Lemnos Marine Conservation

Three-Year Strategic Plan (2025–2027)

Lemnos Marine Conservation (LMC) is a nonprofit organization, committed to protecting and preserving the marine ecosystems surrounding Lemnos Island, Greece. This strategic plan provides a roadmap to guide our mission over the next three years (2025–2027), structured around our long-term vision of becoming a model for marine conservation. Grounded in science, community involvement, and policy advocacy, we aim to establish a permanent Marine Conservation Center, promote sustainable sea-land practices, and inspire collective action through education, data-driven research, and strategic partnerships

I. Vision Statement

To establish Lemnos as a leading model of marine conservation through the creation of a science-based, community-driven Marine Conservation Center that protects the marine ecosystem, educates the public, and fosters sustainable practices for generations to come.

- Promote sustainable land and sea practices
- Measure and share scientific marine data
- Engage the community through citizen science and activism

II. Mission Statement

To empower local communities and stakeholders to take meaningful action in marine conservation by protecting seagrass ecosystems, promoting awareness through data about marine threats like microplastics and overfishing, and fostering environmental sustainability through research, education, and policy advocacy by taking ownership of environmental stewardship and marine sustainability.

III. Core Values

- **Scientific Integrity:** Grounding all initiatives in measurable, peer-reviewed research
- **Focus on Research and Development:** Fresh water sustainability, Sustainability design projects, Marine and Land preservation strategies, Sustainability educational curriculum, Sustainable product development.
- **Community Empowerment:** Elevating local voices and building citizen scientists
- **Collaboration:** Forging local, national, and international partnerships
- **Carbon footprint impact and management:** Provide studies and strategies for local adoption
- **Transparency:** Sharing findings and impact in an open based structure
- **Sustainability:** Integrating ecological, financial, and operational sustainability into all initiatives
- **Sustainable Living**: Ecosystemic philosophy driven initiatives for community living. Sustainable tourism, Agricultural tourism, Health and Wellness tourism

IV. Strategic Pillars (2025–2027)

1. **Marine Research & Data Collection**
2. **Fundraising & Organizational Sustainability**
3. **Infrastructure & Center Development**
4. **Education & Community Engagement**
5. **Policy & Stakeholder Advocacy**

V. Strategic Priorities (2025–2027)

1. **Build and Operate a Permanent Marine Conservation Center** in Myrina to serve the community and raise awareness
2. **Scientific Research & Monitoring:** Conduct and commission research on seagrass coverage, invasive species, biodiversity, carbon sequestration

3. **Community Engagement & Education:** Meaningfully engage with schools, fishermen, professionals, tourists, NGOs
4. **Policy Advocacy & Protected Areas:** Work with authorities and legal protections (to influence science based programs such as:
    a. seagrass protection
    b. biodiversity protection
    c. creative ways to to reduce overfishing,
    d. single use plastic reduction
    e. clean water sustainability.
    f. sustainable mooring

International Partnerships: Collaborating with aligned organizations, institutions and municipalities

5. **Fundraising:** Harness and appropriate EU funds, grants, global donors, and third-party climate platforms

6. **Revenue Streams**: Educational training workshops. Educational classes, merchandise, activities, conferences, lectures, performances, events.
7. **Marketing, Outreach, and Public Relations:** Brand management, advertising sponsors on website and publication.
8. **Yearly Publication** and periodic online data publishing

