

AERIUS CALCULATOR

This document provides you with results of a nitrogen deposition calculation performed with the AERIUS Calculator. You can use this document as a substantiation of a license under the Nature Conservation Act 1998.

The results indicate nitrogen effects of this project to her surroundings. The area includes both Natura 2000 areas as well as protected natural reserves. Only for Natura 2000 areas habitat types occur and whether the critical load is exceeded. Development room is in the current version of the Calculator is not yet visible.

The calculation of nitrogen emissions is based on the components ammonia (NH_3) and nitrogen oxides (NO_x), or one of each. The deposition of the project will be calculated and drawn in both maximum and average deposition per hectare. The depositions are calculated up to a distance of 15.0 miles from the source.

*Would you like to continue or change data?
Import the PDF using the Calculator.*

Calculation Situation 1

- Characterization
- Emission
- Deposition



Further explanation of this PDF can be found in a corresponding tassel. This reading guide and other documentation can be accessed via: www.aerius.nl.

AERIUS CALCULATOR

Project

Legal entity **Rapport**

Project name **Stikstofdepositie**

Location **Entree van Nieuwkerk**

Calculation date **09 October 2014, 10:04**

Calculation year **2015**

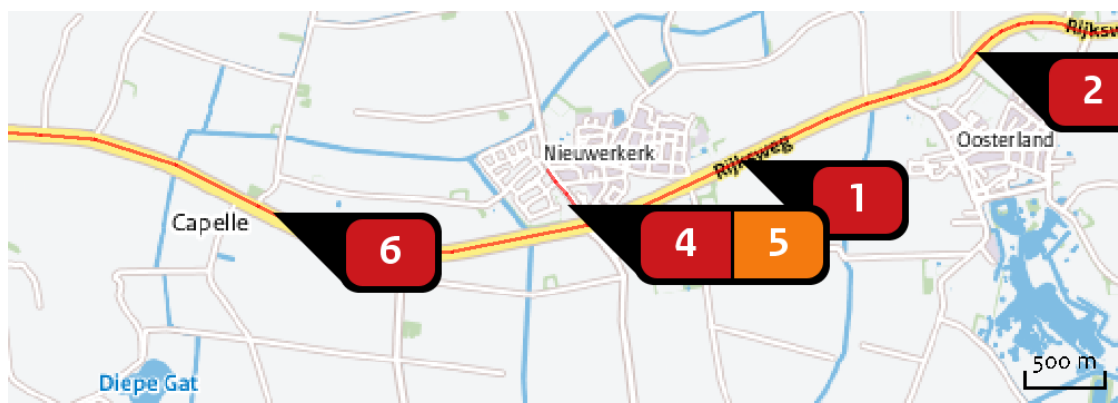
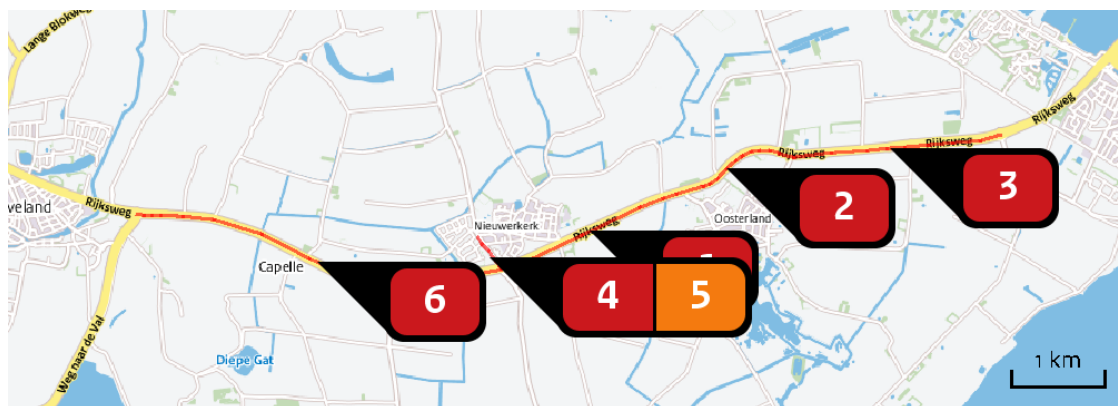
AERIUS Reference **8zglu8mq64**

