

Changing the Connotation of Spatial Quality

Safeguarding project's riverine public value

S.F.V.E. Greter *

Faculty of Technology, Policy and Management, Delft University of Technology, Delft, The Netherlands

Received 3 July 2013

Abstract

The conceptual partitioning of a decision-making process, highlighting its articulation, negotiation, operationalization and provision stage, appoints how public value can be safeguarded in networked infrastructures. Subsequently it proves to be an efficient guideline for emphasizing the changing connotation of spatial quality in the decision-making process in the Room for the River program. However, the framework's provision stage cannot (yet) be emphasized, limiting the preliminary insights in the relationships between the key actors involved in the decision-making process and the changing connotation of project spatial quality. The lacking of a complete in-depth insight in all identified stages of the decision-making process results in the situation where a relatively incomplete picture arises of the changing connotation of spatial quality in the Room for the River program. Conducting an ex-ante evaluation of the provision process in individual Room for the River projects is therefore considered a profound approach, particularly when assessing the connotation of spatial quality in the projects' overall decision-making process.

An author's note

Although this article is aimed at readers with a background in water management, it also contains the more generalized description of a scientific approach to address public values' changing connotation towards project realization. The accompanying conclusions drawn emphasize the article's focus on decision-making, indicating that the insights presented will be useful to readers involved in this process as well, independent of their professional background.

Keywords *Room for the River program, Integrated Water Management, Decision-making, Public value, Spatial quality*

1. Safeguarding project's public value

The years 1993 and 1995 mark previously unprecedented high water levels on the Dutch main rivers whilst consequently large tracts of farmland were inundated (PDR 2012a). These riverine floods opened-up a window of opportunity for a "nonstructural river management philosophy, seeking to overcome the limits for dike reinforcement" (Warner and Buuren 2011:780). By allowing water more space, the Dutch government announced an integrated approach to avert future flooding within the Netherlands; making more room for rivers (Greter 2013). Ultimately, guided by the spatial planning key decision of late 2006 the Dutch government met the approval of the 'Room for the River program', enabling the river Rhine and its tributaries to safely dispose river discharges of 16,000 cubic meters water per second to the sea (Ministry for Public Works and Water Management 2006 and PDR 2012a). Subsequently the Room for the River program emerged as a locally driven program that nowadays consists of 34 individual projects, set to achieve the program's dual main objective; firstly enabling a safe discharge of the Dutch rivers' high water level and secondly the improvement in spatial quality of the riverine landscape.

The achievement of Room for the River's primary dual main objective firstly depends on whether measures meet

'hard' statutory water-safety standards, competent of withstanding high water discharges with a statistical chance of occurring once in every 1250 years (PDR 2012b). For its secondary main objective, however, the spatial planning key decision lacks the provision of a such a 'hard' standard (PDR 2012b). Translating the secondary program objective into local reality therefore involves a process where elements of the original policy narrative are selected and articulated by the competent authority; project executors such as Rijkswaterstaat, municipalities and even local water boards (Hulsker et al. 2011). Subsequently, project plans that integrate multiple decision-making stage are negotiated with the program's executive management (PDR) to fit the specific purposes and perspectives of the stakeholders involved (Dijk 2006). This process is referred to by Dijk (2006) as 'negotiated change shaped through process' and successively subject of evaluations conducted in the year 2011 (Hulsker et al. 2011; Twist et al. 2011). Entering the third quarter of the year 2012, the program's twentieth progress report states that in twenty-five of the 34 Room for the River projects a formal project decision has been reached, denoting the formal start of project implementation (PDR 2012b). In the light of the impending transition towards projects' actual realization, this article reflects on how program's objectives are safeguarded and in particular in its decision-making context.

