Public Participation in River Basin Management in Spain

"Reflecting changes in external and self-created context"

This report has been produced as part of Workpackage 4 of the HarmoniCOP Project

Edited by

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from

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<td>CUADLL</td>
<td>The Delta of the Baix Llobregat Users Association</td>
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<tr>
<td>DGENV</td>
<td>Directorate General Environment of the EC</td>
</tr>
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<td>EC</td>
<td>European Commission</td>
</tr>
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<td>EIA</td>
<td>Environmental impact assessment</td>
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<td>ELAs</td>
<td>Local Water Entities</td>
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<td>ESF</td>
<td>European Social Fund</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>FENACORE</td>
<td>The national federation of irrigation associations</td>
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<td>GW</td>
<td>Groundwater</td>
</tr>
<tr>
<td>HCOP</td>
<td>Harmonicop Project</td>
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<td>IC tools</td>
<td>Information and Communication tools</td>
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<tr>
<td>LSC</td>
<td>Portuguese-Spanish Convention for shared basins</td>
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<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
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<tr>
<td>MIMAM</td>
<td>Ministry of Environment</td>
</tr>
<tr>
<td>MOPU</td>
<td>Ministry of Public Works and Town Planning</td>
</tr>
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<td>NGOs</td>
<td>Non Governmental Organisations</td>
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<td>Nilsa</td>
<td>Navarra of Local Infrastructures</td>
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<td>NWC</td>
<td>National Water Council</td>
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<td>PP</td>
<td>Public Participation</td>
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<td>PPP</td>
<td>Private Public Partnerships</td>
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<td>R&amp;D</td>
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<td>River Basin Plan</td>
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<td>RBWC</td>
<td>River Basin Water Council</td>
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<td>RD</td>
<td>Royal Decree</td>
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<tr>
<td>SEPRONA</td>
<td>Special Police for the Protection of Nature</td>
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<td>SL</td>
<td>Social Learning</td>
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<td>WFD</td>
<td>Water Framework Directive</td>
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<tr>
<td>WUA</td>
<td>Water Users Associations including the earlier irrigation associations</td>
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<td>WWT</td>
<td>Waste Water Treatment</td>
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0. Introduction to the report

This report presents a historical analysis of Public Participation (PP) and an analysis of present PP structures and practice in River Basin Management in Spain. The aim of this national report within the HarmoniCOP project (see inception report, E. Mostert, 2003) is to describe the national traditions and backgrounds as a basis for comparison. This will facilitate cross-country learning and support the organisation of PP in international basins.

The report aims to describe and explain what are the main factors that have affected changes in PP and stakeholders positions in River Basin planning and management (section 2.1). The report looks also into the present structure and level of participation in the formalised PP practices at national, regional and local level; traditional forms of water users participation; and some recent participatory experiences (section 2.3). Many of the later can find resemblance (in the methods, tools and goals) in experiences of participation in other fields (section 2.2). The influences on PP and the effects of PP on Social Learning, as well as the lessons in relation to the Water Framework Directive (WFD) and beyond, are the main focus of the last sections (sections 2.4 and 3).

Sections 2.1, and 2.2 of the report has been prepared on the basis of a literature review, interpreting historical and current analysis on River Basin Management and Institutional issues. Literature for the most not specifically focusing on PP since there is little specialised literature on this in Spain. The report also includes in 2.3 analyses of specific cases prepared on the basis of contributions or/and interviews with “protagonists”. Finally, the report draws extensively on the editors own experience (and that of the contributors) as participant observers of the last 20 years of development of Spanish water policy, institutions and practice.

The report is prepared, whenever possible, containing illustrations of the analysis and statements. In such a way as to make the report and the analysis “discussable”.

1. The Water Problems in Spain and their Evolution.

1.1 Country Profile

Spain is a country with 40.8 million people (2001). Its population today concentrates in coastal areas (in spite of attempts throughout history of repopulating mountain areas). Other main population axis are the capital city in the centre of the country, and the river valleys of the Ebro, the Guadiana and Guadalquivir.

Spain has 504.750 Km² and it is then the 3rd biggest country of Europe (15) after Germany and France. Spain has been able to build both on its Atlantic and Mediterranean “sides” for commerce and tourism although until the 1950’s could be considered mainly as an agricultural country. It has kept strong links with the Mediterranean and Latin American countries, throughout recent history.

1.2 Geography and Hydrology

There are some important characteristics of the geography of Spain and of its natural environment that is important to point out from the point of view of water management. It helps explain, in part, attitudes, public opinion and the perception of water problems today.

Some of the main characteristics of Spain include:

- The rainfall in the Atlantic area of Spain induces a wet North and North West and other humid areas near Gibraltar. At the same time it produces an arid climate in the Mediterranean area.
- Approximately 2/3 of Spain is mountainous. This is important for hydrological, sociological and environmental reasons. There are important differences in average rainfall in mountain areas and the plains and coastal areas nearby.
- In Mediterranean Spain most rivers are characterised by being short and torrential rivers (produced by irregularity of precipitation in arid and semi-arid climates both seasonal and inter-annual). Water reaches the sea at high speed (because of the difference in altimetry) and the fast and torrential character of the rivers have historically produced (as it is still the case in many countries of the Mediterranean) important flood damage to the population in the plains. There are flood ephemeral drainage water courses (Ramblas) in Mediterranean areas.
- The geological conformation of Spain makes all basins to bascule west. This means that most basins in the Mediterranean (except the Ebro) are shorter. Not only precipitation is low but also the surface area under the influence of main rivers is relatively smaller than otherwise.
- The geological nature of soils determines that the mountain range of the west are impermeable and hence the superficial runoff is higher. In the Levant (East/Mediterranean side) much of water filtrates to the aquifers and goes to the sea.
- The character of much of the soil in the Mediterranean area means that water tends to load with salts.
- Scarcely populated mountain areas are also the main reserve of biodiversity and natural environment because of combination of diversity of climates (Spain has 4 bio geographical regions: macaronesic, Mediterranean, Pyrenees and Atlantic) and level of naturalisation of many “empty/low population density” mountain areas. The result is that there are relatively untouched spaces a few Km away from most population centres. The “last remains” of natural environments of Africa in Europe can be found in Andalusia in the highly valued Doñana Natural Reserve.

Table 1: Comparative Table of Habitat and species in Spain (Habitat Directive).

<table>
<thead>
<tr>
<th></th>
<th>Habitats</th>
<th>Species of flora and Fauna</th>
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</thead>
<tbody>
<tr>
<td>EU</td>
<td>250</td>
<td>500 of Flora and 200 of fauna</td>
</tr>
<tr>
<td>Spain</td>
<td>120</td>
<td>264</td>
</tr>
</tbody>
</table>

Source: Red Natura 2000 en Aragón (DGA-Medio Ambiente)

Desertification is today a main environmental problem. The loss of groundcover occurs (due to natural erosion but also to human practices), especially during successive periods of droughts and floods (when ground cover gets washed away after lost vegetation during droughts). Rural abandonment is contributing to increased erosion with the abandonment of terraces in mountain areas and other agricultural practices that help retain groundcover. Depopulation is also contributing to loss of biodiversity reinforced by Sheppard’s abandonment of activity.¹

The result of this hydrological instability is that, under natural conditions, only about 8% of surface water is available at any time, (compared to an average of 40% in Europe as a whole), with some of the Mediterranean basins reaching figures as low as 0.5%. Temporal unevenness is coupled with strong spatial mismatches in the distribution of water compared to the distribution of human settlements. The Northern and Central basins, which include the three main rivers of the Iberian peninsula, Duero, Tajo, and Ebro, concentrate about 76% of water compared to 45% of the total population, whereas the Eastern and Southern sum 24% of water and 55% of the population.

1.3 Socio-economic Context

Water issues in Spain have always been important and have been subject of intense public attention and interventionist policies, particularly since the late 1880’s. It is important when analysing Spanish water policy, and the practices related to public participation to understand its evolution particularly since these are the result of more than a century of cumulative decisions and actions.

¹ “La despoblación rural amenaza la biodiversidad” in El Heraldo de Aragón, 28th of September 2002.
² “La despoblación, el principal problema ambiental” in El Heraldo de Aragón, 30th of September 2002.
Today the socio economic situation in relation to water use has greatly changed. The contribution of agriculture to gross value added is 3.5% and sustains 8% of the active population. The contribution of the 3.5 million Has of irrigated agriculture is, however, important because the mean productivity of irrigated areas is 7.3 times higher than non-irrigated areas, and irrigated land (about 15% of total agricultural land) generates more than 50% of the added value of agriculture and about 50% of employment. It is also important to consider that an important part of the industry (agro-industry) is closely dependent on agricultural production.

There are important differences within the country. Some of the less developed (classified as objective 1 by the EC) such as Andalucia and Extremadura are more dependent on agriculture. An important issue is also the importance of irrigation agriculture in the Mediterranean regions of Spain (specially the Valencia and Murcia regions and some of the coastal provinces of Andalucia- namely Almeria and Huelva- ). These have specialised in highly productive liberalised produce for the export market. Irrigation agriculture in these regions and provinces have developed on the basis of groundwater combined in some cases with surface water. It is in these areas also where main tourist activity concentrates (together with the Islands) and where it competes in the same seasons for water with the highly productive agriculture (both demands concentrate in the summer).

The Islands are a specific case where tourist development has been important in the past 20 years and where there is very low water availability. This has lead to the need to develop quite early on a system of desalination plants to substitute the transport of water by boat from the main land. Both the Balearic and the Canary Islands have developed earlier on by using mainly groundwater. The Canary Islands have a specific legal regime with private property of water and active water markets. “Water lords” are still powerful in the political and socio economic context of the Islands.

Table 2: Water availability and water use in Spain (1992) (in Hm³/year)

<p>| | |</p>
<table>
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<tbody>
<tr>
<td><strong>GROSS RESOURCES</strong></td>
<td></td>
</tr>
<tr>
<td>Precipitation</td>
<td>340,000</td>
</tr>
<tr>
<td>Evaporation</td>
<td>226,000</td>
</tr>
<tr>
<td><strong>AVAILABLE RESOURCES</strong></td>
<td></td>
</tr>
<tr>
<td>Natural regulation</td>
<td>9,000</td>
</tr>
<tr>
<td>Hydraulic regulation</td>
<td>38,000</td>
</tr>
<tr>
<td>Returns (mostly from irrigation)</td>
<td>8,000</td>
</tr>
<tr>
<td><strong>CONSUMPTIVE USES</strong></td>
<td></td>
</tr>
<tr>
<td>Irrigation</td>
<td>24,200</td>
</tr>
<tr>
<td>Industrial</td>
<td>1,900</td>
</tr>
<tr>
<td>Domestic</td>
<td>4,300</td>
</tr>
<tr>
<td><strong>NON-CONSUMPTIVE USES</strong></td>
<td></td>
</tr>
<tr>
<td>Hydroelectric power</td>
<td>16,000</td>
</tr>
<tr>
<td>Refrigeration, instream</td>
<td>6,600</td>
</tr>
<tr>
<td>flows and others</td>
<td></td>
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</tbody>
</table>

Source: National Water Plan (1993)

Today Spain is mainly specialised in the tertiary sector with an important industry. This has influenced the pattern and the type of pollution/emissions. The main pollution points being the main cities and the industrial areas of Catalonia, Basque Country, Ebro Valley and Madrid. Industry located upstream such as Madrid, Zaragoza, Cordoba has the most important impacts for downstream users, whiles industry in coastal areas have important local impacts and on the coastal and marine habitats. Much of the freshwater resources are still tapped from high quality sources in the nearby mountain areas that “de facto” have been and now need to be protected as drinking water sources. This is not a marginal issue and has become important for extensive areas such as the Pyrenees and other mountainous systems. Most of them are subject today to protection.

Overall economic development has brought about increase level of disposable income that is, by no means, even in all parts of the territory. There are important differences between the North and the South and between the coast and the interior, between functioning economic system well integrated with the external markets and isolated areas with marginal activities. For the most, however, rural societies are not closed societies and often have linkages to the other areas or economic activities. Increasingly rural
workers are part time workers who combine with other activities (tourist activities) that bring an important part of their income. Otherwise the aging and the “masculinisation” of the rural areas is a reality especially in mountain areas. The protection of these areas through environmental legislation has tried to preserve and promote the traditional production systems but this is proving to be insufficient to insure an adequate standard of life, particularly for the young.

1.4 River Basin Management

River Basin organisations

River Basin Authorities were created from 1926 (with the predecessor being the River Basin Technical Offices created in 1903). Today there are 9 River Basin Authorities for the main interregional basins; 3 intra-regional water authorities for small rivers in Catalonia, Basque Country and Galicia; and 2 Island Water Authorities in the Balearic and the Canary Islands.

Map 1: Spanish River Basins

It was in the Ebro and the Segura River Basins where the first river Basin Authorities were created (1929 and 1931 respectively) with the view of planned and integrated development of water resources to control risks, warranty water for the population all year around and with economic development objectives in mind.

The idea that water should not be a limitation to development but rather a key contribution to it has been paramount in the last 100 years. The model has been highly successful in economic terms and development of agriculture, tourism, industry and cities have taken place taking advantage of
comparative advantages such as climate, proximity to markets, availability of labour force (at a reasonable price) without considerations of water as a limiting factor.

Water use rights of water made available with new infrastructures were allocated to water users in designated irrigation areas, to cities and industrial users. The administrative responsibilities lay with the provincial governors and later with the River Basin Authorities when these became Autonomous Organisations of Central Government (1958). This system has cohabited together with previously existing historic water rights (of naturally available water) and the “de facto” private development and use of groundwater resources until 1985.

It is important to point out that “organised” water management dates back to much earlier dates. During the Arab kings ruling in Spain (from the 8th to the 15th century) many water associations were formed to develop and manage irrigation districts. During this time it has developed the system of “azudes” (small diversions of water from rives) and “azarbes” (drainage system from fields insuring water returned to the water channels –acequias- and fed downstream farms- wastewater reuse in today’s terms) that still are an important part of the water irrigation districts in the south and Mediterranean Spain. The important role of local collective organisations in water management developed then and was to determine, to an important extent, the type and character of the role of “users” in water management at River Basin scale (see section 2.1).

The responsibilities of the River Basin Authorities today include water resources planning, water resources development and the management of the water use rights and emission rights system, including the monitoring and control of water quality and water resources (surface and groundwater). The earlier water resources development, “reason d´entre” of the RBA’s in Spain (see section 2.1.3), have given way to a much more complex set of responsibilities and a greater role of integrated planning (surface and ground water, quantity and quality) and of management and control. The importance of earlier functions (and their impact in the transformation of the country) still remain and are reflected in the character and functions of the RBA’s where the “investment” activity and budget (the most important) still structures many activities.

Central Government keeps strong control of the RBAs through the investments that are funded mainly by the Directorate of Waterworks and Water Quality in the Ministry of Environment. Since 1994 Cohesion funding have also been a main source of financing of the investments of Basin Authorities.

In the case of groundwater the 1879 Water Law did not declare it “public domain” because then it had little development, abstraction technology was still primitive and use relatively limited. This has changed and use of groundwater has expanded considerably. Since the 1985 water law groundwater is also public domain with a transitory schedule for registration and obtaining water use “property deeds” by previous water users. Public perceptions over the right to use groundwater are still “fuzzy” and recent regulations difficult to apply, hence the existence still of unregistered wells and/or illegal wells.

Box 1: The 1985 provisions regarding groundwater

| - The 1985 Water Law regulated the use of groundwater (previously unregulated) and gave groundwater a similar status as that which surface water has had had since the water law of 1879. Groundwater became public domain allowing for a transitory period of 75 years. Before 1985 the use of groundwater was mainly an individual decision by land owners. |
| - Before 1985 the lack of regulation of groundwater meant that the administration kept mainly a monitoring role since it did not have powers to intervene. In 1985 the Law gave powers to the Basin Authorities to intervene in aquifers declared over exploited. |

River Basin Planning

The 1985 Water Law establishes the need to prepare RB plans. The current RB plans were approved by Royal Decree. The regulations on water planning established that the elaboration of plans should be done in two phases: a first phase for establishing guidelines and a second phase of plan preparation. The preparation of guidelines is also the phase for information and data collection. The Guidelines have to include: The description and evaluation of the situation and the main water (hydrological) problems; and
the proposal of Guidelines including the main decisions that need to be considered for the preparation of the plan.

The Basin plans are constituted by 5 documents: technical memorandum and annexes; regulations; programs and studies; catalogue of basic infrastructures; economic valuation and financing plan. They include the actions that need to be taken in the next 20 years which are reviewed every 8 years. The WFD has changed substantially the objectives and the contents of the River Basin Plans as well as the set procedure for the work program and co-operation with other administrations (and stakeholders).

In addition to the RB plans there have been National Water Plans. The most influential have been the so called “Gasset plan” of 1902 and the National Plan of Hydraulic Works of 1933. The former was implementing J. Costa’s ideas (see section 2.1.3) and was supplemented with the Aids Law (Ley de Auxilios) of 1911, setting the basis for much of the water policies of the 20th century. The later drafted by Prieto and Lorenzo Pardo included much of the infrastructure proposals that have been implemented during the second half of the 20th century. In 2001 it was approved the current National Hydrological Plan.

Public Perceptions

Because of the long history of river basin management and planning in Spain, that survived through the civil war, during the dictatorship and the restructuring of the political system of the country after 1976 (from a highly centralised state to a quasi federal state with a continuously increasing role of the regions), the river basins as physical and management entities are well established in peoples perceptions. Because of long and well established government role in basin management and water resources development and planning, there is also a well established public perception that water is a state property (nobody’s and everybody’s de facto). There are exceptions to this, mainly in the “Levante” and in relation to groundwater. In the first case, because prior appropriation rights were legalised obtained by the then kings decrees dating back as the 12th century and passed from father to son. In the later because groundwater was private property until the Water Law of 1986.

The strong and successful public role of water resources development in the last 100 years have influenced public perceptions about water and water management in important ways:

1.- Water management and the provision of water in enough quantity and adequate quality is perceived to be a public obligation. Industry, urban areas and irrigation districts all have the “right” to as much water as needed, when needed.

2.- Water scarcity can be removed through technical means and should no longer be a consideration. This is particularly an issue in a country that had developed in the past sophisticated systems to deal with limited supplies and where scarcity management was an important part of the water culture.

3.- Water is then not a limiting factor for development since it could and will be made available wherever it is needed.

The combination of these widely held perceptions and the fact that the impact of water infrastructures were concentrated in a few (that were compensated) while has benefited many, explain to some extent, how in a water scarce country rivers in cities could have been used as dumps –everybody's and nobody's- (situation that has changed today); how in places water is still poorly used or loss in the system, etc..

In spite of this strongly held public perceptions that are still there today (because of the success of public water management policies) there are important changes in public perceptions that are affecting public policy. There is an increased interest and increased valuation of the natural assets in mountain areas. The perception today is that the marginal impact of new water infrastructures may destroy important and increasingly scarce natural habitats (this was not the case in the earlier stages of water mobilisation policy). With increased income the valuation of non-market assets also increases and this seems to have
happened in Spain. Whereas the earlier perception was that water infrastructures only affected a few (those that got displaced) and benefited many, the perception today is that they often affect many valuable assets and natural habitats that are worth conserving and benefit many.

There is also an increased public perception of the importance of individual and local bottom-up actions in water management and that the responsibility for improved water management may not lie alone in the big operations directly carried out by the state (see section 2.3.6).

Institutional framework

According to the existing legislation (Water Law 1985 and regulations) the main institutional organisation of water management include:

- The Directorate of WaterWorks and Water Quality of the Secretary of State of Water and Coasts in the Ministry of Environment.
- The National Water Council: it is the highest advisory body ascribed to the Ministry of Environment. Its composition is regulated by the Royal Decree 927/1988 by which the RAPA was approved. The latest modification took place in the RD 2068/1996.
- The RBAs are independent public authorities dependent on the Directorate of Water Works and Water Quality and have functional autonomy but are subject to contractual requirements of public organisations. There are Regional water organisations in those river basins lying entirely in one region.
- The Basin Water Councils: it is the planning advisory body of the Basin Authorities.

Other organisation that assume roles in Water Management at central level include:

- SEPRONA: The specialised service of the Civil Guards (National Police) for the protection of the Environment. They investigate and prosecute polluters and other infractions of the water law and report to the RBAs for administrative infractions or to the judges for ecological crimes.
- Directorate General of Planning and Rural Development of the Ministry of Agriculture and other Departments.
- The National Geographical Institute.
- The Technological Institute of geo-mining of Spain
- The Centre for Hydrographical studies and Tragsatec (technical public organisations providing technical advice on water issues and agriculture).

Other organisations

- Water users associations and irrigation associations
- Public, Private or PPP specialised organisations providing urban water services.
- Municipalities providing water services directly (water distribution and sanitation services) or through groupings of municipalities (*mancomunidades*).

