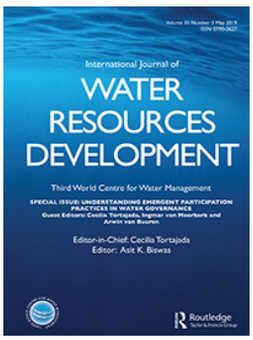

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Community-based initiatives in the Dutch water domain: the challenge of double helix alignment

Michael Duijn, Arwin van Buuren, Jurian Edelenbos, Jitske van Popering-Verkerk and Ingmar Van Meerkerk

Public Administration & Sociology, Erasmus School of Social and Behavioural Sciences, Erasmus University Rotterdam, Rotterdam, the Netherlands

ABSTRACT

Community-based initiatives (CBIs) are emerging in many domains such as care, sustainable energy and water management. This paper examined three initiatives in Dutch water management, focusing on their relationship with water boards. CBIs present issues that water boards find difficult to respond to because of two reasons. First, CBIs are demarcated very differently from the formal tasks that water boards pursue. This calls for internal alignment within water boards to respond adequately. Second, CBIs necessitate external alignment with other water-managing governments. Water boards must therefore implement double helix alignment to relate productively to initiatives emerging in society.

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Alignment strategies; community-based initiatives; water management; water boards; governance

Introduction

In the Netherlands, a significant rise of community-based initiatives (CBIs) can be observed in various domains such as healthcare, urban development, local safety and welfare, sustainable energy, and water management. In water management, CBIs have emerged in relation to ecological water treatment, sustainable river basin management, water containment and local climate adaptation. The institutional context of Dutch water management makes the rise of CBIs highly interesting. For decades, Dutch water management was characterized by a hierarchical, yet consensus-based, tradition of public service delivery. The governmental role regarding water is strongly embedded within the Dutch Rechtsstaat tradition: securing sufficient fresh water and dry feet to all people (Lintsen, 2002; Mostert, 2006; Van Stokkom, Smits, & Leuven, 2005). Moreover, the Dutch regional water authorities are renowned for their efficiency and strong task orientation, an important characteristic of their identity (Raadgever, Dieperink, Driessen, Smit, & Van Rijswick, 2011; Van der Brugge, Rotmans, & Loorbach, 2005). For many water boards, bottom-up community initiatives are a new phenomenon, confronting them with the challenge of how to respond to them in an adequate manner.

For this paper, the purposes and activities of CBIs in the jurisdiction of three regional water authorities were examined. Their specific characteristics are shown

CONTACT Michael Duijn duijn@essb.eur.nl

Table 1. Specific characteristics, contexts and ambitions of the cases.

	Holtenbroek	Markdal	Groote Wielen
Water board	Drents-Overijsselse Delta	Brabantse Delta	Aa and Maas
Other government. organizations	Municipality Zwolle Province Overijssel Social service organisaization Travers Rijkswaterstaat	Province Noord-Brabant MuniciplaitiesMunicipalities Breda and Alphen	Municipality 's Hertogenbosch Rijkswaterstaat
Type of area	Urban – high-rise, multicultural city district	Rural – small river basin with agriculture and nature conservation as its main functions	Urban – new dwelling, high density
Aim of the community-based initiative (CBI)	Multifunctional area with redevelopment goals for diverging target groups	Sustainable and resilient development, for both agriculture and nature	Local ecological water treatment combined with socio-cultural functions at the city farm Awareness creation Educational functions
Responsibility of the water board	Water safety of the new standards of the High Water Protection Plan	Water Framework Directive (WFD) objectives	Water sanitation
Type of initiators	Social service organization inviting individual citizens	Individual citizens. Initiators are former public administrators and local land owners	Individual citizens
Development stage of the initiative	Redesigning initial ideas along the preferred alternative: dike strengthening	Bid book, presented to government organizations	Formal decision to not cooperate any longer with the CBI
Development stage of the project	Detailing a preferred alternative: drawing an implementation plan	Implementation of the WFDWater Framework Directive Implementation of the Nature Network Netherlands	The initiative is the project

in Table 1. Two aspects were analyzed: internal and external alignment. CBIs are self-organizing and demarcate their actions in an issue-oriented way that can readily conflict with the task-oriented, functional organizational structures of water boards. Accordingly, we expected that the strict task definition, internal orientation and conventional culture of water boards will call for internal alignment within their organization to accommodate water initiatives by CBIs productively. Second, due to their inclusive, multifunctional objectives, CBIs ask for external alignment between the regional water board and other governmental organizations, such as local and regional governments. CBIs are often part of a wider collaborative multi-actor approach. Therefore, the ability to respond adequately to CBIs might also depend on the capacity of water boards to work collaboratively with other stakeholders in the field. For each case study, the main challenges for internal and external alignment, the applied strategies and their results are described in Table 2.

These expectations lead to the following research questions: What are the main alignment challenges, both internally and externally, for Dutch regional water boards in responding to emerging CBIs in the water management sector? How are these alignment challenges dealt with and with what results?

The paper is structured as follows. The following two sections discuss the emergence and nature of CBIs. Next, a description of the specific position of Dutch water boards is

Table 2. Overview of alignment challenges and strategies.

	Holtenbroek Drents-Overijsselse Delta	Markdal Brabantse Delta	Groote Wielen Aa and Maas
Main challenge for alignment	Initiative needs to support core tasks; how can it be made acceptable throughout the water board that this is the case?	Attuning the involved departments of the water board, especially stakeholder- management and departments on policy, permits, maintenance and control in order to speak with one voice to external stakeholders	Aligning innovation management, departments of water purification, design and construction, maintenance 'Convincing' colleagues to abandon standard sanitation routines and co-work with the initiative
Internal alignment strategies	Applying the integral project management (IPM)IPM -model to guide the dike-strengthening project In the programprogramme 'In Connection with the environment'Environment', the executive board has informal talks with teams about this challenge	Using the IPM-IPM model to coordinate various internal departments; applying the IPM-model to provide professional support for the initiative	'Decision' of the executive board to support the initiative, both with expertise and financially. Departments are legitimized to devote time and money The administrative agreement emphasized the importance of participation and serves as a guideline
Result	In the IPM-IPM model, strategic stakeholder mgmt.management is a vital part. However, the question is how this project mgmt.management approach is capable of dealing with contextual dynamics	'Squeezing' the initiative into the IPM-IPM model, leading to tension with the integrative goal of the initiative and idea of citizen initiative	Positive working attitude among most of the water board professionals
Main challenge for alignment	Aligning area-oriented interests with project-oriented rationales of the dike strengtheningdike-strengthening project Expected difficult talks with other external project partners	Objectives and funding schemes of the Markdal Association and provincial government need alignment with Water Framework Directive (WFD) objectives of the water board	Difficult relationship with the municipality through their ambiguous position Aligning the initiative with the municipality's department of water sanitation
External alignment strategies	Intended process mgmt. management by Travers to involve local citizens Constructive dialogues with the district manager of the municipality	Association has several thematic working groups, whichthat allows for coordinating efforts of the involved actors External process manager should harmonize different demands and interests between stakeholders	Technical support of the water board for the bid book as an instrument to inform and attract other government organizations
Result	Co-creative exploration of possibilities to combine spatial and social functions with dike strengthening	Co-creative process of aligning demands, interests and (time) schemes	The bid book and the technical support provided did not succeed in convincing the municipality to give up theirits objections and support the initiative.

provided, followed by the alignment challenges raised by CBIs. In the subsequent section, the research approach and methods used are presented, followed by the analysis of the three cases. The paper closes with a discussion of the findings and conclusions.

