

# Public Participation in European Water Management: from Theory to Practice

Alberto Ruiz-Villaverde<sup>1</sup> · Miguel A. García-Rubio<sup>1,2</sup>

Received: 6 November 2015 / Accepted: 10 May 2016 /

Published online: 17 May 2016

© Springer Science+Business Media Dordrecht 2016

**Abstract** Public and stakeholder participation in water management is a crucial element in the EU Water Framework Directive (WFD). Theoretically, the WFD identifies several advantages of public participation, such as the better use of knowledge and experiences from different stakeholders, increases in public acceptance and reduced litigation, delays, and inefficiencies in implementation. However, few studies have gone as deep, in practical terms, as the existing difficulty to introduce public participation in water management. The aim of this study was to cover this issue. It aims to conduct a literature review on public participation looking for successful social innovation experiences by the EU member states and also for the main limitations and difficulties of implementation detailing the study of the Spanish case.

**Keywords** Public participation · Water services management · Practical implementation

## 1 Introduction

In the last quarter of the 20th century there was a global trend of privatizations that affected several industries' monopolies under public ownership. Good examples are the telecommunications, airline or electric power industries. A few years later, this privatisation trend also extended to municipal services such as urban water services.

From a historical perspective, the 1970's energy crisis motivated important tax reforms in most developed countries oriented to reduce the public debt and curb inflation (Ruiz-Villaverde et al. 2010). The new context led to a major financial crunch for local governments. This situation (i.e., a limited capacity to generate financial resources and a drastic reduction in government subsidies), led to many local policymakers needing to

---

✉ Alberto Ruiz-Villaverde  
albertorv@ugr.es

<sup>1</sup> Department of Applied Economics, University of Granada, Campus Cartuja s/n, Granada 18071, Spain

<sup>2</sup> Water Research Institute, University of Granada, C/Ramón y Cajal, 4, Granada 18003, Spain

align the price of services with their real value. Thus, privatisation of local public services has often been seen as a low-cost electoral option in order to increase water rates (Bel and Miralles 2003).

From a theoretical perspective (which will be developed below in section 2.1), privatisation of local public services, at that time, was seen as a way to resolve all the public management inefficiencies and reduce costs. After 30 years of privatisation experiences, it appears that the results have not met expectations. In the last ten years numerous local governments in developed countries, including cities such as Paris and Berlin, have been remunicipalizing urban water services (Hall et al. 2013). Moreover, growing opposition to new privatizations is emerging from certain political parties and citizens' movements (Lobina et al. 2011; Mazzoni and Cicognani 2013; Fattori 2013). Some authors have even stated that the trend towards remunicipalization is now a global one (Lobina et al. 2014). Thus, attempting to understand the reversal of this trend has been a challenge for social scientists.

In the same manner that the Public Choice theory could have a significant influence on the privatizations occurring since the 1980s, some authors have proposed that behind the recent remunicipalization cases there may have been a new theoretical paradigm shift – the Social Choice theory. This is a theoretical approach based on the premise that competitive market orientation alone is not enough to guarantee high levels of efficiency and equity in the context of public services management. An important task under this theoretical approach is deliberation in order to achieve better social results. Recognising the potential market solutions, policymakers need to introduce debate and dialogue with the civil society in order to respond to the diversity of interests and possible conflicts.

In the same manner, the European Water Framework Directive (WFD) appears to draw from many of these ideas. Its main aim is to improve water resources management by prioritizing sustainability and high protection of aquatic ecosystems. In order to do this, the WFD promotes the performance of studies and analysis from different perspectives which must be set out in a plan for the river basin. Throughout this process, *public and stakeholder participation* in water management is a central component, particularly when the benefits are considered: better use of knowledge and experiences from different stakeholders; increased public acceptance through more transparent decision-making processes; reduced litigation, delays, and inefficiencies in implementation.

One of the main challenges of the WFD (in the same line of Social Choice theory) is creating the right context in order to consider citizens' opinions while developing the political capacity to detect solutions for possible differences of interest that do not divide the community. But, how is this done in practice? Is there an easy transition from this theoretical exposure to the practical implementation? What difficulties and problems can be found through this process? This study aims to answer the above questions, and in doing so it conducts a literature review on public participation looking for successful social innovation experiences by the EU member states and also for the main limitations and difficulties of implementation, detailing the study of the Spanish case.

The rest of the paper is organized as follows. Section 2 reviews the theoretical background behind the promotion of public participation in water management. In Section 3, an international literature review on public participation is conducted in order to look for successful social innovation experiences and also the main limitations and difficulties of implementation. Afterwards, in section 4, the level of public participation achieved in Spain is analysed allowing for the possibility of a more in-depth study. In section 5, the intention is to draw some conclusions which could serve as policy recommendations.

## 2 Theoretical Background

### 2.1 From Public Choice to Social Choice theory

Warner (2008) argues the thesis that in order for the wave of privatizations of the last quarter of the 20th century to take place, it required a prior theoretical paradigm shift influenced with a greater market orientation, as noted by the New Public Management theory (1980's) and its influence on city managers and public administration theorists. One of the academic foundations for market approaches to public services management is the *Public Choice theory* (Tiebout 1956). The basic contention of this theory is, in summary, intervention does not pursue public interest goals but rather seeks to satisfy private and political interests, potentially resulting in a bloated public sector, a surplus of public services and highly inefficient management. The solution to such problems could be found in the promotion of private management and the introduction of competition in the management of public services (Savas 1987). Thus, when the monopoly of public services is removed from politicians and bureaucrats, outsourcing via tendering processes presents itself as a cost reduction solution (Niskanen 1971). Privatization is a useful tool for aggregating demands, especially in the case of smaller municipalities, thus achieving a more efficient scale of production (Donahue 1989). In addition, the theoretical argument is that private management is more efficient than its public counterpart.

However, drinking water can be considered a *merit good* (Musgrave 1959) linked to human life and positive externalities to which universal access must be guaranteed. Moreover, the water industry is made up of local monopolies where it is not possible to introduce real competition. Market theoretical approaches rest on the idea of a voluntary bargaining context where individuals with full information and clear property rights pay producers to increase positive externalities in a voluntary scheme (Coase 1960). It is often forgotten that a high number of individuals are involved, these voluntary solutions tend to failure and government organization of production is preferred.