The *municipalities* have exclusive responsibilities for the provision of *water and wastewater services* to the citizens but also in the preparation and approval of the urban development plans. The progressive decentralisation of Government since the approval of the 1978 Constitution has meant an increasing role also of the regions in water management with the creation of *regional water agencies* in the basins lying entirely in one region. More importantly, however, is the region’s increased exclusive responsibilities on issues such as *environmental policy and protection, agriculture, fisheries, and coastal management* that are directly linked to water management and planning at River Basin scale. The important role of municipalities and regions mean that there is an increased need for coordinated planning and action with RBAs, central government departments and with regional and local stakeholders.
Map 2: Spanish Autonomous Communities
<table>
<thead>
<tr>
<th>Issue</th>
<th>RBA</th>
<th>Regional Governments</th>
<th>Local Governments/Other Local organizations</th>
<th>Ministry of Environment</th>
<th>Ministry of Agriculture</th>
<th>Ministry of Health/Regional Department of Health</th>
<th>Other Ministries</th>
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<tr>
<td>Water use permits (surface and GW)</td>
<td>Constituional responsibilities where in interregional basins Water is public domain</td>
<td>In “internal regional rivers” and where there is delegated responsibilities from the RBA</td>
<td>Discharge authorizations to urban sewage systems Water service contracts with individual Consumers</td>
<td>Water Directorate</td>
<td></td>
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<td>Research and Advice to RBAs, Regional Governments and Central Government by the Geological and Mining Institute of the Ministry of Science and Technology:</td>
</tr>
<tr>
<td>Dam construction</td>
<td>Build and manage Now also shared with “RB companies”</td>
<td>In specific cases</td>
<td>Water Directorate: Main funding (with part EU funding)</td>
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<tr>
<td>Environmental actions and impacts Natural Parks Biodiversity</td>
<td>Development of norms (according to basic legislation), Main legal responsibilities Implementation Funding</td>
<td></td>
<td>Basic legislation EIA Nature Directorate</td>
<td></td>
<td></td>
<td>Special Nature Police (SEPRONA) depending on the Ministry f Interior</td>
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<tr>
<td>Forestation Changes and protection of river banks</td>
<td>Planning and implementation Permits. Control limits of publicdomin</td>
<td>Forestation Plans and Implementation</td>
<td>National Forestation plans Funding</td>
<td></td>
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<tr>
<td>Agricultural water use/irrigation Agriculture pollution</td>
<td>Main water transportation infrastructure to irrigation areas</td>
<td>Exclusive responsibility. Department of Agriculture Funding farmers efficiency improvements Control diffuse pollution sources</td>
<td>Irrigation associations with delegated management from RBAs</td>
<td></td>
<td></td>
<td>Interventions declared of general interest or of interregional character Funding Quality of food</td>
<td></td>
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<tr>
<td>Livestock</td>
<td>Exclusive responsibility</td>
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<td>Interventions declared of general interest Funding Quality of food</td>
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<tr>
<td>Fisheries</td>
<td>Exclusive responsibility in continental fishing</td>
<td></td>
<td>Statistics in continental fishing Quality of Food</td>
<td></td>
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<td>Health controls</td>
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<tr>
<td><strong>Industrial water use</strong></td>
<td>Discharge authorizations</td>
<td>Regional Development Programs and R&amp;D support</td>
<td>Location permits for industrial areas development and Delivery of WWT services and charges</td>
<td>Program for the clean up of derelict sites</td>
<td>Health issues</td>
<td>Support of R&amp;D and industrial restructuring programs</td>
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<tr>
<td><strong>Land use planning and control</strong></td>
<td>Approval of local urban plans and development of regional special strategies. Oversight of building permits and other legal requirements</td>
<td>Responsibility in the development of Local Plans and management of building permits</td>
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<td>Statistics</td>
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<tr>
<td><strong>Housing</strong></td>
<td>Authorizations (and charges) of use of water domain.</td>
<td>Responsibility of regional Departments</td>
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<tr>
<td><strong>Tourism Recreation</strong></td>
<td>Building of Wastewater Treatment Plants and charges</td>
<td>Municipal Responsibilities (direct delivery or through companies) Solid Waste installations</td>
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<tr>
<td><strong>Urban Water services and Diffuse pollution</strong></td>
<td>Regional Governments responsibility</td>
<td>National &quot;fight against Desertification Strategy&quot;</td>
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<tr>
<td><strong>Soil erosion Soil quality</strong></td>
<td>Issue permits and charges for the use of the public domain</td>
<td>Legal, implementation and permits related to energy installations affecting one region</td>
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<tr>
<td><strong>Hydroelectricity</strong></td>
<td>Building and maintenance of flood prevention infrastructures</td>
<td>Interventions of regional character</td>
<td>Interventions of Local character</td>
<td>Flood control security Funds compensation of damages</td>
<td>Health issues</td>
<td>Ministry of Interior</td>
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<tr>
<td><strong>Flood management Civil protection</strong></td>
<td>Monitorings of discharge and Fines and penalties</td>
<td>Inspections of discharges</td>
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Source: Fanlo Loras (1995) and own elaboration
2. Public Participation

2.1 History and Institutional Background of PP in River Basin Management

2.1.1 Introduction

This section studies different sequential “models” of water management in Spain in order to gain insights into PP today and the positions and problem frames of the different stakeholders. The five main ones are:

- The liberal 19th century model
- The state led modernist post colonial model
- The state led post civil war and autocracy model
- The democratisation and decentralisation model
- The mercantilisation model.

The history of water management in Spain is well documented in many sources. Some focus on general policies, and some on the history of specific organizations (Canal de Isabel II) or technical artefacts or decisions. Many of them have emphasized the close link between conceptions of development, technical progress, and political events with the way problems were framed, understood and acted upon. Those more valuable studies for this report that look into the institutional and legal set up, rarely have a explicit main focus on PP, or on stakeholder analysis. The account presented below draws particularly on the work of Fernandez Clemente (2000); Fanlo Loras (1995); Swyngedouw (1999); and Bakker (2002).

2.1.2 Early PP in Water Management and its Consolidation in the 19th Century Liberal Period.

The WUA as a model of delegated public management

Water users associations (WUA) were created early in Spain where irrigation farmers grouped together to manage collective irrigation systems, build small dams, divert water from rivers; transport it; extract water from wells and create the distribution and drainage system of farms to allow water to be used and reused by other farmers. During the Arab rule in Spain the system of azudes, azarbes and acequias, and the localised irrigation of gardens, that still remain in much of the south east of Spain, was created. The water users associations have been traced to the even earlier occupation of Spain by the Romans. Water irrigations associations are regulated by norms that date back to Roman and Arab times. Other organisations created at the time included syndicates, boards, and guilds. WUAs had an administration system to manage and distribute water for irrigation. The distribution norms were ruled by custom passed verbally from father to child. Some of their organizational components, such as the Valencia Jury, is more than 1000 years old. The existing associations experience served as a model in the 1866 and 1879 Water Laws to regulate irrigation associations. It obliged all collective water users to form associations if they were to receive public waters (Andres del Campo, 2000). These organisations later on were to be subsumed and incorporated into the formal River Basin Authorities (see section 2.3.4) and their role remains most important as a model of delegated public management.

“The Irrigation association of Urdan with 1,200 farmers associated and 6,500 Has of irrigation have had, since at least the XII century, rights to use water from rivers such as the “Gallego” (Fernandez Clemente, 2001) …. During medieval times the Arab and Christian engineers organised irrigation systems such as that of the Palancia, Turia and Jucar and others of the Levante. The channels of the Alquibia and Aljufia in the Segura in Murcia were inherited from Medieval organisations and have been maintained and widened in later centuries” (Perez Picazo 1985 and Lemeunier 1990)
Context of micro private initiatives by users

Micro private infrastructure initiatives were dominant, both for water supply to urban areas and for productive uses. Irrigation farming was still limited with the dominant model being farming based on dry land, including extensive farming (in the south) as part of large estates relaying on protectionist policies. The existence of seigniorial rights over water reflected a system of prior appropriation legitimised by government (i.e. Royal) decisions. In addition to the private initiatives, the crown intervened deciding on water rights where there were increasing conflicts and pressures over limited resources. The crown also intervened by building infrastructures in a series of emblematic cases that served as models of the potential from re-scaling water interventions.

“To the old culture of irrigation with the old canals with water diverted from the Ebro river were added the canals diverting water from the XVIII century Imperial Canal of Aragon. This Royal initiative consists of 96 Km with a capacity of 25-30 M3/seg. It irrigated an area of 28,000 Has. This together with the Tauste Canal of 44.5 Km and 9m3 irrigated an area of 9,000 Has”…. “The Imperial Channel and the Llobregat Channel in Catalonia were built with private concessions for 99 years after which the property returned to the state. Also the Channel of Castilla” (Fernandez Clemente, 2000).

The new role of the state resulting from making all surface water public domain. Responding to perceived problems of the system of feudal seigniorial water property

The liberal revolution from 1811 to 1873 made all surface water “public domain” or “depatrimonialised water” which had previously been ruled by seigniorial feudal rights. The 1879 Water Law and the 1883 Irrigation Law set “the basic principles for the rational use of water declaring the rivers as public domain”. The previous system was considered to have prevented capitalist forms of ownership and circulation of goods as commodities.

The new legal system also acknowledged the role of previously existing water users associations and private companies in water management.

“at the same time as there needed to be public decisions of collective water use, there had to be a decentralised and participated service delivery” (Benet 1984 and Perez-Perez 1981).

The liberals attempted to facilitate the possibilities which would be opened if water was treated as a tradable good. The political and economic crisis of liberalism prevented the embarking on a productivist and privately run programme to maximize production (Fernandez Clemente 2001, Swyngedouw, 1999). In the 1860’s and 1870’s critiques multiplied because, although there was agreement about the role of irrigation in improving competitiveness of agriculture and national wealth (Maluquer 1983), only a few infrastructures had been built privately and companies were finding financial difficulties because of the low return on investments in irrigation agriculture with long term amortization periods.

“By 1900 the private initiative had “only” developed in Valencia with many small “acequias” (water channels) but together this conformed a wide and complex networks that was improved in the second part of the 1800s” (Villanueva 1991, Fernandez Clemente 2000).

2.1.3 PP in the Early 20th Century Post Colonial Period

Participation as PPP

Public Participation in the post-colonial period had a role in the project of regeneration of the country when major water infrastructures were seen as the instrument for modernisation. The model of Public Participation that developed in the post colonial period was de facto a “Public Private Partnership” model in which the users (and economic and social interests associations) participated with the state in the construction of infrastructures and their management. In the liberal period, private initiative constructed water infrastructures with concessions for 99 years (after which property reverted to the
state. In this period users participated in co-funding of the infrastructures with the state and were also granted “concessions” (now in the form of water use rights) for water use in exchange. The role of users and other interests and the way they participated changed through this period. These changes were influenced by the institutional changes and the way the state framed its role in resource development/mobilisation as an instrument of modernisation, and increasingly mixed with social objectives.

Problem framing in a context of perceived economic and social crisis. Problem solving as a “revolutionary” modernisation project of the country through internal colonisation and up-scaling of interventions

The shift from a privately (individual/feudal) dominated model of water management to a clearly state led model (with user participation) with a dual state promotion and regulatory role was a response to the economic and political context of Spain at the end of the 19th century. In Spain the situation was of mounting economic and social crisis with the loss of the war and the last colonies (Cuba and the Philippines). It was a time of economic brake up and its associated social tensions in an a largely feudal social order (Swyngedouw, 1999).

“The effects of an increasingly liberalised international trade, combined with the loss of the last Spanish colonies, led to disastrous socio-economic conditions and rapidly rising social conflicts along a myriad of ruptures and intensified already sharp social tensions in the countryside” (Garrabou, 1986).

The “regeneracionists” considered that large scale water resource development would allow to modernize agriculture (given the difficulties in the 18th century of land reform), promote growth, and move towards social (and cultural) reform (the solution to all perceived problems). The reform (according to J. Costa) would require a shift from concentrating national resources in maintaining (and exploiting) the colonies to an effort of internal conquest of national resources (through increasing productivity of agriculture and later through ’internal colonial’ settlements).

The regenerationists/modernist logic considered “the need to tame nature”, in order to bring water supply where it was needed, warranty water, correct unbalances and improve health standards both in the cities and in “marshy insalubrious areas”. There were solutions available and the new technical knowledge could make the necessary change possible, transforming the natural resources to develop the country. This was perceived as an alternative to the traditional policy of tariffs and import restrictions, supported by dryland “latifundistas” (Fernandez Clemente 2001, Swyngedouw, 1999).

“It was a time of economic brake up and its associated social tensions in an a largely feudal social order (Swyngedouw, 1999).”

While imperial countries pursued strategies of external spatial solutions, Spain was forced to revolutionise its internal geography and to produce new geographical configurations if it was to keep up with its expansionist northern European rivals. This programme of revolutionising Spain's geography, and the production of a new space, embodied physical, social, cultural, moral and aesthetic elements; fused around the then dominant and almost hegemonic ideology of national development, revival and progress” (Swyngedouw, 1999).

It is important to note that this vision was deeply influential all through the 20th Century because the regenerationists created a “collective illusion”, a project of the country that will permit the dismantling of backward economic (social, cultural and moral) order. It was a project around which many diverse interests, and ideologies could group. It was, then, a revolutionary project where the new liberal bourgeoisie aspired to transform a society with “parasitic” dependence on the Colonies.

The new interventionist state role

This large scale transformation required state intervention because private initiative alone was unable to implement this vision. Still it had to be implemented, considering (as the liberals of the 19th century) the principles of capitalist profitability and integration into the international modern European capitalists markets (Fernandez Clemente 2001).

The modernist logic was revolutionary because it challenged the established traditional agricultural elites and the “economic order” since to bring about the necessary improvements in productivity in agriculture
was, by implication, challenging the existing regime of big landowners (latifundistas) with low productivity holdings. The success of the modernisation of agriculture would have required land reform. With water being public domain and with massive infrastructure development this would induce the necessary reforms in agriculture and increased productivity without directly challenging the feudal property regimen (Swyngedouw, 1999).

The acceptance of the new state role was not easy and found many opponents (not least because of the financial effort it entailed). It was also creating new constituencies:

“Vicuña, was for the total abstention of the state in public works.. the “great battle” had taken place in the agrarian committee of the high Aragon in 1892... Canovas considered that the railways have used up all the budget and the irrigation investments do not resolve hardly anything... irrigation is only of interest for the private land owners –not for the state-“ (Parliament session, cited in Fernandez Clemente 2001).

“In the National Assembly of Producers aiming at a new political party it was agreed the general public interest of increasing as much as possible the irrigated surface in the peninsula; the state responsibility was constructing a national plan for irrigation channels” (Fernandez Clemente 2001).

The state role in the transformation and modernisation of the country through the “hydraulic solution” as a means of economic and social reform, was to focus mainly on creating a modern competitive export oriented agriculture (productivist logic) focusing on transforming those areas where activities would have positive economic returns. The state needed to intervene because private initiative was unable to bring about the necessary scale of intervention and state intervention was necessary because it was of national interest to increase national wealth.

“J. Costa considered that irrigation would not be for cereals because they do not have adequate returns and do not justify state intervention. Part of the technical, solution was also to establish agronomic centres to help dry agriculture farmers to become horticultural producers. In the Ebro River Basin 8 more were added to the one in Zaragoza and the agronomic, topographic, geological and meteorological studies multiply, putting science to the service of the modernist vision. More machinery and fertilisers were also required”. (Fernandez Clemente, 2000).

Social arguments justifying state intervention were to be incorporated gradually and were most important both in the post civil war and the first democratic governments.

The organisations created for implementing the new vision based on lessons of existing models. The promotion of organised stakeholders and the basin approach.

The modernist paradigm needed to create it own organisations to implement and manage this project of structural transformation of the country. The River Basin organizations were conceived from the start on the basis for integrating/associating existing economic interests (The River Basin Confederations were originally named the Syndicate Confederations). An organisation which would serve to implement interventions at a different scale. A necessary shift in scale in two ways: from local to the river basin scale since the new dams needed to be considered at a basin scale; and from small scale interventions to big scale interventions. The interventions needed to incorporate the “local” interests (comarca) together with those that represent the “general interest”: banking and economic associations, and the delegations of the Ministry of Development.

Their organisational form was based on the model of the “Central Syndicates” created with the Law of 1879 which promoted the creation of compulsory industrial and commercial associations in specific sectors (given the lack of general regulation). As pointed out by Fanlo Loras (1995), The River Basin organisations were a novelty, but one that had clear resemblance to already tested experiences inside and outside the water domain. The model of self governance by users was also not only to be found in the irrigation associations (WUA) but also in the Board of Ports of 1880, the Board of the Imperial Channel of Aragon (1873); the Board of Management of the Isabel II Channel (1851); the Boards for the administration of mixed funds of the 1903 and the 1911 Laws that warranted the participation of co-beneficiaries in the funding of infrastructures; the Boards of infrastructure and the social Board of the Irrigation System of the High Aragon. These administrative experiences that articulated the cooperation of the state (more interventionist now in economic affairs) and users were important as models for the
new River Basin organisations. This model of users-state cooperative arrangements was widely incorporated in other sectors at the same time. Namely: roads, railways, water and ports (Fanlo Loras 1995).

The integrative model of intervention at River Basin scale was building not only on general models of institutional and collaborative management with users but also on previous experience of water management at river basin scale. This included the experience of the “technical” Basin Divisions (1903) with responsibilities of reporting “technically” to the provincial governors, on new concessions.

Examples to build on were also some bigger scale interventions that provided lessons on the potential of higher scale integrated actions:

“The consequence of the First Congress of Irrigation (1913) was the approval of the Plan for irrigation of the High Aragon that was to achieve 300,000 new irrigated Has (25% of the total irrigated in Spain in 1915). Several public works were planned in an integrated manner in Huesca and Zaragoza that required a colonization effort and the promotion of new farmers associations” (Fanlo Loras, 1995).

“Gasset is designated as Minister of Agriculture in 1900 and 9 more times after this. Gasset reorganises the Hydrological Services and prepares the National Plan for Hydraulic Works approved in 1902. The plan considers the construction of 296 infrastructures to irrigate 1.5 million Has, half of which would be in the Guadiana and Ebro. The modification of the plan in 1909, 1916 and 1919 made it more realistic and more directed to areas where the investments could be more rational” (Fernandez Clemente 2000).

Resolving tensions and defining the role of users in the new water management model

There were at least four sets of “tensions” to deal with in the process of implementation of the new organisations:

- The “tensions” between those that considered that interventions should be in the most viable profitable areas (linked to the Regeneracionists ideas of progress through improvements in productivity) and those supporting social projects (such as those of the High Aragon of 1915 that was still being implemented in 1995 and debated as to whether it “makes sense” to irrigate bare lands such as the “Monegros”).

- There were/are also “tensions” pointed out by several authors (Fanlo Loras, 1995) between the administrative and the participatory management models (bureaucratic vs participatory). The administrative concessions for water were at the time part of the provincial Governors responsibility and the question has continued as to whether regulatory administrative functions should be separated from participating users decisions on resource development.

- There were also tensions between the bureaucratic and technical perceptions debating that “all services at river basin level should be integrated in one organisation” to be able to make better decisions and use resources better.

- The problems related to obtaining support from the state budget at a time of scarce financial resources of the broken down central government at the turn of the century.

The financial basis for the new organisation was facilitated by agreements to maintain the existing level of financial effort, considering that eventually these funds would be returned through users’ contributions:

“the contribution of the State was kept at the same level as before (same level of investment) and it was agreed that the state would warrant the debt issued by the River Basin Syndicates to finance the public works until the “contributions” of the users were forthcoming, once the infrastructures were operating. This was necessary given the long amortization periods for infrastructures built for farmers” (Fernandez Clemente 2000).

The tensions between the bureaucratic and the participative models were dealt with by keeping the functions separated, hence allowing for a strong role of users in the new organisations as co-founders,
co-financers and co-decision makers. The solution was creating the RBAs as autonomous public bodies “compatible” with the provincial authorities who kept the responsibilities for administering existing water concessions/rights.

The RB organisations were initially conceived as “different” from the state, even if the state finances them, participates in their decision-making and exerts an important tutelage and control over the activities of the RB organisations (then Syndicates associations). The RB organisations could be created by decision of the public administration or of 70% of the agriculture or industrial “wealth” affected by the River and its main tributaries (other users affected in the secondary tributaries could also ask to join in) (Fanlo Loras 1995). The River Basin organisations were also given some role in water administration decisions such as issuing a prior report on new concessions; being able to compulsory purchase, and to decide on delimitation of public domain; policing river courses; establishing taxes; resolution of conflicts; authorizations of temporary diversions; and issuing permits for new wells (Fanlo Loras 1995). In its foundation moment there were the RBAs of the Ebro, Segura (1926) Duero and Guadalquivir (1927) and Eastern Pyrenees (1929).

The initial governance structure of the River Basin organisations (1926-1930) was formed by the Assembly (with representatives of the different types of users, state and official institutions and other commercial interests); the Governing Board which was the executive board of the assembly and two functional executive committees: “infrastructure building” and “exploitation”. There were representatives of the crown: the Royal delegate (with veto power) and the Technical Director. In the case of the Ebro there were also the “social boards” of construction and building (because of social aims of some of the projects).

The Assembly of the Syndicate Confederation of the Ebro River was like a big share society with 121 members (representing associations and corporations). The assembly also incorporated affected parties not directly benefited by infrastructures (workers, property owners, displaced by infrastructures) (Fernandez Clemente 2000).

The outcomes

The RBAs were tremendously efficient in the delivery of their intended outcomes, namely the preparation of integrated River Basin Plans (that had never been produced before at a basin scale) and the building and management of collective infrastructures. The RBA of the Ebro built in 4 years after its creation the same as in the previous 25 years.

Only between 1902 and 1926 the state had spent in Aragon 162 million pts and had only done one dam to irrigate 16,000 Has. With the same amount (166 Million) and in 5 years the Ebro Syndicate confederation had improved 175,000 Has, 125,000 of which were new irrigated land. In the Guadalquivir River Basin organisation (1927) the assembly approved two years later the basin plan to irrigate 122,750 Has (Fernandez Clemente 2000).

Given their efficiency in 1929 they took over many of the responsibilities of the Technical Basin Hydraulic Divisions. The creation of the River Basin organisations had “internal” spin off effects because it led to the creation of specialised technical services (meteorology, hydrology); economic services (economic and social management of irrigation areas) and others (reforestation for protection of dams, and sanitary care of the rural population). It also had “external” spin offs with the preparation of an economic development plan for the Ebro River Basin incorporating the prior partial disjointed efforts. A predecessor (on the river basin scale) of later development planning in the post civil war phase and of current spatial plans and regional development plans.

“Lorenzo Pardo considered that it was possible to move from the 230000 irrigated Has (+200000 without warranty) irrigated in 1926 up to 691,842 Has. This would help Zaragoza to go from 150000 people to 500000 people and the region to grow from 1 to 3 million inhabitants. The plan was a complex mix of population development, industries (duplicate energy production) and agricultural and forest development (to Half a million Has) with engineering technology facilitating the regulation of 3000 Million M³” (Fernandez Clemente, 2000).

The National Irrigation Congresses started to be organised every two years from 1915 and successively in 1918, 1921, 1927 and 1934 before the civil war. They happened in spite of the different regimes.
(monarchy, dictatorship, republic) with the support of the Ministry of Development and become according to Fernandez Clemente an important organised pressure group with a pragmatic agenda.

The RBAs and their agenda generated impressive popular support and there was a clear proctative approach of communicating the advantages of the new model:

“The announcement and creation of the RBA of the Ebro generated impressive popular reaction with rising expectations. There were local assemblies, propaganda talks, articles trying to explain the reasons for a Basin Confederation created by the users to defend not only their interest but mostly to multiply the possibilities of development and create wealth. Based on the principle or socialisation and decentralisation of services, although under the tutelage and the monitoring of the State and Financial Control (Jury of Accounts)” (Fernandez Clemente, 2000).

Financial and political troubles. Perceptions of too much power and users control. Main feedback to context

By 1930 the River Basin organisations were in financial distress because income from farmers was not forthcoming and the River Basin organisations needed to pay interest on the debt they had issued. The state responded by withdrawing the River Basin organisations ability to issue debt, along with other financial arrangements. In addition to self created defeat, there were also the opposing big landowners that were threatened with compulsory purchase if they did not transform their lands to irrigation. Hydroelectricity users considered also the River Basin organisations too powerful; and the perception that the River Basin organisation were “states within the state” was increasingly a concern.

“The confederations were centres for organising and interaction of the agrarian and other non agrarian interests. The debate takes place in the national but mainly in the specialised press. The enemies of the confederations being the large landowners and the electricity companies. The Republic dissolves the structure and the organisation of the Syndicate confederation of the Ebro, considering that its administrative character and the proliferation of councils and assemblies made it look like a Basin State (Fernandez Clemente 2000).