• Sander Greter, student number 1236482
Contact e-mail address: s.f.v.e.greter@student.tudelft.nl

Addressing the characterization of spatial quality, Room for the River program's executive management formulates it as "maintaining the attractiveness and functionality of a project environment which will retain its value in the near and far future" (PDR 2012:7). Their relatively abstract formulation indicates that spatial quality entails a relative broad appearance (Hooimeijer et al. 2001; Jansen et al. 2009; Puylaert and Werksma 2011). This insight is underlined by the second chapter of the spatial planning key decision, stating that the improvement of riverine spatial quality entails the strengthening of riverine economic, ecological and natural values by combining water- and spatial functions of the river (Heuvelhof et al. 2007; Ministry for Public Works and Water Management 2006). Similar to the characterization of spatial quality, Bozeman (2007), Broekhans et al. (2009), Bruijn and Dicke (2006), Charles et al. (2007) and Steenhuisen et al. (2009) argue that public value does not entail a singular vision either, paralleling 'public interests' such as economic welfare and safety from flooding. Acknowledging the considerations by Veeneman, et al. (2009:416), the ambiguous characterization of public values "stressed very different, sometimes conflicting values and mechanisms to secure them". Subsequently, regarding the improvement of project spatial quality as providing a basic service with a collective and dynamic interest, one could argue that it fits the description of a public value as presented by Bozeman (2007), Broekhans et al. (2009), Bruijn & Dicke (2006) and Charles et al. (2007).

Following Veeneman et al. (2009), States and regions previously defined public value and subsequently provided the necessary infrastructure and services to accommodate their realization. However, due to the increased involvement of competent authority and local stakeholders, dealing with a public value becomes a more explicit and complex task, in particular whilst balancing the additional objectives of individual Room for the River projects (Bruijn et al. 2010). In line with the insights provided, this article defines the crucial stages of projects' decision-making process on safeguarding spatial quality against the background of decision-making on public value. The crucial stages of the decision-making process are identified with the application of the conceptual framework formulated by Veeneman et al. (2009), as presented in figure one. The conceptual model by Veeneman, Dicke, and Bruijne (2009) is selected upon the insight that it "enables a conceptual analysis that highlights how shifts shape the meaning of public values; how key actors are involved in processes to achieve public value and to illustrate the variety of mechanisms they use to achieve the public values" (Veeneman et al. 2009:416).

Figure 1: Visualization of the decision-making process on public value (Veeneman et al., 2009:431)



Parallel to the various characterizations of public value by Bozeman (2007), Broekhans et al. (2009), Bruijn & Dicke (2006) and Charles et al. (2007), Veeneman et al. (2009:416) "go one step further than to state that public value is ambiguous and requires a trade-off". Similar to this statement, Veeneman et al (2009:416) seek "to show how the connotation of a public value changes, although under the same moniker, in different parts of the policy process". By providing an in-depth insight in the various perceptions of public value in networked infrastructures, such as the power sector and public transport, the contribution of Veeneman et al. (2009) to the water sector is limited by addressing its drinking- and waste water elements. Subsequently, this article seeks to show whether the connotation of public value changes when addressing spatial quality in different stages of the decision-making process in the Room for the River program. This brings one to the formulation of the following key question addressed in this article:

"How does the connotation of spatial quality change during the different stages of the decision-making process in the Room for the River program?"

Aiming to indicate whether the conceptual model provided by Veeneman, Dicke, and Bruijne (2009) actually applies, reviewing existing literature on the implementation of individual Room for the River projects provides one with compulsory insights. However, this article does not attempt to evaluate the background and history of individual Room for the River projects, nor does it provide an overview of all measures and implications of the Room for the River program, as presented by Heuvelhof et al. (2007) and Twist et al. (2011). This article also does not aim to conduct a multi-dimensional analysis of the impact of the Room for the River projects' dual main objective, as conducted by Warner and Buuren (2011).

Aligned with the overall aim of this article, section two presents a brief structural overview of the decision-making stages identified by Veeneman, Dicke, and Bruijne (2009), whilst the following section explores its implications on spatial quality in Room for the River projects. The remainder of this article addresses the overall discussion and recommendations for further exploration, presenting the overall conclusions that are drawn from this article.

