

Evaluating public participation by the use of Danish water councils – prospects for future public participation processes

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Abstract

With the introduction of the Water Framework Directive (WFD) in 2000, a significant shift in the European water planning tradition occurred. Public participation became a key part of the WFD as an important element in improving regional water planning, strengthening the local involvement and increasing public support for the implementation of Programme of Measures (PoM). To fulfill article 14 of integrating public participation in the WFD planning process, a paradigm shift happened in Danish water planning in 2014. Water councils in all 23 River Basin Districts were established to provide input on how to improve the physical conditions in Danish streams. The water councils were to advise the local municipalities on developing PoM as part of the implementation of River Basin Management Plans (RBMPs) in Denmark. The results indicate that Denmark complied with requirements of making important background information available for the public and ensuring public consultation of the second cycle of RBMPs. However, article 14, stating that member states should encourage active involvement has only been complied with at a very basic level and the public participation process has not been institutionalized and anchored in the policy process. The water councils are presented as the “new option governance” in Danish water planning; however, the water council process was limited and controlled by the competent authority, the Nature Agency. Thereby the water council process can only be characterized as an expanded stakeholder consultation part of the policy process and only touching very little upon active involvement, with future consequences for public participation in Denmark.

1. Introduction

For centuries, the physical conditions in watercourses have been affected by urbanization, agricultural intensification and intensive drainage activities with straightened and regulated streams in poor ecological condition as a result (Brookes, 1987; Iversen *et al.* 1993; Aarts *et al.* 2004). In Denmark, numerous stream restoration projects to improve the physical conditions has been initiated (Pedersen *et al.* 2007). With the introduction of the Water Framework Directive (WFD) in 2000, public participation has become a key part of the WFD. This new water management regime has resulted in a higher need and encouragement for voluntary actions and where engagement of the public are recognized as a necessary policy instrument in reaching the environmental objectives of achieving good ecological status in waters and increasing public support for implementation of Programme of Measures (PoM) (European Commission, 2003).

It is also recognized in the Danish policy context that further improvement of the ecological conditions in our streams and rivers call for a wide array of targeted policy instruments, effective mitigation and restoration actions and innovative solutions that involve the affected stakeholders are required (Natur og Landbrugskommissionen, 2013). However, such innovative solutions to complex “wicked” system problems is challenged by complexity, multi-stakeholder interdependencies and require participation, multi-actor collaborations and new interactive governance networks and processes (Rittel and Webber, 1973; Folke *et al.* 2005; Hofstad and Torfing, 2015). Since the implementation of the WFD there has been a number of studies and evaluations of public participation and collaborative processes in Europe. Most of these evaluation studies have concluded that the implementation and level of public participation varies across the EU Member States (Hering *et al.* 2010; Nielsen *et al.* 2013). Evaluation studies of the implementation of the first generation of Danish RBMPs (2009-2015) (see Petersen *et al.* 2009;

Uitenboogaart *et al.* 2009; Wright & Jacobsen, 2010; Wright & Jacobsen, 2011; Liefferink *et al.* 2011; Bourblanc *et al.* 2013; Nielsen *et al.* 2013), conclude that there has been a very low level of public participation in the Danish implementation of the first RBMPs. The level of public participation was characterized by very little or none involvement of the public and local authorities. The first plans, was made on central government level with a typical “top down” approach.

The planning phase of the second cycle of RBMPs (2015-2021) has just finished in Denmark, and the Danish government has initiated a new experiment with the formation of water councils. Before water councils can be used as a new governance option, evaluations of the policy design, process and outcome is needed. In this study, we investigate water councils as a form of public participation, with a focus on institutional forms of governance, process outcome and prospects for future public participation frameworks. Specifically we assess the extent to which Denmark have complied with Article 14 about actively involving the public (European Commission, 2003).

2. Theoretical framework for evaluation of participatory processes in water management

In evaluation studies of participation in water management and sustainability, there are different ways and types of evaluating (process, intermediary, output and outcome evaluations) (Conley & Mooto, 2003; Carr *et al.* 2012). In another study the output and cost-effectiveness of the Danish water council work have been evaluated, compared and analysed (see: Graversgaard *et al.* submitted), showing that the use of water councils have been cost-effective. Because the time horizon is too short to make any real environmental and intermediary outcome evaluations, we will in this paper specifically focus on the policy process and related process evaluations from the water council work.

2.1 Evaluation criteria

Evaluation of participation means comparing reality to a set of criteria (Conley & Mooto, 2003). In this public participation evaluation, we have made a list of criteria's and related indicators (see Table 1) for developing successful collaborative processes, wherein those process that are able to integrate multiple stakeholder's interest and knowledge, build trust and legitimacy and develop mutually acceptable solutions. The criteria and design of the evaluation framework for this research are illustrated in table 1.