Total emission

NOx **794 kg/y**

NH₃ **34 kg/y**

Location

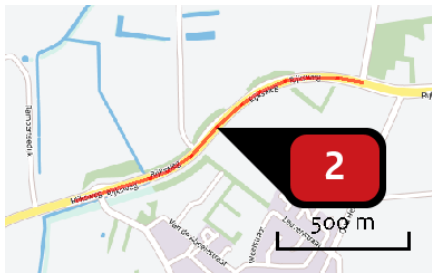


Emission



Name Source 1
Location (X,Y) 59943, 407641
NOx 77.0 kg/y
NH3 4.0 kg/y
Speed limit 0 km/h
Strict enforcement? No

Type	Vehicle	Number of vehicles (/day)	Substance	Emission
Standard	Light Traffic	295.0	NOx NH3	48.7 kg/y 4.0 kg/y
Standard	Freight	9.0	NOx NH3	28.3 kg/y < 1 kg/y



Name Source 2
Location (X,Y) 61415, 408312
NOx 46.5 kg/y
NH3 2.4 kg/y
Speed limit 0 km/h
Strict enforcement? No

Type	Vehicle	Number of vehicles (/day)	Substance	Emission
Standard	Light Traffic	295.0	NOx NH3	29.4 kg/y 2.4 kg/y
Standard	Freight	9.0	NOx NH3	17.1 kg/y < 1 kg/y



Name
Location (X,Y)
NOx
NH3
Speed limit
Strict enforcement?

Source 3
63162, 408534
90.3 kg/y
4.7 kg/y
0 km/h
No

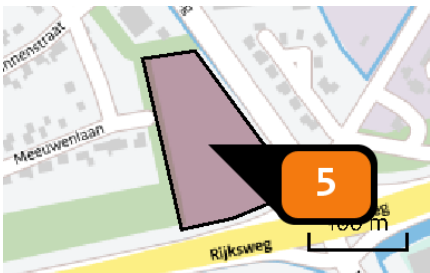
Type	Vehicle	Number of vehicles (/day)	Substance	Emission
Standard	Light Traffic	295.0	NOx NH3	57.1 kg/y 4.6 kg/y
Standard	Freight	9.0	NOx NH3	33.2 kg/y < 1 kg/y



Name
Location (X,Y)
NOx
NH3
Speed limit
Strict enforcement?

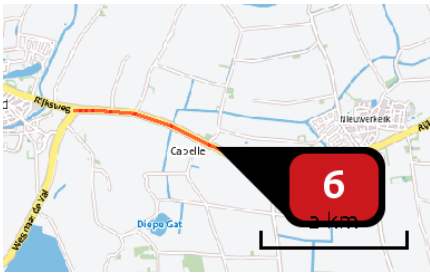
Bron 4
58871, 407410
193.9 kg/y
3.5 kg/y
0 km/h
No

Type	Vehicle	Number of vehicles (/day)	Substance	Emission
Standard	Light Traffic	2,527.0	NOx NH3	121.4 kg/y 3.5 kg/y
Standard	Heavy Freight	78.0	NOx NH3	72.4 kg/y < 1 kg/y



Name
Location (X,Y)
Height
Surface
Spread
Heat content
Diurnal variation
NOx
NH3

Bron 5
58864, 407316
11.0 m
1.6 ha
5.5 m
0.0 mw
Standard profile industry
320.0 kg/y
16.0 kg/y



Name Source 6
Location (X,Y) 57022, 407312
NOx 66.5 kg/y
NH3 3.4 kg/y
Speed limit 0 km/h
Strict enforcement? No

Type	Vehicle	Number of vehicles (/day)	Substance	Emission
Standard	Light Traffic	126.0	NOx NH3	41.4 kg/y 3.4 kg/y
Standard	Freight	4.0	NOx NH3	25.1 kg/y < 1 kg/y

Description Rapport stikstofdepositie

Deposition

Area	EU Directives	Background deposition (mol/ha/y)	Highest project contribution (mol/ha/y)	Exceedance critical load
Grevelingen	Habitat directive/Bird directive	2,953.8	< 0.1	●
Haringvliet	Habitat directive/Bird directive	2,495.7	< 0.1	○
Kop van Schouwen	Habitat directive	2,413.2	< 0.1	●
Krammer-Volkerak	Habitat directive/Bird directive	3,750.6	< 0.1	●
Oosterschelde	Habitat directive/Bird directive	4,087.9	0.1	●
Veerse Meer	Bird directive	2,702.8	< 0.1	○
Voordelta	Habitat directive/Bird directive	2,196.0	< 0.1	○

