

PROMOTING SUSTAINABLE WATER MANAGEMENT IN AREA DEVELOPMENT: A REGULATORY APPROACH

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Water management is an integral part of sustainable area/urban development, and this article examines the interplay between water law and governance in three cases in the Netherlands to determine what sort of written law can provide normative guidance during governance processes, whilst at the same time leaving ample room for innovation and allowing local actors to determine and implement the solution best suited to local circumstances. It is found that generic, abstract rules do not function well under all circumstances, whereas instrumental rules are not necessarily problematic and sometimes essential. In particular, rules are needed to allocate (financial) responsibility. However, the legal system must develop more refined ways to deal with uncertainty.

1 INTRODUCTION²

This article aims to investigate the interplay between legislation and governance processes in urban development projects, in particular with regard to water management. It will determine how legislation should be drafted to give sufficient normative guidance, whilst leaving enough room for innovation, and to ensure that local actors can find and implement solutions that are suited to local circumstances. Currently, urban planners regard legislation as too restrictive, whereas lawyers frown upon unregulated governance, which infringes upon legal certainty and provides insufficient safeguards to protect environmental quality.

Dutch environmental law is subject to criticism from various corners. Characterised as a system that emphasises legal certainty over flexibility,³ it is now felt to be too rigid to allow for new organic and private-sector-led methods of urban development.⁴ It is seen as a hindrance for economic development, especially in times of economic crisis, where perhaps the balance between economic and environmental concerns should be struck differently.⁵ Some even argue that it is too rigid to accommodate sustainable initiatives with clear benefits for environmental

quality as well as economic gains.⁶ This perceived rigidity is also a problem for the implementation of sustainable area development.

Sustainable area development is a loosely defined concept that has quickly gained popularity in the Netherlands. Key elements of the approach are the search for a balance between people, planet and profit, and synergies between as many separate values as possible. To achieve this, public authorities have to increase cooperation and look beyond sectorial boundaries. An example would be the inclusion of an attractive water body in a residential area that allows the water board to meet its goals for water retention capacity, whilst at the same time contributing to the province's ecological goals.

These problems are caused in part by the fact that many rules are sectorial instead of general and that they have been written for specific situations and problems, as well as by the level of detail and technicality they contain.⁷ Some of these problems are regional in nature, but concerns about sustainability and law are relevant to all. Nor are these problems specific to Dutch law: they are merely the newest incarnation of an all too familiar dilemma about how to strike a balance between legal certainty and flexibility.⁸

This contribution starts by setting out some of the conditions for sustainable urban development and discussing the role of water management in sustainable development. It then proceeds to discuss the extent to which, on the one hand, governance approaches and, on the other hand, legislation are likely to help or hinder bringing about sustainable development. It will be shown that neither governance structures nor legislation suffice on their own, and a clever combination of the two is needed. Next, three case studies about the interplay of water law and governance will be presented to clarify how governance and legislation can complement each other in practice.⁹ The final section presents the findings of the research

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3 E Buitelaar, N Sorel 'Between the rule of law and the quest for control: legal certainty in the Dutch planning system' (2010) 27 *Land Use Policy* 983-89 at 985.

4 PBL, Urhahn Urban Design *Vormgeven aan de spontane stad. Belemmeringen en kansen voor organische stedelijke herontwikkeling* (2012) 15. *Memorandum to the Environmental Planning Act* (2013-2014) Kamerstukken II 33 962 nr 3 at 15.

5 M Lurks 'De economische crisis in het omgevingsrecht' (June 2009) 2 *Tijdschrift voor Omgevingsrecht* 49-50 at 49.

6 H C Borgers *Duurzaam handelen. Een onderzoek naar een normatieve grondslag van het milieurecht* (SDU Den Haag 2012), although he attributes this to the way law is applied rather than to how legislation is drafted.

7 *Memorandum to the Environmental Planning Act* (n 4) 15; F Davidson 'Planning for performance: requirements for sustainable development' (1996) 20(3) *Habitat Intl* 445-62 at 459; H F M W van Rijswijk, W G M Salet 'Enabling the contextualization of legal rules in responsive strategies to climate change' (2012) *Ecology and Society* 1-8 at 4.

8 See eg J Raz 'Legal principles and the limits of law' (1972) 81(5) *Yale Law Journal* 823-54 at 841; Davidson (n 7) 454; C S Diver 'The optimal precision of administrative rules' (1983) 93 *Yale Law Journal* 65-109.

9 The case studies were conducted by the researchers of the CONTEXT programme and can be found in full at <http://context.verdus.nl/pagina.asp?id=1413>.

project and explains what sort of regulation is needed to allow local actors to create their own sustainable solutions to water management problems, and what successful governance processes look like.