Table 1

Framework for the process evaluation of participatory processes. Describing evaluative criteria, related indicators, success measures and methods.

Criteria's	Indicators [†]	Success measures	Methods
1. Policy design and institutional arrangements	- To what extend have Denmark complied with Article 14 and under which Institutional form of interactive governance	Active involvement; Collaborative governance	Surveys, interviews, observations and document analysis
2. Collaboration	- Process outcome - Representativeness	Satisfaction; Equity	

3. Prospects	- Adaptability and institutional compatibility	Increase input and output legitimacy; Lessons to be learned	
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*Sources: Hanley et al. 1997; Conley & Moote, 2003; Sabatier et al. 2005; Leach et al. 2005; Koontz & Thomas, 2006; Benson et al. 2014; Hofstad & Torfings, 2015.

Based on a review of evaluation studies and theoretical frameworks for evaluating policies and governance networks in environmental public policy research, we have suggested a set of 3 criteria with 4 key indicators for evaluating the process outcome of public policies in environmental management (see table 1.). In this conference paper, only the first criteria and indicator is analysed and presented to evaluate the requirements in article 14.

Policy design and institutional arrangements

In the policy design and institutional arrangements analysis, the typology developed by Hofstad & Torfing, (2015) of different forms of interactive governance is used to frame, analyse and identify the predominant institutional form of interactive governance in the Danish implementation of the second RBMPs as part of implementing the WFD. Specifically, in Hofstad & Torfing, (2015) three different institutional forms of interactive governance is presented: Stakeholder consultation, relational contracting and collaborative networking (Hofstad & Torfing, 2015). Collaborative networking is the highest form of involvement and in this paper equivalent with active involvement. In the guidance document, describing the new water council act and framework for the water councils, it was described that water councils will strengthening local involvement in water planning. Have a greater local presence and greater local ownership than under the previous legislation, and that water councils will ensure less bureaucracy and greater local involvement in achieving good ecological status in all the targeted streams (Nature Agency, 2014). In the analysis, we investigate the integrative mechanisms, the form of governance and the institutional design, that the Danish government, with the use of water councils have delivered of public participation in relation to the requirements from the WFD article 14.

2.2 Evaluating public participation – active involvement

In article 14 and the related guidance document no. 8 (European Commission, 2003) three different types of involvement of stakeholders are mentioned:

- Information supply, where people participate by being informed what has been decided or has already happened (shall be ensured).
- Consultation, where administrative bodies consult stakeholders to learn from their knowledge, perceptions, experiences and ideas (shall be ensured).
- Active involvement (shall be encouraged).

Article 14 describes that all member states should encourage the active involvement of the public in the production, review and updating of RBMPs (European Commission, 2003). The view taken in the WFD is that encouraging a high level of participation in the development and implementation of plans should be considered the core requirement for active involvement (European Commission, 2003). Although the latter form of participation is not specifically required by the Directive, it may often be considered as best practice. However, it can be discussed what is meant with active involvement and when is a stakeholder actively involved? In Bishop & Davis, (2002) active involvement is described as when partnerships are developed in planning and implementation. Where stakeholders are invited in the process to give their perception of the problem or vision and possible solutions. This seems more as an expanded consultation form. In Shand & Arnberg, (1996) the highest level of public participation is where the responsible authorities actively involve stakeholders in the decision-making process in 'self-determination' of water related issues (Shand & Arnberg, 1996). Self-determination implies that at least parts of water management are handed over to the interested parties. In the article 14, it has not been

stated if active involvement means delegation and shared decision making were the administrative bodies share responsibility with the stakeholders or if active involvement means partnerships with perception sharing of the problem or vision and possible solutions?

3. Data and methods

This research builds on a larger study of stakeholder involvement in Denmark, using mixed methods by combining quantitative and qualitative data gathering, which includes document analysis, observation studies, face-to-face semi-structured interviews and two online national surveys. In this initial conference paper, the main data and methods used were document analysis, of all 23 submitted water council proposals of the PoMs as well as the 23 RBD draft RBMPs (2015–2021). All official documents from the water council process have been analysed and supplemented with interviews with water council members and public administrators.

