

24-26 September 2025

Valletta, Malta

EUROPEAN HERITAGE HEADS FORUM

19TH ANNUAL MEETING

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TAL-PATRIMONJU KULTURALI
SUPERINTENDENCE OF CULTURAL HERITAGE



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Challenges and Insights into preserving World Heritage Sites: the climate challenge

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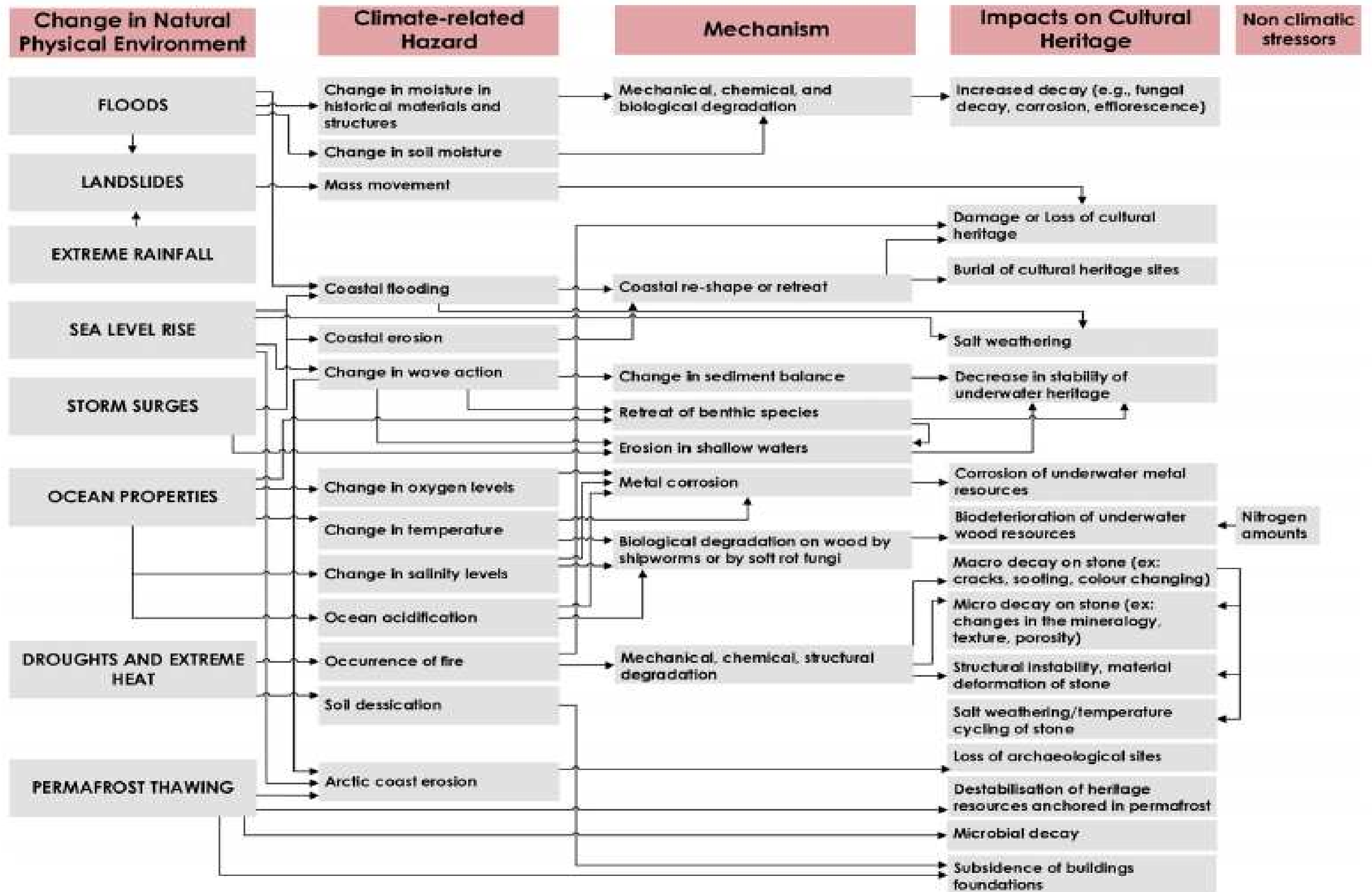