The nature of community-based initiatives

The literature on stakeholder engagement in water resources management traditionally mostly focuses on forms of engagement organized by the government, which sets the conditions under which engagement can take place (Edelenbos & Van Meerkerk, 2016). This focus on stakeholder engagement in decision-making processes is also visible in current approaches to climate change adaptation (Maciejewski Scheer & Höppner, 2010; Pahl-Wostl, 2006, 2007), adaptive or collaborative water management (Meijerink & Huitema, 2010; Van Buuren, 2013) and integrated flood-risk management (Lupo Stanghellini, 2010; Thaler & Levin-Keitel, 2016; Thaler & Priest, 2014).

In general, stakeholder engagement aims to involve actors who are or might be affected by a certain policy or project in the decision-making process (Lupo Stanghellini, 2010). Different forms and degrees of community engagement can be distinguished, often displayed by participation ladders such as those proposed by Arnstein (1969) and Fung (2006), indicating the extent of participation and the degree of influence citizens can have on decision-making (Van Tatenhove, Edelenbos, & Klok, 2010). Participation is government led and conditioned by rules and procedures set by government institutions (Edelenbos & Van Meerkerk, 2016).

CBIs are a different kind of stakeholder engagement as citizens take the lead and determine their own rules and procedures by which they collectively initiate and implement initiatives aimed at solving societal problems and issues (Igalla, Edelenbos, & Van Meerkerk, 2019). These initiatives, in which citizens contribute to the provision of public services and goods, including water-managing tasks, have a long tradition in many 'weak states', but have also become a marked trend in Western states (Bailey, 2012; Healey, 2015). The initiatives come in different forms and emerge in different domains, ranging from running a community centre, to setting up a cooperative to provide care services for the elderly in the local area, to environmental initiatives aiming to provide local renewable energy (Edelenbos & Van Meerkerk, 2016). Here, these activities are referred to as CBIs: forms of community engagement in which citizens mobilize capacities and resources collectively to define and carry out actions aimed at providing public goods or services for their community. It is the community that controls the aims, means and actual implementation of its activities (Healey, 2015). A systematic literature review by Igalla et al. (2019) reveals the main features that characterize CBIs:

- Community-based collectives of local residents that are the initial driving force behind the initiatives, mobilizing volunteers from within the community and focusing on community needs.
- Provide and maintain an alternative form of traditional governmental public services, facilities and/or goods themselves.
- Strive for autonomy, ownership and control in decision-making.
- Often linked to formal institutions, such as the local authority, governmental agencies and non-governmental organizations (NGOs), especially for facilitation and public funding.
- Often use market-based approaches to increase financial stability, but do not aim at profit-making.

How these features take shape in a specific CBI depends highly on the context in which it emerges and evolves. Thaler and Levin-Keitel (2016) have described the emergence of bottom-up initiatives in flood management in the UK. There, controversial proposals from government can meet fierce resistance by local stakeholders, provoking them to develop bottom-up strategies to defend their values and interests (Nye, Tapsell, & Twigger-Ross, 2011). In the Netherlands, we also see a rise of water-related CBIs (Edelenbos, van Buuren, Roth, & Winnubst, 2017; Van Buuren, Buijs, & Teisman, 2010).

The organizational imperative: the context in which initiatives have to survive

Although CBIs can be defined as bottom-up engagement, they do not take place in a governmental institutional void (Edelenbos et al., 2017). The institutional context of CBIs in Dutch water management is mainly public and government oriented. Government support, especially in densely regulated policy areas such as water management, is often vital for CBIs to be productive. This requires the CBIs to be able to maintain relations with various public authorities in order to acquire resources (subsidies, knowledge) and (legal) support to make their initiative viable and to execute their plans comprehensively (Healey, 2015; Korosec & Berman, 2006).

Government support comes in different forms. Some authors estimate that the supportive action of governments is important for the potential future of CBIs as this can boost their start and thereby grow in scale and scope (Healey, 2015). This can be, in general, moral or material support (Fonchingong, 2005). Besides material support, several scholars stress that CBIs can benefit from guidance through bureaucratic tangles by enabling legal and policy environments (Healey, 2015; Korosec & Berman, 2006).

Although governments may consider CBIs valuable for enhanced public service delivery, the willingness and capability of governments to provide actual support is not straightforward (Healey, 2015). CBIs emerge because citizens see an opportunity to contribute to their direct environment or because they are dissatisfied by what public authorities do or fall short of doing (Specht, 2012). This implies that CBIs develop initiatives that are generally more or less at odds with what public authorities do. According to the literature on co-production of public services, the structure and processes of government organizations are often not compatible with the focus and logic of such initiatives (Voorberg, Bekkers, & Tummers, 2015). Several organizational factors are mentioned in this respect. Governments often do not have inviting structures and procedures within their organization to communicate or collaborate with CBIs (Kleinhans, 2017; Voorberg et al., 2015). As a result, public professionals and politicians might fear a number of unknown risks when they allow or support CBIs. They might, for instance, consider the voluntary work in CBIs as unreliable and unpredictable. They could also have doubts about the new ways of service delivery, or be apprehensive about losing status and control (Bailey, 2012; Kleinhans, 2017; Voorberg et al., 2015). Finally, dealing with CBIs can bring about all sorts of transaction costs. Because citizens tend to approach issues as they manifest themselves in their real world, their ideas and initiatives often do not match the predefined silos, processes and products of public

organizations, thereby causing coordination and alignment challenges within and between governments (Agranoff, 2007).

The need for internal and external alignment

For public organizations, alignment refers to their performative capacity to deliver public services in networked settings (Andrews et al., 2012, p. 77). Dealing with CBIs can be perceived as a form of public service performance, in the sense that CBIs often ask for support or legitimization from public organizations for their efforts. An important challenge for water boards to accommodate CBIs is whether they are capable of aligning their internal organization and external network partners in granting them a chance to deliver the societal value they are aiming for. Vanderstraeten and Matthyssens (2012) regard the capability of internal and external alignment as a strategic fit between the organization and its environment. Both internal and external alignment are necessary (Henderson & Venkatraman, 1993).

The internal aspect of alignment can be understood as the degree to which an organization's design, strategy and culture can cooperate to achieve the same desired goals (Semler, 1997, p. 23). A high degree of organizational alignment refers to a systematic agreement among design, strategy and goals; a low degree indicates conflict between them. Semler (1997, p. 28) continues by stating that 'this agreement creates an internal environment that facilitates achievement of the organization's strategic goals by removing internal barriers to cooperation and performance that would otherwise reduce the efficiency and effectiveness of work towards these goals'.