2. The connotation of public value in networked infrastructures

Veeneman, Dicke & Bruijne (2009) outlined the crucial stages in decision-making on public value in their conceptual framework against the political process defined by Bachrach & Baratz (1972). Following Bachrach and Baratz (1972), change negotiations are distinguished by the interaction between different types of stakeholders within a governmental process. Rather than using the word 'phase', Veeneman et al. (2009) use the word '(sub)process' or 'stage' to describe the process of translating public value from first inception towards final implementation. As many of these processes coexist on a single public value at the same time, using the word 'phase' could have implied "a

linear and successive translation” which according to Veeneman et al. (2009:417) is hardly ever the case. In order to illustrate how public value takes shape as it moves through the various processes, generally from more abstract notions to more concrete and specific products, Veeneman et al. (2009) identified four key processes that will be addressed accordingly.

The first stage of the decision-making process on public value is marked as the project’s advocacy process, articulating public value as a merit good in its most attractive and generic way (Veeneman et al. (2009). Acknowledging Charles et al. (2007), Veeneman et al. (2009) refer to this actual notion as ‘clouds of goodness’, realizing that not aspiring to this value may be considered unacceptable by the stakeholder involved. By means of indication, stakeholders subsequently denote their claims, for example highlighting the necessity for affordable drinking water. At this point, however, it is still unclear what actual implication the cloud of goodness will have on the overall networked sector, not knowing the consequences of all alternatives. Despite this awareness the practice of articulating public value reveals that not every stakeholder has equal influence on the projects’ advocacy process and therefore some issues can easily be put forwards or expressively neglected (Bachrach and Baratz 1972). The follow-up stage of the decision-making process decides what project values will actually be designated as public value, subsequently prioritizing the stakeholders’ claims as articulated during the project’s advocacy process. According to Veeneman et al. (2009:420) “the political process occurs on the interface between the representative bodies and the executive bodies”. Subsequently, the initially articulated public value can be substantiated and trade-off in the project’s political process, enabling one to put priorities into perspective and come up with a satisfying solution supported by the stakeholders involved.

The formulated solution eventually matures in the bureaucratic process. Similar to the insights presented by (Steenhuisen, Dicke, and Bruijn 2009), the end-result is often considered a “faint remnant of the original cloud of goodness” (Veeneman et al., 2009:428). In the project’s bureaucratic process the public values are set into concrete norms, highlighting the actual operationalization of the project’s public value. This process stage, however, tends to not run smoothly, as “goals are not simply implemented as ordered by superiors. Instead, decisions and goals are re-interpreted and shifted according to the bias and the interest of the groups and persons who have to work with the abstract goals” (Veeneman et al., 2009:424). Aligned with this discernment, the project’s “discretionary room” tends to enable the re-negotiation of the previously articulated and negotiated public value by the decision makers (Veeneman et al., 2009:425). The interventions that secure public values reach the provision process by the time that all preceding efforts land in the project’s operationalized demand specification that is tendered by the constructors. Following Veeneman, et al. (2009:426), the project’s actual provision process will then indicate “the shortcomings with regard to some important public value for some stakeholder

group”, balancing “the story that explains what has become of the safeguarding of public values that were once decided” upon (Veeneman et al. (2009:427). Summarizing these insights, values secured through the strongest interventions eventually “displace those interventions that left more room for maneuvering and interpretation” (Veeneman et al., 2009:429).

3. Public value in the Room for the River program

The previous paragraph presented the conceptual understanding of how public value is initially articulated and an insight is provided in how public value is translated from an original cloud of goodness towards realization. The remarks made, highlight that public value might undergo significant changes in ‘appearance’ during each of the stages of the decision-making process. In line with the insights presented, this paragraph highlights how the connotation of public value, project’s spatial quality, changes during the decision-making process in the Room for the River program and in particular towards its definite realization.

