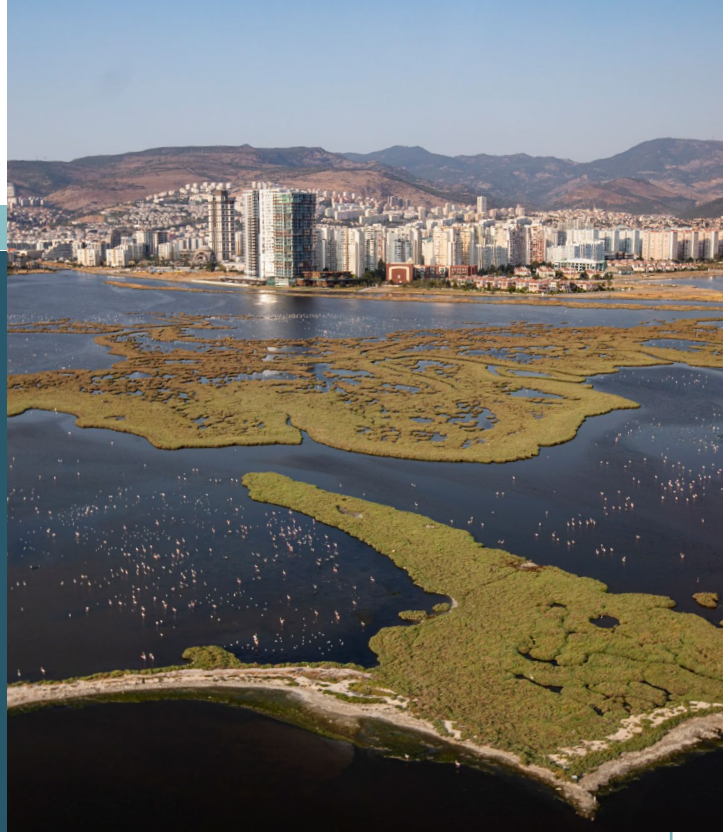
POLICY BRIEF

Mediterranean Coastal Wetlands: Key Allies in Tackling Ongoing Crises

Based on the Mediterranean Wetlands Outlook 3 - 2025



This policy brief draws on findings from the third edition of the Mediterranean Wetlands Outlook (MWO-3), produced by the Mediterranean Wetlands Observatory, a scientific and partnership tool established by MedWet and coordinated by Tour du Valat. Launched at Ramsar COP15 in July 2025, the MWO-3 provides a science-based assessment of Mediterranean wetlands' status and trends, supporting evidence-informed policy and conservation action across the region.

KEY MESSAGES

- **Mediterranean wetlands are disappearing at an alarming rate** due to urban sprawl, agricultural intensification, and water overexploitation, exacerbated by climate change.
  Coastal wetlands are among the most affected, **facing a "coastal squeeze" that could cause a decline of 69–92% of coastal marshes by 2100**, threatening the livelihoods and safety of human communities if urgent action is not taken.

- **Ensuring effective conservation, management and restoration of coastal wetlands** is essential to halt biodiversity loss and sustain critical ecosystem services, including protection against storms and marine submersion, mitigation of sea level rise impacts and greenhouse gases abatement.

- **Nature-based Solutions (NbS) must be mainstreamed across all sectors** to unlock wetlands' potential as cost-effective infrastructure for climate change adaptation and mitigation.

- **Only an integrated Source-to-Sea continuum approach to water resources and coastal management** can secure environmental flows, prevent saltwater intrusion, and limit coastal erosion to protect both wetlands and communities.

- **Wetlands must be fully embedded in urban development policies and spatial planning** (Kenmegne et al., 2025) to reduce pressures and guarantee natural resilience for Mediterranean societies.

What makes Mediterranean Wetlands so special?

