Public Participation under the EU Water Framework Directive – processes and possible outcomes

A preparatory paper for the NOLIMP workshop on public participation and costeffectiveness analysis

Sharon Hophmayer-Tokich

Cartesius Institute, at the Center for Clean Technology and Environmental Policy, University of Twente, Druifstreek 72, 8911 LH, Leeuwarden, the Netherlands

1. Introduction

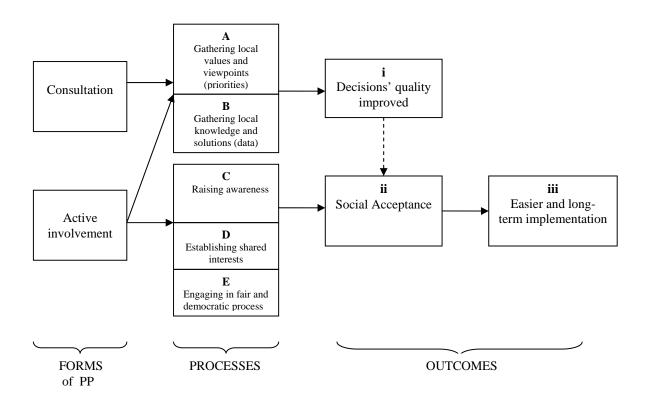
The EU Water Framework Directive (WFD), which went into effect in 2000, places public participation (PP) at the center stage of water management as part of its integrated approach to water management. It calls for PP in order to ensure protection and a sustainable use of the European river basins (Huitema et al., 2004). Although the Directive provides strong stimulus for PP, the exact form of the implementation is left to the Member States. Member States, however, often have limited experience and reserves regarding PP in policy making as many decision makers still have little understanding of the advantages it holds.

The NOLIMP-WFD (North Sea regional and Local IMPlementation of the Water Framework Directive) is a collaborative project involving regions in six countries of the North Sea: Denmark, Germany, Sweden, Norway, the Netherlands and the United Kingdom (Scotland). All these countries face similar problems with regards to the implementation of the Directive. Thus, the project's aim is to gain experience with the implementation of the Directive on local and regional levels by applying its concepts and procedures in pilot projects. One of the topics that were applies in the pilot projects, is PP. The NOLIMP partners' experience with PP may be of value to other EU Member States as they all need to implement the Directive and may face similar difficulties. Based on the NOLIMP experience with PP, an attempt will be made to draw conclusions with regards to the benefits of PP.

This paper is a general introduction to the topic of PP under the WFD and its goal is to present this topic as a background to the NOLIMP experience with PP. It discusses the issue from the water managers' point of view, and mainly answers the question why should these decision makers deal with PP. The discussion revolves around the two forms of meaningful PP, as prescribed in the WFD: consultation and active involvement.

The structure of this paper is as follows: (1) a short background to the topic of PP and the need that arose to involve the public and relevant stakeholders in water resources management; (2) important components of PP to consider for attaining positive outcomes, presented within the context of the WFD's requirements; (3) the two forms of PP prescribed in the WFD: consultation and active involvement, presented within the context of the WFD's requirements; (4) different processes that are likely to occur during PP, depending on the form taken; (5) the possible outcomes of these processes, depending on the form of PP. The first two parts are presented as a background to the main discussion. The latter three comprise the main discussion, as outlined in Scheme 1.

Scheme 1 - PP: forms, processes and possible outcomes



- → Probable outcomes
- --▶ Possible outcomes

2. Public Participation and the Water Framework Directive

Policy makers widely acknowledge the importance of public participation. The Rio Declaration on Environment and Development (1992) states that environmental issues are best handled with the participation of all concerned citizens at the relevant level. Following this, the Aarhus convention of United Nations (1998) calls for access to information, public participation in decision-making, and access to justice in environmental matters. In water management, public involvement is embedded in the legislation. In the USA, state and federal legislations mandate public involvement (Duram and Brown, 1999). In Europe, the EU Water Framework Directive that was adopted in 2000 prescribes public involvement in policy preparation and implementation. PP is mandated in the WFD mainly in article 14. Scholars also recognize that public participation fosters the management of natural resources due to better decisions and sustainability of implementation.

Public participation, also referred to as public involvement, can be defined as a process of allowing people to influence the outcome of plans and working processes (Drafting Group, 2002). However, the interpretation of PP - changes. In the past, the term was often used to refer to opportunities for public comments on plans or projects developed by the authorities. This form of PP (referred to today as the 'traditional public participation') was still geared towards water management that remained the exclusive domain of authorities and experts. It was typically organized as a separate process, in a late stage and with minimum influence (Mostert, 2003; Daniels and Walker, undated). More recently, PP refers to a range of procedures that involves the public/stakeholders in plan preparation and decision making, for example in deliberations about preferred policy options (Webler and Tuler, 2001; Van Leussen, 1996; Beierle and Konisky, 1999; Duram and Brown, 1999).

Although PP is not confined to water management alone, it is especially relevant in this area because of enlarging complexity and uncertainty. Water management is becoming more complex. First, managers of water resources must address various interrelated issues such as water quantity and quality, ground and surface waters, land and water interaction, and biologic and habitat concerns. This gears managers towards integration of all these issues into a 'water system' (Van de Kerkhof and Huitema, 2003). Second, more users appear on stage and they use water more intensively so that many needs must be addressed, which in turn influence the use of water resources. This calls for coordinated actions (Mostert, 2003). Finally, the established technical solutions and infrastructure that were the core element of water management in the past

do not always suit new aspirations that arise from development of environmental, social, cultural and local economic values, attributed to water. Furthermore, new problems arose, such as diffuse-source pollution, for which technical solutions do not exist. This pressing issue, especially pollution from agricultural activities, is very often unsolvable without commitment and cooperation of polluters (Pahl-Wostl, 2002).

Water management is also characterized by enlarging uncertainty. Despite modern data assimilation techniques, accumulated knowledge and development in research, one still does not posses the sufficient knowledge to accurately predict changes in the environment (Van Leussen, 1996). As a result, many measures are selected without full knowledge of their consequences (Ostrom, 1990).

All these cause gradual changes in water management from the command-and-control approach, based on experts' views, towards an interactive approach that addresses cultural, economic and environmental issues in decision making, and not only the technical ones. Hence, more actors need to get involved to underpin decisions and build up social acceptance. Thus, public involvement is increasingly recognized as an important component of water management (Duram and Brown, 1999; Beierle and Konisky, 1999; Van Leussen, 1996; Webler and Tuler, 2001). It is important to emphasize, however, that public involvement does not mean that any private interest such as a sector is allowed to press for its case at the cost of the common interest, nor can it alter the requirements that are defined by the authorities. PP operates within the legal framework, thus ensuring that the common interests dominate the private ones.

