

COASTAL SYSTEMS CAN be categorized in terms of their dominant natural community types. In the 51 coastal systems delineated in the Central Caribbean ecoregion, the following types are present:

- Mangrove-dominated coastal systems with both continental forest and island forest systems;
- Coral reef-dominated coastal systems with island reef systems, banks, atolls, high-energy rocky shore/fringing reef systems, and mixed-shore fringing reef systems;
- Mixed coastal systems that include large shallow bays, and numerous offshore islands with coral reefs, seagrass beds, and mangrove forests;
- Seagrass-dominated coastal systems;
- Beach-dominated coastal systems;
- Upwelling systems; and
- Rocky platform-dominated coastal systems.

Mangrove Coastal Systems

Mangrove-dominated systems are described by the total shelf area (in km²), the total coastline extent (in km), and the mangrove coastline extent (in km). Mangrove coverage was obtained first from the Biodiversity Support Program's mangrove geographic priority setting exercise, and then modified by local experts and additional data sources.

Mangrove coastal systems were divided into two general categories: continental forests and island forests. The list is arranged by size, starting with coastal systems having the greatest extent of mangrove coastline to the coastal systems containing the smallest.

Mangrove Continental Forest Systems

Orinoco River Delta

This system has an area of 28,690 km², coastline length of 1,920 km, and mangrove-coastline length of 1,830 km. This coastal system comprises the extensive Orinoco River delta (a 20,000-km² area) and a large estuary (San Juan River), both fringed by 495,000 ha of mangrove forests and the Gulf of Paria bounded at the east by the island of Trinidad.

The Orinoco delta is the only delta that remains practically undisturbed in the tropical Americas.

Gulf of Venezuela/ Lago de Maracaibo

This system has an area of 29,300 km², coastline length of 1,430 km, and a mangrove-coastline length of 650 km. This large estuary connects the lake of Maracaibo with the outer Gulf of Venezuela. The inner lake is highly developed with oil terminals, refineries, and oil wells. The Lago de Maracaibo and its canal have extensive mangrove forests and tidal wetlands. This system comprises estuarine wetlands in the southern region of the lake with a mangrove forest area of 15,000 ha. The area was renowned for abundant fisheries resources as well as more than 70 species of shore and sea birds, including flamingos.

Gulf of Honduras

This system has an area of 6,150 km², coastline length of 400 km, and mangrove-coastline length of 310 km. In the southernmost end of the Yucatán Peninsula, the Gulf of Honduras comprises the coastal areas of southern Belize, the Caribbean Guatemala, and northern Honduras. There are extensive mangrove forests and coastal wetlands along coastal margins as well as a number of off-shore mangrove cays.

Southwestern Colombia

This system has an area of 9,708 km², coastline length of 486 km, and mangrove coastline length of 293 km. This coastal system is made up of a relatively narrow shelf in the most western portion of Colombia. Mangroves are located in the western half, particularly in the Gulf of Darién.

Central Honduran Coast

This system has an area of 11,240 km², coastline length of 400 km, and mangrove-coastline length of 260 km. The Central Honduran coast contains many coastal lagoons and riverine estuaries, some of which have been severely degraded by overfishing, destruction of mangroves, and by pollution from sewage and agrochemical runoff. The extensive alluvial plains are the center of Honduras' agricultural export production and deforestation has altered hydrological regimes and increased siltation.

Barlovento

This system has an area of 50,450 km²; a coastline length of 410 km, and mangrove coastline length of 250 km. The Barlovento coastal area is made up of a wide shelf (10 to 40 km wide) with mangroves (fringing five coastal lagoons) and coral reefs at Piritu islets. Coastal upwelling may reach the eastern part of this system. Mangrove coverage is about 189,400 ha.

Falcón

This system has an area of 14,640 km², a coastline length of 490 km, and a mangrove-coastline length of 140 km. The Falcón coastal system of Venezuela includes the Trieste Gulf at its eastern end. The coastal shelf varies in width from 20 to 60 km. Along this coastal system are 16 km of the most developed coral reefs of continental Venezuela. In Morrocoy, part of this reef system is a marine protected area. There is a coastal upwelling zone at the western end of the system. Thirty thousand hectares of mangrove fringe the Morrocoy coast.