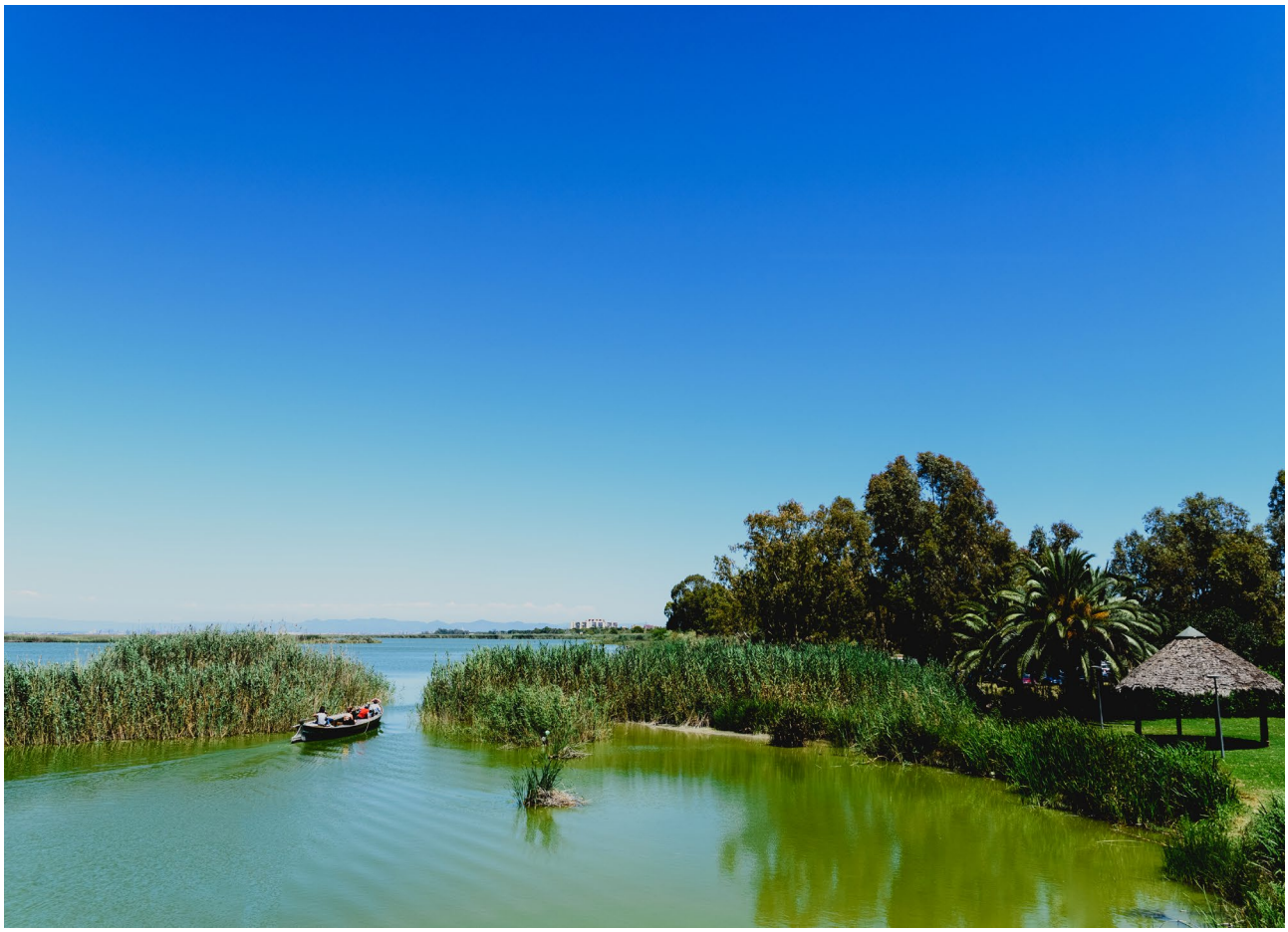
Protecting and restoring Mediterranean wetlands means protecting people. Wetlands are the 'kidneys of nature': they purify water, absorb heavy rainfall, reduce flooding impacts, replenish groundwater, and maintain river flows during droughts. Coastal marshes and lagoons dissipate storm energy, protecting communities from rising sea level and erosion.