The climate challenge

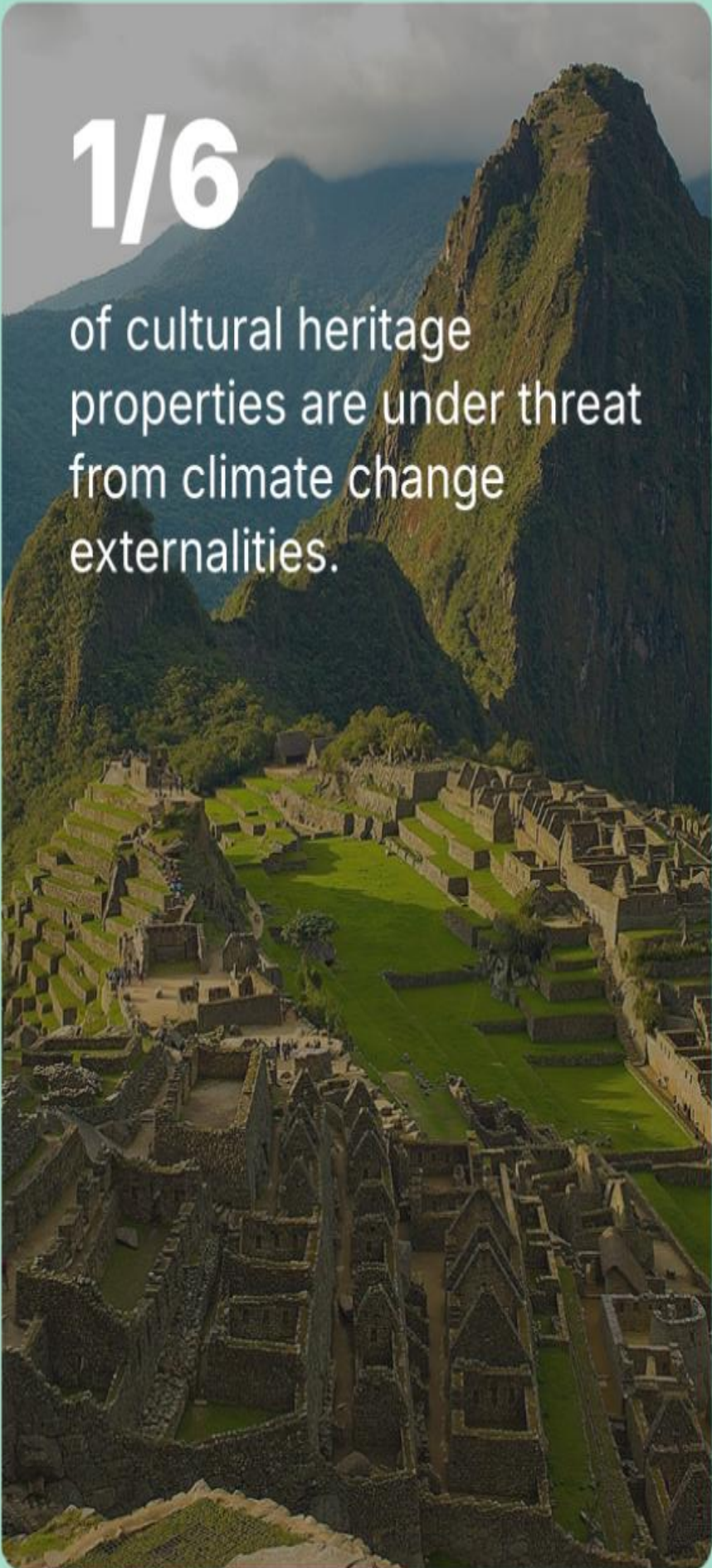
Changing events in a changing climate

- **Extreme temperatures**
- **Changing rain patterns**
- **Wind – increase in strength & frequency**
- **More frequent & stronger extreme weather events**
- **Frost cycles - changes**
- **Salt cycles - changes**
- **Migration of new biological species**
- **Rising sea levels**
- **Melting glaciers**
- **Floods**
- **Storms**
- **Landslides**
- **Desertification**
- **Soil chemistry – modifications**
- **Ocean acidification**