The republic changed the River Basin organisations and renamed them as “Hydrographical Man-communities”. It suppressed their functions which were devolved to the Delegations of the Hydraulic services. In 1932 the Directorate General of Hydraulic works and the Council of Public Works (experts committee) were created. The bureaucratic structure of the RBAs remained, initially removing user representation which was reinstalled in 1934 when the confederations were reorganised. With the change of government the River Basin Organisation (now Hydrographical Confederaions) are reinstalled (1934-35). They become more controlled by Central Government, through the delegate of the government and their organization structure is simplified. They are still not allowed to issue debt but they become able to increase the contributions of beneficiaries. The Committee of Irrigators and the Committee of Electric Generators are created with merely advisory functions (i.e. in the Segura River).

In their short life the River Basin organisations succeeded in the creation of new “constituencies” and captured the imagination of the country. The new stakeholders were the agricultural community (in part), the main professionals involved (engineers), the building companies and (later) the electricity companies. It also counted with the support of the new intellectual elites and the bourgeoisie. Many of who had developed a stake in making the new transformation logic a reality. Their role and participation had changed and restructured but it was also an important part of the new water management model that has remained throughout the rest of the 20th century.
2.1.4 PP in the Post Civil War Period

The demise of PP, the changes in the RBAs and the promotion of WUAs

During the post-Civil War with Dictatorship and autocracy there was a demise of user participation and the consolidation of state led water management as an instrument of economic development and legitimation of the State. After the civil war, the character of the River Basin organisations, as “self administration” by users changes, and user participation is abolished. Franco’s regime rejects any initiative that would mean participation and social presence in public organisations. Participation in the Confederations is seen as not pertinent.

The regime built on the prestigious River Basin organisations. They become, however, administrative delegations of central government but with delegation of “functions” (1947-1959) and later their role as instruments of central government is reinforced (1959). The State keeps control through the budget, and by appointing the governing positions of the RBAs. They become central government instruments for building and managing water infrastructures and loose their intersectoral and participative character. As a result other public organisations take over some roles such as integrated economic development, agricultural transformation and reforestation. In 1958 The River Basin Confederations are given the formal statute of “autonomous bodies” of Central Government, integrating previously fragmented responsibilities (Commissaries, Technical Services, Planning and Infrastructure Development). In this context the irrigation associations (many created in the liberal and post colonial period) continue to be formed in newly developed areas (see below). They are reinforced and are given the legal statute of “public entities” with delegated administrative responsibilities vis-a-vis the River Basin organisations.

Economic and political isolation. The development of solutions for new users by transforming their social and economic conditions and preventing social unrest

The Franco regime considered water interventions as having a fundamental role in the effort to avoid social unrest. The regime decided to act fast on agriculture to prevent this unrest and, in 1939, one of the first measures of the dictatorship was to prepare a plan (based on the 1933 Plan of Lorenzo Pardo) and to issue two new laws on subsidies to irrigation and for the colonisation of big areas. The regime pursued the transformation of the economic and social conditions of some important underdeveloped areas with “colonisation projects” (on the basis of some of the “social” experiences in the post colonial period). The internationally isolated regime also had little choice but to look at the development of its own resources and a policy of self sufficiency in food production. This required again going beyond private initiative and required the technical, financial and legal support of the state. It represented, however, a clear change from previous considerations of the “regeneracionist”, more concerned with improving productivity in the areas with clear potential. The main areas of intervention were those with the greatest number of agricultural labourers: Extremadura (devastated during the war), Andalucia and also Aragon. With these “social/political” aims in mind user participation was no longer needed. The proposals were not “benefiting” existing organised groups but were “creating” their own constituencies that, by definition, could not “participate” on an equal basis with the state. The farmers were still required to organise in irrigation associations (as with the liberal and post colonial models) if they were to benefit from publicly mobilised water resources. The relationship of the new users to the Basin Organisations and the State was one of dependence since the projects were not aiming for the areas with most potential but poor areas, which needed to be financed and maintained by the state through subsidies.

Although the reasons for intervention were different the solutions considered by the regime were very similar to those of the regeneracionists, based on irrigating as much land as possible with the construction of dams, channels and infrastructure also for hydroelectricity production. The National Institute of Colonization was created to carry out the new program in the Colonisation areas in the framework of the 1949 Colonization Law. There were several “colonization plans” in Extremadura (Plan Badajoz), and in Jaen (1953). By 1970 43,434 people were living in 63 new “villages”. The work continued in Aragon but also in the Segura, Gualdaquivir and Duero. The Hydraulic proposals were
presented as merely technical and beyond political interest and the construction of dams was supported by many outside of the close circle of the regime: “building dams will help provide electricity to support an industry with comparatively low costs in Europe”. The investment in the colonization plans also improved the opportunities of the big landowners (the only ones that had means to provide other necessary inputs and implement mechanisation). Laws such as the “law of properties that could be clearly improved” were passed with the aim to give landowners the incentive to collaborate and introduce irrigation where the State was providing water.

**Increased controlled PP as a response to stabilisation programs and financial difficulties**

These Plans were expensive, especially when the state was confronted with the economic stabilization plan of 1959. The slow incorporation of users to the RBAs from the end of the 50’s was a response to financial needs but, even then, participation was restricted to infrastructure building and management and there was no participation in the administrative functions (concessions, policing, inspections, quantity monitoring), or in governing or planning decisions. Initially the user representation is “by appointment” of the authorities. The “dam management commissions” (1960) incorporated users and made decisions related to filling up and releasing water from dams, considering the existing “water use rights” and the “order of preference of uses”. There was also a slow incorporation of users to “exploitation commissions” (1965, 1974); and to the “Infrastructure Construction Commission” (1965).

The role and decision-making power of each actor was then clearly defined. The Commissions had the statute of advisory bodies on “implementation” issues. They had some decision-making power on issues such as the financial contribution of users. The main power in the RBAs, however, lied with the appointed Technical Director (Engineer Director) who had “to hear” the Commissions advice. However, the decisions of the Commissions, if taken by unanimity, were binding for the RBA. The Commissar (who had the strong powers previously of the Provincial Governor) could overrule and suspend decisions of the Commissions, even if these were taken by unanimity.

The Exploitation Commission incorporated all those with water use rights (concessions) within an “Exploitation Unit”. There were as many exploitation commissions, in the geographical area managed by a RBA, as “integrated management geographical systems”. The exploitation commissions decided on the relative contribution of users to the costs of multifunctional infrastructures and on the management issues of the infrastructures that were not delegated to municipalities or irrigation associations. The role of users in the “Commissions of Infrastructure” (active only during building), was also important. Users participated on these commissions because they were most interested in efficient use of financial resources and keeping costs down since the cost would have impact on amortizations to be paid by users through water taxes. Fernandez Clemente (2001) explains that the “timid, controlled” introduction of user participation back in the RBAs was not supported by the technical staff of the River Basin Organisations.

**The role of external and emerging stakeholders and continuist policies**

In 1962 the World Bank produces a report assessing the current irrigation policy in Spain and, although the report agrees with the principle of improving productivity through irrigation, it also considers that in specific places in Spain there might be alternative and more efficient ways of improving economic opportunities other than irrigation. The Report recommends the improvement of coordination and giving a greater role to private initiative. The report suggested finishing projects in those areas under transformation and then investing in those areas with the best capital/product ratio and among them those that produce export products. The government, at the time implementing the stabilisation plan and needing foreign investment was sensitive to the criticism:

“The response to the report was massive. “There were at the time 79 projects being built and 79 in a planning phase that were stopped. The progress of expansion of irrigation slowed down” (Fernandez Clemente 2000).
Still the first development Plan of 1964-1967 insists on the positive “multiplier effects” of the irrigation projects. It informs that existing dams have a capacity of 21,000 M M3 and 10,000 M m3 more are in process. The plan projects 280,000 Has more of irrigation and justifies this on the basis of “agriculture” being different to most other economic sectors:

“It is the case that there has been a tendency to consider irrigation as something good at any cost but irrigation generates external economies and does not require operating costs and hence it is not possible to consider economic returns of 8% (Fuentes Quintana, Ugarte, et al 1963).”

Once the possibility of increasing the water supplies with dams begins to become difficult in areas like the Segura Basin, transfers were proposed. The second development plan of 1968 makes public proposals for water transfers and the Tajo-Segura transfer become operational in 1979. The protests about some of these proposals started immediately:

“In 1974 the announcement of the transfer between the Ebro and northern parts of Catalonia is heavily contested in the Local Press of Aragon. It was considered that before the development of Aragon was considered, the needs of drinking water supply for Barcelona and the industries of Tarragona had been given priority” (Fernandez Clemente, 2001).

During the dictatorship the importance of the big electricity companies as stakeholders increased. Up to the ‘70’s 40% of dam capacity created was related to hydroelectricity production.

2.1.5 PP during Democratisation and Decentralisation in the Late 20th Century

Re-instalment and widening of PP and the emergence of new stakeholders

With democracy the RBAs maintain their statute of “Autonomous Organisations” of Central Government but their participative nature is reinforced, in part. The 1979 Royal Decree (2419/1979) incorporates user representation in the Governing bodies of the River Basin Authorities (General Assembly and Governing Board). The general interest representation includes the local administration and the chambers of commerce, industry and navigation, and the financial institutions. The discharge authorization holders became members of the General Assembly (after 1985) as well as did “future users”. The users increased their ability to “set the agenda” of the Assembly through the newly created “users (sub)committee” with their own delegates. The delegate of Central Government still had veto power. Initially there is no representation from regional governments (see Section 2.3.3 on the present system of representation with the 1985 Law and regulations of Public Administration of Water).

The role of the state led water infrastructures as part of welfare policy

During the period of democratisation and decentralisation of the Government, state led water infrastructures were part of welfare policy, (bringing about modernisation, progress and efficiency), but also aiming at spatially balanced growth and greater equity in “the access to fundamental natural resources”. Democracy in 1977 did not mean a change in the perception that irrigation was a good instrument for economic development. State intervention in promoting agrarian reform built also in the role of irrigation agriculture as an instrument of modernization and for increasing economic opportunities in poor areas. The state in this period also sought to bring about greater equity in the access to natural resources and a more spatially balanced development (the income differences between the main economic centres-cities and the “countryside” had increased tremendously). There were some new motives and arguments for intervention but many of the responses were the same as in previous periods. During the Democratic Period the policy of expansion of irrigation continued (Gualdalquivir 300,000 Has, Duero 499,500 Has). The first democratic governments pass some key laws including the Law of “Lands which could be clearly improved”, in 1979 and the Law of “Agrarian reform” of 1984, trying to balance
modernisation and improvement of efficiency in agriculture with social policy and land property redistribution. The Government tried also to improve the economic rationale for interventions and “public” managed infrastructures which had been built for over 65 years and were poorly maintained; which were “everybody's and nobody's” trying to show the “advantages” of public management.

The socialist government passed the second Water Law in 1985. This law was important in many aspects, including the declaration of groundwater public domain (increasing overexploitation and generalised externalities was now a recognised reality). It included the consolidation of the River Basin scale for water planning, management and decision-making; the consolidation and formalisation of a system of taxes created in the post colonial period, on the basis of the 1960 system of public works. Taxes aimed at cost recovery and also to serve as incentives for better maintenance and for improvement of economic efficiency in decision-making. The state was the financier but the users that benefited had to pay. The 1985 Law financial provisions was also based on the lessons of the 1980 Financial Law of the Tajo-Segura water transfer (built mainly in the post civil war period) establishing the most expensive tariffs to that date and the contribution of users to the investment and operating costs of the water transferred. The Water Law, importantly, incorporated the emerging body of water quality directives of the EU. In a completely different economic context (in an industrial country with strong tourist sector and increased income levels) Europe and democracy (and political decentralization) have substituted “regeneracionismo” as the myths of progress and modernization (Bakker 2002).

State re-structuring and rescaling and the emergence of new stakeholders. The new stakeholder dynamics

Understanding the debates during the preparation of the new draft Water Law is essential to understand the important role of the regional governments as new stakeholders in future policy decisions and participated water management bodies. The decentralisation of government was based on the 1978 constitution that has led to the creation of 17 Regional Governments (Comunidades Autónomas). The important level of decentralisation and the speed of changes emerging have been overwhelming and have had (and are having) an important effect in water governance as well. New dynamics (central-regional governments) are being “played” in the water participating bodies.

David L. Prytherch (cited in Swyngedouw, 1999) has looked at the above political decentralisation in Spain as the “most powerful example of state restructuring and rescaling to be found in Western Europe”. He focuses on the importance of “competition among the regions of Spain” and also on increased competition between regional and central governments. This decentralisation process challenges the existing governance “balance” and creates a force pushing for “rescaling” water decisions and water management (from basin to region). It affects who participates and with which role/power in the management processes. It affects and adds complexity to decision-making (see Section 1.4 on distribution of responsibilities on water related issues). The stakeholder dynamics being played out inside and outside of the participating bodies reflects what David L. Prytherch considers the “cultural importance of the sense of regional identity (a reality of more than 500 years)” with clear reflection in the development of the RBA in Aragon in the modernist post-colonial period, that is to have so much impact on the debates/conflicts on water management in Spain (upstream/downstream and inter basin transfers). Local Governments (and local organisations) also have an increasing role vis-a-vis Central Government.

“It has generated social conflict among regions….. particularisms have emerged…. some exerted by the local state .. that exists somewhere between the central government and civil society.. in some cases modernism can be seen in direct conflict with “cultural heritage”… in many cases the local governments and not the nation state are the sites for conflicts and conflict resolution” (David L. Prytherch - cited in Swyngedouw, 1999)

During the discussion prior to the 1985 water Law this “central-regional government dialectic” was enacted with central government defending the river basin approach and the regional governments defending the regional government management model. In 1983 the “mixed” commissions for planning between the regional and the central government departments are created to help deal with this issue of increasingly vocal regional governments resisting/wanting to participate in major central government proposals and defend the regional interest in “water resource” decisions. As a result of these tensions the
1985 Law changed the governance water systems based (since 1903-1926) in the “River Basin Authorities” and established a mixed model with regional responsibilities in those River Basins integrated entirely in one region (article 148 of the Constitution of 1978). The state finds itself, in the participating bodies at national and river basin scales, playing the role of the warrantor of the constitution (that gives constitutional powers to central government in water management) but also of the Autonomic/regional Statutes (that rule the specific powers of each regional government). In this fast emerging context the “users” and other general interest need to “make room” and establish alliances with this new forces and concerns.

Involvement Dynamics in a decentralisation context (with regional stakeholders). The difficulties of policy proposals to bring about spatial balance, and equity and inter-regional solidarity. The new economic efficiency concerns of the academic community and the financial difficulties

In this context of increasing decentralisation and debate, the Central Government proposals in the 1993 National Hydrological Plan with eminently “social aims” of “resolving” spatial imbalances and insuring greater equity in the access to water resources, based on arguments of inter-regional solidarity in helping to realise potential opportunities in water scarce areas of Spain, failed. For achieving the above social aims, the 1993 Plan of the last socialist Government of Felipe Gonzalez, was proposing some major water transfers all over the country (from humid to arid Spain) that would provide “equal” access to all. In addition to the difficulties emerging with decentralisation and increasingly vocal regional governments, there were important criticisms about the financial viability of the plan and about the need for much of the irrigation proposals that justified the water transfers. Its financial viability with state funding alone (in a context of EU convergence) was not at all warranted and the proposals for a new “resource” tax, in the context of overall opposition to the proposals and a politically weak government, were withdrawn from the final text of the 1993 Plan.

With the increasing budgetary restrictions resulting from EU convergence plans, the increasing crisis of the “administered” model of river basin management along with the emergence of new powerful regional “stakeholders”, civil society started to pose some difficult questions:

- There were increasing claims of economic heresy (Naredo 1994), concerning the use of water for irrigation that requires continuous public investments (that have opportunity costs) and that use 80% of water while only contributing 2/3% to the National value added.
- There are increasing critics, from the academic community, of the low price of irrigation water; the lack of control of what is irrigated, and the difficulty of enforcing legislation.

The PP responses to the new environmental concerns and the “new” self-generated natural context

The sidelining of environmental goals in water policy and plans becomes an issue in the public debate and in the participated bodies of the River Basin Organizations (Confederations). The last socialist government incorporated some representation of “environmental groups” in the Water Councils of the River Basin Authorities (the planning advisory bodies) within the group of “socio-economic interests” and created the “Advisory Environmental Council” of the Central Government Secretary of State for Environment and Housing.

In spite of this, in this period, there is no integrated (holistic) conception of the need to consider the relationships between man and/with nature (beyond externalities) and of the environmental goals to be pursued by water policy. There had been in the new 1985 Water Law an incorporation of the EC Water Quality Directives and this and other environmental proposals can be found in the 1993 National Hydrological Plan, and in the water quality plans of the river basin authorities. The 1993 Plan identified overexploited and contaminated aquifers, wetlands and glaciers that needed protection; identified the rivers stretches and the dams that were suffering from silting and defined programs to avoid floods. Most of this analysis and proposals, mainly attempt to establish measures to cope with “externalities” of water policies and private interventions and aim to the protection of areas of special value in accordance with European Directives. A more integrated conception was only to be incorporated later, with the Water Framework Directive in 2000, in a country where one of the “main outcomes” of 100 years of water
resources development was a major change in the “natural” water context (as part of successive economic and social transformation programs). There were few water bodies that were in natural conditions in Spain, as indeed in most of Europe. Most of them had been transformed and “engineered”.

2.1.6 PP in the Process Towards Convergence and Mercantilization

The formal PP model consolidates with some changes

The formal model of PP in RBM during the mercantilisation period was not changed and inherited mostly the structures of the previous periods (except for the Advisory Environmental Council of the Ministry of Environment that was changed). What is important in this period for the analysis of PP are the changes in the positions and policies of some main stakeholders (including the government) as compared to previous periods; the increasing importance of some existing stakeholders; and the emergence of new stakeholders (public RBM companies) and forums of “participation”.

Deregulation in water management and PP “through the market” as part of liberalization policies. Changes in problem frames and the emergence of new stakeholders

The mercantilisation phase in water management needs to be analysed as part of the overall liberalisation policies of the new Government that emerged from the elections of 1995. Government “deregulation” policies were a response to the stabilization and convergence requirements of the European Union. Policies implemented include the rationalization and sell off of public companies (this started with the socialist government) and the introduction of “privatisation” and “commercialisation” instruments in water management. Deregulation allows government to obtain liquidity, deal with public deficit and improve the efficiency of the economy. Bakker (2002) argues that the conservative government went beyond that and adopted the discourse of state failure trying to move away from excessive intervention in those areas of policy where the private sector could act. The “Plan of Liberalization and support of Economic activity” of 1996 established the shape of the reforms in the labour market; the financial system; pensions; and the new model of public infrastructures financing. In the water sector deregulation was responding to increasing resistance from the Treasury for financing massive investment but also to critiques (see section 2.1.5) that state intervention had led to inefficient and wasteful water use, and that where there were clear direct beneficiaries of water projects they should pay for them (Bakker, 2002).

The Law 13/1996 of fiscal measures allowed new formulas for financing all types of public works. The Convergence Plan of 1997 also “promised” new state intervention in Environmental Infrastructures including concession contracts for operation of hydraulic works. Accordingly, the 1999 reform of the Water Law created “Public Companies” for infrastructure development in seven river basins, operating under private Law. The model of private capital participation in profitable public works was not alien. In fact Hydroelectricity companies had already built half of the dams during the post civil war period. Still the risk involved in long term returns to massive investments, and the availability of European funding for big scale infrastructure projects, influenced the decision towards a model of private financing with state support. The model was still not changed because it was one where decisions were made by the public sector (the Ministry of Environment now) and beneficiaries participated in financing but now through the new river basin public companies in addition to the RBAs. The resulting model is a mixed model where the government finances (with support of European funding) the less profitable proposals and where private companies will take on the most profitable investments mainly in urban water distribution. In the context of reduced role of government, the strong role of the Commissaries as water regulators, administrators of the public domain and implementers of water quality regulations had not been changed.

The creation also of water markets and water banks in 1999 complemented the existing concession systems of water use rights. A system of water allocation that, according to Law, has to respect the pre-defined priorities of water use (who gets water first under conditions of scarcity) and the administrative quotas calculated on technical basis (average per crop/per person), and set in the River Basin Plans.
Bakker (2002) argues that water markets was a complementary response to the financial problems because they would allow for rising prices that will make financially possible new infrastructures. It would also help avoid the negative (political) effects of having new taxes.

The 1999 reform of the Water Law included proposals to advance towards volumetric pricing in all sectors (already generalised in urban water distribution) and a better water taxes collection system with the support of the Ministry of Finance. The model is one in which local market decisions and exchanges (already existing) will be extended to a national level (with exchanges being possible between basins where water transfers make “market/economic” sense). In fact proposals for a new water transfer between the Ebro and the south east of Spain and the establishment of “compensation” mechanisms to the water rich regions (in the 2001 National Hydrological Plan) also could be seen as following this mercantilisation logic. The proposals are very focus on water being taken to where there is potentially the greatest economic value (areas with the highest value tourism and agriculture) whiles subsuming some of the environmental/mercantilisation arguments for internalising environmental costs by compensating the water rich regions.

**Table 4 The dialectic between the State led Model versus the Mercantilisation Model**

<table>
<thead>
<tr>
<th>State Led model</th>
<th>Mercantilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conception of water as a common good, and a merit good; water is a strategic resource that is key to capital accumulation and development.</td>
<td>Water as a tradable good and as a commodity Water is a necessary “lubricant” of economic activity. Water scarcity is structural and functional to capitalism</td>
</tr>
<tr>
<td>State intervention will warranty an orderly allocation of water rights to the different competing uses. Allocation decisions made on the basis of administrative rules.</td>
<td>Market allocation will insure that water is used by the uses that can obtain the greatest economic value. State as regulator because of “market failures”. State intervention is necessary to insure the functioning of the economic system (it is not welfare) and make sure that “bottlenecks” for economic development do not exist.</td>
</tr>
<tr>
<td>State intervention necessary because its provision at the scale necessary is unfeasible for the private sector.</td>
<td>Water scarcity and threats to continuous capital accumulation can justify state intervention but instruments are different. Threats to economic development find “market responses”. State failure and lack of finance justify that private water companies can bring the necessary financial resources and efficient management for infrastructure construction and management; State role is to provide a system for markets and prices to be able to operate.</td>
</tr>
<tr>
<td>Decision rules based on social equity; insuring security of supply; country economic development and self sufficiency. Technical rationality will provide decision rules</td>
<td>Policy decisions illuminated by economic analysis Decision driven by economic efficiency Economic rationality adds to technical rationality</td>
</tr>
<tr>
<td>Water services considered “public services” Users of services as citizens having the right to adequate water supply Water as part of “welfare services”</td>
<td>Users are customers who access water services by paying a price</td>
</tr>
<tr>
<td>Water as key to capital accumulation and welfare can be provided at subsidized rates.</td>
<td>Prices need to reflect economic value. Otherwise inefficient decisions and need to use other financial resources of the state (with opportunity costs) to maintain water services.</td>
</tr>
</tbody>
</table>

Source: K. Bakker (2002) and own elaboration

**An implementation strategy of solutions as a step by step process, avoiding direct changes and adding new layers**

Moving from the “state led” towards the “mercantilisation” model has been a story in Spain not of traumatic shift but of “changing the public-private balance” in a step by step process. The change in the public private balance has built on the “coincidences” of both models.