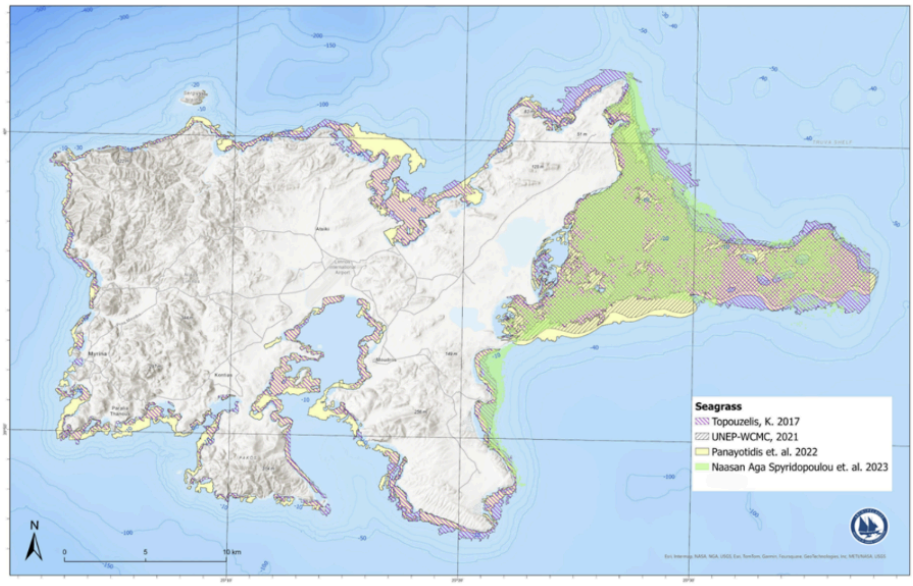

Figure 5: Map compiling all available data of Posidonia oceanica seagrass distribution combining all existing studies that were based on satellite imagery (Topouzelis et al. 2018; UNEP-WCMC 2021; Panayotidis et al. 2017; Naasan Aga Spyridopoulou et al. 2023). Seagrass meadows surround the whole island of Limnos. The largest seagrass meadow of Greek waters, covering approximately 124 km², is found northeast of Limnos (Topouzelis et al 2018).

VI. Year 1: Foundation & Awareness (2025)

Primary Objectives:

- Build awareness, educate the public, and establish baseline marine data

Initiatives:

- Organize existing data collected by LMC as a foundational model for future data collection and reporting
- Deliver educational workshops in schools, fishers' associations, and hospitality professionals
- Launch the "Refill, Re-Use, Restore" plastic reduction campaign
- Deploy underwater drones for habitat documentation
- Launch GoFundMe campaigns and initiate EU grant applications

- Initiate stakeholder mapping and begin policy discussions
- Begin volunteer recruitment and soft-skill training

Education & Community Engagement

- Host school screenings and workshops on Posidonia oceanica
- Launch "Refill, Re-Use, Restore" education and awareness campaign.
- Distribute branded aluminum thermoses

Scientific Monitoring

- Continue seagrass mapping and biodiversity data collection
- Subscription to marine journals, conferences, and educational platforms
- Collaborate with fishermen to report ecological changes
- Coordinate and circulate findings and initiatives to avoid duplication of efforts

Partnerships

- Forge ties with NGOs (e.g., Archipelagos Institute, iSea, Conservation Collective, Blue Marine), schools, religious institutions, universities, municipalities and local professionals (photographers, marketers)
- Support and represent the patriarchate's Care for Creation initiative
- Organize two fundraising public events: one in Lemnos (summer) and one in New York (fall)
- Use MarineTraffic & VesselBot data tools