Internal alignment is here perceived as intra-organizational alignment with references to two orientations: vertical and horizontal. The first is vertical internal alignment of strategies and efforts across different levels of the organization: between top-level management, middle management and the work floor. Vertical alignment of strategic choices on efforts and application of resources enhances the performance of public organizations (Andrews et al., 2012). The second is horizontal internal alignment between co-workers, be it work floor employees or managers, operating in different departments. This alignment is challenging due to the diverging tasks, responsibilities and knowledge across various intra-organizational boundaries (Tushman & Scanlan, 1981).

For water boards, internal alignment is especially important for answering the question how separate organizational departments are able to collaborate with CBIs. For instance, to what extent are the agendas and strategies of departments that are more involved with legal aspects (permits) or maintenance aligned with those who are dealing with planning, strategy and communication?

Galliers (2004) proposes that alignment must influence and be influenced by relationships with key partners in the external environment of the organization. Semler (1997, pp. 29–30) states that this external aspect of alignment reflects 'the strategic fit between the demands of the external environment and the selected vision, goals, and tactics of the organization'. External alignment is perceived as inter-organizational alignment, referring to the coordination, cooperation and synchronization of efforts and resources between different public organizations in the context of public service delivery. Moreover, external alignment depends on the

outward orientation of the public organizations involved. In the Dutch context, external alignment is especially relevant when it comes to the question of how water boards, with their formal responsibilities for water management, can align their own activities with those of regional and local governments. Hence, to what extent are regional water boards urged, willing and capable of working with other public organizations in accommodating the CBIs?

Of course, both types of alignment are mutually dependent. Semler (1997) indicates that the internal aspects of organizational alignment can only be of value when the organization's account of what is needed in the external environment is accurately chosen. Based on various theories about strategic alignment (Andrews et al., 2012; Eisenhardt, 1989; Perrow, 1986; Rasmussen, 2007), specific indicators of (vertical or horizontal) internal alignment are: shared understanding, coordination, cooperation, goal conflict and information asymmetry.

Several scholars (Boschken, 1988; Bourgeois, 1981; Downs, 1967; Miles & Snow, 1978) have provided indicators by which external alignment can be recognized, namely, an organization's capacity: (1) to acquire additional resources (budget, knowledge); (2) be proactive with regard to external dynamics; (3) innovate core tasks and responsibilities; (4) create some freedom to act or slack; and (5) take risks. These indicators show the connective capacities of organizations as well as to the extent to which they can deviate from their own existing functional tasks in order to establish productive forms of collaboration with other organizations.

The indicators for internal and external alignment will be used in the Discussion section below to explain the findings in the three initiative cases presented. Particular attention will be paid to the strategies that the water boards use and to what extent this leads to internal and external alignment.

Understanding the specific context of Dutch water management

Dutch water boards are a type of regional government with their own democratic representation and with clearly defined tasks and responsibilities, such as flood protection, water quality management and water supply for agriculture and nature development. This strong task orientation is reinforced by the fact that water boards are continuously under political pressure to legitimate their existence. This pressure is caused by the low visibility for citizens, the low turnout by the elections of the water boards, various attempts of regional governments to take over tasks and recurring debates at the national parliament to abolish them to reduce the administrative complexity of the Dutch public sector (Nehmelman, Tappeiner, & van Rijswick, 2011). These pressures lead to a strong focus on providing public goods in an efficient, supply-oriented mode. Many mechanisms inspired by new public management are widespread among the water boards, such as benchmarking, output budgeting and performance indicators. A recent survey (Gieske, Duijn, & Van Buuren, 2019) shows that most water boards are especially adept at optimizing their existing qualities, while they are less capable of developing new competencies.

The specific context of the water boards poses serious challenges to CBIs because water boards tend to be risk-averse, sectoral organized and often unwilling to work beyond their functional tasks. Yet, productive accommodation of CBIs could be viewed

as an opportunity to achieve new legitimacy and visibility. This dynamic makes it interesting to examine how they organize both internal and external alignment within their institutional and societal context.

The relevance of alignment for the challenges facing the water boards can be found in their organizational structure and network position. The organization of Dutch water boards is structured as follows. Each water board is governed by a general board, democratically elected for four years. The executive board takes care of strategic and operational management, planning, and implementation of the water board's functional tasks. The sectoral departments are horizontally grouped around the functional tasks, from policy-making to permitting, control and maintenance. The departments are subdivided into smaller organizational components and led by middle managers. Creating internal alignment with CBIs calls for establishing support and legitimization from the general board to daily maintenance (vertical and internal alignment), and among the organizational parts carrying out different functional tasks (horizontal, internal alignment), attached to the external initiative.

The network position of Dutch water boards is characterized as follows. Each water board functions in a regional network of public water managing organizations, such as the regional government (responsible for legislation for ground water management), the local government (responsible for sewage) and the regional agency of the National Ministry of Water Management and Public Works (responsible for water safety). In addition, they take part in the national water management system that operates under responsibility of the national ministry, mainly concerned with water safety issues. External alignment with CBIs includes the coordination of the regional network of water managing and other organizations (horizontal and external alignment) and, in some cases, also requires the coordination of national, regional and local interests (vertical, external alignment).

Research approach and data-collection methods

The main research strategy is the multiple case study research (Eisenhardt, 1989; Stake, 2013) in which several representative cases are selected to develop a more in-depth understanding of the phenomena than a single case study can provide. From mid-2016 onwards, CBIs have been monitored and analyzed at three water boards. The case selection represents a variety of initiatives in water management, in terms of both scale (regional, local and neighbourhood) and orientation (flood protection, water quality, water nuisance and fresh water supply). In the empirical study, various complementary methods were used: interviews, document analysis, secondary analysis, field visits and focus group discussions, allowing for triangulation of the data (Patton, 1987; Yin, 2003).

At least five key players (representatives of the CBI and various representatives of the water board) per case were interviewed, leading to a total of 20 in-depth interviews. At each water board, people with different backgrounds were interviewed, varying from civil servants to members of the executive board. Representatives from different organizational backgrounds were also included, from strategy and policy development to maintenance and permitting. In addition, policy documents, notes, letters and reports were analyzed; in the case of Markdal, a secondary analysis of existing case descriptions

(Van Heeringen, 2017) was included. In the case of Holtenbroek, a field visit and a group discussion were organized to further specify the data and explore – together with involved actors – a strategy to deal with the initiative in an effective and legitimate way. These discussions were very helpful in getting more insight into the dilemmas the water boards face when they are confronted with initiatives and the aspects that are important in their choices of how to align themselves.

This main focus of this study is to examine and identify which challenges water boards encounter when interacting with CBIs and, subsequently, how they try to realize internal and external alignment. The strategies for dealing with both the internal and external alignment challenges in coping with the CBIs will be explored and analyzed in all cases.