As a reflection of all the abovementioned, the WFD calls for PP in water management: "the success of the Directive relies on close cooperation and coherent action at community, Member state and local level as well as on information, consultation and involvement of the public, including users" (European Union, 2000/60/EC). The Directive refers to involvement of both the 'general public' and 'interested parties' (more commonly used as 'stakeholders'). The 'general public' can be defined as "one or more natural or legal persons, and, in accordance with national legislation or practice, their associations, organizations, or groups". The term 'stakeholders' refers to "any person, group, or organization with an interest or 'stake' in an issue, either because they will be directly affected or because they may have some influence on its outcome..." (Drafting Group, 2002, page 18). In this paper the term PP refers to the process that allows all citizens and stakeholders, other than the authorities, to influence water resources management. If needed, the participation of the 'general public' and 'stakeholders' is specified.

Three forms of PP are mentioned in the WFD: Information supply, Consultation and Active involvement. The first two are to be ensured by Member States and the latter is to be encouraged (Drafting group, 2002). This is discussed in section 2.2. However, prior to discussing the different forms of PP, some components of meaningful PP should be discussed. These should be considered for attaining positive outcomes, regardless to the form of PP. They are discussed in section 2.1.

2.1 Components of meaningful PP

In order to obtain positive outcomes, it is important to promote a meaningful PP. Several components of meaningful PP are discussed in this section.

I. Identifying the relevant publics/stakeholders

The WFD uses the terms 'public'; 'general public'; 'public, including users' with respect to the consultation and information supply. The term 'interested party', which is synonymous with 'stakeholder', is used in the case of active involvement (Drafting Group, 2002). Whether involving the public or stakeholders, PP must be well-prepared to cover all the main interests, including the non-organized ones or interests that are unable to make themselves known to the process (FAO/ECE/ILO, 2000; Thomas, 1995).

Identifying the relevant publics/stakeholders can be done either by the *top-down* approach by the competent authority, or the *bottom-up* approach in which the competent authority lets the public define itself. This can be done by public assessment interviews or surveys before the process, in which members of the public are asked how they feel about the issue, who represents them - if at all, who should be involved in the planning process, etc. If choosing the top-down approach, there is a risk of missing important relevant publics/stakeholders (Thomas, 1995). In this case, it may be useful for the competent authority to include representatives from the obvious stakeholders (the major industries, farmers, NGOs) in a discussion group to identify the rest of the stakeholders (Drafting group, 2002).

II. Involving as early and in as many stages of the process, as possible

Projects usually cover vision development, planning process and implementation. Public participation may occur earlier and/or later in the process. However, it is recommended that participants are involved early in the process. PP needs to take place when public/stakeholders' input can still make a difference in the design and/or a decision to implement a project. It is

important to start early when options are still available and parties are open to new suggestions because concerns can be accommodated in the plans (Inter-American Development Bank, 2000). In addition, controversial issues can be addressed before they become critical and eventually cause major conflicts (Connor, 1997).

The WFD prescribes three steps of PP, each one with a document for public's comment:

- 1. <u>The timetable and work programme</u> to be published by the end of 2006 the latest. Relevant stakeholders and public should receive an overview of the planned plan-production steps (data collection, assessment, definition of objectives, decision regarding measures). This way, they can become aware when they can raise their concerns and proposals;
- 2. <u>An interim overview of the significant water management issues</u> to be published by the end of 2007 the latest. A preliminary overview of the major water management issues for the river basin is to be published;
- 3. <u>Draft versions of River Basin Management Plan</u> including extensive documents and maps to be published by the end of 2008 the latest. At this point these documents must already be nationally harmonized and clearly show what coordinated water management is planned;

For each of these consultation steps the public must be allowed a period of at least 6 months to comment in writing (Drafting Group, 2002).

These are the minimum requirements by the Directive regarding when to involve the public. The first document, however, addresses the procedure, whereas only the other two steps address the content of implementing the Directive. Although not required, it is recommended to begin earlier. Involving the public before and during preparation of the draft version of the River Basin Management Plan is envisaged to accommodate know-how and interests of various stakeholders (Drafting Group, 2002). Garin et al. (2002), for example, suggest beginning the public consultation with an analysis of public and users' viewpoints prior to, or at least in parallel with, the preliminary assessment of river basin characteristics (the first stage of WFD implementation).

III. Selecting suitable techniques

There are different methods that can be used for information supply (newsletters, internet, briefings, information repositories, etc.) consultation (interviews, polls and surveys, open houses/exhibitions, public meetings, etc.) and active involvement (advisory committee, task forces, citizens' jury, working conference, etc). The Directive does not elaborate on this issue,

and the choice of methods is left to the authorities in Member States. Methods should suit the relevant target group and make public involvement accessible and attractive (Thomas. 1995). For detailed description of methods see Appendix 1.

IV. Obtaining decision makers' commitment

In addition to all the abovementioned, and as a general rule, PP should not be invited without first obtaining the commitment of the governmental leaders: either top managers or elected officials. The leaders must be committed to both process and outcomes of public participation. Decision makers must be willing to involve public/stakeholders and allow participants a real influence on the preparation of plans. Otherwise, participants – contributing time, efforts and emotions – will get frustrated with the actual limited influence they had. In addition, all the effort, time and money put into the process – will be lost (Thomas, 1995).

If a meaningful PP is promoted, however, accumulated experience shows that decision makers can expect positive outcomes. The following sections discuss the different forms of PP under the WFD, and the processes and outcomes that can be expected from each of them.

2.2 PP forms under the Water Framework Directive

Three forms of PP are mentioned in the WFD: Information supply, Consultation and Active involvement.

Information supply entails public access to information. It is a one-way relationship in which authorities produce and deliver information to the public. It can be passive - access to information on request by the public, and/or actively delivered by the authorities to the public. Strictly speaking, the Directive only requires access to background information and no active distribution of information: "on request, access shall be given to background documents and information used for the development of the draft river basin management plan" (European Union, 2000/60/EC). Active distribution of information, however, is essential for meaningful participation (Drafting Group, 2002). Information supply is considered by many as only the foundation for PP (Drafting Group, 2002; Van de Kerkhof and Huitema, 2003).

Consultation is the first form of real PP. It is a two-way relationship in which the public and stakeholders can react to proposals developed by the authorities. It does not, however, mean a share in the decision-making, nor the obligation to adapt the plans based on the consultation.

Two sub-categories can be distinguished. The first one is consultation after the plan preparation. This is the traditional view on PP (Webler and Tuler, 2001; Mostert, 2003). The second one is consultation before and during the preparation of plans. In this case, information, ideas and concerns of public and stakeholders are considered during the plan preparation. The authorities draft the plans, but stakeholders and the public provide inputs for decisions (Drafting Group, 2002).

