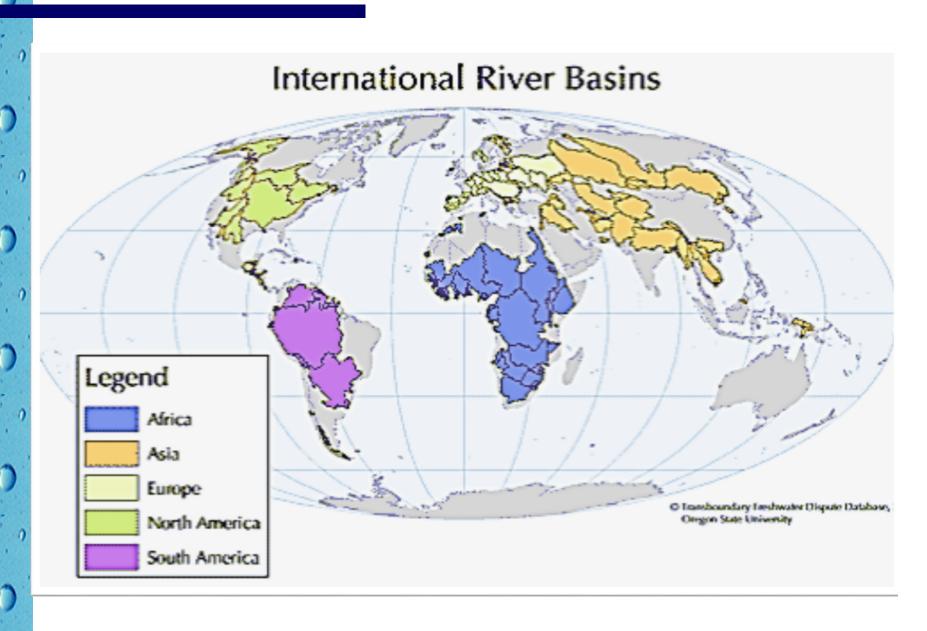
International Water Law and the Portuguese-Spanish Convention on Shared River Basins (Albufeira Convention)

António Gonçalves Henriques

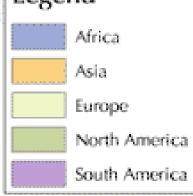
International River Basins



International River Basins

International River Basins

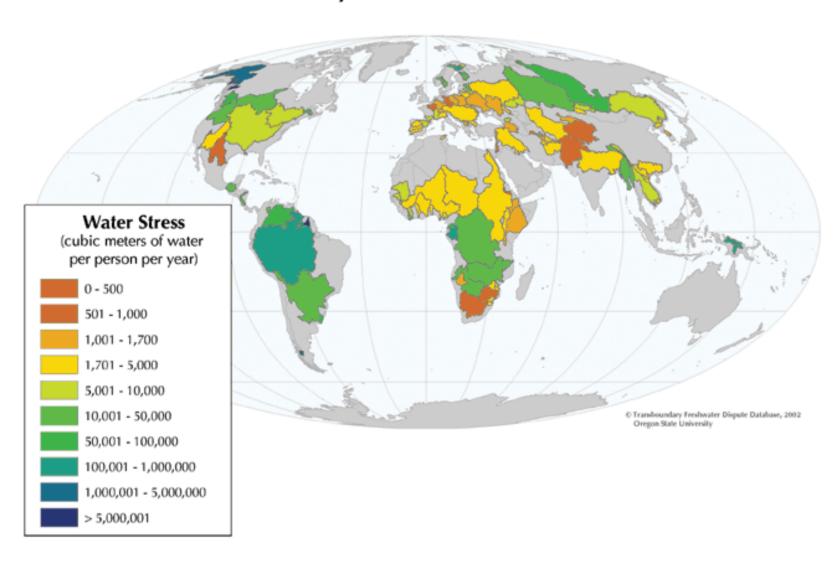
- 263 large international river basins.
- 45% of the continental area of the planet.
- 40% of the world population.
 - 60% of the annual runoff of the planet.