The background for the case study is that in 2013 the WFD competent authority (Nature Agency) put forward a new Act on water planning (*Lov om vandplanlægning*) (FT nr. 1606 26/12/2013). In this new act, it was inscribed that there should be established 23 new water councils (*Vandråd*), one in each River Basin District (RBD). In 2014, 23 water councils were established to undertake public participation. The water councils could only consist of max. 20 members from different interest groups (organizations: Agricultural organizations, nature and environmental organizations, water quality and utility service organizations and recreational organizations). No private persons could attend the water councils. The water councils were to advise the local authorities (municipalities) in the preparation of PoMs for the hydromorphological conditions in the Danish watercourses. The main task of the water councils was in advance delimited to give guidelines and to council the municipalities on which of 16 hydromorphological measures to use in the streams and where to place them in an overall level (Nature Agency, 2014). Together with the municipalities, the councils had six months (April 7- October 7, 2014) to come up with a thorough PoM for the watercourses at stakes and provide input to the PoMs. After the six months, the municipalities forwarded the revised input to the Nature Agency as part of preparing for the second cycle RBMPs.

4. Results and discussion

4.1 Evaluating public participation – Information and consultation

The institutional arrangements of the second RBMP planning process, where split in different platforms and stages. The Nature Agency prepared and made a draft working program (*arbejdsprogram for vandområdeplanerne*) for the implementation and involvement of the public in the second RBMPs (2015-2021) available at an established webpage. The draft working program was in a six month public consultation. 12 responses were made to the working program. The Nature Agency used websites in order to provide more generally planning- relevant information to the wider public. For example, main planning documents representing the different stages of the planning process were made public online. This source included background information on the WFD and regional facts about the planning process. More detailed technical data on the status of various water bodies and risks to water quality was made available in: i) a 'baseline analysis' document (*Basisanalysen*), ii) a 'economic analysis of water use in the baseline' (Vogdrup-Schmidt & Jacobsen, 2014) (*Økonomisk analyse af vandanvendelsen*) and in iii) the 'overview of significant water management tasks' for every RBD and nationwide' (*Væsentlige vandforvaltningsmæssige opgaver*). The documents were also in public consultation for six months in 2014. A WebGIS interface (*MiljøGIS-kort*) of the baseline analysis and the draft RBMP was made available for the public at the before mentioned webpage. Finally, the draft RBMP was made public. Furthermore, the Nature Agency made additional material available at the webpage, for example a water-area planning library with key documents and agreements. The Nature Agency could have prepared more information about the process made accessible via for example public libraries or other institutions. Moreover, the Nature Agency could have

used more effort to inform the public through local and regional media such as newspapers, newsletters, magazines, TV and radio. Much of the information available was only directed to the various organized stakeholders (interest groups) and not for the wider public. Thus, the Nature Agency seemed to comply with the first two requirements in article 14 of the WFD: To provide information and organize public consultations on RBMPs. The Nature Agency invited public comments on three RBMP related consultation documents: the 'working program document', a document concerning 'overview of significant water management tasks'; and the draft RBMP. This form of governance in the initial stage of the RBMP2 process was purely a basic mode of hierarchical governance with only information supply and stakeholder consultation as the interactive governance form. In this institutional design, the Nature Agency holds the key responsibility with consultation from stakeholders in both the policy formulation and implementation phase. In sum, the institutional design and governance structure in the second RBMP has delivered information supply and consultation as required in the WFD. It is more unclear if active involvement of stakeholders also have been encouraged in the Danish water planning process.

4.2 Evaluating public participation – active involvement

The water councils was initiated as a way of fulfilling the encouragement requirements in article 14. In the new water council act, water councils should be part of the policy design of delivering PoMs for the ecological (physical) improvement of targeted streams. The announcement of having water councils was presented and communicated via media and on the Nature Agency's webpage. The institutional arrangement and policy design for the water councils work where however beforehand fixed:

- A limited number of stakeholders could participate (up to 20 members in each council).
- There were a limited timeframe of six months (April 2014-October 2014).
- The water councils were given a specific economy for the work differentiated in each main RBD.
- The water councils were appointed specific measures, with 16 measures to be used in the streams to achieve the goal of good ecological status.
- The water councils could only consist of stakeholder organizations (interest groups), who ought to apply for membership in the councils them self.

The institutional design of the water council set-up was as shown above specified and fixed around how and what the water councils were to deliver. The purpose and task of the water councils was to advise the municipalities in their work to develop PoMs proposals for streams, as well as to advice with local knowledge on the measures to be used. However, there was no room for innovative solutions; the council members could only propose the use 16 pre-proposed measures. The integrative mechanisms and the legal and procedural framework are specified in details, giving no room for self-regulated negotiation between stakeholders and collaborative networking and hereby limiting the potential for innovative collaboration. In collaborative approaches, the argument is to find win-win solutions to a variety of problems facing different stakeholders (Sabatier *et al.* 2005). The lesson from this planning phase of the second RBMP is that the Nature Agency could have used the momentum that many knowledgeable members were gathered in the water councils, possessing local knowledge, which could have assisted to identify interesting sections of water courses, where good holistic environmental initiatives could have been prepared (Graversgaard *et al.* 2015). Especially when there in the next generation (2015-2027) of RBMPs is a requirement of integration of climate change concerns in the RBMPs (European Commission, 2009).

