Coastal Zone Management in Buenos Aires, Argentina

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INTRODUCTION

Argentina is located in the southeastern extreme of South America and its coastal zone is bathed by the Atlantic Ocean. The national economy is based on the export of commodities. The most productive region extends on a sedimentary plain (the Pampa), the eastern boundary of which continues along the coast of the Paraná River, the Río de la Plata, and finally, the Atlantic Ocean. This fluvial/maritime coast is diverse in natural and artificial landscapes, ecological resources, and human activities. The major key ports, industrial establishments, infrastructure, administrative and financial centers, universities, and cities are located there. The Pampa is divided into several provinces (states), the largest being the Province of Buenos Aires. The Buenos Aires Autonomous City, the national capital city, is located on the Río de la Plata coast. Altogether, the Province of Buenos Aires and the Autonomous City coast are considered the Buenos Aires Coastal Zone.

The capital and its surrounding counties is one of the most populated and dense megacities of the world, the Buenos Aires Metropolitan Area. One out of three inhabitants of the country lives in the Buenos Aires Coastal Zone.

*The authors acknowledge the anonymous referees for their valuable suggestions, Dr. María Cecilia Rodriguez for editing, and the financial support of the following grants: ANPCyT, PMTIii, BID 1728/OC-AR, and UBACyT A010/2004. Ocean Yearbook 23: 361–388.
Zone, while more than 7,500,000 visitors spend their holidays at its beach resorts. Within this context, we 1) analyze the main physical, geomorphological, and biological characteristics related to the most important economic coastal uses and activities; 2) identify the pressures, the conflicts and the observed impacts; 3) study some examples in order to analyze the resource management model; and 4) propose and discuss different alternatives to consider through a more integrated, long-term sustainable coastal management.

PHYSICAL AND GEOMORPHOLOGICAL FEATURES

The Buenos Aires Coastal Zone extends from 33°21’ S and 60°13’ W to 41°03’ S and 63°23’ W, covering 84,602 km² in area. It comprises both fluvial and maritime coasts. The oceanic portion is the Exclusive Economic Zone (EEZ), and the oceanic boundary is delimited according to the Maritime Space and Baselines Law (Law 23968/1991), in accordance with the United Nations Convention on the Law of the Sea (UNCLOS). Since the coastal zone lacks a juridical definition, it is convenient for management purposes to include in the continental portion all the counties that border the coastline. The present article follows these conventional limits (Fig. 1).

The climate is temperate (annual mean temperature 17.4°C in the Autonomous City; 15.7°C in the Province of Buenos Aires), and the oceanic water masses are under the influence of the cold subantarctic Malvinas (Falkland) Current. However, from a biogeographical point of view, the northeastern fluvial portion is located at the crossroads between the tropical-subtropical regions of the “Mata Atlantica” of Amazonian lineage, and the Chaco forests. The tropical forests reach the temperate latitudes of the Province of Buenos Aires through the corridor of the Paraná River. Thus, unexpectedly rich riparian forests are found in the northern Buenos Aires Coastal Zones, in a climate tempered by the large water masses of the Paraná River and the Río de la Plata.

The Río de la Plata covers an area of about 38,000 km² and it drains a 3,170,000 km² basin, being the second largest one on the continent.

The Río de la Plata is usually divided into three sectors: upper, from its origin to the Autonomous City-Colonia City; middle, up to Punta Piedras-Montevideo City; and outer, up to Punta Rasa-Punta del Este City (Figure 1).