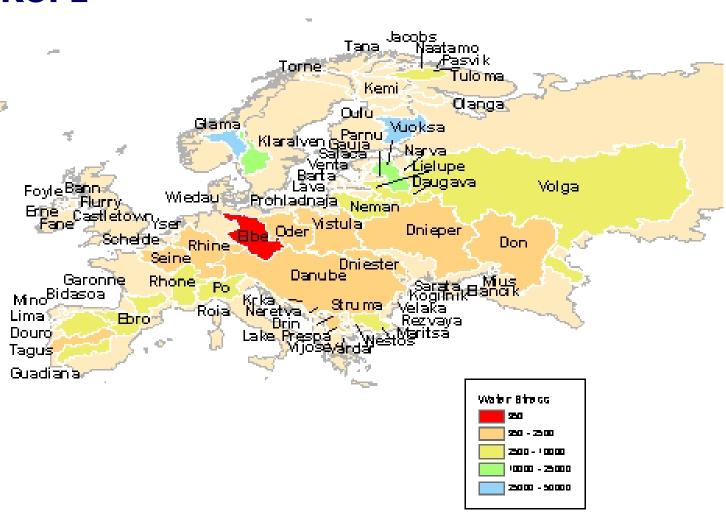
 Transboundary Freshwater Dispute Database, 3 Oregon State University

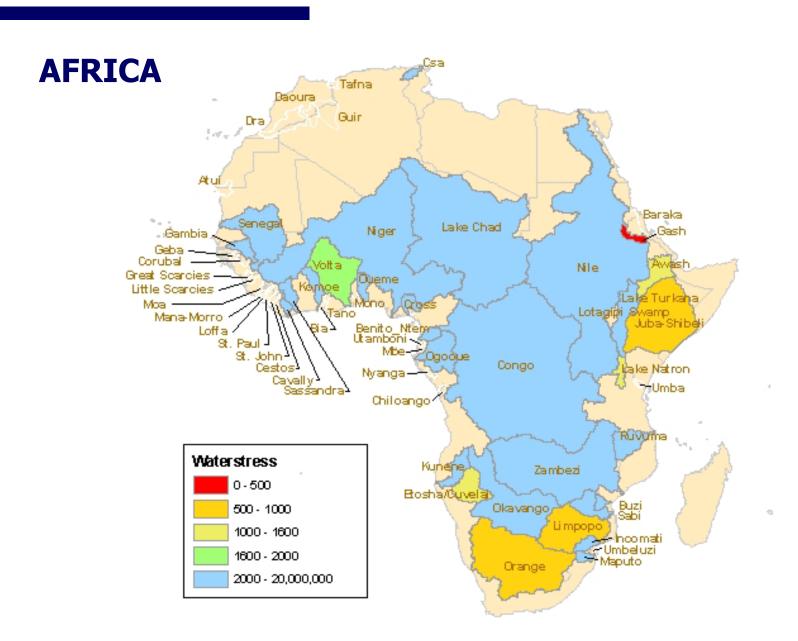
International River Basins

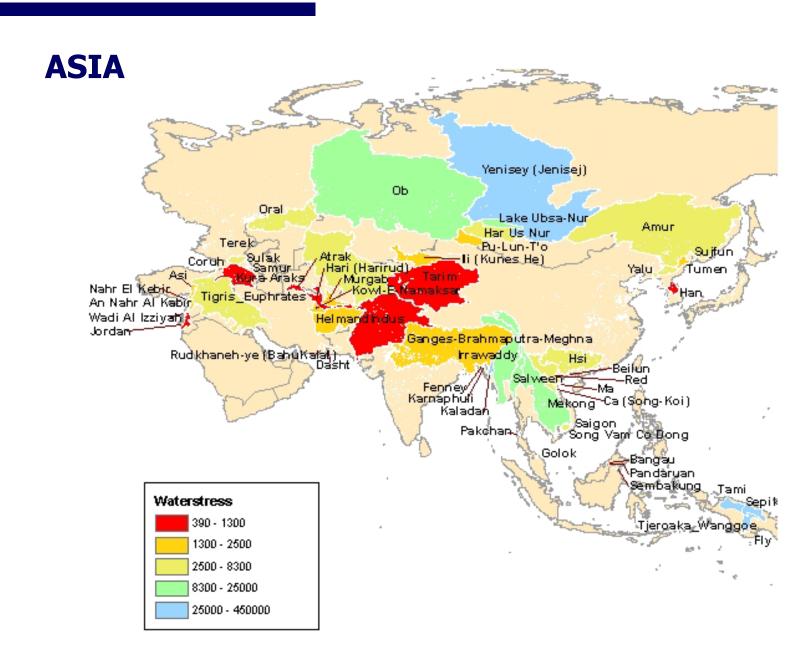
Water Stress by International River Basin