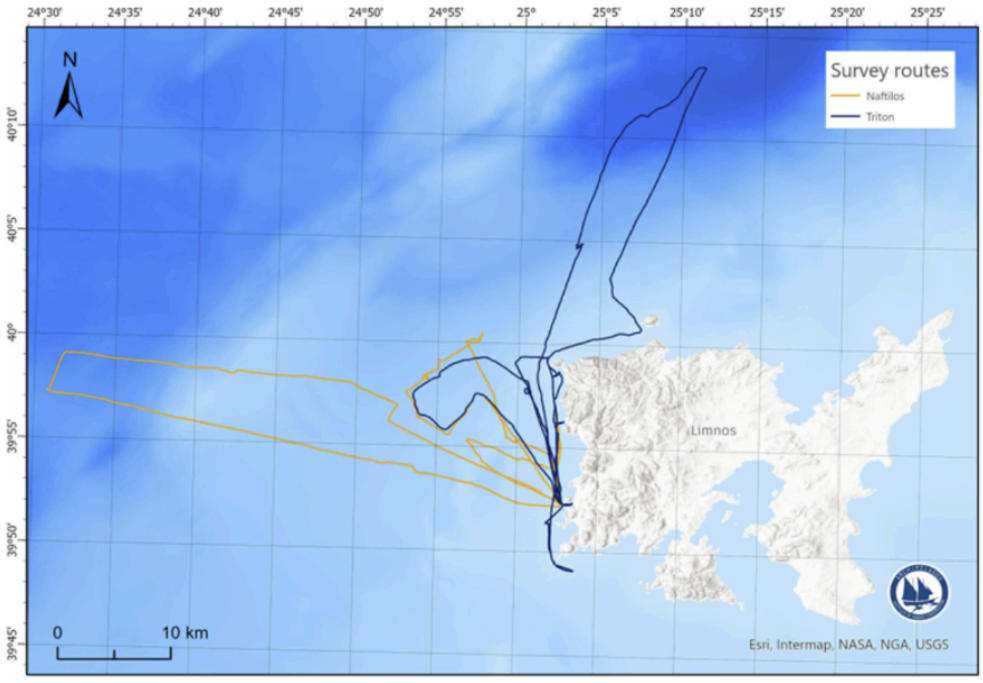

Figure 1: Surveys carried out by Research Vessels Naftilos and Triton.

Expected Milestones:

- 5 community events held
- 1 marine biodiversity report published

- 50-100 aluminum thermoses distributed
- 5 local partnerships formalized

VII. Year 2: Expansion & Structure (2026)

Primary Objectives:

- Conservation Center in Myrina, Deepen research, expand educational outreach and formalize infrastructure plans

Marine Conservation Center Establishment

- Launch a fully operational Center in Myrina
- Offer open-access information and exhibitions on Lemnos' marine biodiversity
- Employ staff and interns to manage programs and projects.

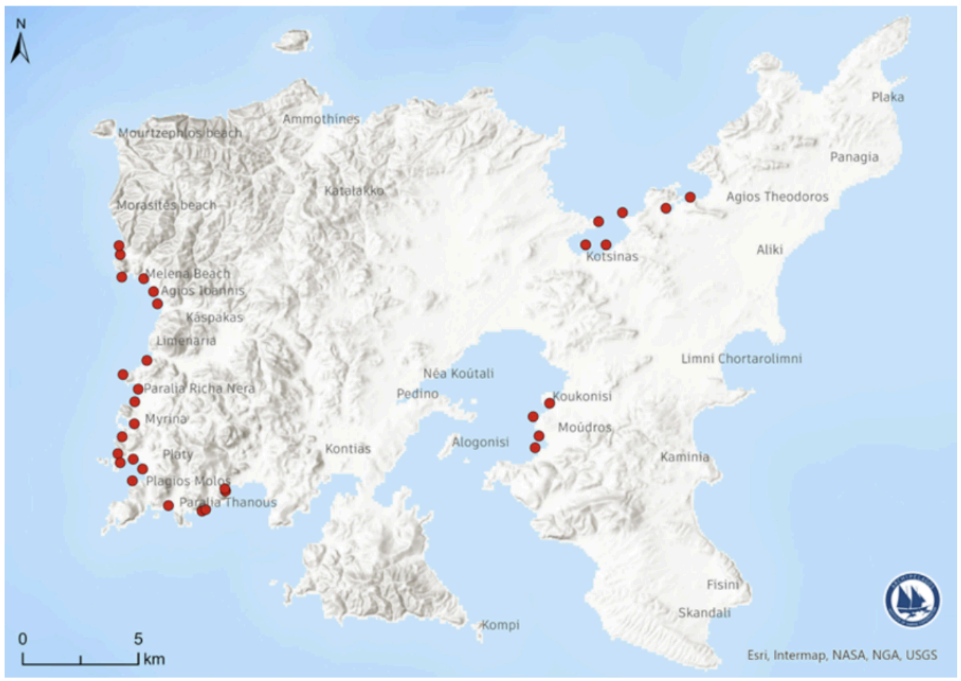

Figure 7: Locations of drone surveys conducted between 18th - 27th November 2024.

Marine Research & Policy

- Continue biodiversity monitoring with invasive and endangered species and Publish annual data reports with university and collaborators
- Present findings at EU and global marine conferences

Education Expansion

- Conduct training for coast guard, fishermen, tourism staff and students
- Organize citizen science programs with youth groups, co-ops, and sports clubs
- Deliver summer seminars and teacher guides for sustainable practices

Initiatives:

- Expand community programs to cultural groups, public servants, and the Coast Guard
- Begin development of educational exhibits and multipurpose space
- Finalize architectural design for the Conservation Center
- Begin measuring seagrass carbon sequestration
- Pilot marine monitoring protocols with local fishermen and divers
- Formalize partnerships with maritime universities and NGOs
- Apply for Marine Protected Area (MPA) designation

Survey Site: Thanos Bay

Three drone surveys took place in Thanos Bay in the southwest of Limnos (Figure 16) Seagrass together with rocky and sandy marine habitats were present in the area.

