Assessment of the Significant Water Management Issues (SWMI) draft documents presented in intercommunitarian river basin districts in Spain

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<u>Introduction</u>

At present (May 2009) the development of the Water Framework Directive (WFD) implementation process in Spain is characterised by the common feature of a general delay, which impedes an assessment of the RBMPs. Despite the heterogeneity of situation, only the Balearic Islands are on time with the foreseen schedule.

Spain is organised in 9 intercommunitarian districts¹ (5 of them, international), managed, with a common approach by the central government through the Confederaciones Hidrográficas. Autonomous Communities are responsible for water management in the basins located exclusively in their territories. Andalusia, Galicia, Basque Country and Catalonia carry out WFD implementation for their "internal basins". The Balearic and Canaries archipelagos are in charged of the process in their islands with the specificities derived from the insularity.

The paper deals only with the intercommunitarian districts, all of them at the same stage of development with the only exception of the Júcar district, blocked due to a judicial dispute on regional competencies.

Significant issues

The main Significant Water Management Issues (SWMI) identified in the different basins are in general terms common to all of them. Quantitative problems arise from an overestimation of the existing resources which presumably will be increased due to a reduction of precipitation with higher plant evapotranspiration associated with climate change. The situation is aggravated by the historical allocation of water rights to uses beyond the renewal capacity of rivers and aquifers. Nevertheless public administrations have shown to be unable to restrict the expansion of the irrigated surface and in most of the basins new irrigated areas are fostered by the regional departments for agriculture and the central government². The overexploitation of underground water bodies is identified as a relevant issue in vast areas of the districts Júcar, Segura Guadiana and Guadalquivir.

From a qualitative point of view, the main common issue is the excess of nutrients associated to agrarian and livestock farming diffuse sources and the

¹ Júcar, Segura, Guadalquivir, Guadiana, Tagus, Duero, Miño-Sil, Cantábrico and Ebro

² Conclusiones del VI Congreso Ibérico sobre Gestión y Planificación del Agua, Vitoria-Gasteiz, 2008 http://www.unizar.es/fnca/docu/docu262.pdf

discharge of treated (and untreated) sewage water. Industrial pollution is not addressed as a relevant issue, with minor exceptions: it is assumed that industries operate respecting the legal rules and only the presence of industrial pollutants in urban sewage plants is perceived as a problem.

The overregulation of rivers for power generation, irrigation, flood protection and urban supply have cause severe morphological alteration of rivers causing the disruption of their ecological functioning.

From the comments presented by the social agents to the SWMI drafts, a general consensus about the relevance of the selected issues can be derived. The divergence between agents arise in the priority setting and in a call for attention to some "forgotten" issues, as for instance, transition an coastal waters or governance for ecosystem conservation and sustainable use.

Measures

The debate on measures has been launched simultaneously with the presentation of the significant issues identified by the water authorities. The level of detail and adaptation of the general catalogue of measures to concrete situations varies widely among the SWIM documents. Nevertheless some common features can be identified: There is still a wide room for the development and application of economic and management instruments. The traditional gravitation of the Spanish water policy around the public works dominates the general philosophy of the planning documents, while the management perspective remains underdeveloped.

a) Economic instruments

The economic dimension of the whole implementation process is underdeveloped, burden with conceptual and information problems since the diagnosis phase. The misconception of costs categories -environmental and resource costs, but also financial- has lead to an overestimation of the cost recovery rates. On the other hand, the cost-effective analysis of measures is troubled by the weakness of costs estimations to be added to the problems derived from the effectivity side.

It should be highlighted that cost analysis is crucial to the fulfilment of art 9 of the WFD and to the justification of exemptions under art 4. The water financial rule needs to be modified in order to be adapted to the new relevance of economic instruments fostered by the WFD. There was an attempt during the previous legislative period to adequate the water law to the new situation, which seems to be abandoned at present. The absence of an adequate legal frame hinders the implementation of economic instruments for an effective accomplishment of cost recovery and polluter payer principles.

b) Management

Despite the evident advances carried out in the last five years in the field of modernisation of some aspects of water administration a lot of work to do still remains. The shift of water policy from public works building to adaptive management of ecosystems requires both a deep revision of traditional practices and a set of new instruments.