3.1 Articulating spatial quality

Following Hooimeijer, Kroon, and Luttik (2001) the initial conceptualization of spatial quality is articulated by the project’s initiator in consultation with the local stakeholders, integrating the area’s core values. In the Room for the River program this initial conceptualization is highlighted by the obviousness of integrating local core values (Sijmons and Feddes 2012). The basis for the initial articulation of program’s spatial quality is subsequently derived from the spatial planning key decision. In the spatial planning key decision the PDR integrates the projects’ core values in a relatively abstract way, highlighting its utility, amenity and future values (Hulsker et al. 2011). The articulation of project spatial quality results in a relatively broad range of reference imagery and textual considerations, emphasizing the integration of the individual project’s substantive components (Hulsker et al. 2011). The identification of substantive components highlights the project’s spatial characterization, emphasizing the contribution of local stakeholders in its articulation (Twist et al. 2011). Assisted by the quality-team, however, the initially articulated spatial quality is formulated into a spatial outline, balancing the input from the local stakeholders involved in the project. The discernments gathered are combined by the landscape architect into an overall project plan (Albers 2011). This insight denotes that the abstractly articulated project spatial quality is not (yet) set in stone and therefore it should rather be addressed as the starting-point for the actual negotiation on project public value and its detailed development (Ministry for Public Works and Water Management 2006).

3.2 Negotiating spatial quality

As a follow-up of the initial conceptualization and articulation of project spatial quality, Rijkswaterstaat applies a standardized approach for the remainder of the decision-making process, the so-called SNIP approach.

Highlighting the decision-making rules, the projects' negotiation process and involving another round of stakeholder consultation, the SNIP approach is relatively process-oriented (Hulsker et al. 2011; Rijkswaterstaat 2005). Balancing the initial articulated spatial quality, a prioritization of the project's public values takes place. This prioritization is generally conducted by the project's technical manager, therefore empowered in signaling whether the alternative's alteration has an influence on the initially articulated project spatial quality (Albers 2011). Based upon the project's articulated spatial quality, the project executor develops various project variants, highlighted by a SNIP2a milestone where project's spatial quality is substantiated into a more detail (PDR 2009).

Towards the follow-up project milestone, however, the type of realization contract tends to significantly influence the level of detail that is ultimately required. Following the in-depth evaluation of multiple individual Room for the River projects conducted by Greter (2013), Design and Construct (D&C) contracts applied for projects' procurement provide relatively more degrees of freedom for the constructor, particularly in terms of design when compared with Rijkswaterstaat's more traditional framework contracts. Subsequently, the overall responsibility for the detailed substantiation of spatial quality is assigned to the constructor, receiving a mere outline of the initially articulated project spatial quality. Towards their development of the preferred alternative and set-up of the accompanying project decision, spatial quality is addressed by either a functional- or detailed specification, highlighting the project's spatial objectives that are accompanied by the criteria (EMVI) for selecting the economically most advantageous tender (PDR 2011).

3.3 Operationalizing spatial quality

Following the discernments highlighted in the previous section, the project decision taken in individual Room for the River projects holds that the actual operationalization of spatial quality still needs to take place, setting the norm for project's spatial quality to be provided. Highlighting the contractual degrees of freedom offered in terms of design by application of a D&C contract, tendering constructors reinterpret the project's relatively abstract spatial outline, objectives, (functional) object specifications and EMVI-criteria (PDR 2011 and Warner and Buuren 2011). A more traditional framework contract, however, tends to set the actual blue-print for the development of project spatial quality, providing an exhaustive list of profiled and detailed objects, where an extended EMVI criteria ultimately tend to outweigh each other (Rijkswaterstaat 2005). Similar to these discernments, the selected constructor's economically most advantageous tender is operationalized into a demand specification that addresses both the project's content (VS1) and design processes (VS2) (PDR 2011). Subsequently, the accompanying approach highlights system-based contract management (SCB) for reviewing the constructors' realization processes through formal milestones, balancing contractual amendments on seven different criteria, of which spatial quality is only one (PDR 2011). Based upon the level of detail in the project's

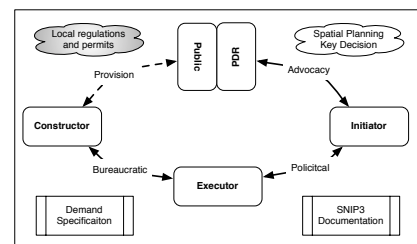
demand specification, the preferred alternative is subsequently highlighted by the project's spatial design and the interfaces between project's prominent objects (PDR 2011).

