinary coursework
- experiential learning opportunities

Students emphasized the value of **field research, marine laboratories, and agency partnerships**, but noted limited cross-program interaction and awareness of SMSOE before enrolling.

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6. Strong Interest in Expanding Community Partnerships

Regional partners expressed interest in deeper collaboration with UNH to:

- translate marine research into public education
- expand citizen science initiatives
- support coastal communities
- strengthen science communication

For example, the Seacoast Science Center highlighted opportunities to expand joint programming and public engagement around coastal science and conservation.

Strategic Implications

Stakeholder engagement revealed strong support for strengthening the role of SMSOE as a coordinating hub for UNH's marine enterprise.

Key opportunities include:

- **Strengthen Enterprise Coordination**
  Improve integration across colleges, centers, and research programs.
- **Expand Interdisciplinary Research**
  Create structures and incentives that support cross-disciplinary collaboration.
- **Elevate National Visibility**
  Develop a clearer identity for UNH as a leader in ocean and coastal science.
- **Improve Marine Education Pathways**
  Clarify academic pathways and strengthen experiential learning opportunities.
- **Expand Partnerships**
  Build deeper collaborations with coastal communities, industry, and regional organizations.