2 THE TRANSITION TO SUSTAINABILITY

Sustainability requires us to meet the needs of the current generation without compromising future generations' ability to meet theirs.¹⁰ This requires a careful balancing between economic, social and environmental interests so as at least to preserve the planet's capacity to foster life.¹¹ Water management is an essential aspect of any attempt at sustainable urban development. Maintaining a good chemical and ecological quality is important, both because drinking water is an essential resource and because many other ecosystem services depend on it.¹² In addition, climate change causes changes to the global water cycle, which must be taken into account in current development projects to allow them to prosper in the future, as well as today.¹³ Water retention capacity for times of drought, and flood protection measures, must be future-proof.¹⁴ This is true for the Netherlands, but also for large conglomerations in the rest of the world, which tend to concentrate around sources of fresh water and in coastal regions.¹⁵

The change towards a more sustainable society has been characterised as a *transition process*.¹⁶ Achieving more sustainable urban development is part of this process. A transition process is a time of – often rapid – change. Sustainability will most likely be achieved through a series of innovations, many of which we cannot imagine yet. These changes cannot be imposed by government institutions, but rather come from society itself. Thus, traditional top-down steering philosophies with a strong role for legislation are not likely to contribute much to the process. Legislators lack the knowledge to predict the effects of legislation on the complex society in which they intervene. Thus, legislation is an ill-suited choice to reach policy objectives.¹⁷

Instead, we need flexible and adaptive decision-making, openness to participation by a wide range of actors, effective multi-level governance and social structures that promote learning and adaptability without limiting the

options for future development.¹⁸ That does not mean there is no role for government actors. They should facilitate the developments, stimulate other actors to participate and provide normative guidance.¹⁹ Law can have a place here, but should not restrict the desired changes and developments.

3 GOVERNANCE OR LAW?

The conditions set out above suggest that transition processes could be facilitated by a governance approach. Governance allows for the involvement of a multitude of actors and, because of the lack of formal rules, these actors have the freedom and flexibility to meet unforeseen challenges and to embrace innovation.²⁰

This is especially true with regard to water management. There is a shift in thinking about private responsibility: public authorities are starting to feel that private parties can and should contribute to water management.²¹ Farmers should take some responsibility for ensuring access to water during dry spells, residents should take care not to diminish water drainage capacity and even flood safety is no longer an exclusive government responsibility.²² In addition, knowledge and other resources are scattered, as are competences and responsibilities, which necessitates the involvement of a large number of actors.²³

Governance might be a good way to promote sustainable area development and to deal with water management aspects involved in the process: it provides room for private initiative, and it offers the flexibility required to deal with changes in the water cycle, which cannot always be foreseen.

However, a heavy reliance on governance also has its disadvantages. Weak interests will tend to be under-represented and long-term effects may be discounted.²⁴ This is particularly problematic with regard to creating sustainable solutions. Local authorities may engage in a race to the bottom to attract investment and jobs, a classical argument as to why environmental protection should be ensured at a higher level.²⁵ More generally, the behaviour of authorities can become less predictable, resulting in arbitrariness and differences in treatment of individuals.²⁶ In addition, the outcome of governance processes is uncertain, with detrimental effects for legal certainty as well as the investment climate.²⁷

10 World Commission on Environment and Development (the Brundtland Commission) *Our Common Future* (Oxford University Press Oxford 1987).

11 T Kuhlman, J. Farrington 'What is sustainability?' (2010) 2 *Sustainability* 3436–48 at 3438–39.

12 B D Richter, R Mathews, D L Harrison and R Wigington 'Ecologically sustainable water management: managing river flows for ecological integrity' (2003) 13(1) *Ecological Applications* 206–24.

13 H K Gilissen *Adaptatie aan klimaatverandering in het Nederlandse waterbeheer. Verantwoordelijkheden en aansprakelijkheid* (Kluwer Deventer 2013).

14 *ibid.*

15 L Creel *Ripple Effects: Population and Coastal Regions* (Population Reference Bureau Washington DC 2003) 1.

16 J Cramer 'De bijdrage van milieurecht aan duurzame ontwikkeling' in N Teesing (ed) *De toekomst van het milieurecht: eenvoudig beter?* (Bju The Hague 2012) 23; *Memorandum to the Environmental Planning Act* (n 4) 13.

17 F A Hayek *Law, Legislation and Liberty: A New Statement of the Liberal Principles of Justice and Political Economy Vol 1 Rules and Order* (Routledge and Kegan Paul London 1973) and *Vol 2 The Mirage of Social Justice* (Routledge and Kegan Paul London 1976).

18 J Ebbeson 'The rule of law in governance of complex socio-ecological changes' (2010) 20 *Global Environmental Change* 414–22 at 414.