Case studies: description and analysis

In this section, the three cases are described and analyzed: first, the cases are described by their core characteristics; next, they are analyzed through the challenges that the water boards are confronted with; and lastly, the specific alignment strategies used as well as their results will be assessed.

Case 1: Holtenbroek

Zwolle is the capital of the province of Overijssel, in the eastern Netherlands. The city is surrounded by three rivers: the Vecht to the north, the IJssel to the south and the Zwartewater to the west. Along these rivers, dikes keep the city safe. However, the national High Water Protection Program (HWPP) has recently set new safety standards that necessitate strengthening these dikes to meet the predicted high-peak discharges. The Drents-Overijsselse Delta Water Board is responsible for strengthening the dikes, together with the regional agency of the Ministry of Public Works, Rijkswaterstaat. For the dike along the city district of Holtenbroek, a flood-risk standard has been set at once every 10,000 years. From 2020 onwards, however, the new standard cannot be achieved with the current dike, making this one of the most urgent renovation projects.

Holtenbroek was built some 60 years ago and has approximately 10,000 inhabitants, with 70% of them living in high-rise buildings and with an over-representation of lower incomes.[1] It is the city's most multicultural district with low social cohesion. Some parts have recently been renovated, achieving more balance between tenants and private home owners. The announced renovation project sparked the idea for a city district manager of the local social service organization, Travers Welzijn, to ask residents to propose ideas for new functions that could be added to the designated area. He invited local residents to co-think about the opportunities for adding new functions to the area. Guided by Travers, residents succeeded in coming up with ideas about additional sociocultural functions, mirroring the specific needs and desires of the different target groups in the city district. A local landscape designer combined these ideas in a spatial map, representing new functions for diverse residential groups, mainly for improved accessibility and enhanced quality of the living environment, for example, through recreational use. This map functioned as

'an opening bid' for talks with public organizations in the area, including the water board.

The initiator tried to activate the local network of organizations and stakeholders to broaden the intended water safety project. This network included the local government, the water board, local residents, the regional government's nature development programme and various sociocultural organizations. However, the initiative emerged in a period in which the water board explored the options and still had not formally decided on the preferred solution of strengthening the dike. In this respect, the initiative more or less anticipated the outcome of decision-making. After taking the formal decision, Drents-Overijsselse Delta 'mirrored' the networking approach of the initiators by heavily investing in stakeholder management and joining up with Travers to allow for local residents at least to co-think with the dike-strengthening project. This approach is sanctioned by the executive board's ambition to co-work with initiatives in the external environment of the water board on subjects that are aligned with its goals.

Case 2: Markdal

The Markdal is the area next to the River Mark, located in the south of the Netherlands, just below the city of Breda, flowing across the border into Belgium. The Mark meandered until 1968, when the river was controlled with dams and broadened and straightened to prevent flooding of the area and the city in case of heavy rainfall. In addition to its recreational functions, the Markdal has an important role for water retention. In the 1990s, 'the tide changed' and the restoration of the meandering of the Mark for nature development became a new priority for the water board. However, several attempts by governments, municipalities, the water board and the regional government of North-Brabant did not bring any results as involved stakeholders (land owners, farmers and nature reserve organizations) had severe conflicts of interest, which led to deadlocks in the process. Furthermore, the national government decided in 2010 to terminate the national policy framework for developing robust ecological networks. Nevertheless, the regional government still persisted in this policy and kept looking for alternative ways to implement the idea of an ecological network by revitalizing the Markdal area.

In 2010, two retired former public administrators started an initiative for the revitalization of the Markdal. Being citizens with an administrative, managerial and/or political background, they knew their way around administrative and political circles. Through their knowledge and connections, they acquired funding from the regional government of North-Brabant for this bottom-up initiative, which enabled them to write a bid book. This document served as a strategic vision to attract other parties to endorse and support the revitalization goals for the area. At the same time, representatives of three nature organizations developed ideas for solving the deadlock between farmers and nature organizations. They came in touch with the two initiators of this case and decided to join in writing the bid book. Again, the regional government supported the initiative under the condition that the CBI should be formalized in a legal entity. It was decided that the CBI, in general, should be called the Markdal Association and get a federation and a foundation structure at the same time. With funding from the regional government, the implementation of the initiative for a sustainable development of the river basin commenced. In addition to the actual implementation – acquiring land

and 'swapping' it between agriculture and nature conservation – the initiators formulated a long-term vision for the development of the river basin to guide and sustain this approach in future. They requested the Brabantse Delta Water Board adopt, legitimize and formalize this vision. However, the water board could not adhere to this request because the visioning process was not initiated and sanctioned by its general board. The vision could not therefore be accepted as an outcome of a democratic decision-making process. The initiators then resorted to activating the political circuits around the water board to adopt their vision. The water board responded by trying to force the initiative into the 'normal' project management model for legitimizing co-working with the initiative. The 'mismatch' between both approaches resulted in the paradoxical situation that the actual implementation of the initiative progressed, whereas the vision that guides it was not formalized.

Case 3: Groote Wielen

Groote Wielen is a relatively new district of 's-Hertogenbosch in the south of the Netherlands. It has about 4300 houses and approximately 7500 inhabitants. The district is characterized by large water bodies (ponds, canals). At the time of conceiving their first ideas, both initiators discussed in this case were considering a new career path. They met at an academic course about sustainable development which inspired them to think about applying their new insight in their own living environment. A television documentary about innovative technology for local ecological organic waste water management led them to image the potential for this in their own living environment. This so-called 'living machine' consists of greenhouse-like containers through which waste water is led and purified by the roots of certain vegetation; the cleaned water is led back to the surface water system. The initiators want to localize this waste-water management facility in their own district, at the local farm Eyghentyds. This farm inhabits several sociocultural functions, such as a daycare for children and the elderly, a biological pig farm, a meeting place, a farm shop and café, and a music school.

The Aa and Maas Water Board owns and operates the regional waste water treatment facility, 20 km north of the city. The initiators want to stimulate local and sustainable waste-water treatment by putting it in visible range of the users: their neighbours. Waste water from at least 200 homes must be decoupled from the city's sewage system and led through the living machine. One of the initiators was working at the neighbouring water board, and this was helpful to connect with Aa and Maas by speaking the same language and appealing to the water board's ambition to innovate. In general, water boards are knowledge-driven, expert-oriented and technology-inspired organizations, and Aa and Maas is no exception. The initiators therefore offered the water board technological and innovation arguments with which to convince Aa and Maas to embrace the idea. This approach worked well. Aa and Maas supported the initiative – from civil servants to the executive board – and was willing to invest in the development and maintenance of the waste-water plant. However, the water board proposed a vital condition: the local government of 's-Hertogenbosch, as a responsible actor for sewage water collection, must be willing to co-support the initiative. Both initiators and the water board wanted to enhance awareness among local citizens for waste water management.