Healthy wetlands sustain healthy economies. By ensuring water quality and quantity, wetlands support tourism, fisheries, and agriculture : pillars of Mediterranean livelihoods. Coastal wetlands provide critical nurseries for 95% of commercial fish species (Lellis-Dibble et al., 2008), underpinning the region's blue economy. The Mediterranean attracts 400 million tourists annually (Plan Bleu, 2022), many drawn to coastal areas where wetlands play a crucial role in maintaining ecosystem services.

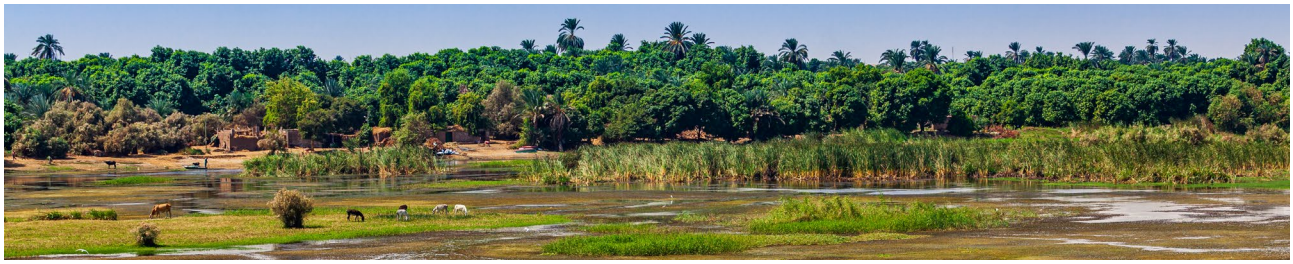
Wetlands are the heart of vibrant nature. Covering only 2-3% of the basin's surface, they support over 30% of vertebrate species. Among wetland-dependent species, 41% are endemic to the Mediterranean and 36% are threatened with extinction (Galewski et al., 2021). River deltas and coastal habitats host tens of millions of migratory waterbirds annually, connecting ecosystems from the Arctic to Southern Africa.

Where wetlands live, culture and spirituality live too. Throughout the Mediterranean, they shape identities and traditions. The region's greatest civilisations were all born and flourished around wetlands, which provided water, food, and fertile land. From rice paddies to salt pans, from fishing communities to spiritual sites, wetlands are living heritage connecting people to nature.

Recognised as Nature-based Solutions, protecting and restoring wetlands is a cost-effective strategy delivering multiple and cumulative benefits. These ecosystems protect communities, strengthen resilience against climate change, and are our most powerful natural ally in addressing the region's converging crises.



Albufera Lake, Spain



Nile river, Egypt

The state of Mediterranean Wetlands today

Mediterranean wetlands are disappearing faster than any other ecosystem in the region. **Historically, 56% of natural wetlands have been lost, and degradation continues, with an additional 12% decline since 1990** (MWO-3, 2025).

Most of these ecosystems lie in coastal zones and floodplains, where population density is now four times the regional average. **Urban sprawl, agricultural expansion, and the overexploitation of freshwater are the main drivers.** Between 1990 and 2020, 54% of wetland conversions in the Mediterranean region were to agricultural land, 36% to artificial wetlands[1], and 10% to built-up areas (MWO-3, 2025).

Climate change amplifies these pressures. **The Mediterranean is warming 20% faster than the global average**, with annual precipitation projected to decline by up to 30% in some regions (MedECC, 2020). **Per-capita water availability in the southern and eastern Mediterranean has dropped by 40% over the past 30 years** (MWO-3, 2025). Basin-wide, water demand could double or even triple by 2050, while aquifer recharge may decline by 30-58% (Fader et al., 2020). Rising sea levels, saltwater intrusion and coastal erosion threaten low-lying wetlands trapped between the sea and urban barriers : a "coastal squeeze" that could cause 69–92% of coastal marshes to disappear by 2100 (Schuerch, 2025).

[1] *«Artificial wetlands» refer to human-made wetland habitats such as rice fields, fish ponds, reservoirs, wastewater treatment areas, irrigation canals or even excavations from gravel, brick, or clay pits.*

Solutions do exist

Bridging the gap between legal status and effective management

Designation alone is not protection. **Although 36% of Mediterranean wetlands lie within protected areas, only 7% benefit from a high level of protection** (MWO-3, 2025). Two-thirds of Ramsar sites still lack implemented management plans.