After more than 20 years of local public services privatization experiments it seems that the results have not met expectations. Ruiz-Villaverde et al. (2015a) summarize the possible reasons from the evidence of urban water services privatizations, focusing mainly on: the impact on water prices (Chong et al. 2006; Carpentier et al. 2007; Martínez-Espiñeira et al. 2009; Ruester and Zschille 2010; Guerrini et al. 2011); the questionable potential cost savings after privatisation; the deterioration on quality (García-Rubio et al. 2016); and also the questionable *part-privatization* as a solution of the above limitations (Da Cruz and Marques 2012). Moreover, applied research suggests that ownership of the operator is irrelevant when it comes to promoting efficiency, while the regulatory and institutional framework in which it operates is a determining factor (González-Gómez and García-Rubio 2008; De Witte and Marques 2010).

In this vein, the privatization momentum may have peaked as in many developed countries we are starting to see cases of remunicipalization of local public services, meaning a return to public management of a service that had previously been privatized. According to Warner (2008) for the particular case of the US, privatization peaked in 1997 and today there are now more instances of remunicipalization than new cases of outsourcing. In the same way that the Public Choice theory could have a significant influence on the privatizations occurred since 1980s, Sager (2001, 2002) and Hefetz and

Warner (2007) have proposed that behind the recent remunicipalization cases it may have been a new theoretical paradigm shift – the Social Choice theory.

This is a theoretical approach based on the premise that competitive market orientation alone is not enough to guarantee high levels of efficiency and equity in the context of public services management. Therefore this approach transcends of the dichotomy between markets vs. planning. In order to use markets for public services, more attention must be given to the civic foundations of markets and the potential for deliberation within them. The Social Choice theory, therefore, is based on the importance of deliberation, especially in situations where there are significant conflicts of interests; accordingly, it proposes repeated processes of dialogue, which combine elements of markets and planning as a way of achieving optimal solutions to social problems. Recognising the potential market solutions, policymakers need debate and dialogue in order to respond to the diversity of interests and possible conflicts. The main challenge within this theory is creating the right context in order to take into account citizens' opinions in public participation processes while developing the political capacity to detect possible differences of interest and identify solutions that do not divide the community (Nalbandian 2005). To that end, some theoretical notions about public participation in public services management are introduced in the next section.

## 2.2 Public Participation: a Theoretical Approach

Public Participation (PP) can be defined as direct participation in decision-making by non-governmental actors such as individual citizens, independent companies, public interest and business groups. "Direct participation" comprises various undertakings such as: mass public demonstrations, legal action, invitations to provide written comments, referenda, and water user's associations, amongst others (Mostert 2003). In short, incorporating PP processes in any substantive area involves delaying the decision in order to obtain results with greater social acceptance. In other words, the intention consists of providing more legitimate replies best suited to the complexity of the problems in our modern societies.

Varying levels of PP may be attained (for a detailed description see Fig. 1). The lowest level of PP is information supply, which does not constitute genuine participation, however, citizens may be provided with the opportunity to comment on plans, discuss issues and develop alternatives. The following level of participation is known as shared decision-making, in which the government shares decision-making powers with the public. For example, water use sectors may be represented in water management bodies and corrective referenda held. In the highest level of PP, decision-making is conducted by the public itself. At this level, part or all of the management functions are decided by the public, including financing, e.g. through water users' associations. Supporters of this level of PP claim that over-exploitation of water resources can be prevented while also avoiding the economically and environmentally harmful oversupply of infrastructure. It is also argued that this method maximizes social learning and ensures proper maintenance and replacement of infrastructure.

Nevertheless it is important to consider that the level of PP will depend on the type of democracy implemented as well as other issues such as the cultural context (Mostert 2003). In this paper we focus on the type of democracy, which can be considered the most important factor.

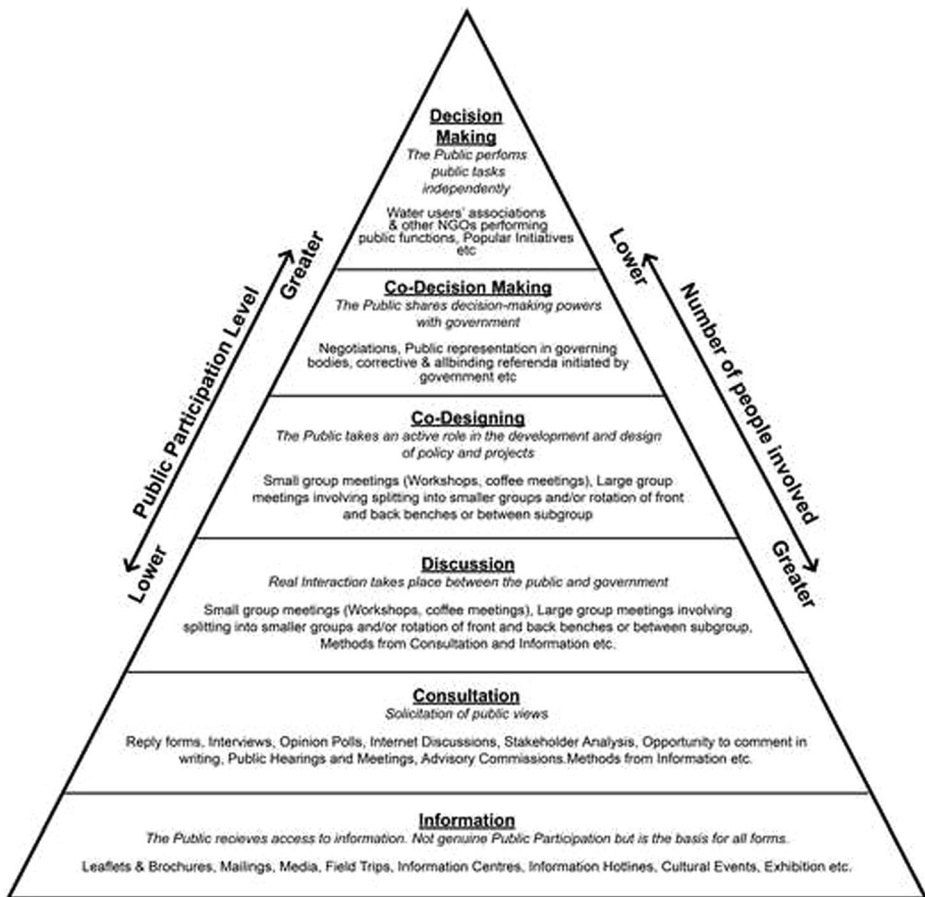


Fig. 1 Different levels of public participation. Source: Own elaboration based on Mostert (2003)

