# 2. THE JÚCAR RIVER BASIN DISTRICT

#### **Administrative boundaries**

The Júcar River Basin District (JRBD) is formed by the addition of several river basins, and the Júcar river basin gives the name to the District. It is bordered by the districts of the Ebro and Segura rivers to the north and south, respectively, and the Tajo, Guadiana and Guadalquivir rivers to the west, bordering to the east with the Mediterranean Sea. The total surface of the District territory, excluding coastal waters, is 43,000 km<sup>2</sup>, which accounts for approximately 8% of the Spanish territory.

This area extends within five Autonomous Communities (Aragon, Castilla-La Mancha, Catalonia, Valencia Region and Region of Murcia) and seven provinces: The totality of Valencia, a great portion of Albacete, Alicante, Castellon, Cuenca and Teruel, a small area of Tarragona, and a very small area of Murcia. The provinces of Valencia Region cover most of the territory of the river basin accounting for nearly 50% of its total area.

Province	Area per province (km <sup>2</sup> )	Area per Autonomous Community (km <sup>2</sup> )	Autonomous Community
Tarragona	88	88	Catalonia
Teruel	5,374	5,374	Aragon
Cuenca	8,681	16,089	Castilla-La Mancha
Albacete	7,409		
Castellon	5,785	21,120	Valencia Region
Valencia	10,813		
Alicante	4,522		
Murcia	64	64	Region of Murcia
Total JRBD	42,735	42,735	Total JRBD

JRBD surface per province and autonomous community

Autonomous Community	Percentage of JRBD contrib- uted by the AC	Percentage of the total surface of the AC in the JRBD
Valencia Region	49.42%	90.52%
Castilla-La Mancha	37.65%	20.31%
Aragon	12.57%	11.27%
Catalonia	0.21%	0.28%
Region of Murcia	0.15%	0.57%

Participation rates of the ACs



Administrative boundaries of the Júcar River Basin District

## 2. THE JÚCAR RIVER BASIN DISTRICT

#### **Physical framework**

In the Júcar River Basin District there are two major environments: Mountainous inland, with altitudes over 1,500 metres and a coastal environment, formed by coastal plains, commonly known as "planas".

The Iberian mountain range acts as a barrier for the sea fronts, causing most of the rainfall. This mountain range is the birth place of the main river of the District: the Júcar River. In addition, the Turia and Mijares rivers are also born there. The three rivers provide as a whole approximately 65% of average runoff of all territorial scope of the District. The final part of the mountains of the Baetic system lies on the south and southwest area, and at this point they spread out partially. This mountainous area is the birth of the Serpis and Vinalopó rivers.

The coastal plain is an alluvial platform delimited by the Iberian mountain range to the northeast, the Central Plateau to the west and the Baetic system to the south. It provides a nutrient-rich soil that supports the majority of the irrigated agricultural production of the District, with over 80% of the total population settled on this coastal plain.

Finally, the area of La Mancha has a relatively level surface with an average height of 650 m and it is located to the west of the scope, between the Iberian and the Baetic mountain ranges. This plain contains an aquifer of large dimensions called Eastern La Mancha aquifer, connected to the Júcar River during its passage through this area.

Another important feature of the District is the length of its coastal line, with a total of 574 km, and the occasional presence of small islands, such as Columbretes or Tabarca islands. These islands are protected by environmental legislation given the great diversity of sea birds that live within their territory.

In the coastal area, the humid areas named marshes, vast flood plains essentially fed by groundwater and, to a lesser extent, by surface water should be noted. Four of these wetlands are included in the Ramsar list, of which the most significant one, for its uniqueness and characteristics, is l'Albufera Lake of València.



Physical framework of JRBD

## 2. THE JÚCAR RIVER BASIN DISTRICT

#### Water resources systems

The hydrological planning, as established in article 19 of the Hydrological Planning Regulation (HPR) should define the water resources systems into which the District territory is divided.

A water resources system consists of surface and groundwater bodies, hydraulic infrastructure projects and facilities, water use regulations derived from the characteristics of the demand and of the exploitation rules that, using the natural water resources, and in compliance with their quality, enable the establishment of the water supplies that form the supply of available resources of the water resources system, in compliance with the environmental objectives (art. 19 of the HPR). The definition of the water resources systems is included in the hydrological planning regulations, in accordance with article 81 of the HPR.

As observed in the figure below, the water resources systems tend to adapt to the river basins that form the District. The corresponding geospatial entities are publicly available through the services of the SDI (Spatial Data Infrastructure) of the River Basin Organisation, in the website: <u>www.chj.es</u>

Water Resources system	Area including coastal waters (km <sup>2</sup> )	Area excluding coastal waters (km <sup>2</sup> )
Cenia - Maestrazgo	2,322	2,033
Mijares - Plana de Castellon	5,069	4,819
Palancia - Los Valles	1,131	1,087
Turia	7,532	7,232
Júcar	22,359	22,187
Serpis	1,186	985
Marina Alta	1,172	839
Marina Baja	750	607
Vinalopó - Alacantí	3,348	2,948
Total JRBD	44,871	42,735

Area of the water resources systems of the JRBD



Water resources systems of the JRBD



### Image: Flamingos at l'Albufera of València

Wetlands play a very important role in the preservation of a large number of birds.

Only in l'Albufera Lake, approximately 250 species of birds use the ecosystem regularly and over 90 species use it for reproduction, which makes l'Albufera one of the most important places of Western Europe to hibernate.