Closing this implementation gap requires:

· **Accelerating the development and enforcement of management plans** for all Ramsar and protected sites

· **Promoting participatory governance tools** such as "Wetland Contracts" (voluntary agreements among local stakeholders, successfully implemented in several sites in France, Italy and many other Mediterranean countries

· **Leveraging of SPAMI designation** as a catalyst: Specially Protected Areas of Mediterranean Importance drive stakeholder engagement, funding access, and management planning for coastal wetlands. Countries should nominate priority coastal Ramsar sites to SPAMI status

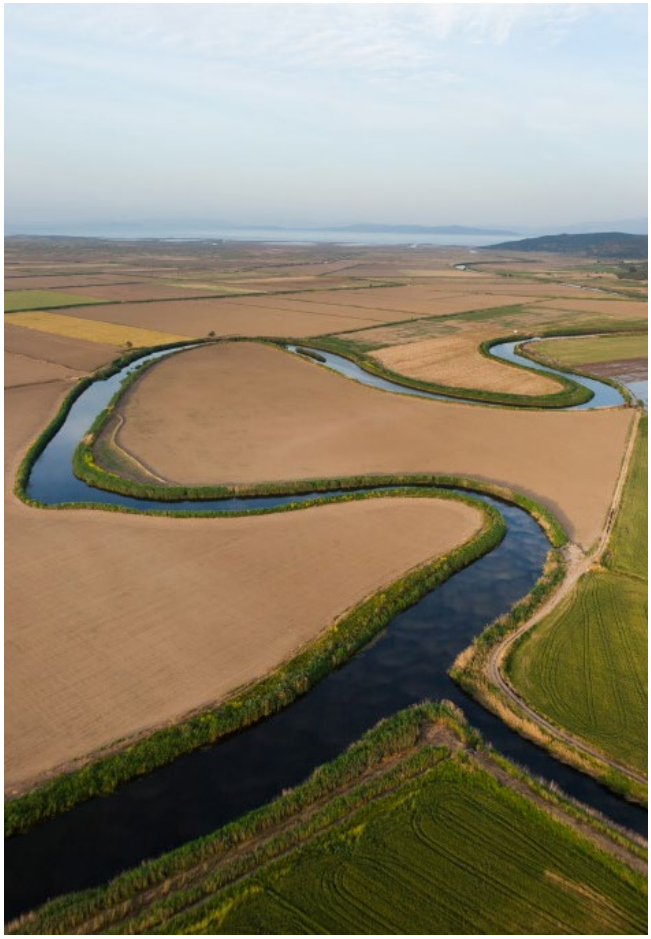
Effective management must become the new standard, not the exception.

Restore nature, restore resilience: Scaling up Nature-based Solutions

Despite immense potential, **less than 1% of degraded Mediterranean wetlands have been restored**. Yet, the opportunities are vast: **88,000 km²** of lost wetland habitat could be recovered across Northern Mediterranean countries with relatively low efforts (MWO-3, 2025). To mobilise this potential:

- **Mainstreaming Nature-based Solutions** in national climate and biodiversity strategies (NDCs, NAPs, NBSAPs)
- **Mobilising public and private finance,** including Payments for Ecosystem Services (PES), blended public–private partnerships and fiscal incentives for land managers
- **Activating the EU Nature Restoration Regulation** as a lever to reconnect rivers, rehabilitate deltas and restore coastal marshes
- **Ensuring hydrological integrity** by identifying and mitigating pressures upstream before restoration begins

Wetland restoration is a smart investment: every dollar spent can generate up to tenfold returns through avoided flood damage, improved water quality and enhanced fisheries.



