

Short- and long-term policy by the authorities for groundwater in the dunes

Survey of recent statements

Supplementary information to the report “Sprinkling irrigation water quality and quantity Noordwijkse Golfclub”, 23 November 2021

Noordwijkse Golfclub (NGC)

Workgroup Water (WW)

The members of the Workgroup Water are listed at the end of this document.

23 November 2021

Short- and long-term policy for groundwater in the dunes

The water for sprinkling irrigation water for NGC is pumped from the subsurface fresh water reservoir directly under NGC. This reservoir is part of a fresh water reserve under the dunes extending along part of the Dutch coast. The water directly under NGC is not used for tap (drinking) water extraction, however, water for tap water is extracted at various other locations throughout the dunes. Water extraction by NGC is thus extracted from the same reserve as from which tap water is extracted. Therefore, the extraction by NGC may influence the possible water extraction for tap water. Nature on surface also depends on the presence of fresh water in the subsurface, and hence water extraction may also influence nature and nature development. Both the extraction of tap water and the water for nature are considered very important and needing protection by many politicians, policy makers, non-governmental organizations and other bodies.

The license to allow fresh water extraction for irrigation purposes from the subsurface below NGC is issued in 1991 by the “Provincie Zuid Holland” (Vergunning grondwater, 1991). The regulating body for exploitation of groundwater in the dunes is the “Provincie Zuid Holland” who has allocated the task to the “Omgevingsdienst Haaglanden” in The Hague (ODH, 2021). The water board “Hoogheemraadschap van Rijnland” (Rijnland, 2021) in Leiden is responsible for surface water, and for extraction of subsurface water if it influences or may influence surface water.

At the time the license was issued in 1991, the “Stichting Duinbehoud” (SD, 2021) and the “Vereniging Natuur-en Vogelbescherming Noordwijk” (VvN&VN, 2021) objected against issuing a license to NGC for groundwater extraction¹. Since that time no further explicit actions by the authorities nor other organizations are known intended at reducing the quantity nor at revoking the license for water extraction by NGC; not at present and not during the past 30 years. However, there are many implicit indications that restrictions on the extraction of fresh water from the subsurface under the dunes may be expected in the future.

Please note that the Noordwijkse Golfclub is in a Nature2000 area with very strict European Union and Dutch laws and regulations on nature and nature development. Water extraction from the subsurface may influence nature and nature development, and hence, extraction may be or become subject to laws and regulations due to the Nature2000 status. This may seriously complicate water extraction from the subsurface in the future. Comparisons made with other “dune” golf clubs such as the Koninklijke Haagsche Golf en Country Club and Kennemer Golf & Country Club may not be valid as these are in “excluded” areas and do not or to a lesser extent need to follow the Nature2000 laws and

¹ The reasons of “Stichting Duinbehoud” and the “Vereniging Natuur-en Vogelbescherming Noordwijk” to object to issuing a license are included in the issued license (Vergunning grondwater, 1991).

regulations. The same applies to the bungalow park and camping north of NGC that are also in an excluded area.

Discussions and ideas on measures for restricting the exploitation of fresh water from the subsurface under the dunes are subject of many reports and (official) documents. However, at this moment it is not known whether this will result in any measures affecting NGC. Below is a listing of statements made in reports and other documents related to groundwater in the dunes. The listing provides insight in thinking and possible up-coming policies of the authorities.

- The provinces of North and South Holland strive to limit the extraction of natural dune water, restore natural groundwater levels, and restore moist and wet dune valleys (Groenendijk, 2015; Koenraad et al., 2006).
- In general, the authorities, i.e. provinces and water boards (“waterschappen” and “hoogheemraadschappen”) are very critical on fresh water extraction from the subsurface and are reluctant to allow new and try to reduce existing exploitation from fresh water subsurface reservoirs (Beleidsregel grondwatervergunningen Zuid-Holland, 2018; Krijnen, 2016; Verdonchot, 2019).
- Krijnen (2016) from the firm “Verhoeve Milieu & Water”² warned explicitly for too much noise about the water extraction of NGC. He presumes that the Hoogheemraadschap van Rijnland (and likely also the Provincie Zuid Holland; addition Workgroup Water) are quite unhappy with the extraction of fresh water from below the dunes and too much noise may trigger unwelcome action by the authorities.
- New extraction of large industrial quantities³ of fresh water suitable for tap (drinking) water to be used for low-quality applications such as irrigation of grassland, is explicitly forbidden by the Provincie Zuid Holland if alternatives are available, and new licenses will not be issued (Beleidsregel grondwatervergunningen Zuid-Holland, 2018). Likely changes in existing licenses, such as changing the extraction depth or increasing the quantity, may also be refused by the Provincie.
- The government is working on regulating fresh-water availability chartered nationwide (IENW, 2021; Van Nieuwenhuizen Wijbenga, 2021).
- The European and Dutch authorities are committed to continue or restore as much as possible the natural conditions in the dunes including a natural groundwater level (Bleuten et al., 2012). The commitment is reflected in many visions, regulations and laws of nationwide, regional, local and other authorities (LIFE Programme, 2012; N2000 Kennemerland-Zuid 2018-2024, 2018; Noordwijk Bestemmingsplan 1e her., 2019).
- The “Nationaal Park Hollandse Duinen” is an initiative to create a reserve in the Dutch coastal area that will develop and protect the nature, scenery and cultural heritage in the area (NPHD, 2018). It started in 2016. This new reserve includes the dunes along the Dutch coast between Hoek van Holland and Langevelderslag, and the inland nature areas, such as the “Haagse Bos”. As far as known no new regulations have been initiated concerning the exploitation of groundwater in the areas concerned. However, one of the goals of the reserve is to restore and improve the nature and this likely will imply restrictions on water exploitation in the future.