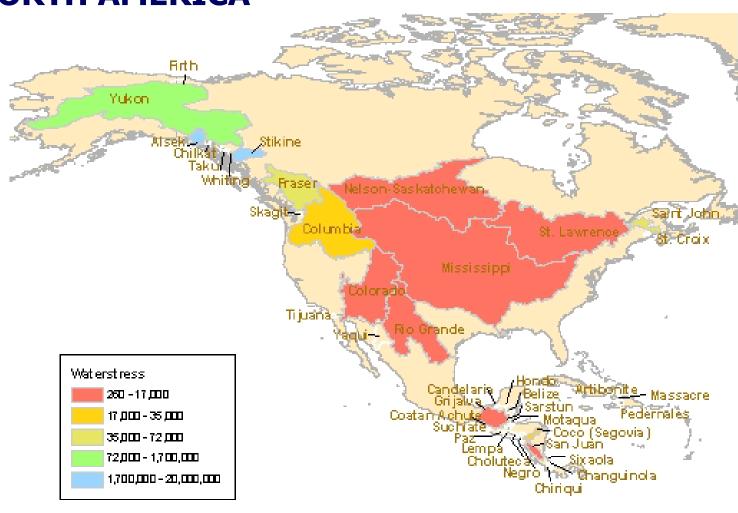
EUROPE



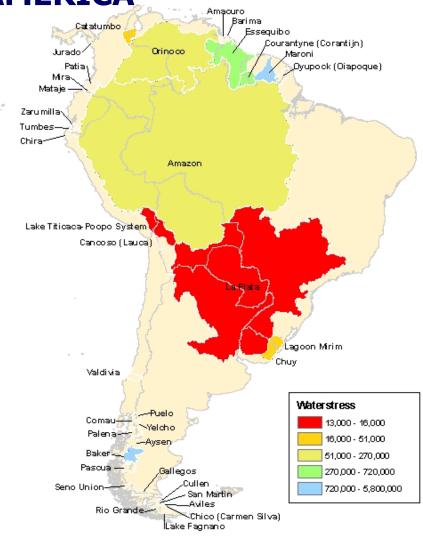


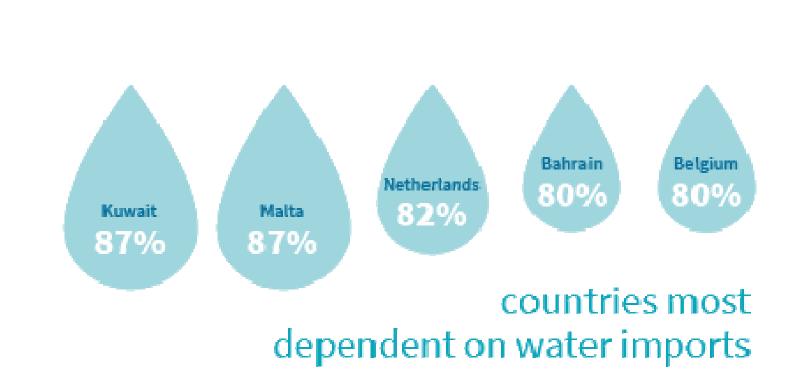


NORTH AMERICA









Water Law Origins

Costumary Law:

- Priority to previous users (first come, first served);
- Priority to upstream users;
- Obligation of not to cause harm ("sic utere tuo ut alienam non laedas").

Evolution:

- Traditional neighbourhood relations
 - → Relations among stakeholders.
- Resource sharing
 - → Polution control (water uses)
 - → Environment protection.
- Relations among Regions and States.

Convention on the Law of Non-Navigational Uses of International Watercourses United Nations, May 1997

- Adopted by the General Assemby of the United Nations in May 1997, with only three dissenting in a vote of 106.
- The text of the Convention was signed by 16 States
- The Convention entered into force in August 2014.
- The Convention was ratified, accepted, approved or acceded by 36 States.
- The Convention is an important step towards arriving at an international law governing water, and has already been referred to by the International Court of Justice.

