Legislation and regulation in spatial planning for multifunctional flood defense design

Brand, Nikki

Publication date
2017

Document Version
Final published version

Published in
Integral Design of Multifunctional Flood Defenses

Citation (APA)

Important note
To cite this publication, please use the final published version (if applicable). Please check the document version above.
LEGISLATION AND REGULATION IN SPATIAL PLANNING FOR MULTIFUNCTIONAL FLOOD DEFENSE DESIGN

Dr. Nikki Brand is a Postdoc at the Spatial Planning & Strategy Department of the Faculty of Architecture & the Built Environment, TU Delft University of Technology, where she is involved in the JP-NWI funded Proxy program and the ESPON-funded COMMANDS program. Additionally, she works as an independent researcher associate at Urban Integrity, studying the contribution of networks of plans to vulnerability for flooding in the US and the Netherlands within the Texas A&M-based resilience scorecard project. In the SWA-MPFD program she was a Postdoc in the project ‘Urban design challenges and opportunities of multifunctional flood defenses’.

Can the recent rise of Dutch multifunctional flood defenses be explained by the increased integration between the water and spatial planning sectors, which compels Water Boards to collaborate with municipalities? An enquiry into the changing relations between water managers and municipalities as a result of changes in spatial and water management regulations starting in the 1980s, and particularly since 2000s, indicates this hypothesis to be wrong.

In the Netherlands, the responsibility for spatial planning is officially assigned to the three levels of government (Provinces, Provinces, and municipalities). The responsibility for water management, on the other hand, is assigned to the single-purpose authority of an independent water manager. This can be the regional Water Authority or the national agency (Polderwaterstichting). The Water Authorities formally do not possess spatial planning competences. In 2003, the national policy agreement on water management in the 21st century (Nationale Bestuurakkoord Water 21e eeuw) led to changes in regulation. The policy agreement aimed to safeguard space for water infrastructure, a goal of the Water Authorities that required the assistance of spatial planning competences that exclusively belong to the municipality.

In theory, increased interdependency between water and spatial planning sectors could have forced Water Authorities to negotiate with municipalities. Municipalities, in exchange for accommodating the Water Authorities’ needs, would expect that their interests be accommodated. This ‘spatial trade’ followed by water interests in pursuit of their goals may explain the construction of recent multifunctional flood defenses like the Scheveningen Boulevard, Keilek’s parking garage of Rotterdam’s Roof Park. The water sector would not have been unique in this approach. Other sectors, such as heritage conservation, also addressed their goals using an integrated spatial planning approach in this period (Janssen et al., 2014).

Legislation and regulation regarding water management and spatial planning. However, the historical record presents a different story of the changing relations between water managers and municipalities. In the nineteenth century, a series of acts laid out the foundations for the relations between the Water Authorities with the other governmental entities of the Kingdom, the provinces and the municipalities (Drebspoor, 2004). In 1850, the Provinciewet (Provincial Act) formally established that the Province should supervise flood defenses managed by regional Water Authorities. ‘Waterstaatswerken’ (national water works), waters, flood defenses and road infrastructure of national concern were managed by the Kingdom, and thus exempted from provincial supervision. The Kingdom was given many powers in the 1881 Water Beheer Waterstaatswerken (Management of National Water Works Act).

The Kingdom’s executive agency regarding these matters, Rijkswaterstaat, could make decisions independent of the Province. Moreover, the Act explicitly prohibited use of the flood defense other than for flood safety, unless the responsible Minister granted permission. At the time, the municipality had no official role in water management, though local governments were authorized to regulate land use in the 1860s. Where local and regional Water Authorities had to deal with supervision by the Province in general, Rijkswaterstaat only had to gather approval for the creation of new land, a provision arranged in the 1900 Waterbeheer (National Water Works Act).
Relations between the different government entities and their responsibilities remained unchanged in the first sixty years of the 20th century. The 1921 Zuiderzee (Southern Sea) Act and the 1928 Delta Act (Delta Act) were both executed laws, enabling the construction of the Dutch grand feats of engineering, the Zuiderzee Works and the Delta Works. Both acts were rescinded in 2005, well after the works were completed. The 1968 Wet op de Ruimtelijke Ordening (Spatial Planning Act) represented a change, though, at the time it did not affect water management. The act permitted the government to intervene in societal developments that had a spatial dimension, balancing and coordinating spatial claims in designated land uses (Driesprong, 2004). These land uses were to be recorded in mandatory land use plans, issued solely by the municipality (Hidema & Schütte-Pistma, 2013). The act, focused primarily on the procedures to be followed in spatial planning, and established a hierarchy of plans. Within the plan hierarchy only the local land use plan was binding for citizens. The local land use plan had to be adapted to the spatial or single-issue policy documents of higher-tier authorities.