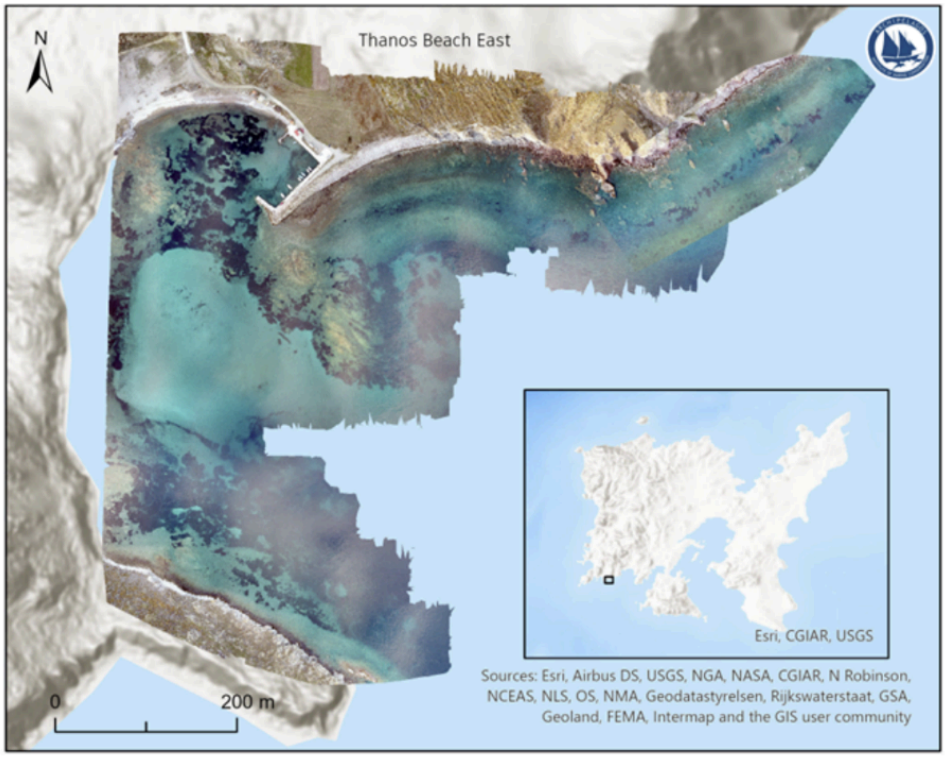

Figure 16. Orthomosaic of drone images of Thanos Bay depticing the location of seagrass/sandy and rocky habitats in the coastal zone.

Expected Milestones:

- 2 major grants secured (US, EU and/or private)
- Center design completed, manned, Operating and ready to be presented to the public.
- Scientific partners actively engaged under LMC presence and supervision
- 500+ community members educated
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VIII. Year 3: Implementation & Recognition (2027)

Primary Objectives:

- Establish the Marine Conservation Center, formalize conservation zones, and achieve sustainability

Initiatives:

- Install sustainable water kiosks at 3 public points
- Implement coral and seagrass restoration pilot programs
- Award annual donor recognitions (Diamond, Gold, Silver, Bronze)
- Launch international donor campaign with US-based diaspora
- Strengthen maritime partnerships (cruise ships, merchant lines)
- Represent Lemnos in EU and global marine conferences

