



2009 - 2015

National Water Plan



National Water Plan – A Summary

2

The National Water Plan: The Netherlands, a safe and liveable delta, now and in the future.

In the last decade, the Fourth National Policy Document on Water Management (*Vierde Nota waterhuishouding*), the Water Management in the 21st Century Advisory Committee (*Commissie Waterbeheer 21^e eeuw*) and the National Administrative Agreement on Water (*Nationaal Bestuursakkoord Water*) represented an important impulse for water management. With this first National Water Plan, which is also a framework vision based on the Water Act (*Waterwet*) and the Spatial Planning Act (*Wet ruimtelijke ordening*) and which was drafted for the 2009-2015 planning period, we are entering a new phase. Because we want future generations to be able to enjoy the Netherlands as a safe and affluent land of water, we have to find answers now to developments in climate, demography and economy, and invest in sustainable water management. Effective flood defences, the prevention of flooding and waterlogging and drought wherever possible, and good water quality are basic preconditions for prosperity and well-being. These are achievements that the Netherlands owes, in large measure, to water, to its favourable location and to the excellent supply of freshwater. The Netherlands, an attractive country with an abundance of water and high levels of safety, contributes positively towards the quality of the living environment and the conservation of biodiversity. Water is wonderful and the Dutch love it.

The aim is crystal clear: the Netherlands, a safe and liveable delta, now and in the future.

Delta Programme

In the 2007 Water Vision (*Watervisie*), the Cabinet set out the aim of stepping up its ambitions and pursuing sustainable and climate-proof water management. To achieve this aim, the Cabinet established a second Delta Committee (*Deltacommissie*) to advise on water policy for the next century and beyond. In 2008, the Delta Committee proposed increasing flood protection and securing freshwater supplies in the long term. The Cabinet endorsed this cohesive vision and decided to use it as a starting point for further elaboration.

In this context, a draft Delta Act was formulated in 2009, which regulates the legal basis of the Delta Programme as well as the tasks and powers of the Delta Commissioner (*Deltacommissaris*) and the Delta Committee. The Delta Commissioner was appointed in 2009. The National Water Plan presents an initial elaboration of the Delta Programme. The aim of the Delta Programme is to achieve sustainable water safety and a sustainable freshwater supply by means of an efficient, resolute and comprehensive approach to the major water tasks the Netherlands will be facing in the coming decades. A start has been made on the organisational structure for the concrete development and elaboration of the programme in nine sub-programmes. These are the generic

programmes Water Safety, Freshwater Supply and New Construction and Reorganisation, and the area-based sub-programmes Coast, Wadden Area, southwest Delta, the Rijnmond and Drechtsteden region, the Rivers, and the IJsselmeer area.

Expenditure for the Delta Programme has not been included in the National Water Plan and will be worked out in the planning period. Comprising fixed, stable and substantial funding amounting to at least one billion euros annually from 2020 onward, the Delta Fund will enable the forceful implementation of the Delta Programme.

Measures in full swing

Alongside all these plans for ensuring the future safety and liveability of the Netherlands, the implementation of measures is already in full swing. The Flood Protection Programme (*Hoogwaterbeschermingsprogramma*) and the programmes for river widening – Room for the River (*Ruimte voor de Rivier*) and the Meuse Projects (*Maaswerken*) – are making good progress. The National Administrative Agreement on Water, updated in 2008, is being used to organise the water systems by 2015, especially in terms of flooding, waterlogging and water shortages. In the planning period, river basin management plans will be carried out to ensure improvements to the necessary water quality of the Ems, Meuse and Scheldt rivers and the Rhine delta.

Working together to implement water policy

Cooperation between government bodies is being intensified. Examples include the result-driven work on the Water Framework Directive (*Kaderrichtlijn Water*) and Room for the River. It is being considered whether collaboration in the individual river basins can be made more effective. The Delta Commissioner will be given a key task when it comes to water safety and freshwater supply. An area-based approach is to become the standard for implementing measures, which means not only deciding what is needed from the perspective of the water system but, more specifically, working with all stakeholders to apply a development-gear approach and seize opportunities. Innovating and generating new knowledge are key to making the most of these opportunities and bringing about renewal. The central government wants everyone to cooperate proactively. For many, water is still a given. What we need is to raise awareness of the opportunities afforded, as well as the risks entailed.

Going with the flow, offering resistance, seizing opportunities

The basic principle of sustainable water management is to 'go with the flow of natural processes where possible, offer resistance where necessary and seize opportunities to foster prosperity and well-being'. Making room for water, going with the flow where

possible and utilising natural processes as is being done in Room for the River are essential for sustainable water management. The central government considers it vital that water tasks and measures are optimally embedded into other types of tasks and measures.