Maximum calculation distance

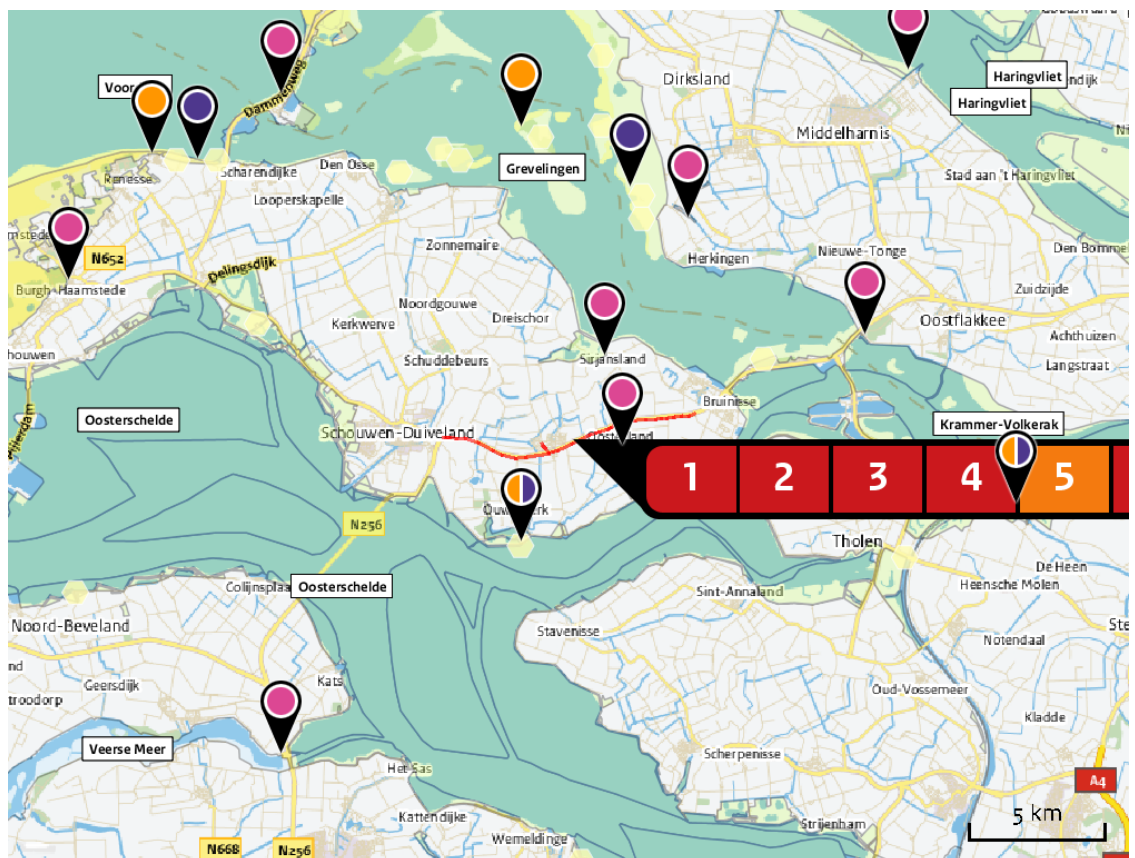
15.0km

Threshold

-

Calculation year

2015



Deposition



Highest project contribution (mol/ha/y)



Highest total deposition where critical load is exceeded (mol/ha/y)



Highest percentage exceeded per area

Deposition
Habitat

Grevelingen

Habitats above critical load		CL	Surface (ha)	Deposition by project (mol/y)	Maximum deposition (mol/ha/y)	Average deposition (mol/ha/y)
H1310A	Zilte pionierbegroeiingen (zeekraal)	1,643	225.7	1.3	< 0.1	< 0.1
H1310B	Zilte pionierbegroeiingen (zeevetmuur)	1,500	26.8	0.2	< 0.1	< 0.1
H1330B	Schorren en zilte graslanden (binnendijks)	1,571	272.8	1.9	< 0.1	< 0.1
H2160	Duindoornstruwelen	2,000	299.7	1.9	< 0.1	< 0.1
H2170	Kruipwilgstruwelen	2,286	227.4	1.3	< 0.1	< 0.1
H2190 B	Vochtige duinvalleien (kalkrijk)	1,429	445.1	2.4	< 0.1	< 0.1

Haringvliet

None of the critical loads of the habitat types in this area is exceeded by this project

Habitats below critical load		CL	Surface (ha)	Deposition by project (mol/y)	Maximum deposition (mol/ha/y)	Average deposition (mol/ha/y)
H6430 B	Ruigten en zomen (harig wilgenroosje)	2,400	2.3	< 0.1	< 0.1	< 0.1