19 Cramer (n 16) 23–25.

20 Van Rijswijk and Salet (n 7) 1.

21 Gilissen (n 13) 128.

22 OECD *Water Governance in the Netherlands. Fit for the Future?* (OECD Publishing OECD Studies on Water 2014) 109 at 129 <http://dx.doi.org/10.1787/9789264102637-en>.

23 OECD (n 22) 90; Gilissen (n 13) 129.

24 Y Rydin, M Pennington 'Public participation and local environmental planning: the collective action problem and the potential of social capital' (2000) 5(2) *Local Environment* 153–69 at 158–59.

25 A Hoppe, H Voelzkow 'Raumordnungs- und Regionalpolitik: Rahmenbedingungen, Entwicklungen, Perspektiven' in T Ellwein, E Holtman (eds) *50 Jahre Bundesrepublik Deutschland. Rahmenbedingungen—Entwicklungen—Perspektiven* (Westdeutscher Verlag Opladen Germany 1999) 279–96.

26 Raz (n 8); R Dworkin *Law's Empire* (Harvard University Press Cambridge Mass 1986).

27 Buitelaar and Sorel (n 3) 988; G Majone 'Credibility and commitment' in G Kochendörfer-Lucius, B Pleskovic (eds) *Investment Climate, Growth and Poverty* (World Bank Washington 2005) 105–14 at 105.

Legislation has its own pitfalls, however. Ideally, legal rules are generic and abstract, and can be applied to a large variety of situations. They do not need to be changed very often, because they represent values that are enshrined in society, which are fairly durable themselves.²⁸ In practice, these ideal rules are rarely found. Legislators enact rules as a reaction to perceived social problems, and the rules often offer a solution for exactly that problem only.²⁹ When in practice they fall short, because the legislator did not understand the full extent of the problem, or because inevitably new problems turn up, the legislator responds by creating still more rules. In environmental law, this has led to a large collection of detailed, instrumental and often sectorial rules, which are subject to change whenever societal change or new technologies mean they become obsolete, or at least less useful. During a period of transition, legislation will become outdated quickly and the legislative process can be slow and cumbersome, so that new developments are difficult to manage. This is often construed as a problem. The rules allegedly restrict flexibility, hinder innovative solutions and are difficult to work with.

On the other hand, legislation cannot simply be omitted. It offers an opportunity to correct the weaknesses inherent in unregulated governance processes, protecting weak interests and parties by giving them access to decision-making procedures and legal courts.³⁰ It gives normative guidance to local actors, and it provides actors with legal certainty, an asset that cannot be missed.³¹ In the UK, where public authorities have a wider margin of discretion when making planning decisions,³² the lack of legal certainty is perceived as the main problem that needs to be addressed with the applicable legislation.³³

4 GOVERNANCE AND LAW

Thus, some authors argue that legislation and governance should be combined and that they can complement each other.³⁴ They acknowledge the self-regulating potential of society, and argue that it is important that legislation builds upon existing values and unwritten norms, so that it can rely on informal mechanisms of enforcement.³⁵ Regulation, in their opinion, can give normative guidance by making those values explicit, but should leave sufficient room for actors to take local and current circumstances into account. They assume that generic, abstract and durable rules are best suited to provide this normative guidance.³⁶ Detailed, location-specific rules should be avoided, because they restrict local decision-making too much.³⁷ Hence, they agree that the current state of

environmental law, scattered and detailed as it is, is likely to be a hindrance to sustainable development.³⁸

But is this true? We assume in this contribution that 'good' legislation promotes sustainable solutions, whilst not restricting the room available to local authorities to come up with solutions that are well suited to local circumstances, or which are innovative but unforeseen by a central legislator. However, empirical data about the interaction between governance and law are lacking.³⁹ Thus, it is hard to say something about the sorts of legal norms that meet these criteria beyond what legal theorists have dreamt up. Although the assumption that general rules offer a great deal of room to local actors to come up with innovative ideas is intuitively appealing, we do not know whether it is true.

The remainder of this article presents three case studies where various actors have tried to come up with sustainable solutions to water management problems within the boundaries set by environmental law. In the Haarlemmermeer case, actors tried to include extra water retention capacity in addition to what was legally required to deal with climate change, but failed to implement the sustainable solution they had designed. In the Utrecht station area, the municipality introduced an innovative technique for decontaminating groundwater, which was non-existent when the relevant legislation was enacted. In the Markermeer-IJmeer case, actors came up with an innovative solution to improve the ecological quality of a large body of water.