Active involvement is an intensive form of PP. The stakeholders take part in the development of plans, thus authorities and public or stakeholders co-operate. Active involvement can also be divided in two sub-categories. The first one entails deliberation with stakeholders in various phases of decision making, albeit the authorities ultimately decide. The second one covers shared decision making or self-determination in which the stakeholders not only participate in the plan preparation but also in decision making (Drafting Group, 2002). Active involvement entails also consultation. In this paper only consultation and active involvement are considered as forms of PP (see Scheme 1).

The main difference between the forms and the sub-categories is the amount of influence of the public and stakeholders on decision making. On extreme: the influence can be limited to comments on the drafts of plans, or extended to a shared decision making/self determination. The different forms of PP can also result in different consequences for the decision making process. These are elaborated in the sections 2.3 and 2.4. Choosing between these PP forms depends on the objectives of the authorities. In general, a limited PP is suitable to collect data and expertise, and generate innovative solutions, whereas active involvement may be needed to increase acceptance and support for plans and get commitment for implementation. Broadly, the larger the impact of the plans the more important it is to involve the public and stakeholders. The components presented above and the PP forms under the WFD are summarized in Appendix 2.

The WFD does not mandate the exact form of PP to be taken by Member States. It does, however, give instructions for consultation about three documents¹: "Member States shall insure that for each river basin district they publish and make available for comments to the public, including users..." (European Union, 2000/60/EC). This implies that the public should be consulted during the preparation of the River Basin Management Plan. However, the first document is more about procedure (planned-steps) than about content (of implementing the

¹ The timetable and work program; An interim overview of the significant water management issues; Draft versions of River Basin Management Plan;

Directive). Thus, the minimum required aims only at two stages in the planning process. As the public can be consulted in more steps and in further forms, this requirement should be considered a minimum requirement. The Directive also requires that "Member States shall encourage the active involvement of all interested parties in the implementation of the Directive, in particular in the production, review and updating of the river basin management plans" (European Union, 2000/60/EC). This requirement is general and the matter is left to be organized and adapted to national, regional and local circumstances.

Thus, although the WFD provides a strong stimulus for PP, it only provides a general framework for meaningful participation. The guidance document also notes that PP covers a wider range of activities than prescribed by the Directive. Mostert, (2003), indicates that indeed, PP does not always get much attention within Member States, which often focus only on information supply and consultation. The reasons for that are that Member States are not accustomed, nor knowledgeable about PP and especially active involvement. Without understanding the reasons for public participation and recognizing the advantages it holds, one can expect that many decision makers will settle for complying with the minimum requirements. It is thus the purpose of the following sections to discuss what can be achieved with PP, based on the accumulated experience. Some of the processes that occur during PP and their possible outcomes are presented.

3. Public Participation: processes and possible outcomes

3.1 Processes likely to occur during public participation, depending on the form taken Scholars, generally, expect many advantages of PP in water management (Hinchcliffe et al., 1995; Duram and Brown, 1999; Webler and Tuler, 2001; Van de Kerkof and Huitema, 2003; Mostert, 2003; Delli-Priscoli, 2004). These advantages are expected if PP is executed properly involving all the relevant stakeholders and public at the early stage of decision making and giving them meaningful influence. Some suggested advantages are structured in Scheme 1. As illustrated in Scheme 1, several processes occur during PP, depending on the chosen form. During consultation, for example, local data (knowledge and alternative solutions) can be gathered. In addition, priorities for actions can be better defined based on the different values and viewpoints gathered during the process (A; B in Scheme 1). During active involvement additional processes can take place: awareness is raised; shared-interests among participants can

be defined; and participants perceive the process itself as fair and democratic and thus its legitimacy - increases (C; D; E in Scheme 1).

I. Processes likely to occur during consultation

A. During consultation relevant values and viewpoints can be gathered and identified (A in Scheme 1). It holds in particular for the values that can not be measured in monetary terms such as restoration of aquatic systems, as well as cultural and social considerations that science failed to appreciate (Van Leussen 1996; Fischer, 2000). This need is reinforced by the fact that current problems and goals are not clearly defined and often a shared perception of the "true" nature of the problem does not exist (Pahl-Wostl, 2002).

Garin et al. (2002), while investigating public viewpoints in preparation of River Basin Management Plans (RBMP) in the Hérault watershed, in southern France, compared viewpoints of other stakeholders to those of the experts. They found that (a) certain private concerns are not identified by the experts, (b) the public does not see some problems cited by the experts and that (c) experts and stakeholders' viewpoints can be opposed on the nature or origin of the problems and on their solutions and legitimacy. These can lead to opposition of stakeholders to the plans and thus to difficulty in implementation. Another example is in case of the Pea River watershed management in Alabama, USA. The watershed authority focused its activities almost entirely upon the issue of flood control, especially after the flooding of the city Elba in early 1990. However, a series of public hearings that took place after the 1990 flood revealed that other issues were of more concern to the citizens than flood control. Issues of greater concern were water supply, water quality, erosion, recreation, fish and wildlife. As a result, the authority conducted meetings during 1995-6 in which public input was obtained for use in the management plan. The resulting plan identified the same issues and concerns in the watershed that were identified in the earlier public meetings (Mullen and Allison, 1999).

Similarly, Beierle and Konisky's (1999) findings reinforce the importance of incorporating public's values into the planning process. These researchers evaluated cases of PP in the Great Lakes region in North America. All their cases involved a wide variety of stakeholders that discussed and sometimes chose alternatives for improving environmental planning and water quality. The cases showed that value-oriented decisions can help define a common vision and priorities for action. Moreover, they found that in most of the cases (76% of 25 cases with good data) participants' preferences drove or changed decisions. Thus,

stakeholders were highly successful in shaping the final results. Similar results are found in a study into watershed planning initiatives in the USA. The results showed that PP fostered a consensus on goals, thus increasing the legitimacy of the plans. The researchers concluded that integration of the various viewpoints is necessary to achieve successful long-term plans (Duram and Brown, 1999).

B. During consultation local data, information, knowledge and possible solutions from the public can be gathered (B in Scheme 1). Given the levels of uncertainty that water resources managers face, many actions are selected without full knowledge of their consequences. A major source of uncertainty is lack of knowledge (Ostrom, 1990). Such knowledge can be accumulated by professionals but it can also be obtained based on local observation, or local knowledge. The latter applies to a wide range of issues, like farmers' familiarity with soils, or botanical knowledge of indigenous peoples. Although for some local knowledge appears 'primitive' and 'unscientific', it can be a valuable source of information and is increasingly recognized as a legitimate source of know-how and ideas for making decisions. In many ways, the local knowledge complements experts', especially when concerning unique local situations. It can provide first-hand knowledge about local circumstances and assist in finding mistakes and solutions that satisfy a wider rage of interests (Kickert et al., 1997; Pretty and Shah, 1997; Beierle and Konisky, 1999; Fischer, 2000).

