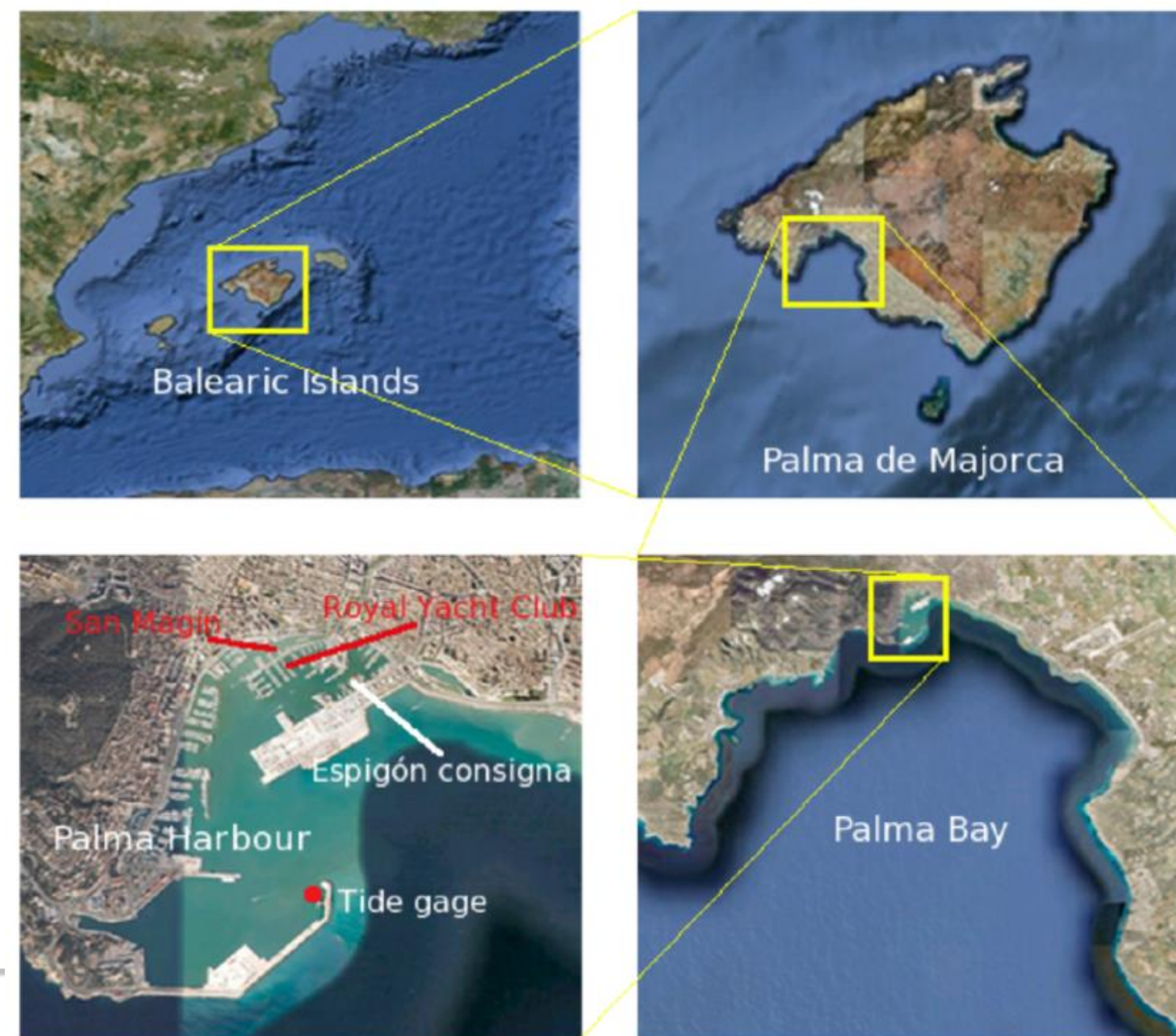


Rip Currents in Palma de Mallorca

Presented by Rachel Gaudette, Seton Hall University



Causes

Beach erosion is being caused by two main factors.

- Rip Currents
 - 20% of Mallorca and Formentera beaches show a retreating shoreline over the last ten years.
 - Strong currents wash out the shorelines.
- Tourism and Foot Traffic
 - Mallorca is a big tourist location for their amazing beaches.
 - Heavy popularity and foot traffic is another cause for erosion.