Aa and Maas worked together with the initiators on a bid book to inform and convince other public organizations, among them the local government, to support the initiative. However, the local government took an ambiguous position. On the one hand, it supported the sociocultural functions at the city farm. The living machine could add new possibilities for the execution of maintenance tasks by reintegrating the unemployed or reactivating people living a large distance from the labour market. On the other hand, the local government is responsible for collecting waste water in the city's districts by operating and maintaining a sewage system. Waste water is treated at the regional waste-water facility, operated by the water board, while the municipality controls the sewage system, keeping health hazards in check. Decoupling a large portion of Groote Wielen from the sewage system would necessitate additional investments from the local government. However, the local government was not willing to make these investments because of low urgency and a (perceived) lack of added value. As a consequence, after quite some time, both initiators and water board had to conclude that the idea was not feasible due to the local government's reluctance to cooperate.

Case analysis: challenges and strategies for alignment

Case 1: Initiative Holtenbroek and the Drents-Overijsselse Delta Water Board

Internal alignment at the Drents-Overijsselse Delta Water Board is guided by the programme 'In Connection with the Environment', which provides the water board's professionals the organizational legitimization for co-working with stakeholders on water managing tasks in its jurisdiction. However, making more productive use of the enhanced involvement of the social environment raises the question for water professionals of how spending time to collaborate with CBIs might be legitimized. This question is particularly significant/problematic when the outcomes of this interaction cannot be predicted beforehand.

To tackle the potential dilemmas in engaging with CBIs, the executive board stated that they must fit the organization's tasks and resources as a precondition for collaboration, with some flexibility in mind to accommodate society's preferences. The management team and the chief executive officer (CEO) have engaged in discussions throughout the organization in exploring what it means for teams and professionals to get involved with CBIs. In addition to the aforementioned programme, the water board has implemented the integral project management (IPM) model for guiding its internal alignment. The chosen strategy for internal alignment – both horizontal and vertical – is well known to its external project partners: it connects positively to the need for external alignment with part of the external network that is the project partners.

External alignment is crucial because different parts of the Holtenbroek area are owned, used and/or maintained by different government organizations. Rijkswaterstaat owns the unembanked areas, Drents-Overijsselse Delta is responsible for the dikes, the local government owns the in-land area and Travers Welzijn hires part of this area for the city farm De Klooienberg. The difficulties for external alignment can be illustrated by Rijkswaterstaat's reluctance to allow the development of a small beach, a pier and a foot path on its premises. The water board did not allow additional recreational use of the dikes, apart from cycling or walking. The initial ideas (an open

fire place and a 'harvesting garden') were developed and implemented in a participative process led by Travers. However, the city's district manager placed some preconditions for financially supporting these ideas: (1) residents must also contribute effort towards the project; (2) acceptance should be created among neighbours and other stakeholders; and (3) ideas should be checked by the municipality to rule out any conflict with formal restrictions.

Moreover, the water board also needs to align its infrastructure project management approach (aimed at a timely and conservative dike enforcement) with the rationales of spatial area development in use by the local government, local residents, local social service organization and other district stakeholders. This is important in order to accommodate the residents' ideas to improve the area's living quality. Drents-Overijsselse Delta has established direct cooperation with the local government regarding the CBI after deciding on the most preferable solution, whereas residents, together with Travers, have been actively exploring possibilities for quite some time. Although decision-making has been rather time-consuming for the residents involved, Drents-Overijsselse Delta intends to keep its engagement and enthusiasm in line with the formal two-year planning process of the HWPP. Stakeholder management is one of the designated roles in the IPM model; consequently, the water board, together with Travers, will invest in it.

Case 2: Initiative Markdal and the Brabantse Delta Water Board

Two legislative frameworks are important to understand the alignment challenges in this case. The first is the above-described national ecological network policy, which steers the activities of the regional government. The second policy condition is the European Water Framework Directive (WFD), which, in particular, applies to the water boards. The WFD was effective from 2000 onwards and concerns water quality policy. The water quality should be in place, that is, sufficiently clean (chemically) and healthy (ecologically). In addition, existing municipal development plans and regional regulation plans have to be taken into account when new revitalization plans for the area are developed. Besides these formal policy frameworks, there are many stakeholders, such as residents, land owners, various farmers and land management organizations, who have specific interests that in practice may conflict. The Markdal Association aims at achieving 'the right piece of land for the right spatial function', allowing for both nature conservation and agriculture to develop in a sustainable and robust way. This process of 'land swapping' is primarily taking place between nature conservation and agriculture. These 'swapping projects' are coordinated of by an external independent process manager who facilitates the negotiations between the involved stakeholders.

The internal alignment is challenging because a tension can be noted between the outward orientation and the stakeholder management approach, on the one hand, and the internal orientation of departments regarding the policies, permits and maintenance, on the other. A solution has been found in following the IPM approach, coordination stakeholder orientation, contracts, and legislation procedures and policies. This partly meets the challenge of internal alignment but also complicates the relationship with the CBI. Initiatives have to be fitted into the internal structures, working routines and procedures that prevail at Brabantse Delta. The IPM approach is common in most

water boards. The IPM sets out specific rules, roles and regulations based on a strong focus on controlling both budget and planning. A strong internal alignment with the CBI along IPM specifications means that it has to comply with the procedures, routines and rules set out by the water board. This bears the risk that the initiative will be taken over by the water board, losing the CBI's characteristics and dynamics.

Regarding the external alignment, Brabantse Delta is more or less forced into a monitoring role to ensure the WFD objectives are realized. The Markdal Association is sponsored by the regional government in its efforts to pursue sustainable land use in the area for both agriculture and nature development. This relationship has led to external alignment challenges between the water board and the regional government with regard to the achievement of WFD objectives. Changes in land use will influence the water quality in the area, for which the water board is responsible. If the Markdal Association takes measures with resources of the regional government without cooperation with the water board, then the latter will have additional challenges to keep these measures in check with the pursuit of WFD objectives. Also, several working groups have been formed within the structure of the Markdal Association, taking care of the preparation and implementation of various projects and concrete actions. This has led to additional alignment challenges for the water board to stay connected to all efforts within the Markdal Association. Although the water board collaborates with the Markdal Association to reach the WFD objectives, it is not a formal partner in its organizational structure. Both organizations have their own work processes for achieving the WFD objectives and, therefore, coordinating these processes can lead to tensions between them. This is particularly the case when it comes to the formal audit task of the water board in formal planning procedures with regard to the WFD objectives. The Markdal Association, with the regional government as sponsor, assumes a broader, more ambitious scope with regard to river basin revitalization than the water board. The Markdal Association also includes recreational and mobility functions in the area that cannot be actively pursued by the water board because these are no formal tasks. However, the projects of the Markdal Association for these additional functions could potentially influence the water board's potential to achieve the WFD goals.

Case 3: Initiative Groote Wielen and water board Aa and Maas

Internal alignment within Aa and Maas concerns the coordination of different perspectives on the necessity of the CBI. Some professionals welcome it, while others tend to reject it because it deviates from the standard routines in water sanitation. Here, the initiators experienced the pitfall in the water board's organization of approaching their idea solely as a technological challenge and not as social innovation opportunity.