5 WATER RETENTION CAPACITY: HAARLEMMERMEER⁴⁰

The Haarlemmermeer is a polder in the province of North Holland, not far from Amsterdam. The north-east of the municipality houses the main Dutch airport, Schiphol. The municipality contains several towns but, until recently, the polder was mainly used for agriculture. Water management in the polder is tailored to this use. The water system in Haarlemmermeer is not self-sufficient. The polder relies on water from outside to ensure a sufficiently high water level during summer, whereas in the winter water is pumped out of the polder. The current system is not future proof: there are threats of water shortages and salinisation.

The Haarlemmermeer is also the location of choice for the development of new housing to resolve the shortage in the Amsterdam metropolitan area. The development project takes an integrated approach: it aims to create new housing, improve the water management in the Haarlemmermeer polder, address the shortage of recreational space in the municipality and resolve mobility issues. This programme is ambitious: the space needed for the realisation of all the plans exceeds the available hectares, so a combination of functions is necessary. The polder's proximity to the airport means the number of

28 L L Fuller *The Morality of Law* (Yale University Press New Haven Connecticut USA 1964).

29 Van Rijswijk and Salet (n 7) 2–3.

30 Ebbeson (n 18) 416.

31 *ibid* 417.

32 Buitelaar and Sorel (n 3) 984.

33 UK Government *Enterprise Zone Prospectus* (Department of Communities and Local Government London 2011) 10.

34 Van Rijswijk and Salet (n 7); Ebbeson (n 18).

35 A Buijze, W Salet and M van Rijswijk 'How central interventions enable contextualized practices of sustainable development' (forthcoming).

36 Van Rijswijk and Salet (n 7) 4; Buitelaar and Sorel (n 3) 988.

37 Buitelaar and Sorel (n 3) 988.

38 Van Rijswijk and Salet (n 7) 3.

39 Indeed, the CONTEXT research project was launched to test the hypotheses that van Rijswijk and Salet (n 7) put forward.

40 The case description is based on S Dembski *Case Study Amsterdam Buiksloterham, the Netherlands: The Challenge of Planning Organic Transformation* (CONTEXT Report 2 AISSR programme group Urban Planning Amsterdam 2013).

applicable rules increases even further, because the legislation relating to Schiphol has to be taken into account and noise exposure rules become harder to comply with. Thus, the potential for clashes between sectorial rules is clearly present.

However, although the applicable rules did limit what was possible within the area, this was not perceived as problematic: 'Though limiting development options, the necessity of the [norm] is widely accepted. It also provides certainty to both developers and the airport'.⁴¹ For example, rules that aim to reduce the goose population in the vicinity of the airport to prevent collisions with planes are widely supported, even though they make it more difficult to realise water retention capacity. Nevertheless, the project did eventually fall through when the national government decided to realise a 380 kV overhead power line in the plan area, making it impossible to realise a high quality development that also had a solid business case.

The project included two specific measures related to water management: a detention pond of 1 million cubic meters to deal with peak loads and a 2 million cubic meter retention pond to make the Haarlemmermeer water system self-sufficient, which would remove the need to pump water in and out of the polder. The realisation of the ponds was complicated slightly by the regulations pertaining to Schiphol: because bird collisions are a risk to aviation safety, large water bodies in the vicinity of the airport are discouraged. The danger they pose to aircraft must be taken into account when deciding to create new water bodies. However, this problem was easily resolved by electing to broaden existing ditches instead of creating one large body of water. What was more important was the allocation of responsibilities. For the detention pond, matters were clear: its realisation was a core task of the water board based on the National Policy Accord on Water and the Water Act.⁴² Although it was included in the integrated plans for the area, it was clear who was responsible for its realisation and its financing was independent of the rest of the project. Sadly, the realisation of the retention pond was not nearly as easy, and indeed fell through with the rest of the project when the decision on the power line was made. The retention pond was a clear example of a sustainability measure: it was aimed at ensuring sustainable water management in the Haarlemmermeer in the face of climate change and impending water shortages. There were no legal barriers to its realisation, but neither was there a clearly allocated legal responsibility to do so.

Although there is an obligation to take climate change into account in water management, which can be derived from the principle of carefulness, this obligation is very general and undefined: the principle in general requires that administrative authorities collect all necessary information concerning relevant facts and interests before they take a decision.⁴³ The development of a robust and climate proof water system is a 'new development', and as such it is excluded from the duties of water boards.⁴⁴ Instead, its

creation was a 'shared ambition'. It was also unclear who should fund it. Indeed, the retention pond competed for funding with other projects, such as the realisation of more green space in the municipality. Its realisation became part of a negotiated package deal, and its integration into the overall project resulted in its not being realised when the rest of the project fell through. Dembski concludes that:

The failure of the Westflank⁴⁵ was not a regulation but a governance problem. The regulation barriers crucial for the Westflank were either respected from the very beginning or, where considered necessary and politically feasible, negotiated and adapted. All this time, the Westflank project continued without successfully addressing some of the crucial questions. There was no shared sense of urgency and no clear problem ownership. Additionally, there seemed to be plenty of political no-go areas and hidden agendas that were not revealed. As a consequence, it proved difficult to discuss the agreed project objectives and develop real alternatives. *The results of a soft governance process became hard and inflexible.*⁴⁶

The case study shows that an integrated approach is not necessarily more flexible: it does increase the range of possible outcomes, but it makes it more difficult to adapt the integrated plan – the result of extensive negotiations and balancing of interests – when unexpected developments occur, in this case the power line. The isolated detention pond, on the other hand, was realised independently of the project.