K Bakker (2002) points out some of the characteristics of the shift towards mercantilisation in Spain:
- This is a process of mercantilisation initiated by the state and not by the market.

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The objective is the reintroduction of the market in a sector from which they were previously excluded. It is a state response to the dilemmas related to lack of financial capacity. The resulting organizational forms reflect past and present political struggles.

**Table 5: The shift from state to mercantilisation in Spain**

<table>
<thead>
<tr>
<th>The Dictatorship water policies</th>
<th>The first democratic period</th>
<th>Mercantilisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capture water to deal with irregularity to serve industrialization and large scale expansion of irrigation</td>
<td>Water as insuring general welfare, equity and greater spatial balance in access to resources based on arguments of inter-regional solidarity</td>
<td>Water as a tradable good The environment as a legitimate user</td>
</tr>
<tr>
<td>Intervention of the state in the financing and construction of large scale infrastructure and mechanisation/modernisation of agriculture (1,200 dams built) The state as master engineer</td>
<td>1993 National Hydrological Plan proposes 100 new dams and an increase of 6000 Hm3 of regulated water. New general system of water transfers Proposed investments of 4,200M Euros</td>
<td>Economic efficiency and macroeconomic austerity are priorities over socio-economic objectives and agricultural sector employment objectives Withdrawal of the state The market as main allocation mechanism.</td>
</tr>
<tr>
<td>Focus on the poorest regions with many landless. Water interventions as a “form” of land reform via irrigation schemes and colonization villages</td>
<td>Solidarity and equity driven decisions Water projects financed by the state will “return” through income resulting from growth.</td>
<td>Focus on interventions that make water available to uses with the highest economic value Need for water for tourism and high value added agriculture</td>
</tr>
<tr>
<td>Modernisation strategy as a form of legitimation and an instrument of “integration” of the country and suppression of opposition</td>
<td>Continuing irrigation growth Help deal with regional disparities and the spatial integration of the country.</td>
<td>Threats to capital accumulation, bottlenecks and market failure justify state intervention and funding Private capital need to be engaged</td>
</tr>
</tbody>
</table>

Source: Baker (2002) and own elaboration

**The responses of the water community and the perceptions of stakeholders**

In practice the water community is “suffering” these tensions, both adopting and resisting them. These reactions of the water community together with an implementation strategy that seems to be based on avoiding directly changing the existing “order/ways of managing” in RBAs and/or existing stakeholders, has led to differences between “espoused theories” and “theories in practice”. Some examples of this are:

- The state still keeps an important role in financing and in water infrastructure decisions because infrastructures are still an important part of economic policy.
- The public companies are still mainly fed by state resources. Users will start to contribute only later on and not as financiers. Still the state will maintain regulatory control and will fund completely some projects (in cases with support of cohesion funds).
- The water markets are not operational because the practice is totally alien for the RBAs and they do not have capacity to change from “providers of goods (new waters) to the allocation of bads” and dealing with resulting conflicts (always more stressful and where administrative decisions need to be made explicit).

The mercantilisation proposals have been adopted and supported by some but also resisted by many in the water community, including some groups of users that have perceived a reduction of their ability to participate (other than as financiers/clients) in some main water decisions. Some perceived that although the formal participative nature of water management institutions and decisions has not changed (the participation in the main water planning body is the same), it may have been emptied of many of its decisions, de facto.

Some strong stakeholders such as the main private companies participating in the provision of urban water distribution services (via concessions with the local authorities) were/are aware of the profits to be made from the new “business” in water resources development and irrigation water management if “prices are right” and volumetric pricing implemented. They argue that this will help in water conservation, stimulate supply and help modernize the agricultural sector. However consumer groups, small farmers and the political “left” have been critical of mercantilisation proposals. They argue that
this forces concentration of holdings (disappearance of small farmers) and that water as a merit good needs to be state responsibility (all citizens have a right to it). The state and not the private sector should implement proposals for increasing water efficiency and water supply. Water rich regions are also resisting the proposals on the basis of alternative uses and future users.

The 2001 National Hydrological Plan requested by the Parliament (the socialists government was asked to redraft the Plan, in 1995, just before the elections) has faced protesters in the streets; protesters are using a variety of some times contradictory arguments, including some of the “old” ones such as those of the “state led autocracy”, and the social projects of the “regeneracionists” period (water needs to be used for the Monegros, and some of the poorest areas of the Ebro); to the environmentalist (impact in the delta; need to preserve the Pyrenees; need to valorise nature when making economic decisions); to the mercantilisation logic (the inflexibility of the concession regimes and the inefficiencies in water use); to those of the early regeneracionists and the World Bank report of 1962 (water needs to be used where there is greater economic value based on economic analysis). Using this variety of arguments have enabled the grouping of many different types of lobbies and have also insured the support of the regional government of Aragon (where the river had always had –see post colonial phase- an important value as part of the regional identity and in relation to prospects of economic development). The Regional Government has actively lobbied in Europe against the financing of the National Hydrological Plan.

The resulting governance model and some stakeholder dynamics. Opportunities for consensus

In practice the resulting organization and governance model today is a hybrid model (Swyngedouw, 1999), an exercise of partial metamorphosis where water managers (the community of practice) are slowly assimilating the new concepts and the role of economic instruments. Mercantilisation in the Spanish context needs to be seen as a facilitator of continuing with state led public investments (Bakker, 2002) but at the same time one that establishes tensions.

The debates around new proposals and the stakeholder dynamics and positions generated can be illustrated by the account of Fernandez Clemente (2001)

“The COAGRET (the coordination commission against new dams) opposed the new Yesa reservoir because of its Environmental impacts (the proposal was of increasing its capacity from 470 to 1523 Hm3) and the future dams of Janovas, Santaliestra and Benasces. The Government argued that the Parliament was the one that had representive power and in the democratic system they are the ones that represented the will of citizens and hence needed to act for the common/public interest….. Yesa was to be for Zaragoza (and also Navarra) but the local groups and the ecologist argued that this would imply an unrealistic consumption per person per day….. the tension mounted with a hunger strike in Jaca……on the 4th of June of 1999 the council of Ministers announced the contracting of Yesa….. on the 6th of June there was a demonstration in Zaragoza demanding the dignity of the mountain, stopping the flooding of valleys and the transfers….. on the 2nd of July the irrigation cooperatives demonstrated supporting the dam…….the new Government of Aragon (socialist) decided to present allegations against the new water law (of 1999) proposing to study an alternative to Yesa….. the national water law was approved in December 1999 and the Ebro River Basin Authority (Confederation) through ACESA (the 1997 newly created river basin company of the Ebro to carry out infrastructures) starts implementing the agreed policies (with the support of irrigation farmers) and with the aim of providing water supply for Zaragoza…. in the Municipality where the debate was only about obtaining water of quality from the Pyrenees for the water supply of the city, there was still disagreement in 2000 as to what would be the best model whiles there were calls for tender of the infrastructures works….. the Regional Government (socialist) was proposing a new organisational specialised body for drinking water service delivery of the city while the opposition parties in the municipal government wanted warrants of European Funding and decoupling the project from the Yesa project….. on the 28th of January of 2000 the municipal council agreed to carry out the project with ACESA with one vote against from the regionalist party.”

It is important to understand that the “intensity of the debate” is also related to the new self generated “natural” context after 100 years of intervention, as described above. The “same” type of proposals were adopted with enthusiasm by the population earlier and were considered “revolutionary” at the time. They captured the imagination of the people because they helped the modernization of the country and established a new “economic and social” order. Today, however, there is one major difference; namely that the “environment” is increasingly considered in its own right along with “legitimate users”. In fact water quality legislation considers quality standards and restrictions of ecological flow in rivers as a prior restriction to water use/discharge authorization rights, when there are few rivers left that have not been
altered, or transformed. Some parts of the population are claiming the need to give more value to natural resources. Natural landscapes and resources that were “plentiful” at the beginning of the 20th century, today are perceived to be increasingly scarce. In this context the new Water Framework Directive does play a role and there are opportunities for implementing its proposals because there are important “points of coincidence” between the supporters of the mercantilisation model and the “greens” with tactical alliances between them common internationally.

Table 6: Points of coincidence between the mercantilization model and the “greens”

<table>
<thead>
<tr>
<th>Mercantilisation</th>
<th>“Greens”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservation values are an important part of economic assets contributing to total welfare.</td>
<td>Modes of accumulation that valorises nature rather than exploits nature need to be promoted.</td>
</tr>
<tr>
<td>Efficient decisions need to consider external costs. to deal with “market failure” This can also bring about financial savings to the industry; create new green jobs and promote renovation of industrial processes.</td>
<td>Internalising environmental cost will help consider the value of the environment and the need to preserve it. Decoupling growth and environmental impacts needs to become a reality.</td>
</tr>
<tr>
<td>Pricing and volumetric charging of water services bring about greater economic efficiency</td>
<td>Present abstraction rates result from water being provided for “free” or at subsidized rates. Pricing will bring about water savings and less wasteful use of water allowing for “more” water to be left in the environment.</td>
</tr>
</tbody>
</table>

Source: K. Bakker (2002) and own elaboration

Still as Swyngedouw (1999) points out “water remains an obsessive theme in Spain and the quest for water continues with regions and cities demanding more and more water, a permanent theme of struggle and conflict in the Spanish process of progress”.

2.1.7 Emerging Views of Postmodernism

There have been new emerging views (problem frames and solutions) of post modernism. In addition to the new mercantilisation logic, there are some ideas suggesting how the relationship between man and nature can be considered and the functions of water. In an increasingly difficult natural context with generalised scarcity and fewer water supply options left, risk analysis and contingency planning (“distribution of bads”) are being incorporated increasingly to analysis (see Libro Blanco del Agua, MIMAM); to the plans and decisions of water companies of the main cities (i.e.: Canal de Isabel II in Madrid) and also to Plans and decisions of River Basin Authorities (Drought preparedness plans; Dam Commission’s decisions).

Other influential ideas being posed include:

- The need to move beyond economic efficiency and look at water not as a productive input but as a social asset beyond economic value and meaning (Federico Aguilera, 1995).

- The need to consider the hydrological cycle not from the perspective of the First Law of Thermodynamics but from the perspective of the third Law of entropy (Naredo et al 1989 and 1993). Management becomes and economic problem because it is now about choices, not only technical choices, but also about social choices:

  “...there are important losses in quality (including osmotic potential) in the hydrological cycle. This means that there are fundamental imbalances and hence the water cycle is an open and unbalanced system and not a close system. The implication is that management of water cannot only look at the inflow into water bodies but it needs to consider the changes in quality along the process... policies need to aim at slowing down and reduce the loses in quality and quantity: reducing evaporation, improving efficiency, reducing discharges.. etc”

- The need to consider man and nature in Spain as interconnected interactive systems. Places as Doñana Natural Park can only survive if there is (adequate) human use in a context of fragmented and modified natural spaces (Campos and Lopez Linage, 1998 but also Margalef, 1983).
2.2 Participation in other issues

2.2.1 Local Agenda 21 and Environmental Management

Local governments have been engaging in the preparation of local strategies for sustainable development, following the Aalborg Charter. The Participatory processes are central to the methodology of preparation of Local Agenda 21. Municipalities engaged in their preparation have experiences now of the implementation of participatory processes for policy development although in many cases this has not extended to the program implementation phase. The Spanish Federation of Municipalities and Provinces has made an effort in disseminating experience and has prepared a code of good practices for the preparation of Local Agenda 21 programs.

Earlier efforts for the development of local Agenda 21 can be traced back to the Provincial Government of Barcelona and the Calvia Agenda 21 (Mallorca) and had strong links with urban planning. Both models have been used extensively in the subsequent efforts by local (and now regional) authorities in Spain. For example, since 1998 Navarra has adopted the preparation of Agenda 21 programs in 13 main municipalities, covering today cities with 70% of total inhabitants of the region. The Agenda 21 deals with waste management, energy use, water use, urban environment, environmental management, society and cohesion, natural environment and endogenous resources, and economic development. These have been prepared through wide participatory processes. Projects for river regeneration have been identified through the process for Pamplona, including actions for the protection and restoration of natural capital in Navarra. Another example of participatory initiatives in environmental management in Urban areas is the Plan for Solid Waste valorization and recycling for Cordoba, which has been co-designed and co-implemented by neighborhood organizations, and later supported by the Municipality. The project has been used as a means for policy integration among different municipal Departments. Structural funds were used for the initial pilot experiment, which was restricted to one small borough of the municipality. The aim was to make it a model for the whole city.

Participation in Spanish Natural Protected Areas³ is regulated by Law 41/97 (and 4/89) as well as by different regional laws. The national regulations make it compulsory the elaboration of a PORN (Natural Resources Plan) for every “Natural Protected Area” NPA, as well as a PRUG (Main Plan for Use and Management) for many of the protected territories. To elaborate the PORN Stakeholders and the public must be heard and there has to be public information and consultation with social and institutional agents. The national regulations do not specify “how” this PORN or PRUG participative processes must be implemented although often this has been regulated in the regional level regulations. The only preceptive principle is that there has to be a public information period in National Parks and also in relation to the Patronato’s (Boards) report. Some autonomous communities legislation (i.e. Valencia, Extremadura) consider too a shared management scheme in which official and unofficial entities can be responsible of the NPA at different scales

In many cases, public pressure has encouraged the declaration of Natural Protected Areas, whereas in some areas different mechanisms (interviews, surveys, seminars and public information...) were used prior to the declaration of the Natural Park. From the perspective of applied participation in Spanish NPA, public (associational) participation has been an important fact for the declaration of NPA. In the planning and management phases of SNPA, PP has occurred mainly through Patronatos or Boards, but there are also public information and allegation periods; and voluntary contributions: a) First, the Patronatos or Boards incorporate different interested parties, according to law. These Boards are only compulsory for Natural Parks, although often the regional laws also require them for most protected areas. The decisions and reports of the Boards are not binding but Natural Parks management organisations normally follow their recommendations. Many of these Boards meet just once or twice per year; b) Second, during the public information procedure the public has a set time (usually 1 month) within which anyone can make suggestions and allegations to the contents incorporated in the consulted documents. Frequently many interested parties miss the public information period because there is not enough publicity and this mechanism only allows to suggest or comment on a nearly finished

management document; c) Third, voluntary contributions in SNPA is evolving quickly towards organized and bigger programs, generally promoted by the autonomous governments. They cover a wide range of activities and organizational schemes: from permanent actions to specific ones, from governmental projects to NGOs independent actions, etc. However many argue that to make real and effective participation possible, it is necessary to improve information transparency, and dedicate more resources, as well as implement actions to insure the proper functioning of the three mechanisms of PP in Natural Parks.

2.2.2 Urban Land Use Planning and Urban Programs

The preparation of Urban Land Use Plans is a Municipal responsibility in Spain. The Regional Governments prepare Spatial Development Strategic Plans/Guidelines (“Directrices de Ordenación el Territorio”). These provide the strategic framework which land use plans are required to comply with. The municipalities issue licenses for land use development in accordance with their land use plans, which need to have prior approval by the regional government in accordance with the spatial strategy, if it exists. Central Government has no responsibility other than preparation of the Land Use Law (“Ley del Suelo”) and to engage in very broad international coordination on land use planning and spatial strategies. It has been providing, however, a key “service” in disseminating good practice and “know how” in aspects relating to sustainable urban development (Habitat Program; Spanish Sustainability Strategy; Best Practices in Urban Interventions, etc.).

The National Land Law and the procedures in the Regional Land Laws require municipalities to inform the public on the proposals of the Urban Land Use Plans and to give the general public a set time to respond to the documents/plan before approval by the municipal council and the regional government, at which point they become legally binding. The plan proposals are displayed publicly in the municipal government offices and advertised locally.

This PP model imposes very tight deadlines for participation and formal allegations are considered mainly in the context of the approval of a legal document. There is no formal process of participation during plan preparation. Although this form of public participation is very limited, it has established a tradition of consultation that has been used in other forums and bears some resemblance to the “way” the National Water Council manages public participation. The Plans are made public and can be obtained from the regional and local offices. They provide a legal framework of rights for the citizens in relation to land use. The type of participation is mainly information with little joint interaction or procedures for co-designing. The implementation phase is all in the hands of private individuals, since the plan only provides the framework for action rather than a way of generating it.

In the urban context it is very important to consider the recent participatory management experiences under the Urban Community Initiative. The Urban Initiative funds integrated programs for urban regeneration. The participatory approach under this program focus on the implementation phase and does not extent to program preparation (the focus of Agenda 21 processes). PP has had varied results and at times it has been difficult to implement. It has helped municipalities to create horizontal area management structures; of one scale but multi-sectoral, multi-issue and multistakeholder. It has also helped initiate a different dynamic in the cities with urban program funding.

Participatory experiences beyond the formal preparation or urban land use plans is quite extensive. T.R Villasante (1996) made a review of bottom up participatory experiences, including the active participation of neighbourhood associations, “the Coordinadora de Barrios de Remodelación”, in the resolution of marginal housing problems (shanty towns) from 1979 onwards with impressive results. It also describes the creation of the popular platform for energy saving in Barcelona, “Barcelona Estalvia Energia”, with more than 100,000 members. Villasante also reviews other participative processes initiated by local authorities for the development of local plans, such as for Girona, Alcobendas, and Cordoba. They involved extensive participation of local groups and experts through seminars and

4 Tomas R. Villasante (1996), “Participación e Integración Social” in Primer Catalogo Español de Buenas Practicas, Habitat II; Ministerio de Obras Públicas, Transportes y Medio Ambiente
workshops, local area based consultations and extensive surveys of local opinions and conditions. Some examples of PP were included in the development of community neighbourhood plans in Valencia, Andalucia, Galicia, Madrid and the Canary Islands and others in rural areas for the protection of natural parks, such as those in Allariz (Galicia); Lena (Asturias) Santa Lucia de Tirajana (Canary Islands), etc.

2.2.3 Participatory Processes in the Context of the Structural Fund Programs

In Andalusia the development of the diagnosis of the Regional Development Program and the integrated Operational Program strategy is linked to the production of the regional economic development strategy. The regional government prepared for the 1998-2000 period the “Economic Plan Horizon 2000” and has now produced the “Plan Andalucia 21st Century”. The new plan has had a phase of negotiation with social and economic agents.

The orientations for the preparation of the new plan clearly reflect a political will for policy integration in the overall framework of Sustainable Development. The process of development of the regional strategy started with a mandate from the regional government Ministerial Council that stated the principles of planning (participation, coordination and evaluation) and the overall objectives of the strategy (employment as a main concern, sustainable competitiveness, continue to support growth and the process of convergence and deal with social exclusion). The technical process of development of the strategy has been cautiously participative. It has relied heavily on focus and open expert groups as participatory processes (as mandated by the regional government decree) and was coordinated by the planning department of the regional economics and finance department. The decree established an expert committee with 15 experts in different areas (to insure independent input) and a technical reporting group with members form the different sectoral departments of the regional government (insuring policy coordination). The kick off of the process was a major seminar with open discussion groups in different subjects.

The involvement of social and economic agents has been mainly restricted to trade unions and business associations throughout the process and instrumentalised through technical discussion working groups. The environmental interests and other local and civic interest were considered not directly but indirectly since it is considered to be adequately canalised through the regional departments of environment, local administration, etc. These Departments involve stakeholders in different participatory processes for the development of their own sectoral plans (that are an input to the regional strategy).

In Andalucia the lessons for participatory local strategy preparation, program management and project selection process from Leader have filtered partially into the Integrated Operational Program and in some measures it is the local actions groups that are in charge of implementation. Through Leader and Proder 50 local action groups were created in Andalucia and the new Integrated Operational Program of Andalucia contributed to building and maintaining that capacity and “relational capital” at local level. These action groups are seen by some as the main mechanism for improving dynamism at local level and as an investment for future main stream policy design and implementation.

The process of plan preparation in Navarra, which has been backed by Structural Funds, is highly participatory with the creation of joint working groups with socio-economic agents, the involvement of the academic community and expert advice through conferences, the consultation with civic groups and with the population through open fora. In the case of the Rural Development Program, which served also for the Leader plus strategy, the “local action groups” developed under Leader II participated in the process, as well as the other sectoral departments. This included the Department of the Environment, whose views are reflected in the diagnosis of problems of severance of ecological corridors with intensive farming and land consolidation) and in the proposed forestry actions and ecological agriculture. These processes are also key to the identification of unintended effects, early on in the policy process.

The actions under Leader Plus in Navarra contributed to the creation of networks of collaboration between rural areas and urban dwellers; helping them to brake up the rural traditional isolation. There is a combined top down and bottom up approach with responsibility for detailed local strategy, program management and project selection, lying with the Local Action Groups. The condition that 50% of those associated need to be private agents insures the private public partnership that is essential for the implementation of actions. The development of organizational capacity is most clear in the Pyrenees where the action group CEDERNA has been functioning for more than two programming periods. Their actions are going well beyond the Leader program and they are participating in many other programs such as Interreg and the management of some programs such as EQUAL. The Social Fund process of strategy development and program preparation benefited from these participatory processes and built on it. The local structures (participatory management) give feedback to the policy level on the effects and effectiveness of measures and allow opportunities (i.e. women employment in environmental projects) to be identified.

An important aspect and a good practice to point out is the role of the territorial pacts for the implementation of the European Social Fund (ESF) in Catalonia. These were developed in the 1994-1999 period with positive results. They are now being used more fully in the 2000-2006 period for all areas of Catalonia. The resources of the ESF are used in a coordinated manner in an “integrated area approach” in order to increase synergies of different actions and to define specific local strategies with a bottom-up approach. There is participation of business, trade unions and local administration. The lessons from the experience of “territorial pacts” are considered valuable by the regional ESF administration. Their potential as a basis for policy coordination and integration, as well as for implementation of actions beyond ESF, are explicit and acknowledged as valuable by the ESF administration of Catalonia.
2.3 Involvement Dynamics

2.3.1 Introduction.

Public Participation in water management in Spain is complex. The system we have today is the result of the last 100 years of interactions between different stakeholders under changing political and economic conditions. Water differs significantly from other “public realms”, as becomes clear in this chapter, and public participation therefore takes a number of forms which are particular to it. In looking at the structure of Public Participation today it is important to distinguish between participation in different scales of river basin management; the different aspects of water management open for participation; and the different levels of participation. It is important then to distinguish between -

- Participation at National; River Basin; Regional; and local scale.
- Participation in policy-making and legislation development; participation in planning decisions; in investment/infrastructure decisions; in management decisions; and in “administration” and regulatory decisions.
- Participation also varies depending on whether there is an advisory role; decision-making role; implementation role; and monitoring and /or evaluation role for those that participate in the different types of activities in water management.

According to MOPU (1995) examples of different institutional forms for participation include:

- The National Water Council
- The Governing Boards of RBAs;
- The Users Assembly of RBAs;
- The Exploitation Commissions of the RBAs;
- The Dam Management Commissions of the RBAs;
- The River Basin Water Councils
- The Irrigation Associations
- The Users Associations
- The Irrigation Juries
- The Irrigation Tribunals
- The General Communities
- The Central Boards of Users
- The Communities of Discharge Authorisation Holders.