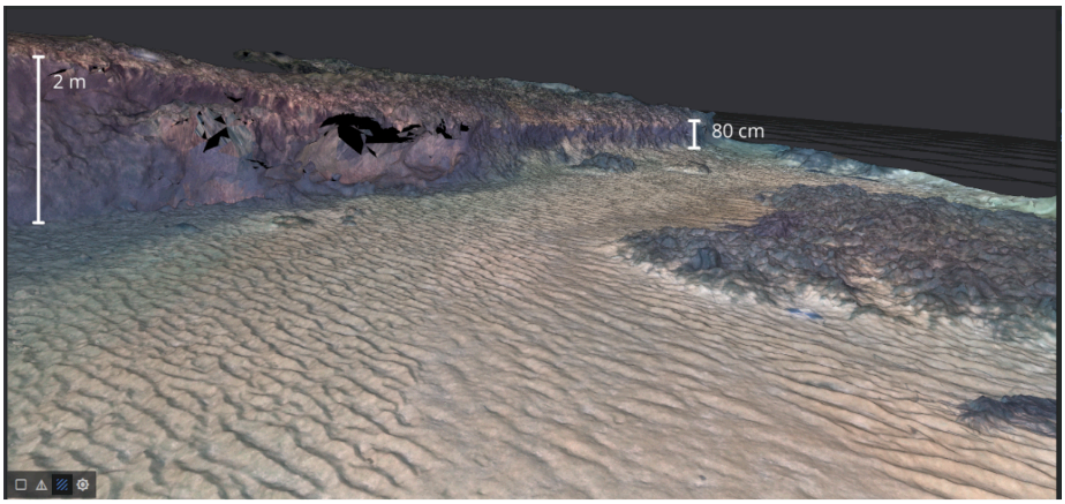


Figure 21 & 22: Poceanica dead matte 3D model, Paralia Plati, Credit: Lorenzo Romani: the first picture shows the complete mapped site, where on the bottom side of the picture is sand and dead Posidonia seagrass leaves, and the top side shows the wall of Posidonia seagrass dead matte and part of the Posidonia seagrass meadow. The second picture shows a detail of the wall on the left side of the picture, starting from the highest point 2m sloping down to the lower areas of the wall 80cm.

Recognition & Impact

- Establish donor recognition program (Diamond, Gold, Silver, Bronze)
- Collaborate with prestigious scientists and marine professionals
- Submit for European conservation awards and funding recognition

Replication & Expansion

- Begin planning for second hub in Moudros Bay

- Installation of permanent clean water osmosis plant
- Ongoing data collection shared via interactive dashboard

Expected Milestones:

- Official designation as MPA overseer
- 2 coral/seagrass restoration zones launched
- Annual donor base reaches €50,000+

Figure 24: Exploratory surveys sites for the assessment of coastal zone the biodiversity.

IX. Key Performance Indicators (KPIs)

- % Increase in seagrass coverage area and health metrics
- of plastic-free community initiatives and partnerships
- of community members trained as citizen scientists
- of published reports/data sets shared with the public
- Amount of funding raised (public, private, grants)

- Establishment of a permanent Marine Conservation Center
- of schools and youth programs engaged annually
- of partnerships with universities, NGOs, and local businesses

X. Organizational Development

- Establish paid staff roles (Operations Director, Education Coordinator, Science Lead, Social Media Marketer)
- Ongoing soft-skill and scientific training for staff and volunteers
- Implement team performance reviews and impact assessments
- Develop a CRM for donor and stakeholder management

Survey Site Plati Bay

Northern part

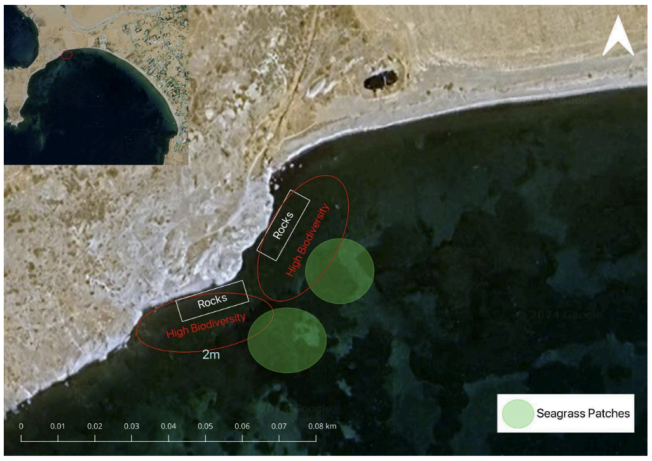


Figure 27: Map of North Plati bay, Limnos. There was a large number of seagrass patches with high biodiversity. The ROV filmed an Octopus vulgaris, roughly at 39°51'34" N 25°3'18" W.