6 GROUNDWATER: UTRECHT STATION AREA⁴⁷

Utrecht is the fourth largest city in the Netherlands. Currently, part of the inner city is being renewed: the station, the neighbouring shopping centre and the Trade Fair are being renewed, and new facilities, housing and offices will be added. The project is realised in close cooperation with the private parties that own the real estate in the area. The presence of contaminated groundwater is one of the complications the project faces. This issue is dealt with in the Soil Protection Act.⁴⁸ The goal of this Act is to prevent new contamination and to ensure the so-called functional decontamination of existing pollution. This means that if existing contamination poses a danger to the environment or to human health, decontamination is required to the extent this is necessary for the intended use of the land. Not all existing contaminations need to be cleaned, but moving them is prohibited.

Because construction activities can affect existing contamination, their likely consequences must be examined up front. In serious cases, decontamination may be necessary to make construction possible. New cases of contamination are subject to a different regime: Article 13 of the Soil Protection Act imposes a duty of care to do everything that can be reasonably required to prevent new cases of contamination or, if that proves impossible, to clean them up immediately.

45 The Westflank is part of the municipality of Haarlemmermeer, and the area where the new developments would take place.

46 Dembski (n 40) 54 (emphasis in original).

47 The case description is based on A Buijze *Case Study Utrecht Station Area, the Netherlands: How PPPs Restructured a Station, a Shopping Mall and the Law* (CONTEXT Report 4 AISSR programme group Urban Planning Amsterdam 2013).

48 Wet Bodembescherming Stb 1996 496.

41 *ibid* 41.

42 Nationaal Bestuursakkoord Water 2003 www.helpdeskwater.nl/publish/pages/473/nationaal_bestuursakkoord_water.pdf.

43 Gilissen (n 13) 449 para 4.4, where he argues that the legislator should clarify this obligation.

44 Water Authorities Act Stb 1999 331 art 1.

Many of the rules in the Soil Protection Act are of the kind that one would expect to cause problems. The legislation is sectorial, and prescribes – in great detail – how the objectives of the Act are to be realised. It assumes that individual cases of contamination can be delineated, and prescribes expensive investigation duties. When its main approach – identifying and decontaminating individual cases of pollution – is not feasible, it outlines exceptions to the main rule. These exceptions are written for specific circumstances, although the actual text of the Act abstracts from them. Article 42, for example, introduces the cluster approach, where a cluster of cases can be decontaminated simultaneously. Although it is left to the local authorities to determine whether a cluster approach is justified, applying it still requires the identification of individual cases.

For various reasons, the standard approach envisioned in the Soil Protection Act was not feasible in the station area. The contamination existed for a large part of volatile organic chlorine compounds (VOCl_s). This kind of contamination spreads easily, and so any construction activity is likely to have adverse consequences that require decontamination or at least counter-measures to prevent the pollution from spreading. It also makes it impossible to discern individual cases of pollution where the contamination has dispersed and become mingled. This leads to problems in the application of the Soil Protection Act, because it is no longer possible to delineate a case of pollution that needs to be cleansed, nor is it possible to identify the party responsible for cleaning it.

In addition, the research and cleaning costs were prohibitive, meaning that certain developments could not proceed. If there is no development, there is no legal obligation to decontaminate, so this is a lose-lose situation: the projects cannot continue but neither is the soil cleaned up. One project that was especially problematic was the inclusion of geothermal heat pumps in the station area. These pumps rely on pumping groundwater to heat buildings in winter and cool them in summer. They would contribute to the CO₂ emission reduction goals set for the station area, but they would also spread contaminated groundwater.

The municipality devised a new, area-oriented technique for decontaminating the area as a whole: the bio-washing machine. This was an area-oriented approach that relied on the natural degradation of VOCl_s. This process was expedited by pumping the water around and adding bacteria. The municipality expects this will result in a marked improvement in soil quality in 30 years' time. The solution was likely better to contribute to the realisation of the objectives of the Soil Protection Act than its classic application would: after all, that would result in no development and no decontamination. It was also considerably cheaper, and allowed for geothermal heat pumps in the area. These pumps would contribute to the CO₂ emission reduction goals for the areas, and would be impossible to realise without the bio-washing machine because they relied on pumping around contaminated water.