3.4 Realization of spatial quality

Similar to the operationalization of spatial quality, the provision of project spatial quality in the Room for the River program requires certain trade-offs. The trade-off at hand when realizing the operationalized project spatial quality, however, is considered to be conditioned by local regulation and the acquiring of the necessary permits (Warner and Buuren 2011). However, as no Room for the River project with a predominant focus on improving spatial quality has (yet) been completed to its full extent, evaluation of the provision process is considered inconceivable.

By means of indication, figure two provides a visualized representation of summary of the insights gathered in this section. Firstly, figure two highlights the position of the initiator versus the PDR and the project's executor, the respective advocacy- and political stage of the decision-making process and its influence by the spatial planning key decision and formal project decision. Subsequently, the bureaucratic process, involving the project executor and constructor, is identified in which spatial quality is operationalized and subsequently realized. As the project's provision of spatial quality is not emphasized in this article, an interrupted line towards the 'public' stakeholders is applied.

Figure 2: Representation of the decision-making process on spatial quality in the Room for the River program



4. Discussing the integrated approach

Where Veeneman, Dicke & Bruijne (2009) outlined the crucial stages in decision-making on public value, their conceptual model seems to correspond with the decision-making process on spatial quality in the Room for the River program. Highlighting its translation process from first inception towards actual realization, spatial quality moves through the various processes and eventually results in a concrete and detailed project demand specification. Subsequently, the various stages of the decision-making process in the Room for the River program introduces a number of important aspects that contrast with traditional integrated water management in the Netherlands, especially with respect to planning processes, formulation of objectives and its integrated approach towards project realization. In line with this discernment, the Dutch water

sector faced certain challenges due to the altered approach of the Room for the River program, such as streamlining decision-making processes and improving stakeholder engagement. Subsequently, this section highlights the challenges faced and discusses its implications.

4.1 Programmed integration

Both project initiators and executors involved in Room for the River projects experiences that current economic and political developments asks for improved contractual degrees of freedom, enabling constructors the opportunity to differentiate by means of price and quality (Albers 2011). In the same light the first explorations of the Dutch 'Delta Program' (Deltaprogramma) point out that integrated D&C contracts are a necessity in order to address national water issues within reasonable time and costs (Deltaprogramma 2012). Based on these insights, successfully achieving the program's secondary objective is considered a challenge appointed by the program's integrative approach (Albers, 2011 and Dijk, 2006).

4.2 Integrated demand specifications

"The existing Dutch set-up is considered to be effective in establishing coordination across different institutional levels towards local municipalities and regional waterboards" (Greter 2012:3). This insight holds that, in theory, traditional framework contracts imply a project managerial structure (Rijkswaterstaat 2005). Contrariwise, the D&C contracts used in Room for the River projects imply that agreements are incrementally translated into detailed project demand specifications (Heuvelhof et al. 2007). This discernment highlights that integrated contracts implemented in Room for the River projects should be considered as a process managerial arrangement, consisting of more 'open agreements' between the project's initiator, executor and contractor and supplemented with agreements on cooperation, coordination and achieving project's objectives (Bree and Doree 2012).

4.3 Participative decision-making

The participatory approach in the Room for the River program is aimed at improving the involvement of key stakeholders in the project's decision-making process, such as a project's competent authority or organized farmers (Warner and Buuren 2011). This objective ultimately results in the situation where the outcome of the project's articulation and negotiation process do not largely reflect the input of the project's initiator and executor input. Subsequently, the participative decision-making process in the Room for the River program presupposes a bureaucratic context that does not necessarily include discretionary room for participation of all stakeholders involved in the decision-making process (Ravesteijn and Kroesen 2007).

