Land-use limitations applicable at National level

	Preferential floodway			Flood-prone area	
Land Use	Rural land	Urbanized land	Special regime for municipalities with high likelihood of flood	Rural land	Urbanized land
School or health centres, retirement homes, disability care homes, sports centres, penitentiary facilities, fire stations, Civil Protection facilities	No	No	Only if there is no alternative location and if it is designed with security conditions	To be avoided, unless there is no alternative location and if it is designed with security conditions	Can be permitted if security conditions are considered to the possible extent
Large commercial areas where crowds of people could gather	No	No	No		
Buildings, repair works, rehabilitation or change of use, underground garages, basements and surface car parks, and other underground constructions	No	Yes, with security conditions	Yes, with security conditions	Yes, with security conditions	Yes, if security conditions are considered to the possible extent
Facilities where products likely to be hazardous to human health and the environment are handled such as gas stations, industrial treatment plants, waste stores or electrical facilities for high and medium tension	No	No	No	Yes, with security conditions	
Campsites, accommodations areas and buildings associated with campsites	No	These activities do not usually occur in urbanized land. If they happen to exist, at least the corresponding security conditions must be guaranteed	Yes, with security conditions and outside the police area	To be avoided, unless there is no alternative location and if it is designed with security conditions	Can be permitted if security conditions are considered to the possible extent
Urban waste water treatment plants	Only if there is no alternative location or if systems are compatible with floods		Only if there is no alternative location or if systems are compatible with floods		
Greenhouses, non-permeable enclosures and fences, material or waste storage	No		No	Yes	Yes
Changes in land morphology that could alter the capacity of discharge	No		Yes	Yes	Yes
Livestock breeding farms	No		Yes, with security conditions and outside the police area	Yes	Yes
Linear infrastructures in parallel to the riverbed	Only if there is no feasible alternative to these infrastructures and if the latter have been designed minimising risk		Only if there is no feasible alternative to these infrastructures and if the latter have been designed minimising risk	Yes	Yes
Sanitation and water supply infrastructures and other underground pipes; works for maintenance, enhance and protection of existing infrastructures	Yes	Yes	Yes	Yes	Yes
Buildings for agricultural use with a maximum of 40 m² and works associated with water uses allowed by Spanish Water Act	Yes, with security conditions	Yes, with security conditions	Yes, with security conditions	Yes	Yes

◆ In addition, as a supplementary requirement, promoters of actions in Preferential floodway or in Flood-prone areas must sign a statement in which they recognise that they know and assume the existing risks and the Civil Protection measures to be applied and they commit themselves to inform other people likely to be affected. Furthermore, in certain cases, it must be noted in the Land Registry that the building is located in Preferential floodway or in a Flood-prone area. Nevertheless, in exceptional cases and for buildings already existing, the competent authorities will encourage affected people to adopt measures for self-protection and vulnerability reduction according to current Civil Protection legislation

Autonomous Communities can establish additional land-use limitations in flood-prone areas in accordance with their competence in spatial planning. Regulations in the River Basin Management Plans can also include certain land-use limitations.

Land-use planning in flood-prone areas in Spain: Floods Directive and Spanish Water Act







Floods Directive, Flood Risk Management Plans and Land-Use Planning

- In Spain, Flood Risk Management Plans (FRMPs) represent the main tool for flood risk reduction, according to the guidelines set in the Royal Decree 903/2010 on the assessment and management of flood risks which transposes the Directive 2007/60/EC (Floods Directive).
- One of the objectives of the FRMPs is to improve land use and urban planning policies, in collaboration with the Autonomous Communities, by means of setting land use limitations. The aim is to establish activities in the floodprone areas compatible, as far as possible, with flooding.

Zoning in flood-prone areas according to the Spanish Water Act

• The Spanish Water Act defines the different river areas and the limitations to the uses that can be made of these areas.

Hydraulic Public Domain. Art. 2 Spanish Water Act

The Hydraulic Public Domain (riverbed) includes, among others, the land covered by water under maximum normal rises in level. They are publicly owned.

Easement use area. Art. 6 Spanish Water Act

5m-wide land strip on both sides of the riverbed. Uses are limited to protect river ecosystems and ensure public passage.

Preferential floodway

Area where the flood flow is concentrated1 and where the flood hazard is high² (high velocity and depth). Only the non-vulnerable activities and those that do not reduce the outflow capacity will be allowed.

Flood-prone area. Art.11 Spanish Water Act

Area covered by flood events with 500-year return period (0,2% annual probability).

Police area. Art. 6 Spanish Water Act

100m-wide land strip on both sides of the riverbed. It can be widen to include the preferential floodway. Any activity must be authorised by the River Basin Authority.

¹ Floodway: Area where the flow is concentrated for a 100-year return period. Any obstacle in this zone generates significant flood level increase.

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² Severe damages area: Flood-prone area with a 100-year return period and water depth >1m, flow velocity >1m/s, or the product

of both greater than 0,5m²/s.

Legally defined river areas under the Spanish Water Act FLOOD-PRONE AREA (500-YEAR FLOOD) PREFERENTIAL FLOODWAY **POLICE AREA** MAXIMUM NORMAL FLOODS **LOW WATERS USE AREA** RIVERBED HYDRAULIC PUBLIC DOMAIN

The National Mapping System for Flood-Prone Areas _sig.mapama.es/snczi

• In this viewer, layers of flood-prone areas, APSFR, preferential floodway and hydraulic public domain, as well flood hazard and risk maps, are displayed.





Land-use limitations deriving from the implementation of the Spanish Water Act

The Royal Decree 638/2016, published on December 29th 2016, details the Spanish Water Act in some aspects such as flood risk management, identifying uses and activities that may be vulnerable in case of flooding according to different criteria:

Depending on the location area:

Preferential floodway: Strict limitations to most land

Flood-prone area: Limitations to most of vulnerable activities and less restrictive conditions.

Special regime for municipalities with high likelihood of flood: For municipalities with more than a 1/3 of their land included in preferential floodway or municipalities whose land morphology materially prevents future expansion out of the flood-prone area.

Depending on land situation on December, 29th **2016** (according to the Spanish Land Law):

- <u>Urbanized land:</u> land already integrated in an urban grid, as well as the land occupied by the network of typical supplies and services of urban areas.
- Rural land: the rest of lands.