In watershed management, conventional conservation programmes undertaken in the last century have been unsuccessful. Experience showed that programmes that are designed without local people are commonly rejected by them if external pressure (enforcement or economic incentives) is removed (Pretty and Shah, 1997). Hinchcliffe et al. (1995) have reviewed 22 case studies of participatory watershed development projects world-wide with regards to soil and water conservation. Local knowledge and skills were at the core of the programmes. Findings showed that despite cultural, political and other differences, all cases had common elements. All cases emphasized the need to use local knowledge and locally-adapted solutions. The impacts were positive including environmental, economic and social benefits. The benefits included recharge of aquifers, increased supply of drinking and irrigation water, reducing soil erosion, salinity and the use of fertilizers and pesticides. The authors stress that while these cases are only few and are still just "islands of success", they have proven to be very successful.

II. Processes likely to occur during active involvement

C. Active involvement may foster raising public awareness to the problems that water managers face (C in Scheme 1). It can also enhance adaptation of management practices. The process of raising public awareness addresses the need to increase public's understanding of the problems and the need for solutions. This is particularly important in cases which require behavior changes on the part of people because decisions made by the authorities without a learning process can not be appreciated and followed. Vice versa, learning process raises awareness of contributions to the problems and willingness to control these problems. In addition, during discussions and deliberations participants have the opportunity to learn the value and rationale of new measures or arrangements (World bank, 1996).

In the study conducted by Beierle and Konisky (1999) on the PP in the Great Lakes region, it was found that educating people motivates them to recognize their contribution to the water pollution and take more responsibility for problems. It also motivates participants to become more involved in the decision making. Similar conclusions resulted from the Duram and Brown (1999) research on watershed planning initiatives in the USA. The findings showed that the watershed initiatives led to public awareness about the need to protect the watersheds. This enhanced the desire to co-operate on problem solving. Similar is argued by Maarleveld and Dangbegnon (1999). Since water system entails many unforeseen changes, continuous adaptation of water management is needed. Thus, when people learn how to assess the way they affect water resources, they also accept more control and contribute to resolve the problems. This, in turn, promotes adaptation of water management.

D. Active involvement may result in defining shared-interests among the different participants (D in Scheme 1). Various stakeholders have different and often conflicting interests and viewpoints about problem solving. This is believed to be in the root of many environmental policy failures. Although deliberation cannot be expected to end controversies, it makes possible to identify and develop shared interests and ideas for coordination of competing interests, hopefully leading to reaching common grounds (Termeer and Koppenjan, 1997; Fischer, 2000).

Even if parties cannot resolve an issue, they can understand the goals and perspective of others by communication and building relationships. Duram and Brown (1999) found in their research on watershed planning initiatives in the USA that PP lead participants to understand better other views and create a common ground for deliberation. For example, the agricultural

communities became aware of the pollution that is caused by them, and the non-agricultural communities became aware of the problems the farmers face (Duram and Brown, 1999).

Beierle and Konisky (1999) report similar findings, based on evaluation of cases of PP in the Great Lakes region in North America. The researchers examined how well PP did in resolving conflicts among stakeholders. They found that in 58% (of the 19 cases with good data), the conflict between interests was declined. They also found that the process of communication, consensus-building and fairness was found more important than the content of the resolved conflicts because it provided opportunity to raise own issues and resolve differences. In addition, the researchers examined whether relationships or institutions were built during the process that would help resolve conflict arising in the future. The findings showed that in 72% of the cases the process involved relationships among stakeholders or led to the development of procedures, or institutions for conflict resolution. In most of the cases participants indicated that even if disagreements or disputes persisted, the process improved relationships among stakeholders. Many participants made efforts to bring the good will and cooperative relationships shaped during the process, into the creation of the joint arrangements. Most of the arrangements created continuous engagement of stakeholders, especially in the implementation phase.

E. During active involvement participants perceive the process as fair and democratic because it enables them to be engaged in deliberation about decisions that need to be taken. Thus, the legitimacy of the process increases (E in Scheme 1). A stream of ideas addresses the issues of fairness and democratic characteristics of the process. Fairness is considered an important element in people's satisfaction with decisions and support for authorities (Webler and Tuler, 2001). It is argued, for example, that those who are affected and who would benefit from water must have the opportunity to participate in its planning and management because citizens should participate in decisions that affect their lives (Delli Priscoli, 2004). It also draws from the idea that the aim of democratic societies is to enable all citizens to participate as fully as possible in social, political and economic life (Benn, 2000, quoted in: HarmoniCOP, 2003)

A participatory process allows participants to attend, contribute to the discussion, challenge and defend each other's claims, and finally decide or influence the outcomes. All these can restore trust in the decision making process.

3.2 Possible outcomes of PP, depending on the form taken

The processes that occur during PP can lead to certain outcomes. Broadly, consultation can improve the quality of decisions (i in Scheme 1) whereas active involvement can, in addition to that, increase social acceptance for plans (ii in Scheme 1) and thus enhance sustainable implementation (iii in Scheme 1).

I. Likely outcomes of consultation

Consultation can enrich the process with relevant viewpoints and values, local information and possible solutions that could not have been gathered otherwise (Van de Kerkhof and Huitema, 2003; Duram and Brown, 1999). By bringing all these to the planning process, the problem-solving capacity is increased: relevant values and viewpoints assist in better definitions of problems and priorities, and local knowledge and solutions can assist in better solving these problems. All these result in improving the quality of decisions (i in Scheme 1). This is especially relevant with PP on local scale, as consulting the local public/stakeholders can bring to the process important input on local circumstances.

The next example demonstrates how consulting with the public in the beginning of the planning process can produce better results: improve quality of decisions and avoid local conflicts. Although not directly connected to water quality problems, it is connected to the RBMP required by the WFD. It is a problem of how to share a river flow in the Hérault watershed, in southern France. Both experts and other stakeholders agreed on the final objective to maintain a minimum stream flow and satisfy all competing uses at the same time. However, disagreements appeared concerning the volume of this threshold value. The problem was particularly acute in the middle Hérault valley where some uses are over a century old, such as gravity irrigation canal. Other water uses were growing as well, such as swimming and canoeing, water abstraction for household uses like drinking, gardening etc. The experts made assessments based on fix reserve volume for the periods of droughts, using a national formula. The local actors, however, suggested to adapt the national formula to the Mediterranean climate and to subdivide the river into sections fixing for each section maximum abstraction volumes and targets for minimum flow rate. The definitions of the sections, the quotas, and the minimum flow rates are all of strategic importance for the local actors and for the environment. They raise

questions such as the economic weight of the different water uses in the local economy that can only be addressed by local actors (Garin et al., 2002).