In the new governance context of decentralization the questions of formal responsibilities, as defined in the 1978 constitution and developed in the autonomic statutes of each of the regional governments (Autonomous Communities), have been important. Dynamics between the regional and central governments that have lead to changes in the governance context have been formal and have focused on interpretation of legal documents (constitution and statutes) rather than based on substantive issues as in the past. Differences in criteria have been often resolved in the “Constitutional Tribunal” (STC 227/1988). They have led to the types of decisions (mentioned earlier) such as the creation of regional government water authorities (for some this has meant a reversal to the administered system of the past, Fanlo Loras, 1995) in the river basin running entirely within one region and remaining with central government (through RBAs) for the River basins that are in more than one region.

The integration in the same organisation of the functions of the Commissaries (water administration/regulatory functions) and those of the previous RBAs (planning and infrastructure development functions) has also been subject of debate. There are concerns with the need to separate regulatory functions from the user participated bodies and establishing clear rules for the “decision-making” capacity of users. One key argument, which impacts the sections that follow is that the RBAs, as autonomous organizations of central government which are mainly funded through the general state budget, cannot have investment decisions being decided by the users. The argument continues that users could have a role in management decisions and have advisory functions in infrastructure decisions but not in investment decisions, which in any case affect future users, not them. This argument won and led
to, for example, the Users Assembly changing from being a Governing body to having an advisory and
management role.

2.3.2 Structure and Level of Participation in Formal Participatory bodies at
National Scale

The main participatory body at National level is the National Water Council (NWC) which is an
advisory body at the highest level in relation to water policy. The Water Law of 1985 regulates the need
for information and PP in national water planning. It includes consultation with the National Water
Council before Parliament approval of the National Plan. The Council then “informs” the National
Water Plan before it is sent to the National Parliament for approval (as Law). The NWC also “informs”
the River Basin Plans prepared by the RBAs. In the NWC the different Central Government Ministries
are represented (Environment, Agriculture, Development and Industry). Also represented are Regional
Governments; Local Governments; and Basin Authorities. Professional and economic associations in
relation to the most important water uses are represented as are ecologists; appointed scientific
academicians; and different categories of users.

The formal involvement Dynamics of the NWC in the approval of the NWP illustrates well the formal
nature of the participation process at National scale and the importance given to democratically
elected bodies in the process. Barreira (2001) has summarised the main processes of PP of the NWP
from the Report on PP in the NWC prepared by the Ministry of Environment:

- The draft Law of approval of the Plan was presented to the plenary of the NWC in September 2000 as
  the starting point for public discussion. This was the point at which the draft was made available to all
  interested parties and incorporated in the web page of the Ministry of Environment. It was decided to
  incorporate to the Permanent Commission of the NWC some specific concerned parties; such as the
  Government of Aragón, one representative of the users of the Ebro River Basin and a representative of
  the ecologists association in the council. This was to facilitate participation in the compulsory report
  from the Council to the Parliament before the plans approval. It was the starting point of the open process
  for presentation and reception of allegations, comments and suggestions from any interested party.
- There were 96,000 allegations in the form of registered entries of documents. After classification and
  elimination of duplicates these were boiled down to 465. After analysis 659 distinct substantive issues
  were identified.
- The Permanent Commission of the NWC conducted 13 working sessions in 4 months and one special
  session of the Special Commission for public administration. In these working sessions the council
  analysed all technical documents of the plans, and the analysis of the allegations received (55% of the
  substantive issues were incorporated in the text), as well as the compulsory report and other parallel
  studies that emerged during the process of discussion and review by the members. After this process
  and the series of meetings, the NWC approved on 30th January 2001 the proposed report of the NWP,
  elaborated by the permanent commission. It was approved with 69 votes in favour, 15 against and 1
  blank vote.
- The report was sent to the government with the proposals of improvements resulting from the
  consultative process. The council of Ministers approved the Draft Law proposal of the Plan with all
  suggested changes and proceeded to send it to the Parliament for approval (12th of February 20019.
- The key steps in the Congress included the presentation of proposed changes (including 7 to the whole
  project); presentations by experts; preparation of the congress report incorporating the 56 proposed
  changes in the Parliament sessions; and approval by the congress plenary on the 30th of April 2001.
- The key steps in the senate included the presentation of 4 veto proposals and 559 proposed changes
  (similar to those rejected in the congress). Other steps included The presentation of the report of the
  speaker, the report from the Environmental Commission of the senate, and the approval of the Law by
  the plenary of the senate.
In addition to formal regulated procedures, for this kind of public participation, there are non regulated forms of participation. In the case of the recent preparation of the National Water Plan, the Ministry of Environment has reported that this has included:

- The preparation of the “White Book for Water” incorporating a first diagnosis of the water problems in Spain, the different perspectives on water and the possible management options. It was prepared through an open process of consultation with experts. The 1998 draft has been changed with different suggestions to its final version of 2000.

- Dissemination of technical documents of the NWP, with 2,000 copies that have been distributed free including free access to it on the web page of the Ministry.

- 100 consultations to academics prior to submission to the Parliament. Some of the suggestions about the written reports were incorporated to the final version.

- Public presentations of the plan for discussion of the project and the conclusions considered in the process of analysis by the NWC and the Parliament.

In addition to formal participation in decisions related to national water policy, plans and legislation, there is a complex system of coordination through permanent and ad-hoc commissions and working groups in relation to different issues. Some of these are multi-scale, and multi issue with participation of stakeholders (see Table 7 with examples below).

<table>
<thead>
<tr>
<th>Issue</th>
<th>Type</th>
<th>Role</th>
<th>Formal Coordination Fora</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Environment</td>
<td>Multiscale, single sector</td>
<td>Information coordination</td>
<td>Issue based Sectoral Conferences between each Ministry and the Regional Governments</td>
</tr>
<tr>
<td>Health</td>
<td>Multiscale, Multi sectoral, and with</td>
<td>Advisory Planning decisions (voting)</td>
<td>National and River Basin Water Councils with Ministry of Environment, other sectoral Ministries, Regional Governments and Stakeholders</td>
</tr>
<tr>
<td>Water</td>
<td>Single sector, one scale</td>
<td>Coordination Information Reporting</td>
<td>Ministry of Environment- Ministry of Health Coordination Committee on Bathing water and Drinking water quality</td>
</tr>
<tr>
<td>Pricing of Public Water</td>
<td>Multiscale, single issue and with</td>
<td>Decision-making</td>
<td>Regional Pricing Commissions with representatives of “consumers protection NGOs”, regional government Departments and RBAs</td>
</tr>
<tr>
<td>Services</td>
<td>stakeholders</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: own elaboration*
2.3.3 Structure and Level of Participation in Formal Participatory Bodies at River Basin Scale

The functions of the RBAs and Participation

The Water Law of 1985 and the Regulation on Public Administration of Water (RAPA RD 927/1988) also regulate the present mechanisms of participation in the River Basin Authorities. The Water Law (Art 24) distinguishes between the governing bodies (Presidency and Governing Board); the management bodies (“Users Assembly”, “Exploitation” and “Dam Management” Commissions) and the planning bodies (the “Water Council”). In the RBAs there are auxiliary functions (in fact the original functions) such as building and management of infrastructures; there are the main water management functions including the protection of the public domain (mainly exerted by the Water Commissaries of the RBAs); and the planning functions with an increased role since the 1985 Law because all actions of the Departments of the RBA need to comply with the plan. The management and administration functions of the Commissar were previously (19th and early 20th Century) functions of the Ministry of Development delegated in the Provincial Governors. Today they are also the main functions of the Presidency of the RBAs.

Participation in planning and management is formally made operational through three levels:

- The governing level where stakeholders have representation in the Governing Board.
- The planning level through participation in the Basin Water Council and the Planning Commissions.
- The Management level though participation in the “Users Assembly” “Exploitation Commissions” and the “Dam Management Commission”

In them the Central Government and its sectoral departments are represented with the regional Governments and their sectoral departments, along with the water users of the Basin (domestic, agricultural, hydroelectricity and others). In the Basin Water Council agrarian professional associations and ecologist groups are also represented. At RB scale there is a clear distinction between “users”, “socio-economic interests” and “the general public”. The former are those holding rights (concessions) to water and having therefore the legal capacity to intervene in the decision-making process. Other stakeholders are represented in consultative/advisory bodies with no executive powers.

The role, functions and the meetings of the participating agencies in the RBAs are ruled also by the Regulation of Public Administration of Water (Art 28 of RAPA). The Governing Board meets every three months. Meetings of the different bodies are well attended although some members delegate representation in the Assembly of Users.

Public participation in water planning is also regulated and there is a period of public exhibition of plans (similar to that in other regional and urban planning documents). There is a period of “public information” during which it is open to comments, suggestions and proposals for amendments (allegations).
### Table 8: The functions of the river basin authorities and stakeholder representation

<table>
<thead>
<tr>
<th>FUNCTIONS</th>
<th>The structure of the RBA</th>
<th>Who Participates</th>
<th>How is it decided</th>
<th>Functions of the body</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governing/Decision-making</td>
<td>President and president.</td>
<td>President of the Governing Board by Law</td>
<td>Proposed by the Ministry of Environment and appointed by the Ministers Council.</td>
<td>Governing, executive and administrative functions, legal representation; warrantor of compatibility of decisions of bodies with the plans. Approval of the action plan. Approval of concessions and authorizations. Approval of infrastructure investment with own funds.</td>
<td>Not elected but appointed Political legitimacy. In the original 1926 statutes the President was voted by the users assembly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-The president and the 4 heads of the RBA.</td>
<td>Appointed by sectoral Ministries in relation to their interest in water use.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-6 representatives of state administration; -1/3 of user representation - and the Regional Governments</td>
<td>At least one for urban water supply, irrigation, and hydroelectricity users and according to number, surface area and population.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Management</td>
<td>Commissaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Management and protection of public water domain)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Administer water use rights of surface and groundwater (register, renewals, update). Administer discharge authorizations. Police (with the protection of nature civil guard) and inspection services (quantity and quality). Quality control monitoring stations and labs.</td>
<td>Note that these functions include the original administrative functions of the Provincial Governors (regulatory functions) and was considered that needed to be kept separated from user participated bodies.</td>
</tr>
<tr>
<td>Building and management infrastructures</td>
<td>Technical Directorate</td>
<td>Technical Director</td>
<td>1 representative for every 100,000 inhabitants of urban areas (or groupings). Major cities maximum of 4 representatives. Representatives of irrigation associations of more than 3,000 Has. (or groupings of the others) and Administration for new irrigation areas yet to have associations. 1 representative for every 50,000 Kwh for hydroelectricity producers (or groupings). Max. 6 Bigger producers. 1 representative for every 20Hm3 for other major industrial users. Max 6 of other uses by proposal of the governing board.</td>
<td>Coordinate rights associated to existing infrastructures in areas where use of water resources is interrelated.</td>
<td>Meets twice per year</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Exploitation Commissions</td>
<td></td>
<td>Representatives of users in the defined area (max 10 urban water supply; 10 energy; 12 irrigation; others 6)</td>
<td></td>
<td>Deal with issues concerning more than one exploitation board; discuss annual report; report on accounts of Exploitation Boards; propose members of dam management board.</td>
<td>Meets once per year (or more if required)</td>
</tr>
<tr>
<td>Users Assembly</td>
<td></td>
<td>All representative of users of all Exploitation Boards in the River Basin Chaired by the President of the RBA. Other stakeholders attend sessions.</td>
<td></td>
<td>Formulates proposals to the President about the filling and releasing of water from dams and aquifers to satisfy existing concessions rights and flood control standards.</td>
<td></td>
</tr>
<tr>
<td>Dam Management Commission (Plenary and sections)</td>
<td>President, Commissar, Technical Director, Head of Exploitation, 2 Central Government reps. user reps.</td>
<td></td>
<td>Members are designated by the governing board on proposals of the users assembly.</td>
<td>Inform future users of infrastructures being built and decision made (have later financial impact on them so warranties efficient construction).</td>
<td></td>
</tr>
<tr>
<td>Infrastructure Building Commissions (Dissolve after building ends)</td>
<td>RBA staff (Technical Director; Area or Department Head; engineer in charge) and representatives of the different types of users</td>
<td></td>
<td>Decided by the governing board responding to requirement by future users once the infrastructure has been approved (of more than 6M euros). Number of representatives of users decided by the Technical Director</td>
<td>The original financial control functions of these bodies is now in the hands of the State Financial Control (and Accounts Tribunal).</td>
<td></td>
</tr>
<tr>
<td>Internal management (Functioning of collegiate bodies and internal administration)</td>
<td>General Secretary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning (Elaboration, updating and monitoring of the River Basin Plan)</td>
<td>Office of Planning</td>
<td>1/3 compulsory presence of regional governments 1/3 users and socio-economic interests 1/3 central government</td>
<td>Important role of planning because management of the RBAs (and other Departments) need to be in accordance with the plan Coordination fora of Regional Governments and Central Governments with affected inetersests (see below)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Fanlo Loras (1995) and own elaboration
Table 9: Stakeholder representation in the Governing Board of the RBAs according to their statutes

<table>
<thead>
<tr>
<th>River Basin Authority</th>
<th>Users and other interests/total</th>
<th>RBA</th>
<th>Regional Governments</th>
<th>Users and socio-economic interests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Urban Water supply</td>
</tr>
<tr>
<td>Jucar</td>
<td>10/32</td>
<td>6</td>
<td>6</td>
<td>10 (5 Valencia, 3 Castilla La Mancha)</td>
</tr>
<tr>
<td>Segura</td>
<td>10/33</td>
<td>6</td>
<td>6</td>
<td>11 (6 Murcia)</td>
</tr>
<tr>
<td>Guadalquivir</td>
<td>9/29</td>
<td>6</td>
<td>6</td>
<td>8 (5 Andalucia)</td>
</tr>
<tr>
<td>Tajo</td>
<td>12/35</td>
<td>6</td>
<td>6</td>
<td>11 (3 Castilla-La Mancha, 3 Madrid and 3 Extremadura)</td>
</tr>
<tr>
<td>Guadiana</td>
<td>9/28</td>
<td>6</td>
<td>6</td>
<td>7 (3 Madrid, 3 Extremadura, 3 Castilla-La Mancha)</td>
</tr>
<tr>
<td>Duero</td>
<td>10/32</td>
<td>6</td>
<td>6</td>
<td>10 (7 Castilla-Leon)</td>
</tr>
<tr>
<td>Norte</td>
<td>13/38</td>
<td>6</td>
<td>6</td>
<td>13 (3 Asturias, 3 Galicia, 3 Pais Vasco)</td>
</tr>
<tr>
<td>Ebro</td>
<td>16/45</td>
<td>6</td>
<td>6</td>
<td>17 (5 Aragon; 3 Catalonia)</td>
</tr>
</tbody>
</table>

Source: modified from Fanlo Loras (1995)

Public Participation in the Water Council of the different basins - the Planning Participatory Body.

The 1985 Law gave water planning an important overarching role for all other functions of the RBAs “all actions related to the public water domain need to comply with River Basin Plans” (art 1.3 of the Water Law). Participation in the River Basin Planning process is thus of highest importance under the 1985 Law and this has been reinforced today with the WFD. Fanlo Loras has pointed out the importance of the Water Council as the forum of institutional get together of different scales or administration since regional governments are compulsory members of the Water Council. He argues that the new role of planning and the role given to the water council makes this body the most important of the participative bodies, administratively and politically in the Basin. The main fora has shifted from the assembly of users and the governing board to the councils. The councils have central government, regional government and stakeholder representation with 1/3 each. For regional governments that do not manage a regional basin this is the only way to be able to participate in RB Planning decisions. Regions such as Aragon have approved a regional Law to regulate the representation of the region in the Basin.

PP has been formally “improved” by Royal Decree in 1994 with the incorporation, in addition to the “traditional” users, of representatives of professional organizations of the agricultural sector and other organizations (including ecologists). In the proposed text, relating to the transposition of the WFD, the presence of ecologist organisations (previously embedded in a general representation of socio-economic interests) have been increased and given a specific quota of the general socio-economic interests.

The River Basin Water Council now has the function of proposing the plan to the Government through the Ministry of The Environment. In addition to planning issues the Water Council can also provide advice on the themes of general interest, including the best organization, management and tutelage of the public water domain. According to Fanlo Loras these “other” functions mean that the RBWCs has a consultative character on governing issues of the RBAs as well.

The River Basin Water Councils can act in plenary or in commissions and there has to be a special commission of planning presided over by the president of the RBAs and integrated by 6 Ministerial representatives; 1 for each regional government; 1 for the professional farmers organizations; 1 for ecologist organizations (among those nominated by the Ministry of Environment); plus the Commissar; the Technical Director; and the Head of the Planning Office. In fact formally the Office of Planning of the RBA is the technical support office of the Water Council. The majority and the minority votes are taken into consideration in the planning process. The conformity of the council is needed to submit the River Basin plan to the Council of Ministers.
The formal roles in plan preparation are that the Planning Office of the RBAs prepare the technical documentation and the Guidelines that are then reviewed by the Planning Commissions. Then follows the plan preparation process where the planning office works together with the Ministerial Departments. The draft plan is presented and alternatives discussed in each Basin by the River Basin Water Councils and then, with conformity, submitted to central government for approval.

Table 10: Composition of the River Basin Water Councils

<table>
<thead>
<tr>
<th>River Basin Authority</th>
<th>Users and other interests</th>
<th>RBA</th>
<th>Central Gov.</th>
<th>Regional Governments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jucar</td>
<td>20+4</td>
<td>5</td>
<td>14</td>
<td>19 (10 Valencia, 6 Castilla La Mancha)</td>
</tr>
<tr>
<td>Segura</td>
<td>20+4</td>
<td>5</td>
<td>14</td>
<td>22 (12 Murcia, Castilla la Mancha 4, Valencia, 4)</td>
</tr>
<tr>
<td>Guadalquivir</td>
<td>17+4</td>
<td>5</td>
<td>14</td>
<td>16 (10 Andalucia)</td>
</tr>
<tr>
<td>Tajo</td>
<td>20+4</td>
<td>5</td>
<td>14</td>
<td>22 (6 Castilla- La Mancha, 6 Madrid, 6 Extremadura)</td>
</tr>
<tr>
<td>Guadiana</td>
<td>17+4</td>
<td>5</td>
<td>14</td>
<td>15 (3 Andalucia, 6 Extremadura, 6 Castilla-La Mancha)</td>
</tr>
<tr>
<td>Duero</td>
<td>19+4</td>
<td>5</td>
<td>14</td>
<td>20 (14 Castilla-Leon)</td>
</tr>
<tr>
<td>Norte</td>
<td>25+4</td>
<td>5</td>
<td>14</td>
<td>25 (6 Asturias, 6 Galicia, 6 Pais Vasco)</td>
</tr>
<tr>
<td>Ebro</td>
<td>27+4</td>
<td>5</td>
<td>14</td>
<td>34 (12 Aragon; 6 Catalonia; 4 Navarra)</td>
</tr>
</tbody>
</table>

Source: modified from Fanlo Loras (1995)

Public involvement in the management decisions of RBAs: the case of the Dam Management Commissions.

The functions of the Dam Management Commission and its sections are of special importance in the Spanish context where “most available water” is water regulated in reservoirs. Decisions on water release are de facto inter-temporal and inter-user allocation decisions. The opportunity costs for the different types of uses of decisions that may affect the availability of water for other uses or in the next period are high on the agenda and “tragedy of the commons” types of situations could potentially generate inefficient solutions. RBAs representatives have developed decision rules (in most cases based on sophisticated “hydraulic resources management” decision tools) to insure that this is not the case. They incorporate assessments under conditions of uncertainty (of water available next year and potential flood risk) accepting the need for a minimum warranty for each user and introducing “penalties” to avoid, for example, that cities have seasonal cuts.

Accordingly, the important role of the administration is in preventing inefficient allocation decisions but with strict compliance of existing water use rights conditions and consideration of priority users as defined in the RB plans or the Water Law. The RBA has most of its high level officials on the Commission (Commissar; Technical Director; Head of Exploitation) and there are also two Sectoral Ministry representatives. The Governing Board of the RBA designates the user representation to the Dam Commission from the proposal of the users assembly (insuring that all interests are represented).

The Dam Management Commission acts in plenary or in sections. It meets in October (to prepare the program of dam filling and release) and in the spring (to review the programs). It can also meet if the president or 1/3 of members calls for a meeting.

The dynamics of decision-making have been documented by Fanlo Loras (1995). Members of the Commission prepare a proposal for dam filling and release, then the President asks the Commissar and the Technical Director for a technical report on the proposal. If there is agreement then a decision will be taken. If not, the President will decide. The importance of the decisions means that the minutes are carefully drafted and approved by the President with a copy sent to the Directorate of Water of the Central Government.
This author illustrates the importance of these decisions and their legal consequences:

"... “with the decision of the President of the Ebro to release water from the dam of Santa Ana...an ecologist group and a fishing association presented a legal case because of the resulting damages to the aquatic fauna and the river margins. The case was dismissed in 1993” (Fanlo Loras, 1995).

Under risk conditions (droughts and expected floods) the Dam Management Commission can constitute a permanent committee (only with RBA officials) and make decisions without meeting with the rest of the members. It only has to inform the full commission and the Directorate of Waterworks in Central Government.

2.3.4 Structure and Level of Participation in/by Users Associations in River Basin Management

a) The water users associations as a form of delegated public administration by users

Participatory local water management organisations have a long tradition and status in Spain, as discussed above. There are today more than 6,000 irrigation cooperatives. The 1879 Law required that all farmers that were to receive surface water needed to be organised in irrigation associations.

“...Their size, importance, and activity varies. An example is the association of the “Acequia Real del Jucar” with 22,000 Has of irrigated land, 35,000 members and processing 1,200 cases p.a.” (del Campo, 2000)

The Law has given WUA a specific status as “public” entities to administer and take “public” decisions at local level. The Law also gave them powers to participate in decision-making at river basin level.

The important role of participatory local water management in water policy, planning, and management today is linked to the specific history from which the current system of water rights, and water organisations derives. The Water Law of 1985 adopted the model of the irrigation associations and expanded it as “users associations” to include different user types (not only irrigators). It also made it compulsory (in 1999) for independent groundwater users in overexploited aquifers to organise in users associations. The participation of users association follows the principle of co-responsibility of users in water management, financing, and planning (see ahead). By Law the user associations are given “public” responsibilities of policing, distribution, and internal administration of water according to water use rights (concessions).

The WUAs have a “public” statute and are linked to and are part of the Basin Authorities who exert tutelage to insure that members comply with their statutes. This, in fact, reinforces the power of the governing and management bodies of the users associations vis-a-vis their members but also protects these members rights. They are “collective organisations” and have autonomy for internal management but submit their functioning norms (ordinances and statutes) to the Basin Authority.