,	Participant	Signature	Approval(AA), Acceptance(A), Accession(a), Ratification	Participant	Signature	Approval(AA), Acceptance(A), Accession(a), Ratification
101	Benin		5 Jul 2012 a	Morocco		13 Apr 2011 a
2,	Burkina Faso		22 Mar 2011 a	Namibia	19 May 2000	29 Aug 2001
, , '	Chad		26 Sep 2012 a	<u>Netherlands</u>	9 Mar 2000	9 Jan 2001 A
	Côte d'Ivoire	25 Sep 1998	25 Feb 2014	Niger		20 Feb 2013 a
	<u>Denmark</u>		30 Apr 2012 a	Nigeria		27 Sep 2010
2,	Finland	31 Oct 1997	23 Jan 1998 A	Norway	30 Sep 1998	30 Sep 1998
	France		24 Feb 2011 a	Paraguay	25 Aug 1998	
	Germany	13 Aug 1998	15 Jan 2007	Portugal	11 Nov 1997	22 Jun 2005
	Greece	-	2 Dec 2010 a	Qatar		28 Feb 2002 a
2,	Guinea-Bissau		19 May 2010 a	South Africa	13 Aug 1997	26 Oct 1998
, , '	Hungary	20 Jul 1999	26 Jan 2000 AA	Spain		24 Sep 2009 a
	Iraq		9 Jul 2001 a	State of Palestine		2 Jan 2015 a
	Ireland		20 Dec 2013 a	Sweden		15 Jun 2000 a
,			30 Nov 2012 a	Syrian Arab Republic	11 Aug 1997	2 Apr 1998
, ,	Italy	47 A 4000		Tunisia	19 May 2000	22 Apr 2009
	Jordan	17 Apr 1998	22 Jun 1999	United Kingdom of Great		13 Dec 2013 a
on N	Lebanon		25 May 1999 a	Britain and Northern Ireland		
	Libya		14 Jun 2005 a	Uzbekistan		4 Sep 2007 a
3	Luxembourg	14 Oct 1997	8 Jun 2012	Venezuela	22 Sep 1997	
	Montenegro		24 Sep 2013 a	Viet Nam		19 May 2014 a
	0			Yemen	17 May 2000	
	\$100 SERVE					

25 a

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- Resulted from the application of customary law.
- Only the riparian states have the right to water.
- Provides an alternative to the classical theories:
 - Absolute territorial sovereignty (the Harmon theory).
 - Absolute integrity of the watercourse.
- Principles of fair use and not to cause damage

• 37 articles divided into seven Parts:

Part II - General Principles.

Part III – Planned Measures.

Part IV - Protection, conservation and management.

Part V - Conditions likely to cause damage and emergency situations.

- Article 33 Settlement of Disputes.
- Resolution of disputes when there is no specific bilateral agreements.
- Basis for the preparation of new agreements.
- Interpretation of existing agreements (Gabcíkovo-Nagymaros).

- "Watercourse" means a system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus;
- "International watercourse" means a watercourse, parts of which are situated in different States;
- "Watercourse State" means a State Party to the present Convention in whose territory part of an international watercourse is situated, or a Party that is a regional economic integration organization, in the territory of one or more of whose Member States part of an international watercourse is situated;
- Exclusion of confined aquifers.

Article 5

Equitable and reasonable utilization and participation

1.Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse.

Article 5

Equitable and reasonable utilization and participation

2.Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention.

Article 6

Factors relevant to equitable and reasonable utilization

- 1.Utilization of an international watercourse in an equitable and reasonable manner within the meaning of article 5 requires taking into account all relevant factors and circumstances, including:
- (a) Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;
- (b) The social and economic needs of the watercourse States concerned;
- (c) The population dependent on the watercourse in each watercourse State;
- (d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States;

Article 6

Factors relevant to equitable and reasonable utilization

- (e) Existing and potential uses of the watercourse;
- (f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect;
- (g) The availability of alternatives, of comparable value, to a particular planned or existing use.

Article 6

Factors relevant to equitable and reasonable utilization

- 2. In the application of article 5 or paragraph 1 of this article, watercourse States concerned shall, when the need arises, enter into consultations in a spirit of cooperation.
- 3. The weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factors. In determining what is a reasonable and equitable use, all relevant factors are to be considered together and a conclusion reached on the basis of the whole.