### 2.3 Public Participation According to the Type of Democracy

In this respect, all modern Western-style democracies are types of *representative* democracies (also *indirect* or *parliamentary* democracies), where representative members elected by the people compose the government. Although, the role of PP is very limited in these types of democracies, well-organized citizens could allow powers to be shared with all relevant interests. However, in practice PP may become ineffectual, as policy makers often prefer to do business with powerful interest groups directly, leaving the old networks to continue operating.

The theory of *direct democracy* (also *pure democracy*) implies the active and direct participation of citizens in government. Supporters of direct democracy favour the highest level of public decision-making power as possible. Direct participation would provide the public with more control over public affairs while equalizing the power of government bureaucracies and sectoral interest groups (e.g. Pateman 1970; Budge 1996). The referendum, useable at different government levels, is the form of direct democracy. After the current proliferation of the Internet, pure democracy and considerable public participation in political

affairs are becoming more popular. Nevertheless, the digital divide between active participants and those who do not participate in electronic communities hinder the E-democratic process (Helbig et al. 2009).

Another theory of democracy is the *principle of subsidiarity*, which emphasizes the role of intermediary organizations between government and individual citizens, such as publicly financed schools and hospitals. In fact, it may be interpreted in different ways. It may be used to promote decentralization and oppose centralization. This way, it may be seen as a way to facilitate direct democracy since it increases the opportunities for citizens to take interest in public affairs (Kraemer 1998). But it could also be used as an argument in favour of privatization (or part-privatization). In actual fact, however some applications of the subsidiarity principle reduce PP. Representative democracy could be replaced by a system of unaccountable semi-public organizations (Millon-Dessol 1993), in doing so it may increase the influence of some individuals as consumers and shareholders, but reduce their influence as citizens.

Finally, in many parliamentary democracies the *pluralist theory of democracy* is linked closely with current practice. The significant role of sectoral government bureaucracies and interest groups is the starting point for many pluralists. From this point of view, democracy is defined as competition for the vote of the citizens by the politically elite, which is their interpretation of the current practice (Schumpeter 1950). Many pluralists, however, see *pluralism* as an ideal to strive for. For example, institutional safeguards have been discussed to ensure that all citizens exercise equal influence (Dahl 1971) or call upon government to encourage a variety of intermediary organizations (Frissen 1996).

PP is not a major factor in the theory of pluralism. It is expected that individual citizens possess a limited interest in direct participation. Organized interests play an important, but customarily informal role in political life. Formal PP may help to provide a voice to those interests with fewer resources.

### 3 Review of European Experiences in Public Participation

For years, public services have been managed in a strictly legal or predominantly technocratic way by policymakers, as this has been the case of water services. The prevailing models of representative democracy and internal organization of public institutions have facilitated those in power to make decisions with little political counterweight. In order to find “*the best*” manner to manage water services, policymakers at best have historically sought technical guidance from various types of experts (engineers, lawyers, environmental technicians or planners). However, we have witnessed an important change at the beginning of the new century. Policymakers are now forced to react in an effective way in a more complex, uncertain and dynamic environment. The legitimacy of public institutions tends to deteriorate gradually when face with an increasingly reflective and critical citizenship with new values. Nowadays, citizens cannot be satisfied with mere technocratic provision of public services.

The European Water Framework Directive (WFD) has revolutionized water management and opened the door to a tendency of democratic intensification by including varying degrees of public participation. Its main aim is to improve water resources management prioritising sustainability and high protection of aquatic ecosystems.<sup>1</sup> In order to do this, the WFD

<sup>1</sup> For an interesting debate about the economic value of water in the requirements of WFD see Moran and Dann (2008).



promotes the performance of studies and analysis from different perspectives which must be set out in a plan for the river basin. Throughout this process, *public and stakeholder participation* in water management is a crucial element. The WFD's Common Implementation Strategy document on Public Participation (EC 2003: p.14) identifies several advantages of public participation, namely, increased public awareness; better use of knowledge and experiences from different stakeholders; increased public acceptance through more transparent decision-making processes; reduced litigation, delays, and inefficiencies in implementation; and a more effective learning process between the public, governments, and experts.

In this section, case study reviews of PP on water management experiences by the EU member states are presented, 15 years after the establishment of the WFD. The intention is not so much an exhaustive record of the experiences of participation, as this would require a research on purpose, which is outside the scope of this paper. It is rather to select cases from those which are available, can be paradigmatic and allow us to build a certain type of experiences. This makes it possible to see the prevailing trends and characterize their strengths and weaknesses, in order to draw some important lessons in this regard (see Table 1).

Sweden has been one of the countries where the issue of PP on water management has been deeply studied. One of the first published studies was Jonsson (2005). She drew attention to an interesting thing. Citizens perceived that their contribution to the process of deliberation was not very relevant. They believed that experts in the field should better address environmental problems related to water management.

A subsequent study, also in Sweden, was performed by Andersson et al. (2008). A participatory methodology – between experts and stakeholders – was applied in order to reduce eutrophication problems. Basically, this methodology was based on a number of meetings. Most meetings took place in smaller groups (5 to 20 people) representing farmers, homeowners (with individual/local sewage treatment) and authorities respectively. The advantage of utilization a method such as this was the ability to harness the potential of local citizens in order to take action on an environmental issue in a manner in which is not easily obtained when using a 'top down' implementation of different remedies and legal frameworks such as the WFD. Again, the willingness of local citizens to participate, along with being time consuming, both proved to be drawbacks. In this vein, successfully promoting management participation is dependent not only on the existence of viable local initiatives elsewhere, but also on the degree and scope of local participation in relation to WFD implementation by Swedish authorities. Remarkably, there has been little effort to involve the public and stakeholders within the various stages of implementation of the EU WFD, despite the corporatist traditions of Swedish democracy (Jonsson et al. 2011).

