WATER MANAGEMENT ARRANGEMENTS ON IJSSELMONDE IN 1920

Introduction

This attachment presents the water management system on IJsselmonde in 1920, focusing on the formal arrangements for flood protection and drainage. In summary, the dykes and the main drainage infrastructure were managed by 57 different water boards and the municipality of Rotterdam. The Province of South-Holland had an important supervisory task. National government had final supervision, was responsible for the legislative framework, and appointed the members of water boards responsible for river dykes. The landholders in the area of the different water boards financed the water boards through a water board charge, were responsible for minor maintenance works, and elected the members of their boards or, as the case may be, voted on recommendations for new members. Moreover, they were consulted on several issues and could appeal against many decisions to the province or national government. Together with other citizens, they had voting rights for the provincial council and for national parliament.

In this attachment, more details will be given on the water boards, the municipality of Rotterdam, the Province of South-Holland and national government. Moreover, a list will be given of all the water boards with some specifics. The main sources of this attachment are Teixeira de Mattos (1920), Monchy and Loon (1954) and Kooiman (1928-1932).

Water boards

Numbers and tasks

Within the ring formed by the main dykes of IJsselmonde, there were 40 water boards. Their tasks were the following (numbers refer to the list at the end of this attachment):

- Two water boards managed river dykes (1, 2)
- Two water boards managed river dykes as well as common drainage works of several polders (27, 33)
- Four water boards managed the river dykes and drainage works of individual polders (21, 24, 25, 26,)
- Twenty-nine water boards managed only the drainage works of individual polders, including one that did not have the statute of a water board (12)
- Three water boards managed a pumping station and other drainage works serving several polders (3, 14, 22)

Many water boards were also responsible for roads, but roads will not be discussed further in this attachment.

Outside of the main dyke ring there were 17 small water boards protected by low dykes only. They were all responsible both for these dykes and for drainage of their area. Four were owned and managed by another water board (44-47), and seven were owned by another single owner (41, 48, 50, 52, 55-57).

In addition to these 17 water boards, there were more than 30 small and very small polders outside of the main dyke ring without a water board statute. These were privately managed.

Composition

The water boards consisted of two organs: the governing board, consisting of a chair person and usually two to five ordinary members, and a body representing the landholders ("ingelanden": owners, usufructuaries and hereditary tenants of land in the water board area). These organs were supported by a secretary, a treasurer and other staff, such as a mechanic for the water board's pumping station. The functions of secretary and treasurer were often combined and could be combined with that of chair person.

The governing board was in charge of the daily management of the water board and had some regulatory powers. The board could adopt byelaws concerning the water board's tasks, provided there was no provincial byelaw or national regulation that already regulated the issue. Moreover, the board controlled implementation, decided on maintenance obligations by third parties and could adopt target water levels for the surface waters. The body representing the landholders was competent in financial matters or matters with financial implications The landholders had to approve the budget and determine the tariff for the water board charges. Moreover, they decided on all new and exceptional works, on taking loans, the sale and lease of the water board's property and on permanent contracts to be concluded by the board.

Governing board members held office for periods of six years (five years in the case of 1 and 2) and had to hold at least one hectare of land in the water board area. In case of water boards that did not manage the main river dykes, the board members were normally elected by all persons and legal entities holding at least one hectare of land in the water board area. The number of votes they could cast depended on the size of their landholding, ranging from one for landholdings between one and two hectares, to 20 for landholdings between 191 and 210 hectares and one additional vote for every additional 25 hectare, up to a maximum of 25% of all the votes in the water board. Landholders holding less than one hectare could register together with others and then got one vote if together they held one hectare or more. Since 1913, female landholders could vote in person and did not need a male guardian anymore, provided they were in charge of managing their own property, which married women usually were not.

Governing board members of water boards responsible for the main river dykes were appointed by the "Crown", in practice the Minister of Public Works. Normally, the landholders could recommend three persons for each post, and those receiving most votes would be recommended to the Crown, who could then select one.

In the smaller water boards, the body representing the landholders consisted of all individual landholders in person. In one larger water board, the landholders elected representatives (33) and in four the landholders were represented by the elected board members of the different polders in the water board's territory (1-3, 14,). In these cases the governing board members were not elected or recommended by all landholders, but by their representatives. The land holders or their representatives did not decide on the water board's byelaws, but draft byelaws had to be put on public display during 30 days, and during this period all interested parties could send in their comments. Moreover, there were possibilities for appeal (see below).