5. Conclusion and recommendations

The aim of this article was to elaborate on how the connotation of spatial quality changes during the different stages of the decision-making process in the Room for the River program. Subsequently, the answer to this question can now be formulated in two-fold: On the one hand the

connotation of spatial quality changes aligned with the translation of a public value, following the stages of its decision-making process as identified by Veeneman et al. (2009). On the other hand the refocused model does not (yet) provide an insight in the underlying agreements that intend to safeguard spatial quality, nor does it provide an understanding in the competitiveness of spatial quality with other project values.

Highlighting the connotation of spatial quality in the different stages of the decision-making process in the Room for the River program, this article draws little attention to the project's provision process of spatial quality and the application of innovative integrated Plan, Design and Construct contracts in selected Room for the River projects. Conducting a so-called ex-ante evaluation of the provision process in individual Room for the River projects is therefore considered a welcome contribution, particularly when assessing the connotation of spatial quality in the projects' overall decision-making process. Subsequently, one could assess the overall ability of key stakeholders and their individual relationships to influence the decision-making process and the accompanying connotation of spatial quality, highlighting their main interests and objectives.

Emphasizing the identified knowledge-gap, improving the current (scientific) insight in application of innovative integrated PDC contracts and the provision stage of spatial quality in the decision-making process of the Room for the River program is considered a prerequisite. To successively address the (changing) connotation of project spatial quality in these situations, conducting the following studies is recommended:

- Formulation of a conceptual framework that includes the relationship between stakeholders that might influence the decision-making process and are positioned across infrastructure networks in the Netherlands.
- Assessment of key stakeholders' ability to influence the identified stages of the decision-making process and the accompanying connotation of spatial quality.
- Exploration of opportunities for an ex-ante evaluation of the provision process of spatial quality in individual Room for the River projects.
- Comparison of the connotation of spatial quality in the provision stage of decision-making process in Room for the River projects that are set-up according to traditional framework contracts, integrated D&C contracts and integrated innovative PDC contracts.

Acknowledgements

The literature study, research and writing of this article are carried out as a complementary assignment of the SEPAM Master's Thesis Project (SMP5910) during the 2012/2013-study year. Many thanks go out to Ernst ten Heuvelhof, Bertien Broekmans, Leon Hermans, Cor Beekmans and Jeroen Rijke for their guidance, valuable comments, inspiration and input.