Survey Site Richa Nera

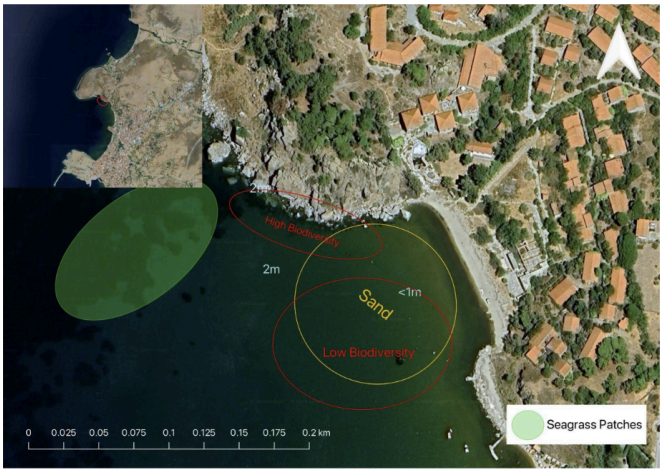


Figure 30: Map of Richa nera bay, Limnos. Relatively low biodiversity than other sites were presented. There were some patches of seagrass next to the cliff and there was a large amount of seagrass washed up on shore. The RUV was placed near to the end of the cliff (39.887452N, 25.060895E) facing south west.

XI. Risk Management & Opportunities

Risks:

- Delays in funding or bureaucratic hurdles
- Cultural pushback from fishers or commercial stakeholders
- Volunteer burnout and lack of continuity

Opportunities:

- Climate change urgency creating funding momentum

- Greece and EU support for marine protected areas
- Lemnos' unique biodiversity providing international visibility
- Alternative tourism scheme: Sustainable tourism, Agricultural tourism, Health and Wellness tourism
- Waste management
- Ongoing water shortages on the island of Lemnos