The composition of the water boards was more simple in case there were less than seven landholders with voting rights. In that case, the landholders would form the governing board and together they had to appoint or recommend to the Crown one representative. In case there was only one owner, the owner or someone appointed by him or her would represent the water board.

Funding

The water boards were funded by means of a charge per hectare, levied from the landholders. In some water boards consisting of distinct parts, different tariffs were used for the different parts (4, 5, 13, 16, 17, 18, 14, 27, 33, 36, 42, 43). This was the case in many water boards that were the result of a merger or managed works benefitting different polders, but not in the same degree. Other reasons for differentiation included old agreements and exemptions and different service levels (e.g. artificial drainage in some parts and drainage by means of gravity in another: 43).

Two polders owned so much real estate generating income that they did not have to levy any charge and even paid money to the other landholders in the polder, in much the same way as companies pay dividend to their shareholders (23, 24; cf. Wouda 2004). By law, if a water board was merged with another, split or abolished, the net assets had to benefit the landholders of that water board.

Since in large parts of the island maintenance of the river dykes and drainage were the responsibility of different water boards, many landholders had to pay two different charges: one to the water board in charge of dyke maintenance and one to the water board managing drainage. In the centre of the island, there were still two polders where the landholders did not contribute anything to the maintenance of the river dykes (20, 23).

Municipality of Rotterdam

In the late 19th century, Rotterdam started to expand rapidly and by 1920 five polders had been turned partly (31, 32) or completely (polders nr. 52, 54 and 55 in Attachment 1) into harbor area or residential areas. In these areas, Rotterdam took over responsibility for dyke management and drainage, and the old polders were abolished or reduced in size. The two pumping stations of Rotterdam also drained the remainder of two polders (31 and 32).

Province

Provincial government consisted of a provincial council and an executive committee out of this council, both chaired by the "Commissioner of the King", appointed by the Crown. The provincial council was directly elected, but women could vote from 1923 onwards only.

According to art. 190 of the constitution, the provincial council supervised all public works and all water boards in their province. Moreover, they could change the organization and statutes of the water boards, abolish existing and establish new ones, and make statutes for these. Pursuant to this provision, the provincial council of South-Holland had adopted statutes for each water board. Moreover, it had made a general polder byelaw for water boards managing individual polders, usually called "polder" themselves. These statutes and this byelaw contained rules on for instance the territory and the tasks of the boards, on voting rights and elections, on the personnel of the boards and remuneration, on the frequency of the board meetings, on decision-making procedures, on the charges and the budgetary process and on maintenance obligations by third parties.

A number of decisions of the water boards required approval by the executive committee of the province. These included the adoption or modification of a byelaw, taking loans, the sale of real estate, starting legal actions and the conclusion of permanent contracts. In most cases, interested

parties could appeal against the decision of the executive committee to the Crown. If the executive council did not have to approve a water board decision, it could still nullify the decision at its own initiative, but only if it conflicted with national or provincial regulations, the statutes of the water board, the national interest, or the interest of the province or another water board. In this case appeal to the Crown was always possible.

The executive committee also decided in case of conflicts between the governing board and the body representing the landholders and conflicts between different water boards. In the latter case, water boards could appeal against the decision to the Crown.

Moreover, plans for new river dykes and coastal defences required approval by the executive committee. Following the storm surge of 22-23 December 1894, the provincial council adopted a provincial byelaw determining which dykes would form the main dyke ring of IJsselmonde and how high these dykes should be. At the same time two water boards (1 and 2) were established in the western part of the island to take over the management of the dykes from the many small polders that until then had been in charge.

While the provincial council could abolish existing and establish new water boards, they needed for this the approval of the Crown. Before they could make a proposal to that extent, they first had to inform all interested parties and give them the opportunity to react.

The province also managed some water management works itself, but not on IJsselmonde (van der Gouw 1975).

National government

National government consisted of parliament and the Crown. Parliament consisted of two chambers: the Second Chamber, which was directly elected (from 1922 onwards also by women) and the First Chamber, which was elected by the provincial council members. The Crown consisted of the Queen, with limited political responsibility, and the cabinet ministers. The cabinet ministers were accountable to parliament and had to abdicate if they lost the trust of parliament.