Effects

- Shorelines are retreating by 20% every ten years.
- Tourist locations and beaches are being destroyed.
- Beach vegetation and marine animals are being damaged.
- Economies on the island that rely on tourism are worsening due to the decrease of beautiful beaches.

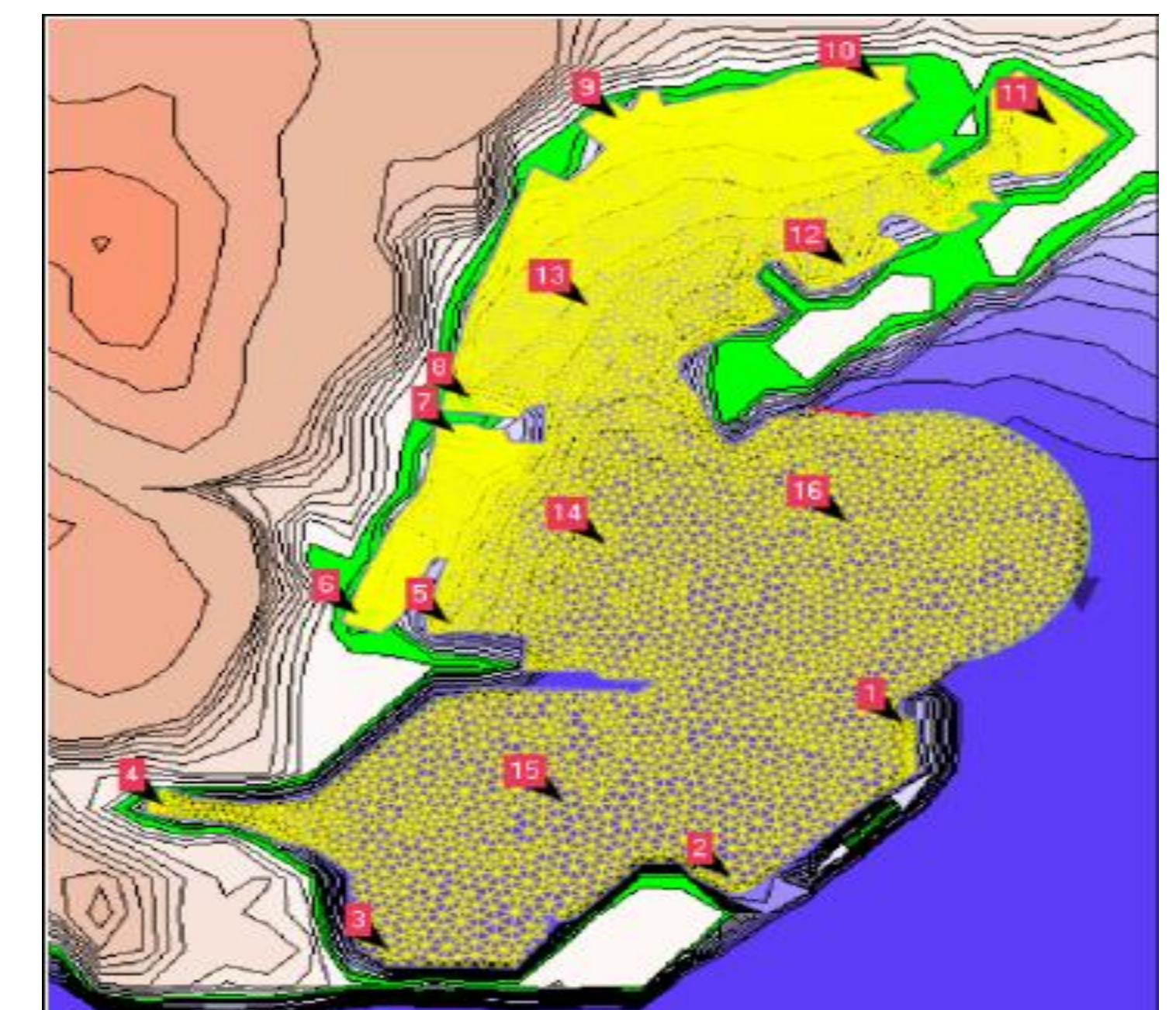
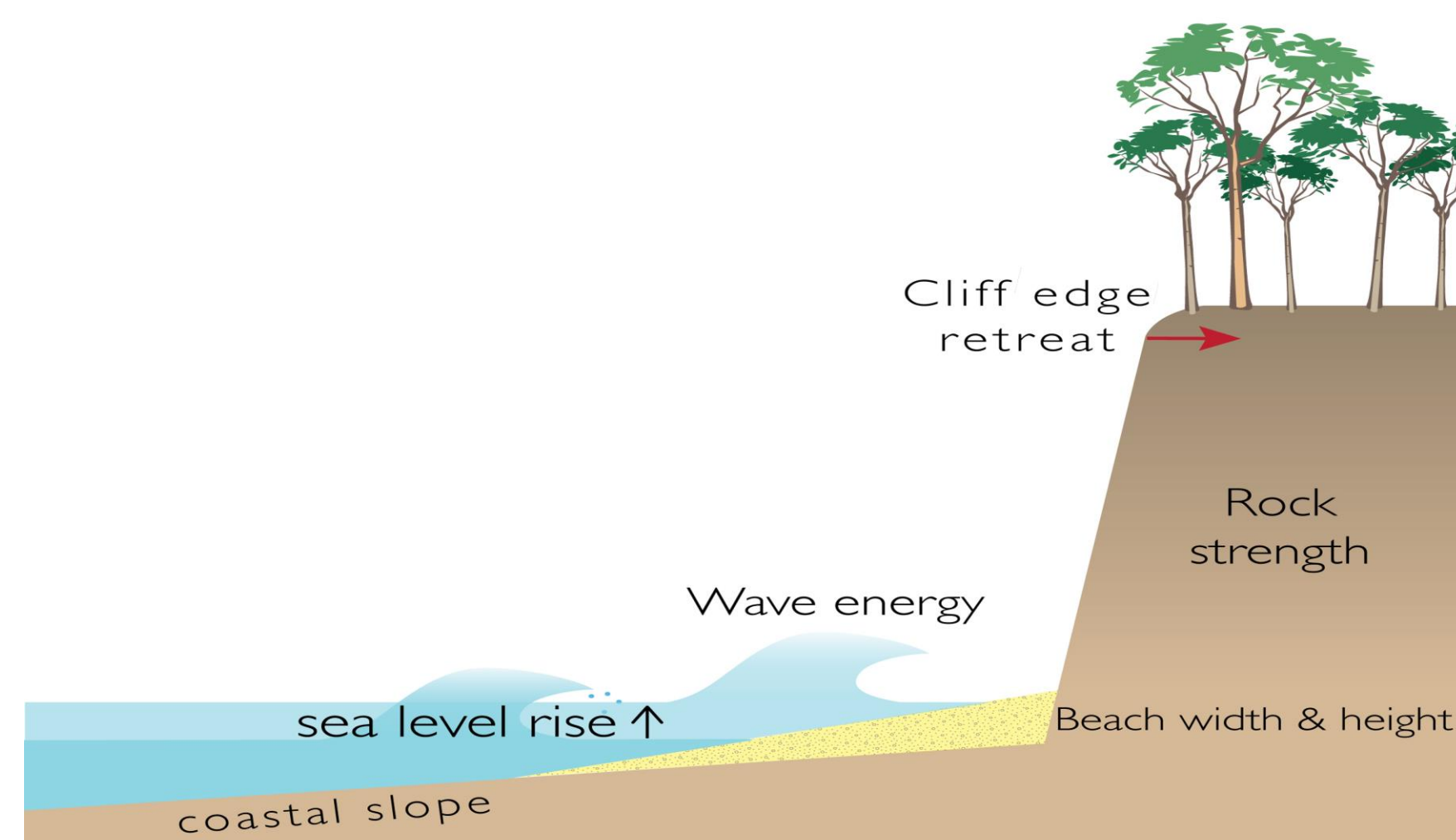
Solution

Environmental Education

- Signs to inform tourists of issues.
- Visual materialism (photos and videos).
- Mandatory information sessions before tourists leave cruise ships to explore the island.

Soft Beach Management

- Beach nourishment
 - Replenishment of sediment to stop erosion.
- Walkovers
 - Wooden walkways/bridges over beach dunes or rock structures to protect the beach from foot traffic.
- Planting of Native Vegetation
 - Planting native vegetation on the beaches can prevent erosion by grounding the sand through the roots of the plants.
 - Some native vegetation that would be good for this is:
 - Posidonia Oceania Seaweed
 - Mediterranean Fan Palms
 - Ammophila



Sources

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