Article 7

Obligation not to cause significant harm

- 1.Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.
- 2.Where significant harm nevertheless is caused to another watercourse State, the States whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures, having due regard for the provisions of articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.

Article 8

General obligation to cooperate

- 1. Watercourse States shall cooperate on the basis of sovereign equality, territorial integrity, mutual benefit and good faith in order to attain optimal utilization and adequate protection of an international watercourse.
- 2. In determining the manner of such cooperation, watercourse States may consider the establishment of joint mechanisms or commissions, as deemed necessary by them, to facilitate cooperation on relevant measures and procedures in the light of experience gained through cooperation in existing joint mechanisms and commissions in various regions.

Article 9

Regular exchange of data and information

- 1.Pursuant to article 8, watercourse States shall on a regular basis exchange readily available data and information on the condition of the watercourse, in particular that of a hydrological, meteorological, hydrogeological and ecological nature and related to the water quality as well as related forecasts.
- 2. If a watercourse State is requested by another watercourse State to provide data or information that is not readily available, it shall employ its best efforts to comply with the request but may condition its compliance upon payment by the requesting State of the reasonable costs of collecting and, where appropriate, processing such data or information.

Article 9

Regular exchange of data and information

3. Watercourse States shall employ their best efforts to collect and, where appropriate, to process data and information in a manner which facilitates its utilization by the other watercourse States to which it is communicated.

Article 10

Relationship between different kinds of uses

- 1. In the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses.
- 2. In the event of a conflict between uses of an international watercourse, it shall be resolved with reference to articles 5 to 7, with special regard being given to the requirements of vital human needs.

Part III - Planned measures.

Article 11 - Information concerning planned measures.

Article 12 - Notification concerning planned measures with possible adverse effects.

Article 13 - Period for reply to notification.

Article 14 - Obligations of the notifying State during the period for reply.

Article 15 - Reply to notification.

Article 16 - Absence of reply to notification.

Article 17 - Consultations and negotiations concerning planned measures.

Article 18 - Procedures in the absence of notification.

Article 19 - Urgent implementation of planned measures.

Part IV - Protection, preservation and management.

Article 20 - Protection and preservation of ecosystems.

Article 21 - Prevention, reduction and control of pollution

- (a) Setting joint water quality objectives and criteria;
- (b) Establishing techniques and practices to address pollution from point and non-point sources;
- (c) Establishing lists of substances the introduction of which into the waters of an international watercourse is to be prohibited, limited, investigated or monitored.

Article 22 - Prevent the introduction of alien or new species.

Article 23 - Protection and preservation of the marine environment, including estuaries.

Article 24 - Consultations concerning the management of an international watercourse, which may include the establishment of a joint management mechanism.

Article 25 – to respond to needs or opportunities for regulation of the river-flows, including the participation on an equitable basis in the construction and maintenance or defrayal of the costs of such regulation works.

Article 26 – to maintain and protect installations, facilities and other works related to an international watercourse.

Parte V - Harmful Conditions and emergency situations.

Article 27 - Prevention and mitigation of harmful conditions (flood or ice conditions, water-borne diseases, siltation, erosion, saltwater intrusion, drought or desertification).

Article 28 - Emergency situations (floods, the breaking up of ice, landslides or earthquakes, or industrial accidents).

Article 33° - Settlement of disputes.

The Parties to the Convention undertake to take all appropriate measures to prevent, control and reduce any trans-boundary impact.

- ensure that trans-boundary waters are managed in a rational, environment-friendly manner;
- ensure that trans-boundary waters are used in a reasonable and equitable way;
- ensure conservation and restoration of ecosystems.

Any action designed to deal with water pollution must attack the pollution at source.

Measures must not result directly or indirectly in a transfer of pollution to other parts of the environment.

Actions of the Parties to the Convention must be guided by the following principles:

- the precautionary principle: action to avoid the release of hazardous substances must not be postponed, despite the lack of a proven causal link between the substances and the trans-boundary impact;
- the polluter pays principle: the costs of pollution prevention, control and reduction measures must be borne by the polluter;
- water resources must be managed so that the needs of the present generation are met without compromising the ability of future generations to meet their own needs.