Consultation may be sufficient when public input is needed to improve the quality of decisions and plans. It may even provide better acceptance of the plan, because local issues and expertise were taken into consideration. However, if public's acceptance, support and commitment are important for the success of the plan, active involvement may be more efficient.

II. Likely outcomes of active involvement

Sometimes the consequences of plans mean that new arrangements will be introduced. In some cases a major objection, which can delay or even threaten the implementation, can be expected. For example, if measures are perceived as a threat to livelihood. In other cases, implementation relies on the public's active cooperation. In these cases, acceptance, support and even commitment of the local communities/stakeholders are necessary for implementation.

Active involvement can increase the likelihood of social acceptance and support for plans (ii in Scheme 1). Raising public awareness addresses the need to increase public's understanding of the problems and the need for solutions. Educated public is more aware of its own contribution to the problems and may be more able and willing to control them. This can affect the public's perception about the problems and solutions and thus may increase support for the decisions. In addition, improved communication and identifying shares interests can contribute to a consensus about plans, which in turn underpin the legitimacy of final plans (Beierle and Konisky, 1999; Lawrence and Daniels, 1996; Duram and Brown, 1999). Moreover, working together and taking into consideration all relevant viewpoints and concerns can generate solutions that will satisfy a wider range of interests. The process itself, being perceived as fair and democratic, can increase the legitimacy of plans, and thus lead to social acceptance and support. Social acceptance and support lead, in turn, to sustainable implementation (iii in Scheme 1).

As illustrated in Scheme 1, active involvement can eventually lead to easier implementation, which is the ultimate goal of plans and policies. Successful implementation of plans means completing the physical implementation and having a programme operating without public outcry (Thomas, 1995). Furthermore, in some cases active cooperation of the public is needed for implementation. For example, in water management restrictions of various kinds are needed. These restrictions are often legal in nature, based on legislation and enforcement. Legal

restrictions such as criteria for effluent quality can be applied to point source pollution (e.g. domestic and industrial wastewater discharges). In these cases they can generally be enforced without great difficulties. However, one of the biggest pollution problems today is diffuse pollution from non-point sources such as agriculture. In these cases, if these measures are to be successfully implemented, support and active cooperation of the public is essential. Napier and Johnson (1998) state that conservation agencies failed to recognize that the major barriers to adaptation and continued use of soil and water protection systems are socio-economic rather than technological. The major barrier is the reluctance on the part of land owners to internalize the costs of implementing these measures. Until land owners become willing to assume these costs, it is highly unlikely that new measures will be adopted. But even if there is cooperation during the implementation of the project due to financial incentives or some other kind of incentive, experience shows that measures are often rejected once the project is over. Involving the public, on the other hand, can make a difference. Pretty and Shah (1997) note that people who were involved during planning and implementation of plans are more likely to continue activities after project completion. They note that if people have responsibility, feel ownership and are committed, then sustainability is more likely. Similarly, Mullen and Allison (1999) in their research on cases of stakeholders' involvement in watershed management in Alabama, USA, concluded that many programmes produce short term improvement in water quality as long as funding is available. However without meaningful stakeholders' involvement and support, the problems often reappeared once external funding (federal and state) is withdrawn. Community involvement is needed to insure that watershed activities will continue after funding is reduced or eliminated. Moreover, due to the dynamics of water systems and the uncertainties that characterize water management actions, adaptation of water management practices is needed. Active involvement can enhance such adaptation (Maarleveld and Dangbegnon, 1999).

The following example demonstrates how active involvement in decision making, in this case self-determination, can produce positive results. Ostrom, 1990, describes a case of local enterprises created by water producers of groundwater basins in California. These producers were engaged in a pumping race for decades, when each producer withdrew unlimited water quantities. Users pumped as much as was privately profitable and ignored the consequences for themselves and for others. This decreased water levels and caused intrusion of salt water from the sea, thus endangering the groundwater resources quality. Experts' reports about the severity of the situation raised awareness to the problems and a need for a solution. Facing a common

problem, each basin established a voluntary association to provide a forum for face-to-face discussions about joint problems and potential joint strategies. Decisions were made, including cut back of water withdrawals to try and restore safe water levels. Water rights were allocated, taxes on water withdrawals were placed and a mutual monitoring system was established. The results showed that despite the high impact of the decisions, compliance was very high. First, a common goal was defined: constrain water use so that access to the resource will be continued over the long run. Second, the active, reliable and neutral monitoring system makes it impossible for users to pump more than their water rights without all the others learning about it. This is because everyone is organized and communicating with one another about joint strategies. Thus, continues non-compliance is likely to bring legal actions as well as loss of reputation. Third, each user is constrained and almost all users voluntarily agreed to the initial allocation of rights. Thus, the basic system is perceived to be fair by most participants. Further, participants continue to have control over the monitoring system to insure that it continues to be active, fair and reliable. As a result of these actions, water levels in the basins were restored and freshwater barrier along the exposed coasts was completed to protect the basins from sea water intrusion. This allowed the users to continue using water from the local source. Unless they took action to restore the basins, the alternative water source was imported water. Importing water was calculated to be three times more expensive (cost of a water unit) than withdrawing from the local basins. Thus, working together for a common goal was more beneficiary to the users than continuation of the individual pumping race. Ostrom presents also cases of failures and fragilities. However, she emphasizes that the successful cases demonstrate that there is an alternative to external authorities' centralized top-down approach. Allowing stakeholders, in this case water resource users, to negotiate an agreement and make decisions on the resource management, can deliver a successful sustainable outcome: more efficient, less expensive and better accepted socially.

Thus, active involvement can be beneficiary in cases when plans are expected to have a great impact on the communities; when coordinated actions of different and sometimes conflicting interests are needed; and when implementation relies on active cooperation of the public.

Having said all that, it should be emphasized that PP is a challenging process. It has to be organized and facilitated and it requires allocation of financial and human resources. In addition, there is no guarantee of success as participants can cling to the non-cooperative strategies despite

of genuine good intensions of organizers (Kickert and Koppenjan, 1997). Duram and Brown (1999) report that despite the positive outcome in many watershed initiatives, in some cases a more negative relationship developed between the agricultural and non-agricultural communities. Furthermore, different viewpoints and interests can grow further apart and the degree of conflict can increase as a result (Beierle and Konisky, 1999). Respectively, in their research on PP in the Great Lakes region, Beierle and Konisky (1999) found that although in 11 of the cases the level of conflict decreased, in 3 cases the level of conflict increased. Failing to involve all the relevant stakeholders is a major factor for failure. Also, PP, as a process, is a part of the broader social and political context and factors such as existing conflicts, fear of social pressure or fear of losing control can impede co-operation. Whatever the reasons, it cannot be concluded that PP can guarantee the anticipated positive results.