In delivering PoMs for the physical conditions in the streams, the local authorities (municipalities) in collaboration with the interest groups in water councils were responsible to develop the POMs together. This in itself is a novelty in Danish water management and have secured cost-effective solutions (Graversgaard *et al.* submitted), however the Nature Agency did not have any plans of continuing the water councils after their six months of work, and the initial plan was that they first will gather again for the third generation of RBMPs (2021-2027) in 2018. It can potentially be problematic that it will take a relatively long time from the water council work took place, until the efforts are to be implemented. One can question if the water council members in a few years still

can remember what they proposed to recommend in 2014, when no follow-up has taken place. However if the members still are supporting their recommendations, later on, then according to Sørensen & Torfing (2005) one of the benefits of collaborative networks is that stakeholders are less likely to resist implementation. The fact that the water councils only had six months (April 7 2014 to October 7 2014) including summer vacation period and including political considerations and approval of PoM proposals in all 98 municipalities is a very short period for such an enormous process with engagement of multiple stakeholders. In a review study of participation, it is argued that success with long-term participation depend on reorganization and changes in government institutions (Reed, 2008), another important part of this reorganization is that participation is institutionalized. Experiences from Sweden, where water councils have existed since 2005, also indicate that the institutional setup of water councils is essential for successful participation (Franzén *et al.* 2015). With a limited timeframe and limited institutionalization, reorganization and changes in government institutions is minimal. The narrow frame for the water council policy design and institutional arrangements, even though it is 'sold' as a new active involvement implementation, replacing the old paradigm of top-down water planning, still can be considered a hierarchical governance form. However, in an announcement in late 2015 the former Environmental and Food minister announced that water councils are to begin working with the implementation of the RBMP already in 2016, if this happens, some changes to the institutional design the water council process have occurred.

If we look at the type of interactive governance, the water councils are characterized as an expanded stakeholder consultation part of the policy process and only touching very little upon collaborative networking and active involvement, which thus is encouraged in the WFD. This is a problem in the long-term delivery of sustainability, mainly because stakeholder consultation, with a limited timeframe, fails in engaging stakeholders in the design of novel solutions. Meaning there is a relatively low capacity for mutual learning, risk sharing and the development of joint ownership of co-created solutions, when the Nature Agency already have found the solutions and only need stakeholders to consult on the solutions prepared. It seems the main focus for the Nature Agency have been stakeholders interaction, with focus on solving a specific task between typically conflicting interest groups. Successful collaborative networking can enhance the conditions and opportunities for future use of networks in the management of environmental and political challenges (Sørensen & Torfing, 2005). One recommendation is that the future of Danish water councils is formulated in a different type of constellation, where the involvement of local interest and knowledge are active involved and ensured more optimal at both regional and local level and with possibilities for synergies in the water, energy and food nexus.

5. Conclusion

The requirements of making important background information available for the public and ensuring public consultation of the plans has been complied in the second RBMP period. The encouragement of active involvement have only been fulfilled at a very basic level. If we look at the interactive governance form, the water councils can be characterized as an expanded stakeholder consultation part of the policy process and only touching very little upon active involvement, which thus is encouraged in the WFD. The Danish water planning tradition has historically been centralized and coordinated from the central government (Nature Agency). With the introduction of water councils this could have been the start of a change from a hierarchical governance structure towards more collaborative networking in the policy process and governance form, if continued and institutionalized. However this research shows that the water council's institutional design and arrangements fits very well into the Danish established model for regulation, which for decades have been top-steered and where the government in details describes and regulates what the stakeholders can and cannot do. The water councils have been presented as the "new option governance" in Danish water planning; however, the water council process was limited and controlled by the Nature Agency. Recommendations suggest that future water councils represent a more nuanced and holistic approach to water planning were members together with policy-makers handles tasks where interaction with other agricultural, water and nature management issues are central. The institutional framework provides an incentive for

participation. However, this is not alone sufficient for successful collaborations. Since the main goal of the water council work was to involve stakeholders, a full paper will investigate a detailed evaluation of the collaboration experiment with involvement of stakeholders. With process outcome and a representation evaluation analysis.

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