Mangrove Island Forest Systems

North Central Cuba

This system has an area of 17,370 km²; a coastline length of 3,570 km, and mangrove-coastline length of 3,013 km. North Central Cuba includes the archipelago Sabana-Camagüey or Jardines del Rey, which is the largest array of keys and islets in Cuba. The coastal system includes smaller islands and mainland areas fringed by mangroves. The shallow areas of the coastal system experience intense evaporation. The high salinities are tidally diluted in the exchange with open oceanic water. Seagrass and muddy bottoms are extensive. Fisheries resources, seabirds, and shorebirds are abundant; hundreds of kilometers of pristine sandy beaches cover the seaward side of the islands and keys. A unique tidal delta is located in Esquivel Key.

Northern Hispaniola

This system has an area of 8,590 km²; a coastline length of 780 km, and mangrove-coastline length of 156 km. Northern Hispaniola comprises the northern coasts of Haiti and most of the western portion of the Dominican Republic. Rocky shores, sandy beaches, and mangrove forests (especially in the Dominican Republic's Monte Cristi area) dominate the coastline. Mangroves thrive in both fringing

and riverine forests, and are important in fisheries production along the narrow shelf area of the system.

Southern Jamaica

This coastal system has an area of 7,490 km², a coastline length of 300 km, and mangrove-coastline length of 144 km. This system covers the southern half of Jamaica with rocky shores and fringing mangroves covering most of the length of the shoreline. There are several large estuaries at the mouth of the Black River and numerous smaller mangrove coastal wetlands. Much of the historic mangrove areas have since been filled in for urban development in the eastern end of the coastal system.

Samaná

This system has an area of 2,090 km², a coastline length of 200 km, and mangrove-coastline length of 77 km. The large mangrove complex in the Dominican Republic's Samaná Bay is located at the western end of the inlet. Much of the shoreline is rocky with fringing mangroves to the eastern end of the bay. Mangrove forests in Samaná Bay dominate the mouths of several large rivers.

Northern Puerto Rico

This system has an area of 3,840 km²; a coastline length of 240 km, and mangrove-coastline length of 68 km. The northeastern coast of Puerto Rico has the highest concentration of mangrove swamps in the country. The north coast receives year-round rainfall and has an indented coastline with several major river deltas and estuaries. Fifty-eight percent of the total island runoff drains into six north coast estuaries comprising a total area of 15,358 ha, of which 1,825 ha (or 11.9%) are still mangroves. The sand spit at the mouth of the Río de la Plata forms a barrier coast, yet the northwest coast is a series of rocky, karst-eroded limestone cliffs that form a secondary shore type as a result of wave erosion.

Coral Reef-dominated Coastal Systems

Coral reefs have often been the target of conservation efforts as a natural community of exceptional diversity. However, coral reefs do not occur in isolation. Reef communities are dependent on surrounding ecosystems for the transfer of animals, propagules, and energy. Adjacent seagrass and mangrove areas serve as nurseries for juvenile fish that will later take up residence on the reef. Coastal

systems dominated by coral reefs vary greatly throughout the ecoregion depending on shelf morphology, wave energy, and coastal runoff.

Coral reef-dominated coastal systems have been sub-divided in: atoll systems; bank systems; small island reef systems; high-energy rocky shore/fringing reef systems; mixed-shore/fringing reef systems; and mixed mangrove-seagrass-reef systems.

Small Island Reef Systems

Small island systems with associated reef communities are arranged according to area from largest to smallest.