Administrative coordination –sectorial and territorial- seems to be a major need difficult to attain. It should be kept in mind that most of the measures considered in the planning process affect the pressures and that these pressures respond to political incentives shaped in departments other that the water one. Land use strategy, agricultural policy, IPPC etc. need to integrate the water policy objectives and its administrators must be coordinated with the water authorities. On the other side, water districts overlap with other existing administrative territories, whose authorities not always have the habit of administrative coordination.

Despite the fact that the basic spatial unit of the WFD is the water body, its implementation runs at very different scales. There is a challenge for the planning process to develop an effective organization of the different levels, which ensure coherence and practical feasibility. Special attention must be paid to the gathering and managing of information. Although improvement of the monitoring networks has been achieved during the past years there is still a lack of physical data (not to mention socioeconomic ones).

c) Innovative measures

The SWMI documents drafted by the water authorities can be said to be rather conservative in their approach and proposals. Nevertheless, some innovative measures can be found here and there. The claim for a more intensive use of non conventional measures comes from the side of NGOs through their comments to the official proposal. For instance, the emphasis on adaptation and demand management strategies without supply increase, the restoration of ecological functions as a means to provide ecological services to society or the enhancement of governance instruments can illustrate what is meant here by innovative measures.

The next generation of RBMP

It is daring to anticipate the next generation of RBMG, not being yet published the RBMPs for the period 2009-2015. However from the following up of the present planning process³, at least some worries can be mentioned. The first one relates to the expected use of exemptions in the first generation of RBMP and the subsequent problem transfer to the next generation. Due to the weaknesses of some key elements of the present planning process –e.g. diagnostic or cost analysis- exemption justification can turn into a foggy affair. It is true that the present cycle has been a useful training for next plans; it is also true that many of the worries and uncertainties of the beginning have been overcome, but the lack of an ambitious political commitment has limited the possibility of a change of the required extension. Special attention should be given to the likely impacts on the state of water bodies produced by the vast catalogue of public works included as proposed measures in the SWMI.

³ Proyecto de Seguimiento de la Implementación de la Directiva Marco del Agua en las Cuencas Españolas, FNCA

http://www.unizar.es/fnca/index3.php?id=1&paq=18

Furthermore, those works proposed as a means of preventing the effects of floods may not be aligned with the scope of the flood directive.

Climate change scenarios will probably be a major topic to be fully considered in the next planning cycle. At the present stage the debate on the adequacy of the hydrological series used as a planning reference has turned around the use of large (~60 years) and short (~25 years) series, but the integration of climate change scenarios remains for future plans. However, precipitation shortness combined with higher plant evapotranspiration in the near future have been introduced by scientists and NGOs as an argument for a precautionary approach in the decision making process.

Knowledge gap

During the past years a big effort has been done by the water administration in order to gather, systematise and publish relevant information for a planning process with, among others, the great novelty of public participation. The outcome is positive but insufficient. On the one side there is still a lack of essential data for a sound water management, in topics like water abstraction, uses and costs, or on the real state of water bodies. On the other side, an important knowledge gap has been identified as a consequence of the practical development of the new approach. This gap relates not only to the knowing of a concrete situation –let's say the river-aquifer relationship in a certain location-but also with the general understanding of some processes and with the practical consequences which can be derived.

We can identify an important research need in the interplay of social and ecologic systems, with an immediate and relevant relation to the implementation of the WFD, as, for instance, how to conceive and develop economic instruments for conservation and sustainable use; or how to promote social ecological awareness and how to integrate effective public participation in administrative routines.

Conclusion

Water policy in Spain during the last decade has been conditioned undoubtedly by the WFD implementation process. Relevant changes have occurred along the period in the administrative sphere as well as in the attitudes of public and social agents –old and new. Regardless of the introduction in the policy making process of new elements, like the ecosystem perspective or the public participation, the inertia of traditional planning has burden heavily the development of an innovative policy. The change to a sustainable water policy based on the recovery and conservation of the aquatic ecosystems is slow and contradictory.

During the past ten years, the technical work in the water administration has been submitted to incongruous political decisions, which have affected negatively the implementation process. The accumulated delay and the expectable low profile of the present generation of RBMP will presumably burden the next one with deferred problems.