Up until the late 1980s, spatial planning and water management developed separately; they were yet to integrate. In the 1990s, a revolution in flood safety and water management regulations took place. The combination and management of flood defenses was addressed in a series of Acts (the 1992 Waterschapswet (Water Authority Act), 1995 Delta Act (Lange Rivières), 1996 Wet op de Waterlinen (Flood Defence Act), complemented by Zweve Noita Waterhuisstoring, 1988 and Versle Viste Noita Waterhuisstoring, 1998 (the third and fourth Memoranda on Water Management) (Driesprong, 2004). The Flood Defence Act introduced a number of concepts that remain central to contemporary Dutch water management: the difference between primary and regional flood defenses, the introduction of national dice-rings with designated safety standards, the Basic Coastal, national agricultural boundary conditions, and mandatory reporting by both Akojs (Akkoij) and the Water Authorities.

Taken together, these acts had a significant impact on the relations between municipal- ity and water manager while the organization and obligations of the Water Authorities were increasingly regulated (limiting their independence since the 1993 Act). Water managers could evade mandatory procedures regarding consultation and objections, directly issuing permits when flood defenses had to be strengthened, using the regulations from 1992 and 1995. The 1995 act regarding the large rivers, and the 1996 act addressing flood defense, both responded to the near-flood events in the early 1990s. High water on the Maas River demanded the evacuation of many citizens, and prompted awareness that flood defenses had to be strengthened to prepare for an emergency. The 1995 and 1996 acts formalized this quixotic route, which permitted lengthy spatial planning procedures to be skipped. The 1992 Water Authority Act stated that the Water Authorities could issue requirements and prohibitions, using a policy known as the ‘Aeur’. In practice, the Aeur provided a legal tool with which Water Authori- ties could regulate land use in three spatial zones on and surrounding flood defenses. This tool was to guarantee that any new structures in these three zones would not jeopardize the integrity of the flood defense, nor the possibilities to broaden the structure in the future, should the need arise (Stoyna, 2001, 2016).

Thus, the 1993 act gave Water Authorities a tool that Akkoij had possessed since 1981, whereas they had previously only had to rely (at least in theory) on the municipal land use plan. Anyone wanting to build anything on or near the flood defense had to request at least two permits: one from the Water Authority, and one from the municipality. So, in sharp contrast to the assumptions, by the end of the twentieth century regulations strengthened the water manager’s authority over land use on and near the flood defense.

In the first decades of the twenty-first cen- tury, water interests have been even more intensively integrated into spatial plans. This has, in turn, increased the ability of water managers to influence spatial plans to ac- commodate their goals. First, in 2001, the Akkoij’s Nobel Waterboards (Administrative Memorandum ‘Water Assessment’) made consulting water managers when drafting land-use plans mandatory. Second, there has been a clear move towards simplifying and integrating regulation into a few comprehen- sive acts. In 2005, the Waterschap (Water Act) replaced the Water Authority Act, the Flood Defense Act and the Delta Act on the large rivers. The Water Act also formalized the 2001 requirement to consult water managers during the design of spatial plans, and intro- duced a variety of bureaucratic documents enabling collaboration between different governmental agencies. For the spatial plan- ning sector, the 2008 Wet op de ruimtelijke ordening (Spatial planning act) and the 2011 Belasting algemene regel ruimtelijke ordening (Decree general regulations for spatial plan- ning, also known as ‘Barto’) aimed to simplify procedures, by combining different permit systems. The permit systems of the water manager and the municipality were merged into the single omgevingsvorderung (environ- mental permit). Barto also requires the protection zones of primary flood defenses to be translated into land use plans.

Concluding remarks

The exploration of the changed dependency between water managers on the one hand and the municipality on the other does not confirm the hypothesis of an increasingly de- pendent water board that has to compromise in order to use municipal planning competen- cies. Rather, water managers have used provisions in the new acts to become increas- ingly independent from municipalities. While these provisions require that water managers be consulted in spatial procedures, they offer the opportunity to bypass the municipalities’ powers when flood safety may be compromised. Spatial tools within the land use plan add another layer of spatial protection to the integrity of flood defenses. An example is the mandatory translation of protection zones into zoning overlays (dubbel- bestemming). Originally these were only protected by the assessment process of the permit system.

What factors have been decisive for the rise of multifunctional flood defenses in the first fifteen of the new millennium remains out of scope. It could be that lack of space in Dutch waterfronts has encouraged the combination of functions at sites that used to accommodate only one function, flood safety. It is also possible that multifunctional uses of flood defenses have been made explicit - as is the case with the Scheveningen Boulevard. However, a broader phenomenon could also be at work: the weakening of Modernism as the defining way of looking at the world around us (Lassen et al., 2014).

Modernist planning and architecture have been associated with functionality, uniformity and separation of functions. This was not only the case with spatial designs, but the way government was organized, with different ministries pursuing separate goals (Meyer et al., 2014). Although modernist thinking was challenged by the late 1970s democratiza- tion movement (Lassen et al., 2014), the shift in paradigm seems to have become more pronounced in the new millennium (Meyer et al., 2014). This is partly due to a growing awareness of quality and the environment we live in (Lassen et al., 2014), but also a move- ment towards plurality. In an interview about the planning process of flood defenses, a water manager at the Delta Water Author- ity stated: “We do not accommodate multiple interests because it’s mandatory, but because it’s the right thing to do.” Maybe, instead of looking at regulatory issues and the integra- tion of water interests into spatial regula- tion, we should consider the recent rise of multifunctional flood defense in the context of this larger phenomenon of increasing inter- action and plurality.