Effects on heritage

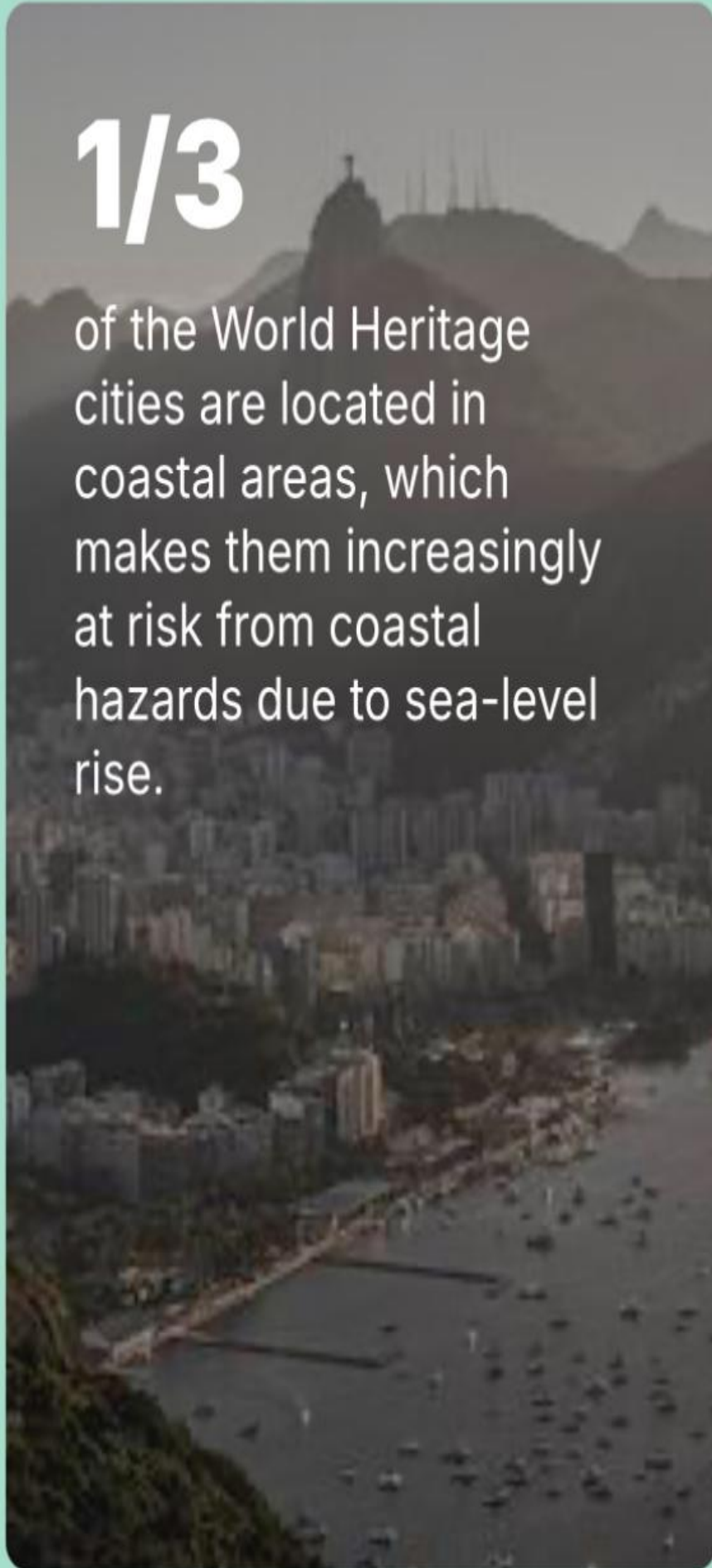


Main effects on UNESCO World Heritage Sites



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of cultural heritage properties are under threat from climate change externalities.