Kop van Schouwen

Habitats above critical load		CL	Surface (ha)	Deposition by project (mol/y)	Maximum deposition (mol/ha/y)	Average deposition (mol/ha/y)
H2120	Witte duinen	1,429	4.3	< 0.1	< 0.1	< 0.1
H2130A	Grijze duinen (kalkrijk)	1,071	1.3	< 0.1	< 0.1	< 0.1
H2130B	Grijze duinen (kalkarm)	714	1.0	< 0.1	< 0.1	< 0.1
H2130C	Grijze duinen (heischraal)	714	4.7	< 0.1	< 0.1	< 0.1
H2160	Duindoornstruwelen	2,000	23.9	< 0.1	< 0.1	< 0.1
H2180 A	Duinbossen (droog) - berken-eikenbos	1,071	0.4	< 0.1	< 0.1	< 0.1
H2180 B	Duinbossen (vochtig)	2,214	2.0	< 0.1	< 0.1	< 0.1
H2180C	Duinbossen (binnenduintrand)	1,786	10.8	< 0.1	< 0.1	< 0.1
H2190 B	Vochtige duinvalleien (kalkrijk)	1,429	0.6	< 0.1	< 0.1	< 0.1
H2190 D	Vochtige duinvalleien (hoge moerasplanten)	2,400	6.6	< 0.1	< 0.1	< 0.1
H6410	Blauwgraslanden	1,071	1.3	< 0.1	< 0.1	< 0.1

Krammer-Volkerak

Habitats above critical load		CL	Surface (ha)	Deposition by project (mol/y)	Maximum deposition (mol/ha/y)	Average deposition (mol/ha/y)
H1310A	Zilte pionierbegroeiingen (zeekraal)	1,643	2.8	< 0.1	< 0.1	< 0.1
H2190 B	Vochtige duinvalleien (kalkrijk)	1,429	70.2	0.3	< 0.1	< 0.1
H91E0 A	Vochtige alluviale bossen (zachthoutoibossen)	2,429	1.2	< 0.1	< 0.1	< 0.1
Habitats below critical load		CL	Surface (ha)	Deposition by project (mol/y)	Maximum deposition (mol/ha/y)	Average deposition (mol/ha/y)
H6430 B	Ruigten en zomen (harig wilgenroosje)	2,400	0.2	< 0.1	< 0.1	< 0.1

Oosterschelde

Habitats above critical load		CL	Surface (ha)	Deposition by project (mol/y)	Maximum deposition (mol/ha/y)	Average deposition (mol/ha/y)
H1160	Grote baaien	2,400	9,499.1	42.8	< 0.1	< 0.1
H1310A	Zilte pionierbegroeiingen (zeekraal)	1,643	198.2	0.7	< 0.1	< 0.1
H1320	Slijkgrasvelden	1,643	313.3	1.8	< 0.1	< 0.1
H1330A	Schorren en zilte graslanden (buitendijks)	1,571	231.0	1.4	< 0.1	< 0.1
H1330B	Schorren en zilte graslanden (binnendijks)	1,571	241.9	1.2	< 0.1	< 0.1
H7140B	Overgangs- en trilvenen (veenmosrietlanden)	714	0.2	< 0.1	< 0.1	< 0.1

Veerse Meer

There are no habitat types in this nature area

Voordelta

None of the critical loads of the habitat types in this area is exceeded by this project

Habitats below critical load		CL	Surface (ha)	Deposition by project (mol/y)	Maximum deposition (mol/ha/y)	Average deposition (mol/ha/y)
H1110B	Permanent overstroomde zandbanken (Noordzee-kustzone)	2,400	116.9	0.2	< 0.1	< 0.1
H1140B	Slik- en zandplaten (Noordzee-kustzone)	2,400	140.1	0.2	< 0.1	< 0.1

Disclaimer

Although the calculation is made with the utmost care, no responsibility will be taken with respect to the decisions taken based on the results of the calculation. The information provided can be used to substantiate a permit request. AERIUS accepts no responsibility for the content of information provided by third parties. The above data and corresponding results are valid till a new version of AERIUS is available. AERIUS is a registered trademark in the Benelux. All rights not expressly granted herein are reserved.

References for calculations

This calculation is based on:

AERIUS [version BETA8_20140921_099d67e943](#)

Database [version BETA8_20140924_ffeo7cf133](#)

More information about the used data on www.aerius.nl/methodiek