When considering other countries, the study of Page and Bakker (2005) for the case of England and Wales is particularly noteworthy as it reviews the ability of water users to participate in water policy-making within a privatized model. In this vein, although there are many forms of participation (i.e., voting, Water Voice, or annual meetings) it is interesting to note that water users are not necessarily inferred as a strong force in influencing the Government in their water policies. This was neither the case before nor after privatization; providing public participation is limited to 'back room' lobbying or mere consultation then users will remain on the sidelines of decision-making. Before privatization, water-users were viewed as citizens; after privatization, they are considered largely as customers.

Messner et al. (2006) focus on the possibility of introducing mathematical tools in order to support the PP for the case of water allocation conflict of the Spree River Watershed

**Table 1** International experiences on Public Participation

Study <sup>a,b</sup>	Aim and background	Relevant lessons and contributions	Type of PP <sup>c</sup>
Jonsson (2005)	Investigations of PP in water management by forming <i>catchment committees</i> with representation from stakeholder groups and the use of various practical methods for participation. Area of study -Rönneå (Southern Sweden).	In promoting effective PP, if something concrete were about to take place affecting the local environment, people are more likely to react and engage.	Discussion
Page and Bakker (2005)	A review of the evolution of PP before and after privatization in the late 1980s in England and Wales water sector. The OFWAT Customer Services Committees and the set of institutions and mechanisms for PP created in 1989 are examined.	Privatization and restructuring has had limited impact on the water user's influence on government policy or the behaviour of water companies. Advocates of PP are calling for transformation of institutions and mechanisms of participation.	Consultation
Messner et al. (2006)	Applies an integrated participatory multicriteria decision support approach called IMA. This offers a practicable sciencebased decision process with participatory elements to increase quality in public decision making by improving information management, the legitimacy of decision processes and considering social dynamics. A case study on water allocation problems in the Spree River watershed (Germany) under conditions of global change.	IMA improves decision processes by broadening knowledge through stakeholder participation, inclusion and processing of complex data using scientific models, and through consideration of different uncertainties. IMA scores well on many criteria such as information management, legitimacy of decisions and social dynamics. Unfortunately, applying IMA is neither cheap nor quick.	Discussion
Moster et al. (2007)	Identifies the factors that foster or hinder <i>social learning</i> for river-basin management. Based on 10 case studies of participatory river-basin management in Europe: Flemish (Belgium); Ribble (England and Wales); Dordogne (France); Elbe (Germany) Danube (Hungary); Bacchiglione (Italy); Meuse (The Netherlands); Dee (Scotland); Muga (Spain); Guadiana (Spain).	Often, the role of stakeholder involvement was not clear or was limited due to political and institutional constraints. An unwillingness to move from a traditional governance style toward multiparty collaboration existed. When steps toward a truly participatory approach were taken, it resulted in benefits for stakeholders and the environment.	Discussion, Co-Designing
Özerol and Newig (2008)	Aimed at developing criteria to evaluate the " <i>success</i> " of PP in water resources management. Five key constituents of Public Participation were identified and their current application was assessed within the context of the European Union and Canadian water policy, paying particular attention to the relevant provisions of the EU Water Framework Directive.	Major problems: (1) Scope of participants: unclear definition of stakeholders, unequal involvement opportunities; (2) Communication with public: unclear, insufficient or too technical information; delay or absence of response from authorities; opaque decision-making processes; (3) Capacity building: lack of public knowledge, lack of	Discussion



**Table 1** (continued)

Study <sup>a,b</sup>	Aim and background	Relevant lessons and contributions	Type of PP <sup>c</sup>
Andersson et al (2008)	Develops and tests participatory methodology based on dialogues between stakeholders and experts working together. It is two-pronged: (i) increases willingness to carry out remedies; and (ii) increases the level of understanding between various groups, reducing chances of future conflicts. Focused in the Kaggebo Bay drainage area of the Motala Ström River basin (Sweden).	institutional capacity; (4) Timing of participation: late public involvement; and (5) Financing: lack of financial support for participants. Advantages include the use of local potential for action to an environmental problem which is not easily obtained in a 'top down' implementation of remedies and legal frameworks such as the WFD. It can be time demanding, and depends on local willingness to participate.	Discussion
Garmendia and Stagl (2010).	Three case studies of <i>social learning</i> combining participatory processes with integrated appraisal tools in natural resource management and European energy policy. Multicriteria assessment combined with participatory approaches related to: (1) sustainable energy systems in Austria; (2) energy transition in Southeast England; and (3) sustainable management of the Urdaibai River Basin, a Biosphere Reserve in the Basque Country (Northern Spain).	The authors found that social learning does occur in participatory workshops, but (1) to a lesser extent than expected and (2) the depth and breadth of learning depends on the workshop design, time given to the process and the type of participant.	Discussion, Co-Designing
Jonsson et al (2011)	Development and testing of ways to involve local stakeholders in defining targets as a way to legitimate and facilitate Swedish implementation of the EU WFD water quality goals and Swedish NEQOs on the local scale (drainage basin). The study is focused in the Kaggebo Bay drainage area of the Motala Ström River basin (Sweden) where local farmers conducted a EU-funded project using collective action to reduce nutrient losses to the Baltic Sea and safeguard the main river as a fishing resource.	Success depends on viable local initiatives elsewhere, as well as the degree and scope of local participation in relation to WFD implementation by Swedish authorities. Surprisingly, efforts to involve the public and stakeholders in implementing the EU WFD have not been overwhelming, despite the corporatist traditions of Swedish democracy.	Discussion

<sup>a</sup> Only cases related to the WFD context<sup>b</sup> Chronological order<sup>c</sup> See Fig. 1