Offshore Colombian Islands

This system has an area of 11,446 km², a coastline length of 51 km, and mangrove-coastline length of about 5 km. The offshore Colombian Islands make up about 1,500 km² of banks (Quitasueño, Serrana, and Roncador), shoals, oceanic islands (San Andrés and Providencia), and two atolls (Courtown and Albuquerque). The two archipelagos have an atoll origin and are aligned to the north-northeast along the Nicaragua Rise. Mangroves are limited, but coral reefs are extensive, about 180 km of fringing reef described as very exuberant.

Bay Islands

This system has an area of 6,284 km², a coastline length of 193 km, and mangrove-coastline length of 190 km. Three major “high” islands dominate this coastal system: Roatán, Guanaja, and Utila as well as numerous smaller cays such as Cayos Cochinos. Both Roatán and Santa Elena contain significant mangrove wetlands. Roatán is also the center of the Honduran fishing industry. The coral reefs around and between the islands make up the southern extension of the Meso-American barrier reef that stretches from Quintana Roo, Mexico, to eastern Honduras.

Swan Islands

This system has an area of 5,453 km², and a coastline length of 6 km with no mangrove forests. Shallow bank areas with reefs surround these small and relatively remote islands. This is the location of the last known sighting of the Caribbean monk seal in the 1970s. The area is primarily used by fishermen and, reportedly, has depleted reef fish stocks.

Aruba-Curaçao-Bonaire

This system has an area of 4,500 km², a coastline length of 319 km, and mangrove-coastline length of 23 km. Coral reefs are located along the southern coasts of Aruba and Curaçao, and around the entire island of Bonaire—136 km in total length. Mangroves are limited to small formations within some bays. In addition, rivers are lacking and shore birds are abundant, particularly flamingos (Bonaire).

Cayman Islands

This system has an area of 3,380 km², a coastline length of 187 km, and a mangrove-coastline length of 48 km. This coastal system is made up of three islands with fringing reefs: Grand Cayman, Cayman Brac, and Little Cayman. Reefs are protected in areas of Grand Cayman for scuba diving and the area represents one of the most popular Caribbean diving destinations.

Atolls and Banks

Belize and Mexican Atolls

This system has an area of 9,438 km², a coastline length of 366 km, and a mangrove-coastline length of 366 km. Four atolls (Chinchorro Bank, Turneffe Atoll, Lighthouse Atoll, and Glover's Reefs) comprise a unique system of atolls off the coast of Mexico and Belize. Reefs are highly developed. Chinchorro Bank is located 30 km off the coast of Quintana Roo, and is 800 km² in area. Sand and soft-bottom marine communities mainly cover the inner lagoon of the atoll. The Belizean atolls are more distant from the coast and have larger emerged areas, forming islands and keys, often with fringing mangrove communities.

Pedro Bank

This bank has an area of 20,133 km². The Pedro Banks belong to Jamaica and are made of an unusually shallow bank with sandy areas and patch reefs. The maximum depth is only about 40 m. Fishermen use the small, ephemeral cays on the southern end of the bank. This is an important regional fisheries resource for queen conch and lobster.

High-Energy Rocky Shore/Fringing Reef Systems

Eastern Cuba

This system has an area of 12,447 km², a coastline length of 939 km, and a mangrove-coastline length

of 92 km. This system extends along the north- and southeast coasts of Cuba. Rocky shores with steep cliffs dominate the shoreline with occasional pocket beaches. The shelf is very narrow with spur-and-groove reefs fringing the coastline and dropping sharply to abyssal depths, particularly in the southern coast. However, there are four bays (Guantanamo, Santiago de Cuba, Nipe, Nicaro) that provide shallow estuarine habitats. Fringing and riverine mangrove forests are extensive in Guantanamo and Nipe bays. Several seasonal rivers drain in this coastal system.

Southwestern Hispaniola

This system has an area of 11,757 km², a coastline length of 676 km, and a mangrove-coastline length of 142 km. Steep cliffs that can reach heights of more than 100 m characterize the coast of southwestern Hispaniola. Coral reef development is limited along this narrow, high-energy coastline, and mangrove growth is confined to a few protected bays. There are a number of small bays west of Aquin, with offshore cays and fringing coral reefs. Northwest of Pointe l'Abacou in Haiti, there are at least two marine terraces, one of which shows evidence of differential uplift.