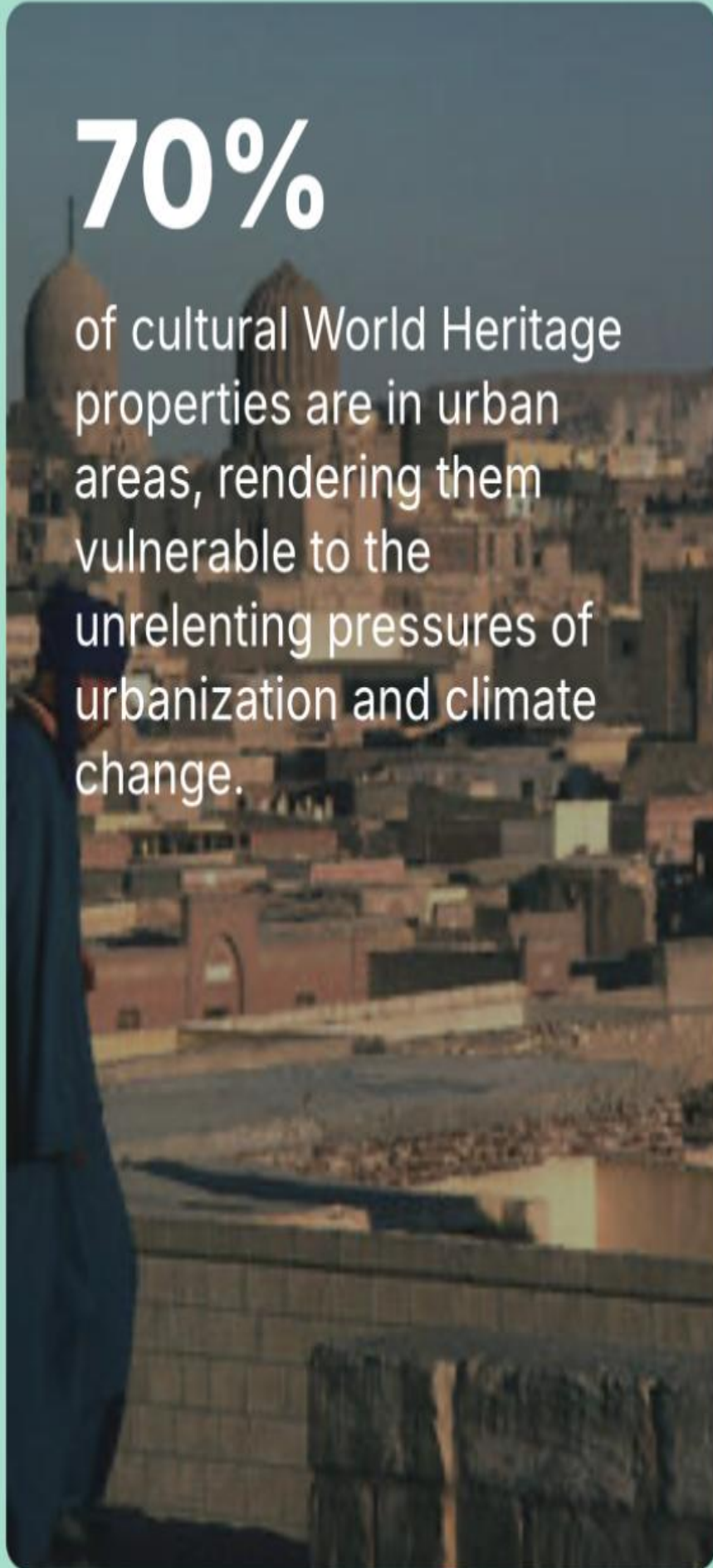
1/3

of the World Heritage cities are located in coastal areas, which makes them increasingly at risk from coastal hazards due to sea-level rise.



60%

of the World Heritage properties in the Mediterranean region have already reported risks such as coastal flooding and erosion, resulting from sea-level rise.