The model ordinances of the irrigation associations were drawn up in 1884 and modified in 1968. They were inspired by and took the form of the most important existing ordinances. The adoption of the ordinances in 1884 was voluntary and it is understood today that it has meant an improvement of management practices. Still, today the traditional regulations carry legal weight (the 1879 Law mentions the need to respect customs explicitly). The ordinances distinguish between common uses of water and the private water use allocation of the total allocated by the RBA to the association.

Water distribution among members of the WUA is carried out as decided by the Governing Board of the association and individual irrigators cannot take water without permission even if its is “their turn”. Irrigators cannot claim “more water” than that established in their individual water use right concession, even if they change to more water consuming crops (Andres del Campo, 2000).
Box 2: Legal background on “water users associations” in Spain.

Most of the experience in Spain of organized users management has been based on management of surface irrigation water, originally regulated by the 1879 Water Law. The Water Law of 1985 and its reform in 1999 created the concept of “users associations” as the way to manage water, including aquifers, as a common property resource. Given the difficulty of influencing the behavior of groundwater users who have had a long history of acting almost without limitations under conventional means of administration (police, regulation, control), it was considered that the participation of users would be fundamental to any attempted reform.

- The 1985 Water Law widened the concept of “users associations” to be not only farmers but also other types of users. Users of all kinds, however, have not always adopted the formulae of the Water Law for organized action. For example in Levante the Wells Societies still remain and in some cases users have opted for organizing as a private association regulated according to long established uses and customs. Of the 12 groundwater management associations of this kind which are operating today, only 3 are doing so as a response to legal requirements).
- The Water Law makes it compulsory that, in overexploited aquifers, users should create a users association. However, there are cases where this has been created without the aquifer being declared over-exploited.
- The reform of the Water Law also placed special emphasis on some of the functions that the users’ associations could have: namely, that both users associations and the Basin Authorities can demand the establishment of monitoring systems of amounts of water used; the users association could elaborate a plan for the improvement of an aquifer which has been declared as over-exploited.

Source: own elaboration

The associations have legal powers in that the General Board of all members approves the budget, elects representatives, ask for new water use rights and acquires and sell properties. They have executive power in that the Governing Board has the executive functions of the General Board and members are elected from it. It also has judicial powers to resolve conflicts among the members or between members and professional irrigators, with powers to impose sanctions and fines. The decisions of the General Board (Assembly) and the Governing Board are binding (as any other public administrative decisions) although decisions can be appealed by individual members to the Basin Authority. The Jury responds to appeals with quick decisions without having to go to the ordinary court. The Jury takes decisions by absolute majority. The secretary formally notes the decision and they become binding. As above, farmers can appeal the Jury decisions to the Basin Authority.

The Irrigation Associations have the ability to raise income through charges to members to cover costs of the charges for water from the RBAs and those associated to running the system of water distribution within the irrigation area (not in-farm), and its conservation and improvement. The farms and the water use rights belong to the individual members and not to the association. The objectives of the associations are legally considered of “public interest” as well as their assets and collective properties. Still they perform “private” services to their members but do not have the same requirements for transparency as other private commercial organizations (public registry of accounts, etc.).

The WUAs are formally part of the structure of the River Basin Authority since they participate in management decision-making bodies (Exploitation Commissions; Users Assembly; Dam Management Commissions; Infrastructure building Commissions); they participate in planning bodies (River Basin Water Council and National Water Council); and in the Governing Bodies (Governing Board). Still, according to the national federation of irrigation associations (FENACORE), it is not a completely cohesive group but composed of many groups that act independently of each other in each Basin.

b) The case of groundwater management in the “Baix Llobregat” aquifer. From overexploitation to joint participated management of the “commons”.

The users association of the Baix Llobregat was created in 1976 as a response to the alarm created by the lowering of the water table and the salinisation problems as a result of over-abstractions in the aquifer located near Barcelona. It was the main water supply of an industrial area and some population centers. The main municipal government in the area took a leading role and, together with the Basin Authority,

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facilitated the creation of the user’s association with the eventual approval of its statutes in 1979. It became fully operational in 1982.

The creation of the users association confronted difficulties because of the non existence at the time of an appropriate legal framework for engaging in collective management of aquifers. Groundwater under the existing 1879 Law was considered private property and hence its use subject to individual decisions. The Public administration could not intervene, in general, in regulating its use and its role up to then had been mainly of developing “technical studies”.

Initially (from 1982 to 1990) only few users become interested in joining the user's association. This included 4 municipalities, some industries and the water company for Barcelona (Agbar) that had many abstraction points for supplying water to the city of Barcelona. Slowly, thanks to the work of the existing members, there has been a widening of membership to include municipalities up to the coastal border.

Raising public awareness has been a main tool in the improvement of the aquifer. From the middle of the 70’s and under the initiative of the municipality of “El Prat”, some key industries and the water supply company made a public call for the need to reverse the unsustainable trends in water use. After the important drought of 1973 with its consequent lowering of the water table and the deterioration of water quality the need was obvious. In 1974 a public campaign was initiated to inform the public about the salinisation problems of the aquifer. At that point the municipality and the main industries adopted a proactive attitude to find out about the reasons for deteriorating water quality of the water supplies. Studies carried out by the Basin Authority services (at that point with no legal responsibilities over aquifer management) were presented publicly.

The main municipality of the area first and later the water users association, considered that public awareness is key to obtaining support for the protection of the aquifer. The participation in technical conferences has given them the necessary technical legitimacy and support while the publication of opinion articles in major newspapers has allowed them to inform the general public and obtain their support; leading to changes in policy decisions affecting the aquifer.

In 1976 the Municipality banned the opening of new wells. The paralization of new perforations was to be of major importance in the reversal of the abstraction trends, limiting access to “new comers”. Ferret (1985) argues that this served as an incentive for the existing industries to start engaging in investments in water saving. If the municipality would have allowed new wells they would have had no incentive to do so. Institutionally, however, it was difficult at the time to establish restrictions on water usage to existing users as is the case today.

**Box 3: The Delta of the Baix Llobregat Users Association (CUADLL).**

**Objectives of the User Association:**

- Reduction of abstractions; insure recharge of aquifers; improvements of water quality; control of the process of sanitization of the aquifers; management of common interests and common representation in basin management; dissemination of technical information.

**Legal status:**

- The CUADLL has the status of a public corporation associated with the Basin Authority but with independent legal status.
- This means that the decisions of the governing bodies are binding, that they can produce ordinances and other “orders”. This allows them also to use the “legal powers” of the administration to enforce decisions of the Board without having to go to resolve disputes, lack of payment, etc.,

**The organizational structure and the functioning rules:**

- The bodies of the WUA are: the General Assembly; the Governing Board elected by the assembly and responsible for the execution of ordinances and agreements adopted by the Board or by the Assembly; the Arbitrator and “the Jury of water use”; the Water Police; and the Technical Commission.
- There is a president, a vice president, a secretary, a speaker, and a technical advisor. Their functions are to insure that the common interest is protected, promote the common interest and defend rights, to establish the norms for a better allocation of water respecting the acquired rights and the local costumes, submit to the Governing Board the modification of ordinances and other proposals.
- Meetings are public and there are regulations to determine its functioning. The decisions are executive.

Source: CUADLL
The association meets about 18 times per year. This includes 7 meetings of the technical commission, 7 of the Governing Boards, 2 General Assemblies and 2 meetings of the Technical Advisors. The budget of the association was 3,125 Euros in 1982 and 66,111 Euros in the year 2000. The quotas paid by the members for services received vary between 138 Euros p.a. and 23,929 Euros p.a. There exists a permanent technical advisor and a legal advisor working on a part voluntary basis. The Users Association regularly publishes in main newspapers, contracts independent technical studies on the aquifer, and produces publications.

The users association has been committed since its creation to ensuring the greater involvement of the water users of the aquifer, and raising awareness about the value and importance of water and aquifer management. The users association is also engaged in getting all groundwater abstractions registered in the official “Water Registry” created with the 1985 Water Law. The user association relies heavily on self-assessment and information by water users. This information is the basis, as well, for the charges of the users association (based on self-reported volumes abstracted). Complementing this it has a system of control of new abstractions, the so called water police, formed by users with experience and knowledge about existing users, and who work in collaboration with municipal police. The association has today a full inventory of existing abstractions.

Technical advice has been fundamental in the process of improvement of the aquifer. The International Center of Groundwater Hydrology and the technical services of the Basin Authority provided back up with technical studies on the conditions of the aquifer since 1965. Technical reports have been used by the stakeholders to support controls and start preventive actions to avoid further deterioration of the aquifer. This was the case in 1977 when groundwater users opposed the diversion of the Llobregat River and the extension of the port. The predicted result of this diversion and extension was a worsened saline intrusion and reduction of further infiltration.

The user association has had a major role in the implementations of some actions for the protection of the aquifer. This includes:

- The negotiations over the proposals related to the construction of new infrastructures, such as the extension of the airport, the new motorway (NII), the proposal for diverting the Llobregat river and other pollution incidents.

- The freezing of new permits for gravel abstractions and its continuous monitoring. The water administration allows the users association to control abstractions and the materials used for “filling”, since this had resulted in the past in filtration of heavy metals pollution from the filling material.

It is important to point out how the lessons from the experience in the Baix Llobregat fed back into the formal Governance system and was incorporated in the amendments of the Water Law of 1985. This innovative strategy of a groundwater/aquifer users association led to changes in the regulations in relation to the creation of users rather than irrigation associations and making it compulsory for them to deal with the “tragedy of the commons” type of situation in overexploited aquifers.

c) From conflict, monopolistic practices and overexploitation (natural and social) to “common property” and sustainable use. The role of a water users association in the modernization of an irrigation district. The case of Mula.

Mula County has a precipitation of around 200-300 mm per year. Potential Evapo-transpiration is high with 1,200-1,300 mm per year. It is a semi-desertic area. Until a few years ago, the traditional basin irrigation was characterized by an old and deteriorated irrigation network causing high water losses. It was on the brink of land abandonment and desertification.

7 Presentation and interview with Francisco del Amor, President of the Mula Water Users Association.
Since the 16th century, and until 1966, water from the river and the wells was owned by “Water Lords” that inherited the rights (as is still the case in the Canary Islands). Water from the artificial irrigation channel was divided in modules of 40 l/s and was sold at an auction every morning in modules of 4 hours to small farmers. Few water lords acted in a monopolistic market (in the supply side) and could fix prices at the expense of the many small farmers. The irrigation users association began in 1966 to manage the water resources by themselves and there was from 1990 a slow process of “acquiring” the water use rights from the water lords and other users. Today all rights for the use of groundwater and surface water in the irrigation area are owned jointly by all farmers in the Water Users Association that functions as a share society.

The WUA with the support of the Murcia Regional Government and others (including the High Council for Research) have introduced a modern micro-irrigation network with a computerized automated system connecting wells, small reservoirs, pumping stations on a community basis. The irrigation system covers a hilly area totaling around 2,000 hectares and is divided into seven main sub-areas. There are a total of 4,000 land holdings belonging to 1,700 farmers. The main products are fruits, citrics and flowers. 68% of farmers are small holders owning farms of less than one hectare. The design choices and operational practices, consistent with the local crop requirements and farmers capacities, were decided by the irrigation users. The main water distribution network to the plots is centralized and owned by the Irrigators User Association. Water loses have been reduced from 1.2 Mm3 to 0.14 Mm3 by the introduction of the system. Other benefits have been gained also, energy cost savings, savings in fertilizer used (around 45,000 fertilizing units), agriculture production increase, etc.

In Mula, there is a detailed account of available water reserves, individual consumption, financial costs and energy consumption according to water source. The WUA draws from a combination of sources: regulated water from the Segura River, which is the cheapest because it is delivered by gravity and costs them 0.03 Euro/m3; water from the water transfer Tajo-Segura which is more expensive (0.13 Euros/m3) since it incorporated the payment of an expensive transfer infrastructure; and groundwater when other sources are insufficient.

One of the prominent features is the financial management of the irrigation cooperative. Each farmer has a “water account”, similar to a bank account in which all water allocation and transactions (withdrawals) are indicated. Each irrigator has his own “water account book” where all his water and fertilizers “movements” are registered. Another interesting innovation is the “water teller machine”, which is similar to a cash-dispensing machine which is located outside of the association's headquarters office. Farmers can program the irrigation times and verify water withdrawal volume by the machine. The WUA has a distribution plan for irrigation and fertilization at the same time. Water carries the dissolved fertilizers that each kind of irrigation crop requires according to the requests from farmers.

Depending on water availability each month, the water is given by quotas to irrigators. The quotas change each month. Irrigators can also exchange quotas among them, always within the irrigation area. The greatest advantages of working with quotas (modules) of water is that at every moment each irrigator knows the amount of water that is at his disposal. The WUA is cautious with the allocation of quotas and these can only be confirmed, for example, when the water transfers from the Tajo are also confirmed. Farmers may save part of their quota if there is a rainy period (rainfall of 10 l/m² permits a stop in irrigating for 3 or 4 days). Quotas that are not used are returned to the association and individual farmers “do not pay for them” but they are not compensated for unused quotas. The incentives to return quotas resides in the savings that farmers make by not paying for the water not used (considering that all water use is now metered). Water prices to individual association members are set in assembly to cover the expected average costs in the period considering the costs of the combination of available sources. Depending on scarcity costs may increase leading to price changes and adjustments by farmers.

The Segura River Basin Authority works with the Mula WUA to manage and control groundwater and surface water through inventorying, monitoring, licensing, etc. As in many other semi-desertic areas with scarce water resources, use of water for irrigation is restricted to specifically designated “irrigation perimeters” which are monitored by the River Basin Authorities. There are always claims about the difficulties of day-to-day control of this by the RBAs. In Mula the irrigation area is inside a designated
perimeter, controlled by the water police of the RBA. The Mula association plays at least two key roles vis-a-vis the RBA. It acts as an information office to new farmers about water rights of different pieces of land. It also reports to the RBA water police on specific cases where farmers outside the allowed irrigation perimeter may be irrigating since it is against their interest when it is the “same” aquifer/surface water they may be using.

According to the main actors involved, the most difficult challenge has been to change people’s minds. The historical mentality has been not to accept a technology of the 20th century, and resist accepting the risks involved in the joint transformation of the system of water rights. The lessons from the project are being applied in collaboration with the Segura RBA in near by areas in the “Campo de Cartagena”, in an area of 40,000 ha, in Lorca with 20,000 ha, and in Totana with 4,000 ha.

### 2.3.5 Structure and Level of Participation in Regional Water Management Organizations and Local and Regional Organizations Providing Water Services

The regional governments that have exclusive responsibilities for water management in River Basins lying entirely within their territory have specific water management organisations at regional level. Their organisational structure includes participating bodies as in the River Basin Authorities (Confederations).

#### Table 11: Participation in the regional water (river basin or island) organisations

<table>
<thead>
<tr>
<th>Region</th>
<th>Participated Body</th>
<th>Stakeholder participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalonia</td>
<td>Governing Commission</td>
<td>10 Regional Government, 15 users and 10 appointed by the regional government in representation of other economic, professional and recreational interests (1988)</td>
</tr>
<tr>
<td>Galicia</td>
<td>Governing Board of “Aguas de Galicia” No users assembly</td>
<td>1/3 of user representation in “Aguas de Galicia” (1993) No user representation in the public company of infrastructures and hydraulic services</td>
</tr>
<tr>
<td>Canary Islands</td>
<td>The General Board of the Island Water Board</td>
<td>In Tenerife 1 regional government, 14 of the Island Government, 1 of Municipalities, 12 of users and their organizations, 7 of farmers organizations and 6 of commercial associations, trade unions and consumer interest groups.</td>
</tr>
<tr>
<td>Balearic Islands</td>
<td>Consejo del Agua and Juntas Insulares Water Forum of the Balearic Islands (BWF)</td>
<td>Public bodies (2002) at a regional (Consejo) and Island scale (Juntas) for consultation and advise regarding management and planning of water. Equal composition of representatives from every involved sector: island and local governments, professionals, University, NGOs, suppliers, agriculture and tourism. Involves citizens, professionals, businessmen and women, students, protected areas managers, national, regional and local politicians and technicians, NGOs and neighborhood representatives, farmers and agriculture organizations representatives, etc.</td>
</tr>
</tbody>
</table>

Source: Fanlo Loras (1995); and on elaboration

The Autonomous Community of Catalonia, for example, holds executive and legislative powers in water management for the so-called “Inner River Basins”. These Inner Basins constitute approximately half of the Autonomous Community, roughly the Eastern part. The rest of Catalonia belongs to the Ebro river catchment and therefore is managed by the Ebro Basin River Authority in which Catalonia participates alongside other autonomous communities whose territory lies within this basin. There is now an agreement between the RBA of the Ebro and the Catalan government who has assumed “by delegation” some functions of the RBA of the Ebro.

Water planning and management in Catalonia is the responsibility of the Catalan Water Agency (Regional Department of The Environment). The main legislative text is the Law 6/1999 of “Planning, Management and Taxation of Water”; by which the autonomous government regulates all aspects of the water cycle. Among the principles inspiring the law, we find that of “co-responsibility, transparency, information and participation of the general public and of users”. There is no specific mention of participation in the objectives of water planning or in the plans and programs developing these objectives. The only possibility of participation is the procedure called “public information” by which any person can present written objections to one or several provisions of the plans. This legal procedure
is common in the Catalan and Spanish legal and administrative systems but it only allows participation in a very limited manner and at the end of the planning process.

Regarding water management, in Catalonia as well as in Spain there is a clear distinction between “users”, “socio-economic interests” and “the general public”. The former are those holding rights (concessions) to water and having therefore the legal capacity to intervene in the decision-making process. For example, they are represented in the River Basin Boards and in the Dam Management Boards (Comisiones de Desembalse). Other stakeholders are represented in consultative bodies that do not have any executive powers. For instance, the statutes of the Catalan Water Agency recognize the existence of a “Council for a Sustainable Use of Water”. This council is formed by 48 members that besides traditional users (city councils, farmers, and hydro electrical companies) includes representatives from environmental groups, consumer and civic groups, unions, universities, etc. The functions of the council vis-a-vis the Water Agency are merely consultative.

Table 12: Composition of the Catalan Council for a Sustainable Water Use

<table>
<thead>
<tr>
<th>Organization</th>
<th>Number of members</th>
</tr>
</thead>
<tbody>
<tr>
<td>City councils</td>
<td>8</td>
</tr>
<tr>
<td>Metropolitan Environmental Authority (Barcelona Area)</td>
<td>1</td>
</tr>
<tr>
<td>Environmental Groups</td>
<td>6</td>
</tr>
<tr>
<td>Unions</td>
<td>4</td>
</tr>
<tr>
<td>Universities</td>
<td>4</td>
</tr>
<tr>
<td>Water Supply Companies</td>
<td>2</td>
</tr>
<tr>
<td>Farmers, Manufacturing, Recreational</td>
<td>16</td>
</tr>
<tr>
<td>Consumer Groups</td>
<td>3</td>
</tr>
<tr>
<td>Civic Groups</td>
<td>1</td>
</tr>
<tr>
<td>Experts</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>48</td>
</tr>
</tbody>
</table>

The 1999 reform of the national Water Law also created and regulated the so-called “Local Water Entities” (ELAs) which, in application of the subsidiarity principle, may hold executive powers regarding water supply and wastewater management at the local level. ELAs can also be created for the integrated management of river basins (or parts of these basins). Nevertheless, since 1999 no ELAs have been formally constituted in Catalonia. Moreover, public participation in this is not foreseen, at least explicitly.

The regional and local governments have created public companies or other entities for management of specific water services such as urban water distribution or sewage collection and treatment. Some of these have participating bodies.
Table 13: Stakeholder participation in other local and regional organisations providing water services

<table>
<thead>
<tr>
<th>Region</th>
<th>Name</th>
<th>Character and Functions</th>
<th>Stakeholder representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madrid</td>
<td>Canal de Isabel II</td>
<td>Created in 1851 as a Public Company. Since 1984 with responsibilities for water storage, distribution and wastewater treatment</td>
<td>In the Administration Board there are representatives of municipalities, the region of Madrid and central government. No users.</td>
</tr>
<tr>
<td>Navarra</td>
<td>Navarra de Infraestructuras Locales (Nilsa)</td>
<td>Public Company (1989) for the construction of wastewater treatment plants and provision of sanitation services (including charging)</td>
<td>Governing Board: 50/50 Local Governments (designated by their Federation) and Regional Government. No users.</td>
</tr>
<tr>
<td>Valencia</td>
<td>Entidad Pública de Saneamiento de Aguas Residuales</td>
<td>Public Body (1992) for construction of wastewater treatment plants and provision of sanitation services and wastewater reuse (including charging)</td>
<td>Governing Board (Regional Government, 3 Local Governments and 1 State). Participation Board (Regional, central and Local Governments, trade unions, user associations, business associations and environmentalists)</td>
</tr>
<tr>
<td>Asturias</td>
<td>Sanitation Board</td>
<td>Public Body (1994) for planning and construction of wastewater treatment plants and sea outflows and the provision of sanitation services (including charging and incentives). Including establishing objective for quality of emissions</td>
<td>Governing Board (Regional Government; 2 of Local Governments and 1 of organizations giving services to groupings of municipalities). Participation Board advisory to the Governing Board including the budget, the annual action plan and the sanitation charges (Region. Municipalities and economic and social agents).</td>
</tr>
</tbody>
</table>

Source: Fanlo Loras (1995) and own elaboration

2.3.6 Other Recent Experiences in Participatory Approaches in International River Basins and Regional and Local Water Management

a) Participatory approaches to water demand management in Zaragoza

This project in Zaragoza is an example of a local group taking responsibility for an initiative of promoting water saving in an urban area. The group took the initiative of “showing real results” of water saving alternatives as compared to mainstream water supply options in a context of general scepticism about their potential contribution to the “water problem”. It is a good example of a “grass roots” initiative, unusual in that it calls for and promotes individual and different groups responsibility engaging public actors rather than “waiting” or “reacting” to public proposals (see public perceptions in 1.3 and concluding section 3).

This project was considered innovative and supported by Life funding of DGENV. The project has had important outcomes such as:

- Dissemination of knowledge about the possible water saving actions that citizens can take (from 40 to 72%).
- Education programs on water saving covering 69% of primary and secondary schools.
- Involvement of 150 organizations (end users) in the project.
- More than 140 companies distributing water saving technologies participated in the project (65% of the total)

The Local group established a series of actions that included different levels of involvement of different local actors, local and regional institutions, economic and social groups and the citizens. The strategies for action included: water savings audit to companies; comprehensive information campaigns to economic actors; engaging the local suppliers of water saving technologies; general education campaign including explaining the need to have prices that reflect the value of water.
b) The 2001/2003 Participative Forum on water management of the Balearic Islands

Water scarcity is a common background to the impressive economic development of the Balearic Islands. Scarcity brings about conflict and this is the case mainly in the context of existing water use rights (groundwater and some surface water use rights) and increasingly expensive water supply options (desalination). The regional government of the Islands initiated in 2001 an open process of consensus building about a sustainable water policy for the Islands, acknowledging that this was the only way to progress in building social consensus between the different stakeholders. The background for the participative approach was the approval of the WFD in December of 2000 in anticipation to its Spanish transposition.