4. Summary and conclusions

The WFD obliges Member States to some form of PP in the implementation of the Directive. However, it does not mandate the exact form of PP and the matter is left to competent authorities. Often these authorities are unfamiliar or inexperienced with PP, specifically with extended forms of PP. This can lead to authorities promoting the minimum required by the Directive with focus on information supply and consultation.

The different forms of PP can yield, as was presented, different outcomes. Although these outcomes cannot be guaranteed, especially outcomes of active involvement, accumulated experience shows that they are likely to occur. This paper reviewed some of these outcomes. This way, decision makers can get an idea of what outcomes can be expected from the different forms. It may well be that in some cases there is no great need for social acceptance for plans, but that local input can improve decisions and plans. In those cases consultation may be sufficient. In other cases, social acceptance, support and commitment may be vital for the implementation of the plan. In these cases, active involvement of all relevant interests is likely to provide the needed outcomes.

The experiences with PP in water management presented in this paper are relevant for the WFD which calls for integrated water management based on river basins. River basin management is too complex for any single organization. It involves many authorities and stakeholders and they all need to learn about the basin, how they depend on it and how they affect it. They need to arrive at a coordinated action. In addition, the Directive focuses on

restoring and improving water quality. The pressing issue of non-point source pollution from agriculture is unsolvable without responsibility and co-operation of polluters. This implies a major change in the roles and responsibilities of the different stakeholders groups. It also implies that more active involvement of public and stakeholders may be needed. Based on the presented experiences, PP under the WFD can assist in preparation and implementation of the River Basin Management Plan. Consultation can assist, for example, in setting priorities for implementation ("The overview of significant water management issues") based on public/stakeholders inputs; it can introduce locally adapted solutions and improve the quality of the decisions. But furthermore, active involvement can bring all relevant stakeholders to the table and allow them to define shared-interests and agree on joint actions. It can increase social acceptance for plans and thus assist in long-term and effective implementation.

Given the complexity of the water management tasks of the Directive and the anticipated high impacts it will have on the communities, it seems that extended PP is indeed needed if the goals are to be met. In this case, however, it is important to prepare a meaningful PP thoroughly: involving all relevant publics/stakeholders, as early and in as many stages as possible and allowing them a real influence on the process and outcomes of plans.

References

- Beierle, T. C. Konisky, D. M., (1999), *Public Participation in Environmental Planning in the Great Lakes Region*, Discussion paper 99-50, Resources for the Future, Washington. http://www.rff.org/Documents/RFF-DP-99-50.pdf
- Connor, D. M., (1997), *Public participation: a manual, how to prevent and resolve public controversy* Development Press, Victoria.
- Daniels, S. E. Walker, G. B., (Undated), *Rethinking Public Participation in Natural Resource Management: Concepts from Pluralism and Five Emerging Approaches*, http://www.mtnforum.org/resources/library/danix99a.htm
- Delli-Priscoli, J., (2004), What is Public Participation in Water Resources Management and Why is it Important? *Water International*, 29 (2), 221-227.
- Drafting Group, (2002), Guidance on public participation in relation to the Water Framework Directive. Active involvement, consultation and public access to information. Document prepared in the Framework of the Common Implementation Strategy of the European Commission and the EU member states, endorsed by the EU water directors in Copenhagen.
- Duram, L. A., Brown, K.G., (1999), Assessing Public Participation in U.S. Watershed Planning Initiative, *Society & Natural Resources*, 12, 455-467.
- European Union, The European Parliament, The Council (23-10-2000), Directive of the European Parliament and of the Council concerning establishing a framework for community action in the field of water policy (2000/60/EC) http://europa.eu.int/eurlex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32000L0060:EN:HTML
- FAO/ECE/ILO, (2000), *Public Participation in Forestry in Europe and North America*, International Laboru Organization, Geneva.
- Fischer, F., (2000), *Citizens, Experts and the Environment. The Politics of Local Knowledge*, Duke University Press, Durham and London.
- Garin, P. Rinaudo, J-D. Ruhlmann, J., (2002), Linking expert evaluation with public consultation to design water policy at the watershed level, *Water Science and Technology*, 46 (6-7), 263-271.
- HarmoniCOP, (2003), *Social learning in River Basin Management*, HarmoniCOP WP2 Reference Document. http://www.harmonicop.info/_files/_down/SocialLearning.pdf
- Hinchcliffe, F. Guijt, I. Pretty, J. N. Shah, P., (1995), New Horizons: The Economic, Social and Environmental Impacts of Participatory Watershed Development, IIED.

- Huitema, D. Kerkhof, M. van de, Terweij, R. Van Tilburg, M. Winsemius, F., (2004), *Exploring the future of the IJsselmeer. Report to the River Dialogue project on the Dutch Citizens'*Jury, The River Dialogue Projetc http://www.riverdialogue.org/files/W04-09b.pdf
- Inter-American Development Bank, (2000), *Building a Framework for Consultation and Public Participation*, *Discussion Paper*, Washington http://www.iadb.org/sds/doc/sds-participationE.pdf.
- Kerkhof, M. van de & Huitema, D. (2003). Public participation in river basin management: A methodological perspective. St. Michielsgestel, Conference Monitoring Tailor-Made IV. Information to support sustainable water management: from local to global levels
- Kickert, W. J. M. Klijn, E-H. Koppenjan, J. F. M., (1997), Managing Networks in the Public Sector: Findings and Reflections, in: W. J. M. Kickert, E-H. Klijn, J. F. M. Koppenjan (eds.), *Managing Complex Networks*, SAGE Publications, London.
- Kickert, W. J. M. Koppenjan, J. F. M., (1997), Public Management and Network Management: An Overview, in: W. J. M. Kickert, E-H. Klijn, J. F. M. Koppenjan (eds.), *Managing Complex Networks*, SAGE Publications, London.
- Lawrence, R. L. Daniels, S. E., (1996), *Public Involvement in Natural Resource decision Making: Goals, Methodology and Evaluation*, Forest Research Laboratory, Oregon State University.
- Leussen, W. van, (1996), Public Policy Aspects of Integrated Water Management.

 Implementation of Management Plans for the Restoration of Aquatic Ecosystems,
 particularly estuaries, Virginia Polytechnic Institute and State University, Netherlands
 School of Government and the Ministry of Transport, Public Works and Water
 Management, Blacksburg and The Hague.
- Maarleveld, M. Dangbegnon, C., (1999), Managing natural resources: A social learning perspective, *Agriculture and Human Values*, 16, 267-280.
- Mostert, E., (2003), Public participation and social learning for river basin management, *MTM-IV Proceedings*. http://www.mtm-conference.nl/mtm4/docs/103-Mostert%20final.pdf
- Mullen, M. W. Allison, B. E., (1999), Stakeholders involvement and social capital: keys to watershed management success in Alabama, *Journal of the American Water Resources Association*, 35 (3), 655-662.
- Napier, T. L. Johnson, E. J., (1998), Impacts of voluntary conservation initiatives in the Darby Creek Watershed of Ohio, *Journal of Soil and Water Conservation*, 53 (1), 78-84.
- Ostrom, E., (1990), *Governing the Commons: the Evolution of Institutions for Collective Action*, Cambridge University Press, New York.