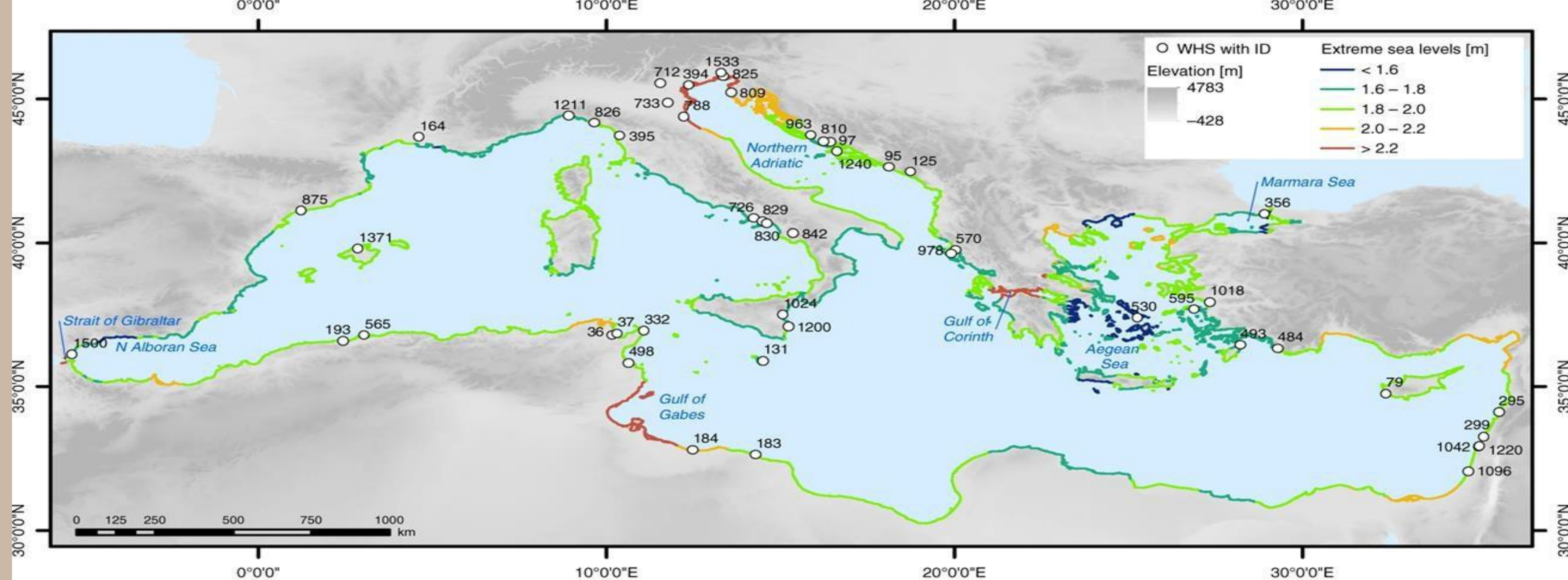


70%

of cultural World Heritage properties are in urban areas, rendering them vulnerable to the unrelenting pressures of urbanization and climate change.