Gediz Delta, Turkey © Hellio - Van Ingen

Managing water from Source-to-Sea

Wetlands depend on the water that feeds them, and the way these resources are managed directly shapes their future. Yet across the Mediterranean, rising demands for irrigation and energy have fragmented rivers and depleted both surface and groundwater reserves. Today, **95% of major rivers are disrupted** (MWO-3, 2025), breaking the natural routes used by migratory species and interrupting the transport of sediments. This loss of ecological connectivity is accelerating coastal erosion and driving saltwater intrusion (Grill et al., 2019), placing wetlands, and the communities that rely on them, under growing pressure.

To reverse this trajectory:

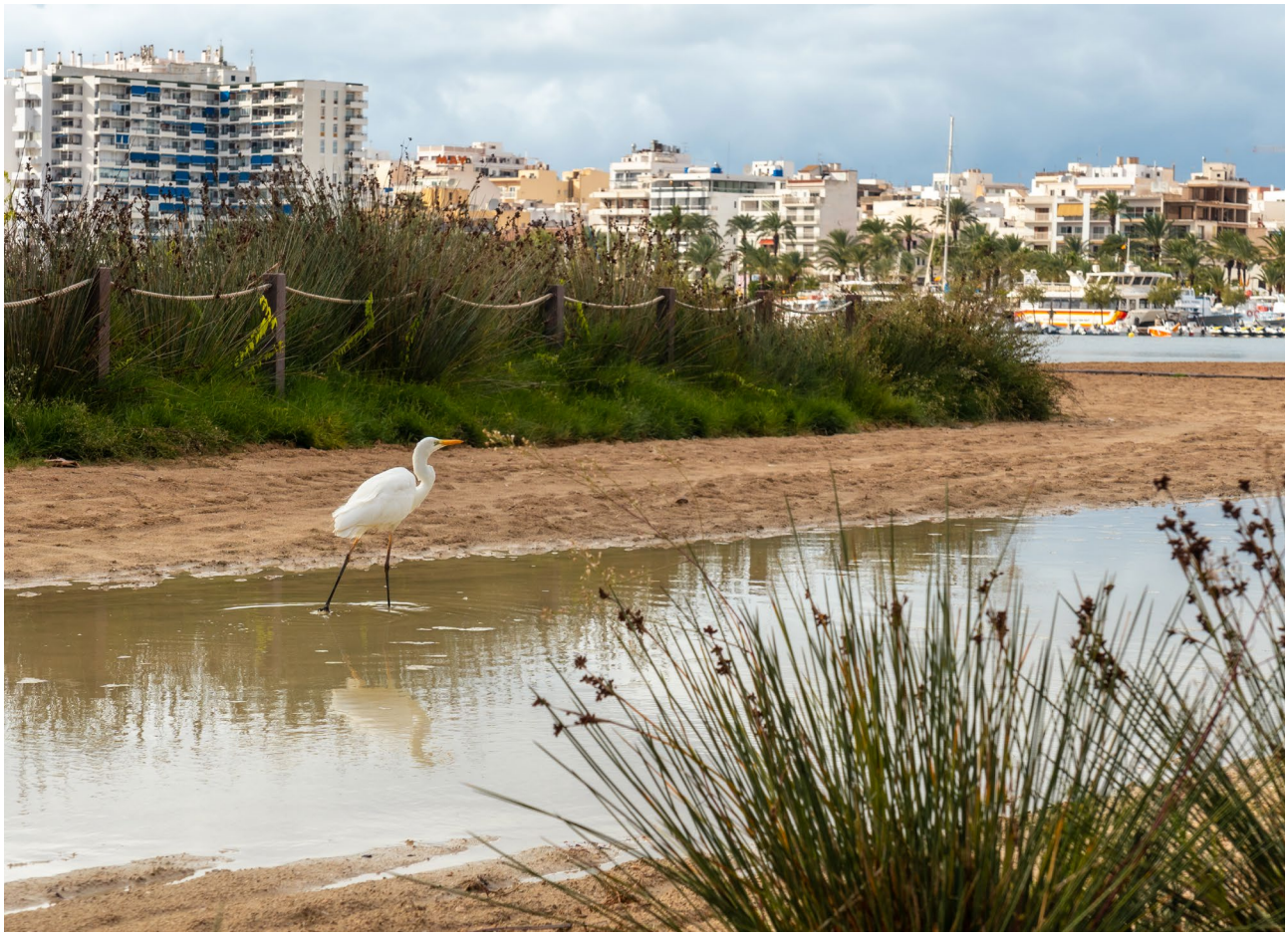
- **Implementing Integrated Water Resource Management (IWRM) and Integrated River Basin Management (IRBM)** ensuring that ecosystem needs are formally recognised
- **Reconnecting rivers, floodplains, and deltas** to revive water and sediment longitudinal and transversal transport, which is essential to address subsidence and sea-level rise
- **Modernising irrigation** and promote sustainable farming practices to reduce water use
- **Scaling wastewater reuse**, as 80% of treated water remains unused in the MENA region (World Bank, 2017 as cited in UNEP/MAP and Plan Bleu, 2020)
- **Strengthening water governance institutions** with clear mandates, budgets and cross-sectoral coordination