The Convention encourages cooperation among the Riparian Parties by means of bilateral and multilateral agreements for the introduction of harmonised policies, programmes and strategies to protect transboundary waters, including:

- ➤ To collect information and compile inventories on sources of pollution which have (or may have) trans-boundary impact;
- To set up joint monitoring programmes;
- To adopt emission limits for waste water;
- To establish warning procedures;
- To carry out environmental impact assessments;
- ➤ To evaluate the effectiveness of programmes dealing with this type of pollution.

The Riparian Parties must provide mutual assistance upon request should a critical situation arise.

The Parties to the Convention must cooperate on research and development activities regarding effective techniques for preventing, controlling and reducing trans-boundary impact (methods of evaluating the toxicity of hazardous substances, knowledge of the effects on the environment of polluting products, development of environment-friendly technologies or manufacturing methods, etc.)..

1991 Espoo Convention

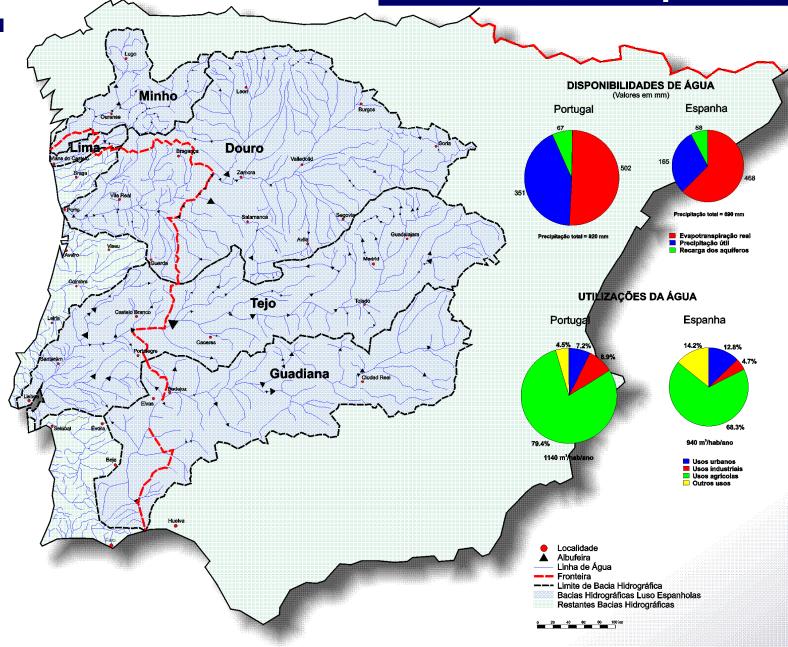
The Espoo (EIA) Convention sets out the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning.

It also lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries.

1991 Espoo Convention

- notification and consultation with affected parties;
- public participation;
- → a posteriori analysis and monitoring;
- implementation of integrated environmental management programs;
- → research programs;
- → mechanisms for conflict resolution.