**Is sea level rise the
elephant in the room?**

**Mediterranean coastal
UNESCO sites**

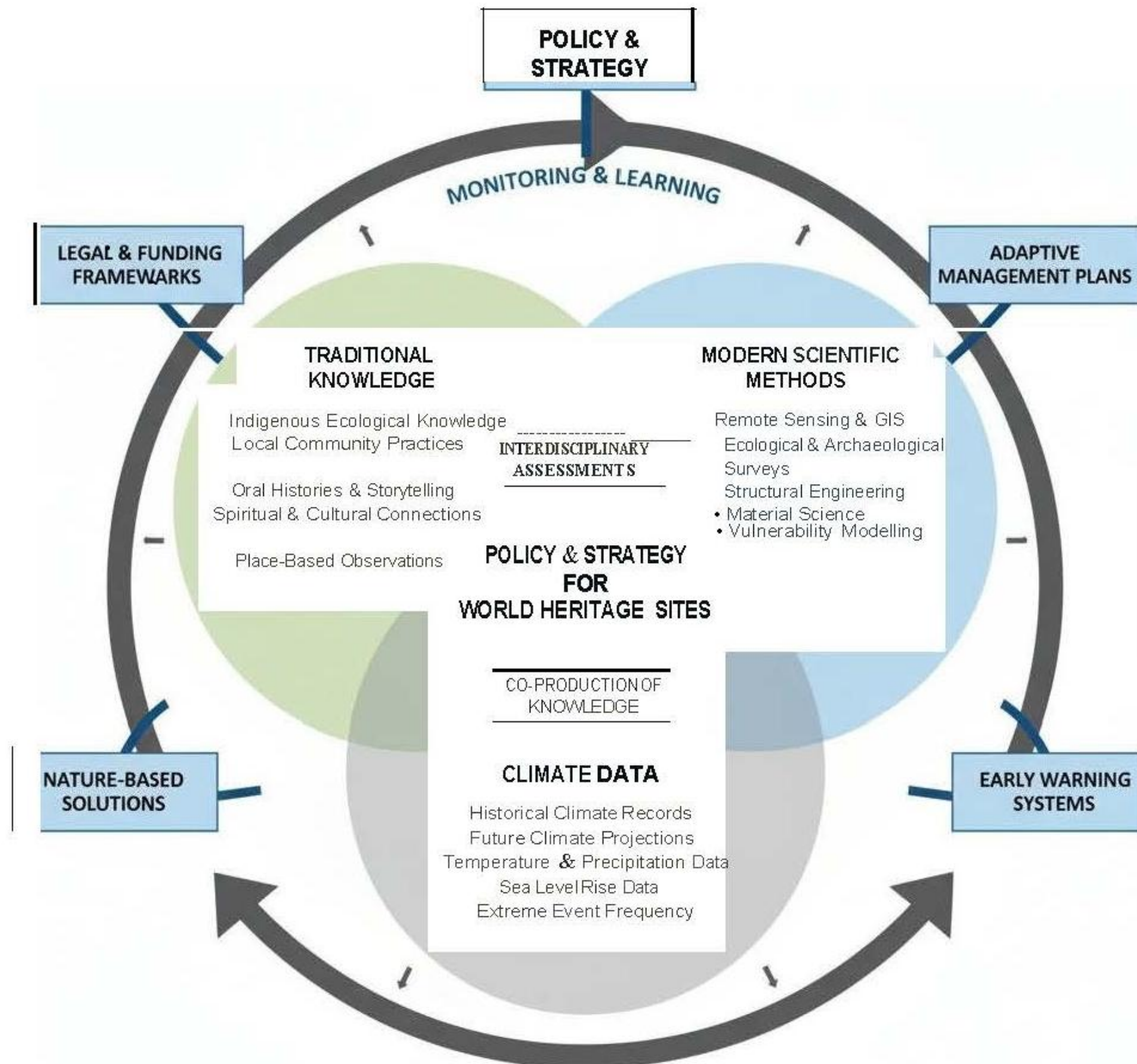


Reimann, L., Vafeidis, A.T., Brown, S. *et al.* Mediterranean World Heritage at risk from coastal flooding and erosion due to sea-level rise. *Nat Commun* **9**, 4161 (2018). <https://doi.org/10.1038/s41467-018-06645-9>

36	Medina of Tunis	493	Medieval City of Rhodes	842	Cilento and Vallo di Diano National Park with the Archeological Sites of Paestum and Velia, and the Certosa di Padula
37	Archaeological Site of Carthage	498	Medina of Sousse	875	Archaeological Ensemble of Tàrraco
79	Paphos	530	Delos	963	The Cathedral of St James in Šibenik
95	Old City of Dubrovnik	565	Kasbah of Algiers	978	Old Town of Corfu
97	Historical Complex of Split with the Palace of Diocletian	570	Butrint	1018	Ephesus
125	Natural and Culturo-Historical Region of Kotor	595	Pythagoreion and Heraion of Samos	1024	Late Baroque Towns of the Val di Noto (South -Eastern Sicily)
131	City of Valletta	712	City of Vicenza and the Palladian Villas of the Veneto	1042	Old City of Acre
164	Arles, Roman and Romanesque Monuments	726	Historic Centre of Naples	1096	White City of Tel-Aviv --the Modern Movement
183	Archaeological Site of Leptis Magna	733	Ferrara, City of the Renaissance, and its Po Delta	1200	Syracuse and the Rocky Necropolis of Pantalica
184	Archaeological Site of Sabratha	788	Early Christian Monuments of Ravenna	1211	Genoa: Le Strade Nuove and the system of the Palazzi dei Rolli
193	Tipasa	809	Episcopal Complex of the Euphrasian Basilica in the Historic Centre of Poreč	1220	Bahá'i Holy Places in Haifa and the Western Galilee
295	Byblos	810	Historic City of Trogir	1240	Stari Grad Plain
299	Tyre	825	Archaeological Area and the Patriarchal Basilica of Aquileia	1371	Cultural Landscape of the Serra de Tramuntana
332	Punic Town of Kerkouane and its Necropolis	826	Portovenere, Cinque Terre, and the Islands (Palmaria, Tino and Tinetto)	1500	Gorham's Cave Complex
356	Historic Areas of Istanbul	829	Archaeological Areas of Pompei, Herculaneum and Torre Annunziata	1533	Venetian Works of Defence between 15th and 17th centuries: Stato da Terra – western Stato da Mar
394	Venice and its Lagoon	830	Costiera Amalfitana		
395	Piazza del Duomo, Pisa				
484	Xanthos-Letoon				

**Insights – leading to
actions?**

**Traditional knowledge and
modern scientific means to
formulate
Policy and Strategy**



**A look at one article from
the Valletta Convention and
preservation of
archaeological sites**

Article 4

Each Party undertakes to implement measures for the physical protection of the archaeological heritage, making provision, as circumstances demand:

i for the acquisition or protection by other appropriate means by the authorities of areas intended to constitute archaeological reserves;

ii for the conservation and maintenance of the archaeological heritage, preferably in situ;

iii for appropriate storage places for archaeological remains which have been removed from their original location

Questions to ponder

Do we promote *in situ* preservation regardless of climate change?

Does recommendation 4 ii of the Valletta Convention need to be reviewed?

Thank you !



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