Integrating wetlands into spatial and urban planning

Decisions on urbanisation, tourism, and agriculture are too often taken in silos, with little regard for their ecological impacts. To overcome this sectoral fragmentation**, governments must integrate wetlands into spatial and coastal planning frameworks,** especially in areas where they intersect with **urban development.**

Priority actions include:

- **Expanding ratification and implementation of the Integrated Coastal Zone Management** (ICZM) **Protocol,** which remains unratified by 10 Contracting Parties of the UNEP / MAP Barcelona Convention
- **Embedding wetlands as "natural infrastructure" in urban and coastal plans** under the ICZM Protocol
- **Creating or reactivating national wetland committees** bringing together all sectors to break institutional silos and establish integrated action plans
- **Establishing no-build zones** around sensitive areas and maintaining ecological corridors
- **Launching basin-wide restoration plans under the Ecosystem Approach roadmap for targeted renaturation measures:** remove concrete cover from land and waterways, re-establish river meanders, restore floodplains
- **Promoting adaptive management frameworks** that integrate long-term monitoring, scenario planning, and flexibility in management decisions. This is essential to cope with uncertainty from climate change and shifting hydrological regimes.
- **Assessing cumulative impacts of large infrastructure and tourism developments** in Environmental Impact Assessments



Ibiza, Spain

Strengthening regional cooperation and financing

Over 60% of surface waters in the southern and eastern Mediterranean are shared across borders (World Bank, 2018 as cited in Fader and al., 2020). Effective wetland conservation depends on coordinated regional action to manage shared rivers, aquifers, and coasts.

To achieve this, governments should:

- **Develop a coordinated regional approach** to support national wetland strategies and address shared socio-ecological challenges. Strengthening regional and transboundary cooperation helps ensure the sustainable management of shared water resources, prevent conflicts, and protect interconnected wetland ecosystems
- **Secure adequate financial resources,** combining public budgets, multilateral funds and private capital to support local wetland action plans

In this context, the **Ramsar Regional Initiative for the Mediterranean (MedWet)** plays a pivotal role as an intergovernmental network uniting 27 countries plus the Palestinian Authority. By fostering dialogue and collaboration among governments, civil society, and the scientific community, MedWet provides a platform for **sharing data, experiences, and good practices,** while helping to strengthen institutional capacities and harmonise approaches across the region.

Prespa Lake, Greece, Albania, North Macedonia
© Laurent Chazée

Conclusion: Turning the tide

Mediterranean wetlands stand at a crossroads. Despite mounting pressures, **solutions exist and they work.** From participatory governance to catchment-scale water management, from NbS mainstreaming to integrated spatial planning, the tools are available. What's needed now is political will, adequate financing, cross-sectoral coordination, and regional cooperation.

The science is clear: **managing and restoring wetlands is one of the most cost-effective and high-impact solutions available to Mediterranean countries** to address climate, water and biodiversity crises.

Mediterranean wetlands are more than natural ecosystems, they provide cultural value, aesthetic beauty, and serve as foundations for resilience, livelihoods and peace. **Protecting them is crucial** to align economic development, nature conservation and the preservation of both natural and human heritage.