With regard to external alignment, Aa and Maas is confronted with a 'reluctant' government partner: the local government. The water board struggles with the question to what extent it must devote time and effort to convince the local government to support the CBI by investing in new pipeline infrastructure and putting trust in the water quality after purification. It is left with the dilemma of what it should do: should it take the lead here or leave it to the initiators to attract other partners?

In supporting the initiative, the water board wonders to what extent it should get involved in the concrete realization of the living machine. It restricts itself to the role of partner by providing expertise and partial financial resources. As such, it is reluctant to

adopt the role the initiators wanted it to take, that is, as progenitor and co-owner of the initiative. Aa and Maas struggles with the question whether or not the organization should try to convince the reluctant local government to get involved in the initiative. This dilemma connects to the question how far Aa and Maas should go in supporting an initiative that bears potential health safety issues according to the local government. Can it find the arguments to work with the CBI and bypass an external network partner? Water sanitation is at a high quality level in the Netherlands. Should this high quality be put at risk by deviating from the current centralized sanitation and purification system?

Lastly, the water board wonders how durable the CBI will be in the longer run. Already a slight decrease in the level of involvement of the initiators can be seen. Will they still be involved once the living machine is operative? Is the acceptance of their idea among neighbours broad enough to guarantee community involvement over time? The initial information meeting in the community centre was predominantly positive, but it is far from clear whether this support can be sustained.

Discussion of cross-case findings

This paper has examined the internal and external alignment strategies of water boards in their attempts to relate to CBIs. It can be observed that water boards prefer to remain at some distance and to provide mainly financial support, expertise and/or information to the CBI. From a theoretical point of view, these are quite traditional forms of support (cf. Korosec & Berman, 2006). This observation is exemplified in the Markdal case where the water board chooses to monitor the activities and results of the CBI and check whether these results matched the WFD goals for which they were held accountable. In the case of Holtenbroek, we see that the role of the water board is mainly to safeguard its responsibility for flood safety according to the new flood-risk norms.

When their own goals and standards are safeguarded, water boards are willing to support the CBIs with various kinds of resources such as financial support (Markdal, Groote Wielen), expertise and information (Markdal, Groote Wielen, Holtenbroek) and a facilitative role in the planning process (Holtenbroek). Particularly, the latter form of support is often chosen by the water boards as this fits their role as water management specialists contributing to the cooperation with CBIs and other stakeholders. Giving advice can also be an instrument to improve the substantive quality of an initiative and can mitigate the eventual risks of it for the water board, as is the case with Holtenbroek. In the cases of Holtenbroek and Groote Wielen, the active, expert-driven meddling by the respective water board is welcomed by the CBI. It is remarkable to observe that all three water boards genuinely reflect on the question to what extent their advising role can go with regard to the extent to which they can deviate from their core tasks. Apparently, the emergence of the CBI in their jurisdictions leads to a reorientation of their societal role.

However, these types of support do not always seem to fit with the expectations and needs of the initiators, who are looking for a collaborative partner taking an active role in coordination, facilitation and implementation of the initiative. They see their initiatives as social innovations that require partnerships with governmental actors to further develop, implement and anchor them in the (local) society. Initiators hope the water boards will follow their path, whereas water boards believe they have their own tasks

and strategies. The mismatch between the expectations of the CBI and the preferred working style of the water board is exemplified in the case study of Markdal. Here, representatives of the CBI tried to build a large collaboration in which all stakeholders, including the water board and regional government, take a proactive stance towards the goals they have set. However, the water board opted to use its own preferred approach, which did not match with the logic of the Markdal community. In the Groote Wielen case, the initiators managed to get the water board behind their initiative as leverage for attracting support of the local government and other stakeholders. However, this strategy failed and the initiative was terminated. In Holtenbroek, the initiators were well ahead of the water board in thinking about the potential for coupling dike strengthening with adjacent community services and facilities. The water board there has only just begun to accommodate the inclusion of the CBI into its approach to stakeholder management.

The role dilemma – an active, involved and accommodating attitude versus a distant, observing and independent role – are related to the specific task orientation of water boards. In all three cases, the water boards are strongly departing from their tightly formulated functional task orientation. In the Markdal case, for example, the water board is mainly interested in realizing the goals of the WFD. The Holtenbroek case indicates that the CBI must be framed in the formal procedures, common for dike-strengthening projects of the HWPP. On the contrary, in Groote Wielen the water board has a more open, inclusive task orientation, and the initiative is welcomed because it gives the water board the opportunity to explore innovative ways of decentralized water sanitation techniques and enhances its societal exposure. The supporting and accommodating stance of the water boards towards CBIs thus depends on whether the initiative fits their organizational objectives and practices.

The strong focus on management, control and efficiency makes it difficult for water boards to honour initiatives, even though they may indeed strengthen its connection to local communities and citizens and, thus, their legitimacy. The recurring debate about the (lack of) democratic legitimacy of the water boards increasingly becomes a trigger for water boards to invest in a supportive role for CBIs.

The involvement of water boards in CBIs seems to be primarily mainstreamed with their formal tasks and procedures. They believe that in this way the CBIs can be internally accommodated and taken seriously. The unintended consequence is that the representatives of the CBI feel overwhelmed or even captured by the procedures and working processes of the water boards.

To summarize, three key strategies are used for internal alignment. First, the initiative is approached as any other project, and thus standard procedures are applied to organize the initiative as a project. The IPM model is used in the Holtenbroek and Markdal cases as a way to align to CBIs. The IPM creates a shared understanding within the water boards about how to deal with the CBI 'as a project'. Also, the indicator '(absence of) goal conflict' is visible because through the IPM model an attempt is made to align the goals of the water board with those of the CBI. Second, water boards tend to play a facilitating role for the CBIs, attempting to advance and/or improve them. This refers to the indicators 'cooperation' and 'coordination'; through facilitating, the CBIs water boards are better able to cooperate as a partner or sponsor and have some coordinative influence of the development process of the CBI. Finally, executive administrative support is mobilized to legitimize new approaches

that do not apply to certain formal rules and regulations. This strategy is observed in the Groote Wielen case in which water board professionals help the initiators to comply with their own administrative requirements. The latter two strategies require extensive processes of deliberation and dialogue between water boards and CBIs, mainly aimed at bridging the gap between the intention of the initiative and the professional practices within the water boards. Both strategies are examples of the indicators 'cooperation' and 'coordination'.

External alignment strategies are used to achieve a similar stance towards a CBI among the public authorities confronted with this initiative. External alignment is meant to prevent situations in which CBIs can play authorities off against each other or get crushed between them. For external alignment, we can observe four strategies. First is the strategy of *boundary spanning*, in which representatives from the water board establish relations at different levels with other governments: horizontally to municipalities and regional governments and vertically to national government level (e.g., Rijkswaterstaat). This refers to the indicator of 'being proactive with regard to external dynamics'. Next is the strategy of *convincing*, in which both initiators and the water board engage in (jointly) fact finding to obtain support from public authorities and other actors through factual information to substantiate the claim put forward by the CBI. This strategy connects to the indicator of 'acquiring additional resources'. Here, this is reciprocal because additional resources are not only acquired but also shared among other actors. Third, a strategy of *creating attractiveness* is used by water boards and initiators jointly to 'seduce' other stakeholders to cooperate, using inspiring documentation and the like. Fourth, water boards arrange some room for *experimentation* that allows them to deviate from the rules. This can be observed in the Groote Wielen case in which the ambition to innovate is a key motive to support the initiative. This connects to the indicators 'create some freedom or slack' and 'innovate the core tasks and responsibilities'.