The main outcomes of the project are a “Declaration” reflecting an agreement of the five main orientations for a sustainable water policy for the Islands: integrated management of the water cycle as a central framework; incorporate water as part of land use planning; improvement of efficiency of the public administration; re-orientation of public investments; and insure effective participation of every stakeholder related to water in any sense. The main strategies included proposals for slowing down tourist development; increase control of the administration over water use; need to build on the traditional scarcity management practices and real participation of stakeholders in decision-making. Action lines proposed include - to improve wastewater treatment: public educational and awareness campaigns; policing of wells and other water supplies; land use planning decisions need to consider water availability; and improve the islands administrative decision-making.

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The qualities of the outcome were important in the initiative and the objective of the forum was for the agents to identify with the final product. The media (clear media presence through the process) should reflect this as well.

<table>
<thead>
<tr>
<th>Level of participation</th>
<th>PP methods</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Local briefings; sectorial symposia; electronic bulletins</td>
<td>Provide different types of information through a variety of activities</td>
</tr>
<tr>
<td>Consultation</td>
<td>Public hearings and meetings Focus groups</td>
<td>Create an atmosphere of listening to public concerns Initial strategy is how agents respond to official diagnosis of problems</td>
</tr>
<tr>
<td>Discussion</td>
<td>Small group and large group meetings Working groups using Logical Framework and EASW methodology</td>
<td>Creation of non-threatening environments of public-private interactions by having meetings without the media Create informal forums for discussion among agents with traditionally confronting interests</td>
</tr>
<tr>
<td>Co-designing</td>
<td>Small group and large group meetings Building and revising final consensus document (BWF Declaration)</td>
<td>Build together consensus on gaps in policy Build together a sense of commonalities in analysis and positions of different agents Identify together main conflict points</td>
</tr>
<tr>
<td>Co-decision-making</td>
<td>Voluntary agreements</td>
<td>Build together consensus on the main lines of public policy</td>
</tr>
<tr>
<td>Decision-making</td>
<td>----------</td>
<td>Level not reached Info available at <a href="http://www.caib.es">www.caib.es</a></td>
</tr>
</tbody>
</table>

Almost 230 people from all 4 islands have been informed, more than 80 have participated in several workshops and 90 signed the final BWF Declaration. The process outcomes were of specific importance and these were reported by participants to include the change of public perceptions on the regional administration. From imposing solutions and generating conflict to an agent creating platforms for debate and consensus and an agent of consensus building.

Creating a forum for interaction between traditionally confronting agents was also perceived as a major process outcome because it was soon realized that there were consensus points not only on analysis but also on positions. Feeling listened to by the public bodies (not mere PR) was a main achievement for participants. The process allowed government to tap into the potential of stakeholders as leaders, providers of information, and facilitators.


The Muga River is located at the North-East of Catalonia, Spain, near the border with France. It is the only Mediterranean river left in Catalonia without a medium or large reservoir built in it. Apart from the key role that it plays in providing water for tourism in the North of the Costa Brava and for a thriving agro-food production sector, it is also crucial for the preservation of the Aiguamolls Natural park wetland, declared of international importance according to the Ramsar Convention.

In the project, a total number of 30 experts and interest group representatives have been consulted via 3 focus group meetings in order to gain support for the assessment of the state about problems of the river, as well as to generate some insights on possible courses of action. Policy makers, relevant NGOs, local authorities, and experts have been invited and have participated in the meetings. Work is still in progress.
Information
The public has access to information
An up-date dossier, containing the recent data on the river situation is provided before hand at the meetings. This now includes updates on the issues of participation within the WFD. Tailor-made web page created.

Consultation
The views of the public are sought
Via a total of 4 groups meetings of both experts, policy-makers and interest groups representatives.

Discussion
Interaction takes place between the public and government
Policy makers attend the meetings together with representatives of stakeholders.

Co-designing
The public takes an active part in developing policy or designing projects
Not reached

Co-decision-making
The public shares decision-making powers with government
Not reached

Decision-making
The public performs public tasks independently
Not reached.

d) The 2002 international rivers (Spain-Portugal) initiative for participation in the WFD context

The IBERAQUA project (developing a co-operative system for the management of shared water basins in the Iberian Peninsula; January-December 2002; Iberaqua, 2002a., 200b) focused on providing knowledge and support for the implementation of the Water Framework Directive (WFD) and the Luso-Spanish Convention (LSC) with focus on the issues of collaboration between institutions of Spain and Portugal and the participation of local stakeholders in the three shared river Basins of the Duero, Guadiana and Tajo Rivers. Specifically IBERAQUA aimed at achieving three main objectives:

1.- Carry out new research on the Water Framework Directive and the Luso Spanish Convention taking into account the specific environmental, administrative, legal and economic characteristics of the three Luso-Spanish basins while addressing the complementarity between these two legal instruments and identifying the social and institutional mechanisms to enhance the effectiveness of their implementation.

2.- Provide information to relevant institutions, stakeholders, and water managers on the WFD and the LSC and also specific results of the IBERAQUA research.

3.- Facilitate a co-learning and interactive process in order to promote debate and institutional change via public participation and better understanding of the water management systems.

Three participatory full day workshops were carried out in border towns close the Duero, Tajo and Guadiana rivers involving around 35-50 people a time, divided in focus groups of about 5-10 people with access to simultaneous translation, and a moderator and a note taker. The day meetings were also complemented with two plenary sessions first given some relevant information on the two legal instruments (WFD, LSC) and at the end with some conclusions of the gatherings. In total, just over a hundred people were consulted. Previous to the workshops, a questionnaire was delivered to possible participants as well as to other relevant agents in order to better frame the discussions of the focus groups and obtain secondary information from actors unable to attend the meetings. A web site was also set up at an early stage of the project in order to give easy access to the relevant documents and state-of-the art situation in the three river basins.

According to the organisers IBERAQUA contributed to a greater awareness and understanding of the EC’s Water Framework Directive (WFD) and the Luso-Spanish Convention (LSC) in the Iberian Peninsula by contributing to fostering collaboration and joint participation of water users and managers involved in the river basins shared between Portugal and Spain. IBERAQUA also helped at providing a platform for discussion about the sustainable management of transboundary river basins by inter-institutional coordination in each of the Iberian states and the participation of civil society. However, and despite the huge efforts devoted to contacting and establishing the network of relevant actors, the difficulties of a one year and three river basins program became evident, and have limited the
possibilities for integrating the results, mainly of a procedural nature, in the broader institutional and social context.

<table>
<thead>
<tr>
<th>Level of participation</th>
<th>PP methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Large dossier containing relevant information related to the public participation and implementation of the WFD and the water Spain-Portugal Convention delivered. Tailor-made web page created.</td>
</tr>
<tr>
<td>Consultation</td>
<td>Internationally composed focus groups during 3 sessions.</td>
</tr>
<tr>
<td>Discussion</td>
<td>Face-to-face focus groups and support for mail networking built.</td>
</tr>
<tr>
<td>Co-designing</td>
<td>Level not reached</td>
</tr>
<tr>
<td>Co-decision-making</td>
<td>Level not reached</td>
</tr>
<tr>
<td>Decision-making</td>
<td>Level not reached</td>
</tr>
</tbody>
</table>

**e) The Malaga Forum of social participation and management in the Basins of Andalucia**

The Malaga Forum has been promoted by the Regional Government of Andalusia as a Forum of participation of the stakeholders affected by water decisions. The forum is an on-going open experience where experts, main water user associations and citizen associations discuss the proposals for water policy in an open forum. The purpose is to discuss the strategic issues that can later on be reflected in policies and actions. The new factors that need to be confronted in Andalucia, according to Forum organizers and participants, include the increasing water scarcity and limited possibilities of increasing water availability and also the challenges posed by the WFD.

The Forum uses, in each of its meetings, the methodology of the “European awareness scenario workshop” with a series of iterations among the different participants identifying issues and scenarios and developing action proposals for the scenarios.

The forum results include:

- A “Sustainability Declaration” and associated actions around 5 strategies for water management, including coordination with spatial policies: address groundwater overexploitation and increasing costs of water for farmers: changes in the agricultural context: public responsibilities in water management: agricultural diffuse pollution and expected tensions with urban water users.
- A “Participation Declaration” and associated actions related to 4 horizontal themes - improve political-administrative effectiveness of the existing participating water management forum: transparency in information and awareness raising: confront the skeptics in relation to participation: confront the increasing social tensions and the value changes in relation to environmental awareness.

Of particular interest and value is the role of the Regional Government of Andalucia in the process. Although the Forum is organised and funded by the government, they have kept deliberately a role of convenor, facilitator, and reporters. Regional Government officials are present enough to pass on the message that the results of the forums will have impact on public policies but without taking over the “running” of the sessions avoiding being perceived “as usual” as chairman or as main proposers of

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9 Babiano, Luis (2003), Borrador Final II Encuentro del Foro de Malaga, CENTA y Junta de Andalucia
policies to be discussed by Forum members. This “new approach” to the role of government could have potential in light of the challenges of the WFD (see concluding section 3).

<table>
<thead>
<tr>
<th>Level of participation</th>
<th>PP methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>European awareness scenario workshop</td>
</tr>
<tr>
<td>The public has access to information</td>
<td></td>
</tr>
<tr>
<td>Consultation</td>
<td>European awareness scenario workshop</td>
</tr>
<tr>
<td>The views of the public are sought</td>
<td></td>
</tr>
<tr>
<td>Discussion</td>
<td>European awareness scenario workshop</td>
</tr>
<tr>
<td>Interaction takes place between the public and government</td>
<td>Development of scenarios and of actions</td>
</tr>
<tr>
<td>Co-designing.</td>
<td>Level not reached</td>
</tr>
<tr>
<td>The public takes an active part in developing policy or designing projects</td>
<td></td>
</tr>
<tr>
<td>Co-decision-making</td>
<td>Level not reached</td>
</tr>
<tr>
<td>The public shares decision-making powers with government</td>
<td></td>
</tr>
<tr>
<td>Decision-making</td>
<td>Level not reached</td>
</tr>
<tr>
<td>The public performs public tasks independently</td>
<td></td>
</tr>
</tbody>
</table>
2.4 Impact of Public Participation

2.4.1 What has Influenced Public Participation

Reasons for involvement and how this has affected Public Participation

The variety of reasons for public involvement in River Basin Authorities (Confederaciones Hidrograficas and other regional water agencies) in Spain have influenced who is involved and how. Users initially “gave themselves” the opportunity to be involved (as co-founders). The RBAs later have promoted this involvement and the collective representation of users as “financial” contributors towards building necessary “collective” infrastructures. The RBAs and other government agencies were key in the process of up-scaling water interventions. As direct contributors and interested parties the presence of users went beyond financial support and extended to management of infrastructures where allocation decisions are taken and controlling the building decision process to insure low costs.

Early on, different governments have built on and promoted the creation of irrigation and, later, user associations. The reasons for involvement have been, among others, the need to “facilitate” government intervention through “intermediate organized structures” that could act both as interlocutors with many individual farmers and as implementers and part of the executive arm of policy. This led to the WUA having an important role and although their role in RBAs participated bodies today is advisory, they have co-decision-making and decision-making power, through juries and administrative decisions at local level. This is supported by the River Basin Authorities. As “public entities” they assume administrative powers of enforcement (with the tutelage of the RBAs).

The involvement of other stakeholders representing “socio-economic interests” or “general interests” (in addition to existing users) was justified very early on, where projects had social objectives or in new colonization projects with no users yet. The consideration of social objectives and the implications of actions for sectoral Departments and Ministries have meant the involvement of stakeholders such as regional administrations (in parallel to the decentralization process) and sectoral departments of Central Government Ministries. Participation of the public is always “indirect” and made operational by casting them as “members of stakeholders groups”. Everyone in this process is a “water user” or representative of organized socio-economic or general interests and thus a “stakeholder”. No one is cast here directly as “general public” (general interests are safeguarded by the public organizations). There has been a very slow and limited incorporation of ecologist representation and other consumer protection associations, as part of the socio-economic interests, and this only in planning advisory bodies in the National and River Basin Water Councils.

The issues at stake have prevented public participation in “regulatory” functions of the River Basin Authorities in Spain. In general there is no PP either in organizations providing urban water services (local water distribution, sewage and wastewater treatment) when these are provided through a specialized public or private company. There are some exceptions to this, in Asturias and Valencia for example. When the service is provided directly by municipal services they are subject to the “same” publicity regulations as any other municipal decision. At local level, when users are organized in water users associations (WUA), the participation and decision rules inside the associations are well established in tradition and formal statutes (and subject to oversight of the RBAs). Some of the issues here relate as to whether representation according to size of holdings provides enough weight to smaller farmers.

The level of involvement has varied from consultation, discussion, and information with some level of co-decision-making in the RBWC to co-designing and co-decision-making (active involvement) in the management commissions of the RBAs and in/by the users associations. Over time, decision-making rules in RBAs have been regulated and it includes provisions today where the role of stakeholders (in most River Basin participating bodies) is mainly advisory. This is related to considerations that it is the governments’ responsibility to be involved in decision-making. Decisions or agreements in the participated bodies can then be overruled often by the Basin President or the Comissar. Still there is a tacit understanding that this procedure should be avoided and that consensus/majority votes (considering
minority votes) should be the basis of decisions in the context of RBAs. This is especially the case in those Basin Commissions where decisions affect directly beneficiaries (water allocation or RBA taxes) and where, of course, “consensus” will improve the possibility of solutions being accepted as positive.

Many of the “other” more recent participatory experiences have been, in general, less linked to specific decision-making processes or management issues as those above. “Who” has participated and “how” has followed principles of inclusivity (and equality) of all affected parties. The understanding was that all parties were necessary in order to obtain the necessary information, bridge across different views and interests, if the objective was to come to common understanding about acceptable solutions and improved consensus, or at least understanding. This is especially important where “critical” situations of water scarcity make it necessary to establish forums of consensus among different interests. The methods used include creating non threatening opportunities for small group discussions where all participants are invited to express their views and opinions. They used a variety of charts and maps to facilitate joint understanding of common problems. Yet, there is a general acceptance that in many of these examples, the “higher levels” of involvement where participatory processes lead to policy decisions or actions on the ground, has not been reached.

The influence of ideology and context changes on PP

Ideology has strongly influenced the importance given to public participation in the different phases of River Basin management. In fact, it is the evolution of political and economic paradigms that have exerted, and continue to exert, an important influence on institutional arrangements and public participation. Ideology helps us to understand what the “rules of the game” are today. It has legitimated the appearance of new actors, and their positions and power in the process of problem solving. In, what was called above, the Liberal Period of the late 19th century and in the Mercantilisation Period stakeholders were most importantly financiers who needed to be part of decision-making or engaged directly through the market. In the Regeneracionist Period, of the early 20th century, users organised through syndicates are promoted and engaged in big scale public led river basin interventions with other affected parties and general/social interests also represented. In the Post Civil War Period, users and other “interests” are not “necessary” and are not involved or are organised in new users associations with eminently practical goals. In the Democratisation and Decentralisation period, participation opens up and becomes much more active with the emergence of two new types of affected parties: the regions and the ecological groups.

It is important to consider, as well, that the present structure of public participation, the importance it has in different types of issues (planning, management, governing), can only be understood in the light of the above changes of the last 100 years. The formalised participatory practices we have today in River Basin Authorities and at the National level are the result of “cumulative” changes and gradual displacement of issues at stake and accordingly of the role of some participated bodies and stakeholders.

Other influences on PP

An important question is whether there has been any cross-learning between different policy fields and if this has had influence in PP practices in River Basin and generally in water management today. Some of the “public information” and formal response procedures in River Basin Planning (in the context of the Water Councils) has parallels with the procedure of public information and the consideration of allegations in urban land use plans, which is generalized in all municipalities and has a long standing tradition. The more recent PP experiences in the context of Urban, Agenda 21 and some of the structural fund programs (Leader, Territorial Pacts and Equal) has not so clearly filtered into the Public Participation processes in River Basin Authorities (or at National level). They seem, however, to have been influential in the types of “new experiences” described in section 2.3. There are at least two ways in which this seems to have been the case: in the methods and IC-tools used and in the goals of the processes.
It is also important to consider how these experiences in other fields have served to come out with bottom up proposals for water interventions (see Navarra Cohesion Fund project on river restoration) and have helped to create some of the local structures that are looking into water issues in the context of integrated local sustainable development programs. They are raising issues such as the need to consider the value of natural resources. This is the case of Leader and particularly in mountain areas, today, confronting specific dilemmas because traditionally they have received many impacts of water interventions and today have extensive areas declared “sensible areas” in relation to the bathing water directive or the drinking water directive.

**Scale and multi-scale** issues are also relevant for understanding public participation and who is involved and how. In the Spanish water management context, up-scaling of interventions in the early 20th century made it necessary to incorporate “organized users” through syndicates and other associations of economic or social interests, rather than individual users affected by specific projects. Re-scaling again during the decentralization in the last part of the 20th century introduced a new type of influential stakeholders and also led to creation of regionally managed river basins. Multi-scale issues in river basin planning and management affecting different levels of government and types of actors (local, regional, national) are a special challenge. The complex intersectoral multi-scale nature of River Basin planning has led in Spain to development of specific coordination commissions. There are, in some cases, some formulas of coordination mainly of “administrations” but also, in cases, including other stakeholders. Inclusion of stakeholders is more common in specific single issue coordination such as the regional price commissions.

There are clear differences in the type and quality of PP according to whether there are local, regional or River Basin or National scale issues in water management. It is at the local scale (but also at regional scale) where many of the most recent experiences of open PP have emerged. Regional, River Basin and National scale PP has a long tradition and is much more regulated. Actors have a clear understanding of their influence on decision-making in the context of established rules. Meetings are carefully minuted to insure that actors know and are provided with “security” of how their opinions and positions (and that of others) are considered in decision-making. This both binds them but also provides security.

### 2.4.2 Effects of Public Participation on Social Learning.

**SL in the context of Harmonicop and contributions of this report**

According to the definition of SL in the context of the Harmonicop Project (Craps, 2003 and Maurel, 2003), this section aims to analyze the existing experiences of public participation presented in this report, and assess the impact they have had on “the growing capacity of social entities to perform common tasks related to a river basin considering it both as a process and an outcome”. It looks “beyond whether and how actors are “structurally” part of decision-making (their power and role) to the outcomes, and on to the quality of the relations they establish”. It answers also the following questions:

- What is the context in which this takes place?
- How do the outcomes of the social processes affect the context in turn?
- What is the tuning between the social and the physical system?
- What is the role of IC tools?

In the River Basin Management context it is of special interest to draw lessons on “how groups learn to take joint decisions related to water resources (learning together to deal with the interconnected issues of their environment) in which they all have an interest, in order to arrive at collective sustainable solutions”.

The limitations of this National Report is acknowledged. It provides little evidence to enable detailed conclusions on the “growth” of different elements of social learning to be drawn. There is little evidence on growth of cognitions on technical issues and social processes; attitudes (ability to accept differences
The report supplies little evidence on which conclusions can be drawn about the levels of learning in the Spanish context (“first level”, “second level” and “learning how to learn”). We will draw out some ideas, however, which can be tested in the case studies in Work Package 5.

The analysis of social learning has to look into experiences in a relatively long time frame. In this national report we have chosen to draw conclusions from:

- The analysis of the cases of PP in water management in the context of water users associations and from the new experiences of PP in local water management.
- The analysis of formalized public participation in River Basin Management organizations by looking at subsequent changes in history from the perspective of the “communities of practice”.
- The analysis of the quality of relational practices in RBAs and the challenges and bottlenecks.

The problems that users and local population were confronting both in The Baix Llobregat (Barcelona) and in Mula (Murcia) were extreme. Sea water intrusion and lowering of the water table in the deep aquifer of the Baix Llobregat was endangering the water supply of main urban centers and industries in an area greatly dependent on the aquifer. Land and economic activity abandonment was an increasing reality in Mula. In both cases PP and the creation of new self-sustaining organizational formulas have resulted in improved opportunities and progress towards sustainability in the use of resources, and in the management of “the commons”.

The analysis of the process of “change” both in the “Baix Llobregat” and in “Mula” show that to achieve results local actors have become self-organized and have established joint systems of self management and control. They have also established multi-scale systems of collaboration with other scales of administration and other agents (mainly the River Basin Authority and research organizations). Moreover they have been able to establish a process that has at the end “feedback” to the “governance” system, establishing and helping to reinforce new organizational structures and new agents. In both cases these have served as models for further levels of change at a larger scale. In the case of the Baix Llobregat their “system” has been incorporated and made “compulsory” for other over exploited aquifers in the National Water Law. In the case of Mula the “model” is being promoted by the RBA to improve efficiency in other irrigation areas of the Segura Basin.

The extent to which lessons about the “quality of relational practices” in PP in these two important experiences have been explicitly “learnt” is an open question. In the context of a community of practice that at all levels is dominated by the “technical professions”, mainly concerned with “solving the problems”, let alone give substantial entity to issues such as relational practices. The consequence is that the lessons are embedded in the personal experience of the leaders/facilitators but do not become more widely/shared or considered.

The protagonists of the cases explain how important it has been to look at the process of change as a step by step process and one where “the outcomes” were not so clearly envisaged in advance or have the same shape as envisaged but have emerged in small improvements; showing results along the way such as a slow but gradual reduction in salination in the aquifer or increased value per drop in the irrigation zone. This gradual change has helped in the process of building trust in the joint efforts as against their own possible individual ones. As results came about more farmers became engaged in Mula and more users involved in Baix Llobregat. Helping to support joint action versus individual action and legitimizing the existence of common “control” rules.
In both cases there has been engagement of different types of agents (some users, some not) with different “abilities” or resources that they could bring to the process. In the case of the Baix Llobregat the difficulties associated with “seeing” the problems in an “aquifer” made it necessary to engage the support of the RBA and a scientific research center to help providing “evidence” with maps and other simulation tools of the salinisation and over-exploitation problem and their evolution. It also engaged Agbar (the water company of Barcelona) in providing specific monitoring services and in recharging the aquifer. In the case of Mula the support of the RBA, and the CEBAS (part of the National Research Council) was fundamental in providing technical advise on water use and fertilizer and pesticides use and also providing “financial resources”, mainly in the pilot phase of application. Financial support was key to the success of the project but also for SL because it helped the project to be “owned” by a wider set of actors generating their interest in the dissemination of an experience perceived also as “theirs”.

In both cases there was engagement generally of the local population through conferences, the local press and even demonstrations (in the Baix Llobregat). All these were important “tools” to increase visibility and support for the actions and for increasing awareness of shared problems. In Mula there have been important spin offs from the social/relational capital built in the process and the ability and benefits shown from working together, and trust generated. This has included the creation of different types of farm cooperatives for local packaging and marketing local products. Improved status due to results have also lead to the President of the Mula Water Users Association becoming a main stakeholder in the River Basin participatory bodies.

It is important to point out the many opportunities for positive and negative loops. The process of change should not be expected to be “even”. In the case of Mula they explain that the process was not “easy” and that challenging the “existing order” in Mula involved some clearly adversarial practices such as law suits from existing water lords and landowners. This could have led to a vicious circle of confrontation. Even to abandonment of the process of change.