(Germany). In particular, they develop an integrated methodological approach (IMA) which combines two decision-making analyses – multi-criteria analysis (MCA) and benefit–cost analysis (BCA). According to the authors, the IMA approach improves the aptitude of the decision process by broadening the knowledge base and augmenting fairness through the participation of stakeholders, the use of scientific models to include and process complex data, as well as clear consideration of various uncertainties as well as striving for the treatment of sustainability issues. The views and interests of many affected stakeholders are considered early in the process which broadens the possibilities for discovering solutions to problems as well as wider acceptance of policy. Thus, the IMA approach fares well in different criteria, especially in terms of information management, legitimacy of decisions and social dynamics. A noteworthy drawback of the case study was the hefty one million Euro budget; showing that application of the IMA approach is neither cost nor time effective.<sup>2</sup>

Additionally, in this review we have included two studies related to PP in water management under the theoretical framework of *social learning*. This is a promising approach for natural resource management, and more specifically for river basin management. It is based on three central ideas (Moster et al. 2007): (1) All stakeholders should be involved in water management; (2) water management requires a form of organization, e.g. water users' organization; and (3) water management is a learning process. In order to deal with differences of the implicated actors constructively, it requires the development of new knowledge, attitudes, skills, and behaviours.

The first study is Moster et al. (2007). After the analysis of 10 case studies of participatory river-basin management in Europe, some interesting conclusions were reached. In complex organizational settings, social learning becomes an issue as well as in controversial cases where social learning does not naturally occur. This results in the social learning processes becoming time consuming and costly and often requiring professional facilitation. In many cases, the role of stakeholder involvement is unclear or very limited due to political and institutional pressure. At times, there is an aversion to moving from a traditional style of governance to multiparty collaboration but, when steps are taken toward a truly participatory approach, it results in benefits for the stakeholders involved as well as the environment. The second study is Garmendia and Stagl (2010). Three real case studies are reviewed which join participatory processes with integrated appraisal tools related to natural resource management in Europe. Their main findings include the absence of social learning during participatory workshops, albeit to a lesser degree than anticipated; and extent of learning is dependent on the design of the workshop, the time provided and also the type of participant.

Finally, it is worth mentioning the study of Özerol and Newig (2008). Their objective was to develop criteria within water resources management which evaluate the “success” of public participation. Five key constituents of PP were identified and their existing application was assessed within the framework of the European Union and Canadian water policy (see table 1 for the results obtained). When considering the results, it was observed that the most commonly encountered problems were those of communication with the public and issues of capacity building. It was concluded that public participation should be carried out, for the most part, by local authorities. In contrast to the phrasing of the Water Framework Directive, which largely refers to whole river basins as spatial units of PP, stakeholder analysis will be

---

<sup>2</sup> For another interesting study on decision making in urban water management for the case of Austria see Starkl and Brunner (2004).

implemented by local authorities in order to define the scope of participants, to communicate decisions clearly and early, and provide feedback to participants.

## 4 Evidence for the Spanish Case

Considering that PP is strongly influenced by the type of democracy (section 2.2.), it should be succinctly described thereupon.

The Spanish democracy can be perfectly described as a representative democracy. Citizens simply elect representatives who deliberate and make decisions with the power that citizenship provides them through the vote. This is particularly visible in Article 92 of the Spanish Constitution which allows only non-binding referendums. Binding referendums are explicitly prohibited in Spain, except for constitutional reform, in which case only the reform of a very small part of the Constitution is required to hold a binding referendum (art. 168). Only three nationwide referendums have been held since the democracy started: the referendum required for the ratification of the new Spanish Constitution in 1978; a non-binding referendum for Spain to remain a member of NATO in 1986; and a non-binding referendum to ratify the European Constitution Treaty in 2005.

Therefore, when studying public participation it should be considered that Spain is a very young representative democracy with less culturally democratic tradition than most of the EU member states. Therefore, in principle it is foreseeable that the level of public participation can be very limited. Nonetheless, one area in which public participation is being introduced in a more visible way, but not necessarily effective, is water management. In the last decade a significant number of participatory processes have proliferated in ways which have not been seen in the history of water management. This fact is mainly due to the requirements established by the WFD, and to the pressure exerted from various actors outside of the traditional decision centres seeking to use this new regulation to introduce new dynamics of governance in water management.

In this regard, two types of participatory processes can be recognized. The first type of process occurs when the initiative derives from a public administration, of which we will call *formal process of public participation*; the second type occurs when the initiative arises from a social group, which we will call *informal process of public participation*. The first type can be framed in a vertical top-down design, the second in a bottom-up design.

Moreover, some participatory processes do not go beyond consultation, while others have a greater willingness to influence decision-making. In this sense, a distinction can be drawn between consultative-deliberative processes and participatory decision-making processes. Hence, the combination of the two mentioned aspects allow differentiation between four types of participatory processes (see Table 2).

**Table 2** Different types of participatory processes

Process result Initiative origin	Consultative/ deliberative processes	Participatory/ decisionmaking processes
Formal public participation	Type I	Type II
Informal public participation	Type III	Type IV

Source: Own elaboration

#### 4.1 Formal Public Participation in Water Management

A report on the monitoring of public participation in water management was published in 2008 under an agreement between the University of Seville and the Spanish Ministry of Environment (Espluga and Subirats 2008). The information contained in the report, an extension and subsequent analysis of the data led to a series of conclusions to be considered (Espluga et al. 2011). In this report a total of 25 cases of public participation that ended up being integrated in the context of the WFD were studied. In this sense, participatory processes were evaluated under three levels of public involvement considered in the WFD: *information, consultation and active participation*.

In relation to the *processes of information* to the public, most Spanish authorities in all river basin districts developed and disseminated a large amount of information through websites, conferences and briefings. The improvement of the information available on the internet is one of the most remarkable elements; however, there is a substantial difference in the quality and quantity of information provided by individual river basin districts. Among the weaknesses, it should be noted that the information brings a huge amount of data, often considered of high technical complexity. Furthermore, the data presented are not always updated, are often not presented in a disaggregated manner at different levels (e.g. sub-basin and operating system), and it is not always possible to trace the origin. It is noteworthy that information on the water planning process and the possibilities of participation have rarely reached the public at large, thus a greater effort in this direction (i.e. advertising campaigns and mass media) is desirable.