Offering resistance fits in well with the Dutch tradition of building dykes and dams to defend the land against water and manage water levels in polders, tasks that are essential if we are to continue to live and work in the Netherlands. Grasping the opportunities water offers is an attitude the Cabinet values highly. Water plays a significant part in enhancing the spatial quality of rural and urban areas – water is what makes the Netherlands beautiful. All manner of activities can be combined with water management, such as leisure activities, nature and landscape, agriculture, renewable energy production and housing. Taking an area-based approach is often a way of improving water management whilst reinforcing the economy and the living environment at the same time. This should be done at the lowest possible social cost.

Enhancing water and space

Taking short-term and long-term water management requirements into consideration during spatial development is essential for a sustainable and climate-proof water system. Conversely, water management authorities need to be aware that there is far more to

be achieved in all areas than just water-related targets. They must also anticipate spatial and economic developments.

If a sustainable and climate-proof water system is to be accomplished, water must play a more influential role than it has done so far in decisions regarding major tasks in the areas of urbanisation, commerce, industry and agriculture, nature, landscape and leisure activities. The extent to which water is a defining factor in spatial developments depends on the nature, scope and urgency of the water task in relation to other tasks, existing functions and soil quality, as well as other area-specific features. As always, the key is to strike a balance between different interests.

The National Water Plan, which is also a framework vision based on the Spatial Planning Act, replaces certain policy sections of the National Spatial Strategy (*Nota Ruimte*) pertaining to the IJsselmeer lake, the North Sea and the rivers. The protection of vital functions and vulnerable objects is a subject of national importance, although it is not limited to areas in the national spatial structure. The central government will be drawing up a separate General Administrative Order for this on the basis of a flood risk pattern, in order to protect telecommunications, ICT and energy networks as well as evacuation routes in the event of flooding.



The central government is expanding and enhancing the operation of the water test and will evaluate its effect in 2011. It is asking provinces and municipal councils to involve water management authorities at as early a stage as possible when drafting framework visions by requesting their advice and asking them to include a section on water management in local land use plans. The central government will then look into effective measures for keeping space for water available in the long term, supplementary to the tool of spatial reservation.

Working toward a safe delta

Climate change increases the threat of water. Furthermore, the values to be protected have increased significantly in the last decades. The Cabinet is opting for sustainable water safety policy by focusing on ‘multi-layer safety’. This is a three-tier or layer approach to our protection, the first of which is prevention, i.e. preventing flooding. This is and remains the cornerstone of water safety policy, even though flooding can never be ruled out completely. The second and third layers are therefore aimed at limiting the effects of flooding. The aim of the second layer is to create a sustainable spatial layout of the Netherlands and the third seeks to improve the organisational preparations for a potential flood (*disaster mitigation*).

New standards are to be established on the basis of flood risk, which will be tested every six years against water levels and wave heights that are expected to occur twelve years later. The level of the standards will be decided in 2011, based on a cost-benefit analysis and an analysis of the potential number of casualties. The consequences of the safety standards increased by a factor 10 as proposed by the Delta Committee will also be shown. This will be elaborated in the Delta Programme.

Research is to be conducted into new water safety concepts, including the building of robust and wide delta dykes. With a view to sustainable spatial development, the provinces, water boards and the central government are jointly developing a flood risk zoning system, which will be mapped out in 2012.

The central government is encouraging water management authorities and safety regions to draft cooperation agreements, in addition to their existing statutory obligations, establishing the role they are to fulfil in disaster mitigation during an actual or impending flood. The results of the work done by the Flood Management Taskforce (*Taskforce Management Overstromingen*) and the outcome of the nation-wide ‘Waterproef’ flood disaster exercise have been embedded in policy.

This multi-layered approach to safety requires area-based customisation. In association with regional

parties, the Cabinet will be expounding this approach in area pilot schemes. The European Directive on the assessment and management of flood risks (*Europese Richtlijn Overstromingsrisico's*) will be introduced into Dutch legislation during the planning period. Risk maps and flood risk management plans are to be jointly developed with neighbouring countries.

In 2009, the central government inventoried the bottlenecks in the areas outside the dykes. Together with administrative partners, it is considering which measures for improvement need to be taken and whether an amendment of policy is needed. If decided on, this reassessment will take place in the light of the new standards and linked with basic safety.

Sustainable freshwater supply

Existing freshwater supply agreements will remain in force until 2015. Under normal circumstances, policy is geared towards meeting users’ needs wherever possible. As yet, no major problems are expected until 2015 – under normal circumstances. In periods of water shortages (in dry summers), water will be distributed on the basis of the list of priorities and the damage to be contained.