In the Baix Llobregat and in Mula changing the perceptions of the population of what was possible has been reported by participants to be a main challenge. A challenge, that has been confronted also explicitly in some of the “other participatory experiences” presented in this report, was to deal with the conflicting perspectives of many different interest groups. In several of these “new experiences”, the task has centered on changing, through collaborative methods, the commonly held perspectives leading to proposals about what ought to be done. For example, groups committed to the “usefulness of demand management” or others convinced about water supply options for dealing with the underlying problems of water scarcity in Baleares and Andalucia were not so much wrong as needing to see a bigger picture. Interaction forums began to allow bigger pictures to emerge for everyone. These pictures, were still different but they had much more in common than they expected and there were, presumably, themes which almost everyone could agree on, if not on their relative importance.

In light of the Spanish new experiences interaction forums need to be seen as “wider” than a “negotiation table” with many engagements with specific stakeholders such as that with the “water saving devices industry” in Zaragoza having a specific realm. It was important to provide “non threatening” environments where actors feel their position will become known and therefore with potential to be influential but, at the same time, not “determined” in open processes by design, seems to be a common aim also in these settings.

The new experiences of an initially broader field, are generally less “mature” and hence it is difficult to assess their impact particularly since this depends on how they are designed to be followed up. They are “often” more ambitious and less concrete in their objectives than those of the users associations experiences here. They are the initial steps aiming at confronting and making explicit existing problem frames of different actors as well as observing how some overlap and even fit together. The protagonists at these events report important relational outcomes, changing perceptions and relationships with government, because of being heard (beyond elections) as was not the case before. It was an experience of open government and enhancing democracy. They also report improved working relationships and increased practical collaboration between consumer and ecologist groups and governmental offices. Perhaps a most important lesson in light of the WFD relates to the generation of models of the possible
additional “public administration” role in RBM (in the cases of the Balearic Islands and Andalucia mainly) as conveners and as facilitators and less as Chairman’s and proposers of specific “solutions” to be accepted or rejected by other stakeholders.

The use of IC tools has had a specific role, not only in the context of helping actors to come into a common understanding of existing problems but in sharing common visions of future options. In the case of the Baix Llobregat particularly the IC tools and the maps and simulation models provided by the supporting Scientific research institute help everyone to understand the problem, monitor results of control actions taken, and help provide a feedback between the social and the natural system on which all the actors depended. In the case of Mula the development of a “model” of the possible future of the irrigation area was very helpful. The construction of a building (beyond using the local museum offices) in Mula also helped providing a sense of common identity for the joint effort. The use of IC tools such as brochures, leaflets, and charts for the joint construction of understanding about shared problems was common in the “new experiences”.

**The evolution of the role of PP, Social Learning, and River Basin Management from the perspective of “communities of practice”**

The evolution of Public Participation in River Basin Management in Spain was analysed in its historical context in Section 2.1. PP and “social learning” needs to be understood in the context of successive governance systems, and the evolving self made natural conditions of the country. It is within these conceptual spaces where stakeholders interact. The context determines, to a varying extent, both the way decisions are made and the relationship between the actors. Public participation (PP) takes place considering the competing and shared conceptual frameworks of different groups of actors about the problems of the river basins and the way these actors can exercise power and legitimate their participation in decision-making. This takes place within the wider field of political, economic and environmental debate.

In the Spanish case in order to understand existing governance structures and the way different actors understand the water problem, it is necessary to study previous political and economic processes and “their relational and technical outcomes”. Fragments of earlier positions have become embedded in the administrative character and rules of the present structures. Other fragments influence commonly held public perceptions, and the way the problems of the river basin, and its opportunities, are framed by the different actor groups.

It is the interactions between the changing dominant ideologies, “external” to the water sector, and the attempts to cope and adapt by the different groups of the water community (who have inherited and hold fragments of previous positions), that help us to better understand what kind of pressures it is under today in order to proceed with further change. These changes in dominant ideologies of the past have influence PP, given support to and legitimise the changes in problem frames, the appearance of new actors, the positions of actors and their power, and the ways they interact in the process of problem solving. It is the “conversation” between external and internal that throws light onto the role of PP and the way communities of practice adapt and change and, indeed, the way these changes are legitimised or questioned in wider arenas. In this way we can understand also that the River Basins are important nodes in the wider mechanisms of societal learning.

The relevant external changes in the policy environment in Spain, have been identified by different authors (del Moral and Sauri 2003) and they include the globalization processes, the decentralization of government, the increasing valuation of environmental qualities by the population, the liberalization policies and indeed the changes in the European context (WFD and sustainability debates). These context changes have legitimised and reinforced existing internal processes and led to adaptation, but also resistance and rejection on the part of the communities of practice.

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10 see concept defined in M. Craps, 2003
There are, however, other factors which need to be understood as part of the formation of generally accepted values and specific positions of some stakeholders and which provides clear “information” to different stakeholders. This includes **hard evidence of the way the natural context (under increasing pressures today) is different today from what it was 100 years ago**.

Perhaps we also need to point out at changes in other paradigms for understanding policy; such as those moving from a positivist to an interactive conception of the relationship between man and nature or the important role of risk and uncertainty in the particular case of the management of natural resources.

The resulting PP system of the historical evolution and the process of more or less smooth adaptation has resulted in the system we have today. This confronts a series of specific dilemmas and bottlenecks and can be also assessed (from the SL Perspective of Harmonicop) in relation to the quality of the relational practices (see below).

**Dilemmas and bottlenecks in PP, the quality of existing relational practices in River Basin Management**

PP is a well established practice in River Basin Authority’s decisions and interventions in Spain today. The present structure of PP (its role and who participates and how) and the way it influences decision-making reflects the historical evolution. There are some major concerns and dilemmas that the PP system and governments and other actors confront in the process of making River Basin Planning and Management decisions.

There are some legitimate concerns and dilemmas confronted by different governmental bodies about PP. They need to decide where the legitimacy of decision resides within the system of Parliamentary Democracy; with the elected national and local governments or with specialized participating forums, and what implications do the different answers have for PP practices in river basin authorities? The advisory role of these bodies, their composition (with an important presence of public or appointed officials) and the relational practices where majority vote rules, reflect these concerns. Still it is important to note that consensus decisions are pursued and otherwise quality and minority votes considered in decision-making and in allegations. This is specially the case in management commissions such as the dam commissions and other river basin advisory bodies where RBAs Presidents try to avoid overruling decisions of participatory bodies.

There are also dilemmas where government and river basin managers see their role as “integrative” and, considering wider goals of spatial balance and equity, and where decisions clearly affect specific regions and/or some representatives of specialized groups. Existing decision-making rules facilitate that governmental decisions prevail but this model also affects relationships and the ability of RBAs to work in the day-to-day management and governing decisions. The consideration of minority votes and the thorough considerations and analysis of responses to draft plans has not always led to consensus decisions at the end of the process.

There are also concerns about the confidentiality of some information and procedures carried out by government and how much this can be subject to PP. This is an issue especially relevant where the WFD is increasing the level of transparency of information on issues such as polluters and economic analysis (cost recovery and economic importance of water uses).

Some specific challenges include:

- Effective participation of new emerging groups such as consumer protection groups and ecologists groups with relatively small representation before, both in the professional ecologist category and in terms of lifestyle groups promoting sustainable development. They have repeatedly claimed that they need resources to build the necessary capacity and participate effectively.
- The real possibilities of interaction among stakeholders in existing main participatory forums (RBWC and NWC) consisting of “huge” heavily regulated meetings with little opportunities for open discussion. The problem might be that these forums generate many expectations that may not always be fulfilled and hence lead to disappointment and lost prestige.

- The extent to which some decisions may be taken “elsewhere” away from the main organized public set up. And the extent to which privatized companies delivering public water services become less accountable and at the same time more “powerful” and influential as stakeholders.

- Governmental officials and offices are for the most little trained to handle participatory process and PP competes for their time, given that they are highly time consuming processes. This is particularly so when the WFD imposes new technical challenges and tight deadlines on planning officers.

- Increasing costs and the specialized nature of the participatory process in conditions of increasing complexity of issues at stake in the new River Basin Management Plans, according to the WFD. These are different from the ones considered before in the Spanish context.

- There is a need to establish clear understanding of the role and usefulness of PP in the context of efficient decision-making. It might be relevant then for public and other organizations to be aware of and extract lessons from other experiences and fields of PP to search for hypotheses about the resolution of WFD type problems.

- The need to incorporate the wider public in more open forums, beyond information and allegation dynamics. This is fundamental if the WFD is to obtain support and is going to be implemented in the context of a clear shift of policy goals of water policy (see section 2.1).

- Finally, the need to make more explicit the importance of giving substantive status to process issues and the quality of relational practices. Especially in the context of a community of practice dominated by the “technical professions”.
3. Conclusions

This study placed great importance on the impact of five stages of political and economic ideologies which have impacted water policy in Spain over the last 100 years; to explain the levels and kinds of public participation which each of the different stages sustained. It is the changes in this external context over time which have been shaping who participates and how. Fragments of earlier ideologies and management approaches can be found in the positions which are taken up by different interest groups today and in the attitudes and practices of the River Basin Planning and Management agencies. PP has played and plays an important role all along as “instrument” and apparently less as “driver” of change. The role of PP and the multiplication of new experiences shows an increasing interest in PP away from main formal decision-making forums and drawing in part from PP experiences in other fields.

In light of the information and analysis from Section 2 of the report we attempt to draw some conclusions on the main strengths and weaknesses of the present approach to PP in Spain (in Section 3.1) and the opportunities and threats for the future in light of the new experiences and the requirements of the WFD. Section 3.2 also addresses the questions raised in the Inception Report relating to the possible limitations of the PP proposals in the WFD and draw some conclusions in light of the Spanish experience; making proposals for improvements.

3.1 Lessons Learned

The WFD approach to PP

The inception report (Mostert, E. 2003) identifies the requirements and challenges from the PP approach of the WFD. This includes:

- Preambles 14 and 46 stress the need and the importance of sound information policy and active involvement of the public. Preamble 46 highlights the importance of timely information to ensure public participation.
- Article 14 and annex VII A (points 9 and 11) mentioned three levels of participation: information, consultation and active involvement.
- Member States have to publish the necessary documents in the river basin management planning process. In each round the public is invited to comment in writing within six months. Upon request Member States have to provide additional background information. For this purpose contact points and procedures have to be included in the river basin management plan (Annex VII A.11). Annex VII A.9 of the WFD moreover requires that the management plan documents the measures taken to inform and consult the public, the results of the consultations, and the respective changes made.
- Active involvement is a higher level of participation than consultation and "shall be encouraged" by the Member States. There are three levels of active involvement: 1) participation in the development and implementation of plans, 2) shared decision-making and 3) self-determination. (Drafting Group 2002, p. 20).
- The appointed competent authorities are responsible for the outcome of the successful implementation and they finally decide to what extent they are going to share their power with other stakeholders (Drafting Group 2002, p. 20).

Conclusions of the Spanish experience of PP and on the opportunities and threats in light of the WFD approach

The conclusions of the strengths and weaknesses of the current system of Public Participation in River Basin Management have been discussed in section 2.4 and some key points are summarised in Table 15 below. The existing PP system is analysed in light of the wider social learning approach of Harmonicop
and, more specifically, in relation to the structure and level of participation; the quality of relational 
practices; the ability to deal with complexity and uncertainty; and the ability to provide for open forums 
of discussions and debate. The conclusions on the opportunities and threats have been drawn more 
explicitly in light of the WFD requirements above.

Table 14: The Strengths, and Weaknesses of the current system of PP in River Basin Management

<table>
<thead>
<tr>
<th>Strengths of the PP system in Spain</th>
<th>Weaknesses of the PP system in Spain</th>
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<tbody>
<tr>
<td>- Long history (over 100 years) of PP explicitly in water management at River Basin scale. Experience of PP in many issues in RBM (planning, management, implementation)</td>
<td>- PP system in RBM developed in the context of users participation in investment and infrastructure decisions.</td>
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<tr>
<td>- Experience of PP at many levels (from information to co-decision-making).</td>
<td>- Long tradition of organised stakeholders but mainly of “productive water uses”. Lower articulation of “general interests” or other interests.</td>
</tr>
<tr>
<td>- Experience of PP involving many types of mainly organised “publics” (promoted often by the RBM system) including the general public (mostly represented by public organisations but also through public information and allegation procedures on policy proposals and in cases specific opinion polls).</td>
<td>- Low consideration of the inputs that PP can provide in the “technical” phase of policy, and plan preparation.</td>
</tr>
<tr>
<td>- Existence of organised forums to articulate multiscale and multi-stakeholder PP in RBM including mixed commissions and Water Councils.</td>
<td>- Lower articulation of involvement of the general public beyond one way communication (via press, information, open procedures) on decisions taken elsewhere.</td>
</tr>
<tr>
<td>- Existence of experience in dealing in participative forums with complex issues where there is interdependence, inter-allocation and uncertainty issues.</td>
<td>- Little substantive importance (only implicitly in some cases) to the need to consider the quality of relational practices in PP processes and the importance of the social capital built in previous interactions. Often due to the dominance of the “technical professions” in RBM.</td>
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<tr>
<td>- Well established organised stakeholders (mainly users) with advocacy tradition and co-operative management with government at different scales.</td>
<td>- Lack of interest of the civil society to participate directly in water management perceived as a state responsibility and a technical problem.</td>
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<tr>
<td>- Successful experiences of PP to draw on at many levels and established feedback to the governance system.</td>
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<tr>
<td>- Clear decision-making rules of PP forums (built from tradition and experience of interactions), clear role (and weight) of stakeholder in participating forums.</td>
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<tr>
<td>- Important tradition and experience in consideration of the importance of consensus decisions.</td>
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<tr>
<td>- Increasing experience to draw on with explicit focus on relational practices in the context of Agenda 21 and new experiences in PP.</td>
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Table 15: The Opportunities and Threats, in light of the WFD

<table>
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<tr>
<th>Opportunities in light of the WFD</th>
<th>Threats in light of the WFD</th>
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<tr>
<td>- The provisions for participation in the Spanish River Basin Planning and Management system comply to a large extent formally with the requirements of the WFD. The proposed increase in the representation of ecological interests in participating advisory planning bodies also respond to this.</td>
<td>- There needs to be a willingness of “moving beyond” formal compliance of the PP provisions to articulating and “believing” in the value added of PP in real terms in light of the new objectives (improvement of ecological water quality) of the WFD.</td>
</tr>
<tr>
<td>- There are possibilities of building on the existing system of PP and well organised participative forums (see strengths above).</td>
<td>- Need to improve the capacity of new stakeholders such as those promoting ecological water quality (expert groups and ecological groups). But also those benefiting from improved ecological water quality (mountain areas, recreational, consumer defence groups).</td>
</tr>
<tr>
<td>- Possibilities of building on the experience of integrated RB Planning that has required (with different goals) the coordination of different sectoral Ministries and different scales of administration. This has been articulated in multi-scale commissions and multi-stakeholder forums.</td>
<td>- Need to increase the capacity in RBAs of managing/facilitating PP in the RBMP processes.</td>
</tr>
<tr>
<td>- Possibilities of building on new experiences for methods and IC tools to involve the wider public and promote relational qualities, specially in light of the change of focus of the planning process.</td>
<td>- Need to find ways to involve the wider public that will be affected in different ways by the WFD (including increases in water prices and new environmental restrictions to productive activities).</td>
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3.2 PP in Spain, the WFD and Beyond

The needs for clarification and improvement

The inception report (E. Mostert, 2003) identifies that there might be a need for clarification, development or “improvement” in the way the WFD has incorporated PP requirements. This include:

- The more explicit requirements of recent international developments such as the Aarhus Convention where ensuring public consultation and participation enhances public advocacy for the decisions to be taken. The Aarhus convention contains provisions (additional to those in the WFD) for regulating the access to bodies of justice and provisions concerning the financing of interest groups.
- Co-ordination of WFD requirements with those of other EU Directives. The SEA Directive requires public consultation with respect to both plans and programmes, while the WFD
requires consultation on the river basin management plans and not on the full programme of measures.

- The WFD does not give a definition of the "public". A definition can be derived from the SEA Directive and the Aarhus Convention ("one or more natural or legal persons, and […] their associations, organisations or groups.").

- Due to the limited specificity of the EU Directives, problems and discussions will arise with respect to the scaling aspects, i.e. how public participation should take place at the local, regional or European level and how to coordinate among the different levels.

- The public perception of the WFD may not be as high as necessary for PP since many of the issues regulated may not be salient to the broad public. This may lead to an implementation gap.

- Other pertinent issues for the success of the Directive are compliance monitoring and clarity concerning financial support for the administrative and other costs of facilitating PP (consultations, networks, focus groups, etc.).

Conclusions in light of the Spanish experience

The conclusions to be drawn from the analysis of the PP system and practices in River Basin Management in Spain is that there is formally explicit consideration and articulation of PP in well established participatory bodies. These ensure consultation and participation as means to increase implementability and accountability of decision-making. There are also built in rules to build towards consensus decisions. Although at the same time assuring that decisions are taken and that “public decisions” are ultimately the responsibility of the elected governments.

However, as suggested in the inception report, this may not be enough. They are heavily regulated participatory processes that are so to insure a framework in which the participating stakeholders know how their opinions/positions are considered vis a vis those of the government. But often this does not provide opportunities for open discussion beyond the agenda set by the government (although users can suggest agenda items through (sub) committees) or enough weight for participation of non productive interests. Especially in the planning advisory bodies, the great number of participants (to insure inclusivity), makes it difficult to have the type of open discussion that might be necessary when there is a need to increase “ownership” of the new policy focus, an ecological approach which is perceived as “imported” from outside Spain. The challenge is that this new focus, which the WFD brings about, would require a proactive approach of increasing ownership and of creating alliances with/between existing and new stakeholders and would require providing wide information to the public of the benefits of the new approach. The same type of proactive approach that served the “regeneracionists” to capture the collective imagination of the country in the early 20th century.

The PP system in Spain does seem to provide evidence for the need to go beyond PP in the planning process and move towards PP in management and implementation of the program of actions, ensuring co-designing and co-implementation as is the case in the water users associations; to insure implementability, efficiency in government, “ownership” of decision-making, and actions on the ground.

The Spanish PP system does provide opportunities to insure that the public has access to RBM decisions, information, and processes but this access varies according to the types pf decisions to be made and the type of stakeholder. Organized stakeholders are given a greater role (and in cases access to information) and this poses questions about the need to provide better information, financial resources and support for the newer stakeholders who are fundamental in the collaborative forums of implementation of the “new” policies of the WFD. The model of the water users associations as collaborative “public entities” or that of “Leader” groups (or other developed in the context of structural funds and in the management of natural parks and protected areas), may provide some examples. They are examples of the potential of the possible new cooperative arrangements between users-ecologist groups-consumers associations and of the role of other stakeholders in implementation/coordination of site specific local new measures of river and aquifer regeneration vis a vis the River Basin Authorities.

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The Spanish system does provide evidence of the value and need to build explicit multisectoral and multi-scale coordination forums in the development and implementation of complex integrated river basin plans affecting a complex set of agents and administrations. The dilemma is how to be inclusive and at the same time being able to provide adequate and manageable discussion forums.

The question of giving importance to the quality of relational practices and the need to have specific resources (financial and human) dedicated to facilitating and promoting PP processes seems fundamental in light of the Spanish experience, where there is little explicit consideration of the quality of processes as “significant” to decision-making, common in the present water community of practice dominated by the “technical professions”. Framing decisions as technical makes them undiscussable and creating adversarial and win-lose situations can endanger the possibilities of moving towards coordinated and consensual policy change which is necessary to implement the WFD, contributing to questioning the legitimacy of existing long standing participating bodies.

Finally, the implementability of the river basin plans of the WFD, aiming to preventing deterioration and to restoration of ecological water quality, would depend critically of the active participation of the local and river basin organised stakeholders and the water community, but also the general civil society. The citizens in the localities and in the basins need to take ownership, if the programmes of measures are to be implemented at all. They have to reflect their concerns and their willingness to trade off costs and benefits at local and river basin level. This requires in Spain moving away from the general perceptions of the state (or other competent authorities) having to solve all problems and take all initiatives in water management (and where debates are focused on state actions or lack of action) and change towards development of greater civil society and personal individual responsibility for the status of water in river basins.
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5. Glossary and Definitions

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<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Basin Commissar</td>
<td>The Head of the Basin Authority in relation to “Regulatory” Functions of the RBA: water rights, discharge authorisation permits; inspection and policing; security of dams; monitoring water quality; managing the discharge charge.</td>
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<tr>
<td>Basin Management Commissions</td>
<td>The Basin Management Commissions in this report include the Dam Management Commission; the Exploitation Commission and the Infrastructure Building Commission of the RBAs. They are participated bodies for management of the regime of filling and release of water from dams; the exploitation of water resources at sub-basin level including fees and charges; and the building of new infrastructures.</td>
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<tr>
<td>Basin President</td>
<td>The Basin President is the Head of the River Basin Authority. They are appointed by the Council of Ministers and Chairs the Governing Board and the different commissions of the RBA. The Presidency has overall decision-making powers in the RBA and its decisions are binding.</td>
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<tr>
<td>Depatrimonisation of water</td>
<td>Process during the late 19th century by which feudal seigniorial water property rights were removed and all surface water become “state property” and declared “public domain”.</td>
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<tr>
<td>Governing Board of the RBAs</td>
<td>The Governing Board is the Decision-making body of the River Basin Authority in addition to the President.</td>
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<td>Man-communities</td>
<td>Legally established organisations as “groupings of municipalities” to provide jointly public services such as police, fire fighting, solid waste collection and disposal, and water and wastewater services. In particular those services that benefit in quality of services and economies of scale from joint provision. Now also includes the promotion of joint local economic development programs.</td>
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<tr>
<td>Regeneracionists</td>
<td>Movement of the early 20th Century in Spain aiming to the cultural, economic and social regeneration of the country. They were deeply influential in Spanish Water Policy throughout the 20th century.</td>
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<td>River Basin Authorities</td>
<td>The River Basin Authorities is the general name given in this report to the different water organisations at River Basin level including: the early “Hydrographical Syndicates Confederations”, the “Hydrographical Man-communities” and the present “Hydrographical Confederations” in the different inter-regional river basins. It is the general name given also to the regional water agencies acting as RBAs in river basins lying entirely within the regional boundaries.</td>
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<tr>
<td>River Basin Water Councils</td>
<td>The River Basin Water Councils of the River Basin Authorities is the multi-stakeholder; multi-scale advisory body of the RBAs in issues related to water planning and other policy issues.</td>
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<tr>
<td>Water Users Associations</td>
<td>The Water Users Associations are regulated in the National Water Law of 1985 (amended in 1999). They are local area base “public entities” that carry out specific administrative public functions by delegation and with the support of the RBAs, who have to approve their statutes and exert tutelage. They find their origins in the Irrigation Associations and have been traced back to Arab and Roman times.</td>
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