The time to act is now. **Wetlands are our best ally, but only if we conserve, restore and protect them.**

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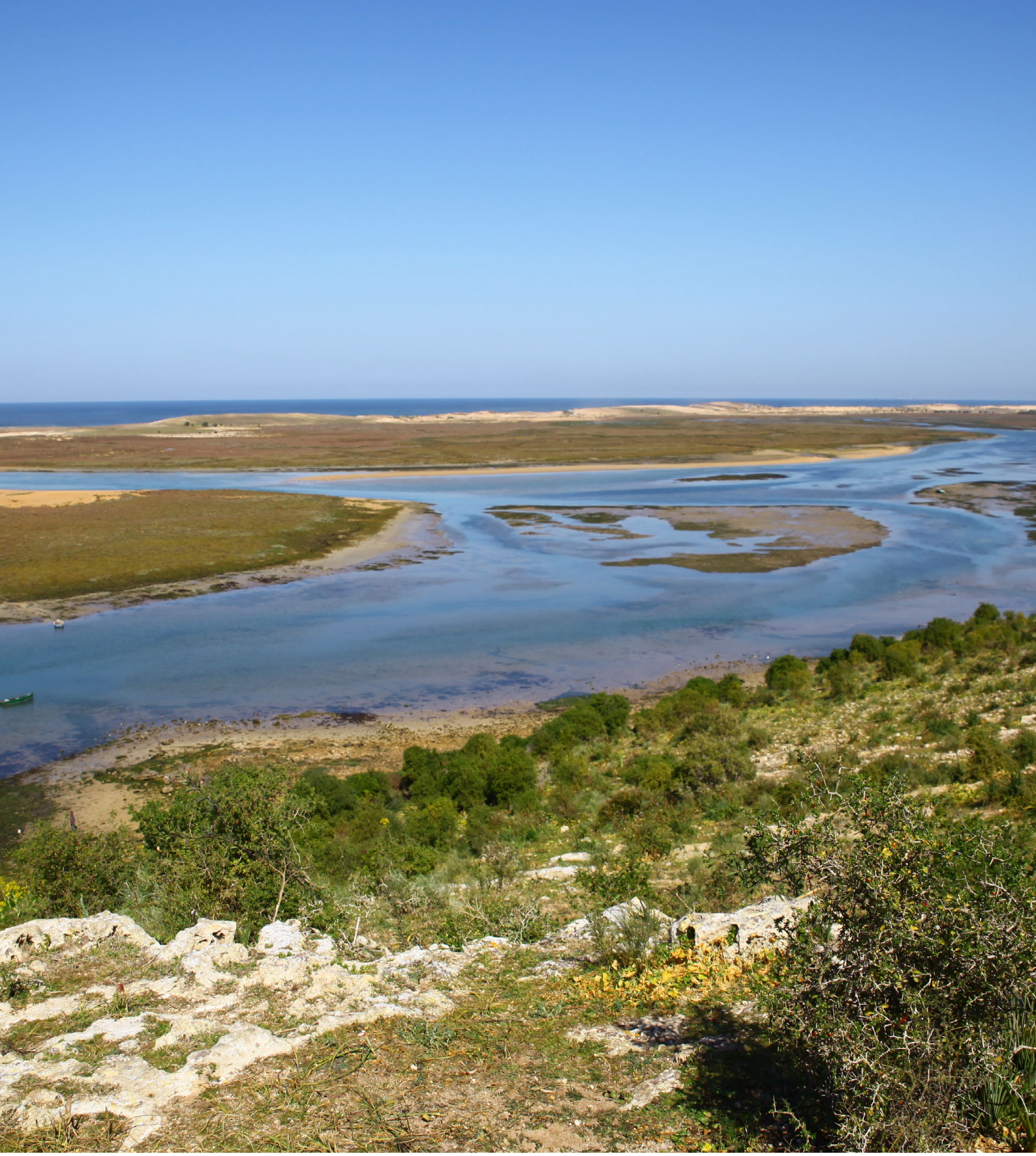

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