- Pahl-Wostl, C., (2002), Towards sustainability in the water sector The importance of human actors and processes of social learning, *Aquatic Sciences*, 64, 394-411.
- Pretty, J. N. Shah, P., (1997), Making soil and water conservation sustainable: from coercion and control to partnership and participation, *Land Degradation and Development*, 8, 39-58.
- Public participation toolbox, (undated). http://iap2.org/practitionertools/toolbox.pdf
- Termeer, C. J. A. M. Koppenjan, J. F. M., (1997), Managing Perceptions in Networks, in: W. J. M. Kickert, E-H. Klijn, J. F. M. Koppenjan (eds.), *Managing Complex Networks*, SAGE Publications, London.
- Thomas, J. C., (1995), *Public Participation in Public Decisions*, Jossey-Bass Publishers, San Francisco.
- USEPA, (1996), *RCRA Public Participation Manual*, Washington. http://www.epa.gov/epaoswer/hazwaste/permit/pubpart/manual.htm
- Webler, T. Tuler, S., (2001), Public Participation in Watershed Management Planning: Views on Process from People in the Field, *Human Ecology Review*, 8 (2), 29-39.
- World Bank, (1996), the World Bank Participation Sourcebook. http://www.worldbank.org/wbi/sourcebook/sbhome.htm

Appendix 1

Selected methods for information supply				
Method	Description	Advantages	Disadvantages	Tips
Public Notices:				
Newspaper advertisements	Paid advertisements in newspapers and magazines.	Gives certainty that information is presented unchanged at a certain time in a certain medium; can reach a wider public.	There is only space for limited information; costly.	Figure out the best days and best sections of the paper to reach intended audience.
Newspaper Inserts	A "Fact Sheet" within a local newspaper.	Stands out from other newspaper advertisements; provides a way to reach beyond the most-involved citizens;	Costly, especially in urban areas.	Pay attention to the design – to get noticed among the other inserts. Try on a day that has few other inserts.
Brochures		Can be used to present a short summary of the project, indicates the most important issues; can be made cheap; informs many people.	Can be interpreted wrongly; contains limited information; can be hard to disseminate; quickly out-dated; no guarantees that material will be read.	Keep it short and simple. Make it visually interesting. Always state contact person, telephone number, email address.
Signs and Bulletin Boards	Posters or bulletins on community bulletin boards (in community centers, town halls, grocery stores, on heavily-traveled streets) where people are likely to see them.	A useful means of public notice.		A sign should be large enough so that passers-by can read it.
Internet-site	Web sites which contain project information, announcements, and documents.	Capable of reaching very large audiences with enormous amounts of information. Can be a very low cost way of distributing larger documents.	Computer infrastructure is essential and many people still don't have access to that; some experience with computers is required; target group is unverifiable.	Keep it simple and up-to-date.

Information Repositories	An information repository is a collection of documents related to the process. Libraries, City Halls, distribution centers, schools and other public facilities make good location for housing project-related information.	A repository can make information readily available to people who are interested in learning about the issue; relevant information is accessible to the public at a low cost.	Information repositories are not often used by the public.	Make sure personnel at the location know where materials are kept. Keep a list of items. Track usage through sing-in sheet.
Project Tours/ Field Trips/ Open House/ Exhibition/ Community Fairs	Project tours and Field Trips are scheduled trips to the project-area/subject for local officials, media representatives and citizens, during which technical staff answer questions. Community Fairs are central events of multiple activities to provide project information and raise awareness.	Meets information and interaction needs of many members of the public; gives general information in relative low cost; the project is made "visible"; an Open House/Exhibition allows the public to tour at their own pace.	Project Tours and field Trips are one-way communication – difficult to document public input; protestors may use the opportunity to disrupt event; usually more staff intensive	Someone should explain the format in the beginning of the tour/at the door. Use simple and accessible language.
News and Press releases	News releases are statements sent to the news media. They can be used to publicize progress, to announce public meetings, to report the results of public meetings or studies, and describe how citizen concerns were considered. Press kits consist of a packet of relevant information distributed to reporters. The press kit should summarize key information.	News releases can effectively and quickly disseminate information to large numbers of people.	Generally low media response.	Try to hand deliver press releases or kits to get a chance to discuss project.
Project Newsletters and Reports	Project newsletters and reports are means of direct communication that keep interested people informed about activities and actions. A project newsletter uses a readerfriendly, news-based format to provide regular updates on activities and actions taking. Project reports may include		Newsletters can require significant amounts of staff time and resources to write, copy, and distribute.	

	official technical reports or other environmental documents and relevant studies. Sending these reports directly to key stakeholders can spread information more effectively than simply placing the documents in an information repository.			
Selected metho	ds for consultation			
Method	Description	Advantages	Disadvantages	Tips
Interviews	Community interviews are informal, face-to-face or telephone interviews held with local residents, community groups, and other individuals to acquire information on citizen concerns and attitudes about the project.	This is a direct way to exchange information; it provides an opportunity to get understanding of public concerns and issues and what is the best way to communicate with the public; it gives people the feeling that someone is listening; it combines an indebt conversation with networking function.	Time consuming.	Do not tender interviews. Doing it yourself is likely to increase the involvement.
Surveys and Telephone poles	Surveys and polls are designed to solicit specific types of feedback from a targeted audience, such as public opinion about a certain activity/ measure, the effectiveness of PP activities, etc. Surveys may be oral or written; used in person or by mail; and distributed either to specific segments of the community or to representative samples.	Provides input from cross-section of public, not just activists; statistically tested results are more persuasive with political bodies and the general public.	Can be labor intensive and expensive to get statistically valid results; level of detail may be limited; bias is easily charged if questions are not carefully constructed.	Questionnaires should be professionally developed to avoid bias. Telephone and Internet surveys are likely to produce higher response rate than mail-in survey.
Public Hearings	Formal meetings with scheduled presentation offered. Public hearings provide an opportunity for	Provides an opportunity for public to speak and putts	Does not foster dialogue. Creates "us verses them" feeling.	