Concerning the *public consultation processes*, the mandatory documents included in the basis of River Basin Management Planning have been subject to public exposure by all river basin districts. However, the WFD certainly requires more interactive modes of consultation with the general public open queries. While many districts have sought the views of certain actors, usually stakeholders, the main weakness is again the excessive technicality of the planning documents which makes them relatively inaccessible to most of the public.

Unlike the information and consultation processes, *active participation processes* are very new in Spain and collide heavily with Spanish political and institutional tradition. Two major problems are noteworthy in this respect: the lack of commitment by public administrations in promoting participatory processes, and the existence of coordination problems between the different levels of public administration.

The lack of involvement of policymakers is particularly reflected in the absence of real inclusion of participation in the political agenda and the limited human and material resources provided (for participation) in the set of planning processes. Moreover, since various public authorities can have water expertise in the same river basin district, it is essential to create mechanisms of coordination and integration. The non existence of these mechanisms in light of the concurrence of expertise has often meant uncertainty and a coordinated reluctance to claim responsibility.

Apart from the assessment on PP under the European legislation of water, other general problems are remarkable. For instance, it is not clear how to integrate participatory processes at a lower territorial scale in the General River Basin Plan (e.g. sub-basin processes). Participation at the territorial level of an entire river basin would require greater methodological sophistication to ensure a bottom-up process that included the most representative actors of the territory. This would require more technical resources and sufficient connection with the different actors of social reality which would then result in longer processes and more complex participation. Moreover, in the same line of Jonsson et al. (2011), the most promising PP

processes appear to be those with strong support by the corresponding public administration. This is the case of Navarre, Catalonia and Cantabria. It seems that the proliferation of existing participatory processes in the rest of Spain is articulated by institutions which are forced to promote them. This adversely affects the quality of public participation.

If the goal is simply to comply with the WFD requirements, any participatory process formally respectful of the rules is adequate. If the aim is to take advantage of the WFD in order to change the way water management is understood in Spain, then the WFD is not a goal per se, but a great legal tool to achieve it. In this sense, more time, resources, and a reform to improve the institutional framework is necessary.

## 4.2 Informal Public Participation in Water Management

Following the previous definition, informal public participation is when the citizen's involvement in water management is not derived from a public institution but from a citizen group or movement. In the Spanish case this type of participation has become prominent since 2008, as there is greater social awareness of water as a common good. Two facts may explain this issue: (i) the development of a greater awareness of the problems occurred in those municipalities which privatized urban water services management during the 1980s; and (ii) the intensification of these problems particularly after the financial crisis began in 2007–2008.

One of the main processes of informal public participation has been the initiative registered in the European Commission (number ECI (2012) 000003) with the title: Water and sanitation are a human right! Water is a public good, not a commodity! Promoted by 'Right2Water', which is composed of several Spanish and other European civil associations. It is interesting to mention some of the data collected for the Spanish case. Every year, more than 500,000 Spanish families receive a shut-off notice of water supply. It is estimated that the number of cases has increased 30 % since the beginning of the crisis. To this we can add the fact that the average water bill in Spain has risen around 25 and 35 % since then.<sup>3</sup>

Right2Water is likely the main citizen initiative which has introduced the battle for public management water in Europe. In addition, various groups around the world are mobilization to ensure the Sustainable Development Goals (SDG). They include water management with the hue of "fair and sustainable", avoiding the adjective "effective". They seek to ensure that in the hierarchy of water uses, which are many, an important priority is given to human rights.

In December 2008, the neighbourhood community of Avilés (Asturias) managed to create one of the most active platforms in the country against the privatization of water. Founded by twenty-one groups, the platform achieved almost 20,000 signatures –in a town of 83,000 inhabitants– to demand the type of water management decided by referendum. This popular initiative failed to prevent the partial privatization of the water management. In 2010 a new company, owned 74 % by the Aquagest Group (AGBAR/Suez) and 26 % by the City Council, began to manage urban water services. Currently, this case of privatization has been submitted to the Court of Justice (Babiano 2015).

At a citizen level, one of the great achievements of (informal) public participation was in early 2012 when the Red Agua Pública [*Public Water Network*] was created. This initiative

<sup>3</sup> There are numerous differences between each location, since water services are usually under municipal jurisdiction, but price increases around 50 % have been detected in certain places and, above all, the creation of new tax figures that recharge on citizens water services. Nevertheless, water tariffs can be seen as a powerful management tool in order to promote multiple, possibly conflicting, objectives (Pinto and Marques 2015; García-Rubio et al. 2015).

brings together various social movements, institutions and individuals that promote a vision of water as a common good and public service. Its main areas of action have been developed in Catalonia through the “Aiguaés Vida”; in Andalusia –Jerez, El Puerto de Santa María and Priego de Córdoba– through the “Marea Azul del Sur” [South Blue Tide] platform; and in Candeleda (Ávila), Ermua (Vizcaya) or in the city of Murcia. Again, the reason that motivated the creation of this network is therefore the struggle against water privatization and the defence of public water management.

To close this section, it is important to mention one of the main cases of extensive media coverage of public participation in resistance against the privatization of water services – The attempt for water privatization in the Community of Madrid.<sup>4</sup>

### 4.3 The Attempt of Water Privatization in Madrid (Spain)

In 2008, a plan for privatising water services in Madrid was shaped. On the 1st of July 2012, the Government of the Region in Madrid approved the first step, the creation of a public limited company –Canal de Isabel II Gestión SA–, which is currently responsible for managing urban water services for almost the entire Region of Madrid (110 out of 178 municipalities). The regional government of Madrid owns 82.4 % of the shares of Canal de Isabel II Gestión SA, 17.6 % are spread across the municipalities assigned to this new management model. In other words, the situation for a partial privatization has been ready since 2012; however, the process has not yet taken place due to difficulties in finding investors, mainly due to the unfavourable economic situation in Spain.