This solution was supported by all layers of government, as well as the main private parties who owned property in the area. However, it was not in line with the Soil Protection Act, at least not with how it was interpreted and applied in practice. However, the Act contains ample pro-

visions that award discretionary room to local authorities. The municipality made optimal use of its discretionary room, with the support of the state attorney, and calculated a way of fitting the bio-washing machine into the framework of the Soil Protection Act.

In order to justify the area approach, the municipality relied on the cluster approach in the Soil Protection Act. Although when interpreted strictly this can only be applied to a cluster of individually discernable cases of pollution, the provision explicitly gives discretionary room to the municipality to determine whether a cluster of cases exists. Thus, it was essentially up to the municipality to justify why it felt that it would be appropriate to use a cluster approach, and that is exactly what the municipality did. The clear benefits of the bio-washing machine provided the municipality with a host of arguments. Although there was a slight risk of the Council of State (the highest administrative court in the Netherlands) eventually rejecting this approach, the municipality felt it had made the right decision, and one that was within the boundaries set by the law.

The reinfiltration of contaminated groundwater is classified as new pollution and is subject to the regime of Article 13 of the Soil Protection Act. Thus, the municipality is under a duty of care regarding everything that can be reasonably asked of it to prevent reinfiltration or, if that is impossible, at least to clean up the new contamination. The municipality argued that it had met its duty of care to prevent new contamination from occurring because its overall plan would contribute to better soil quality. The geothermal heat pumps were an essential part of that, because pumping around the water expedited the degradation of the VOCl_s. Thus, the reinfiltration of contaminated water was justifiable.

Despite the support of the private parties, the municipality bore the majority of the costs for the project. This is perhaps unfair, because the private parties would profit financially from the bio-washing machine. However, the municipality has no legal instruments to enforce contributions, so it relied entirely on negotiation and voluntary contributions.

This case shows that even detailed, sectorial legislation offers room for flexibility and innovation, provided the chosen solution is widely supported and public authorities are willing to expend effort to show that their solution is justifiable. Although the regime for new pollution seems more lenient in the sense that the applicable provision is less specific and detailed and thus should offer more room for flexibility, it did not prove much easier to apply in practice. Policy rules and court rulings had established some appropriate ways to deal with the duty of care to prevent new contamination, and deviating from that practice required as much justification and research as a novel interpretation of more detailed provisions in the Act.⁴⁹

49 For an impression of how the municipality struggled with the correct application of general norms see R P M Fennis *Gebiedsgerichte aanpak van grondwaterverontreiniging – een onderzoek naar de gebiedsgerichte aanpak van grondwaterverontreiniging binnen de in Nederland en Europa erkende milieurechtelijke beginselen* (Utrecht University Utrecht 2011) http://www.uu.nl/faculty/leg/NL/organisatie/departementen/departementrechtsgelcerheid/organisatie/onderdelen/centrumvoorumgevingsrechtenbelid/publicaties/Documents/SBRscriptie%20Ren%C3%A9%20Fennis_2c%20februari%202012.pdf.

The case of the bio-washing machine also shows the value of an inspiring vision: the plan helped to improve soil quality, made sustainable energy solutions for the station area possible and had clear economic benefits. It was not difficult to get actors on board, and it has now become something of an export product for the municipality: it is a success story that inspires cities all over the world.⁵⁰

7 ECOLOGICAL QUALITY: MARKERMEER-IJMEER⁵¹

Markermeer-IJmeer is a lake in the centre of the Netherlands. It is a protected nature area and borders on Almere and Amsterdam. Housing is in short supply in the region, and there are plans to enlarge Almere by building 60,000 houses and to add a new district – IJburg II – to Amsterdam. To unlock these areas, existing infrastructure will have to be improved. These developments will have to deal with the presence of the protected nature conservation area and the applicable rules that aim to protect its integrity. This comprises both nature protection legislation and water law, more specifically the Nature Protection Act and the Water Law, both of which transpose European legislation – the Birds and Habitats Directives and the Water Framework Directive.

Based on the Nature Protection Act, developments can in principle only be allowed if there is no reasonable scientific doubt that they will not have a significant impact on the protected area. This rule can be abandoned if there is a pressing social need but, in that case, the negative impact must be mitigated. If mitigation is impossible – and only then – the negative impact may be compensated. The Water Framework Directive requires Member States to set water quality standards that must be realised by 2015, although extensions are possible.⁵²

Compliance with this legislation is made more difficult by the existence of a so-called autonomous negative trend in the lake. This means that, if no action is taken, the quality of the water and the ecosystem will degrade over time. The applicable legislation does not seem to have considered the possibility of an autonomous negative trend: the Birds and Habitats Directives are based on the idea that habitats and species must be conserved. Protecting them from the negative impact of development is the means to this end. However, in the case of Markermeer-IJmeer, this is insufficient. The Water Framework Directive is more lenient towards heavily modified water bodies, which the Markermeer-IJmeer definitely qualifies as, and sets lower quality standards for such bodies. Even so, meeting this standard requires positive action.