Eastern Hispaniola

This system has an area of 11,314 km², a coastline length of 325 km, and a mangrove-coastline length of 60 km. From the Bahía de Samaná to Cabo Engaño in the Dominican Republic, the coast is low and is surrounded by intermittent reefs. The remaining coast is almost continuously cliffed with the cliff height varying from less than one meter to approximately 18 m. A large lagoon system is formed between the island of Saona and the peninsula making up Parque Nacional del Este.

Central Hispaniola

This system has an area of 8,942 km², a coastline length of 325 km, and a mangrove-coastline length of 46 km. The central coast of Hispaniola includes several large river deltas and extensive rocky shorelines with some isolated, well-developed reefs to 30 m in depth. This coastal system contains some of the largest cities and industrial developments in the Dominican Republic, including the capital, Santo Domingo.

Western Hispaniola

This system has an area of 8,372 km², a coastline length of 755 km, and a mangrove-coastline length of 131 km. The north coast of Haiti's Jacmel Peninsula consists of rocky cliffs ranging from 10 to 18 m in height. Coral reefs are relatively rare and, like mangroves, are mainly confined to sheltered locations. Gonâve Island is a large island off the coast of Haiti, stretching 57 km in length and up to 15 km in width. The island is almost entirely bounded by coral reefs except for the high, rocky cliffs along the northwestern end. The alluvial lowlands of the western coast of Hispaniola have flat, marshy shores with fringing mangrove.

Southern Puerto Rico

This system has an area of 8,066 km², a coastline length of 348 km, and a mangrove-coastline length of 177 km. The Southern Puerto Rico coastal system has extensive reef development with several fringing reefs and well-developed offshore reefs. The southern coast has a broad shelf and extensive offshore reef development where the influence of terrestrial runoff is low and currents are strong. Coastline features are related to coastal geology with coastal lands formed by limestone bedrock, igneous rock, or sediment fans and alluvial plains of unconsolidated material. The limestone forms a rocky irregular coast with small sand and gravel beaches

Southeastern Jamaica

This system has an area of 5,563 km², a coastline length of 132 km, and a mangrove-coastline length of 37 km. The system includes the Morant Cays, 37 km southeast of Kingston and several submerged banks off the southeastern coast of Jamaica. Modern coral reefs exist only as patches and are located inshore of the shelf edge.

Mixed-Shore/Fringing Reef Systems

Northern Hispaniola

This system has an area of 8,599 km², a coastline length of 249 km, and a mangrove-coastline length of 68 km. High sea cliffs, and a large offshore island—Tortue Island, 37 km long and reaching 7 km wide—dominate this coastal system. From Haiti's Port-de-Paix to the Dominican Republic, the coast is approximately equally divided into sections bounded by cliffs and lowlands. Low, mangrove-fringed coastline, beginning near Cap Haïtien, con-

tinues, practically uninterrupted into the Dominican Republic as far east as Punta Mangle. Coral reef formations are common and, in the case of the broad bight in the northeastern portion of the system, the reef may extend as much as 12 km offshore. Due to the scarcity of large intact fringing mangrove forests in the insular component of the Central Caribbean, this coastal system is also included on the list of island mangrove systems.

Quintana Roo

This system has an area of 7,022 km², a coastline length of 254 km, and a mangrove-coastline length of 100 km. This coastal system in Mexico encompasses about 200 km of mainland coast, several smaller keys and a large island (Cozumel) fringed by mangroves with poorly to well-developed fringing reefs. The most northern cay, Isla Contoy, faces the Yucatán Channel, through which Caribbean oceanic waters enter the Gulf of Mexico. These conditions result in large seabird colonies on Isla Contoy. The seabirds can feed in the enriched waters of the eastern Yucatán's frontal system and reside and nest on the island.