Since the announcement of the partial privatization of urban water services in 2008, a citizen movement in Madrid was created in clear opposition to this political decision. The “Plataforma contra la privatización del Canal de Isabel II” consists of several social organizations: neighbourhood associations, sections of major Spanish national Unions, political parties and individual citizens. This movement has held some notable events including several mobilizations and demonstrations against privatization as well as a claim being submitted to the Constitutional Court in March 2012 alleging that the decision was not constitutional. The movement’s greatest impact came when a referendum was proposed on the 4th of March 2012. This (informal) consultation asked citizens about their preferences regarding the ownership of water service management. The result was that 99 % of participants voted against any changes in ownership, preferring to continue with public management.

Nowadays, after the elections of 2015, the Community of Madrid is ruled by the same political party but without the majority. This government needed the support of one of the newly created political parties to form government. One of the main points for the agreement of investiture was not to privatize water services in Madrid. Today, the water is still managed publicly.

## 5 Concluding Remarks

Many of the studies dealing with the problems of water management argue, theoretically, the need to increase PP to the extent that this could promote better social and environmental

---

<sup>4</sup> For a more in-depth study of the case of Madrid, Ruiz-Villaverde et al. (2015b), and De Miguel-Ortega and Sanz-Mulas (2007) are highly recommended.



results. However, few studies gone as deep, in practical terms, as the existing difficulty to introduce PP in water management. The aim of this study was to cover this issue.

Different levels of PP can be achieved in water management. The highest levels of participation, those related to increased citizen involvement in decision-making will depend on a number of issues; one of the most important is the democratic tradition of the country. This should be an important factor to consider before analysing the levels of participation achieved in any country. This is an issue that the WFD has not taken into account when promoting PP in the different EU member states.

It is no wonder that countries with more democratic tradition count on major initiatives and field studies on PP in water management; a good example of this is Sweden. Surprisingly, it has been interesting to note that there are serious restrictions, mainly political and institutional, when implementing PP even in these countries. Furthermore, the reviewed studies show that citizens do not feel prepared to participate in water management. They believe the expert groups should be dealing with these issues. This seems to be due to the available information, which is often too technical and inaccessible to the citizen without expert knowledge.

The case of England and Wales is particularly interesting. It can be learned from the review of this case that the introduction of a private water management model has not increased (or decreased) public participation in water management; however, it has changed the role of the citizen. Before privatization, water users were viewed as citizens; after privatization, they are considered largely as customers.

Regarding the Spanish case there are significant resistances towards the implementation of the PP. We refer to the existence of interests articulated around the traditional community of stakeholders (i.e. hydroelectric companies, irrigators, builders and specialized engineers in the waterworks). Any conflict over time has been resolved by a decision exclusively and in defence of the interests of the above community. The WFD was established as a powerful legal and political instrument to break this resistance – by introducing PP in river basin plans. However, major existing democratic deficits in the country means the change is occurring very slowly; which highlights the important need to promote reform of the institutional framework. Only in those cases where there has been strong support from the public authorities have higher levels of participation been achieved.

In recent years citizens' mobilizations have proliferated, seeking to be heard and influence the management of water conflicts. However, the informal public participation that has occurred in Spain, one which has emerged from the bottom-up, is basically restricted to demonstrations against privatization announcements or those defending remunicipalization. In some cases they have been successful in reversing the privatization trend, while in other cases, they have not. The Madrid case brings to the table an important issue. To the extent that the newly established political parties are in power or become necessary in order to support the investiture of the government, the possibilities of increasing public participation in political life increases.

An issue for further improvement is the significant lack of citizens' interest to participate in water management and in particular in those cases that require greater environmental sensitivity. In this sense, the WFD must be understood as a powerful legal instrument to promote cultural change needed by the population; however, it depends on how policymakers use this instrument to really promote the change in water management.

## References

- Andersson L, Olsson JA, Arheimer B, Jonsson A (2008) Use of participatory scenario modelling as platforms in stakeholder dialogues. *Water SA* 34(4):439–447
- Babiano L (2015) Urban Water: Commodification and social resistance in Spain. *Water Landsc* 6:133–141
- Bel G, Miralles A (2003) Factors influencing the privatisation of urban solid waste collection in Spain. *Urban Stud* 40(7):1323–1334
- Budge I (1996) *The new challenge of direct democracy*. Polity Press, Cambridge
- Carpentier A, Nauges C, Reynaud A, Thomas A (2007) Effets de la délégation sur le prix de l'eau potable en France. Une analyse à partir de la littérature sur les 'effets de traitement'. *Economie Prévision* 174(3):1–19
- Chong E, Huet F, Saussier S, Steiner F (2006) Public-private partnerships and prices: evidence from water distribution in France. *Rev Ind Organ* 29(1–2):149–169
- Coase RH (1960) *The problem of social cost*. Palgrave Macmillan, UK, pp 87–137
- Da Cruz NF, Marques RC (2012) Mixed companies and local governance: no man can serve two masters. *Public Adm* 90(3):737–758
- Dahl RA (1971) *Polyarchy*. Participation and opposition. Yale University Press, New Haven
- De Miguel-Ortega E, Sanz-Mulas A (2007) A public sector multinational company: The case of Canal de Isabel II. *Util Policy* 15(2):143–150
- De Witte K, Marques RC (2010) Designing performance incentives, an international benchmark study in the water sector. *CEJOR* 18(2):189–220
- Donahue J (1989) *The privatization decision: public ends, private means*. Basic Books, New York
- EC (2003) Common implementation strategy for the water framework directive (2000/60/EC). Guidance document n° 8. European Commission. Available on line at: <https://goo.gl/2SkA0v>
- Espluga J, Subirats J (2008) *La participación ciudadana en las políticas de agua en España*. Panel Científico-Técnico de Seguimiento de la Política de Aguas. Convenio Ministerio de Medio Ambiente-Universidad de Sevilla. Fundación Nueva Cultura del Agua: Zaragoza, España
- Espluga J, Ballester A, Hernández-Mora N, Subirats J (2011) Public participation and institutional inertia in water management in Spain. *Revista Española de Investigaciones Sociológicas* 134:3–26
- Fattori T (2013) From the water commons movement to the commodification of the public realm. *S Atl Q* 112(2): 377–387
- Frissen P (1996) *De virtuelestaat. Politiek, bestuur, technologie: een postmodern verhaal*. Schoonhoven. Academic Service: Schoonhoven, Netherlands
- García-Rubio MA, Ruiz-Villaverde A, González-Gómez F (2015) Urban water tariffs in Spain. What needs to be done? *Water* 7(4):1456–1479
- García-Rubio MA, Tortajada C, González-Gómez F (2016) Privatising water utilities and user perception of tap water quality: Evidence from Spanish urban water services. *Water Resour Manag* 30(1):315–329
- Garmendia E, Stagl S (2010) Public participation for sustainability and social learning: Concepts and lessons from three case studies in Europe. *Ecol Econ* 69(8):1712–1722
- González-Gómez F, García-Rubio MA (2008) Efficiency in the management of urban water supply services. What have we learned after four decades of research? *Hacienda Pública Española* 185(2):39–67
- Guerrini A, Romano G, Campedelli B (2011) Factors affecting the performance of water utility companies. *Int J Public Sect Manag* 24(6):543–566
- Hall D, Lobina E, Terhorst P (2013) Re-municipalisation in the early 21st century: water in France and energy in Germany. *Int Rev Appl Econ* 27(2):193–214
- Hefetz A, Warner M (2007) Beyond the market versus planning dichotomy: Understanding privatisation and its reverse in US cities. *Local Gov Stud* 33(4):555–572
- Helbig N, Gil-García JR, Ferro E (2009) Understanding the complexity of electronic government: Implications from the digital divide literature. *Gov Inf Q* 26(1):89–97
- Jonsson A (2005) Public participation in water resources management: Stakeholder voices on degree, scale, potential, and methods in future water management. *AMBIO* 34(7):495–500
- Jonsson AC, Andersson L, Alkan Olsson J, Johansson M (2011) Defining goals in participatory water management: merging local visions and expert judgements. *J Environ Plan Manag* 54(7):909–935
- Kraemer RA (1998) Subsidiarity and water policy. In: Correia FN (ed) *Water resources management in Europe: institutions, issues and dilemmas*, vol 2. Balkema Publishers, Rotterdam
- Lobina E, Terhorst P, Popov V (2011) Policy networks and social resistance to water privatization in Latin America. *Procedia-Social Behav Sci* 10:19–25
- Lobina E, Kishimoto S, Petitjean O (2014) *Here to stay: Water remunicipalisation as a global trend*. Public Services International Research Unit, Transnational Institute and Multinational Observatory, UK. Available online at: [https://www.tni.org/files/download/heretostay-en\\_0.pdf](https://www.tni.org/files/download/heretostay-en_0.pdf)