According to the constitution, national government was responsible for the national legislative framework and had ultimate supervision ("oppertoezicht") over all public works. In addition, it managed water management works itself, but not on IJsselmonde. As discussed above, the Crown appointed members of water boards responsible for river dykes (and coastal defences). Moreover, it was possible to appeal to the Crown against several decisions of the executive committee of the province. The Crown could also nullify any decision of the provincial council or executive committee at its own initiative if this decision conflicted with the law or the general interest.

Moreover, new land reclamation work needed a concession by the Crown, which the Crown could give only after advice from the provincial executive committee. The executive committee had to put applications for a concession on public display during 30 days and process the comments received before giving advice.

Much of the national legislation was meant to provide the provinces and the water boards the means to make and enforce rules and take action during emergencies. For instance, the Competencies act ("Bevoegdhedenwet") gave the water boards the power to take all necessary action in case of a flood threat or an actual flood, to remove illegal works and recover the costs

from the culprits, and to seize property of people who did not pay the water board charges, without prior consent by a court of law. Judicial review of decisions was possible only afterwards to ensure that the water board could take timely action and continue to function in case of conflicts.

List of water boards

NB: Numbers of former polders refer to the list of polders in Attachment nr. 1.

A: Within the main dyke ring

- 1. Water board the old and new Meuse dykes in front of Rhoon
 - River dykes only
 - Polders within its territory: 5 (Boudewijn Hartsland), 13, 15-19, 32 (Oud-Pendrecht)
- 2. Water board the West dykes of IJsselmonde
 - River dykes only
 - Polders within its territory: 4, 5 (excluding Boudewijn Hartsland), 6-12
- 3. Waterschap van de gemeenschappelijke uitwatering met bepaling van de polders "het land van Poortugaal" en "de polders Pernis c.a."
 - Managing common pumping station of 4 and 5 that also drains 6
- 4. Het Land van Poortugaal
 - Drainage only
 - Former polder 1
- 5. De polder Pernis c.a.
 - Drainage only
 - Former polders 2, 3, 4, 6 and 20
- 6. Polder Roozand c.a.
 - Drainage only
 - Discharge its drainage water for free onto 3, based on an agreement of 1645
 - Former polder 5
- 7. Polder Deijffelsbroek
 - Drainage only
 - Former polder 10
- 8. Polder Oud-Smalland
 - Drainage only
 - Former polder 7
- 9. Polder Langebakkersoord
 - Drainage only
 - Former polder 8
- 10. Polder Nieuw-Engeland
 - Drainage only
 - Former polder 9
- 11. Elderspolder
 - Drainage only
 - One owner
 - Former polder 14
- 12. Polder Meeuwenoord
 - Drainage only

- No statute, so officially not a water board, but contributing for dyke maintenance to 2
- 12 ha., created before 1812 (figure 1, called "Meeuw gors")
- 13. Polder Albrandswaard
 - Drainage only
 - Former polder 15
- 14. Waterschap de Koedood
 - Managing common drainage works of the polders 15, 16, 17, 19 and 20
- 15. Polder de Kiesheid
 - Drainage only
 - Former polder 21
- 16. Polder Binnenland van Rhoon
 - Drainage only
 - One statute with 17. Two separate boards that were combined when decisions had to be taken on a number of common issues, such as a sluice serving both polders
 - Former polders 22-29
- 17. Het Buitenland van Rhoon
 - Drainage only
 - One statute with 16: see supra.
 - Former polders 30 and 36
- 18. Polder Zegen-, Molen en Portlandpolders
 - Drainage only
 - Former polders 31, 32 and 33
- 19. Polder Nieuw-Pendrecht
 - Drainage only
 - Former polders 30 and 35
- 20. Polder Binnenland van Barendrecht
 - Drainage only
 - Landholders did not contribute to dyke maintenance
 - Former polder 37
- 21. Polder Ziedewij
 - River dykes and drainage
 - Former polder 38
- 22. Waterschap gemeenschappelijke Stoombemaling van de polders Buitenland en Zuidpolder
 - Managing common pumping station of 23 and 24
- 23. Polder Buitenland (Barendrecht)
 - Drainage only
 - Landholders did not contribute to dyke maintenance
 - Since the polder owned a lot of land, the other landholders did not have to pay a polder levy and sometimes even received money from the polder
 - Former polder 39
- 24. Zuidpolder (Barendrecht)
 - River dykes and drainage
 - Since the polder owned a lot of land (polders 44-47), the landholders did not have to pay a polder charge and instead received substantial income from the polder
 - Former polder 40
- 25. Polder Reijerwaard
 - River dykes and drainage
 - Common dyke inspection with 26
 - Former polders 42 and 43