Conclusions

In the Dutch water management sector, we see CBIs emerging in which citizens develop an initiative for water-related tasks, such as water sanitation or water quality. This increase in CBI participation is not exclusively for water management in the Netherlands, as it can be observed in other countries as well (Nye et al., 2011; Thaler & Levin-Keitel, 2016). Although being fully aware of the limitation of this study, conducted in the Dutch context with a consultative governance culture (Pollitt & Bouckaert, 2004), interesting and meaningful conclusions can be drawn from the conducted comparative case study.

First, it is obvious that water boards struggle to align internally with the CBIs. The intentions of CBIs tend to cut through departmental structures of water boards, addressing all kind of issues that need internal coordination within their organizational structure. By applying standard approaches, such as the IPM, the different departments of a water board are able to perceive a CBI as a project and thus recognize what they have to do. However, this internal alignment strategy has the side effect that CBIs can experience alienation and loss of control of their own initiative because they are more or less forced to behave along the rationales of the IPM. This is called the hedgehog dilemma (Brandsen, 2016), indicating that in their attempt to embrace CBIs, water boards tend to take over the initiative and smother them in the end. If water boards

cannot reshape CBIs in their own organizational framework and professional work processes and procedures, then they tend to be less welcomed and workable. But if CBIs are willing to develop more co-productive relationships with water boards, some reciprocity has to be accepted, implying some loss of full control and authority over their own initiative. Forming a partnership implies that joint rules, procedures and processes have to be agreed upon. Coming to this agreement proves to be challenging, as both water boards and CBIs have to adapt to each other's ways of conduct.

A second conclusion is that water boards struggle to combine their traditional orientation on strictly defined functional tasks with working along the broader scope of many CBIs. CBIs are issue driven and more integrative than the functionally organized departments of the water boards. In other words, water boards, by performing as a functional, mission-oriented government and simultaneously as a demand-oriented government, find it difficult to giving shape to ambidexterity or 'two-leggedness' (O'Reilly & Tushman, 2013). In a context that is primarily aimed at executing clearly defined tasks as cheaply as possible (Grotenbreg & Altamirano, 2017), it seems almost impossible to accommodate CBIs, aiming for a broader value creation than developing an infrastructure project alone. Having had a public monopoly on water-related tasks for centuries, the rise of CBIs can only be accommodated with institutional adaptation, making room for organizations other than public authorities to take action. More creative and explorative interactions between water boards and CBIs can flourish when the institutional context is reshaped accordingly. Increasing pressure from the general public on public authorities, in general, to show more responsiveness and deliver broader public value can foster the change towards more openness for societal initiatives and spontaneous engagement.

Based on the first two conclusions, a third comes to mind. The emergence of CBIs tends to evoke the need to align externally with other government organizations. Although water boards develop several external alignment strategies, other public agencies are not always able or willing to 'get aligned'. They do not perceive the urgency to collaborate with water boards and CBIs. This difficulty implies a potential pitfall for the success of CBIs. CBIs in the water sector are dependent on the willingness and capability of all involved governmental organizations to align with these initiatives. If government, in general, aims at activating or stimulating societal entrepreneurship to help solve societal challenges – such as climate adaptation and energy transition – then they need to be able and willing to align themselves along society-driven initiatives. That necessitates a less ambivalent and a more receptive stance from the water boards. Otherwise, the potential of CBIs to deliver the additional problem-solving capacity to take on today's complex water problems will not be capitalized.

Note

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ORCID

Arwin van Buuren http://orcid.org/0000-0002-8504-0495
Ingmar Van Meerkerk http://orcid.org/0000-0001-7279-2607

References

Agranoff, R. (2007). *Managing within networks: Adding value to public organizations*. Washington DC: Georgetown University Press.

Andrews, R., Boyne, G. A., Meier, K. J., O'Toole, L. J., Jr, & Walker, R. M. (2012). Vertical strategic alignment and public service performance. *Public Administration*, *90*(1), 77–98. doi:10.1111/j.1467-9299.2011.01938.x

Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, *35*(4), 216–224. doi:10.1080/01944366908977225

Bailey, N. (2012). The role, organization and contribution of community enterprise to urban regeneration policy in the UK. *Progress in Planning*, *77*(1), 1–35. doi:10.1016/j.progress.2011.11.001

Boschken, H. L. (1988). *Strategic design and organizational change*. Tuscaloosa, AL: University of Alabama Press.

Bourgeois, L. J. (1981). On the measurement of organizational slack. *Academy of Management Review*, *6*(1), 29–39. doi:10.5465/amr.1981.4287985

Brandsen, T. (2016). Governments and self-organization: A Hedgehog's Dilemma. In J. Edelenbos & I. van Meerkerk (Eds.), *Critical reflections on interactive governance. self-organization and participation in public governance* (pp. 337–351). Cheltenham: Edward Elgar.

Downs, A. (1967). *Inside bureaucracy*. Boston, MA: Little Brown.

Edelenbos, J., van Buuren, M. W., Roth, D., & Winnubst, M. (2017). Stakeholder initiatives in flood risk management: Exploring the role and impact of bottom-up initiatives in three 'room for the river' projects in the Netherlands. *Journal of Environmental Planning and Management*, *60*(1), 47–66. doi:10.1080/09640568.2016.1140025

Edelenbos, J., & Van Meerkerk, I. (2016). *Critical reflections on interactive governance: Self-organization and participation in public governance*. Cheltenham, UK: Edward Elgar.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, *14*(4), 532–550. doi:10.5465/amr.1989.4308385

Fonchingong, C. C. (2005). Negotiating livelihoods beyond Beijing: The burden of women food vendors in the informal economy of Limbe, Cameroon. *International Social Science Journal*, *57* (184), 243–253. doi:10.1111/j.1468-2451.2005.00548.x

Fung, A. (2006). Varieties of participation in complex governance. *Public Admin Rev*, *36*, 65–74.

Galliers, R. D. (2004). Reflections on information systems strategizing. In C. Avgerou, C. Ciborra, & F. Land (Eds.), *The social study of information and communication technology* (pp. 231–262). London: Oxford University Press.

