



# The Importance of Classifying Coastal Lagoons and the Way its Maintained

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## DESCRIPTION

The lido is a sandbar that divides the shallow coastal lagoons of the Mediterranean from the open ocean. By one or more inlets, lagoons are connected to the sea. Whether permanent or cyclical, inlets allow seawater to enter due to wind and tides. Rivers and storm runoff provide freshwater inputs from the basin. The lagoons continue to have relationships with the nearby marshes that are not in the water.

Coastal lagoons are bodies of water that are separated from the ocean by a barrier such as a sandbank, coral reef, or spit. They are typically found along low-lying coastlines and can be either saltwater or freshwater, depending on their location and the sources of water that feed them [1].

These lagoons are important ecosystems that provide a variety of benefits, such as supporting a diverse range of plant and animal life, providing recreational opportunities for people, and protecting coastal areas from erosion and storm surges. They also serve as important nursery grounds for many species of fish and shellfish [2].

However, coastal lagoons are also vulnerable to pollution and other human activities that can degrade their water quality and harm the organisms that live in them. It is therefore important to manage these ecosystems carefully to ensure their long-term health and sustainability. They are typically found in areas where the coastline is irregular, and the sea level is low [3].

Coastal lagoons are shallow bodies of water separated from the ocean by a barrier island, spit, or other landform. They are usually found along low-lying coasts and are characterized by their dynamic nature, fluctuating water levels, and diverse habitats.

### Coastal lagoons can be classified into three types

**Barrier lagoons:** These lagoons are separated from the ocean by a narrow strip of land, typically a sandbar or barrier island [4].

**Tidal lagoons:** These lagoons are directly connected to the ocean through an inlet or channel, and the water levels are influenced by tides.

**Coastal plain lagoons:** These lagoons are located in low-lying under coastal plains and are typically connected to rivers or other freshwater sources.

Coastal lagoons provide important habitats for a variety of marine and terrestrial species, including fish, birds, and mammals. They also serve as important breeding and feeding grounds for many migratory species. In addition to their ecological importance, coastal lagoons also provide important economic benefits, such as fisheries, tourism, and recreation. However, coastal lagoons are also vulnerable to pollution, erosion, and sea level rise, which can have significant impacts on their ecology and the communities that rely on them [5,6].

### Coastal lagoon hazards

If they are maintained effectively, their regulation services can make them more cost-effective solutions to environmental hazards than physical facilities. Innovative solutions for the stakeholders in the regions may result from the protection of these coastal ecosystems [7,8].

### Safeguarding against severe weather

Some wetlands serve as buffer zones by having the capacity to reduce storm power and wave strength and speed. Lagoons and other wetlands should be protected because they make communities less susceptible to the effects of climate change [9,10].

Water can be retained on the surface or stored under the soil in lagoons. As a result, they can be used to manage flood peaks, spread the water table, slow the current, and prolong the duration of the flood until the water level is low.

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## REFERENCES

1. Davis K, Richard A. New York: Scientific American Library. The Evolving Coast. 1994;5(2):101-107.
2. Kusky Y, Timothy D. Encyclopedia of Earth Sciences in New York: Facts on File. Lagoon. 2005;10(8): 245.
3. Reid S, George K. New York: Van Nostrand Reinhold Company. Ecology Inland Wat Est. 1961;5(10): 74.
4. Kjerfve A, Bjorn V. Coastal Lagoons. Coast lagoon proc. 1994; 21(5):1-3.
5. Aronson RB. Hurricane effects on backreef echinoderms of the Caribbean. Coral Reefs. 1993;12 (3-4): 139-142.
6. Goodbred S, Locicero V. Bonvento S. Kolbe S. Holsinger A. History of the Great South Bay estuary: Evidence of a catastrophic origin. Coast Shelf Sci. 2012; 2(5):12-25.
7. Bird F, Eric CF. Encyclopedia of the World's Coastal Landforms. Springer. 2010; 1(3):485.
8. Kirk RM, Lauder GA. Significant coastal lagoon systems in the South Island, New Zealand. Coast Proc Lagoon Closure. 2000; 12(2):146.
9. Jia K. Significant coastal lagoon systems in the South Island, New Zealand. Eng Oxford J. 1971;10(5):1560.
10. Jia, Peng and Ming Li (2012). Circulation dynamics and salt balance in a lagoonal estuary. J Geo Res. 2012;117.