- 26. Polder Oost-IJsselmonde
 - River dykes and drainage
 - Common dyke inspection with 25
 - Former polder 47
- 27. Waterschap van West-IJsselmonde
 - River dykes and some common drainage works
 - Polders within its territory: 28-30
- 28. Polder Dirk Smeetsland en Meester Arend van der Woudenland
 - Drainage only
 - Former polder 48
- 29. Polder Acht-en-zestig morgen
 - Drainage only
 - Former polder 49
- 30. Polder het Klein-Nieuwland of de 51 morgen
 - Drainage only
 - Former polder 50
- 31. Polder Varkensoord en Karnemelksland
 - Drainage only, using pumping station of Rotterdam
 - Former polder 51 (partly)
- 32. Polder Charlois
 - Drainage only, using pumping station of Rotterdam
 - Former polders 53 (partly) and 34
- 33. Hoogheemraadschap Zwijndrechtse waard
 - River dykes and some common drainage works
 - Polders within its territory: 34-40
- 34. Polder Hendrik-Ido-Ambacht
 - Drainage only
 - Former polder 57
- 35. Polder Sandelingenambacht
 - Drainage only
 - Former polder 58
- 36. Polder Heerjandsdam, Rijsoord en Strevelshoek
 - Drainage only
 - Former polders 59 and 60
- 37. Polder Zwijndrecht
 - Drainage only
 - Former polder 61
- 38. Polder Heer Oudelands-Ambacht
 - Drainage only
 - Former polder 62
- 39. Polder Kijfhoek
 - Drainage only
 - Former polder 63
- 40. Polder Groote en Kleine Lindt
 - Drainage only
 - Former polder 64

- B: Outside of the main dyke ring (excluding areas that in 1920 were still separate islands and were attached to IJsselmonde only after 1953)
- NB: All water boards outside of the main dyke ring were responsible for both their dykes and for drainage.
- 41. Polder het Zomerland
 - One owner
 - Former polder 52
- 42. Polder Vóór-Donkersloot en Woude
 - Former polders 44 and 45
- 43. Polder het Zand
 - Drainage onto 25, based on contract
 - Former polder 46
- 44. Polder Spuiveld
 - Managed by the board of 24, owner of the polder
 - 12 ha., created partly before 1834, enlarged between 1850 and 1866
- 45. Vredepolder
 - Managed by the board of 24, owner of the polder
 - Former polder 41
- 46. Jan-Gerritzepolder
 - Managed by the board of 24, owner of the polder
 - 62 ha., created before 1848 (Municipal archive Rotterdam, Zuidpolder (Barendrecht), inv.nr. 497)
- 47. Carnissepolder
 - Managed by the board of 24, owner of the polder
 - 5 ha., created 1863
- 48. Johannapolder
 - Since 1900, when water board 1 built a new dyke through the polder, partly within the main dyke ring
 - Owned completely by the Municipality of Rotterdam
 - 20 ha., created 1804 (Municipal archive Rotterdam, Ambacht en Gemeente Albrandswaard, inv.nr. 462)
- 49. Buiten-Kijveland en de Slobbegorzen
 - Former polders 17 and 18
- 50. Jenever- en Kooipolder
 - Owned completely by the Municipality of Rotterdam
 - Former polder 19
- 51. Polder Oud- en Midden-Kijveland of het Binnen-Kijveland
 - Former polder 16
- 52. Zuidpolder of het Gijpland
 - Undivided property of two families
 - 74 ha., created probably second half of the 18th century
- 53. Polder Jaagin
 - One dyke with 54
 - Part of former polder 13
- 54. Polder de Hoogen en Lagen Gorzen
 - One dyke with 53
 - Part of former polder 13

- 55. Polder Nieuw-Smalland
 - One owner
 - Former polder 12
- 56. Buitengronden genaamd Madroel
 - One owner
 - Former polder 11
 - Area raised. Technically not a polder anymore, statute officially still valid but not applied
- 57. De Gorzenpolder en de Hey
 - One owner
 - 22 ha., created in or before 1839 (Municipal archive Rotterdam, Gorzenpolder en de Hey, inv.nr. 1)

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