Even in the absence of the autonomous negative trend, the consequences of the Nature Protection Act are severe. For each development, either the absence of a negative

impact or the presence of a pressing social need must be shown. In the latter case, the damage to the protected area must be mitigated – preferably – or compensated. This requires large amounts of research and leads to uncertainty for each project about its feasibility.

A number of actors have formed a coalition to solve this problem. They have come up with the idea of a robust ecological system (*toekomstbestendig ecologisch systeem*, literally a future-proof ecological system). They intend to enable future developments near the lake by creating a ‘reservoir’ of compensation and outstanding ecological quality. Moreover, by strengthening the ecological quality of the lake, it will become more resistant to negative impacts from development. This solution differs from the standard approach in a number of ways. The objective of the applicable legislation is still realised; in fact, the overall ecological quality of the lake will improve. However, the idea that compensation should occur in the same area as the ecological losses was abandoned. In addition, the scale of the compensation is much larger than usual and compensating measures are no longer tied to one specific development. The new approach negates the need to undertake extensive research for each new development and is much cheaper than compensating for individual projects. In spite of the financial gains, financing the robust ecological system has proved complicated. When using the traditional approach, the costs for compensation can be tied to the project that caused them. With the robust ecological system, there are few guidelines to determine who should pay. It has proved difficult to resolve this in a rather informal governance process.

The robust ecological system has not yet been fully implemented, although some preliminary steps have been taken. Its urgency is not felt as strongly as it once was: the crisis has dampened the enthusiasm for the housing and infrastructure projects in the area. Whether this solution would hold up when challenged before the courts is uncertain: it is defensible, since it is a more effective way of realising the objectives of the EU directives, which generally leave the manner in which objectives are to be achieved to the Member States, but it is also a clear departure from Dutch practice under the Nature Protection Act. Only the courts can determine how it will turn out eventually. However, there is broad support for the measure.

Previous developments in the region faced strong opposition from environmental interest groups. However, many of these groups have embraced the robust ecological system.⁵³ We see that the discussion is now framed in a very different way: ecology is presented as an opportunity rather than as a barrier to development. The Nature Protection Act is not seen as a barrier to development; rather, the robust ecological system is presented as a tool to make development possible. This framing is important because, as Waterhout and others conclude, the success of innovative solutions depends on acceptance by stakeholders: the easiest way to ensure that decisions will not be annulled by the courts is to ensure that nobody will challenge them.

Support from stakeholders is important, but the success of contextualisation also depends on the willingness of the

50 See <http://www.citychlor.eu/> and <http://globalsoilweek.org/>.

51 The case description is based on B Waterhout, W Zonneveld and E Louw *Case Study Markermeer-IJmeer, the Netherlands: Emerging Contextualization and Governance Complexity* (CONTEXT Report 5 AISSR programme group Urban Planning Amsterdam 2013).

52 See P De Smedt and H F M W van Rijswijk ‘Nature conservation and water management: one battle?’ in C Born (ed) *20 Years of Habitats Directive* (Routledge-Earthscan London 2014) for more on the relation between the Birds and Habitats Directives and the Water Framework Directive.

53 One of them, Natuurmonumenten, has even contributed financially to its realisation.

eventual arbiter of legal norms to embrace it. Uncertainty about this is problematic, and may cause risk-aversion. In this particular case that did not happen, at least not enough to stall the project, perhaps because of its high potential gains. The local plan initiators did approach the European Commission directly for advice on how to make plans more ecologically and legally robust to gain more certainty. The Commission found the plans to conform to the spirit of EU legislation, but warned that the final decision on whether the plans were in compliance with the directives should be made by the Court of Justice.

The law in this case was a trigger for action: in combination with the autonomous negative trend in the area, it required a proactive approach. It does appear to give sufficient discretionary room for innovation, although this has not been tested before the courts. Waterhout and others stress the importance of the commitment of all relevant actors – the most important weakness they see in the process is the lack of involvement and commitment of the national and provincial governments – and of the existence of a feeling of urgency.

This case study shows the importance of good governance for the effective contextualisation of legal rules. The actual flexibility that rules afford will depend to a large extent on the way that various actors handle them. It also shows the effects of uncertainty about the interpretation that will be given to rules by courts, or rather, the uncertainty about the extent to which courts – as the final arbiters of the meaning of legislation – will accept the interpretation of other actors.