² Verhoeve Milieu & Water is the company that was involved in the construction of at least one of the boreholes for water extraction at NGC.

³ Industrial quantities > 150,000 m³/yr, i.e. larger than the quantity licensed to NGC.

- In the dune areas used for fresh water exploitation the quantity of water exploited is as much as possible balanced against recharge with external water derived from, for example, the major rivers (N2000 Kennemerland-Zuid 2018-2024, 2018).
- Existing exploitation for tap water is ceased at some locations because the surface above the exploitation became too dry, for example, the exploitation by Waterleidingbedrijf Noord-Holland (PWN) in de Kennemerduinen (Nationaal Park Zuid-Kennemerland) and in Langeveld by the Gemeente Noordwijk, later Dunea (Aspers, 2003; Dunea-Langeveld, 2017; N2000 Kennemerland-Zuid 2018-2024, 2018).
- The Kennemerduinen are designated a strategic tap water reserve (“grondwater-beschermingsgebied”) by a Provinciale Milieuverordening (PMV) (N2000 Kennemerland-Zuid 2018-2024, 2018).
- Protected areas already exist around groundwater exploitation areas (Figure 1) (Borst et al., 2014). NGC is not located in any of these protected areas⁴.
- The fresh water under the dunes is not yet a strategic groundwater reserve on national or provincial level in general. However, it may become such a reserve in the future (Figure 2) (STRONG, 2018).

Compensation – financial

Financial compensation (in Dutch “planschade”) may be applicable if the license for water extraction would be revoked or if the maximum allowed extracted quantity be reduced because the present license has no expiry date. This has not been investigated further.

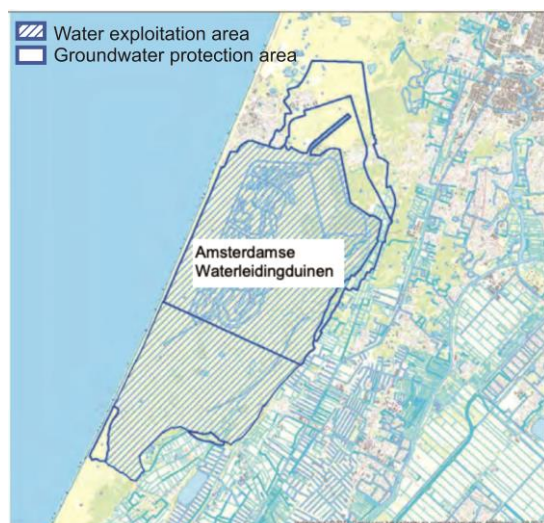


Figure 1. Protected area Amsterdamse Waterleidingduinen (source: Borst et al., 2014)

⁴ The Kennemer Golf & Country Club is located in such a protected area.