Western Cuba

This system has an area of 1,899 km². This system faces the Yucatán Channel, where the water flowing from the Caribbean Basin funnels to the eastern Gulf of Mexico and the Florida Straits, forming the powerful Gulf Stream. The coastline to the south is mostly rocky with long sandy beaches facing a narrow shelf that drops steeply to the southern entrance of the Yucatán Channel. Reefs fringe the entire edge of the shelf.

Northern Puerto Rico

This system has an area of 3,849 km², a coastline length of 254 km, and a mangrove-coastline length of 100 km. The northern coast of Puerto Rico has areas of developed fringing reefs with a mixed coastline of rocky shores, beaches, and mangroves in bays and inlets.

Northern Jamaica

This system has an area of 3,382 km², a coastline length of 293 km, and a mangrove-coastline length of 80 km. Modern coral reefs are dominant where they form a discontinuous fringe at the edge of the coastal shelf. The shelf is narrow, extending only

about one kilometer offshore. Short, seasonal streams cross the northern coastal plain. These streams originate at the foot of limestone hills, against which the coastal plain abuts. The eastern section of coast, drained by rivers from the Blue Mountains, is the exception. Man has shaped the present coastline as land has been reclaimed to facilitate housing and the development of amenities for tourism. Many of these reclamation projects have resulted in filled-in coastal wetlands, such as in the Montego Bay area.

Havana-Matanzas

This system has an area of 2,270 km², a coastline length of 280 km, and a mangrove-coastline length of 31 km. An extensive rocky shore with terraces and cliffs with extended beaches characterize this coastal system. The coastal system is relatively narrow, the shelf ranging 1-3 km in width. Cuba's largest coastal population resides in the cities of Havana and Matanzas, close to the bays with the same names.

Costa Rican Coral Reefs

This system has an area of 1,719 km², a coastline length of 92 km, and a mangrove-coastline length of 19 km. This is a small coastal system that stretches from Punta Limón to the Panamanian border east of Punta Mona. Sandy beaches are located in the western and eastern ends of this system, separated by long extensions of grass and inundated wetlands. A small mangrove formation is situated close to Panama. Fringing reefs are not well developed.

Seagrass-dominated Coastal Systems

Despite that the Northern Miskitos and the Southern Miskitos were classified as the same type of coastal system, their delineation was based on the following criteria: a) although they share a dominant habitat type (seagrass), the combination of habitats is different (in the Northern, terrestrial runoff and coastal geomorphology combine to sustain more extensive coastal wetlands while in the Southern, the oceanic influence is greater and so patch reefs and seagrass are more developed), b) very large coastal systems are not adequate for good management, c) the boundary between them was ultimately placed in the countries' border for facilitating their management.

Northern Miskitos

This system has an area of 85,504 km², a coastline length of 216 km, and a mangrove-coastline length of 64 km. Coral reefs, extensive lagoons, wetlands, and long barrier beaches in an expansive savanna characterize this area which plays a central role in the health and sustainability of Honduras' fisheries. For the most part, as a result of its inaccessibility, the area has been spared the combined impacts of deforestation, intensive agriculture, and overexploitation of fish and wildlife that has transformed much of the rest of Honduras' coastal areas.

Southern Miskitos

This system has an area of 73,238 km², a coastline length of 481 km, and a mangrove-coastline length of 332 km. The coastline has a large area of coral reefs which varies from small patches and pinnacles to large (tens of meters in diameter), complicated platforms and well-defined belts that are distributed across virtually the entire shelf. Extensive areas of seagrass exist in continental shelf waters and provide grazing pasture for green sea turtles nesting along the coast. Hawksbill turtles nest sparsely along the coast; Nicaragua may be the last refuge for this species in the Caribbean.

Eastern Venezuela

This system has an area of 50,457 km², a coastline length of 949 km, and a mangrove-coastline length of 65 km. This coastal system has ample shelf area. Mangrove formations (total area of 10,000 ha) lie offshore Margarita Island and include the Gulf of Cariaco. There are three main reef formations: Los Testigos, Los Frailes, and Mochima (10-km long altogether). In addition, there is a coastal upwelling with high biological productivity (the estimated biomass of pelagic fish is approximately two million tons, with 90,000 tons of sardines and large populations of dolphins and whales outstanding for the ecoregion). Sea turtles nest at sites in Margarita, Paria Peninsula, while numerous seabirds nest in Los Testigos, Los Frailes, and La Restinga.