Gieske, J. M. J., Duijn, M., & Van Buuren, M. W. (2019). Innovation and optimization tensions in practice: Practices of ambidexterity within Dutch regional water authorities. *Public Management Review*. doi:10.1080/14719037.2019.1588354

Grotenbreg, S., & Altamirano, M. (2017). Government facilitation of external initiatives: How Dutch water authorities cope with value dilemmas. *International Journal of Water Resources Development*, *35*(3), 465–490. doi:10.1080/07900627.2017.1374930

Healey, P. (2015). Citizen-generated local development initiative: Recent English experience. *International Journal of Urban Sciences*, *19*(2), 109–118. doi:10.1080/12265934.2014.989892

Henderson, J. C., & Venkatraman, N. (1993). Strategic alignment: Leveraging information technology for transforming organizations. *IBM Systems Journal*, *32*(1), 4–16. doi:10.1147/sj.382.0472

Igalla, M., Edelenbos, J., & Van Meerkerk, I. (in review 2019). Citizens in action, what do they accomplish? A systematic literature review of citizen initiatives, their main characteristics, outcomes, and factors.

Kleinhans, R. (2017). False promises of co-production in neighbourhood regeneration: The case of Dutch community enterprises. *Public Management Review*, *19*(10), 1–19. doi:10.1080/14719037.2017.1287941

Korosec, R. L., & Berman, E. M. (2006). Municipal support for social entrepreneurship. *Public Administration Review*, *66*(3), 448–462. doi:10.1111/puar.2006.66.issue-3

Lintsen, H. (2002). Two centuries of central water management in the Netherlands. *Technology and Culture*, *43*(3), 549–568. doi:10.1353/tech.2002.0126

Lupo Stanghellini, P. S. (2010). Stakeholder involvement in water management: The role of the stakeholder analysis within participatory processes. *Water Policy*, *12*(5), 675–694. doi:10.2166/wp.2010.004

Maciejewski Scheer, A., & Höppner, C. (2010). The public consultation to the UK climate change act 2008: A critical analysis. *Climate Policy*, *10*(3), 261–276. doi:10.3763/cpol.2009.0029

Meijerink, S., & Huitema, D. (2010). Policy entrepreneurs and change strategies: Lessons from sixteen case studies of water transitions around the globe. *Ecology and Society*, *15*(2). doi:10.5751/ES-03509-150221

Miles, R., & Snow, C. C. (1978). *Organizational strategy, structure and process*. London: McGraw Hill.

Mostert, E. (2006). Integrated water resources management in the Netherlands: How concepts function. *Journal of Contemporary Water Research & Education*, *135*(1), 19–27. doi:10.1111/j.1936-704X.2006.mp135001003.x

Nehmelman, R., Tappeiner, I. U., & van Rijswick, H. F. M. W. (2011). *De constitutionele inbedding van het waterschap*. Oisterwijk, BV: Wolf Productions.

Nye, M., Tapsell, S., & Twigger-Ross, C. (2011). New social directions in UK flood risk management: Moving towards flood risk citizenship? *Journal of Flood Risk Management*, *4*(4), 288–297. doi:10.1111/j.1753-318X.2011.01114.x

O'Reilly III, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of Management Perspectives*, *27*(4), 324–338. doi:10.5465/amp.2013.0025

Pahl-Wostl, C. (2006). The importance of social learning in restoring the multifunctionality of rivers and floodplains. *Ecology and Society*, *11*(1). doi:10.5751/ES-01542-110110

Pahl-Wostl, C. (2007). Transitions towards adaptive management of water facing climate and global change. *Water Resources Management*, *21*(1), 49–62. doi:10.1007/s11269-006-9040-4

Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. Newbury Park, CA: Sage.

Perrow, C. (1986). *Complex organizations: A critical essay* (3rd ed.). New York, NY: McGraw-Hill.

Pollitt, C., & Bouckaert, G. (2004). *Public management reform: A comparative analysis*. USA: Oxford University Press.

Raadgever, G. T., Dieperink, C., Driessen, P. P. J., Smit, A. A., . H., & Van Rijswick, H. F. M. W. (2011). Uncertainty management strategies: Lessons from the regional implementation of the water framework directive in the Netherlands. *Environmental Science & Policy*, *14*(1), 64–75. doi:10.1016/j.envsci.2010.11.001

Rasmusen, E. (2007). *Games and information* (4th ed.). Malden, MA: Blackwell.

Semler, S. W. (1997). Systematic agreement: A theory of organizational alignment. *Human Resource Development Quarterly*, *8*(1), 23–40. doi:10.1002/hrdq.3920080105

Specht, M. (2012). De Pragmatiek van Burgerparticipatie. Hoe burgers omgaan met Complexe vraagstukken omtrent veiligheid, leefbaarheid en stedelijke ontwikkeling in drie Europese steden. PhD thesis Utrecht University.

Stake, R. (2013). *Multiple Case Study Analysis*. New York, NY: Guilford.

Thaler, T., & Levin-Keitel, M. (2016). Multi-level stakeholder engagement in flood risk management – A question of roles and power: Lessons from England. *Environmental Science & Policy*, *55*, 292–301. doi:10.1016/j.envsci.2015.04.007

Thaler, T., & Priest, S. (2014). Partnership funding in flood risk management: New localism debate and policy in England. *Area*, *46*(4), 418–425. doi:10.1111/area.12135

Tushman, M. L., & Scanlan, T. J. (1981). Boundary spanning individuals: Their role in information transfer and their antecedents. *Academy of Management Journal*, *24*(2), 289–305.

Van Buuren, M. W. (2013). Knowledge for water governance. *International Journal of Water Governance*, *1*(1–2), 157–175. doi:10.7564/12-IJWG6

Van Buuren, M. W., Buijs, J. M., & Teisman, G. R. (2010). Program management and the creative art of coopetition: Dealing with potential tensions and synergies between spatial development projects. *International Journal of Project Management*, *28*(7), 672–682. doi:10.1016/j.ijproman.2009.12.002

Van der Brugge, R., Rotmans, J., & Loorbach, D. (2005). The transition in Dutch water management. *Regional Environmental Change*, *5*(4), 164–176. doi:10.1007/s10113-004-0086-7

Van Heeringen, R. (2017). Met de stroom mee in het Markdal: Casusstudie naar de voordelen van een maatschappelijk initiatief voor publieke besluitvorming, master's thesis. Rotterdam: Erasmus Universiteit Rotterdam.

Van Stokkom, H. T. C., Smits, A. J. M., & Leuven, R. S. E. W. (2005). Flood defense in the Netherlands: A new era, a new approach. *Water International*, *30*(1), 76–87. doi:10.1080/02508060508691839

Van Tatenhove, J., Edelenbos, J., & Klok, P. J. (2010). Power and interactive policy making: A comparative study of power and influence in 8 interactive projects in the Netherlands. *Public Administration*, *88*(3), 609–626. doi:10.1111/j.1467-9299.2010.01829.x

Vanderstraeten, J., & Matthyssens, P. (2012). Service-based differentiation strategies for business incubators: Exploring external and internal alignment. *Technovation*, *32*(12), 656–670. doi:10.1016/j.technovation.2012.09.002

Voorberg, W. H., Bekkers, V. J. J. M., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: Embarking on the social innovation journey. *Public Management Review*, *17*(9), 1333–1357. doi:10.1080/14719037.2014.930505

Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks: Sage.