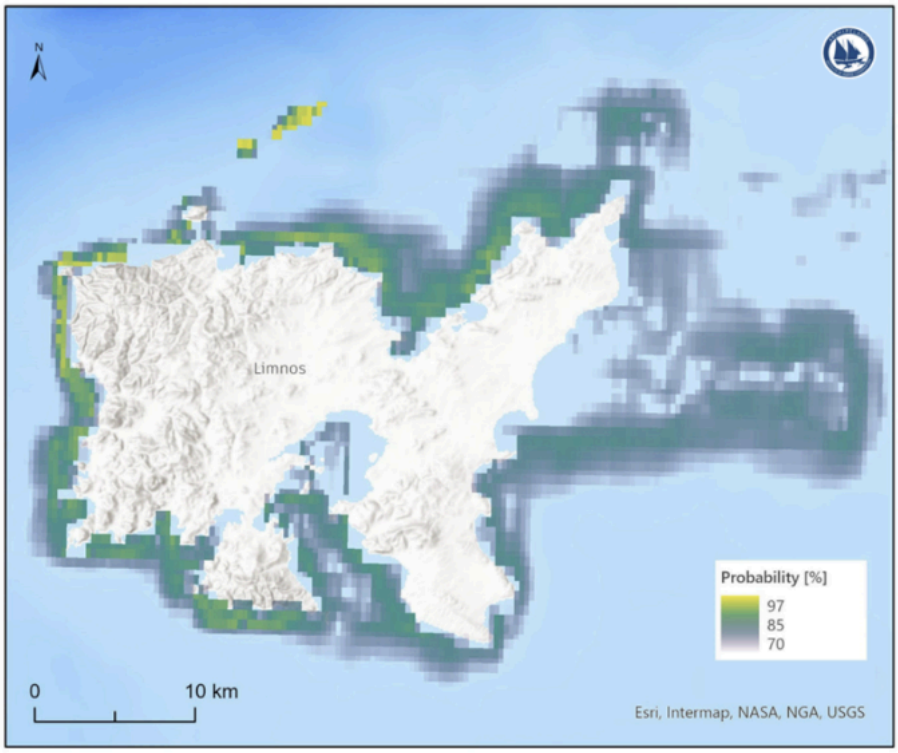
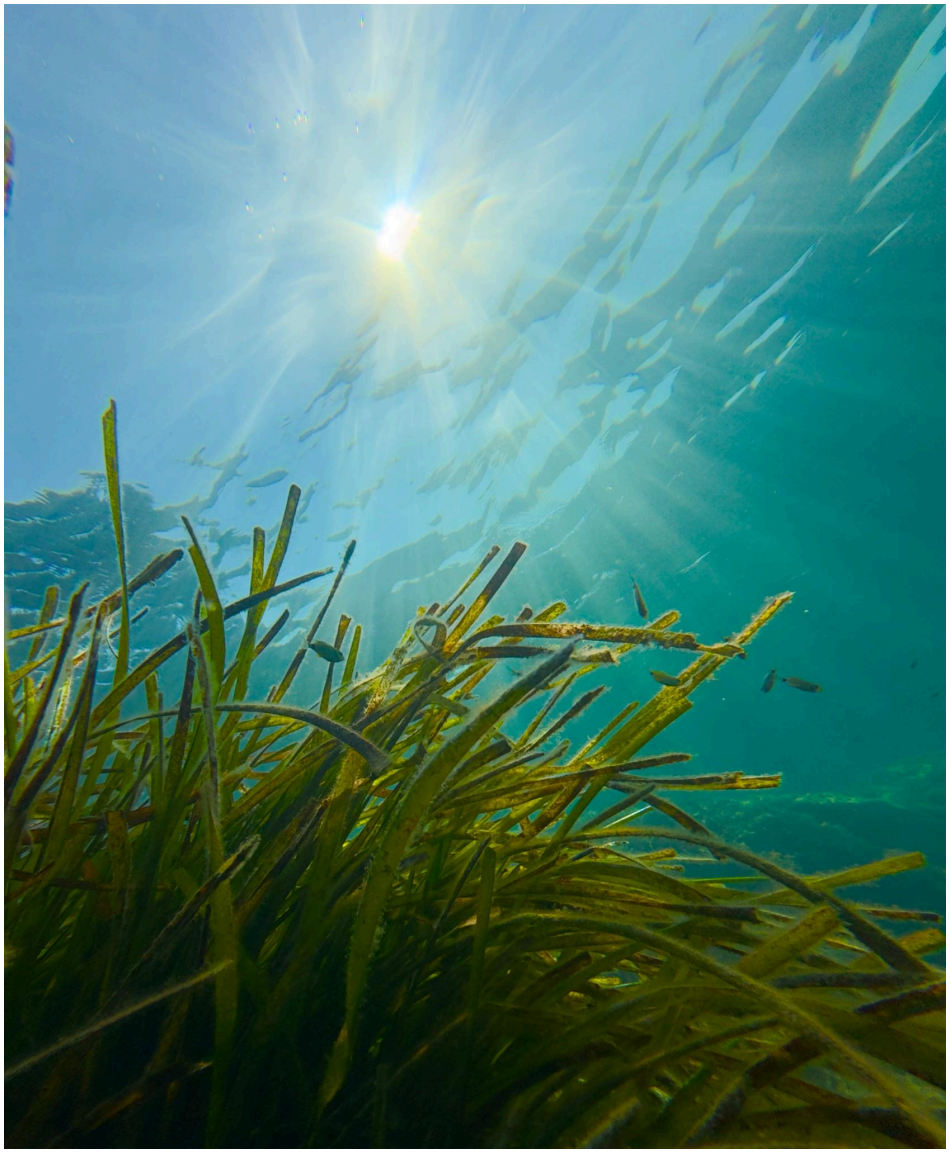


Figure 23: Probability map of coralligenous locations (EMODNet).

XI. Summary & Future Steps

By 2027, Lemnos Marine Conservation will be a recognized leader in grassroots marine protection with a fully operational conservation center, a robust citizen science network, and strong local and international partnerships. Through science, community, and perseverance, the marine future of Lemnos will be not only protected but revitalized.



Future Steps Beyond 2027:

- Scale up the restoration of coral and seagrass habitats across additional sites
- Secure long-term EU and international funding for operational stability
- Create open-access digital platforms for real-time marine monitoring data
- Advocate for replication of Lemnos' conservation model in other Greek islands
- Expand educational programming to include global youth fellowships or internships

- Contribute research to Mediterranean-wide conservation policy and climate adaptation strategies
- Develop a formal accreditation system for local businesses engaging in sustainable marine practices

By maintaining a science-driven, inclusive, and innovative data-driven approach, Lemnos Marine Conservation can become a benchmark for marine sustainability across the Mediterranean and a beacon of hope in the global climate challenge.