Trinidad and Tobago

This system has an area of 36,604 km², a coastline length of 552 km and a mangrove-coastline length of 72 km. This coastal system includes the wide shelf area around the islands of Trinidad and Tobago, separated arbitrarily from the Venezuela coastline.

Tobago (36-km long) boasts fringing reefs as well as mangroves (5,286 ha) in the Caroni Swamp. This system is located upstream from the rest of the Caribbean. The North Equatorial Current flows to the west through the islands while the input of freshwater and sediment from the Orinoco River strongly influences the coastal environment.

Mixed Coastal Systems

Some coastal systems are complex bays and shelf areas that have reefs, mangrove forests or offshore cays, and extensive seagrass beds. These are typically large coastal systems and are described as "mixed" systems.

Gulf of Batabanó

This system has an area of 27,673 km², a coastline length of 1,831 km, and a mangrove-coastline length of 1,688 km. This is the largest and most habitat-diverse section of the Cuban shelf. The gulf is a shallow body (3-6 m, prevailing depths) surrounded by the main island and the Canarreos Archipelago (almost 700 hundred mangrove islets and keys and the Isle of Youth). The gulf is covered by extensive seagrass beds and numerous patch reefs; an array of islands and barrier reefs separates the gulf from the Caribbean Sea. Mangroves fringe the islands and mainland and are particularly extensive in the Zapata Swamp. All these conditions combine to provide highly diverse marine fauna and abundant populations of lobsters, seabirds, bottlenose dolphin, sea turtles, and numerous reef fish species.

Southeastern Cuba

This system has an area of 24,422 km², a coastline length of 1,434 km, and a mangrove-coastline length of 1,351 km. The Southeastern Cuba coastal system is the second largest system in area along the coast of Cuba. The shelf is relatively deep (12 to 15 m dominant depths, 28 m maximum) and includes two gulfs—Ana María in the west and Guacanayabo in the east—that are mainly covered by seagrass beds, muddy bottoms, and patch reefs. A chain of shoals and cays separates these two gulfs. The whole system is separated from the ocean by the fringing reefs of the Archipelago Jardines de la Reina. The ring-shaped *Oculina* reefs, on muddy bottoms of the Gulf of Guacanayabo, are unique to the island of Cuba.

Offshore Venezuela Islands

This system has an area of 13,475 km²; a coastline length of 232 km, and a mangrove-coastline length of 222 km. This coastal system includes a diversity of natural communities including numerous mangrove-fringed offshore islands surrounded by highly developed coral reefs (187 km) at Los Testigos, La Blanquilla, La Tortuga, and La Orchila. There are two atoll reefs: Los Roques and Las Aves. Areas of coastal upwelling facilitate nesting sites for seabirds. The islands' beaches provide nesting sites for sea turtles.

West Central Colombia

This system has an area of 12,530 km²; a coastline length of 510 km, and a mangrove-coastline length 240 km. Along much of this coastal system, there are mud flats covered by extensive mangrove areas. Mangroves are most prevalent between Santa Marta and Barranquilla, just east of the Río Magdalena and around the Bay of Cartagena. Coral reefs occur at some places along the coast, and seagrass beds occur within the Bay of Cartagena.

Eastern Yucatán Bays

This system has an area of 7,667 km²; a coastline length of 901 km, and a mangrove-coastline length of 831 km. The coastal system stretches from Punta Xcalak south to northern Belize. It comprises three bays: Ascensión Bay, Espíritu Santo Bay (in Mexico), and Chetumal Bay (Mexico and Belize). The bays are the result of extensive normal faulting. The oceanographic conditions within and outside the bays differ from the rest of the coast of the Mexican Caribbean and Belize. Reefs and mangroves are well developed as are seagrass areas within the bays.