In this planning period, the central government will be making long-term decisions on freshwater supplies and salinisation control, including the infrastructure

6 measures this may require. In the next planning period, possible solution strategies will be worked out with the regions by way of a national exploration of the freshwater supply that is to be carried out as part of the Delta Programme. The key aspects of this new strategy are greater levels of regional self-sufficiency and optimisation of freshwater distribution in the main and regional water systems. For this too, the central government, the regions and the users will be hammering out solutions in the coming planning period. Solutions and areas will be considered as a coherent whole and the (spatial) consequences for regional systems and functions (drinking water, agriculture, nature and shipping) made transparent.

Cleaner water and a natural design

The Cabinet is holding on to a combination of tackling pollution at the source and improving the design of the water system, reflected in the implementation of the river basin management plans for the Ems, Meuse and Scheldt rivers and the Rhine delta based on the Water Framework Directive for the 2009-2015 period. Alongside continuation of the (international) approach to sources and the treatment of wastewater, a new key element is improving the design. During this period, for example, 2,456 km of eco-friendly banks and 635 fish ladders will be constructed. The fight against pollution continues – 156 sewage overflow points are to be tackled and improvements made to 59 wastewater treatment plants. Despite all

these activities, the aims of the Water Framework Directive have not been achieved yet. The Cabinet has set aside 75 million euros to promote innovations intended to further improve water quality.

Water policy for coast, rivers, IJsselmeer lake, southwest Delta, North Sea and urban areas

Nourishing the coast. The Cabinet is opting for sand replenishment as a way of enabling the coastal foundation zone to grow concurrently with the rise in sea levels. Where possible, this is to take place by distributing and transferring sand naturally along the coast. In addition, the Cabinet is opting for a cohesive approach to area development that allows for a balanced development of nature, economy and accessibility in the existing coastal areas. The Delta Committee has suggested extending the coastline to provide more space for functions in the coastal area. The central government will be exploring the feasibility of this proposal in the framework of the Delta Programme.

Creating room for the rivers. The key planning decision (PKB) Room for the River and the Meuse Projects are progressing steadily, which means that by 2015, the Rhine will be able to handle a peak discharge level of 16,000 m³/s and the Meuse a discharge level of 3,800 m³/s. Steady progress is also being made implementing the Rhine and Meuse Action Plans

on Flood Defence (*Actieprogramma's Hoogwater Rijn en Hoogwater Maas*). Future agreements will be made in light of the flood risk directive.

Where possible and cost-effective, measures can already be taken for discharging 18,000 m³/s from the branches of the Rhine and 4,600 m³/s from the Meuse, for example by linking the water task with spatial developments. To anticipate the safety task after 2015, land outside and possibly also inside of the dykes should be set aside and, where necessary, purchased.

The central government is working with all authorities involved on the formulation of a long-range task for areas outside of the dykes along the rivers, taking account of safety, nature, water and spatial quality and (regional) spatial developments towards a more balanced application, management and use of the riverbed.

As for the Rijnmond and Drechtsteden region, the Cabinet recognises the significance of guaranteeing protection against flooding of the rivers and the sea in the long term as well. At the same time, the negative effects of salinisation in this area must be prevented. In the framework of the Delta Programme, the central government and other authorities will be conducting research into possible long-term solutions, including a 'closable-open' Rijnmond.

The IJsselmeer lake as a strategic water supply. The Cabinet is opting to reinforce the strategic function of the IJsselmeer lake area to supply freshwater.

By making small adjustments to the water level management regime, space that the system currently has anyway can be used in the short term. For the long term, an investigation will be carried out in the framework of the Delta Programme into the best way of dealing with the increasing freshwater demand and managing water drainage. One potential solution that will be considered is raising the water level of the IJsselmeer lake, while continuing the practice of natural water drainage through inlet sluices to the Wadden Sea for as long as possible. Other alternatives will also be considered.

The Cabinet has decided to unlink the levels of the Markermeer lake and the Veluwerandmeren lakes from that of the IJsselmeer lake. As a result, water level management in the Markermeer-IJmeer lake and the Veluwerandmeren lakes will correspond far better with what is needed for ecologically sustainable development. It also opens up possibilities for limited building activities in the Markermeer-IJmeer lake outside of the dyke. A pumping station will be built for the Houtribdijk.

The Cabinet is opting to allow a restricted number of developments outside the dykes that take the spatial quality of the area into account. The loss of water storage capacity as a result of developments outside of the dykes does not have to be compensated.