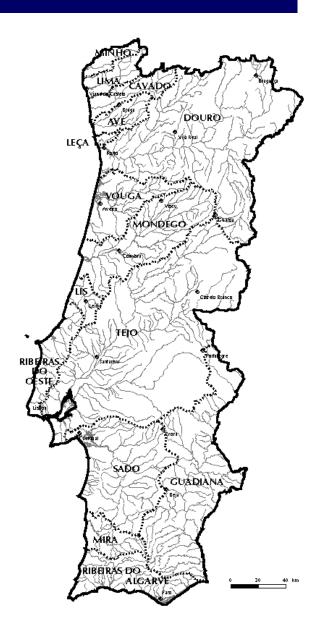
Portuguese-Spanish River Basins



WATER RESOURCES OF PORTUGAL AND SPAIN

	unidades	Espanha	Portugal	Total	Espanha	Portugal
Área	km2 milhões de	494 000	89 000	583 000	84,7%	15,3%
População	habitantes	36,8	9,4	46,225	79,7%	20,3%
Precipitação anual média	mm hm3	691 341 354	920 81 880	726 423 234	95,2%	126,7%
Evapotranspiração real	mm	468	502	473	98,9%	106,1%
Precipitação útil	mm hm3	223 110 162	418 37 202	253 147 364	88,2%	165,4%
Precipitação útil por hab.	m3/hab/ano	2 992	3 958	3 188	93,8%	124,1%
Recarga dos aquíferos	mm hm3	58 28 720	67 5 963	59 34 683	97,7%	112,6%
Recursos potenciais nacionais internacionais total	hm3 hm3 hm3	110 162 110 162	37 202 24 398 61 600	182 047	60,5%	20,4%
Recursos pot específicos Recursos potenciais por hab	mm m3/hab/ano	223 2 992	692 6 553	312 3 938	71,4% 76,0%	221,7% 166,4%
Recursos utilizáveis nacionais internacionais total	hm3 hm3 hm3	44 235 44 235	7 930 4 270 12 200	52 165	84,8%	15,2%
Recursos util específicos	mm	90	137	89		
Recursos utilizáveis por hab	m3/hab/ano	1 201	1 298	1 221	98,4%	106,3%

Agreements on Portuguese-Spanish Rivers



- → 1864 Treaty of Limits.
- → 1866 Rules for the use of the border reaches of the international rivers.
- → 1926 Convention of limits.
- → 1927 Convention to regulate the use of the International reach of river Douro.
- → 1964 Convention on the use of the International reach of river Douro and its tributaries.
- → 1968 Convention on the use of the International reaches of rivers Minho, Lima, Tagus, Guadiana and Chança and its tributaries

Reasons for the Convention

- The increased water consumption in Spain caused a significant decrease of flow rates (in some cases 50% decrease in the last 50 years).
- The regulation led to artificialization the flow regime with greater variation and, in general, lower flow rates in the dry season.
- The increase in wastewater discharges and reducing the flow of drought caused increased pollution – organic, nitrates, chemicals.
- Increased irrigation caused a marked increase in the salinity of flows.



- → Coordination of the environmental objectives:
 - ecological and chemical status for surface waters,
 - potential ecological and chemical status means for artificial or heavily modified water,
 - quantitative status and chemical status for groundwater



- → Coordination of specific objectives for water quality:
 - quality of water to produce drinking water,
 - bathing waters,
 - protection of habitats,
- coordination of programs of measures to achieve the objectives;
- coordination of plans for river basin management;

Water Framework Directive

- → coordination of water management authorities of the river basins;
- → harmonized monitoring of waters and aquatic ecosystems;
- → exchange of information on the status and about the uses of water;
- → mediation of the European Commission (on the issues of the application of Community law);
- → public participation.

- Exchange of information on the state of water, uses of water and water infrastructure.
- Assessment of transboundary impacts.
- Co-ordination of programs of measures for the protection of water and aquatic ecosystems, control and prevention of pollution, and ensuring the sustainable use of water.
- Coordination of programs of measures to prevent and control the effects of floods, droughts and pollution accidents.
- Establishes bodies for the implementation and development of the regime of the Convention.

- Preamble and 35 Articles.
- Appendix I: Exchange of information
- Annex II: Transboundary Impacts
- Additional Protocol: Interim river flows.
- Annex to the Additional Protocol: Basis of interim river flows.

- Part I: General Terms (Articles 1 to 4):
 - definitions, scope and objectives of the Convention and forms of cooperation.
- Part II: Cooperation (Articles 5 to 12):
 - Information exchange ,
 - public information,
 - transboundary environmental impact,
 - mechanisms for cooperation,
 - communication systems,
 - mechanisms for early warning and emergency situations,
 - safety of infrastructures.

- Part III: Protection and Sustainable Use of Water (Articles 13 to 16):
 - water quality,
 - prevention and control of pollution,
 - water uses,
 - flow rates.
- Part IV: Exceptional Situations (Articles 17 to 19):
 - incidents of accidental pollution
 - floods
 - drought and scarcity of resources.

- Part V: Institutional clauses (Articles 20 to 23):
 - cooperation bodies: the Conference of the Parties Commission for the implementation and development of the Convention.
- Part VI: Final clauses (Articles 24 to 35):
 - affected rights,
 - consultation mechanisms,
 - conflict resolution,
 - conventions on international rivers,
 - extinction of the Committee on international rivers,
 - force of the Convention,
 - denunciation of the Convention,
 - entry into force of the Convention.

International Water Law and the Portuguese-Spanish Convention on Shared River Basins (Albufeira Convention)

Thank you