This emphasises the importance of durability. Durable written rules will in fact allow developments in practice, whilst the framework established to judge whether novel interpretations and applications of written rules are acceptable will gain clarity over time. The latter point can be illustrated by the evolution of soil protection legislation, where technological change is prevalent, and changes in legislation are relatively minor or unnecessary. Finally, the case suggests that a proactive approach makes it easier to handle stringent demands that flow from legislation. Environmental concerns are reframed: they are no longer a barrier to development; rather, the creation of a robust ecological zone creates an opportunity for development that would otherwise not be possible.

8 CONCLUSION: GOOD LEGISLATION

Law in application is more flexible than it appears on paper. Buitelaar and Sorel have already said as much specifically for planning law.⁵⁴ This is not necessarily a problem for the safeguarding function of legislation. A minimum level of protection is still ensured because if an innovative 'solution' is implemented at the cost of environmental objectives, interest groups can go to court. Both the Utrecht station area case and the Markermeer-IJmeer case show that authorities take great care to justify innovative decisions to limit court procedures and improve the chances the decision will hold up before a court. Hence, the easy access to courts in the Netherlands may be a mechanism that ensures that the safeguarding function is not lost if governance processes result in non-traditional solutions.

⁵⁴ Buitelaar and Sorel (n 3) 985.

When we look at the factual interplay between law and governance, a couple of things stand out. First, the assumption that environmental law in its current form, with its detailed, instrumental and often sectorial rules, is a serious hindrance for governance processes reaching sustainable outcomes appears to be false. In those cases where no sustainable solution was implemented, the obstacles were mostly financial. The rules were not problematic.

In those cases where an innovative solution that was not foreseen by the central legislator was found by local actors, there were no insurmountable legal barriers to its implementation. That does not mean it was necessarily easy to comply with the rules. Deviating from standard solutions requires extensive justification and motivation, and public authorities need to do large amounts of research to prove that it is plausible that the innovations they want to implement do indeed lead to the desired outcome. This process is made easier if legislation has clearly defined goals. Functional decontamination, the goal of the Dutch Soil Protection Act, allows for meaningful debate about how to achieve it. Both legislation that has a goal that is too generic, and purely instrumental legislation that does not define the goals that it serves, make it harder to implement novel techniques and solutions.⁵⁵

General rules are in practice much less workable than legal theory suggests. It takes a great deal of effort to apply such norms in local conditions. If they award true discretionary room, the administration has to justify and motivate its decisions. If not, they have to justify their judgment on how the norm applies in local circumstances. Either way, their evaluation is subject to judicial review, and the outcome of court cases is uncertain. Thus, even when there are general rules that theoretically allow for a variety of solutions to problems that local authorities encounter, standard approaches and rules of thumb tend to develop. Deviating from the standard again requires extensive justification and motivation.

Secondly, sustainability ambitions pay off. In many urban development projects, environmental rules are seen as an obstacle. They set a boundary within which the real project goals – profits – are to be realised and optimised. Abandoning this approach and adopting environmental quality and sustainability as additional project goals has some clear advantages. It helps to bring actors on board who would otherwise fight the project because of its detrimental effects on the environment. Instead, their time and expertise can be used to improve the project, which can help to create new ideas. Ambition, in other words, generates enthusiasm. This mechanism is clearly at work in the Markermeer-IJmeer case. In the station area, the positive approach of the bio-washing machine may be part of the explanation for the lack of legal procedures on this issue, whereas the rest of the project is heavily contested.⁵⁶

⁵⁵ This confirms the hypothesis put forward by van Rijswijk and Salet (n 7).

⁵⁶ This is in line with insights from planning theory, where inspiration – a shared vision between actors – is a rare thing, but very important in situations where government has to deal with a lot of other actors and does not have control over all resources. Davidson (n 7) 450.

Legislation should therefore be drafted in a way that stimulates actors to see sustainability as a goal, rather than a limitation on what would otherwise be possible. Norms that oblige actors to achieve something and that require positive action seem to stimulate the concept that environmental goals should be embraced: achieving functional decontamination or good ecological quality stimulates action, whereas a norm prohibiting a decline in environmental quality stimulates actors to see the environment as an obstacle.

An important risk factor when trying to implement sustainable urban development is money. In the

Haarlemmermeer case the lack of financing was an important factor in the cancellation of the plans, or part of the plans. In the station area and Markermeer-IJmeer cases the plans combined environmental gains with financial gains. Nonetheless, financing them proved difficult. In the station case, the private parties stood to reap large benefits, whilst providing a minimal amount of funding. In the Markermeer-IJmeer case the project could only be launched after a charitable donation. Thus, although actors can be trusted to come up with sustainable plans, the legislator may help by allocating financial responsibility. Alternatively, subsidies could be used as a steering mechanism.