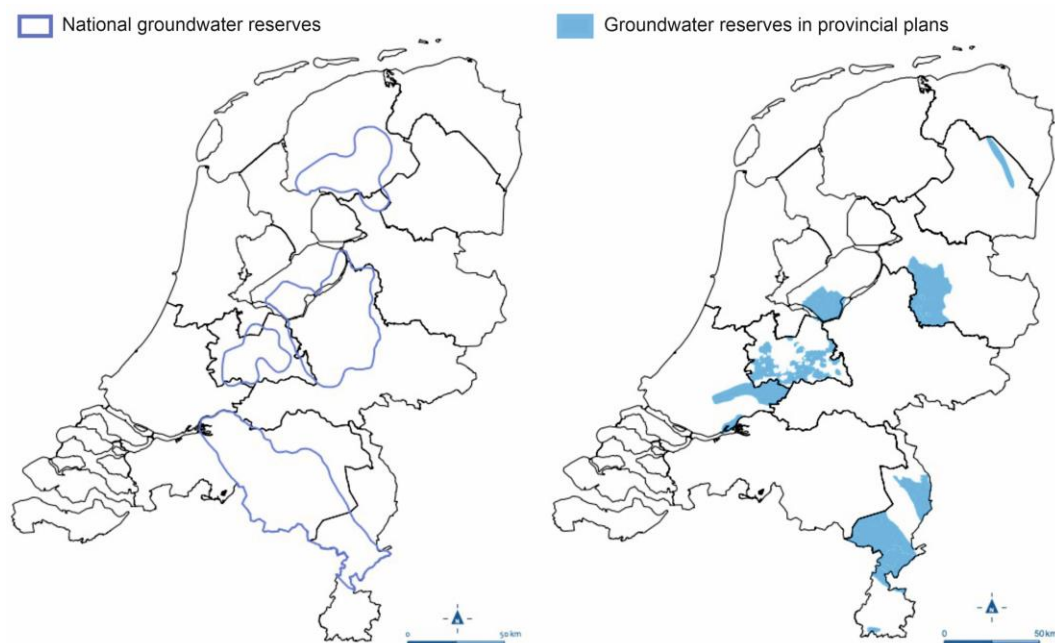


Figure 2. National and provincial groundwater reserve areas (source: STRONG, 2018)

References

- Aspers, J., 2003. Het begin van de drinkwatervoorziening in Amsterdam. *H2O; KNW, Kennisnetwerk Nederlands Waternetwerk*. 17. pp. 12-15. <https://edepot.wur.nl/368073> (in Dutch)
- Beleidsregel grondwatervergunningen Zuid-Holland, 2018. *Beleidsregel grondwatervergunningen Zuid-Holland 2018. Gedeputeerde Staten Van Zuid-Holland*. The Hague, Netherlands. p. 5. <https://www.zuid-holland.nl/@21266/vaststellen/> (in Dutch)
- Bleuten, W., Bouwman, J.H., Eysink, A.T.W., Jansen, A.J.M., 2012. *Hydro-ecologische systeemanalyse van enkele duinvalleien in de duinen van Noordwijk*. March 2012. Coöperatie Unie van Bosgroepen; Staatsbosbeheer West, Ede, Netherlands. p. 46. https://www.researchgate.net/publication/298871737_Hydro-ecologische_systeemanalyse_van_enkele_duinvalleien_in_de_duinen_van_Noordwijk [Accessed: 13 June 2021] (in Dutch)
- Borst, L., Vissers, M., Vliegthart, F., 2014. *Gebiedsdossier drinkwaterwinning Amsterdamse Waterleidingduinen* (306709; GM-0062819). 10 January 2014. Provincie Noord-Holland. Grontmij Nederland B.V., Houten, Netherlands. p. 56. https://www.noord-holland.nl/Onderwerpen/Water_Bodem/Watervisie/Beleidsdocumenten/Gebiedsdossier_Amsterdamse_Waterleidingduinen.org (in Dutch)
- Dunea-Langeveld, 2017. *Voormalige drinkwaterproductielocatie teruggegeven aan de natuur*. Dunea; Duin & Water, Zoetermeer, The Netherlands. <https://www.dunea.nl/algemeen/nieuws/2017/voormalige-drinkwaterproductielocatie-teruggegeven-aan-de-natuur> [Accessed: 9 April 2018]
- Groenendijk, J., 2015. *088 Kennemerland-Zuid gebiedsanalyse mei 2015, Definitief ed* (RDC_BD2825-103_R20150326_904438). Royal HaskoningDHV; Provincie Noord-Holland, Amsterdam. p. 100. https://www.natura2000.nl/sites/default/files/PAS/Gebiedsanalyses_vigerend/088_Kennemerland-Zuid_GA_25-010-2017.pdf
- IENW, 2021. *Beleidsnota Drinkwater 2021-2026; Samen werken aan een toekomstbestendige drinkwatervoorziening*. April 2021. Ministerie van Infrastructuur en Waterstaat, The Hague, Netherlands. p. 72. <https://www.rijksoverheid.nl/documenten/rapporten/2021/04/23/bijlage-beleidsnota-drinkwater-2021-2026>
- Koenraadt, R., Geelen, L., Cornelissen, W., 2006. Oplossing voor verdroging Amsterdamse Waterleidingduinen komt dichterbij. *H2O; Tijdschrift voor watervoorziening en waterbeheer*. 39 (22). pp. 14-15. <https://edepot.wur.nl/346478>
- Krijnen, A., 2016. Diepte bronnen (Email from Arjan Krijnen to Rob Spruit). *Recipient: Spruit, R.* 16 November 2016. Verhoeve Milieu & Water, Dordrecht, Netherlands (in Dutch)
- LIFE Programme, 2012. *Dutch Coastal Dunes; Restoration of dune habitats along the Dutch coast; LIFE projectnummer LIFE05 NAT/NL/000124; LIFE Duinen, projectnr. 2618*. European Commission; Environment; LIFE Programme; Staatsbosbeheer, Brussels; Groningen, The Netherlands. p. 127. <http://ec.europa.eu/environment/life/project/Projects/> [Accessed: 9 February 2018] (in Dutch)
- N2000 Kennemerland-Zuid 2018-2024, 2018. *Natura 2000 beheerplan; Kennemerland-Zuid 2018-2024, 1.2 ed*. October 2018. Provincie Noord-Holland, Haarlem, Netherlands. p. 257. <https://www.bij12.nl/wp-content/uploads/2019/01/N2000-Beheerplan-Kennemerland-Zuid-2018-2024.pdf> [Accessed: 13 June 2021] (in Dutch)
- Noordwijk Bestemmingsplan 1e her., 2019. *Zee, Strand en Duin, 1e herziening; Bestemmingsplan; Toelichting* (NL.IMRO.0575.BPZSD1eherziening-ON01). 1 februari 2019. Gemeente Noordwijk; Van Riezen & Partners. Gemeente Noordwijk, Noordwijk, Netherlands. p. 62. https://www.planviewer.nl/imro/files/NL.IMRO.0575.BPZSD1eherziening-ON01/t_NL.IMRO.0575.BPZSD1eherziening-ON01.pdf (in Dutch)
- NPHD, 2018. *Nationaal Park Hollandse Duinen*. Dunea; Nationaal Park Hollandse Duinen, Zoetermeer, The Netherlands. <https://www.nationaalparkhollandseduinen.nl/> [Accessed: 25 February 2018] (in Dutch)
- ODH, 2021. *Omgevingsdienst Haaglanden*. The Hague, Netherlands. <https://omgevingsdiensthaaglanden.nl/> [Accessed: 12 November 2021]
- Rijnland, 2021. *Hoogheemraadschap van Rijnland*. Leiden, Netherlands. <https://www.rijnland.net/> [Accessed: 12 November 2021]
- SD, 2021. *Stichting Duinbehoud*. Leiden, Netherlands. <https://www.duinbehoud.nl/> [Accessed: 11 November 2021]