Public Meetings	the public to provide formal comments and oral testimony on proposed actions. All testimony received becomes part of the public record. Public meetings are less formal than public hearings: anyone can attend, there are no formal	Public meetings provide two-way		
Public Meetings	testimony on proposed actions. All testimony received becomes part of the public record. Public meetings are less formal than public hearings: anyone can	Public meetings		
Public Meetings	actions. All testimony received becomes part of the public record. Public meetings are less formal than public hearings: anyone can	•		
Public Meetings	received becomes part of the public record. Public meetings are less formal than public hearings: anyone can	•		
Public Meetings	Public meetings are less formal than public hearings: anyone can	•		
Public Meetings	Public meetings are less formal than public hearings: anyone can	•		
Public Meetings	formal than public hearings: anyone can	•		
	formal than public hearings: anyone can	•		
	hearings: anyone can	provide two-way		
		communication,		
	aucha, uicic ale no ioinial	with community		
	time limits on statements,	members asking		
	and the competent	questions and the		
	authority would answer	competent		
	questions. The purpose of	authority		
	the meeting is to share	providing		
	information and discuss	_		
		responses; public		
	issues, not to make	meetings are open		
	decisions. Due to their	to everyone and it		
	openness and flexibility,	is open and		
	public meetings are	flexible procedure.		
	preferable to hearings as a			
	forum for discussing			
	complex or detailed issues.			
Focus Groups	Focus groups are a way of	Provides	Relatively expensive	
	gathering information on	opportunity to test	if one needs to	
	community opinion. The	key messages prior	provide for a	
	advertising industry	to implementing	moderator, meeting	
	developed focus groups as	programme.	space, and	
	an alternative to expensive		transportation.	
	market research. Focus			
	groups are small discussion			
	groups selected either to be			
	random or to approximate			
	the demographics of the			
	community. A trained			
	moderator who draws out			
	people's reactions to an			
	issue usually leads the			
	•			
Oman II /	group.	A 11 orus 1	Mono at-ff:	Dublicaire
Open House/	Informal meetings in a	Allows people to	More staff intensive.	Public input must
Exhibition/	public location with visual	tour at their own		be well
	presentation where people	pace; allows them		documented.
	can talk to involved	to find out more		
	officials on a one-to-one	about all sides of		
	basis. Citizens can ask	the issue.		
	concerns directly to project			
	staff.			
workshops	An informal public	Maximizes	Several small group	
	meeting that may include a	feedback obtained	facilitators are	
	presentation but ends with	from participants.	necessary.	
	interactive working groups.			
workshops	questions and express concerns directly to project staff. An informal public meeting that may include a	Maximizes feedback obtained	facilitators are	

Selected methods for active involvement				
Method		Advantages	Disadvantages	Tips
Method Advisory body/committee/ group	In this technique representatives of various relevant groups (farmers, fishermen, authority staff, citizens groups etc) are asked to serve on a committee in order to present and discuss their needs and concerns with the competent authority. The committee meets routinely to discuss issues involving a particular project and then advises on a particular policy or issue. The participants are expected to represent the interests of larger publics. Advisory committee can be formed for the purpose of presenting a recommendation, and it can be formed for the purpose of making a decision in the end of the discussion, in which the stakeholders are in fact	Advantages Provides detailed analysis of project issues; participants gain understanding of other perspectives, leading towards compromise.	Disadvantages General public may not embrace the body's recommendations; members may not achieve consensus; sponsors must accept need for give-and-take; time and labor intensive.	Tips Define roles and responsibilities upfront. Be forthcoming with information. Interview potential body members before selection. Use third party facilitation.
Task forces	A group of experts or representative stakeholders formed to develop a policy recommendation.	A task force of independent or diverse interest will have greater credibility; this method provides constructive opportunity for compromise.	Task force may not come to a consensus; time and labor intensive.	Obtain strong leadership in advance. Make sure representatives have credibility with the public. Make sure members represent diverse perspectives and will be independent.
workshops	An informal public meeting that may include a presentation but ends with interactive working groups.	Excellent for discussions on criteria and analysis of alternatives; fosters small group	Several small group facilitators are necessary.	

Working conference	Meeting with a limited amount of participants to deepen the insight in a	or one-to-one communication; builds credibility; maximizes feedback obtained from participants; fosters ownership in solving the problems. Provides a good way for a lot of information and	Time consuming.	Pay attention to participants' selection.
	problem or to map possible	argument		Determine the
Citizens' jury	solutions. Citizens' Jury is a small group of citizens, randomly selected to represent the general public, who meet to deliberate upon a specific issue. The jury usually consists of 12 to 20 individuals. Jurors hear from a variety of expert witnesses and are able to deliberate together on the issue. On the final day of their moderated hearings, the members of the citizens' jury present their recommendations to the public.	exchange. Provides good opportunity to develop deep understanding of an issue; the public can identify with the jurors; offers an opportunity for non-traditional stakeholders to hear expert testimony, deliberate together and produce recommendation to inform decision making.	Costly - Jurors are often paid a stipend for their time; expert witnesses need to be found, and generally paid, and a moderator is needed. Time consuming - preparatory work is needed, especially organizing the survey that randomly selects a demographically representative panel.	objectives well.
Joint fact-finding – guiding-group	Group of involve parties and interested parties which guides a process of joint fact-finding. The group is involved in the formulation of research questions and assessment of interim results.	Provides a wide range of input.	Needs to be coordinated by initiator with scientific quality check.	

Sources: Drafting group, 2002 (Annex I); Public participation toolbox, (undated); USEPA, 1996.

Appendix 2

	Public Participation under the Water Framework Directive					
		Minimum required (Member States must insure)	Better practice (Member States must encourage)	Best practice		
PP form		Consultation – during preparation of final River Basin Management Plan	Active involvement - Deliberation	Active involvement - Shared decision making/self- determination		
		Information supply – on request	Active distribution of information	Active distribution of information		
W	ho to involve	The general public, including stakeholders	Involvement- Stakeholders	Involvement- Stakeholders		
		Information –the general public and stakeholders	Information –the general public and stakeholders	Information –the general public and stakeholders		
M e t h o d s	Involvement	The public must be allowed to comment in writing. In this case methods such as internet site and information repositories can be used to allow the public access to the documents. If the public is invited to comment also orally (considered better practice by the Drafting Group), methods such as interviews, polls and surveys, open houses/exhibitions, public meetings, panel of citizens and focus groups can be used.	Working conference, planning workshop, task forces, advisory committee. The stakeholders deliver a recommendation.	Working conference, planning workshop, citizens' jury, task forces, advisory committee and mediation. The stakeholders get to make the decision.		
	Information	On request: Internet site, Information repositories. Active distribution: Newsletters, brochures, signs and bulletin boards, internet site, briefings, project tours/field trips etc.	Newsletters, brochures, signs and bulletin boards, internet site, briefings, project tours/field trips etc.	Newsletters, brochures, signs and bulletin boards, internet site, briefings, project tours/field trips etc.		
Wi	nen to involve	- The timetable and work programme (to be published by the end of 2006 the latest) - An interim overview of the significant water management issues (to be published by the end of 2007 the latest) - Draft versions of River Basin Management Plan (to be published by the end of 2008 the latest).	Involving the public in other and earlier stages.	Involving the public in other and earlier stages.		