References

- Albers, J.
2011 *Waarborging van ruimtelijke kwaliteit in Ruimte voor de Rivierprojecten: in de overgang van planstudie- naar uitvoeringsfase*. Rotterdam: University Press.
- Bachrach, P., and M. Baratz
1972 *Power and Poverty: Theory and Practice*. Oxford: University Press.
- Bozeman, B.
2007 *Public Values and Public Interest: Counterbalancing Economic Individualism*. Georgetown: University Press.
- Bree, T.de, and A. Doree
2012 *Evlauatie aanbestedingsfase Nederijn: Eindrapportage*. Enschede: Universiteit Press.
- Broekhans, B., E. Kerpershoek, and B. Romp
2009 *Van visie tot interactieve uitvoering: Over publieke waarden*. Informative. Leven met water.
http://www.levenmetwater.nl/static/media/files/6_Van_visie_tot_interactieve_uitvoering_TU, accessed December 4, 2012.
- Bruijn, H. de, and W. Dicke
2006 *Strategies for Safeguarding Public Values in Liberalized Utility Sectors*. Public Administration 84(3): 717–735.
- Bruijn, H. de, E. ten Heuvelhof, and R. in 't Veld
2010 *Process Management: Why Project Management Fails in Complex Decision Making Processes*. 2nd edition. Dordrecht: Springer.
- Charles, M., W. Dicke, J. Koppenjan, and N. Ryan
2007 *Public Values and Safeguarding Mechanisms in Infrastructure Policies: A Conceptual and Theoretical Exploration*.
<http://eprints.qut.edu.au/9283/>, accessed December 13, 2012.
- Deltaprogramma
2012 *Kansen voor innovatieve contracten*. DeltaNieuws 5. 2: 15.
- Dijk, J. van
2006 *Water Assessment in the Netherlands*. Impact Assessment and Project Appraisal 24(3): 199–209.
- Greter, S.
2013 *Safeguarding Public Value with Formal Agreements: An Evaluation of Project- and Process Agreements on Safeguarding Spatial Quality Towards Realization of Room for the River Projects*. Delft: University Press.
- Greter, Sander
2012 *Challenges in Dutch Water Management Policy: Integrating the European Water Framework Directive*. Informative. Delft: University Press.
- Heuvelhof, E. ten, H. de Bruijn, M. de Wal, et al.
2007 *Procevaluatie Totstandkoming PKB Ruimte Voor De Rivier*. Utrecht: Berenschot.
- Hooimeijer, P, H. Kroon, and J. Luttik
2001 *Kwaliteit in meervoud : conceptualisering en operationalisering van ruimtelijke kwaliteit voor meervoudig ruimtegebruik*. Gouda: Habiforum.
- Hulsker, W., M. Wienhoven, M. van Diest, and S. Buijs
2011 *Evaluatie ontwerpprocessen ruimte voor de rivier*. Amsterdam: Ecorys.
- Ministry for Public Works and Water Management
2006 *Spatial Planning Key Decision Room for the River: Approved Decision*. Informative. *Spatial Planning Key Decision Room for the River: Approved Decision*.

<http://www.ruimtevoorderivier.nl/media/21963/pkb%204%20approved%20decision%20h01-h086.pdf>, accessed September 25, 2012.

PDR

2009 *Projectbeslissing SNIP3*. Ministry for Public Works and Water Management.

2011 *Handboek Realisatie: Overzicht van condities, processen en beschikbare documenten*. Utrecht: Programmadirectie Ruimte voor de Rivier.

2012a *Dutch Water Program Room for the River*. Utrecht: Rijkswaterstaat.

2012b *Voortgangsrapportage 20 - Ruimte voor de Rivier*. Utrecht: Programmadirectie Ruimte voor de Rivier.

Ravesteijn, W., and O. Kroesen

2007 *Tensions in Water Management: Dutch Tradition and European Policy* 56(4). Water Science and Technology: 105–111.

Rijkswaterstaat

2005 *m.e.r. en SNIP procedure overzicht voor “natte” RWS-projecten*. <http://www.scribd.com/doc/79506081/m-e-r-en-SNIP-procedure-overzicht-voor-natte-RWS-projecten>, accessed October 1, 2012.

Sijmons, D., and F. Feddes

2012 *Kwaliteit is geen luxe* 5(93). Stedenbouw en Ruimtelijke Ordening: 17–22.

Steenhuisen, B., W. Dicke, and H. de Bruijn

2009 *“Soft” Public Values in Jeopardy: Reflecting on the Institutionally Fragmented Situation in Utility Sectors*. International Journal of Public Administration 32(6): 491–507.

Twist, M. van, E. ten Heuvelhof, M. Kort, C. van den Berg, and N. Bressers

2011 *Tussenevaluatie PKB Ruimte voor de Rivier. Ruimte voor de Rivier*.

<http://www.ruimtevoorderivier.nl/media/77815/tussenevaluatiepkbaug2011.pdf>, accessed September 27, 2012.

Veeneman, W., W. Dicke, and M. de Bruijne

2009 *From Clouds to Hailstorms: a Policy and Administrative Science Perspective on Safeguarding Public Values in Networked Infrastructures*. International Journal for Public Policy 4(5): 414–434.

Warner, J., and A. van Buuren

2011 *Implementing Room for the River: Narratives of Success and Failure in Kampen, the Netherlands*. International Review of Administrative Sciences 77(4): 779–801.