The Cabinet has decided to reinforce the IJsselmeer dam (Afsluitdijk), while endeavouring to combine this

with a multifunctional arrangement in line with the existing core qualities of the IJsselmeer lake area and the Wadden Sea that makes allowance for the lake's strategic freshwater supply in the long term.

Restoring the southwest Delta's dynamic quality.

Working on flood defences remains crucial in the southwest Delta. The coastal foundation zone will grow naturally with rising sea levels. The northern Delta reservoir and the Volkerak-Zoommeer lake will have to provide sufficient drainage and storage capacity to cope with the increase in discharge from the major rivers. Restoring tidal dynamics is to counteract the harmful effects of the Delta Project on the ecology. In addition, it increases the self-cleaning and natural production capacity of the water and ensures a better distribution of the nutrient load in the various bodies of water. Fish can swim from the sea to the rivers and vice versa. Possible solutions for addressing sand demand in the Oosterschelde estuary are being explored, including sand replenishment.

Restoring tidal dynamics does mean, however, that the targets of the Water Framework Directive as included in the river basin management plans in 2009 will have to be adjusted for some of the water bodies in six years' time. This applies to the Volkerak-Zoommeer lake, for example, into which salt will again be allowed before 2015.

Making the North Sea more sustainable. The Cabinet is opting to use the North Sea in a way that is sustainable and safe and makes efficient use of space, while

keeping it in balance with the marine eco-system as set out in the Water Framework Directive, the Marine Strategy Framework Directive, the OSPAR convention and the Bird and Habitat Directive. In consultation with the Dutch fishing sector, nature protection organisations and other EU member states, and within the framework of the European Common Fisheries Policy, the focus is on working towards the sustainability of fishing in the North Sea. Views across the sea to the horizon are to remain open.

Within international frameworks, the Cabinet is giving priority to the following activities as being of national importance for the Netherlands:

- Sand extraction and replenishment: sufficient space for protecting the coast, counteracting flood risks and for fill sand on land;
- Sustainable (wind) energy: space for 6,000 Megawatt of wind energy on the North Sea in 2020 (at least 1,000 km², creating conditions for further (international) growth after 2020);
- Oil and gas field development: extracting as much natural gas and oil from the Dutch fields in the North Sea as possible;
- CO² storage: sufficient room for storing CO² in empty oil and gas fields or aquifers;
- Sea shipping: building a system of traffic separation schemes, clearways and anchoring areas allowing safe and prompt handling of shipping;
- Defence areas at sea.



Existing and new users will be informed of the space available for new activities and the conditions attached.

Improving the liveability of urban areas. Tasks that involve living, working, mobility, leisure activities, landscape and nature, water and the environment are to be addressed cohesively. The aim is to increase green spaces and water in city developments, making urban areas more attractive and liveable. In this context, the central government is encouraging living on water, which can contribute towards a climate-proof blueprint of the Netherlands because it is a form of dwelling that can be combined with space for water.

Progressive urbanisation and climate change are being taken into consideration in the approach to the urban water task, and where possible linked to the dynamics of cities. The implementation of measures is being combined with the restructuring of existing built-up areas and the creation of green areas in and around cities. Combining water and green zones offers plenty of opportunities to make urban water systems more robust and climate-proof. Good connections between urban water systems and the surrounding land contribute towards the quality of water and landscape. Water offers potential for improving the living environment in existing urban settlements. Best practices applied elsewhere in the world will be inventoried in the planning period. Dutch cities will be involved in this project.

The Netherlands works with water on a worldwide scale

The Cabinet wants the Netherlands to cooperate actively with countries in low-lying delta areas, protecting them against floods and ensuring sufficient, clean water. Central to this are adapting to the climate, contributing towards achieving the millennium development goals and creating and utilising economic opportunities. The Cabinet is focusing its attention on five deltas: the Jakarta, the Mekong, the Ganges/Brahmaputra, the Incomati and the Nile deltas. To this end, the Netherlands will be entering into long-term water partnerships. These will be based on the existing Partners for Water (Partners voor Water) programme, which is to be extended for a period of six years to 2015. In addition, where opportunities arise and a demand for Dutch technology and knowledge exists, the Cabinet is opting for an approach based on a global positioning of the water and delta technology sectors. An international 'Water Sector Marketing Programme' (Marketing Programma Water-sector) is to be developed in 2012.

Taking the plunge!

With this National Water Plan, the Cabinet has opted for a future-driven national water policy based on concrete measures that can be taken now. A plan the Cabinet wants to realise with you: working towards a safe and liveable Netherlands, now and in the future.

Colophon

The plan has been drawn up by the State Secretary for Transport, Public Works and Water Management and the Ministers for Housing, Regional Development and the Environment and for Agriculture, Nature and Food Quality.

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