- Martínez-Espiñeira R, García-Valiñas MA, González-Gómez F (2009) Does private management of water supply services really increase prices? An empirical analysis in Spain. *Urban Stud* 46(4):923–945
- Mazzoni D, Cicognani A (2013) Water as a commons: An exploratory study on the motives for collective action among Italian water movement activists. *J Community Appl Soc Psychol* 23(4):314–330
- Messner F, Zwirner O, Karkuschke M (2006) Participation in multi-criteria decision support for the resolution of a water allocation problem in the Spree River basin. *Land Use Policy* 23(1):63–75
- Millon-Dessol C (1993) *Le principe de subsidiarité*. Presses Universitaire de France, Paris
- Moran D, Dann S (2008) The economic value of water use: Implications for implementing the Water Framework Directive in Scotland. *J Environ Manag* 87(3):484–496
- Moster E, Pahl-Wostl C, Rees Y, Searl B, Tàbara D, Tippett (2007) Social learning in European river-basin management: barriers and fostering mechanisms from 10 river basins. *Ecol Soc* 12(1):1–16
- Mostert E (2003) The challenge of public participation. *Water Policy* 5(2):179–197
- Musgrave RA (1959) *Theory of public finance: a study in public economy*. McGraw-Hill, New York
- Nalbandian J (2005) Professionals and the conflicting forces of administrative modernization and civic engagement. *Am Rev Public Adm* 35(4):311–326
- Niskanen WA (1971) *Bureaucracy and representative government*. Aldine Atherton, Chicago
- Özerol G, Newig J (2008) Evaluating the success of public participation in water resources management: five key constituents. *Water Policy* 10(6):639–655
- Page B, Bakker K (2005) Water governance and water users in a privatized water industry: participation in policy-making and in water services provision: a case study of England and Wales. *Int J Water* 3(1):38–60
- Pateman C (1970) *Participation and democratic theory*. Cambridge University Press, London
- Pinto FS, Marques RC (2015) Tariff structures for water and sanitation urban households: a primer. *Water Policy* 17(6):1108–1126
- Ruester S, Zschille M (2010) The impact of governance structure on firm performance: an application to the German water distribution sector. *Util Policy* 18(3):154–162
- Ruiz-Villaverde A, García-Rubio MA, González-Gómez F (2010) Analysis of urban water management in historical perspective: Evidence for the Spanish case. *Water Resour Dev* 26(4):653–674
- Ruiz-Villaverde A, González-Gómez F, Picazo-Tadeo AJ (2015a) The privatisation of urban water services: theory and empirical evidence in the case of Spain. *Investigaciones Regionales* 31:157–174
- Ruiz-Villaverde A, Picazo-Tadeo AJ, González-Gómez F (2015b) The ‘social choice’ of privatising urban water services: A case study of Madrid in Spain. *J Policy Model* 37(4):616–629
- Sager T (2001) Positive theory of planning: the social choice approach. *Environ Plan A* 33(4):629–647
- Sager T (2002) *Democratic planning and social choice dilemmas. Prelude to institutional planning theory*. Ashgate, Aldershot
- Savas ES (1987) *Privatization. The key to better government*. Chatham House Publishers, Chatham
- Schumpeter JA (1950) *Capitalism, socialism and democracy*, 3rd edn. Harper, New York
- Starkl M, Brunner N (2004) Feasibility versus sustainability in urban water management. *J Environ Manag* 71(3): 245–260
- Tiebout CM (1956) A pure theory of local expenditures. *J Polit Econ* 64(5):416–424
- Warner ME (2008) Reversing privatization, rebalancing government reform: Markets, deliberation and planning. *Policy Soc* 27(2):163–174