

Coastal Lagoons: Dynamic Link Between Land and Sea

Where freshwater meets saltwater

Coastal lagoons form where creeks and rivers flow into the ocean. Sand carried down coast by currents forms a sandbar across the stream's mouth, causing water upstream to spread out. The lagoon's mix of salty ocean water and fresh stream water changes with the tide.

Food and shelter for fish and birds

Lagoons are full of life. Nutrients supplied by the mixing waters feed microorganisms and plants, food for larger creatures such as shellfish and worms. The result is a feast for fish and birds. Sheltered from ocean waves by the sandbar, lagoons are ideal fish nurseries. Marsh plants provide protected places where birds can nest and rest.

Natural functions make a healthy coast

Although their water may look stagnant, lagoons actually contribute to a healthy ocean and coast. They filter out sediments and debris brought in by streams. Their vegetation stabilizes soil and sand. The sandbar slows coastal erosion by reducing wave force. Most years high water flows and waves break through the sandbar (called breaching), changing the water level and salty/fresh mix. Some lagoons must be managed by humans because of changes in the watershed, but most work best if allowed to breach naturally.

Prematurely opening the lagoon mouth can kill young fish, including steelhead, a threatened species.