San Blas

This system has an area of 6,795 km²; a coastline length of 356 km, and a mangrove-coastline length 50 km. Thriving coral colonies have been identified east of Colón and one of the most important mangrove zones on the Atlantic coast is found along the Golfo de San Blas.

Coastal Belize

This system has an area of 4,855 km²; a coastline length of 360 km, and a mangrove-coastline length of 338 km. This coastal system stretches from Belize City south to the mouth of the Monkey

River. The broad shelf includes extensive mangrove forests and mangrove cays, seagrass meadows, and an offshore barrier reef.

Northwestern Cuba

This system has an area of 2,844 km²; a coastline length of 545 km, and a mangrove-coastline length of 355 km. This coastal system includes a barrier reef offshore and an extensive shelf, particularly broad in the Gulf of Guanahacabibes, a shallow-water body with numerous mangrove cays, seagrass beds, and patch reefs that stretches to the westernmost end of Cuba. Barrier reefs run along the outer border of the shelf, parallel to the Archipelago Las Coloradas (225-km long) formed by hundreds of mangrove cays.

Bocas del Toro

This system has an area of 4,780 km²; a coastline length of 633 km, and a mangrove-coastline length of 191 km. This area has more than 50 barrier islands (Archipiélago Bocas del Toro), the largest of which is more than 130 km². Another notable geographical feature is the Laguna Chiriquí—at 840 km²; the largest lagoon in Panama. Mangroves and bananas are dominant along the coast and more than 300 km² of freshwater wetlands are located behind the mangrove fringe.

Eastern Panama Canal

This system has an area of 2,473 km²; a coastline length of 166 km, and a mangrove-coastline length of 49 km. The shelf is very narrow and mangrove areas are scattered along the coastline. This system includes some of the most extensive reef development in the area.

Upwelling Areas, Beaches, and Rocky Platform Systems

Central Venezuela

This system has an area of 12,734 km²; a coastline length of 209 km, and a mangrove-coastline length of 25 km. The shelf of this coastal system is relatively narrow and widens to the west. Reefs and mangroves are limited. The largest urban centers of Venezuela as well as oil refineries and ports are located here. Extensive rocky platform areas offshore characterize the area.

East Central Colombia

This system has an area of 2,330 km², a coastline length of 119 km, and a mangrove-coastline length of 31 km. Rocky sea cliffs with pocket beaches are found where the Andes Mountains reach the coast. Mangroves lie just west of Santa Marta, a consistent upwelling area supporting important pelagic fisheries and seabird populations.

Western Panama Canal

This system has an area of 8,486 km², a coastline length of 188 km, and no mangrove forests. In the west and all along the 200-km Golfo de Mosquitos, the coast is made up of a succession of small beaches, separated by cliffs. The offshore marine communities are dominated by algae-covered rocky platforms.

South Central Cuba

This system has an area of 2,849 km², a coastline length of 196 km, and a mangrove-coastline length of 38 km. From the Cazonos Gulf (a tongue of the Caribbean Sea) east to Punta Casilda, the shelf is very narrow. This system separates the two wide shelf areas of the Gulf of Batabanó and the Gulf of Ana María. The area is characterized by rocky offshore platforms facing deep-water tongues of the ocean.

San Juan River

This system has an area of 13,065 km², a coastline length of 292 km, and a mangrove-coastline length of 104 km. Extensive sandy beaches and wetlands fringe the coastline. The San Juan River drains in this section and the shelf widens to the north. Extensive beaches and some of the more important turtle nesting beaches in the Caribbean characterize the area at the mouth of the San Juan River.

Eastern Colombia

This system has an area of 24,345 km², a coastline length of 445 km, and a mangrove-coastline length of 42 km. The Eastern Colombia sector includes the Guajira Peninsula, the country's northernmost pronounced extension. Shrub vegetation lines the coast and offshore; rocky platform areas dominate the area.