- STRONG, 2018. *Structuurvisie Ondergrond (STRONG)*. June 2018. Ministerie van Infrastructuur en Waterstaat; Ministerie van Economische Zaken en Klimaat, The Hague, Netherlands. p. 116. <https://www.rijksoverheid.nl/documenten/rapporten/2018/06/11/structuurvisie-ondergrond> [Accessed: 18 February 2018] (in Dutch)
- Van Nieuwenhuizen Wijbenga, C., 2021. *Kamerbrief Minister van Infrastructuur en Waterstaat inzake Beleidsnota Drinkwater 2021-2026; IENW/BSK-2021/108543*. 23 April 2021. Ministerie van Infrastructuur en Waterstaat, The Hague, Netherlands. p. 4. <https://www.rijksoverheid.nl/documenten/rapporten/2021/04/23/bijlage-beleidsnota-drinkwater-2021-2026>
- Verdonschot, P.F.M., 2019. *We moeten ons water niet langer naar de zee brengen; Verslag interview met Verdonschot, Trouw* <https://www.trouw.nl/nieuws/we-moeten-ons-water-niet-langer-naar-de-zee-brengen~bc101973/>
- Vergunning grondwater, 1991. *Grondwater ontrekkingsvergunning; Grondwaterwet; Besluit vergunning-aanvraag Noordwijkse Golfclub te Noordwijk. DWM/24382B, 23 May 1991*. Gedeputeerde staten van Zuid-Holland, DWM, Waterstaatszaken, Provincie Zuid-Holland, The Hague. p. 12. (in Dutch)
- VvN&VN, 2021. *Vereniging voor Natuur-en Vogelbescherming Noordwijk*. Noordwijk, Netherlands. <https://www.strandloper.nl/> [Accessed: 11 November 2021]

Members Workgroup Water (WW)

The members of the Workgroup Water (WW) are:

Tobias de Rooij (tderooij@gmail.com; +31612123555)

Robert Hack (chair WW) (hack@xs4all.nl; +31624505442): expertise: geology/geotechnics/civil engineering; former member green committee.

Just Kerckhoff (kerckhoff@ziggo.nl; +31651559704): former chair green committee

Alex Schmidt (a.a.schmidt@hotmail.nl; +31655125900): expertise: civil engineering

Dirk van Epen (d.vanepen@gmail.com; +31683977938): expertise: civil engineering, pumps, pipes

Nico Visser (n.w.visser@planet.nl; +31651544381) expertise: nature development

Richard Wing (coursemanager@noordwijksegolfclub.nl; +31610925170) Course Manager